County of Santa Cruz
Community Development & Infrastructure
701 Ocean Street 4th Floor, Santa Cruz, CA 95060
www.sccoplanning.com

Supplemental Documents Index

This form is required to be the first page of the Supplemental (SUP) file

The preparer is legally responsible for signatures whether a graphic, typewritten, or handwritten. Documents may not be restricted by digital signatures or otherwise.

Project Information

Permit No. APP-251009
APN: 076-231-02
Project Address: 9835 Newell Creek Rd, Ben Lomond, CA 95005
Legal Owner: Santa Cruz County Flood Control District
Applicant: Michael Hettenhausen - County Employee
Date: 5/14/2025

County Review Stamp

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

County Documents portion for staff use only

County Documents County staff use only	Additional County Documents County staff use only
☐ Environmental Planning Notes & Inspections	☐

The SUP file must be complete and include all documents required for permit issuance each time the file is uploaded (partial/incremental submittals are not allowed)

Project Documents Checkmark documents included		Additional documents Identify additional documents included
☐ EVCS Form(s) – *PLG290*, *PLG291*, *PLG292*, *PLG293*	1	EMAIL RE: "X'ED" OUT ITEMS NOT INCLUDED IN PERMIT REVIEW
☐ Transfer of Responsibility Form(s) – *PLG250*	2	STORMWATER POLLUTION PREVENTION PLAN
☐ Modification Worksheet – *Form*	3	DISCRETIONARY PERMIT COMPLETE LETTER
☐ Substantial Improvement Form – *Form*	4	
☐ WELO Residential Checklist & Exemption Form – *PLG152*	5	
☐ WELO Landscape Plan Submittal Form – *PLG154*	6	
☐ **Arborist Report**	7	
☐ →*Consultant Plan Review* – *PLG300* required with report	8	
☐ →*Addendum(s)*	9	
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☐ →*Addendum(s)*	12	
☐ →*County Acceptance Letter(s)*	13	
☒ **Geotechnical Investigation Report** (or *Waiver Request Form*)	14	
☒ →*Consultant Plan Review* – *PLG300* required with report	15	
☐ →*Addendum(s)*	16	
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☐ **Truss Shop Drawings** project architect/engineer review required	24	
☐ →*Written review by project architect/engineer of record*	25	
☒ **Specification Book** (with table of contents & bookmarked sections)	26	

Michael Hettenhausen

From: Bailey Kirkland
Sent: Tuesday, February 11, 2025 8:23 AM
To: Michael Hettenhausen
Cc: Brian Rubin; Isolda Lobao
Subject: RE: Ben Lomond Transfer Station - 23180

Good Morning Michael,

I confirmed with Brian that we will accept an X through the portions and sheets that are not included in this scope. Please be sure to use a color other than red when updating the plans so we can hopefully process at your next submittal. If you have any additional questions, I'm available for a call today – just let me know.

Thanks!

Bailey Kirkland
Building Permit Technician II
T 831.454.2580

Community Development & Infrastructure
701 Ocean St - 4th Floor, Santa Cruz, CA 95060

The Department's Zoning, Building, and Environmental Planning counters are open
BY APPOINTMENT, **Monday through Thursday from 8:00 to 11:30 AM**
Either in-person or telephone. Self-schedule your appointment **here**.

From: Michael Hettenhausen <Michael.Hettenhausen@santacruzcountyca.gov>
Sent: Monday, February 10, 2025 3:30 PM
To: Isolda Lobao <Isolda.Lobao@santacruzcountyca.gov>; Brian Rubin <Brian.Rubin@santacruzcountyca.gov>
Subject: Ben Lomond Transfer Station - 23180

Hi Issy and Brian,

Per the PLN comment ("PLN_Plans_v1.pdf => Other: Please remove all the clouds and submit clean plans for intake. (Only change orders or resubmittals allow clouding on plans)."), is it acceptable to place an "X" over the areas on the plan set that are not included in the permit review, i.e., scale house, scales, and overhead sign? If entire sheets are not included, should an "X" be placed over the entire sheet or the sheet number in the lower right-hand corner?

Please advise and I will direct the consultant to modify the plan set accordingly.

Thanks,
Michael

From: do-not-reply@santacruzcounty.us <do-not-reply@santacruzcounty.us>
Sent: Monday, February 10, 2025 1:35 PM
To: Michael Hettenhausen <Michael.Hettenhausen@santacruzcountyca.gov>
Subject: SCCePlanReview - BLDG OTH Project Edited

BLDG OTH Project Edit Summary

Project Name:	Ben Lomond Transfer Station Improvements Project_23180
Application Number:	
Status:	New Permit Notification Sent
Assigned To:	
Comments:	SUP_Supplemental_v1.pdf => Other: There are a few thousand too many bookmarks... Please bookmark ONLY the first page of each supplemental document called out on the SUP index, such as the soils report, structural calcs, spec sheets, etc. PLN_Plans_v1.pdf => Other: Please remove all the clouds and submit clean plans for intake. (Only change orders or resubmittals allow clouding on plans). Include in cover sheet a breakdown of square footages for all building and retaining walls. APP_Application_v1.pdf => Other: Intake requirements not addressed and remains the same (2) outstanding items. Include a breakdown of square footages for all buildings, retaining wall. Include in submittal an approved EH clearance form, required. Michael, when ready to reupload files, building would like a meeting to go over the project work scope for processing. Reach out to Brian.Rubin@santacruzcountyca.gov and or myself Isolda.Lobao@santacruzcountyca.gov. to set up a meeting.
Project Locked:	False
Project Cycle:	1
Date Created:	12/24/2024 10:10:51 AM
Date Modified:	2/10/2025 1:35:19 PM

Need help? See the SCC ePlan youtube channel, and SCC ePlan Review for latest User Guide, Training & Seminars.

County of Santa Cruz

DEPARTMENT OF COMMUNITY DEVELOPMENT AND INFRASTRUCTURE
701 OCEAN STREET, FOURTH FLOOR, SANTA CRUZ, CA 95060-4070

Planning (831) 454-2580 Public Works (831) 454-2160
https://cdi.santacruzcountyca.gov/

April 25, 2025

Michael Hettenhausen
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

Subject: **Complete Application Submittal**
Application #: **251095**
Assessor's Parcel #: **076-261-03**
Owner: **County of Santa Cruz**

Dear Michael Hettenhausen:

On March 28, 2025, you applied for a development permit with the County of Santa Cruz. The first phase in the processing of your application is the determination of the "completeness" of the application. The determination of "completeness" is made based on the preliminary review of the materials that you have submitted, by all the reviewing agencies, and site visits by Santa Cruz County Planning staff. As of this time, the reviewing agencies and Santa Cruz County Planning staff have made comments on the materials that you have submitted. This letter is to inform you of the status of your application.

As of April 25, 2025, this application has been considered **complete** for further processing. The next phase in the processing of your application will be the preparation of a staff report with recommendations to the appropriate decision-making body. Minor variations are processed by the Planning Director or designee, as minor administrative permits, in accordance with Chapter 18.10 of the Santa Cruz County Code.

Agency Review Comments

The attached agency review comments may include anticipated Conditions of Approval for this permit if approved, or other requirements which must be met prior to approval of any Building or Grading Permit(s) for this project. Questions related to these comments can be addressed to each separate agency.

Environmental Review

It is important to understand that although your application has been found to be complete for further processing, Santa Cruz County Planning may, in the course of processing the application, request that you clarify, amplify, correct, or otherwise supplement the information required for this application, or to submit additional information to comply with the provisions of Division 13 (California Environmental Quality Act) of the Public Resources Code. Please note that the environmental determination for this project has not been made at this time and the environmental determination for this project, required by the California Environmental Quality Act, shall be made at the time the final action is taken on this project by the appropriate decision-making body.

Should you have further questions concerning this application, please contact me at:
(831) 454-3121 or e-mail: rebecca.rockom@santacruzcountyca.gov.

Sincerely,



Rebecca Rockom
Project Planner
Development Review

County of Santa Cruz

Department of Community Development and Infrastructure

701 Ocean Street, Fourth Floor, Santa Cruz, CA 95060
Planning (831) 454-2580 Public Works (831) 454-2160
cdi.santacruzcountyca.gov

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15 April 2025

Michael Hettenhausen, AICP
Capital Projects
701 Ocean Street, Room 330
Santa Cruz, CA 95062

Subject: Review of the Geotechnical Design Report Rev.1 Ben Lomond Transfer Station New Canopies and Water Intrusion Assessment dated 6 August 2024 by Tetra Tech, Inc. Project No. BAS 21-185E

Project Site: 9835 Newell Creek Road
APN 076-261-03
Application No. REV251041 (related to 251095 and B-251009)

Dear Applicant(s):

We understand the proposed project consists of two new canopy structures at the site with associated improvements, and that a new scale house is not currently included within the scope of work. The purpose of this letter is to inform you that the Planning Division has accepted the subject report, and the following items shall be required:

1. All project design and construction shall comply with the recommendations of the reports. [SCCC 16.10.070]

2. Final plans shall reference the subject reports by titles, authors, and dates. Final Plans should also include a statement that the project shall conform to the reports' recommendations. [SCCC 16.10.070]

3. After plans are prepared that are acceptable to all reviewing agencies, please request both your project geologist and project geotechnical engineer submit a completed Consultant Plan Review Form (PLG-300) to Environmental Planning. The authors of the geology and geotechnical reports shall sign and stamp their completed forms. Please note that the plan review forms must reference the final plan set by the last revision date. [SCCC 16.10.070]

Any updates to report recommendations necessary to address conflicts between the reports and plans must be provided via a separate addendum to the subject reports.

Electronic copies of all forms required to be completed by the Engineering Geologist and/or Geotechnical Engineer may be found on our website:

https://cdi.santacruzcountyca.gov/UPC/EnvironmentalPermitsTechnicalReviews/GeologyandSoils/AssistanceandForms.aspx

After building permit issuance the engineering geologist and geotechnical engineer *must remain involved with the project* during construction. Please review the Notice to Permits Holders (attached).

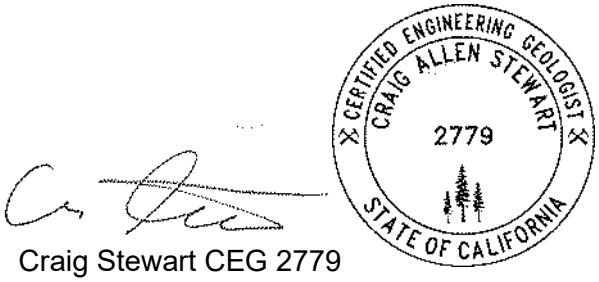
Our acceptance of the report is limited to its technical content only. Compliance with other resource protection requirements set forth in Chapter 16 of the Santa Cruz County Code, as well as other planning related regulations governing zoning, fire safety, septic or sewer are subject to approval by other agencies.

Please contact Rick Parks at (831) 454-3168/email: Rick.Parks@santacruzcountyca.gov or Craig Stewart at (831) 454-3175/email: Craig.Stewart@santacruzcountyca.gov if we can be of any further assistance.

Sincerely,



Rick Parks GE 2603
Civil Engineer
County of Santa Cruz
CDI - Planning Division



Craig Stewart CEG 2779
County Geologist
County of Santa Cruz
CDI - Planning Division

Cc: Environmental Planning, Attn: Kathleen McLaughlin
Tetra Tech, Inc., Attn: Michael Spira CEG
Tetra Tech, Inc., Attn: Peter Skopek GE
Tetra Tech, Inc., Attn: Fernando Cuenca GE

Attachments: Notice to Permit Holders

NOTICE TO PERMIT HOLDERS WHEN GEOLOGIC AND GEOTECHNICAL REPORTS HAVE BEEN PREPARED, REVIEWED AND ACCEPTED FOR THE PROJECT

After issuance of the building permit, the County requires your engineering geologist and geotechnical engineer to be involved during construction.

1. **At the completion of construction,** a *Soils (Geotechnical) Engineer Final Inspection Form* and a *Geologist Final Inspection Form* are required to be submitted to Environmental Planning that includes copies of all observations made during construction and is stamped and signed, certifying that the project was constructed in conformance with the recommendations of the geologic and geotechnical reports.

   If the *Final Inspection Form(s) (PLG-305)* identifies any portions of the project that were not observed by the geotechnical engineer and/or engineering geologist, you may be required to perform destructive testing in order for your permit to obtain a final inspection. The geotechnical engineer and/or engineering geologist then must complete and initial an *Exceptions Addendum Form* that certifies that the features not observed will not pose a life safety risk to occupants.

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Special Inspections

The preparer is legally responsible for signatures whether a graphic, typewritten, or handwritten. Documents may not be restricted by digital signatures or otherwise.

A. Statement of Special Inspections

Permit No. APP-251009
APN: 076-261-03; 076-231-02; 076-241-05
Project Address: 9835 Newell Creek Rd, Ben Lomond, CA 95005

Note: A completed PLG-240 is required on a plan sheet(s), see Form Submittal below.

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2022 California Building Code
This form lists aspects of the project that require special inspection and testing as indicated in the California Building Code Section 1704 and 1705 and defines duties and responsibilities of parties involved in the project.

Form Submittal. The Owner or Owner's Agent, on the advice of the Registered Design Professional in Responsible Charge, must complete this form, secure signatures by **all parties**, and incorporate **all pages** onto the **plan sheet(s)** for review (even if duplicating similar information).

Duties & Responsibilities. The Owner and Contractor acknowledge assignment of the following duties, responsibilities, and conditions applicable to special inspection or testing:

Owner

1. Ensures that construction complies with the approved permit documents and implements the program of special inspections.

Contractor

1. Ensures proper notification to the special inspection or testing agency for items listed herein.
2. Reviews the Building Division approved permit documents for additional inspection or testing requirements. *A pre-construction conference at the job site is recommended to review special inspection procedures.*

Special Inspection/Testing Agency

1. Provides copies of all laboratory reports and inspections to the Building Division and Registered Design Professional in Responsible Charge on a weekly basis. Only the testing laboratory may take samples and transport them to their laboratory.
2. Submits for the Building Division's approval an Inspector List that shows the names and qualifications of on-site special inspectors who are NOT on the County's pre-approved list.
3. Provides each special inspector with an identification badge that includes:
   → Name and photograph
   → Areas that the inspector is qualified to inspect
   → An authorization signature by the Registered Engineer who is a full-time employee of the agency
4. Provides the Final Report of Special Inspections that documents required special inspections and correction of discrepancies noted in inspections. A copy of this report must be kept at the job site for review by the County Inspector prior to final inspections. *Per CBC section 1704.2.4 this report is required before an occupancy permit can be issued.*

Special Inspectors

1. Must have their badge visible when performing their duties.
2. Must immediately notify the County Building Division upon encountering any concerns or problems.
3. Must use only the County Building Division's approved permit documents.

Acknowledgements Please print name, sign, & enter date

Registered Design Professional in Responsible Charge		
Name: Brett Boehmke	Signature:	Date: 5/2/2025
Owners' Authorization		
Name: Michael Hettenhausen	Signature: Michael Hettenhausen	Date: 12/24/24
Contractor		
Name:	Signature:	Date:
Responsible Employee of the Testing Agency		
Name: Ruchil R. Shah / Ninyo & Moore	Signature:	Date: 5/2/2025
Geotechnical Inspector		
Name:	Signature:	Date:

Enter firm names, contact information, and area of responsibility.

B. Special Inspection Agency, Material Testing Lab, Geotechnical

Firm Name: Tetra Tech	Firm Name:
Phone: (949) 809-5000	Phone:
Email: Brett.Boehmke@tetratech.com	Email:
Responsibility: See Page 3	Responsibility:
Firm Name:	Firm Name:
Phone:	Phone:
Email:	Email:
Responsibility:	Responsibility:
Firm Name:	Firm Name:
Phone:	Phone:
Email:	Email:
Responsibility:	Responsibility:

C. Contractor's Statement of Responsibility – CBC 1704.4

California Building Code (CBC) Section 1704.4 requires the Contractor responsible for the construction of a main wind or seismic force resisting system, designated seismic system, or a wind or seismic resisting components to submit a written statement of responsibility to the Building Official and the Owner prior to the commencement of work on the system or component. **The Contractor hereby acknowledges this responsibility regarding special requirements as described in the Summary of Special Inspections & Tests, Inspection Schedule, and County issued documentation and as prepared by the engineer of record or the registered design professional per the requirements of California Building Code Section 1704.3.**

Acknowledgement Please print name, sign, & enter date

Contractor: California License No. _____ I am aware of the requirements and responsibilities.

Name: _____ Signature: _____ Date: _____

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC Sections 1704 and 1705.The Summary of Special Inspections & Tests summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.

Seismic Requirements – CBC 1704.3.2
The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

Describe the seismic-force-resisting system and designated seismic systems subject to special inspections per Section 1705.13:

Wind Requirements – CBC 1704.3.3
The extent of the main wind-force-resisting system and wind resisting components is defined in more detail in the construction documents

Describe the main wind-force-resisting system & designated wind resisting components subject to special inspections per Section 1705.12:

D. Summary Of Special Inspections & Tests

Identify special inspections/tests required by CBC chapter 17 for this project.
Additional detail regarding inspections and tests is provided in the project specifications or notes on the drawings.
Describe and mark each required inspection/test as "C" or "P" or both as appropriate. Key: C → Continuous P → Periodic

Inspection/Test Categories	Inspection/Test Descriptions	C	P
Special Cases – 1705.1.1		☐	☐
		☐	☐
Structural Steel – 1705.2.1	Welding and bolting.	☒	☒
Cold-Formed Steel Deck – 1705.2.2	Material verification and certified test reports, connections.	☐	☒
Open-Web Steel Joists & Joist Girders – 1705.2.3		☐	☐
Cold-Formed Steel Trusses Span ≥ 60 feet – 1705.2.4		☐	☐
Concrete – 1705.3	Placement of rebar, anchor placement, design mix,	☐	☒
	curing, formwork.	☐	☒
	Adhesive anchors, cylinders, slump, concrete placement.	☒	☐
Masonry – 1705.4 (Level 1 TMS 602 Tables 3, Level 2 or 3 TMS 602 Tables 3, 4)		☐	☐
Wood – 1705.5		☐	☐
		☐	☐
		☐	☐
Soils – 1705.6	Subgrade, excavations, fill testing and compaction.	☐	☒
	Fill materials and lift thicknesses during compaction.	☒	☐
Driven Deep Foundation Elements – 1705.7		☐	☐
Cast-in-Place Deep Foundation Elements – 1705.8	Drilling, placement, and typical concrete inspections.	☒	☐
Helical Pile Foundations – 1705.9		☐	☐
		☐	☐
Wind Resistance – 1705.12	Roof deck, roof framing connections.	☐	☒
		☐	☐
Seismic Resistance – 1705.13		☐	☐
		☐	☐
		☐	☐
Testing for Seismic Resistance – 1705.14		☐	☐
		☐	☐
Sprayed Fire-Resistant Materials – 1705.15		☐	☐
Mastic & Intumescent Coatings – 1705.16		☐	☐
Exterior Insulation & Finish Systems (EIFS) – 1705.17		☐	☐
Fire-Resistant Penetrations & Joints – 1705.18		☐	☐
Smoke Control Systems – 1705.19		☐	☐
Sealing of Mass Timber – 1705.20		☐	☐
Other tests, inspections, or special instructions:		☐	☐
		☐	☐
		☐	☐
		☐	☐
		☐	☐

E. Special Inspection & Testing Agencies Recognized by Santa Cruz County Building Division

Agencies may not be qualified to perform all aspects of special inspection; and have not been evaluated for geotechnical inspection.
(1) Agencies may have offices in more than one location. (2) Other agencies may be approved by Santa Cruz County Planning Department's Building Inspection Division.

Key: **RC** = Reinforced Concrete; **PC** = Prestressed Concrete; **SM** = Structural Masonry; **FP** = Fireproofing; **HSB** = High-Strength Bolting; **NDT** = Non-destructive Testing; **SWC** = Structural Wood Construction; **SW** = Steel Welding

Agency Name	Address	Phone/Fax	RC	PC	SM	SW	HSB	NDT	SWC	FP	Expiration
ACE Quality Control	1830 Vernon St, Suite #7 Roseville, CA 95678	(916) 742-5096 (530) 241-5935	X	X	X	X	X			X	4/5/2025
Achievement Engineering Corp.	2455 Autumnvale Dr., Unit E San Jose, CA 95131	(408) 217-9174 (408) 217-9632	X	X	X	X	X	X	X	X	5/16/2025
Advanced Testing & Inspection (ATI)	540 Brunken Ave, Ste. B Salinas, CA 93901	(831) 422-2272 (831) 597-2004	X	X	X	X	X			X	10/1/2022
Apex Testing Labs, Inc.	1790 Yosemite Ave San Francisco, CA 94124	(415) 550-9800 (415) 550-9880	X	X	X	X	X	X		X	5/3/2025
Applied Materials & Engineering	980 41st Street Oakland, CA 94608	(510) 420-8190 (510) 420-8186	X	X	X	X	X	X	X	X	4/11/2025
Aries Engineering	5357 Persimmon Grove Ct San Jose, CA 95123	(408) 634-0087	X			X	X		X		10/10/2026
BAGG Engineers	138 Charcot Ave. San Jose, CA 95131	(650) 852-9133 (650) 852-9138	X	X	X	X	X	X		X	10/13/2026
Berlogar, Stevens and Associates	5587 Sunol Boulevard Pleasanton, CA 94566	(925) 484-0220 (925) 846-9645	X	X	X	X	X			X	9/4/2021
Biggs Cardosa Associates, Inc.	865 The Alameda San Jose, CA 95126	(408) 296-5515 (408) 296-8114	X	X	X	X	X				1/14/2024
B.S.K. Associates	399 Lindbergh Ave Livermore, CA 94551	(925) 315-3151 (925) 315-3152	X	X	X	X	X	X		X	5/1/2025
Consolidated Engineering Labs	2001 Crow Canyon Rd, Ste 100 San Ramon, CA 94583	(925) 314-7100 (925) 855-7140	X	X	X	X	X	X	X	X	4/8/2025
Construction Testing Services (CTS)	2118 Rheem Drive Pleasanton, CA 94588	(925) 462-5183 (925) 462-5151	X	X	X	X	X	X	X	X	3/24/2026
CTE Cal, Inc.	46716 Fremont Boulevard Fremont, CA 94538	(510) 573-6362 (510) 573-6684	X	X	X	X	X	X	X	X	12/9/2025
Earth System Pacific	48511 Warm Springs Blvd, Ste. 210 Fremont, CA 94539	(510) 353-3833 (888) 567-4292	X	X	X	X	X		X	X	3/3/2024
ENGEO Incorporated	2010 Crow Canyon Pl., Ste 250 San Ramon, CA 94583	(925) 866-9000 (888) 279-2698	X	X	X	X	X	X	X	X	8/7/2022
Geissler Engineering	235 Montgomery St., Ste. 1011 San Francisco, CA 94104	(415) 992-9393	X			X	X		X		10/5/2023
Geocon Consultants, Inc.	6671 Brisa Street Livermore, CA 94550	(925) 371-5900 (925) 371-5915	X	X	X	X	X			X	10/7/2023
HP Inspections	690 Sunol Street, Bldg. H San Jose, CA 95126	(408) 288-8460 (408) 271-0902	X	X	X	X	X	X		X	1/27/2024
Inspection Services Inc.	1798 University Avenue Berkeley, CA 94703	(415) 243-3265 (415) 243-3266	X	X	X	X	X	X	X	X	2/8/2026
Kleinfelder Inc.	2601 Barrington Ct, Hayward, CA 94545	(925) 484-1700	X	X	X	X	X	X		X	7/30/2022
Korbmacher Engineering Inc.	480 Preston Court, Ste. B Livermore, CA 94551	(925) 454-9033 (925) 454-9564	X	X	X	X	X	X	X	X	2/2/2024
Krazan and Associates Inc.	1061 Serpentine Lane, Ste. F Pleasanton, CA 94566	(925) 307-1160 (925) 307-1161	X	X	X	X	X	X	X	X	3/2/2024
MatriScope Engineering Lab., Inc	6244 Preston Av Livermore, CA 94551	(510) 763-3601 (916) 375-6700	X	X	X	X	X	X	X	X	5/16/2025

E. Special Inspection & Testing Agencies Recognized by Santa Cruz County Building Division

Agencies may not be qualified to perform all aspects of special inspection; and have not been evaluated for geotechnical inspection.
(1) Agencies may have offices in more than one location. (2) Other agencies may be approved by Santa Cruz County Planning Department's Building Inspection Division.

Key: **RC** = Reinforced Concrete; **PC** = Prestressed Concrete; **SM** = Structural Masonry; **FP** = Fireproofing; **HSB** = High-Strength Bolting; **NDT** = Non-destructive Testing; **SWC** = Structural Wood Construction; **SW** = Steel Welding

Agency Name	Address	Phone/Fax	RC	PC	SM	SW	HSB	NDT	SWC	FP	Expiration
Mid Pacific Engineering, Inc MPE	4200 N. Freeway Blvd., Ste. 5 Sacramento, CA 95834	(916) 927-7000	X	X	X	X	X	X		X	6/2/2026
Nicholas Engineering Consultants	6743 Dublin Boulevard, #15 Dublin, CA 94568	(925) 829-8090 (925) 829-0235	X	X	X	X	X		X	X	5/9/2026
Ninyo & Moore	1956 Webster Street, Ste. 400 Oakland, CA 94612	(510) 633-5640 (510) 633-5646	X	X	X	X	X	X	X	X	5/20/2024
NORCON LLC	1661 Tennessee St. Ste. 201 San Francisco, CA 94107	(415) 710-1155	X	X	X	X	X	X	X	X	10/6/2026
Pacific Crest Engineering, Inc.	444 Airport Blvd, Ste. 106 Watsonville, CA 95076	(831) 722-9446 (831) 722-9158	X		X		X				1/7/2022
Professional Service Industries, Inc.	380 Tennant Ave, Ste. 3 Morgan Hill, CA 95037	(408) 669-5500	X		X	X	X			X	3/26/2022
RES Engineers, Inc.	1250 Missouri Street, Ste. 207 San Francisco, CA 94107	(415) 822-4625 (415) 822-8925	X	X	X	X	X	X	X	X	8/8/2026
RMA Group	3150 Fitzgerald Rd San Jose, CA 95112	(408) 362-4920 (408) 362-4926	X	X	X	X	X	X	X	X	7/14/2026
Sigma Engineering Laboratories, Inc.	1180 4th Street #520 San Francisco, CA 94158	(415) 702-8374 (628) 999-0377	X	X	X	X	X	X		X	9/17/2026
Signet Testing Laboratories	3526 Breakwater Court Hayward, CA 94545	(510) 887-8484 (510) 783-4295	X	X	X	X	X	X	X	X	1/11/2025
Smith-Emery Company	Box 880550, Hunters Pt. Shipyard, Bldg. 114, San Francisco, CA 94188	(415) 642-7326 (415) 642-7055	X	X	X	X	X	X	X	X	8/1/2026
Stevens Ferrone & Bailey	1600 Willow Pass Court Concord, CA 94520	(925) 688-1001 (925) 688-1005	X	X	X	X	X		X	X	7/31/2026
Structure Groups	2352 Research Drive Livermore, CA 94550	(925) 447-9900 (925) 447-9901	X	X	X	X	X		X	X	7/14/2026
Summit Associates	2300 Clayton Road, Ste. 1380 Concord, CA 94520	(925) 363-5560 (925) 363-5511	X	X	X	X	X	X	X	X	12/12/2022
Terracon Consultants, Inc	5075 Commercial Circle, Ste. E Concord, CA 94520	(925) 348-9057	X	X	X	X	X	X		X	4/9/2024
Testing Engineers Inc.	2811 Teagarden Street San Leandro, CA 94577	(510) 835-3142 (510) 834-3777	X	X	X	X	X	X	X	X	10/25/2024
Twining	1572 Santa Ana Avenue Sacramento, CA 95838	(916) 649-9000 (916) 921-8532	X	X	X	X	X			X	2/2/2024
Valley Inspection	326 Woodrow Avenue Vallejo, CA 94591	(707) 552-7037 (707) 552-7022				X			X	X	6/6/2025
Wallace-Kuhl & Associates, Inc.	3050 Industrial Blvd West Sacramento, CA 95691	(916) 372-1434 (916) 372-2565	X	X	X	X	X	X		X	8/21/2023

County of Santa Cruz
Community Development & Infrastructure
701 Ocean Street 4th Floor, Santa Cruz, CA 95060
www.cdi.santacruzcountyca.gov

Special Inspections

The preparer is legally responsible for signatures whether a graphic, typewritten, or handwritten. Documents may not be restricted by digital signatures or otherwise.

A. Statement of Special Inspections

Permit No. APP-251009
APN: 076-261-03; 076-231-02; 076-241-05
Project Address: 9835 Newell Creek Rd, Ben Lomond, CA 95005

Note: A completed PLG-240 is required on a plan sheet(s), see Form Submittal below.

Reserved for County Stamp

2022 California Building Code
This form lists aspects of the project that require special inspection and testing as indicated in the California Building Code Section 1704 and 1705 and defines duties and responsibilities of parties involved in the project.

Form Submittal. The Owner or Owner's Agent, on the advice of the Registered Design Professional in Responsible Charge, must complete this form, secure signatures by **all parties**, and incorporate **all pages** onto the **plan sheet(s)** for review (even if duplicating similar information).

Duties & Responsibilities. The Owner and Contractor acknowledge assignment of the following duties, responsibilities, and conditions applicable to special inspection or testing:

Owner

1. Ensures that construction complies with the approved permit documents and implements the program of special inspections.

Contractor

1. Ensures proper notification to the special inspection or testing agency for items listed herein.
2. Reviews the Building Division approved permit documents for additional inspection or testing requirements. *A pre-construction conference at the job site is recommended to review special inspection procedures.*

Special Inspection/Testing Agency

1. Provides copies of all laboratory reports and inspections to the Building Division and Registered Design Professional in Responsible Charge on a weekly basis. Only the testing laboratory may take samples and transport them to their laboratory.
2. Submits for the Building Division's approval an Inspector List that shows the names and qualifications of on-site special inspectors who are NOT on the County's pre-approved list.
3. Provides each special inspector with an identification badge that includes:
   → Name and photograph
   → Areas that the inspector is qualified to inspect
   → An authorization signature by the Registered Engineer who is a full-time employee of the agency
4. Provides the Final Report of Special Inspections that documents required special inspections and correction of discrepancies noted in inspections. A copy of this report must be kept at the job site for review by the County Inspector prior to final inspections. *Per CBC section 1704.2.4 this report is required before an occupancy permit can be issued.*

Special Inspectors

1. Must have their badge visible when performing their duties.
2. Must immediately notify the County Building Division upon encountering any concerns or problems.
3. Must use only the County Building Division's approved permit documents.

Acknowledgements Please print name, sign, & enter date

Registered Design Professional in Responsible Charge		
Name: Douglas Gadow	Signature:	Date: 5/13/2025
Owners' Authorization		
Name: Michael Hettenhausen	Signature: Michael Hettenhausen	Date: 12/24/24
Contractor		
Name:	Signature:	Date:
Responsible Employee of the Testing Agency		
Name: Ruchil R. Shah / Ninyo & Moore	Signature:	Date: 5/2/2025
Geotechnical Inspector		
Name:	Signature:	Date:

Enter firm names, contact information, and area of responsibility.

B. Special Inspection Agency, Material Testing Lab, Geotechnical

Firm Name: Linchpin Structural Engineering	Firm Name:
Phone: (530) 563-6341	Phone:
Email: info@linchpinse.com	Email:
Responsibility: Welding and High Strength Bolting	Responsibility:
Firm Name:	Firm Name:
Phone:	Phone:
Email:	Email:
Responsibility:	Responsibility:
Firm Name:	Firm Name:
Phone:	Phone:
Email:	Email:
Responsibility:	Responsibility:

C. Contractor's Statement of Responsibility – CBC 1704.4

California Building Code (CBC) Section 1704.4 requires the Contractor responsible for the construction of a main wind or seismic force resisting system, designated seismic system, or a wind or seismic resisting components to submit a written statement of responsibility to the Building Official and the Owner prior to the commencement of work on the system or component. **The Contractor hereby acknowledges this responsibility regarding special requirements as described in the Summary of Special Inspections & Tests, Inspection Schedule, and County issued documentation and as prepared by the engineer of record or the registered design professional per the requirements of California Building Code Section 1704.3.**

Acknowledgement Please print name, sign, & enter date

Contractor: California License No. _____ I am aware of the requirements and responsibilities.

Name: _____ Signature: _____ Date: _____

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and CBC Sections 1704 and 1705.The Summary of Special Inspections & Tests summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.

Seismic Requirements – CBC 1704.3.2
The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

Describe the seismic-force-resisting system and designated seismic systems subject to special inspections per Section 1705.13:

Wind Requirements – CBC 1704.3.3
The extent of the main wind-force-resisting system and wind resisting components is defined in more detail in the construction documents

Describe the main wind-force-resisting system & designated wind resisting components subject to special inspections per Section 1705.12:

D. Summary Of Special Inspections & Tests

Identify special inspections/tests required by CBC chapter 17 for this project.
Additional detail regarding inspections and tests is provided in the project specifications or notes on the drawings.
Describe and mark each required inspection/test as "C" or "P" or both as appropriate. Key: C → Continuous P → Periodic

Inspection/Test Categories	Inspection/Test Descriptions	C	P
Special Cases – 1705.1.1		☐	☐
		☐	☐
Structural Steel – 1705.2.1	Welding and High Strength Bolting	☒	☒
Cold-Formed Steel Deck – 1705.2.2		☐	☐
Open-Web Steel Joists & Joist Girders – 1705.2.3		☐	☐
Cold-Formed Steel Trusses Span ≥ 60 feet – 1705.2.4		☐	☐
Concrete – 1705.3		☐	☐
		☐	☐
		☐	☐
Masonry – 1705.4 (Level 1 TMS 602 Tables 3, Level 2 or 3 TMS 602 Tables 3, 4)		☐	☐
Wood – 1705.5		☐	☐
		☐	☐
		☐	☐
Soils – 1705.6		☐	☐
		☐	☐
Driven Deep Foundation Elements – 1705.7		☐	☐
Cast-in-Place Deep Foundation Elements – 1705.8		☐	☐
Helical Pile Foundations – 1705.9		☐	☐
		☐	☐
Wind Resistance – 1705.12		☐	☐
		☐	☐
Seismic Resistance – 1705.13		☐	☐
		☐	☐
		☐	☐
Testing for Seismic Resistance – 1705.14		☐	☐
		☐	☐
Sprayed Fire-Resistant Materials – 1705.15		☐	☐
Mastic & Intumescent Coatings – 1705.16		☐	☐
Exterior Insulation & Finish Systems (EIFS) – 1705.17		☐	☐
Fire-Resistant Penetrations & Joints – 1705.18		☐	☐
Smoke Control Systems – 1705.19		☐	☐
Sealing of Mass Timber – 1705.20		☐	☐
Other tests, inspections, or special instructions:		☐	☐
		☐	☐
		☐	☐
		☐	☐
		☐	☐

E. Special Inspection & Testing Agencies Recognized by Santa Cruz County Building Division

Agencies may not be qualified to perform all aspects of special inspection; and have not been evaluated for geotechnical inspection.
(1) Agencies may have offices in more than one location. (2) Other agencies may be approved by Santa Cruz County Planning Department's Building Inspection Division.

Key: **RC** = Reinforced Concrete; **PC** = Prestressed Concrete; **SM** = Structural Masonry; **FP** = Fireproofing; **HSB** = High-Strength Bolting; **NDT** = Non-destructive Testing; **SWC** = Structural Wood Construction; **SW** = Steel Welding

Agency Name	Address	Phone/Fax	RC	PC	SM	SW	HSB	NDT	SWC	FP	Expiration
ACE Quality Control	1830 Vernon St, Suite #7 Roseville, CA 95678	(916) 742-5096 (530) 241-5935	X	X	X	X	X			X	4/5/2025
Achievement Engineering Corp.	2455 Autumnvale Dr., Unit E San Jose, CA 95131	(408) 217-9174 (408) 217-9632	X	X	X	X	X	X	X	X	5/16/2025
Advanced Testing & Inspection (ATI)	540 Brunken Ave, Ste. B Salinas, CA 93901	(831) 422-2272 (831) 597-2004	X	X	X	X	X			X	10/1/2022
Apex Testing Labs, Inc.	1790 Yosemite Ave San Francisco, CA 94124	(415) 550-9800 (415) 550-9880	X	X	X	X	X	X		X	5/3/2025
Applied Materials & Engineering	980 41st Street Oakland, CA 94608	(510) 420-8190 (510) 420-8186	X	X	X	X	X	X	X	X	4/11/2025
Aries Engineering	5357 Persimmon Grove Ct San Jose, CA 95123	(408) 634-0087	X			X	X		X		10/10/2026
BAGG Engineers	138 Charcot Ave. San Jose, CA 95131	(650) 852-9133 (650) 852-9138	X	X	X	X	X	X		X	10/13/2026
Berlogar, Stevens and Associates	5587 Sunol Boulevard Pleasanton, CA 94566	(925) 484-0220 (925) 846-9645	X	X	X	X	X			X	9/4/2021
Biggs Cardosa Associates, Inc.	865 The Alameda San Jose, CA 95126	(408) 296-5515 (408) 296-8114	X	X	X	X	X				1/14/2024
B.S.K. Associates	399 Lindbergh Ave Livermore, CA 94551	(925) 315-3151 (925) 315-3152	X	X	X	X	X	X		X	5/1/2025
Consolidated Engineering Labs	2001 Crow Canyon Rd, Ste 100 San Ramon, CA 94583	(925) 314-7100 (925) 855-7140	X	X	X	X	X	X	X	X	4/8/2025
Construction Testing Services (CTS)	2118 Rheem Drive Pleasanton, CA 94588	(925) 462-5183 (925) 462-5151	X	X	X	X	X	X	X	X	3/24/2026
CTE Cal, Inc.	46716 Fremont Boulevard Fremont, CA 94538	(510) 573-6362 (510) 573-6684	X	X	X	X	X	X	X	X	12/9/2025
Earth System Pacific	48511 Warm Springs Blvd, Ste. 210 Fremont, CA 94539	(510) 353-3833 (888) 567-4292	X	X	X	X	X		X	X	3/3/2024
ENGEO Incorporated	2010 Crow Canyon Pl., Ste 250 San Ramon, CA 94583	(925) 866-9000 (888) 279-2698	X	X	X	X	X	X	X	X	8/7/2022
Geissler Engineering	235 Montgomery St., Ste. 1011 San Francisco, CA 94104	(415) 992-9393	X			X	X		X		10/5/2023
Geocon Consultants, Inc.	6671 Brisa Street Livermore, CA 94550	(925) 371-5900 (925) 371-5915	X	X	X	X	X			X	10/7/2023
HP Inspections	690 Sunol Street, Bldg. H San Jose, CA 95126	(408) 288-8460 (408) 271-0902	X	X	X	X	X	X		X	1/27/2024
Inspection Services Inc.	1798 University Avenue Berkeley, CA 94703	(415) 243-3265 (415) 243-3266	X	X	X	X	X	X	X	X	2/8/2026
Kleinfelder Inc.	2601 Barrington Ct, Hayward, CA 94545	(925) 484-1700	X	X	X	X	X	X		X	7/30/2022
Korbmacher Engineering Inc.	480 Preston Court, Ste. B Livermore, CA 94551	(925) 454-9033 (925) 454-9564	X	X	X	X	X	X	X	X	2/2/2024
Krazan and Associates Inc.	1061 Serpentine Lane, Ste. F Pleasanton, CA 94566	(925) 307-1160 (925) 307-1161	X	X	X	X	X	X	X	X	3/2/2024
MatriScope Engineering Lab., Inc	6244 Preston Av Livermore, CA 94551	(510) 763-3601 (916) 375-6700	X	X	X	X	X	X	X	X	5/16/2025

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Agency Name	Address	Phone/Fax	RC	PC	SM	SW	HSB	NDT	SWC	FP	Expiration
Mid Pacific Engineering, Inc MPE	4200 N. Freeway Blvd., Ste. 5 Sacramento, CA 95834	(916) 927-7000	X	X	X	X	X	X		X	6/2/2026
Nicholas Engineering Consultants	6743 Dublin Boulevard, #15 Dublin, CA 94568	(925) 829-8090 (925) 829-0235	X	X	X	X	X		X	X	5/9/2026
Ninyo & Moore	1956 Webster Street, Ste. 400 Oakland, CA 94612	(510) 633-5640 (510) 633-5646	X	X	X	X	X	X	X	X	5/20/2024
NORCON LLC	1661 Tennessee St. Ste. 201 San Francisco, CA 94107	(415) 710-1155	X	X	X	X	X	X	X	X	10/6/2026
Pacific Crest Engineering, Inc.	444 Airport Blvd, Ste. 106 Watsonville, CA 95076	(831) 722-9446 (831) 722-9158	X		X		X				1/7/2022
Professional Service Industries, Inc.	380 Tennant Ave, Ste. 3 Morgan Hill, CA 95037	(408) 669-5500	X		X	X	X			X	3/26/2022
RES Engineers, Inc.	1250 Missouri Street, Ste. 207 San Francisco, CA 94107	(415) 822-4625 (415) 822-8925	X	X	X	X	X	X	X	X	8/8/2026
RMA Group	3150 Fitzgerald Rd San Jose, CA 95112	(408) 362-4920 (408) 362-4926	X	X	X	X	X	X	X	X	7/14/2026
Sigma Engineering Laboratories, Inc.	1180 4th Street #520 San Francisco, CA 94158	(415) 702-8374 (628) 999-0377	X	X	X	X	X	X		X	9/17/2026
Signet Testing Laboratories	3526 Breakwater Court Hayward, CA 94545	(510) 887-8484 (510) 783-4295	X	X	X	X	X	X	X	X	1/11/2025
Smith-Emery Company	Box 880550, Hunters Pt. Shipyard, Bldg. 114, San Francisco, CA 94188	(415) 642-7326 (415) 642-7055	X	X	X	X	X	X	X	X	8/1/2026
Stevens Ferrone & Bailey	1600 Willow Pass Court Concord, CA 94520	(925) 688-1001 (925) 688-1005	X	X	X	X	X		X	X	7/31/2026
Structure Groups	2352 Research Drive Livermore, CA 94550	(925) 447-9900 (925) 447-9901	X	X	X	X	X		X	X	7/14/2026
Summit Associates	2300 Clayton Road, Ste. 1380 Concord, CA 94520	(925) 363-5560 (925) 363-5511	X	X	X	X	X	X	X	X	12/12/2022
Terracon Consultants, Inc	5075 Commercial Circle, Ste. E Concord, CA 94520	(925) 348-9057	X	X	X	X	X	X		X	4/9/2024
Testing Engineers Inc.	2811 Teagarden Street San Leandro, CA 94577	(510) 835-3142 (510) 834-3777	X	X	X	X	X	X	X	X	10/25/2024
Twining	1572 Santa Ana Avenue Sacramento, CA 95838	(916) 649-9000 (916) 921-8532	X	X	X	X	X			X	2/2/2024
Valley Inspection	326 Woodrow Avenue Vallejo, CA 94591	(707) 552-7037 (707) 552-7022				X			X	X	6/6/2025
Wallace-Kuhl & Associates, Inc.	3050 Industrial Blvd West Sacramento, CA 95691	(916) 372-1434 (916) 372-2565	X	X	X	X	X	X		X	8/21/2023

INDUSTRIAL ACTIVITIES STORMWATER POLLUTION PREVENTION PLAN

for

Ben Lomond Landfill and Transfer Station
Santa Cruz, County, California

Facility Address:

9835 Newell Creek Road
Ben Lomond, California

Waste Discharge Identification (WDID):

344I001259

Exceedance Response Action (ERA) Status:

Level 2

Legally Responsible Person (LRP):

County of Santa Cruz Department of Public Works
701 Ocean Street, Room 410, Santa Cruz, CA 95060
Kasey Kolassa
(831) 454-2377

Prepared for

County of Santa Cruz

SWPPP Prepared by:

Geosyntec Consultants
3043 Gold Canal Drive Suite 100
Rancho Cordova, CA 95670

SWPPP Preparation Date

September 2017

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

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Legally Responsible Person

Approval and Certification of the Stormwater Pollution Prevention Plan

Facility Name:	Ben Lomond Landfill and Transfer Station
Waste Discharge Identification (WDID):	344I001259

"I certify under penalty of law that this document and all Attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kasey Kolassa
Legally Responsible Person



Signature of Legally Responsible Person

10-05-2017
Date

Amendment Log

Facility Name: Ben Lomond Landfill and Transfer Station

Waste Discharge Identification (WDID): 344I001259

Amendment No.	Date	Page and Section No.	Requested By	Brief Description of Amendment; include reason for change, site location, and BMP modifications.	Prepared and Approved By
Initial Preparation	04/06/2015	Entire Document	Santa Cruz County	The SWPPP was updated to comply with the New General Permit that will be implemented on July 1, 2015.	Patrick E. Galvin P.E.
1	9/8/2017	Sections 2, 3, 4, 5, 6	County of Santa Cruz	The SWPPP was updated to reflect implementation of additional BMPs in response to the Level 1 ERA process.	Patrick E. Galvin, P.E.

1. SWPPP REQUIREMENTS

1.1 Introduction

The Ben Lomond Landfill and Transfer Station (site or facility) comprises approximately 60 acres and is located at 9835 Newell Creek Road, one mile North of Glen Arbor Road, in Ben Lomond, California. The property is owned by the County of Santa Cruz and is being operated by the County of Santa Cruz Department of Public Works (County). The facility location is shown in **Figure 1** in **Appendix A**.

This Stormwater Pollution Prevention Plan (SWPPP) is designed to comply with California's General Permit for Stormwater Discharges Associated with Industrial Activities (General Permit) Order No. 2014-0057-DWQ (NPDES No. CAS000001) issued by the State Water Resources Control Board (State Water Board) (**Appendix B**) This SWPPP has generally been prepared following the format of the SWPPP Template provided on the California Stormwater Quality Association Stormwater Best Management Practice Handbook Portal: Industrial and Commercial (CASQA 2014). In accordance with the General Permit, Section X.A, this SWPPP contains the following required elements:

- Facility Name and Contact Information;
- Site Map;
- List of Significant Industrial Materials;
- Description of Potential Pollution Sources;
- Assessment of Potential Pollutant Sources;
- Minimum Best Management Practices (BMPs);
- Advanced BMPs, if applicable;
- Monitoring Implementation Plan (MIP);
- Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); and
- Date that SWPPP was Initially Prepared and the Date of Each SWPPP Amendment, if Applicable.

1.2 Permit Registration Documents

Required Permit Registration Documents (PRDs) were submitted to the State Water Board via the Stormwater Multi Application and Report Tracking System (SMARTS) by the Legally Responsible Person (LRP), or authorized personnel (i.e., Approved Signatory) under the direction of the LRP. The project-specific PRDs include:

1. Notice of Intent (NOI);
2. Signed Certification Statement (LRP Certification was provided electronically with SMARTS PRD submittal);
3. Site Map(s);
4. SWPPP; and
5. Annual Fee.

The Site Maps can be found in **Appendix A**. A copy of the submitted PRDs are also kept in **Appendix C** of the SWPPP along with the Waste Discharge Identification (WDID) confirmation letter.

In the event of future significant changes to the facility layout, the Discharger will certify and submit new PRDs via SMARTS.

1.3 SWPPP Availability and Implementation

The SWPPP is available on-site to all employees during all hours of operation (see **Section 2.2** for the Operations Schedule), and will be made available upon request by a State or Municipal Inspector. The SWPPP has been implemented since July 1, 2015.

1.4 Pollution Prevention Team

Facility staff that have been designated as Pollution Prevention Team (PPT) members are listed below in **Table 1.1**, along with their responsibilities and duties. A list of alternate team members is also provided and these personnel will perform SWPPP activities when regular members of the PPT are absent or unavailable. This table will be updated as needed when there are changes to staff and staff responsibilities. All team members will be trained to perform the duties assigned to them. Employee training logs are provided in **Appendix D**.

Table 1.1: Pollution Prevention Team

Name	Title	Phone Number	Responsibilities and Duties
Kasey Kolassa	Recycling and Solid Waste Manager	(831) 454-2377	LRP; Directs all sampling, field observations, reporting, SWPPP updates, management of stormwater data, and BMP implementation
Mike Torrecillas	Operations Manager	(831) 454-5157	Oversees BMP implementation
Albert Eslit	Assistant Public Works Superintendent	(831) 454-5158	Oversees BMP implementation
Bob Cohen	Public Works Supervisor	(831) 336-3954	Oversees and performs BMP implementation
Sarah McBee	Environmental Programs Coordinator	(831) 454-5332	Oversees and performs stormwater sampling, field observations, management of stormwater data, and BMP implementation
Mike Malwaukie	Solid Waste Inspector II	(831) 454-5331	Performs stormwater sampling and field observations
Greg Harden	Solid Waste Inspector II	(831) 454-5331	Performs stormwater sampling and field observations
Kristina Collins	Solid Waste Inspector II	(831) 454-5331	Performs stormwater sampling and field observations
Chris Lin	Solid Waste Inspector I	(831) 454-5331	Performs stormwater sampling and field observations

1.5 Permits and Governing Documents

In addition to the General Permit, the following documents have been considered while preparing this SWPPP:

- Regional Water Quality Control Board requirements;
- Basin Plan requirements;
- Total Maximum Daily Load (TMDL) requirements;
- Spill Prevention Control and Countermeasures (SPCC) Plan; and
- Hazardous Material Management Plan (HMMP).

1.6 SWPPP Amendments

This SWPPP will be amended or revised as needed as a result of the Annual Evaluation. A list of amendments (Amendment Log) is included in the front of this SWPPP, and amendment certifications are included in **Appendix E**. The Amendment Log will include the date of initial preparation and the date of each amendment. The SWPPP will be revised when:

- There is a General Permit violation;
- There is a reduction or increase in the total industrial area exposed to stormwater;
- BMPs do not meet the objectives of reducing or eliminating pollutants in stormwater discharges;
- There is a change in industrial operations which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4); and
- There is a change to the parties responsible for implementing the SWPPP.

The SWPPP text will be revised replaced, and/or hand annotated as necessary to properly convey the amendment. SWPPP amendments must be certified and submitted by the LRP via SMARTS within 30 days whenever the SWPPP is significantly revised. With the exception of significant revisions, SWPPP changes will not be certified and uploaded to SMARTS more than once every three months in the reporting year.

1.7 Exceedance Response Actions (ERAs)

A General Permit numeric action level (NAL) exceedance for an individual pollutant can occur in one of two ways: 1) the reported concentration of the pollutant exceeds the instantaneous maximum for that pollutant during any one sampling event; or 2) the average pollutant concentration reported during a reporting year (July 1 to June 30) exceeds the NAL. The NAL and instantaneous maximums for each pollutant are provided in **Appendix F**.

If a General Permit NAL exceedance occurs in a given reporting year, a Level 1 ERA Evaluation and a Level 1 ERA Report will be required in the following year, or, if in a subsequent year, a Level 2 ERA Action Plan and a Level 2 ERA Report will be required in accordance with the General Permit. The results of either of the ERA reports may require that the SWPPP be amended.

1.8 Termination and Changes to General Permit Coverage

When any of the following conditions occur, termination of coverage under the General Permit will be requested by certifying and submitting a Notice of Termination (NOT) via SMARTS:

- Operation of the facility has been transferred to another entity;
- The facility has ceased operations, completed closure activities, and removed all industrial related pollutant generating sources; or
- The facility's operations have changed and are no longer subject to the General Permit.

2. FACILITY INFORMATION

2.1 Facility Description

This section describes the facility location, operations, existing conditions, and drainage area.

2.1.1 Facility Location

The facility comprises approximately 60 acres and is located at 9835 Newell Creek Road, in Santa Cruz County, California. The facility is located approximately one mile North of Glen Arbor Road, and is approximately 300 feet from Newell Creek. Newell Creek borders the facility to the East. The facility is surrounded by a residential area and open spaces of perennial grasses and conifers. The facility is identified in **Figure 1** in **Appendix A**.

2.1.2 Facility Operations

Operations at the facility consist of all activities required to receive waste generated within the Ben Lomond City area, transfer the waste for disposal to other landfills, and receive, sort and process material for recycling or reuse. A list of specific industrial activities is provided below:

- Receiving and sorting of municipal waste;
- Loading waste to transfer trucks;
- Collecting and bulking household hazardous waste;
- Receiving and sorting recyclables;
- Bailing of recyclables and storage of bailed recyclables;
- Collection of waste oil and antifreeze;
- Receiving and processing green waste;
- Managing landfill gas; and
- Landfill cap maintenance

2.1.3 Existing Conditions

The facility is a closed Class III municipal solid waste landfill and is currently operated as a recycling center and transfer station. The landfill has been capped in accordance with the landfill's Regional Board permit. Approximately two percent of the 60-acre site is

impervious. Of the developed area, there are approximately 30 acres of industrial activities that are directly exposed to precipitation and stormwater runoff. Refer to **Figure 2** for current site conditions. The facility is divided into three drainage areas; the southern portion of the facility is the closed landfill and the northern portion contains the transfer station and recycling areas. The third drainage area is the small unpaved roadway at the entrance to the facility in the southeast portion of the site. All surface water from the facility discharges to the Lower Newell Creek.

There are no known historic sources of contamination at the site.

2.1.4 Description of Drainage Areas and Existing Drainage

The facility is located in the Santa Cruz Mountains and generally slopes toward the south. The elevation of the site ranges from 390 to 650 feet above mean sea level (amsl). Surface drainage at the site, where industrial activities take place, currently flows towards Lower Newell Creek or to a sedimentation pond which then discharges into Lower Newell Creek.

The facility is divided into three drainage areas, as shown in **Figure 2** in **Appendix A**. The figure shows the area layout, including the general site topography, storm drainage system, drain inlets, drainage areas, and discharge locations. Stormwater runoff is conveyed through above ground pipes, V-ditches, earthen channels, and below ground piping.

A more detailed description of each drainage area is provided below.

Drainage Area 1 (D1)

D1 is located in the northern portion of the facility and encompasses an area of approximately 28 acres. The industrial activities within D1 include: equipment fueling, receiving and sorting of municipal waste at the transfer station building, loading of trucks, public drop off of recyclables, collection of waste oil and antifreeze, sorting, processing, and bailing of recyclables, and storage of recyclables in outdoor bins. The scale house, parking lot, and office are also located within D1.

All industrial activities are conducted on the impervious surfaces (18% of D1 is paved), while the remaining area of D1 are vegetated and wooded. Access roads leading to the transfer station and the area around the transfer station are paved. Stormwater from the unpaved areas of D1 is conveyed aboveground through V-ditches that discharge into storm drains. Stormwater runoff from the paved areas are conveyed below ground through storm drains. Ultimately, stormwater collects into four storm drains located along the eastern edge of the transfer station and discharge through an open pipe into a natural

ravine. Stormwater flows through the ravine and into a storm drain that discharges at one location into Lower Newell Creek identified as TS-1 in **Figure 2**.

Drainage Area 2 (D2)

D2 encompasses an area of approximately 32 acres and consists mostly of the closed landfill. D2 is entirely vegetated, with the exception of the access roads leading to the green waste processing area, the access roads at the bottom of the landfill leading to the transfer station facility, and area around the fire suppression water tank. The access roads are primarily unpaved. Industrial activities conducted in D2 include wood processing, landfill cap maintenance, and the landfill gas management. Stockpiles of unprocessed green waste, processed green waste (wood chips), gypsum wallboard, concrete rubble, and aggregate are stored on top of a portion of the landfill.

Stormwater is conveyed aboveground through V-ditches, earthen channels, above ground pipes, and underground pipes, before being discharged to a sedimentation pond located in the southeast portion of D2 (**Figure 2**). The sedimentation pond discharges via a riser pipe to Lower Newell Creek through outfall LP-1.

Drainage Area 3 (D3)

D3 includes the entrance drive-way leading to the transfer station area located near the southeastern property boundary. No industrial activities take place in D3. The area is mostly paved and stormwater is conveyed through V-ditches, underground pipes, and a culvert to Lower Newell Creek.

2.1.5 Stormwater Run-On from Offsite Areas

Run-on to the site is generated from forested non-industrial areas surrounding the northeast side of D1. Run-on from the vegetated area is directed to a ditch which prevents it from coming in contact with industrial areas on the facility. The run-on is solely from highly vegetated areas and is not expected to contribute pollutants to the drainage area on site.

2.2 Operations Schedule

The Ben Lomond Landfill and Transfer Station facility operates Monday through Saturday between the hours of 7:30 AM and 3:30 PM. The facility does not operate on Thanksgiving, Christmas, and New Year's Day.

If industrial activities are temporarily suspended for 10 or more consecutive calendar days during a reporting year, BMPs that are necessary to achieve compliance with this General

Permit during the temporary suspension of the industrial activity will be identified and incorporated into the SWPPP.

2.3 Required Site Map(s) Information

The facility's Site Maps are provided in **Appendix A** and include all information required by the General Permit (Section X.E). The maps include information regarding the facility boundary and stormwater drainage areas, nearby water bodies, locations of stormwater collection and conveyance systems including outfalls, locations of all industrial activities and materials, and locations of all structural control measures.

3. POLLUTANT SOURCE ASSESSMENT

This section presents a list of all industrial activities, materials, and potential pollutant sources at the facility. It also identifies specific pollutants associated with these sources, activities and/or areas that have the potential for spills and leaks, and the pollutant sources that are susceptible to exposure with stormwater and non-stormwater discharges (NSWDs). In addition, this section provides an assessment of the industrial pollutants present at the facility that may be related to the receiving waters with 303(d) listed impairments or approved TMDLs.

A pollutant source assessment has been conducted for each industrial area and/or activity at the facility as required by Section X.G.2 of the General Permit. These assessments are included in **Appendix G**.

3.1 Description of Potential Pollutant Sources

Table 3.1 includes a list of industrial activities and associated materials that are used or stored onsite. These activities and associated materials will or could potentially contribute pollutants to stormwater runoff. The anticipated activities and associated pollutants provided in **Table 3.1** form the basis for selecting the BMPs for the facility as described in **Section 4**. Locations of all material stockpiles, storage areas, and associated BMPs are shown in **Figures 2 and 3** in **Appendix A**.

Table 3.1: Industrial Activities, Associated Materials, and Pollutant Source

Industrial Activity or Area	Pollutant Source Type(s)	Associated Industrial Materials	Material Stored Quantity	Material Physical Characteristics	Material Location (Figure 2 map ID)	Associated Pollutants	Stormwater Exposure Pathway
Equipment Fueling Area	-Material handling and storage	Diesel fuel	6,000 gallons daily	Combustible liquid, Class II	Aboveground, 12,000-gallon double walled tank in secondary contained pad (3)	Oil & Grease	Spills and leaks during filling; overfilling of tank; leaking storage tank
Loading of Waste to Transfer Trucks	-Material handling and storage -Dust and particulate generating activity	Refuse material	100 tons daily	Solid	Covered loading area outside transfer facility (5)	pH, Total Suspened Solids (TSS), Chemical Oxygen Demand (COD), Trash	Tracking of material from loading area
Household Hazardous Waste Collection and Bulking	-Material handling and storage	Paint	1,000 gallons daily	Flammable, corrosive liquids/solids/gases	55-gallon steel drums located under cover in the bermed household hazardous waste station (7)	pH, Iron, Aluminum, Lead, Zinc, Organics, Oil & Grease, COD	None; storage in secondary containment; under cover
		Oxidizers	15 gallons daily				
		Acids	110 gallons daily				
		Bases	110 gallons daily				
		Flammable liquids	1000 gallons daily				
		Toxic solids	750 pounds daily				
		Batteries	1600 pounds daily				
		Flammable gases, insecticide gases	30 cubic feet daily				

Industrial Activity or Area	Pollutant Source Type(s)	Associated Industrial Materials	Material Stored Quantity	Material Physical Characteristics	Material Location (Figure 2 map ID)	Associated Pollutants	Stormwater Exposure Pathway
		Flammable liquids toxic	550 gallons daily				
Green Waste Collection and Processing	-Industrial process -Material handling and storage -Dust and particulate generating activity -Erodible surfaces	Wood and yard greeen waste	Collection: 29 tons daily; Processing: variable	Solid	Stockpiles on top of landfill (11)	pH, COD, TSS, Iron	Stockpiles directly contacting rainfall and runoff; tracking from disposal trucks
Waste Oil and Antifreeze Collection	-Material handling and storage	Used antifreeze	55 gallons daily	Flammable and combustible liquids	Public recycling area (10)	Oil & Grease	Spills and leaks during collection activities; drips; leaking storage drum; contact of spills/leaks with rainfall runoff
		Used oil	500 gallons daily				
		Used oil filters	100 pounds daily				
Public Recycling	-Material handling and storage	Recycle Material: paper,cardboard, metal, plastic bottles, electrical motors, appliances, electronics, plastic bags, metal cans, glass	Variable	Solid	Outdoor Area near Transfer Station Building; storage bins (8)	pH, TSS, COD, Iron, Aluminum, Lead, Zinc, Oil & Grease, Trash	Drips and leaks from storage bins; contact of spills/leaks with rainfall runoff
Bailing and Bailed Recyclables Storage	-Industrial process -Material handling and storage	Plastic bottles; metal cans; cardboard	Variable	Solid	Outdoor Area near Transfer Station Building (9)	TSS, Oil & Grease, Iron, Aluminum	Leaking equipment; bailed material liquid residue; contact of spills/leaks with

Industrial Activity or Area	Pollutant Source Type(s)	Associated Industrial Materials	Material Stored Quantity	Material Physical Characteristics	Material Location (Figure 2 map ID)	Associated Pollutants	Stormwater Exposure Pathway
Waste/Recyclables Sorting in Transfer Station Building	-Industrial process -Material handling and storage	Refuse and recyclable materials	Variable	Solid	Transfer Station Building (6)	pH, TSS, COD, Iron, Aluminum, Zinc, Lead	None; area under cover
Gypsum Wallboard, Concrete Rubble, and Aggregate Stockpiling	-Material handling and storage -Dust and particulate generating activity -Erodible surfaces	Concrete rubble	1,000 cubic yards	Solid	Stockpiles at top of landfill (14)	TSS, pH, Iron	Direct contact with rainfall runoff; tracking from disposal trucks
		Aggregate	100 cubic yards				
		Gypsum wallboard	40 cubic yards				
Closed Landfill Maintenance	-Industrial process -Erodible surfaces	Dust	Varies	Solid/particulate	Closed landfill and assoicated access roads	TSS, Iron, Cloride	Roadway erosion; dust deposition from the unpaved areas to paved areas
Landfill Gas Management	-Industrial Process -Material handling and storage	Knock-out condensate from landfill gas flare	Knock out tank capacity 500 gallons	Liquid	Aboveground tank in bermed landfill gas flare area (12)	COD, pH, organics	Leaking knockout tank, contact with rainfall runoff

3.2 Significant Spills and Leaks

Table 3.2 includes a list of industrial materials where spills and leaks have potential to occur, and includes material characteristics, quantities, locations, and containers. Spills and leaks will be prevented by implementing the BMPs described in **Section 4**.

No spills or leaks have occurred in the last five years.

Table 3.2: Potential Material Spills and Leaks

Industrial Material	Material Physical Characteristics	Material Stored Quantity	Material Container	Material Location
Motor Oil	Combustible Liquid, Class III-B (Pure)	150 gallons daily	55-Gallon Steel Drum	Transfer Station Building
Diesel Fuel	Combustible Liquid, Class II (Mixture)	6,000 gallons daily	12,000-Gallon Aboveground Tank	Equipment Fueling Area
Diesel Fuel	Combustible Liquid, Class II (Mixture)	80 gallons daily	80-Gallon Aboveground Tank	Fire Suppression Shed
Corrosive Acid	Corrosive Liquid (Waste)	110 gallons daily	55-Gallon Steel Drum	Household Hazardous Waste Station
Corrosive Base	Corrosive Liquid (Waste)	110 gallons daily	55-Gallon Steel Drum	Household Hazardous Waste Station
Flammable Liquids Toxic	Flammable and Combustible Liquid (Waste)	550 gallons daily	55-Gallon Steel Drum	Household Hazardous Waste Station
Mixed Flammable Liquids Bulk	Flammable and Combustible Liquid (Waste)	1,000 gallons daily	55-Gallon Steel Drum	Household Hazardous Waste Station
Oxidizers	Oxidizing Liquid (Waste)	15 gallons daily	55-Gallon Steel Drum	Household Hazardous Waste Station
Paint Related Materials	Liquid	1,000 gallons daily	55-Gallon Steel Drum; Lined cubic yard ULINE box	Household Hazardous Waste Station

Industrial Material	Material Physical Characteristics	Material Stored Quantity	Material Container	Material Location
Used Antifreeze	Flammable and Combustible Liquid (Waste)	55 gallons daily	250-Gallon Aboveground Tank	Waste Oil and Antifreeze Collection Station
Used Oil	Flammable and Combustible Liquid (Waste)	500 gallons daily	1,000-Gallon Aboveground Tank	Waste Oil and Antifreeze Collection Station
Landfill Gas Flare Knockout Condensate	Liquid	250 gallons daily	500 gallon tank	Landfill Gas Flare Area

3.3 Identification of Non-Stormwater Discharges

NSWDs consist of discharges which do not originate from precipitation events. The General Permit allows certain NSWDs provided they:

- Do not cause erosion;
- Do not carry other pollutants;
- Are not prohibited by the local MS4; and
- Do not require a separate NPDES Permit from the Regional Water Board.

NSWDs that are not specifically listed above, or that are authorized under a separate NPDES permit, are prohibited (referred to as unauthorized NSWD's). There are no unauthorized NSWDs identified at the facility. Authorized NSWDs at this facility are summarized in **Table 3.3** below.

Table 3.3: Authorized NSWDs at the Facility

NSWD Source	Frequency of Discharge	Drainage Area and Discharge Location (Figure 2 Discharge ID Number)	Quantity of NSWD	Characteristic of NSWD
Air conditioning compressor condensate from office	Often in the summer	-Drainage area: D1 -Discharge point: TS-1 (17)	Minimal	Water carrying no pollutants
Hillside water seepage through paved areas at transfer tuck loading area	After rain events, during wet season	-Drainage area: D1 -Discharge point: TS-1 (17)	Minimal	Water carrying no pollutants
Water seepage from landfill cap drainage layer	After rain events, during wet season	-Drainage area: D2 -Discharge point: LP-1 (18)	Minimal	Water carrying no pollutants
Dew on roof at transfer facility building	Varies	-Drainage area: D1 -Discharge point: TS-1 (17)	Minimal	Water carrying no pollutants

These authorized NSWDs will be managed with the stormwater and non-stormwater BMPs described in **Section 4** of this SWPPP. Steps will be taken to ensure that unauthorized NSWDS are eliminated.

3.4 HUC 10 Pollutant Assessment

The facility is located within the San Lorenzo River HUC 10 Watershed. The 303(d) listed impairments for this watershed include: chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH. There are no established TMDLs for this watershed.

Of the 303(d)-listed impairments, the facility monitors for pH since this pollutant is present at the facility. The other pollutants are not related to the industrial materials and activities at the facility.

4. BEST MANAGEMENT PRACTICES

4.1 Minimum BMPs

Sections 4.1.1 through **4.1.7** list the requirements for each minimum BMP. Minimum BMPs will be implemented for additional targeted industrial activities, equipment, and materials as necessary. If any of the required minimum BMPs are applicable but cannot be implemented, an explanation and alternative approach will be provided in the following sections. The minimum BMP section below includes the permit requirements (italicized bullets) followed by an explanation of how the BMP is addressed within the facility.

As required by the General Permit, a summary of all implemented BMPs is included in **Table 4.1**. The schedule for BMP implementation and the requirements for inspection and maintenance are presented in **Section 4**. **Appendix H** includes the applicable CASQA BMP fact sheets, which provide general guidance on how certain BMPs should be implemented.

4.1.1 Good Housekeeping

The following good housekeeping measures are required to be implemented in accordance with the General Permit (Section X.H.1.a):

- *Observe all outdoor areas associated with industrial activity including stormwater discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or stormwater run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials will be cleaned and disposed of properly;*
- *Minimize or prevent material tracking;*
- *Minimize dust generated from industrial materials or activities;*
- *Ensure that all facility areas impacted by rinse/wash waters are cleaned as soon as possible;*
- *Cover all stored industrial materials that can be readily mobilized by contact with stormwater;*
- *Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed via by the wind or contact with stormwater;*

- *Prevent disposal of any rinse/wash waters or industrial materials into the stormwater conveyance system;*
- *Minimize stormwater discharges from non-industrial areas (e.g., stormwater flows from employee parking area) that contact industrial areas of the facility; and*
- *Minimize authorized NSWDs from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.*

The facility fulfills the above General Permit requirements by conducting the following site specific BMPs described below. Note that there are no rinse/wash activities at the facility.

- Inspections of all outdoor areas with industrial activity are conducted monthly.
- Inspections of storm drain catch basins are conducted to observe for debris, trash, and sediment accumulation.
- Trash, debris, or waste material found at the site during inspections are picked up and properly disposed of.
- Impermeable areas are routinely swept with a sweeper three times a week during wet season and once a week during dry season to minimize material tracking.
- Dust at unpaved surfaces is minimized using water spray. The landfill cap is vegetated to reduce erosion.
- Prior to storm events or when no ongoing industrial activities are taking place:
    - Bins used for storage of recyclables located outdoors are covered;
    - Baled recyclables are stored in covered containers and covered with tarps or on skids and covered with tarps;
    - Tarps or other covers are placed over processed stockpiled materials at the green waste processing area; and
    - Wattles are placed around unprocessed wood waste, rock, and concrete stockpiles.
- Materials within the Household Hazardous Waste Facility are stored indoors, under roofs, or in sealed containers within bermed, secondary containment.
- Recyclables are stored in bins to avoid contact with stormwater.
- Drain inlets at the public recycle area are covered during the dry season.
- Stormwater from non-industrial areas are directed to V-ditches to avoid contact with industrial areas.

- Water seepage through paved areas at the transfer truck loading area is collected in strip drains.
- Water seepage through the landfill cap discharges to V-ditches and is stored in the sedimentation pond.

4.1.2 Preventative Maintenance

The following preventative maintenance measures are required to be implemented in accordance with the General Permit (Section X.H.1.b):

- *Identify all equipment and systems used outdoors that may spill or leak pollutants;*
- *Observe the identified equipment and systems to detect leaks, or identify conditions that may result in the development of leaks;*
- *Establish an appropriate schedule for maintenance of identified equipment and systems; and*
- *Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.*

The facility fulfills the above General Permit requirements by conducting the following site specific BMPs described below.

- All equipment and systems used outdoors that may spill or leak pollutants are identified in **Figure 2**.
- Weekly inspections of all equipment are performed at the facility to assess for leaks.
- Aboveground diesel tank and used antifreeze and oil tanks are inspected for leaks weekly.
- Maintenance of trucks, forklift, and loader used at the facility is conducted off site or indoors at the transfer station. There is a schedule of preventative maintenance for each piece of equipment.

4.1.3 Spill and Leak Prevention and Response

The following spill and leak prevention and response measures are required to be implemented in accordance with the General Permit (Section X.H.1.c):

- *Establish procedures and/or controls to minimize spills and leaks;*

- *Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system. Spilled or leaked industrial materials will be cleaned promptly and disposed of properly;*
- *Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and*
- *Identify and train appropriate spill and leak response personnel.*

The facility fulfills the above General Permit requirements by conducting the following site specific BMPs described below.

- Industrial equipment and structures are inspected weekly for spills or leaks at:
    - Bailer;
    - Aboveground diesel tank at fueling area; and
    - Waste oil and antifreeze collection area.
- Unattended loading of waste or fueling is not allowed.
- All hoses and fittings at the equipment fueling area are checked for leaks and repaired as needed.
- Spill and leak response procedures for petroleum storage are detailed in the site specific SPCC Plan, kept in the facilities main office building. The SPCC Plan outlines procedures for prompt response and disposal measures.
- A spill prevention, control, and cleanup BMP fact sheet (**Appendix H**) also provides details on spill and leak response procedures.
- Spill kits are available and stocked in case of spills at the equipment fueling area, oil and antifreeze collection station, transfer station building, and at the household hazardous waste facility.
- Leaks, drips, and other spills are immediately cleaned with absorbent materials. All materials used to clean spills are properly disposed of. Use of water during clean ups is minimized.
- Training is provided once a year for the PPT and training records are kept in **Appendix D**.

4.1.4 Material Handling and Waste Management

The following material handling and waste management measures are required to be implemented in accordance with the General Permit (Section X.H.1.d):

- *Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm event;*
- *Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with stormwater during handling;*
- *Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;*
- *Divert run-on and stormwater generated from within the facility away from all stockpiled materials;*
- *Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (Section X.H.1.c); and*
- *Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes*.

The facility fulfills the above General Permit requirements by conducting the following site specific BMPs described below. Note that there are no non-solid industrial materials stored on site that can be easily mobilized by wind or stormwater contact.

- Outdoor facility industrial operations are minimized during storm events.
- All recyclables are stored in covered bins or kept within the Transfer Station Building.
- Stockpiles of processed green waste are covered with tarps when not in use.
- Household hazardous waste facility, waste oil and antifreeze collection area, and transfer station building are under cover.
- Straw wattles are used to divert stormwater around the stockpiles of unprocessed and processed wood prior to storm events.
- Cleanup procedures for spills and leaks of petroleum products can be found in the Spill Prevention Control and Countermeasure Plan.
- A spill prevention, control, and cleanup BMP fact sheet (**Appendix H**) provides details on spill and leak response procedures.
- Bins and material handling equipment are inspected weekly and exterior is cleaned as necessary.

4.1.5 Erosion and Sediment Controls

The following erosion and sediment control measures will be implemented in accordance with the General Permit (Section X.H.1.e):

- *Implement effective wind erosion controls;*
- *Provide effective stabilization for all disturbed soils and other erodible areas prior to a forecasted storm event;*
- *Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site;*
- *Divert run-on and stormwater generated from within the facility away from all erodible materials*.

The facility fulfills the above General Permit requirements by conducting the following site specific BMPs described below:

- Vehicles are operated at low speeds at the facility.
- Water trucks are used at the facility to provide moisture for dust control on unpaved surfaces.
- Capped landfill is vegetated to prevent erosion and is maintained monthly.
- Transitional areas, from unpaved to paved roads, are swept weekly to minimize tracking.
- Prior to storm events, straw wattles are placed around the stockpiles of unprocessed green waste, gypsum wallboard, concrete rubble, and aggregate; and
- Prior to storm events, processed green waste stockpiles are covered with tarps.

4.1.6 Employee Training Program

The following employee training program measures are required to be implemented in accordance with the General Permit (Section X.H.1.f):

- *Ensure that all team members implementing the various compliance activities of this SWPPP are properly trained in topics including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities;*
- *Prepare or acquire appropriate training manuals or training materials;*

- *Identify which personnel need to be trained, their responsibilities, and the type of training they will receive;*
- *Provide a training schedule; and*
- *Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.*

The facility fulfills the above General Permit requirements by conducting the following site specific BMPs described below.

- **Table 1.1** of this SWPPP identifies the PPT and their roles and duties within the facility.
- All personnel listed on PPT will receive annual compliance training.
- Documentation of training activities is retained in **Appendix D**.
- Task-specific training for all employees engaged in activities that have the potential to cause stormwater pollution will be conducted when new employees are hired.

4.1.7 Quality Assurance and Record Keeping

The following quality assurance and record keeping measures are required to be implemented in accordance with the General Permit (Section X.H.1.g):

- *Develop and implement management procedures to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan;*
- *Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP; and*
- *Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five years (Section XXI.J.4).*

An employee training program is used to ensure that the appropriate staff implements all elements of the SWPPP and the Monitoring Implementation Plan. The facility fulfills the above General Permit requirements by maintaining all the appropriate records, mentioned in **Section 7** of this SWPPP.

4.2 Advanced BMPs

Where the minimum BMPs described above will not adequately reduce or prevent pollutants in stormwater discharges, the General Permit (Section X.H.2) requires

dischargers, to the extent feasible, implement and maintain advanced BMPs necessary to reduce or prevent discharges of pollutants in its stormwater discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

4.2.1 Exposure Minimization BMPs

Storm resistant shelters are installed onsite to prevent the contact of stormwater with industrial activities and material. The locations of these shelters and associated industrial activities and materials are presented in **Table 4.1** and in **Figure 3** in **Appendix A**. The following are the exposure minimization BMPs found on Site:

- Transfer Station Building: all activities within the building are under cover and protected from stormwater.
- Household Hazardous Waste Station: hazardous waste collection and processing activities are conducted under a roof.
- Waste Oil and Antifreeze Collection Station: collection area is under a canopy.
- Resource Recycling Area: area is partially covered by a canopy protecting recyclable bins.

4.2.2 Stormwater Containment and Discharge Reduction BMPs

Stormwater containment and discharge reduction BMPs include BMPs that divert, reuse, contain, or reduce the volume of stormwater runoff. A sedimentation pond is located at the base of the southeast portion of the landfill. Stormwater runoff from the landfill cap, and the green waste processing area discharges into the sedimentation pond. The sedimentation pond reduces the sediment content and infiltration reduces the volume of the water prior to discharge. The sedimentation pond was designed for a 10-year, 24-hour storm.

4.2.3 Spill Containment BMPs

Spill containment BMPs prevent spills and leaks from coming in contact with stormwater runoff or directly discharging from the site. Secondary containment is used at the facility to contain spills from storage tanks containing diesel, waste oil, antifreeze, and leachate gas flare knockout condensate. The size, type, and contents of each tank found at the facility are identified in **Table 3.2**.

4.2.4 Stormwater Conveyance System BMPs

Catch basins allow for the settlement of pollutants such as sediment and metals. Routine maintenance is necessary at the catch basins as they can collect debris and litter during storm events. To enhance the efficiency of the catch basins, drain inlet inserts are used to help filter pollutants from the discharge water. Drain inlet inserts used on site include filter fabrics, drain inserts, and mesh screens.

Concrete blocks, hay bales, and straw wattles are used around drain inlets in the green waste storage area to prevent wood floating debris from entering the storm drain system. Routine maintenance is necessary to remove settled debris around the drain inlets and replace the hay bales or straw wattles when appropriate.

Sandbag check dams are used at the base of the natural ravine in drainage area D1 to slow the water velocity thus reducing erosion and enhancing sediment settling prior to discharge. In addition, grade rings are used to elevate the elevation of outfall TS-1, which allows the storm drain to operate as a "standpipe". This allows sediment in the water to settle out prior to discharging through the pipe.

4.3 BMP Summary Table

Table 4.1 summarizes the industrial activities, materials, pollutant sources, potential pollutants, minimum and advanced BMPs implemented to prevent discharge of pollutants in stormwater runoff, BMP location, frequency of BMP implementation, and the required equipment needed. Descriptions of the specific BMPs implemented were provided in previous subsections. Implementation and maintenance of BMPs is described in **Section 5**.

Table 4.1: BMP Summary Table

Industrial Activity/ Material	Pollutant Sources	Potential Pollutants	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map ID (Figure 3)	Frequency of BMP Implementation
Equipment Fueling	-Spills and leaks during filling -Overfilling of tank -Storage tank failure (punctures)	Oil & Grease	-Secondary containment for diesel tank	Advanced	SC	At all times
			-Spill kit	Minimum	SPC	At all times
			-Routine inspections for releases and implementation of preventative maintenance	Minimum	GH, PM	Weekly
			-Inspections, releases, maintenance, and corrective actions records maintained	Minimum	NA	As necessary
			-Unattended fueling prohibited	Minimum	SPC	At all times
			-SPCC Plan is available and provides detailed procedures for spill response	Minimum	SPC	At all times
Loading of Waste to Transfer Trucks	-Release of trash during loading activities -Contact with NSWDs -Dust and particulate generation	pH, TSS, COD Trash	-Strip drains outside loading area prevent NSWDs from reaching the loading area	Minimum	GH	At all times
			-Drain inlet inside loading area to convey liquid waste from loading area to a leach field and prevent discharge of entering the storm drain system	Minimum	GH	NA
			-Drain inlet inserts	Advanced	DII	At all times
			-Sweeping conducted to remove waste and dust	Minimum	GH	Three times a week during the wet season; weekly during the dry season
			-Area is covered	Advanced	C	At all times
			-Unattended loading not allowed	Minimum	SPC	At all times

Industrial Activity/ Material	Pollutant Sources	Potential Pollutants	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map ID (Figure 3)	Frequency of BMP Implementation
Household Hazardous Waste Collection and Bulking	-Spills and leaks during loading unloading or filling of storage drums -Storage drum failure (punctures)	pH, Iron, Aluminum, Lead, Zinc, Organics, Oil & Grease	-Secondary containment	Advanced	SC	NA
			-Area is covered	Advanced	C, MHWM	NA
			-Routine inspections for releases and implementation of preventative maintenance as needed	Minimum	GH, PM	Weekly
			-Inspections, releases, maintenance, and corrective actions records maintained	Minimum	NA	As necessary
			-Spill kit	Minimum	SPC	At all times
Green Waste Collection and Processing	-Tracking from disposal trucks - Dust and particulate generation -Erosion	pH, COD, TSS, Iron	-Stormwater drain inlets protected with hay bales, concrete blocks, and straw wattles to settle particulates	Advanced	DII	At all times
			-Sedimentation pond for runoff collection	Advanced	SP	At all times
			- Sweeping of adjacent paved areas conducted to reduce tracking	Minimum	GH	Weekly
			-Stockpiles of processed material covered with tarps during storm events or when not in use	Minimum	GH, MHWM	During storm events; or when no on-going industrial activities are taking place
			-Wind erosion protection; vehicles operated at low speeds, watering to reduce dust generation	Minimum	EC	Vehicle speed-at all times; Moisture-as needed
			-Drain inlet inserts	Advanced	DII	At all times

Industrial Activity/ Material	Pollutant Sources	Potential Pollutants	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map ID (Figure 3)	Frequency of BMP Implementation
Waste Oil and Antifreeze Collection	-Spills and leaks during collection -Overfilling of tank -Storage drum failure (punctures)	Oil & Grease	-Secondary containment for waste oil storage drums	Advanced	SC	At all times
			-Collection area under cover	Advanced	C	At all times
			-Routine inspections for releases and implementation of preventative maintenance as needed	Minimum	GH, PM	Weekly
			-Inspections, releases, maintenance, and corrective actions records maintained	Minimum	NA	As necessary
			-Spill kit	Minimum	SPC	At all times
			-SPCC Plan is available and provides detailed procedures for spill response	Minimum	SPC	At all times
Public Recycling	-Storage bin seepage -Open bins exposure to rainfall -Release of recyclables from bins contacting stormwater	pH, TSS, COD, Iron, Aluminum, Lead, Zinc, Oil & Grease	-Area partially under cover	Advanced	C	At all times
			-Sweeping conducted to remove recyclables and dust	Minimum	GH	Three times a week during the wet season; weekly during the dry season
			-Drain inlet inserts	Advanced	DII	At all times
			-Drain inlets are covered	Minimum	GH	During dry season
			-Area inspected for debris, waste, spills, or tracked material and cleaned accordingly	Minimum	GH	Daily
			-Bin coverage	Minimum	GH, MHWM	During storm events; or when no on-going industrial activity is taking place

Industrial Activity/ Material	Pollutant Sources	Potential Pollutants	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map ID (Figure 3)	Frequency of BMP Implementation
			-Storage of recyclables inside bins or on skids and covered with tarps	Minimum	GH, MHWM	At all times
			-Sandbags used at the base of the natural ravine to prevent sediment erosion; grade rings installed at the TS-1 storm drain to allow water to pool and sediment to settle	Advanced	RR; GR	At all times
Bailing of Recyclables	-Hydraulic oil leak -Bailed product drippage -Bailed recyclables exposed to stormwater	TSS, Oil & Grease, Iron, Aluminum, Trash	-Routine inspections for releases and implementation of preventative maintenance as needed	Minimum	GM, PM, SPC	Weekly
			-Inspections, releases, maintenance, and corrective actions records maintained	Minimum	NA	As necessary
Waste/ Recyclables Sorting in Transfer Station Building	-Industrial process, but no exposure	pH, TSS, COD, Iron, Aluminum, Lead, Zinc, Oil & Grease, Trash	-Area is covered	Advanced	C	At all times
Gypsum Wallboard, Concrete Rubble, and Aggregate Stockpiling	-Tracking from trucks - Dust or particulate generation -Material directly exposed to stormwater	TSS, pH, Iron	-Sedimentation pond for runoff collection	Advanced	SP, GH	At all times
			-Wattles around stockpiles of unprocessed materials for erosion protection during storm events	Minimum	EC, MHWM	During storm events; or when no on-going industrial activities are taking place
Landfill Cap Maintenance	-Erodible surfaces	TSS, Iron, Chloride	-Cap vegetated and maintained to prevent erosion	Minimum	EC	As needed
			-Wind erosion protection; moisture control for dust	Minimum	EC	Weekly

Industrial Activity/ Material	Pollutant Sources	Potential Pollutants	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map ID (Figure 3)	Frequency of BMP Implementation
			-Sedimentation pond for runoff collection; V-ditches used to divert runoff	Advanced	GH	At all times
Managing Landfill Gas Flare	-Industrial process -Spill from condensate tank	COD, pH, Organics	-Secondary containment; bermed area	Advanced	SC	At all times
			-Routine inspections for releases and implementation of preventative maintenance as needed	Minimum	GM, PM, SPC	Weekly
			-Inspections, releases, maintenance, and corrective actions records maintained	Minimum	NA	As necessary

Notes:

The following minimum/advanced BMPs are implemented at the facility and apply to all industrial activities:

- All impermeable surface areas are routinely swept with a sweeper three times a week during wet season and once a week during dry season.
- Annual compliance training conducted annually and all training activities are documented.
- The PPT (**Table 1.1**) ensures all BMPs are implemented at the facility.
- BMP implementation records are maintained.
- Outdoor facility industrial operations are minimized during storm events.

5. BMP IMPLEMENTATION AND MAINTENANCE SCHEDULE

BMPs will be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions will be implemented as soon as practicable of identified deficiencies and associated amendments to the SWPPP will be prepared and documented. Inspection, frequency, and maintenance for minimum and advanced BMPs implemented are included in **Table 5.1**. Records of BMP implementation are included in **Appendix I**.

Table 5.1: BMP Implementation and Maintenance Schedule

Industrial Activity/ Material/ Area	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map Location ID (Figure 3)	Required BMP Equipment and Tools	Inspection Frequency	Maintenance
Equipment Fueling	-Secondary containment for diesel tank	Advanced	SC	NA	Monthly	-Confirm water and/or fuel has not accumulated in secondary containment
	-Spill kit	Minimum	SPC	Spill kit materials adjacent to tank	Monthly	-Confirm spill kit is properly stocked
	-Routine inspections for releases and implementation of preventative maintenance as needed	Minimum	GH, PM	NA	Monthly	-Hoses and fittings are checked for leaks
	-SPCC Plan is available and provides detailed procedures for spill response	Minimum	SPC	NA	Monthly	-Maintain SPCC Plan in office
Loading of Waste to Transfer Trucks	-Strip drains outside loading area prevent stormwater and NSWDs from reaching the loading area	Minimum	GH	NA	Monthly and after every storm event	-Inspect and clear of debris, trash, and sediment
	-Drain inlet inside loading area conveys liquid waste from loading area to a leach field and prevent discharge of liquids from entering the storm drain system	Advanced	GH	NA	Monthly	-Inspect and clear of debris, trash, and sediment

Industrial Activity/ Material/ Area	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map Location ID (Figure 3)	Required BMP Equipment and Tools	Inspection Frequency	Maintenance
	-Drain inlet inserts	Advanced	DII	Filter fabric, drain inserts, mesh screen	Monthly and after every storm event	-Check for ruptures in filter fabric and breakage in mesh screen -Ensure drain inlet inserts are properly installed -Inserts are cleared of debris, trash, and sediment
Household Hazardous Waste Collection and Bulking	-Secondary containment	Advanced	SC	NA	Monthly	-Inspect integrity of the berm
	-Spill kit	Minimum	SPC	Spill and cleanup material	Weekly	-Confirm spill kit is properly stocked
Green Waste Collection and Processing	-Stormwater drain inlets protected with hay bales or straw wattles to settle out particulates	Advanced	DIP	Hay bales, straw wattles	Monthly during the wet season and after every storm event	-Check integrity of hay bales, straw wattles, replace as necessary
	-Sedimentation pond for runoff collection	Advanced	SP	shovels, loader	Monthly	-Inspect for invasive vegetation, trash and debris, clogging of inlet/outlet structures, erosion, and sediment buildup in pond

Industrial Activity/ Material/ Area	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map Location ID (Figure 3)	Required BMP Equipment and Tools	Inspection Frequency	Maintenance
	-Processed stockpiles covered with tarps during storm events or when not in use	Minimum	GH, MHWM	Tarps	Monthly and after every storm event	-Check for ruptures in the tarps
	-Drain inlet inserts	Advanced	DII	Filter fabric, drain inserts, mesh screen	Monthly and after every storm event	-Check for ruptures in filter fabric and mesh screen breakage -Ensure drain inlet inserts are properly installed -Inserts are cleared of debris, trash, and sediment
Waste Oil and Antifreeze Collection	-Secondary containment for waste oil storage drums	Advanced	SC	NA	Monthly	-Check for no water and oil or antifreeze accumulation in secondary containment
	-Spill kit	Minimum	SPC	Spill and cleanup material at collection location	Weekly	-Spill kit is properly stocked
	-SPCC Plan is available and provides detailed procedures for spill response	Minimum	SPC	NA	Monthly	-Maintain SPCC Plan in office

Industrial Activity/ Material/ Area	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map Location ID (Figure 3)	Required BMP Equipment and Tools	Inspection Frequency	Maintenance
Public Recycling	-Drain inlet inserts	Advanced	DII	Filter fabric, drain inserts, mesh screen	Monthly and after every storm event	-Check for ruptures in filter fabric and mesh screen breakage -Ensure drain inlet inserts are properly installed -Inserts are cleared of debris, trash, and sediment
	-Bin coverage	Minimum	GH, MHWM	Tarps, lids	Monthly and after every storm event	-Confirm covers are in good working order and available -Check for ruptures in the tarps or holes in lids
	-Storage of recyclables inside bins	Minimum	GH, MHWM	Bins	Monthly and after every storm event	-Confirm the bins are in good working order and are not leaking
	-Sandbags used at the base of the natural ravine to prevent sediment erosion; grade rings installed at the TS-1 storm drain to allow water to pool and sediment to settle	Advanced	RR; GR	Sandbags	Monthly and after every storm event	-Check integrity of sandbags and grade rings -Ensure sandbags are clear of accumulated sediment, debris, and trash -Ensure area around the grade ring is clear of accumulated sediment

Industrial Activity/ Material/ Area	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map Location ID (Figure 3)	Required BMP Equipment and Tools	Inspection Frequency	Maintenance
Gypsum Wallboard, Concrete Rubble, and Aggregate Stockpiling	-Sedimentation pond for runoff collection	Advanced Minimum	SP, GH EC, MHWM	Shovels and loader Tarps	Monthly	-Inspect for invasive vegetation, trash and debris, clogging of inlet/outlet structures, erosion, and sediment buildup in pond
					After every storm event	- Inspect to ensure drainage system is in good working order
					Annually	-Maintain vegetation around pond to prevent erosion
	-Wattles around stockpiles of unprocessed materials for erosion protection during storm events	Minimum	EC, MHWM			
Landfill Cap Maintenance	-Cap vegetated and maintained to prevent erosion	Minimum	EC	NA	Monthly	-Inspect for erosion
	-Wind erosion protection; moisture control for dust	Minimum	EC	Water truck	Monthly	-Ensure all surfaces are vegetated

Industrial Activity/ Material/ Area	BMPs Implemented	BMP Type Minimum/ Advanced	BMP Site Map Location ID (Figure 3)	Required BMP Equipment and Tools	Inspection Frequency	Maintenance
	-Sedimentation pond for runoff collection; V-ditches used to divert runoff	Advanced	SP, GH	Shovels and loader	Monthly	-Inspect for invasive vegetation, trash and debris, clogging of inlet/outlet structures, erosion, and sediment buildup in pond -Ensure V-ditches are clear of debris, trash, and sediment Make repairs accordingly
					After every storm event	-Inspect to ensure drainage system is in good working order
Managing Landfill Gas Flare	-Condensate tank is within secondary containment bermed area	Advanced	SC	NA	Monthly	-Confirm that the secondary containment is in good working order, make repairs as necessary

6. MONITORING IMPLEMENTATION PLAN AND REPORTING

6.1 Purpose

This section describes the Site Monitoring Implementation Plan (MIP) and the storm water program reporting obligations. The following topics are addressed:

1. Storm water PPT monitoring team;
2. Discharge locations;
3. Monthly visual observations and responses;
4. Storm water sampling and analysis;
5. Example Chain of Custody (COC);
6. Storm event visual observations and responses; and
7. Quality assurance and quality control, including field instrument calibration.

6.2 Storm Water PPT Monitoring Team

The storm water monitoring team is comprised of staff that are part of the PPT. Those individuals are identified in **Table 1.1** of this plan.

6.3 Discharge Locations

As described in **Section 2.1.4** and shown in Figure 2 in Appendix A, there are two Site discharge locations. **Table 6.1** identifies each:

Table 6.1: Stormwater Discharge Locations

Location Identifier (Figure 2)	Discharge Location (Note Drainage Area that the discharge location drains)
17	Transfer Station Discharge and Recycle Area at Transfer Station Drainage Area
18	Lower Pond Discharge at Landfill Drainage Area

There are three storm water containment areas on site: the Lower Pond, the landfill gas flare condensate tank secondary containment, and the 12,000 gallon diesel fuel tank secondary containment. The only containment area that discharges is the Lower Pond.

The other containment areas do not discharge. Contained water in the 12,000 gallon diesel fuel tank secondary containment will be disposed to the septic system and the water from the condensate tank secondary containment will be pumped to the condensate tank and hauled off Site. The containment areas are shown in **Figure 2** in **Appendix A** and **Table 6.2** identifies the storm water containment area by location.

Table 6.2: Stormwater Storage and Containment Areas

Location Identifier (Figure 2)	Description of Containment (Note Drainage Area in which the containment is located)
20	Sedimentation Pond at Landfill Drainage Area
3	Bermed area around 12,000 gallon diesel fuel tank
12	Bermed area around landfill gas condensate tank

6.4 Monthly Visual Observations and Responses

Visual observations will be conducted at least once each calendar month and will include observations of drainage areas, BMPs, and discharge locations. Visual observations will be conducted during daylight hours of scheduled facility operating hours and on days without precipitation. Use the "Record of Monthly Dry Weather Observations" form found in **MIP Attachment 2**. If visual observations are not conducted, provide an explanation for each uncompleted event on the "Record of Monthly Dry Weather Observations" form.

BMP deficiency corrections, including repairs or maintenance of BMPs, will be initiated as soon as possible. If the deficiencies require substantive design or procedural changes, including additional BMPs, the SWPPP will be amended to reflect the changes.

The completed logs and checklists will be kept in **MIP Attachment 1** "Monitoring Records".

6.4.1 Non-Storm Water Discharges

Using the "Record of Monthly Dry Weather Observations" form found in **MIP Attachment 2**, observe the presence or indications of prior, current, or potential unauthorized NSWDs and note their sources. Observe authorized NSWDs, their sources, and associated BMPs to ensure that authorized NSWDs flows are reduced to the extent possible and do not contact industrial materials or sources of pollution. Ensure BMPs that

are intended to address NSWDs are in place and functional. Note deficiencies on "Record of Monthly Dry Weather Observations" form found in **MIP Attachment 2**.

6.4.2 Industrial Activities Areas and BMPs

Using "Record of Monthly Dry Weather Observations" form found in **MIP Attachment 2**, review site drainage areas and observe outdoor potential sources of pollutants including industrial equipment and storage areas, outdoor industrial activities areas, BMPs and other potential sources of pollutants.

6.5 Storm Water Sampling and Analysis

This section describes the methods and procedures that will be followed for stormwater sampling and analysis. It contains information for sampling schedule, sampling locations, sample collection procedures, sample handling, sample analysis, and data evaluation and reporting.

6.5.1 Sampling Schedule

Stormwater samples at each discharge location will be collected and analyzed from two Qualified Storm Events (QSEs) within the first half of each reporting year (July 1 to December 31) and two QSEs within the second half of each reporting year (January 1 to June 30).

A QSE is a precipitation event that:

- Produces a discharge for at least one drainage area; and
- Is preceded by 48 hours with no discharge from any drainage area.

6.5.2 Sampling Locations

Two discharge locations have been identified on the project site, D1 and D2. Samples collected at LP-1 (D2) will only be collected from the pond surface when the pond reaches capacity and begins to discharge. **Table 6.3** summarizes the sampling locations.

Table 6.3: Sampling Locations

Sample Location ID and Number (Figure 2)	Sample Location Description	Sample Location Latitude and Longitude (Decimal Degrees)

TS – 1 (17)	Transfer Station Discharge	37.094006/ -122.075194
LP – 1 (18)	Lower Pond Discharge	37.091303/ -122.077294

6.5.3 Sample Collection Procedures

Samples from each discharge location will be collected within four hours of:

- The start of the discharge; or
- The start of facility operations if the QSE occurs within the previous 12 hour period.

Samples will be collected during scheduled facility operating hours and when sampling conditions are safe (for instance, not during flooding or electrical storms). Only team members properly trained in water quality sampling will collect samples. If sampling cannot be conducted, document this on the "Sampling Log" found in **MIP Attachment 2**.

To maintain sample integrity and prevent cross-contamination, sample collection personnel will follow the protocols below:

- Collect samples (for laboratory analysis) only in laboratory-provided sample containers;
- Wear clean, powder-free nitrile gloves when collecting samples;
- Change gloves whenever something not known to be clean has been touched;
- Change gloves between sites; and
- Decontaminate all equipment (e.g. bucket, tubing) prior to sample collection using a trisodium phosphate water wash, distilled water rinse, and final rinse with distilled water.

The most important aspect of grab sampling is to collect a sample that represents the entire runoff stream. Typically, samples are collected by dipping the collection container in the runoff flow paths and streams as noted below.

- For small streams and flow paths, simply dip the bottle facing upstream until full.

- For larger stream that can be safely accessed, collect a sample in the middle of the flow stream by directly dipping the mouth of the bottle. Once again making sure that the opening of the bottle is facing upstream as to avoid any contamination by the sampler.
- For larger streams that cannot be safely waded, pole-samplers may be needed to safely access the representative flow.
- Avoid collecting samples from ponded, sluggish or stagnant water.
- Do not stand upstream of the sampling point within the flow path.

Note, that depending upon the specific analytical test, some containers may contain preservatives. These containers should never be dipped into the stream, but filled indirectly from the pole sampler.

6.5.4 Sample Handling

Immediately following sample collection, the following will be completed:

- Cap sample containers;
- Complete sample container labels;
- Seal containers in a re-sealable storage bag;
- Place sample containers into an ice-chilled cooler;
- Document sample information on the "Sampling Log" form; and
- Complete the COC.

All samples will be shipped inside coolers with ice. Sample bottles will be well packaged to prevent breakage.

6.5.5 Sample Analysis

Grab samples will be collected and analyzed for pH using a portable pH meter. The pH meter manual and calibration instructions are provided in **MIP Attachment 3** "Field Meter Instructions". The pH analysis will be performed as soon as practicable, but no later than 15 minutes after sample collection.

The analytical constituents vary by drainage area. The total list of analytes and the basis for each is provided in **Table 6.4**.

Table 6.4: Analytical Constituents

Constituent	Basis	Drainage Area
pH	Basic required constituent	D1, D2
Oil and grease	Basic required constituent	D1, D2
Total Suspended Solids	Basic required constituent	D1, D2
COD	Pollutant Source Assessment (PSA) constituent	D1, D2
Iron	SIC Code constituent and PSA constituent	D1, D2
Aluminum	SIC Code constituent and PSA constituent	D1
Lead	SIC Code constituent and PSA constituent	D1
Zinc	SIC Code constituent and PSA constituent	D1
Chloride	Indicator of Leachate Seepage from Landfill	D2

Samples will be analyzed using the analytical methods established in the IGP. The details of these methods are presented in **Table 6.5**.

Table 6.5: Sample Collection, Preservation and Analysis for Water Quality Samples

Constituent	Analytical Method	Minimum Sample Volume	Sample Containers	Sample Preservation	Reporting Limit	Maximum Holding Time
Oil and Grease	EPA1664A	1000 mL	1-L amber glass bottle	Sulfuric Acid, 4^{O} C	1 mg/L	28 days
pH	Field Probe	100 mL	--	None, 4^{O} C	--	15 minutes
Total Suspended Solids	SM 2540D	1000 mL	1-L HDPE	4^{O}C	1 mg/L	7 days
COD	SM 5220C	50 mL	250-mL glass bottle	Sulfuric Acid, 4^{O}C	5.0 mg/L	28 days

Constituent	Analytical Method	Minimum Sample Volume	Sample Containers	Sample Preservation	Reporting Limit	Maximum Holding Time
Iron, Total	EPA 200.7	100 mL	250-mL HDPE	Nitric Acid, 4^{O} C	0.1 mg/L	180 days
Aluminum (Total); Lead (Total); Zinc (Total)	EPA 200.8	100 mL	250-mL HDPE	Ultra Nitric Acid, 4^{O} C	Al-0.05 mg/L; Pb-0.001 mg/L; Zn-0.005 mg/L	180 days
Chloride	EPA 300.0	50 mL	125-mL HDPE	4^{O} C	2.0 mg/L	28 days

Samples will be analyzed by Calscience Laboratories, Inc, 7440 Lincoln Way, Garden Grove, CA, 92841. Calscience's phone number is (714) 895-5494. Their ELPA certification is 03220CA. Samples will be shipped on wet ice via overnight courier to Calscience.

6.6 Example Chain of Custody

An example COC is included in MIP Attachment 3 "Example Forms". The COC should be carefully and accurately prepared in ink. Changes will be noted with strikethrough text, sampler's initials, and date.

6.7 Storm Event Visual Observations and Responses

Whenever storm water samples are collected, sampling event visual observations will also be conducted. These observations allow the PPT to quickly assess the quality of the discharged storm water and respond to potential BMP deficiencies in a timely manner. The "Record of Wet Weather Observations during Sampling" form found in **MIP Attachment 2** will be used to record sampling event observations.

If observations are not made, an explanation for not conducting the required observations will be provided on the "Record of Wet Weather Observations during Sampling" form found in **MIP Attachment 2**.

When pollutants (i.e., odor, oily sheen, sediment, trash, etc.) are observed in the discharged stormwater, follow-up observations of the drainage area will be conducted to

identify the probable source of the pollutants and adequacy of BMPs. BMP deficiency corrections, including repairs or maintenance of BMPs, will be initiated as soon as possible. If the deficiencies require substantive design or procedural changes, including additional BMPs, the SWPPP will be amended to reflect the changes.

The completed logs and checklists will be kept in **MIP Attachment 1** "Monitoring Records".

6.8 Quality Assurance and Quality Control

An effective Quality Assurance and Quality Control (QA/QC) plan will be implemented as part of the MIP to ensure that reliable data (field observations and analytical data) is developed. QA/QC procedures to be initiated include the following:

- Field forms will be carefully and legibly prepared and signed by the PPT member that conducts the observations and sampling;
- Clean sampling techniques will be implemented by trained PPT members;
- Field instruments are carefully calibrated and the calibration documented on sampling forms;
- Chains of custody forms will be carefully prepared and reviewed prior to sample shipment; and
- Data will be reviewed to ensure that the laboratory performed the requested analyses and that laboratory performance parameters (hold time, reporting limits, method detection limits, and laboratory QC samples) are satisfactory.

7. REPORTING AND RECORDKEEPING

7.1 Annual Comprehensive Facility Compliance Evaluation

The General Permit (Section XV) requires the Discharger to conduct one Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) for each reporting year (July 1 to June 30). Annual Evaluations will be conducted at least eight months and not more than 16 months after the previous Annual Evaluation. The planned window for conducting the Annual Evaluation is between April and June of each year. The SWPPP will be revised, as appropriate based on the results of the Annual Evaluation, and the revisions will be implemented within 90 days of the Annual Evaluation.

At a minimum, Annual Evaluations will consist of:

- A review of all sampling, visual observation, and inspection and monitoring records and sampling and analysis results conducted during the previous reporting year;
- A visual inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the stormwater conveyance system;
- A visual inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in General Permit Section XVII;
- A visual inspection of equipment needed to implement the BMPs;
- A visual inspection of any BMPs;
- A review and effectiveness assessment of all BMPs for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial stormwater discharges and authorized NSWDs; and
- An assessment of any other factors needed to comply with the Annual Reporting requirements in General Permit Section XVI.B.

7.2 Annual Report

The Annual Report will be prepared, certified, and electronically submitted no later than July 15th following each reporting year using the standardized format and checklists in SMARTS based on the reporting requirements identified in Section XVI of the General

Permit. Annual reports will be submitted in SMARTS and in accordance with information required by the on-line forms.

7.3 Records Retention

Paper or electronic records of stormwater monitoring information and copies of reports (including Annual Reports) must be retained for a period of at least five years from date of submittal or longer if required by the Regional Water Board.

Records to be retained include:

- Employee Training Records;
- BMP Implementation Records;
- Spill and Clean-up Related Records;
- Sampling logs and analytical laboratory reports;
- Visual Observation Records, including corrective action responses; and
- Annual Reports from SMARTS (checklist and any explanations).

Copies of these records will be available for review by the Water Board's staff at the facility during scheduled facility operating hours. Upon written request by U.S. EPA or the local MS4, Dischargers will provide paper or electronic copies of requested records to the Water Boards, U.S. EPA, or local MS4 within 10 working days from receipt of the request.

7.3.1 SMARTS Reporting

All sampling and analytical results for all individual samples will be submitted via SMARTS within 30 days of obtaining all results for each sampling event.

- The method detection limit will be provided when an analytical result from samples taken is reported by the laboratory as a "non-detect" or less than the method detection limit. A value of zero will not be reported.

- Analytical results that are reported by the laboratory as below the minimum level (often referred to as the reporting limit) but above the method detection limit will be provided.

- Reported analytical results will be averaged automatically by SMARTS at the end of the reporting year. For any calculations required by the General Permit a value of zero shall be used, all effluent sampling analytical results that are reported by the laboratory as “non-detect" or less than the Method Detection Limit (MDL).

MIP Attachment 1:
Monitoring Records

MIP Attachment 2:
Example Forms

Monthly Dry Weather Observations - Ben Lomond Landfill Facility

Date and Time of Observations/Inspection:

Current Weather:

Inspected By: Inspector Signature:

Exception Documentation
(Explanation required if inspection could not be conducted)

Part I. Non-Stormwater Discharge (NSWD) Observations

Were any authorized non-storm water discharges observed? (*circle one)*	Yes	No
Were any **unauthorized** non-storm water discharges observed? *(circle one)*	Yes	No

If yes to either, identify source:

Part II. Drainage Area and BMP Observations

Drainage Area D1
Industrial Activities: Equipment Fueling Area, Truck Waste Loading Area, Household Hazardous Waste Collection and Bulking, Waste oil and Antifreeze Collection, Public Recycling Area, Bailer

Outdoor Industrial Equipment and Storage Area Observations

Were any deficiencies or any other potential source of industrial pollutants observed? Did you identify a new pollutant source, did the facility bring a new industrial material onsite, changes to industrial activities, etc.? (circle one)	Yes	No

If yes, describe:

BMP Observations		
BMPs	**Observations**	**✓: Inspected BMP and no deficiency observed; X: Inspected BMP and deficiency observed (Describe deficiency and response in Part III)**
Secondary containment for diesel tank	Confirm water and/or fuel has not accumulated in the secondary containment	
Spill kit	Spill kit is properly stocked	
Sandbag used at the base of the natural ravine to prevent sediment erosion; grade rings installed at the TS-1 storm drain to allow water to pool and sediment to settle	Confirm rip-rap and area around grade rings are clear of accumulated sediment, debris, and trash	
Routine inspections for releases and implementation of preventative maintenance as needed at the fueling area	-Confirm hoses and fittings are in good working order -Confirm no releases	
Routine inspections for releases and implementation of preventative maintenance as needed at the bailer	-Confirm there are no hydraulic oil leaks under bailer -Confirm area under and around bailer is properly swept and cleared of any bailed material residues	
Check that liquid has not accumulated in the secondary containment	Confirm no releases	
Strip drains outside loading area to prevent NSWDs from reaching loading area	Confirm drain is clear of debris, trash, and sediment	
Drain inlet inside loading area to convey water from loading area to leach field	Confirm drain is clear of debris, trash, and sediment	
Drain inlet inserts at storm drains within drainage area D1	-Check for ruptures in filter fabric and breakage in mesh screen -Ensure drain inlet inserts are properly installed -Inserts are clear of debris, trash, and sediment	
Drain inlets are kept covered at the public recycle facility (dry season)	Confirm drain inlets are covered during the dry season	
Secondary containment at the Household Hazardous Waste facility	Check that liquid has not accumulated in the secondary containment	
Sweeping of pvaed areas conducted to remove waste and dust	Confirm sweeping is effective at preventing tracking issues	
Bin coverage	Confirm the covers are in good working order	
Storage of recyclables inside bins or on a skid covered with tarps	Confirm bins are in good working order. Confirm tarps are in good condition.	

Drainage Area D2 *Industrial Activities: Green Waste Colelction and Processing, Gypsum, Wallboard, Concrete Rubble and Aggregate Stockpiling, Landfill Cap Maintenance, Managing Landfsill Gas Flare*		
Outdoor Industrial Equipment and Storage Area Observations		
Were any deficiencies or any other potential source of industrial pollutants observed? Did you identify a new pollutant source, did the facility bring a new industrial material onsite, changes to industrial activities, etc.? (circle one)		Yes No
If yes, describe:		
BMP Observations		
BMPs	**Observations**	**✓: Inspected BMP and no deficiency observed; X: Inspected BMP and deficiency observed (Describe deficiency and response in Part III)**
Stormwater drain inlet protection at the green waste collection and processing area	Check integrity of hay bales, concrete blocks, straw wattles and that they are properly placed and installed	
Sweeping conducted at the paved access roads to remove dust	Confirm sweeping is effective at preventing tracking issues	
Cap vegetated and maintained to prevent erosion	Check that all portions of cap are properly vegetated and maintained	
Sedimentation pond for runoff collection	Inspect for invasive vegetation, trash and debris, clogging of inlet/outlet structures, erosion, and sediment buildup in pond	
Wattles around stockpiles of unprocessed materials for erosion protection during storm events	-Ensure stockpiles are protected with wattles -Check integrity of wattle (ensure it is not filled with sediment or broken)	
Stockpiles of processed material covered with tarps during storm events or when not in use	-Ensure tarps are in good working condition and are not ruptured	
Landfill gas flare secondary containment; bermed area	Check that liquid has not accumulated in the secondary containment	

Part III. Descriptions of BMP Deficiencies			
Deficiency	**Presence and Source of Pollutants, if any observed**	**Repairs Implemented:** *Note - Repairs must be completed as soon as possible*	
		Repaired (Y/N)	**Corrective Action Implemented**
1.			
2.			
3.			
4.			
5.			

Sampling Event Visual Observations - Ben Lomond Landfill Facility

Date:

Sampler Name: Sampler Signature:

Sampling conducted within four hours of: *(circle one)*

- The start of the discharge; or

-The start of facility operations if the QSE occurs within the previous 12-hour period

Field Meter Calibration

Calibration Date/Time:

Sampling Event Observations

Location	Observations	Yes	No	Comments
TS-1	Odors			
	Floating/Suspended Material			
Sampling Time:	Sheen			
	Discolorations			
	Turbidity			
	Field pH			
Location	**Observations**	**Yes**	**No**	**Comments**
LP-1	Odors			
	Floating/Suspended Material			
Sampling Time:	Sheen			
	Discolorations			
	Turbidity			
	Field pH			

CHAIN OF CUSTODY RECORD

eurofins | Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

WO # / LAB USE ONLY

DATE: _____

PAGE: _____ **of** _____

LABORATORY CLIENT: COUNTY OF SANTA CRUZ, DEPARTMENT OF PUBLIC WORKS

ADDRESS: 701 Ocean Street Room 410

CITY: Santa Cruz STATE: CA ZIP: 95060

TEL: 831-454-5332 E-MAIL: dpw128@co.santa-cruz.ca.us

CLIENT PROJECT NAME / NUMBER: Ben Lomond Storm Water

P.O. NO.:

PROJECT CONTACT: Kasey Kolassa

SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ STANDARD

☐ COELT EDF GLOBAL ID: L10009318484

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Sample Type	Oil and Grease (EPA1664A)	TSS (SM 2540D)	COD (SM 5220C)	Zinc, Total (EPA 200.8)	Iron, Total (EPA 200.7)	Aluminum, Total (EPA 200.8)	Lead, Total (EPA 200.8)	Chloride (EPA 300.0)										
	LP-1			W		Grab	X	X	X		X			X										
	TS-1			W		Grab	X	X	X	X	X	X	X											
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Ultra HNO3							1,3	1	1,3	1,5	1,4	1,5	1, 5	1										

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

MIP Attachment 3:
Field Meter Instructions

Please Note: *After long term storage, approximately one week or longer, replace the reference electrolyte solution prior to calibration. It may be necessary to replace the reference electrolyte after receiving the MP20 from QED.*

Please Note: *Colored solution may cause the Teflon reference junction to become "dyed" to this color. This will not, in any way, negatively affect the function of the junction.*

4.0 Use and care of Standards

Buffers are only intended for single use and should be discarded immediately after use. Buffer solutions should always be poured directly into the calibration cup for calibration, and used buffers should never be poured back into the bottle.

Please Note: *pH 10 buffer solution is susceptible to rapid degradation after the bottle has been opened. Opened pH 10 buffer solution has a more limited usable time frame than other buffer solutions and should be replaced with fresh solution after approximately 5 days.*

Please Note: *During storage of an opened bottled of pH 10 buffer solution, be sure the bottle is tightly capped.*

Please Note: *pH 4 buffer solution used for the calibration process may be saved and used as storage solution only.*

5.0 Calibration of the pH Probe

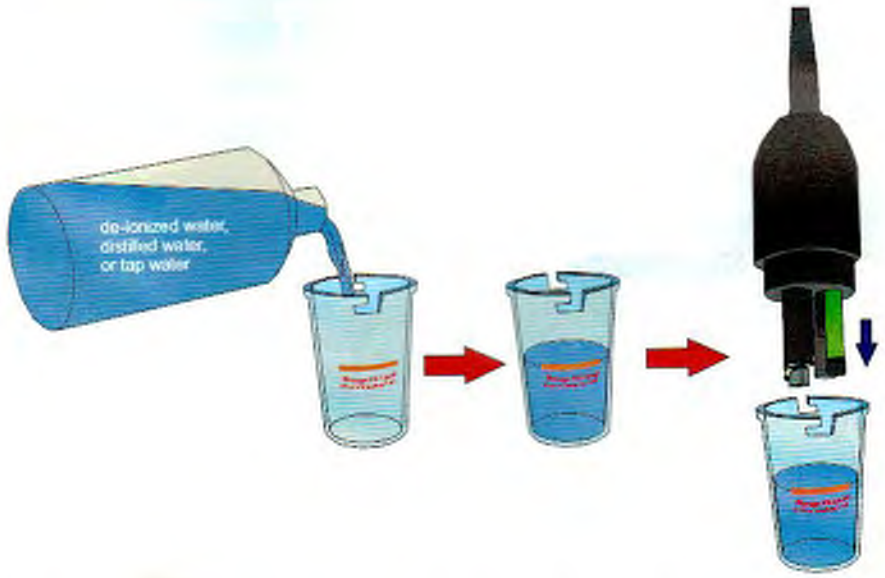
Calibration of the pH probe requires that the probe is clean and has been adequately maintained. If there are any doubts as to the condition of the probe, it should be serviced according to the previous sections. Even probes brought in from the field with an adequate service record should be cleaned thoroughly.

5.1 Pre-cleaning and Assessment of pH Probe Condition

The storage cup should be filled to the preset line (approximately 2.4 inches from the bottom of the storage cup, or filled with approximately 165ml of solution) with deionized or distilled water. Deionized or distilled water is preferred; however, tap water may be used if deionized or distilled water is not available (Figure 5.1).

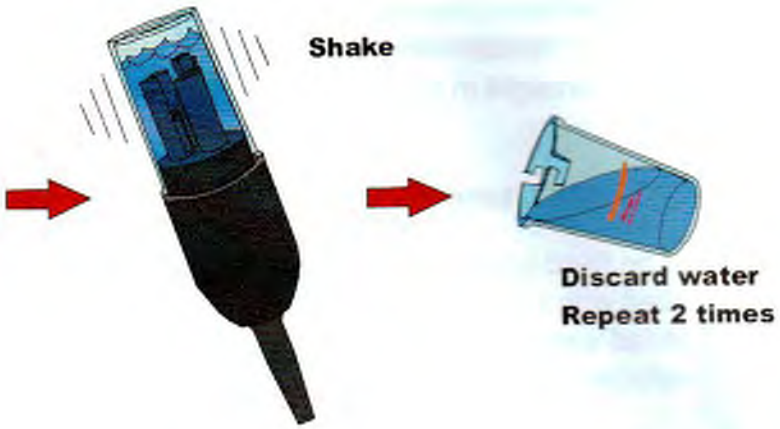
Please Note: *If you do not have a fill line on your storage cup, you can measure out approximately 165ml of water to adequately fill the cup.*

Figure 5.1



Attach the storage cup to the sonde (transmitter). Shake the sonde to remove debris from the probes. Discard the water, and repeat this process at least two more times, (Figure 5.2). Carefully examine the pH probe. If there are signs of accumulated debris, salts or heavy staining of the bulb or reference tube, follow the cleaning instructions in the previous sections. Once you are satisfied that the probe is clean, calibration may begin.

Figure 5.2



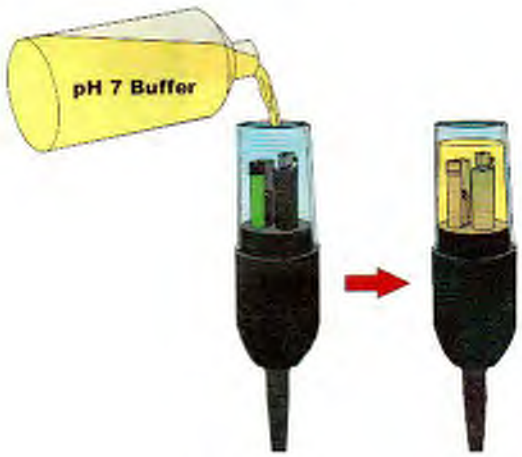
5.2 pH Probe Calibration Process

1. Calibration may be carried out using the storage cup or the calibration cup.

   a. If using the storage cup, fill with enough pH 7 buffer solution to assure that the pH probe Sensing Bulb is completely immersed in the buffer solution.

b. If using the calibration cup, invert the MP20 sonde and clamp it firmly in the vertical position, with the probes pointing up. Place the calibration cup on the sonde and secure it. This method is shown in Figure 5.3 . Fill the cup with enough pH 7 buffer solution to assure that the solution completely covers all of the probes.

Figure 5.3



2. Switch the MP20 meter (display) unit "on".

3. Verify that the pH reading is between pH 6.5 and 7.5 and then wait until the reading is stable; that is, when the change in pH reading does not exceed 0.02 pH units per 5 seconds.

   a. Stabilization of the reading may take approximately 60 seconds.

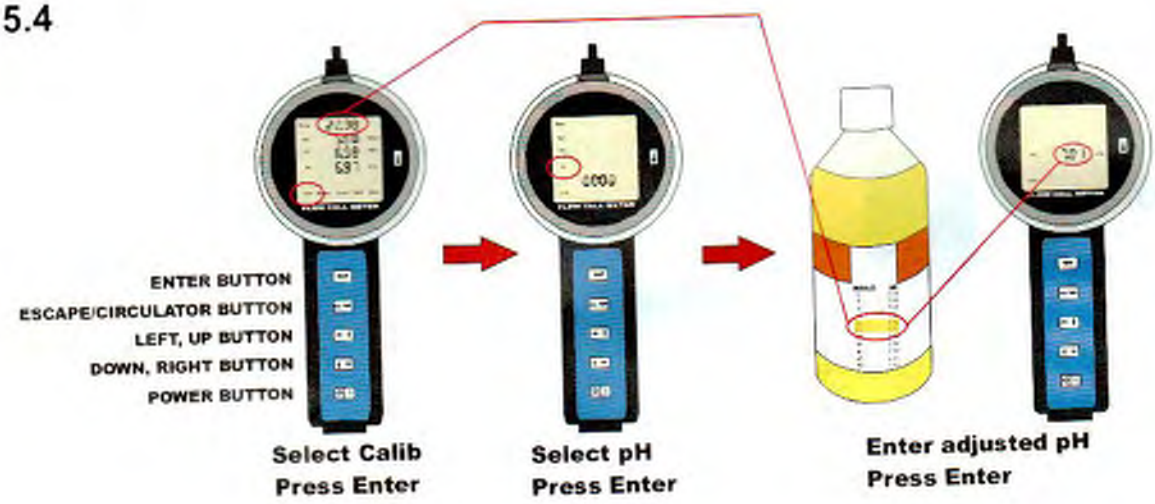
4. Use the up/down and left/right keys to select "calibrate" and press the "enter" key (Figure 5.4).

5. Using the up/down and left/right keys, select the pH symbol on the screen, this will flash to indicate it has been selected, and press the "enter" key. The pH symbol will stop flashing and the pH reading will be displayed, flashing on the screen (Figure 5.4).

6. Using the up or down keys, adjust the reading to the standard being used.

   a. The value entered will depend on the temperature. Consult the side of the bottle for the temperature corrected value, enter this value and press "enter". This will fix the zero point for the instrument when measuring pH (Figure 5.4).

Figure 5.4



7. Press the "escape" key, this will return you to the main screen.

   a. The pH reading should be pH 7 +/- 0.2. It will most likely read within a few hundredths of pH 7.00.

8. Discard the pH 7 buffer (Figure 5.5).

9. Rinse out the calibration or storage cup and the sonde with deionized or distilled water. Discard and shake out excess water (Figure 5.5 below). Deionized or distilled water is preferred; however, tap water may be used if deionized or distilled water is not available.

Figure 5.5



10. Pour a small amount of pH 4 buffer solution, enough to fill the cup up to approximately ¾ of an inch, into the calibration or storage cup, depending on which you are using. Shake for 5-10 seconds and discard the solution (Figure 5.6).

Figure 5.6



11. Pour pH 4 buffer solution into the cup.

a. If using the storage cup fill with enough pH 4 buffer solution to assure that the pH probe Sensing Bulb is completely immersed in the buffer solution.

b. If using the calibration cup, invert the MP20 sonde and clamp it firmly in the vertical position, with the probes pointing up. Place the calibration cup on the sonde and secure it. This method is shown in Figure 5.7. Fill the cup with enough pH 4 buffer solution to assure that the solution completely covers all of the probes.

Figure 5.7



12. Verify that the pH reading is between pH 3.5 and 4.5 and then wait until the reading is stable; that is, when the change in pH reading does not exceed 0.02 pH units per 5 seconds.

a. Stabilization of the reading may take approximately 60 seconds.

13. Use the up/down and left/right keys to select "calibrate", and press the "enter" key (Figure 5.8).

14. Using the up/down and left/right keys, select the pH symbol on the screen (this will flash to indicate it has been selected) and press the "enter" key. The pH symbol will stop flashing and the pH will be displayed, flashing on the screen (Figure 5.8).

15. Using the up or down keys, adjust the reading to the standard being used.

    a. The value entered will depend on the temperature; consult the side of the bottle for the temperature corrected value. Enter this value and press "enter". This will fix the span for the instrument when measuring pH (Figure 5.8).

Figure 5.8



16. Press the "escape" key. This will return you to the main screen.

    a. The pH reading should be pH 4 +/- 0.2. It will most likely read within a few hundredths of pH 4.00.

17. You may discard the pH 4 buffer solution or save it in a clean container to use as storage solution when the calibration process is complete (Figure 5.9).

Please Note: *If you are not saving the pH 4 buffer solution to use for storage, the solution should be discarded, and not reused for any further calibrations.*

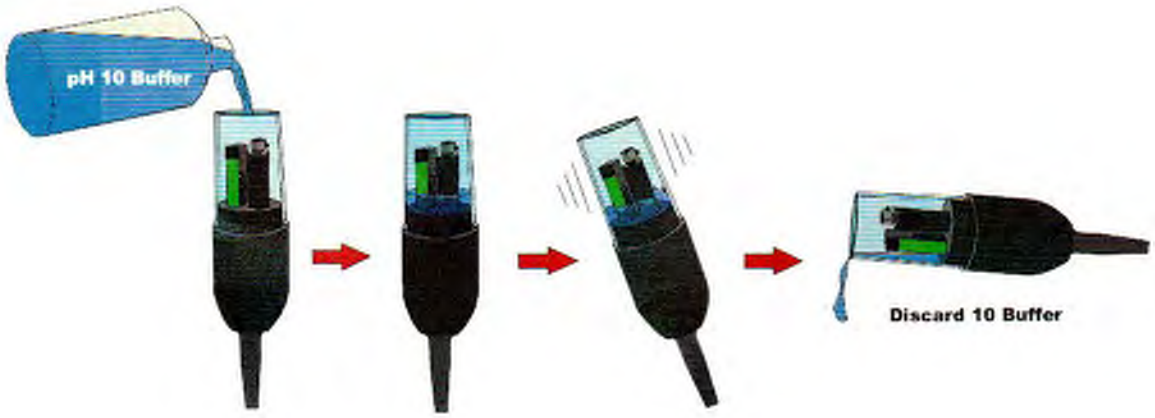
18. Rinse out the calibration or storage cup with deionized or distilled water. Discard and shake out excess water (Figure 5.9). Deionized or distilled water is preferred; however, tap water may be used if deionized or distilled water is not available

Figure 5.9



19. To verify that the probe has been properly calibrated, pour a small amount of pH 10 buffer solution, enough to fill the cup up to approximately ¾ of an inch, into the calibration or storage cup, depending on which you are using. Shake for 5-10 seconds and discard the solution (Figure 5.10).

Figure 5.10

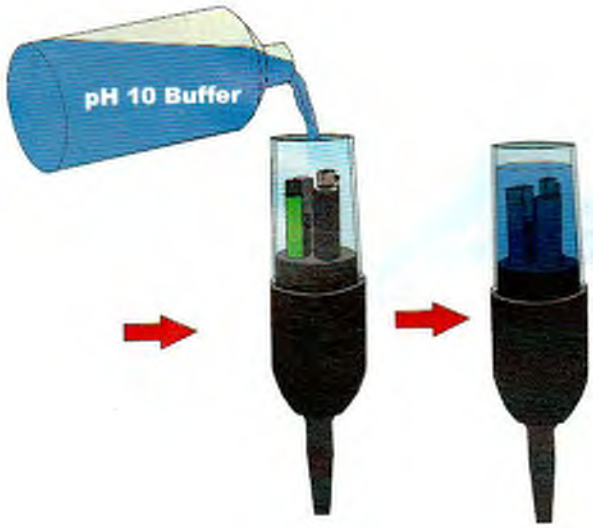


20. Pour pH 10 buffer solution into the cup.

a. If using the storage cup, fill with enough pH 10 buffer solution to assure that the pH] probe Sensing Bulb is completely immersed in the buffer solution.

b. If using the calibration cup, invert the MP20 sonde and clamp it firmly in the vertical position, with the probes pointing up. Place the calibration cup on the sonde and secure it. This method is shown in Figure 5.11. Fill the cup with enough pH 10 buffer solution to assure that the solution completely covers all of the probes.

Figure 5.11



21. Note the pH indicated on the display, once the reading has stabilized. The reading should be between pH 9.8 and 10.2.

    a. Stabilization of the reading may take approximately 60 seconds.

22. The MP20 is now calibrated.

23. Rinse out the calibration or storage cup with deionized or distilled water. Discard and shake out excess water (Figure 5.12 below). Deionized or distilled water is preferred; however, tap water may be used if deionized or distilled water is not available.

24. The MP20 can now be used to measure pH accurately.

Figure 5.12



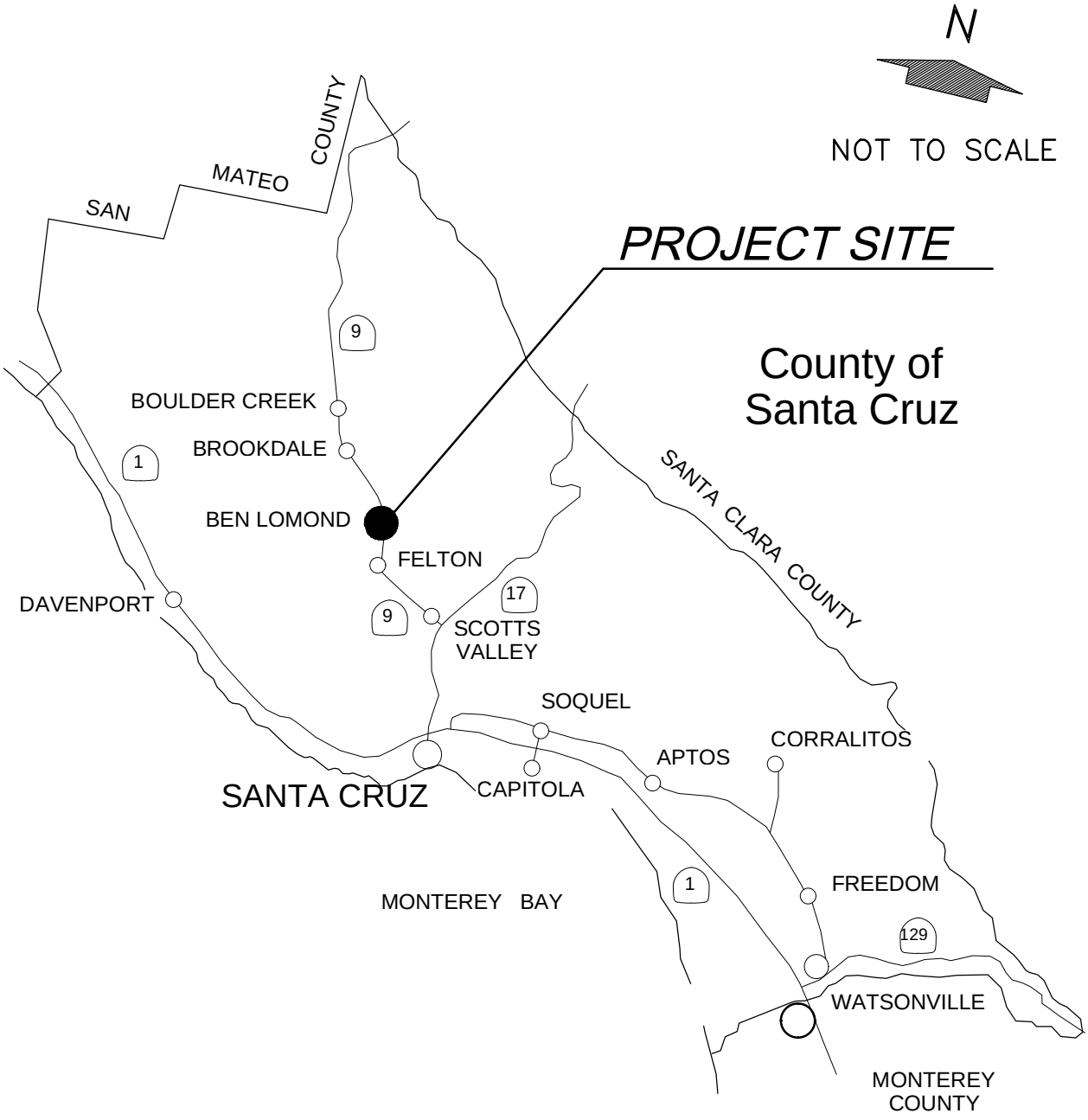
MIP Attachment 4:
Other Regulatory Documents

8. REFERENCES

State Water Resources Control Board (2014). Order 2014-0057-DWQ, NPDES General Permit No. CAS000001: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Industrial Activities. Available on-line at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml.

CASQA 2012, *Stormwater BMP Handbook Portal: Industrial Commercial*, August 2014, www.casqa.org

APPENDIX A
Site Maps



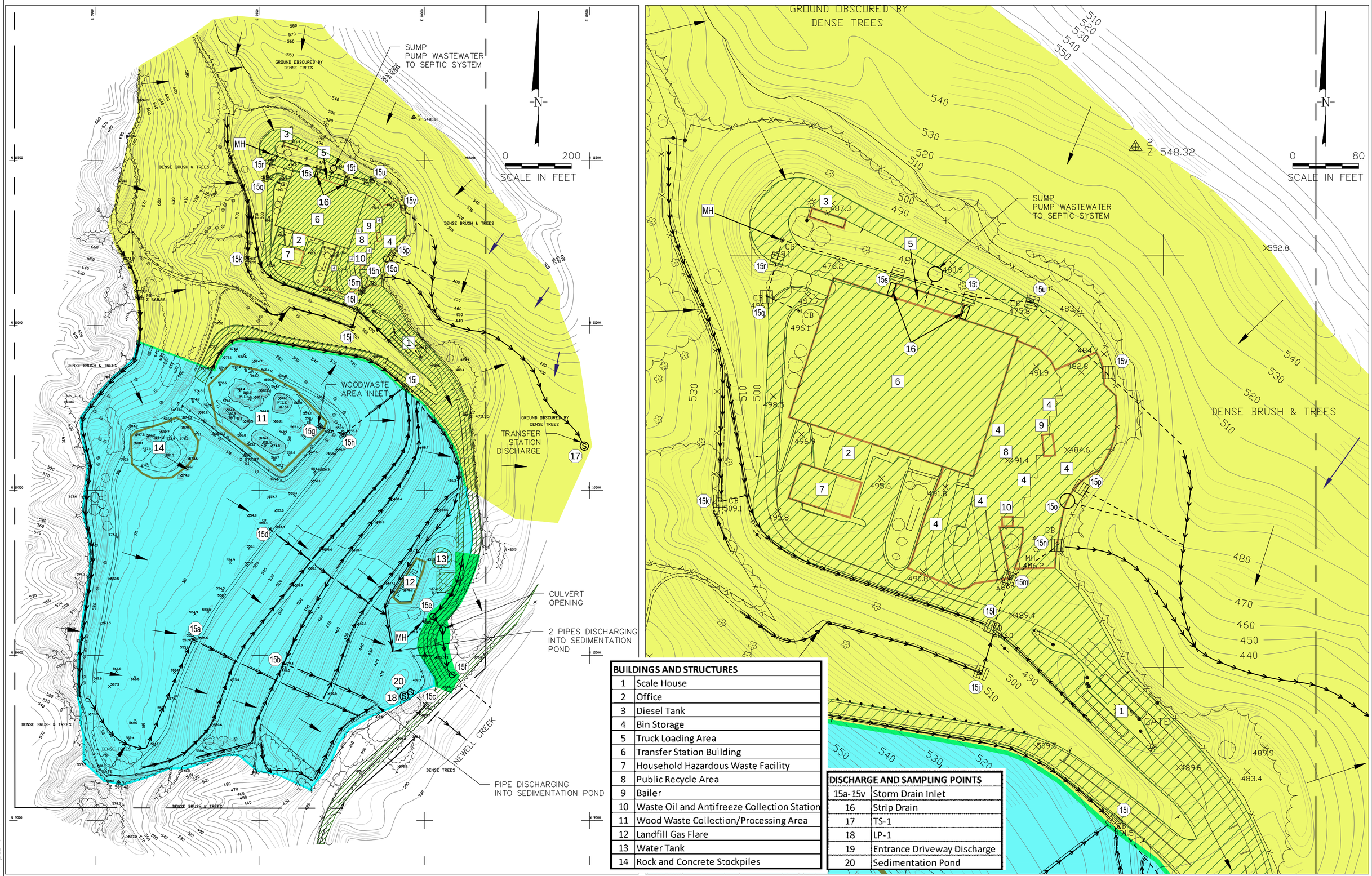
SITE VICINITY MAP
BEN LOMOND LANDFILL
SANTA CRUZ COUNTY, CALIFORNIA

Geosyntec consultants

PROJECT NO: WG1654G | DECEMBER 2016

FIGURE 1

P:\CADD\SANTA CRUZ\BEN LOMOND\WG1654-SWPPP\FIG1-SITE VICINITY MAP



BUILDINGS AND STRUCTURES	
1	Scale House
2	Office
3	Diesel Tank
4	Bin Storage
5	Truck Loading Area
6	Transfer Station Building
7	Household Hazardous Waste Facility
8	Public Recycle Area
9	Bailer
10	Waste Oil and Antifreeze Collection Station
11	Wood Waste Collection/Processing Area
12	Landfill Gas Flare
13	Water Tank
14	Rock and Concrete Stockpiles

DISCHARGE AND SAMPLING POINTS	
15a-15v	Storm Drain Inlet
16	Strip Drain
17	TS-1
18	LP-1
19	Entrance Driveway Discharge
20	Sedimentation Pond

LEGEND

- 170 — EXISTING GROUND 10-FT CONTOUR
- EXISTING GROUND 2-FT CONTOUR
- APPROXIMATE PROPERTY LINE
- ABOVE GROUND FLOW VIA PIPES, V-DITCHES, OR EARTHEN CHANNELS
- BELOW GROUND FLOW VIA STORM DRAINS
- CATCH BASIN
- DISCHARGE POINT VIA OPEN PIPE
- STORMWATER SAMPLE AND OBSERVATION POINT
- STORMWATER FLOW DIRECTION (ONSITE)
- STORMWATER FLOW DIRECTION (RUN-ON FROM ADJACENT PROPERTIES)
- APPROXIMATE DRAINAGE AREA D1 TO TS-1
- APPROXIMATE DRAINAGE AREA D2 TO LP-1
- APPROXIMATE DRAINAGE AREA D3 TO 15f (NON-INDUSTRIAL)
- INDUSTRIAL ACTIVITIES AND/OR MATERIAL STORAGE AREA
- IMPERVIOUS SURFACES (PAVED AREA, ROOFS)
- 1 — BUILDINGS AND STRUCTURES ID (SEE TABLE)
- 15 — DISCHARGE AND SAMPLING POINTS ID (SEE TABLE)
- MH — MANHOLE

NOTES:

1. EXISTING TOPOGRAPHY SHOWN ON THIS MAP BY AERO-GEODETIC CORPORATION.. DATE OF AERIAL PHOTOGRAPHY: 10-01-2012. COORDINATE GRID AND ELEVATIONS BASED ON ASSUMED LOCAL SYSTEM PROVIDED BY COUNTY OF SANTA CRUZ.

2. SLOPES OF THE CLOSED LANDFILL ARE VEGETATED OR ROCKED TO PREVENT SOIL EROSION.

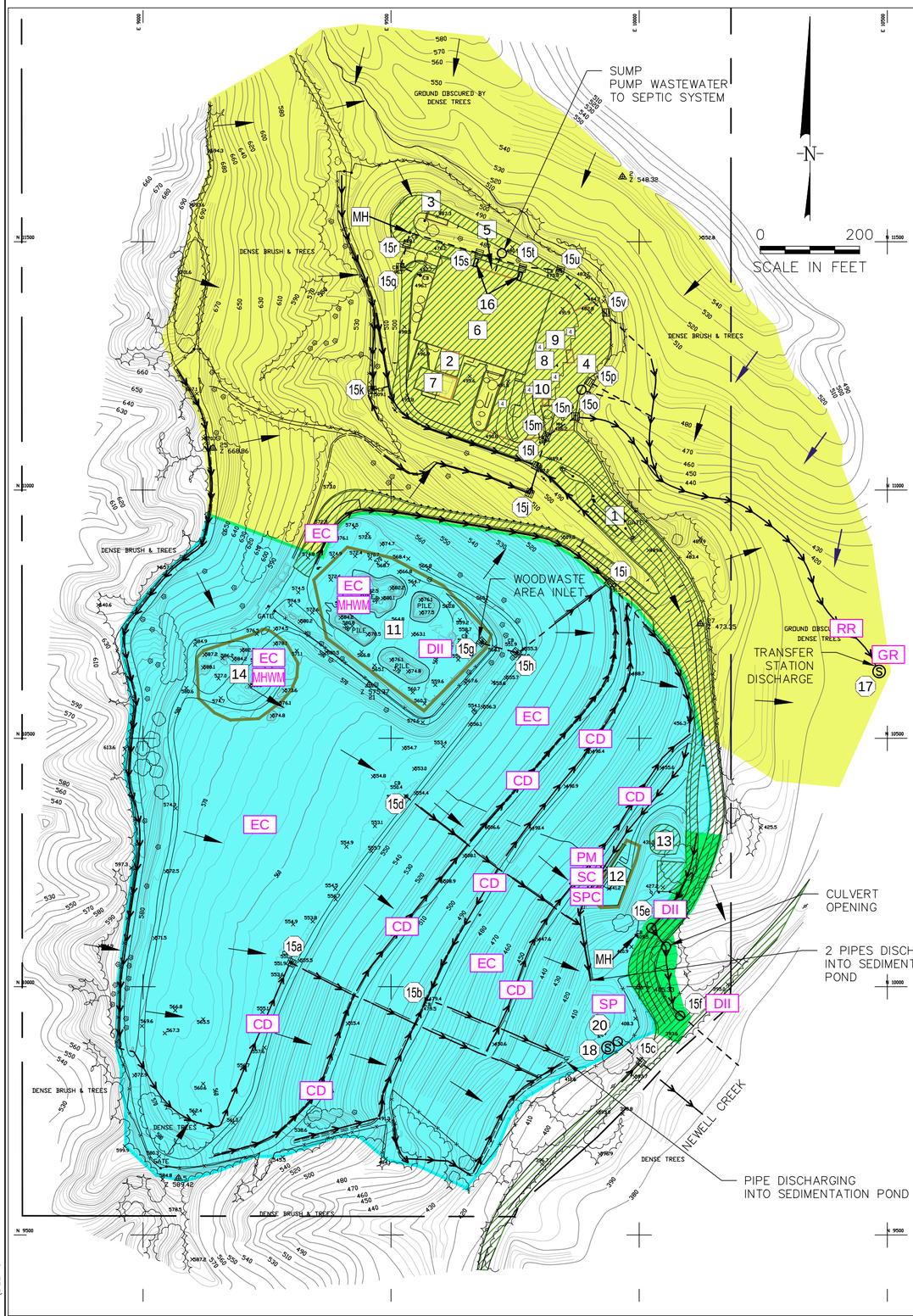
SITE DRAINAGE AND FACILITY LAYOUT
BEN LOMOND LANDFILL
SANTA CRUZ COUNTY, CALIFORNIA

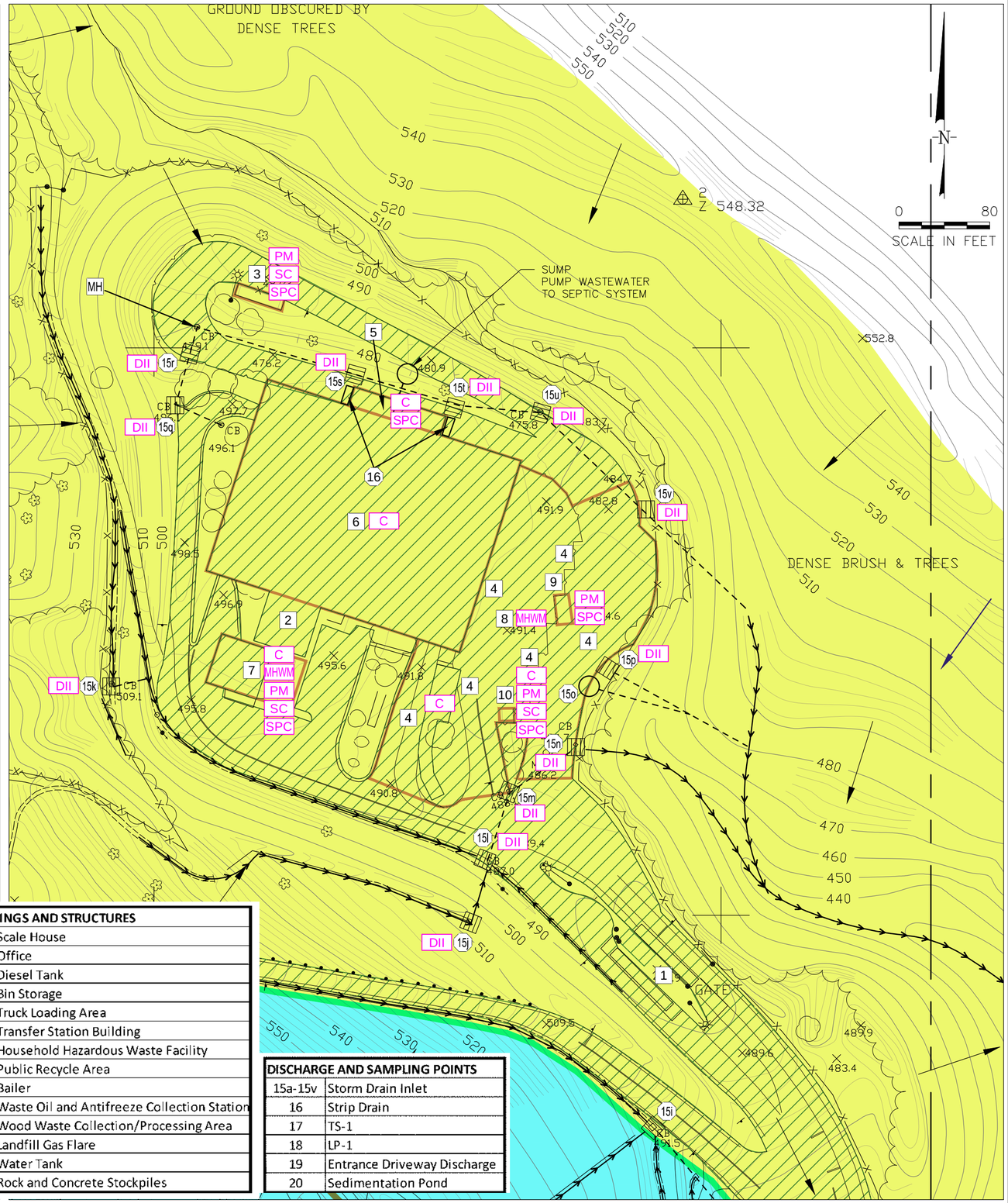
Geosyntec consultants

FIGURE 2

PROJECT NO: WG1654G | DECEMBER 2016

P:\CADD\SANTA CRUZ\BEN LOMOND\WG1654-SWPPP\BLL-SWPPP





BUILDINGS AND STRUCTURES	
1	Scale House
2	Office
3	Diesel Tank
4	Bin Storage
5	Truck Loading Area
6	Transfer Station Building
7	Household Hazardous Waste Facility
8	Public Recycle Area
9	Bailer
10	Waste Oil and Antifreeze Collection Station
11	Wood Waste Collection/Processing Area
12	Landfill Gas Flare
13	Water Tank
14	Rock and Concrete Stockpiles

DISCHARGE AND SAMPLING POINTS	
15a-15v	Storm Drain Inlet
16	Strip Drain
17	TS-1
18	LP-1
19	Entrance Driveway Discharge
20	Sedimentation Pond

LEGEND

- 170 — EXISTING GROUND 10-FT CONTOUR
- EXISTING GROUND 2-FT CONTOUR
- APPROXIMATE PROPERTY LINE
- ABOVE GROUND FLOW VIA PIPES, V-DITCHES, OR EARTHEN CHANNELS
- BELOW GROUND FLOW VIA STORM DRAINS
- CATCH BASIN
- DISCHARGE POINT VIA OPEN PIPE
- STORMWATER SAMPLE AND OBSERVATION POINT
- STORMWATER FLOW DIRECTION (ONSITE)
- STORMWATER FLOW DIRECTION (RUN-ON FROM ADJACENT PROPERTIES))
- APPROXIMATE DRAINAGE AREA D1 TO TS-1
- APPROXIMATE DRAINAGE AREA D2 TO LP-1
- APPROXIMATE DRAINAGE AREA D3 TO 15f (NON-INDUSTRIAL)
- INDUSTRIAL ACTIVITIES AND/OR MATERIAL STORAGE AREA
- IMPERVIOUS SURFACES (PAVED AREA, ROOFS)
- 1 — BUILDINGS AND STRUCTURES ID (SEE TABLE)
- 15 — DISCHARGE AND SAMPLING POINTS ID (SEE TABLE)
- MH — MANHOLE

BMP ACRONYMS

C	COVERAGE	PM	PREVENTATIVE MAINTENANCE
CD	CHECK DAM	RR	RIP-RAP
DII	DRAIN INLET INSERT/PROTECTION	SC	SECONDARY CONTAINMENT
EC	EROSION CONTROL	SP	SEDIMENTATION POND
GH	GOOD HOUSEKEEPING (NOTE 3)	SPC	SPILL PREVENTION, CONTROL, AND CLEAN-UP
GR	GRADE RING		
MHWM	MATERIAL HANDLING AND WASTE MANAGEMENT		

NOTES:

1. EXISTING TOPOGRAPHY SHOWN ON THIS MAP BY AERO-GEODETIC CORPORATION..
DATE OF AERIAL PHOTOGRAPHY: 10-01-2012.
COORDINATE GRID AND ELEVATIONS BASED ON ASSUMED LOCAL SYSTEM PROVIDED BY COUNTY OF SANTA CRUZ.

2. SLOPES OF THE CLOSED LANDFILL ARE VEGETATED OR ROCKED TO PREVENT SOIL EROSION.

3. GH IS APPLIED TO ALL INDUSTRIAL AREAS.

SITE BMPs
BEN LOMOND LANDFILL
SANTA CRUZ COUNTY, CALIFORNIA

Geosyntec consultants

PROJECT NO: WG1654G | DECEMBER 2016

FIGURE 3

P:\CADD\SANTA CRUZ\BEN LOMOND\WG1654-SWPPP\BLL-SWPPP

APPENDIX B
Industrial General Permit

APPENDIX C
Permit Registration Documents

Permit Registration Documents included in this Appendix

Y/N	PERMIT REGISTRATION DOCUMENT
	Notice of Intent
	Certification
	Copy of Annual Fee Receipt
	Site Maps, see Appendix A

APPENDIX D
Training Reporting Form

TRAINED TEAM MEMBER LOG
Stormwater Management Training Log and Documentation

Facility Name: _____

WDID #: _____

Stormwater Management Topic: (check as appropriate)

- ☐ Good Housekeeping
- ☐ Preventative Maintenance
- ☐ Spill and Leak Prevention and Response
- ☐ Material Handling and Waste Management
- ☐ Erosion and Sediment Controls
- ☐ Quality Assurance and Record Keeping
- ☐ Advanced BMPs
- ☐ Visual Monitoring
- ☐ Stormwater Sampling and Analysis

Specific Training Objective: _____

Location: _____ Date: _____

Instructor:_____ Telephone: _____

Course Length (hours): _____

Attendee Roster

(Attach additional forms if necessary)

Name	Company	Phone

As needed, add proof of external training (e.g., course completion certificates, credentials for QIS

APPENDIX E
SWPPP Amendment Certifications

SWPPP AMENDMENT NO. 1

Legally Responsible Person's Certification
of the Stormwater Pollution Prevention Plan Amendment

"This Stormwater Pollution Prevention Plan and attachments were prepared under my direction to meet the requirements of the California Industrial General Permit (SWRCB Order No. 2014-0057-DWQ)."

[signature]	10-05-2017
LRP's Signature	Date
Kasey Kolassa	
LRP Name	LRP Title
Recycling & Solid Waste Services Mgr., Santa Cruz County Department of Public Works	(831) 454-2160
Title and Affiliation	Telephone
701 Ocean Street, Room 410, Santa Cruz, CA 95060	kasey.kolassa@santacruzcounty.us
Address	Email

APPENDIX F
NAL Values

TABLE 2: Parameter NAL Values, Test Methods, and Reporting Units

PARAMETER	TEST METHOD	REPORTING UNITS	ANNUAL NAL	INSTANTANEOUS MAXIMUM NAL
pH*	See Section XI.C.2	pH units	N/A	Less than 6.0 Greater than 9.0
Suspended Solids (TSS)*, Total	SM 2540-D	mg/L	100	400
Oil & Grease (O&G)*, Total	EPA 1664A	mg/L	15	25
Zinc, Total (H)	EPA 200.8	mg/L	0.26**	
Copper, Total (H)	EPA 200.8	mg/L	0.0332**	
Cyanide, Total	SM 4500–CN C, D, or E	mg/L	0.022	
Lead, Total (H)	EPA 200.8	mg/L	0.262**	
Chemical Oxygen Demand (COD)	SM 5220C	mg/L	120	
Aluminum, Total	EPA 200.8	mg/L	0.75	
Iron, Total	EPA 200.7	mg/L	1.0	
Nitrate + Nitrite Nitrogen	SM 4500-NO3- E	mg/L as N	0.68	
Total Phosphorus	SM 4500-P B+E	mg/L as P	2.0	
Ammonia (as N)	SM 4500-NH3 B+ C or E	mg/L	2.14	
Magnesium, total	EPA 200.7	mg/L	0.064	
Arsenic, Total (c)	EPA 200.8	mg/L	0.15	
Cadmium, Total (H)	EPA 200.8	mg/L	0.0053**	
Nickel, Total (H)	EPA 200.8	mg/l	1.02**	
Mercury, Total	EPA 245.1	mg/L	0.0014	
Selenium, Total	EPA 200.8	mg/L	0.005	
Silver, Total (H)	EPA 200.8	mg/L	0.0183**	
Biochemical Oxygen Demand (BOD)	SM 5210B	mg/L	30	

SM – Standard Methods for the Examination of Water and Wastewater, 18th edition
EPA – U.S. EPA test methods
(H) – Hardness dependent
* Minimum parameters required by this General Permit
**The NAL is the highest value used by U.S. EPA based on their hardness table in the 2008 MSGP.

APPENDIX G
Pollutant Source Assessment Forms

Pollutant Source Assessment

Date of Assessment:	9/8/2017	**Assessors Name:**	Laila Nasr
Industrial Area / Activity:	Bailer	**Drainage Area:**	D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Plastic bottles, metal cans, cardboard

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☑	Industrial Processes (containment structures and capacities)	Recalls are bailed in this area. No containment structures are implemented
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Bailed recyclables are stored outdoors
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☑	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	No significant leaks from the bailing equipment have occurred in the last 5 years. Preventative measures are outlined in the SPCC plan
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . No contribution from industrial activity.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
TSS	The bailing process and storage of bailed material is conducted outside. The degree of exposure is high	Equipment leaks can come into contact with stormwater; liquid from bailed material can leak and come into contact with stormwater
Oil & Grease		
Metals		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	**Type (min/adv)**
Routine inspections for releases and implementation of preventative maintenance as needed	Minimum
Inspections, releases, maintenance, and corrective actions records maintained	Minimum
Drain inlet inserts	Advanced

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

The use of minimum BMPs alone may not be effective.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Minimum BMPs may not enough to reduce pollutants in stormwater. Drain inlets are used to help remove pollutants before entering the storm drain system.

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment:	9/8/2017	**Assessors Name:**	Laila Nasr
Industrial Area / Activity:	Closed landfill	**Drainage Area:**	D2

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Dust, sediment

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☑	Industrial Processes (containment structures and capacities)	Maintenance of the closed landfill
☐	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	
☑	Dust and Particulate Generating Activities (discharge locations, source type)	Activities conducted on the closed landfill could generate dust. Dust could be deposited on paved areas and discharged to storm drain system.
☐	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☑	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	Landfill cap is unpaved and vegetated; cap can erode during storm events.

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . No contribution from industrial activity.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
TSS	Highly exposed	Dust depostion on paved areas can come in contact with stormwater; Cap can erode and come in contact with stormwater.

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	Type (min/adv)
Cap vegetated and maintained to prevent erosion	Minimum
Wind erosion protection; moisture control for dust	Minimum
Sedimentation pond for runoff collection; V-ditches used to divert runoff	Advanced

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective at preventing pollutants in stormwater or NSWDs.

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs are expected sufficient at reducing or preventing pollutants in stormwater discharge.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Although the minimum BMPs are expected to be effective, advanced BMPs have been implemented to further reduce the likelihood of release. The sedimentation pond captures sediment that erodes from the cap and allows for the solids to settle out.

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr
Industrial Area / Activity: Equipment Fueling Area **Drainage Area:** D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Diesel Fuel

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☐	Industrial Processes (containment structures and capacities)	
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Diesel fuel is stored in a 12,000 gallon AST used for fueling equipment. Spill response procedures are included in the SPCC plan. The AST is a double walled tank and is located inside a secondary containment.
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☑	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	No historic releases. AST is routinely inspected , has secondary containment, is double walled, and has overfill protection
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . No contribution from industrial activity.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
Oil and Grease	Limited	Catastrophic tank failure or uncontrolled release during fueling could flow to storm drain system

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

Pollutant Source Assessment

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	**Type (min/adv)**
Secondary containment	Advanced
Spill Kit is available	Minimum
Routinely inspected and preventative maintenance is conducted	Minimum
Inspections, releases, maintenance, and corrective action records are maintained	Minimum
Unattended Fueling is prohibited	Minimum
Prevention and response procedures are provided in the SPCC plan	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are very effective and a release is extremely unlikely

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

The use of minimum BMPs alone would be less effective. Advanced BMPs including secondary containment have been implemented such that a release is extremely unlikely.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Minimum BMPs alone may not be effective if there was a catastrophic failure of the AST. Advanced BMPs including secondary containment have been implemented

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr
Industrial Area / Activity: Household Haz Area **Drainage Area:** D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Paint, oxidizers, acids, bases, flammable liquids, toxic solids, batteries, flammable gasses, toxics

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☑	Industrial Processes (containment structures and capacities)	Bulking of household hazardous waste. Area is completely covered and is secondarily contained. Spill response procedures are included I the SPCC plan.
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Household hazardous waste is stored in 55 gallons drums. Area is completely covered and is secondarily contained. Spill response procedures are included I the SPCC plan.
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☑	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	No historic releases. Area is completely covered and is secondarily contained. Spill response procedures are included I the SPCC plan.
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . If household hazardous was released it could contribute to a pH exceedance.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
pH	No potential for exposure because all processing, storage, and handling is conducted inside.	NA
Metals		
Organics		
Oil and Grease		
COD		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	**Type (min/adv)**
Secondary containment	Advanced
Area Covered (inside building)	Advanced
Routinely inspected and preventative maintenance is conducted	Minimum
Inspections, releases, maintenance, and corrective action records are maintained	Minimum
Spill Kits	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are very effective

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

The use of minimum BMPs alone would not be effective.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

The use of minimum BMPs alone would not be effective. Advanced BMPs including all processing, storage, and handling inside and the use of secondary containment have been implemented to prevent a release.

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

All household hazardous waste including Paint, oxidizers, acids, bases, flammable liquids, toxic solids, batteries, flammable gasses, toxics

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr
Industrial Area / Activity: Landfill Gas Management **Drainage Area:** D2

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Condensate water from landfill gas

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☑	Industrial Processes (containment structures and capacities)	Condensate from the landfill gas system is collected at the flare.
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Condensate contained in 500 gallon tank. Containment structure: concrete, berm around the entire area in place. No spills have occurred in the past.
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☑	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	No significant leaks have been reported in the last 5 years. Spill response and prevention procedures are provided in the SWPPP
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . Knock-out water spills contacting stormwater can contribute to a pH impairment.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
COD	Minimal; knock-out water is stored inside closed tank and in a bermed area	-Leaking knock-out tank -leaked liquid contact with stormwater
pH		
Organics		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	**Type (min/adv)**
Secondary containment; bermed area	Advanced
Routine inspection for releases and implementation of preventative maintenance	Minimum
Inspections, releases, maintenance, and corrective action records maintained	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective at reducing or preventing pollutants from contacting stormwater.

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs would likely be sufficient.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Although minimum BMPs will are likely to be effective, the tank is enclosed in a bermed area which would contain any spills.

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment:	9/8/2017	**Assessors Name:**	Laila Nasr
Industrial Area / Activity:	Public Recycling Area	**Drainage Area:**	D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Recycle material (paper, cardboard, metal, plastic, bottles, electrical motors, appliances, electronics, plastic bags, metal cans, glass)

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☐	Industrial Processes (containment structures and capacities)	
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Recyclables are stored inside bins. Possibility of release of recyclables from the bins.
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☐	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . If recyclables were released it could contribute to a pH exceedance.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
pH	Degree of exposure is minimal because all materials are stored in bins that are covered when not in use	Drips from leaking storage bins; contact of released recyclables with stormwater
TSS		
COD		
Metals		
Oil & Grease		
Trash		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	Type (min/adv)
Area partially under cover	Advanced
Sweeping conducted to reduce tracking	Minimum
Drain inlet inserts	Advanced
Bins and area is routinely inspected for release and maintenance is implemented as needed	Minimum
Storage of recyclables inside bins or on skids and covered with tarps	Minimum
Drain inlets are covered during dry season	Minimum
Bin coverage	Minimum
Sandbags used at the base of the natural ravine to prevent sediment erosion; grade rings installed at the TS-1 storm drain to allow water to pool and sediment to settle	Advanced

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

The current BMPs are effective; the likelihood of recyclables being from the bins is low and BMPs are in place to prevent or reduce contact with stormwater.

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

The minimum BMPs are expected to significantly reduce pollutants in stormwater or NSWDs.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Minimum BMPs are expected to significantly reduce pollutants. However, advanced BMPs including coverage and drain inlet inserts in stormwater reduce likelihood of release. Sand bags are also used near the TS-1 outfall to prevent sediment erosion and grade rings around the outfall are used prevent discharge of erodible material.

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr

Industrial Area / Activity: Wallboard, Concrete, Aggregate Storage **Drainage Area:** D2

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 3.1):

Concrete Rubble, Aggregate, Gypsum Wallboard

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☐	Industrial Processes (containment structures and capacities)	
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Materials are stockpiled on top of the closed landfill. No containment is provided
☑	Dust and Particulate Generating Activities (discharge locations, source type)	Surfaces are unpaved and generate dust with vehicle traffic and wind. Dust can travel to the paved areas outside wood waste area.
☐	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☑	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	Area is unpaved and can erode. Piles can erode during storm events.

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . If material was released it could contribute to a pH exceedance.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
pH	Stockpiles are exposed to stormwater. Material is highly exposed	Direct contact of materials with stormwater; dust from unpaved surfaces contact stormwater; and tracking from trucks.
TSS		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	**Type (min/adv)**
Sedimentation pond for runoff collection.	Advanced
Wattles around stockpiles of unprocessed materials for erosion protection during storm events	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective at preventing pollutants in stormwater or NSWDs.

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs would have limited effective at reducing or preventing pollutants in stormwater.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Minimum BMPs are not effective at erosion control.
In the event materials are mobilized, the sedimentation pond captures the runoff water and allows the material to settle out.

List material(s) that do not have a potential to be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr
Industrial Area / Activity: Transfer Station Building **Drainage Area:** D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Municipal solid waste; recyclables

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☑	Industrial Processes (containment structures and capacities)	Sorting of municipal solid waste inside building; all materials are contained inside building. Area is completely covered.
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Recyclables are stored inside building.
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☐	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH . Industrial materials could contribute to a pH impairment if released.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
Trash	None; all activities are completely under cover inside a building.	None.
pH		

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

Pollutant Source Assessment

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	Type (min/adv)
Area is covered.	Advanced

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective at preventing pollutants in stormwater or NSWDs

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs alone would not be effective.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Because minimum BMPs would not be effective, processing, handling and storage are conducted inside a building.

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Waste; recyclables

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr
Industrial Area / Activity: Waste Loading Area **Drainage Area:** D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 3.1):

Refuse Material

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☐	Industrial Processes (containment structures and capacities)	
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Refuse is transferred from floor into trucks, at loading area. Trash spillage and associated liquids can be spilled to pavement. The loading area is contained
☑	Dust and Particulate Generating Activities (discharge locations, source type)	Area does not produce significant dust.
☐	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	
☑	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	Authorized NSWD occurs on ramp from hillside seepage. This NSWD is directed away from the refuse with strip drains. Liquid from the refuse could produce unauthorized NSWD. This liquid is captured in a sump and directed to a leach field.
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH. There is potential for industrial activity to contribute to a pH impairment .

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
pH	Minimal	If trash or MSW liquids are tracked out of loading area, they could mix with stormwater and drain to adjacent strip drains or drain inlets.
COD		
TSS		
Trash		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 4.1):

BMP	Type (min/adv)
NSWD from hillside is collected in strip drains and does not contact the municipal waste.	Minimum
Drain inlet inside loading area to convey liquid from loading area to leach field.	Minimum
Drain inlet inserts in catch basins outside loading area.	Advanced
Sweeping conducted to eliminate tracking.	Minimum
Loading area is covered.	Advanced
Unattended loading not allowed.	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

The current BMPs are effective.

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs alone would reduce pollutants in industrial stormwater, but advanced BMPs are necessary to further reduce or prevent pollutants from entering stormwater.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Advanced BMPs including coverage and drain inlet inserts are used to prevent water from coming in contact with refuse and prevent waste from entering the storm drain system

List material(s) that do not have a potential to be exposed to stormwater or NSWDs.

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr

Industrial Area / Activity: Waste oil and antifreeze collection **Drainage Area:** D1

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 2.1):

Used antifreeze, used oil, used oil filters

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☐	Industrial Processes (containment structures and capacities)	
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Materials are stored in drums. Leaks in can cause releases of pollutants. The storage area has a berm for secondary containment. Spill prevention and response procedures are included in the SPCC plan
☐	Dust and Particulate Generating Activities (discharge locations, source type)	
☑	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	No significant spills or leaks have occurred in the last 5 years. SPCC plan outlines preventative measures
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☐	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH. Industrial activity does not contribute to listed impairments.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
Oil & Grease	Material handling is conducted under cover and within a secondary containment. There is no potential for exposure to stormwater	

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	**Type (min/adv)**
Secondary containment	Advanced
Area is covered and bermed	Advanced
Routine inspections for releases and implementation of preventative maintenance as needed	Minimum
Inspections, releases, maintenance, and corrective actions records maintained	Minimum
Spill kit	Minimum
Training of staff for waste handling	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective at preventing material exposure to stormwater

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs alone would not be effective.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Advanced BMPs including coverage and secondary containment are used to prevent exposure to stormwater

List material(s) that do not have a potential be exposed to stormwater or NSWDs.

Used oil, antifreeze, oil filters

Pollutant Source Assessment

Date of Assessment: 9/8/2017 **Assessors Name:** Laila Nasr

Industrial Area / Activity: Wood waste collection/processing **Drainage Area:** D2

List all industrial materials associated with the industrial activity or area (quantities, physical characteristics, and locations are provided on Table 3.1):

Wood and yard waste

Check each potential pollutant source that applies and provide a brief description of the source and any applicable supporting information (required supporting info shown in grey):

	Potential Pollutant Source	Descriptions
☑	Industrial Processes (containment structures and capacities)	Wood and yard waste chipping. No containment structures available at processing area.
☑	Material Handling and Storage (spill prevention and response procedures, containment structures and capacities)	Stockpiles of unprocessed wood waste and stockpiles of wood chips; There are no structural containments for the stockpiles.
☑	Dust and Particulate Generating Activities (discharge locations, source type)	Surfaces are unpaved and generate dust with vehicle traffic and wind. Dust can travel to the paved areas outside wood waste area.
☐	Significant Spills or Leaks (details of historic leaks or releases, preventative measure to assure leaks do not occur)	
☐	NSWD's (types of NSWDs, how unauthorized NSWDs have been eliminated)	
☑	Erodible Surfaces (contact with storm water, NSWDs, or run-on)	Area is unpaved and can erode. Piles of processed wood chips can erode during storm events.

List any 303(d) listed impairments or approved TMDLs for the receiving water body and note any potential for industrial pollutants at Site to contribute to an exceedance:

303(d) listing for chlorpyrifos, low dissolved oxygen, E.Coli, Fecal Coliform, Enterococcus, nutrients, PCBs, chlordane, and pH. Industrial activity can contribute to the pH impairment.

List potential pollutants to be present in storm water or NSWDs, degree to which pollutants/materials may be exposed and/or mobilized by storm water, and pathways by which they may be exposed if applicable.

Potential Pollutants	Degree of exposure	Exposure Pathways (if applicable)
pH	Highly exposed. Stockpiles of processed and unprocessed wood are exposed to stormwater.	Wood debris contact to stormwater; dust from unpaved surfaces contact stormwater; and tracking from disposal trucks.
COD		
TSS		

Pollutant Source Assessment

If there is no potential for a material to be exposed to storm water or NSWD's, list the material in the last box at the end of this assessment form.

List **existing** BMPs for this industrial area and activity (copy from Table 3.1):

BMP	Type (min/adv)
Stormwater drain inlet protection.	Advanced
Sedimentation pond for runoff collection.	Advanced
Sweeping conducted to remove dust from the paved surfaces.	Minimum
Stockpiles of processed materials covered with tarps during storm events.	Minimum
Wind erosion protection; vehicles operated at low speeds, moisture control for dust.	Minimum

Based on sampling, visual observation and inspection records, answer the following questions:

How effective are the **existing** BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs?

Existing BMPs are effective at preventing pollutants in stormwater or NSWDs.

What is the estimated effectiveness of implementing minimum BMPs at reducing or preventing pollutants in industrial stormwater or NSWDs? (minimum BMPs include good housekeeping, preventative maintenance, spill and leak prevention and response, material handling and waste management, erosion and sediment controls, employee training programs, and quality assurance and record keeping)

Minimum BMPs would have limited effect at reducing or preventing pollutants in stormwater.

Based on the above assessments, identify when a minimum BMPs will not be effective and when an advanced BMPs will be required.

Minimum BMPs are not effective at erosion control. Hay bales and drain inlet inserts are used to prevent processed wood from discharging from the facility.
In the event wood waste escapes, the sedimentation pond captures the runoff water and allows the wood waste to settle out.

List material(s) that do not have a potential to be exposed to stormwater or NSWDs.

NA

APPENDIX H
CASQA Stormwater BMP Handbook Portal: Industrial and Commercial Fact Sheets

Spill Prevention, Control & Cleanup SC-11

Description

Many activities that occur at an industrial or commercial site have the potential to cause accidental spills. Preparation for accidental spills, with proper training and reporting systems implemented, can minimize the discharge of pollutants to the environment.

Spills and leaks are one of the largest contributors of stormwater pollutants. Spill prevention and control plans are applicable to any site at which hazardous materials are stored or used. An effective plan should have spill prevention and response procedures that identify hazardous material storage areas, specify material handling procedures, describe spill response procedures, and provide locations of spill clean-up equipment and materials. The plan should take steps to identify and characterize potential spills, eliminate and reduce spill potential, respond to spills when they occur in an effort to prevent pollutants from entering the stormwater drainage system, and train personnel to prevent and control future spills. An adequate supply of spill clean-up materials must be maintained onsite.

Objectives
■ *Cover*
■ *Contain*
■ *Educate*
■ *Reduce/Minimize*
■ *Product Substitution*

Targeted Constituents	
Sediment	
Nutrients	
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Minimum BMPs Covered	
Good Housekeeping	
Preventative Maintenance	
Spill and Leak Prevention and Response	✓
Material Handling & Waste Management	
Erosion and Sediment Controls	
Employee Training Program	✓
Quality Assurance Record Keeping	✓

Approach

General Pollution Prevention Protocols

- ☐ Develop procedures to prevent/mitigate spills to storm drain systems.
- ☐ Develop and standardize reporting procedures, containment, storage, and disposal activities, documentation, and follow-up procedures.
- ☐ Establish procedures and/or controls to minimize spills and leaks. The procedures should address:
  - ✓ Description of the facility, owner and address, activities, chemicals, and quantities present;

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- ✓ Facility map of the locations of industrial materials;
- ✓ Notification and evacuation procedures;
- ✓ Cleanup instructions;
- ✓ Identification of responsible departments; and
- ✓ Identify key spill response personnel.

- ☐ Recycle, reclaim, or reuse materials whenever possible. This will reduce the amount of process materials that are brought into the facility.



Spill and Leak Prevention and Response

Spill Prevention

- ☐ Develop procedures to prevent/mitigate spills to storm drain systems. Develop and standardize reporting procedures, containment, storage, and disposal activities, documentation, and follow-up procedures.

- ☐ If illegal dumping is observed at the facility:
  - ✓ Post "No Dumping" signs with a phone number for reporting illegal dumping and disposal. Signs should also indicate fines and penalties applicable for illegal dumping.
  - ✓ Landscaping and beautification efforts may also discourage illegal dumping.
  - ✓ Bright lighting and/or entrance barriers may also be needed to discourage illegal dumping.

- ☐ Store and contain liquid materials in such a manner that if the container is ruptured, the contents will not discharge, flow, or be washed into the storm drainage system, surface waters, or groundwater.

- ☐ If the liquid is oil, gas, or other material that separates from and floats on water, install a spill control device (such as a tee section) in the catch basins that collects runoff from the storage tank area.



Preventative Maintenance

- ☐ Place drip pans or absorbent materials beneath all mounted taps, and at all potential drip and spill locations during filling and unloading of tanks. Any collected liquids or soiled absorbent materials must be reused/recycled or properly disposed.

- ☐ Store and maintain appropriate spill cleanup materials in a location known to all near the tank storage area; and ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.

- ☐ Sweep and clean the storage area monthly if it is paved, *do not hose down the area to a storm drain.*

- ☐ Check tanks (and any containment sumps) daily for leaks and spills. Replace tanks that are leaking, corroded, or otherwise deteriorating with tanks in good condition. Collect all spilled liquids and properly dispose of them.

- ☐ Label all containers according to their contents (e.g., solvent, gasoline).

- ☐ Label hazardous substances regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous).

- ☐ Prominently display required labels on transported hazardous and toxic materials (per US DOT regulations).

- ☐ Identify key spill response personnel.

Spill Response

- ☐ Clean up leaks and spills immediately.

- ☐ Place a stockpile of spill cleanup materials where it will be readily accessible (e.g., near storage and maintenance areas).

- ☐ On paved surfaces, clean up spills with as little water as possible.

  - ✓ Use a rag for small spills, a damp mop for general cleanup, and absorbent material for larger spills.

  - ✓ If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to a certified laundry (rags) or disposed of as hazardous waste.

  - ✓ If possible use physical methods for the cleanup of dry chemicals (e.g., brooms, shovels, sweepers, or vacuums).

- ☐ Never hose down or bury dry material spills. Sweep up the material and dispose of properly.

- ☐ Chemical cleanups of material can be achieved with the use of adsorbents, gels, and foams. Use adsorbent materials on small spills rather than hosing down the spill. Remove the adsorbent materials promptly and dispose of properly.

- ☐ For larger spills, a private spill cleanup company or Hazmat team may be necessary.

Reporting

- Report spills that pose an immediate threat to human health or the environment to the Regional Water Quality Control Board or local authority as location regulations dictate.
- Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hour).
- Report spills to 911 for dispatch and clean-up assistance when needed. Do not contact fire agencies directly.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - ✓ Types and quantities (in some cases) of wastes;
  - ✓ Patterns in time of occurrence (time of day/night, month, or year);
  - ✓ Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills);
  - ✓ Clean-up procedures; and
  - ✓ Responsible parties.



Employee Training Program

- Educate employees about spill prevention and cleanup.
- Well-trained employees can reduce human errors that lead to accidental releases or spills:
  - ✓ The employee should have the tools and knowledge to immediately begin cleaning up a spill should one occur; and
  - ✓ Employees should be familiar with the Spill Prevention Control and Countermeasure Plan.
- Employees should be educated about aboveground storage tank requirements. Employees responsible for aboveground storage tanks and liquid transfers should be thoroughly familiar with the Spill Prevention Control and Countermeasure Plan and the plan should be readily available.
- Train employees to recognize and report illegal dumping incidents.

Other Considerations (Limitations and Regulations)

- State regulations exist for facilities with a storage capacity of 10,000 gallons or more of petroleum to prepare a Spill Prevention Control and Countermeasure (SPCC) Plan (Health & Safety Code Chapter 6.67).
- State regulations also exist for storage of hazardous materials (Health & Safety Code Chapter 6.95), including the preparation of area and business plans for emergency response to the releases or threatened releases.
- Consider requiring smaller secondary containment areas (less than 200 sq. ft.) to be connected to the sanitary sewer, prohibiting any hard connections to the storm drain.

Requirements

Costs (including capital and operation & maintenance)

- Will vary depending on the size of the facility and the necessary controls.
- Prevention of leaks and spills is inexpensive. Treatment and/or disposal of contaminated soil or water can be quite expensive.

Maintenance (including administrative and staffing)

- Develop spill prevention and control plan, provide and document training, conduct inspections of material storage areas, and supply spill kits.
- Extra time is needed to properly handle and dispose of spills, which results in increased labor costs.

Supplemental Information

Further Detail of the BMP

Reporting

Record keeping and internal reporting represent good operating practices because they can increase the efficiency of the facility and the effectiveness of BMPs. A good record keeping system helps the facility minimize incident recurrence, correctly respond with appropriate cleanup activities, and comply with legal requirements. A record keeping and reporting system should be set up for documenting spills, leaks, and other discharges, including discharges of hazardous substances in reportable quantities. Incident records describe the quality and quantity of non-stormwater discharges to the storm sewer. These records should contain the following information:

- Date and time of the incident;
- Weather conditions;
- Duration of the spill/leak/discharge;

- Cause of the spill/leak/discharge;
- Response procedures implemented;
- Persons notified; and
- Environmental problems associated with the spill/leak/discharge.

Separate record keeping systems should be established to document housekeeping and preventive maintenance inspections, and training activities. All housekeeping and preventive maintenance inspections should be documented. Inspection documentation should contain the following information:

- Date and time the inspection was performed;
- Name of the inspector;
- Items inspected;
- Problems noted;
- Corrective action required; and
- Date corrective action was taken.

Other means to document and record inspection results are field notes, timed and dated photographs, videotapes, and drawings and maps.

Aboveground Tank Leak and Spill Control

Accidental releases of materials from aboveground liquid storage tanks present the potential for contaminating stormwater with many different pollutants. Materials spilled, leaked, or lost from tanks may accumulate in soils or on impervious surfaces and be carried away by stormwater runoff.

The most common causes of unintentional releases are:

- Installation problems;
- Failure of piping systems (pipes, pumps, flanges, couplings, hoses, and valves);
- External corrosion and structural failure;
- Spills and overfills due to operator error; and
- Leaks during pumping of liquids or gases from truck or rail car to a storage tank or vice versa.

Storage of reactive, ignitable, or flammable liquids should comply with the Uniform Fire Code and the National Electric Code. Practices listed below should be employed to enhance the code requirements:

- Tanks should be placed in a designated area.
- Tanks located in areas where firearms are discharged should be encapsulated in concrete or the equivalent.
- Designated areas should be impervious and paved with Portland cement concrete, free of cracks and gaps, in order to contain leaks and spills.
- Liquid materials should be stored in UL approved double walled tanks or surrounded by a curb or dike to provide the volume to contain 10 percent of the volume of all of the containers or 110 percent of the volume of the largest container, whichever is greater. The area inside the curb should slope to a drain.
- For used oil or dangerous waste, a dead-end sump should be installed in the drain.
- All other liquids should be drained to the sanitary sewer if available. The drain must have a positive control such as a lock, valve, or plug to prevent release of contaminated liquids.
- Accumulated stormwater in petroleum storage areas should be passed through an oil/water separator.

Maintenance is critical to preventing leaks and spills. Conduct routine inspections and:

- Check for external corrosion and structural failure.
- Check for spills and overfills due to operator error.
- Check for failure of piping system (pipes, pumps, flanges, coupling, hoses, and valves).
- Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or vice versa.
- Visually inspect new tank or container installation for loose fittings, poor welding, and improper or poorly fitted gaskets.
- Inspect tank foundations, connections, coatings, and tank walls and piping system. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.
- Frequently relocate accumulated stormwater during the wet season.

- Periodically conduct integrity testing by a qualified professional.

Vehicle Leak and Spill Control

Major spills on roadways and other public areas are generally handled by highly trained Hazmat teams from local fire departments or environmental health departments. The measures listed below pertain to leaks and smaller spills at vehicle maintenance shops.

In addition to implementing the spill prevention, control, and clean up practices above, use the following measures related to specific activities:

Vehicle and Equipment Maintenance

- Perform all vehicle fluid removal or changing inside or under cover to prevent the run-on of stormwater and the runoff of spills.
- Regularly inspect vehicles and equipment for leaks, and repair immediately.
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- Immediately drain all fluids from wrecked vehicles.
- Store wrecked vehicles or damaged equipment under cover.
- Place drip pans or absorbent materials under heavy equipment when not in use.
- Use absorbent materials on small spills rather than hosing down the spill.
- Remove the adsorbent materials promptly and dispose of properly.
- Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- Oil filters disposed of in trashcans or dumpsters can leak oil and contaminate stormwater. Place the oil filter in a funnel over a waste oil recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask your oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries, even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- ☐ Design the fueling area to prevent the run-on of stormwater and the runoff of spills:

  Cover fueling area if possible.

  Use a perimeter drain or slope pavement inward with drainage to a sump.

  Pave fueling area with concrete rather than asphalt.

- ☐ If dead-end sump is not used to collect spills, install an oil/water separator.
- ☐ Install vapor recovery nozzles to help control drips as well as air pollution.
- ☐ Discourage "topping-off" of fuel tanks.
- ☐ Use secondary containment when transferring fuel from the tank truck to the fuel tank.
- ☐ Use absorbent materials on small spills and general cleaning rather than hosing down the area. Remove the absorbent materials promptly.
- ☐ Carry out all Federal and State requirements regarding underground storage tanks, or install above ground tanks.
- ☐ Do not use mobile fueling of mobile industrial equipment around the facility; rather, transport the equipment to designated fueling areas.
- ☐ Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date.
- ☐ Train employees in proper fueling and cleanup procedures.

Industrial Spill Prevention Response

For the purposes of developing a spill prevention and response program to meet the stormwater regulations, facility managers should use information provided in this fact sheet and the spill prevention/response portions of the fact sheets in this handbook, for specific activities.

The program should:

- ☐ Integrate with existing emergency response/hazardous materials programs (e.g., Fire Department).
- ☐ Develop procedures to prevent/mitigate spills to storm drain systems.
- ☐ Identify responsible departments.

- Develop and standardize reporting procedures, containment, storage, and disposal activities, documentation, and follow-up procedures.
- Address spills at municipal facilities, as well as public areas.
- Provide training concerning spill prevention, response and cleanup to all appropriate personnel.

References and Resources

California's Nonpoint Source Program Plan. http://www.swrcb.ca.gov/nps/index.html.

Clark County Storm Water Pollution Control Manual. Available online at: http://www.co.clark.wa.us/pubworks/bmpman.pdf.

King County Storm Water Pollution Control Manual. Available online at: http://dnr.metrokc.gov/wlr/dss/spcm.htm.

Orange County Stormwater Program, Best Management Practices for Industrial/Commercial Business Activities. Available online at: http://ocwatersheds.com/documents/bmp/industrialcommercialbusinessesactivities

Santa Clara Valley Urban Runoff Pollution Prevention Program. http://www.scvurppp.org.

The Stormwater Managers Resource Center. http://www.stormwatercenter.net/.

APPENDIX I
BMP Implementation Log

TABLE I.1
BMP IMPLEMENTATION LOG

Industrial Activity/Material and Location	BMP Description	Implementation Frequency	Implementation Description or Fact Sheet Reference	Person Responsible for Implementing BMP

LIST OF ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
Annual Evaluation	Annual Comprehensive Facility Compliance Evaluation
BMPs	Best Management Practices
CASQA	California Stormwater Quality Association
COC	Chain of Custody
COD	Chemical Oxygen Demand
ERA	Exceedance Response Action
ERAs	Exceedance response actions
General Permit	General Permit for Stormwater Discharges Associated with Industrial Activities
HMMP	Hazardous Material Management Plan
LRP	Legally Responsible Person
MDL	Method Detection Limit
MIP	Monitoring Implementation Plan
MS4	Municipal Separate Storm Sewer System
NAL	numeric action level
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharges Elimination System
NSWDs	Non-Stormwater Discharges
PRDs	Permit Registration Documents
PPT	Pollution Prevention Team
QA/QC	Quality Assurance and Quality Control
QCS	Qualified Combined Samples
QSEs	Qualified Storm Events
SMARTS	Stormwater Multi Application and Report Tracking System

SPCC	Spill Prevention Control and Countermeasure
State Water Board	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
WDID	Waste Discharge Identification

County of Santa Cruz
Community Development & Infrastructure
701 Ocean Street 4th Floor, Santa Cruz, CA 95060
www.sccoplanning.com

Supplemental Documents Index

Form **PLG-235**
Page 1 of 1
Rev 04/28/23

This form is required to be the first page of the Supplemental (SUP) file
The preparer is legally responsible for signatures whether a graphic, typewritten, or handwritten. Documents may not be restricted by digital signatures or otherwise.

Project Information

Permit No.
APN: 076-261-03; 076-231-02; 076-241-05
Project Address: 9835 Newell Creek Rd, Ben Lomond, CA 95005
Legal Owner: Santa Cruz County Flood Control District
Applicant: Michael Hettenhausen - County Employee
Date: 12/24/2024

County Review Stamp

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

County Documents portion for staff use only

County Documents County staff use only	Additional County Documents County staff use only
☐ Environmental Planning Notes & Inspections	☐

The SUP file must be complete and include all documents required for permit issuance each time the file is uploaded (partial/incremental submittals are not allowed)

Project Documents Checkmark documents included		Additional documents Identify additional documents included
☐ EVCS Form(s) – PLG290, PLG291, PLG292, PLG293	1	
☐ Transfer of Responsibility Form(s) – PLG250	2	
☐ Modification Worksheet – Form	3	
☐ Substantial Improvement Form – Form	4	
☐ WELO Residential Checklist & Exemption Form – PLG152	5	
☐ WELO Landscape Plan Submittal Form – PLG154	6	
☐ **Arborist Report**	7	
☐ →*Consultant Plan Review* – PLG300 required with report	8	
☐ →*Addendum(s)*	9	
☐ **Geological Investigation Report**	10	
☐ →*Consultant Plan Review* – PLG300 required with report	11	
☐ →*Addendum(s)*	12	
☐ →*County Acceptance Letter(s)*	13	
☒ **Geotechnical Investigation Report** (or *Waiver Request Form*)	14	
☒ →*Consultant Plan Review* – PLG300 required with report	15	
☐ →*Addendum(s)*	16	
☐ →*County Acceptance Letter(s)*	17	
☐ **Drainage Calculations**	18	
☒ →*Appendix A: Project Information & Threshold Determination*	19	
☐ →*Addendum(s)*	20	
☐ **Special Inspections** Form – PLG240 submit all pages of form	21	
☒ **Structural Calculations**	22	
☐ →*Addendum(s)*	23	
☐ **Truss Shop Drawings** project architect/engineer review required	24	
☐ →*Written review by project architect/engineer of record*	25	
☒ **Specification Book** (with table of contents & bookmarked sections)	26	

County of Santa Cruz
Community Development & Infrastructure
701 Ocean Street 4th Floor, Santa Cruz, CA 95060
www.sccoplanning.com

Consultant Plan Review

The preparer is legally responsible for signatures whether a graphic, typewritten, or handwritten. Documents may not be restricted by digital signatures or otherwise.

Project Information Permit No.

APN: 076-261-03; 076-231-02; 076-241-05 Date: 1/22/25
Project Address: 9835 Newell Creek Rd, Ben Lomond, CA 95005
Legal Owner: Santa Cruz County Flood Control District Email: michael.hettenhausen@santacruzca.gc
Owner Address: 701 Ocean St, Rm 410 Santa Cruz, CA 95060 Phone: (831) 454-2210

Technical Report Information Please cite all reports utilized to determine project conformance

Consultant Company Name: Tetra Tech BAS, Inc.
Name of Professional Who Signed Report: Fernando Cuenca, Michael Spira, Peter Skopek
Date of Report: July 11, 2022
Date of Updates/Supplemental Information: August 6, 2024

Consultant Information

Firm Name: Tetra Tech BAS, Inc. License No. GE 3128
Name: ~~Brett Boehmke~~ Fernando Cuenca Email: ~~brett.boehmke@tetratech.com~~ fernando.cuenca@tetratech.com
Address: 21700 Copley Drive, Ste 200, Diamond Bar, CA 91765 Phone: ~~(949) 809-5127~~ (909) 655-3207

☒ Geotechnical Engineer ☐ Certified Arborist ☐ Civil Engineer
☐ Certified Engineering Geologist ☐ Qualified Biologist ☐ Other (type):

Project Plan Sheets Reviewed

Plan Prepared By	Plan Sheet Numbers	Date of Latest Revision
Tetra Tech	C-002,S-001, SD-101, S-101, S-102, S-301, S-302, S-501, S-502	12/23/2024

By signing below, we confirm that the plan sheets listed above for the specified project are in conformance with the recommendations of the technical report prepared under our responsibility.
Apply California State registered architect or engineer (signature and stamp below, if applicable)

REGISTERED PROFESSIONAL ENGINEER
FERNANDO AUGUSTO CUENCA
GE 3128
GEOTECHNICAL
STATE OF CALIFORNIA

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

Signature: Fernando Cuenca Date: January 31,2025

County of Santa Cruz

Department of Community Development & Infra

701 Ocean Street, 4th Floor, Santa Cruz, CA 95060-4070
(831) 454-2160

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

Project Information & Threshold Determination - Ap

Completion of this form shall be used as a guidance by the applicant for determining the projects stormwater requirements. Applicants are encouraged to contact the Stormwater Management staff with any questions. Definitions, standard details and further guidance is provided within Part 3 of the **Design Criteria** linked on the Public Works website at https://dpw.co.santa-cruz.ca.us/Home.aspx

PROJECT & CONTACT INFORMATION

Project Site Address:
9835 Newell Creek Rd, Ben Lomond, CA 95005

Assessor's Parcel Number (APN):
076-261-03; 076-231-02; 076-241-05

Building Permit No. / Discretionary Application:

Property Owner, Applicant, or Representative Name:
Michael Hettenhausen - County GSD

Contact Phone Number:
(831) 454-2210

Flood Control District (additional permit fees for lot coverage may be assessed, refer to Unified Fee Schedule)
Zone 8

PROJECT DESCRIPTION

Lot Coverage	Actual		Adjusted	
A. Total lot size:	2,689,830	sq.ft.		
B. Existing Permitted Impervious Area:	224,383	sq.ft.		
C. Replaced Permitted Impervious Area:	24,626	sq.ft.		
D. Replaced Permitted Semi-Impervious* Area:	0	sq.ft.	0	sq.ft.
E. Total proposed Self-mitigating Area:	0	sq.ft.		
F. Proposed Impervious Area:	0	sq.ft.		
G. Proposed Semi-Impervious* Area:	0	sq.ft.	0	sq.ft.

Values in these tables are automatically calculated, user does not need to enter information here if filled out electronically.

Total **REPLACED** impervious & semi- impervious area [C + D]: 24,626 sq.ft.

Total **NEW** impervious & semi-impervious area [F + (0.5*G]: 0 sq.ft.

Project Threshold Classification

(Value will auto-sum if filled out electronically, otherwise add **REPLACED** *and* **NEW** *to obtain total for determining project size below)* 24,626 sq.ft.

☐ **Small Project** (less than 500 sq.ft. created and/or replaced) - Use *Appendix B 'Small Project Submittal Requirements'* for submittal requirement guidance.

☐ **Medium Project** (more than 500 sq.ft. but less than 5,000 sq.ft. created and/or replaced) - Use *Appendix C 'Medium Project Submittal Requirements'* for submittal requirement guidance.

☑ **Large Project** (more than 5,000 sq.ft. created and/or replaced **OR** 50% increase in permitted impervious area**) - Use *Appendix D 'Large Project Submittal Requirements'* for submittal requirement guidance.

1. Application is part of a phased project OR master plan?	Yes ☐	No ☑
2. No diversion is proposed and pre-development runoff patterns will be maintained.	Yes ☑	No ☐
3. Application complies with Part 3 of the Design Criteria requirements .	Yes ☑	No ☐
4. Drainage has been evaluated. There are no existing drainage issues on/near the site and none anticipated.	Yes ☑	No ☐
5. Safe stormwater overflow has been incorporated into the project design. No adverse impacts to neighboring properties, drainage pathways, or roadways are anticipated.	Yes ☑	No ☐

Signature Required

By signing this form, the signee agrees the information provided here represents, to the best of their knowledge the scope of work being proposed. Signee acknowledges this document is to be used as a guidance for determining the project size and stormwater requirements, additional requirements and clarification may be required.

Michael Hettenhausen

**Form will apply a 50% credit for semi-impervious areas as final count. Applicant shall not apply the credit.*
*** Projects that add more than 50% impervious area coverage are required to mitigate the entire site.*

TETRA TECH

Structural Calculations

for

Canopies, Scale House, Entrance Sign & Equipment Pads

at

Ben Lomond Transfer Station
Ben Lomond, CA

NOT FOR CONSTRUCTION - ISSUED FOR PERMIT REVIEW

December 23, 2024

Prepared Under the Direction of



Brett Boehmke
Registered Civil Engineer, P.E. 91335

Tetra Tech, Inc.
17885 Von Karman Avenue, Suite 500
Irvine, Ca. 92614
(949) 809-5000
TT Job No. 200-42064-22005

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
Bldg. Permits: B-251911, 12 & 13

TETRA TECH

Contents

I:	Scale House Building	1 to 185
II:	Entrance Sign	186 to 240
III:	Household Hazardous Waste Canopy	241 to 377
IV:	Recycling Area Canopy	378 to 639
V:	Exterior Equipment Pads	640 to 776



Tetra Tech
17885 Von Karman Ave., Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE	Ben Lomond TS Scale House		
JOB NO.	200-42064-22005	**SHEET NO.**	
CALCULATED BY	BMB	**DATE**	
CHECKED BY	MSO	**DATE**	

CS2021 Ver 2022-04-02 www.struware.com

STRUCTURAL CALCULATIONS

FOR

Ben Lomond Transfer Station Scale House

Tetra Tech
17885 Von Karman Ave., Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE Ben Lomond TS Scale House
JOB NO. 200-42064-22005 **SHEET NO.**
CALCULATED BY BMB **DATE**
CHECKED BY MSO **DATE**

www.struware.com

Code Search

Code: International Building Code 2021

Occupancy:

Occupancy Group = B Business

Risk Category & Importance Factors:

Risk Category =	II
Wind factor =	1.00
Snow factor =	1.00
Seismic factor =	1.00

Type of Construction:

Fire Rating:

Roof =	0.0 hr
Floor =	0.0 hr

Building Geometry:

Roof angle (θ)	0.00 / 12	0.0 deg
Building length	42.4 ft	
Least width	27.0 ft	
Mean Roof Ht (h)	15.4 ft	
Parapet ht above grd	19.0 ft	
Minimum parapet ht	3.6 ft	

Live Loads:

Roof 0 to 200 sf: 20 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12 psf

Floor:

Typical Floor	250 psf
Partitions	15 psf
Corridors above first floor	80 psf
Lobbies & first floor corridors	100 psf
Stairs and exit ways	100 psf
Storage areas above ceilings	20 psf

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(907) 250-5765

JOB TITLE Ben Lomond TS Scale House
JOB NO. 200-42064-22005 **SHEET NO.**
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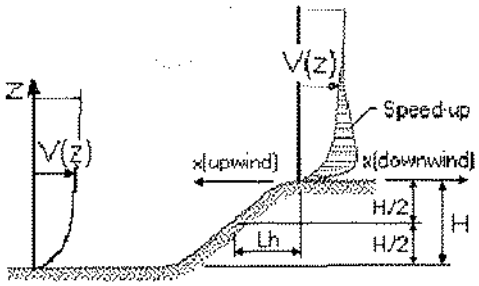
Wind Loads : ASCE 7- 16

Ultimate Wind Speed	92 mph
Nominal Wind Speed	71.3 mph
Risk Category	II
Exposure Category	C
Enclosure Classif.	Enclosed Building
Internal pressure	+/-0.18
Directionality (Kd)	0.85
Kh case 1	0.853
Kh case 2	0.853
Type of roof	Monoslope

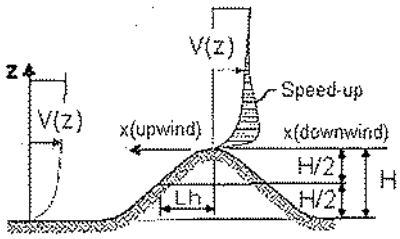
Topographic Factor (Kzt)

Topography		Flat
Hill Height	(H)	80.0 ft
Half Hill Length (Lh)		100.0 ft
Actual H/Lh	=	0.80
Use H/Lh	=	0.50
Modified Lh	=	160.0 ft
From top of crest: x =		50.0 ft
Bldg up/down wind?		downwind

H/Lh= 0.50 K_1 = 0.000
x/Lh = 0.31 K_2 = 0.792
z/Lh = 0.10 K_3 = 1.000
At Mean Roof Ht:
Kzt = $(1+K_1K_2K_3)^2$ = 1.00



ESCARPMENT



2D RIDGE or 3D AXISYMMETRICAL HILL

Gust Effect Factor

h = 15.4 ft
B = 23.5 ft
/z (0.6h) = 15.0 ft

Flexible structure if natural frequency < 1 Hz (T > 1 second).
If building h/B>4 then may be flexible and should be investigated.
h/B = 0.65 Rigid structure (low rise bldg)

G = 0.85 Using rigid structure formula

Rigid Structure

$\bar{e}$ =	0.20	
ℓ =	500 ft	
z_{min} =	15 ft	
c =	0.20	
g_Q, g_v =	3.4	
L_z =	427.1 ft	
Q =	0.94	
I_z =	0.23	
G =	**0.89**	use G = 0.85

Flexible or Dynamically Sensitive Structure

Natural Frequency (η_1) =	0.0 Hz				
Damping ratio (β) =	0				
/b =	0.65				
/α =	0.15				
Vz =	77.7				
N_1 =	0.00				
R_n =	0.000				
R_h =	28.282	η =	0.000	h =	15.4 ft
R_B =	28.282	η =	0.000		
R_L =	28.282	η =	0.000		
g_R =	0.000				
R =	0.000				
Gf =	0.000				

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JOB TITLE Ben Lomond TS Scale House
JOB NO. 200-42064-22005 **SHEET NO.**
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Enclosure Classification

Test for Enclosed Building: Ao < 0.01Ag or 4 sf, whichever is smaller

Test for Open Building: All walls are at least 80% open.
Ao ≥ 0.8Ag

Test for Partially Enclosed Building: Predominately open on one side only

	Input			Test	
Ao	500.0	sf	Ao ≥ 1.1Aoi	NO	
Ag	600.0	sf	Ao > 4' or 0.01Ag	YES	
Aoi	1000.0	sf	Aoi / Agi ≤ 0.20	YES	Building is NOT
Agi	10000.0	sf			Partially Enclosed

Conditions to qualify as Partially Enclosed Building. Must satisfy all of the following:
Ao ≥ 1.1Aoi
Ao > smaller of 4' or 0.01 Ag
Aoi / Agi ≤ 0.20
Where:
Ao = the total area of openings in a wall that receives positive external pressure.
Ag = the gross area of that wall in which Ao is identified.
Aoi = the sum of the areas of openings in the building envelope (walls and roof) not including Ao.
Agi = the sum of the gross surface areas of the building envelope (walls and roof) not including Ag.

Test for Partially Open Building: A building that does not qualify as open, enclosed or partially enclosed.
(This type building will have same wind pressures as an enclosed building.

Reduction Factor for large volume partially enclosed buildings (Ri) :

If the partially enclosed building contains a single room that is unpartitioned , the internal pressure coefficient may be multiplied by the reduction factor Ri.

Total area of all wall & roof openings (Aog): 0 sf
Unpartitioned internal volume (Vi) : 0 cf
Ri = 1.00

Ground Elevation Factor (Ke)

Grd level above sea level = 0.0 ft Ke = 1.0000
Constant = 0.00256 Adj Constant = 0.00256

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Wind Loads - MWFRS h≤60' (Low-rise Buildings) except for open buildings

Kz = Kh (case 1) = 0.85
Base pressure (qh) = **15.7 psf**
GCpi = +/-0.18

Edge Strip (a) = 3.0 ft
End Zone (2a) = 6.0 ft
Zone 2 length = 11.8 ft

Wind Pressure Coefficients

	CASE A				CASE B		
		θ = 0 deg					
Surface	GCpf	w/-GCpi	w/+GCpi		GCpf	w/-GCpi	w/+GCpi
1	0.40	0.58	0.22		-0.45	-0.27	-0.63
2	-0.69	-0.51	-0.87		-0.69	-0.51	-0.87
3	-0.37	-0.19	-0.55		-0.37	-0.19	-0.55
4	-0.29	-0.11	-0.47		-0.45	-0.27	-0.63
5					0.40	0.58	0.22
6					-0.29	-0.11	-0.47
1E	0.61	0.79	0.43		-0.48	-0.30	-0.66
2E	-1.07	-0.89	-1.25		-1.07	-0.89	-1.25
3E	-0.53	-0.35	-0.71		-0.53	-0.35	-0.71
4E	-0.43	-0.25	-0.61		-0.48	-0.30	-0.66
5E					0.61	0.79	0.43
6E					-0.43	-0.25	-0.61

Ultimate Wind Surface Pressures (psf)

1	9.1	3.5		-4.2	-9.9
2	-8.0	-13.7		-8.0	-13.7
3	-3.0	-8.6		-3.0	-8.6
4	-1.7	-7.4		-4.2	-9.9
5				9.1	3.5
6				-1.7	-7.4
1E	12.4	6.8		-4.7	-10.4
2E	-14.0	-19.6		-14.0	-19.6
3E	-5.5	-11.2		-5.5	-11.2
4E	-3.9	-9.6		-4.7	-10.4
5E				12.4	6.8
6E				-3.9	-9.6

Parapet

Windward parapet = 24.7 psf (GCpn = +1.5)
Leeward parapet = -16.5 psf (GCpn = -1.0)

Windward roof overhangs = 11.0 psf (upward) add to windward roof pressure

Horizontal MWFRS Simple Diaphragm Pressures (psf)

Transverse direction (normal to L)

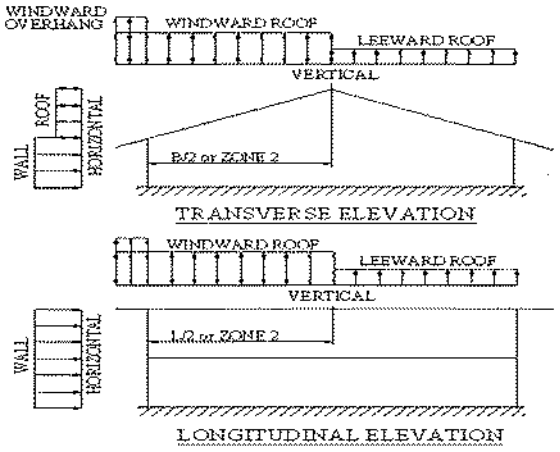
Interior Zone: Wall 10.8 psf
Roof -5.0 psf **
End Zone: Wall 16.3 psf
Roof -8.5 psf **

Longitudinal direction (parallel to L)

Interior Zone: Wall 10.8 psf
End Zone: Wall 16.3 psf

** NOTE: Total horiz force shall not be less than that determined by neglecting roof forces (except for MWFRS moment frames).

The code requires the MWFRS be designed for a min ultimate force of 16 psf multiplied by the wall area plus an 8 psf force applied to the vertical projection of the roof.



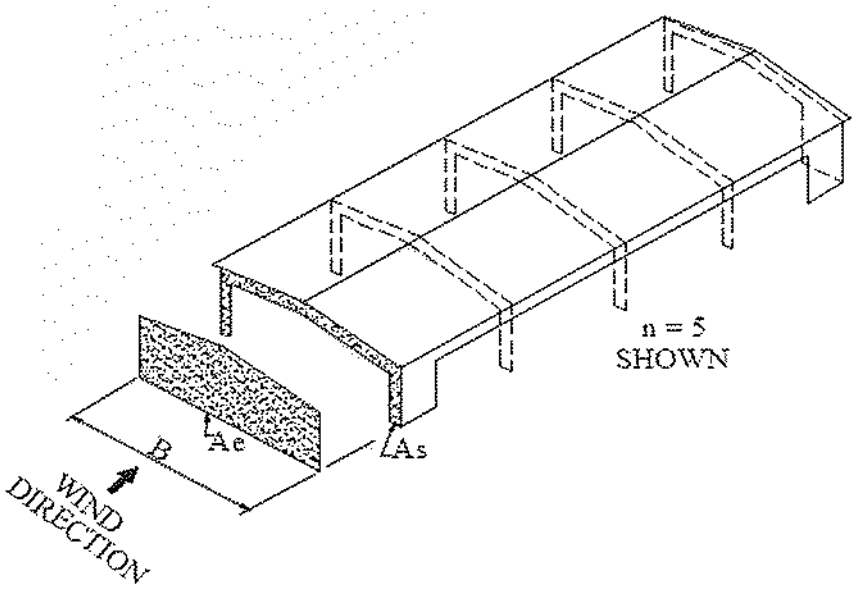
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JOB TITLE	Ben Lomond TS Scale House		
JOB NO.	200-42064-22005	**SHEET NO.**	
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Wind Loads - h≤60' Longitudinal Direction MWFRS On Open or Partially Enclosed Buildings with Transverse Frames and Pitched Roofs

ASCE 7-16 procedure

Base pressure (qh) = **15.7 psf**
GCpi = +/-0.18 Enclosed bldg, procdure doesn't apply
Roof Angle (θ) = 0.0 deg



B=	23.5	ft
# of frames (n) =	1	
Solid are of end wall including fascia (As) =	1,500.0	sf
Roof ridge height =	15.4	ft
Roof eave height =	15.4	ft
Total end wall area if soild (Ae) =	361.5	sf

Longidinal Directional Force (F) = pAe
p= qh [(GCpf)windward -(GCpf)leeward] K_B K_S

Solidarity ratio (Φ) =	4.150	
n =	3	use n = 3 minimum
KB =	1.56458	
KS =	16.794	
Zones 5 & 6 area =	315	sf
5E & 6E area =	46	sf
(GCpf) windward - (GCpf) leeward] =	0.735	
p =	303.3	psf

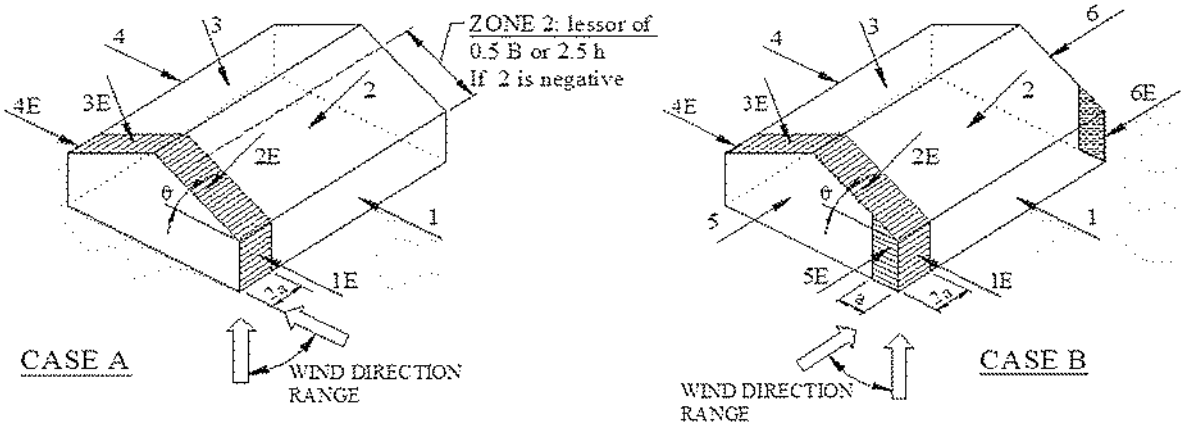
Total force to be resisted by MWFRS (F) = **109.6 kips** applied at the centroid of the end wall area Ae

Note: The longidudinal force acts in combination with roof loads

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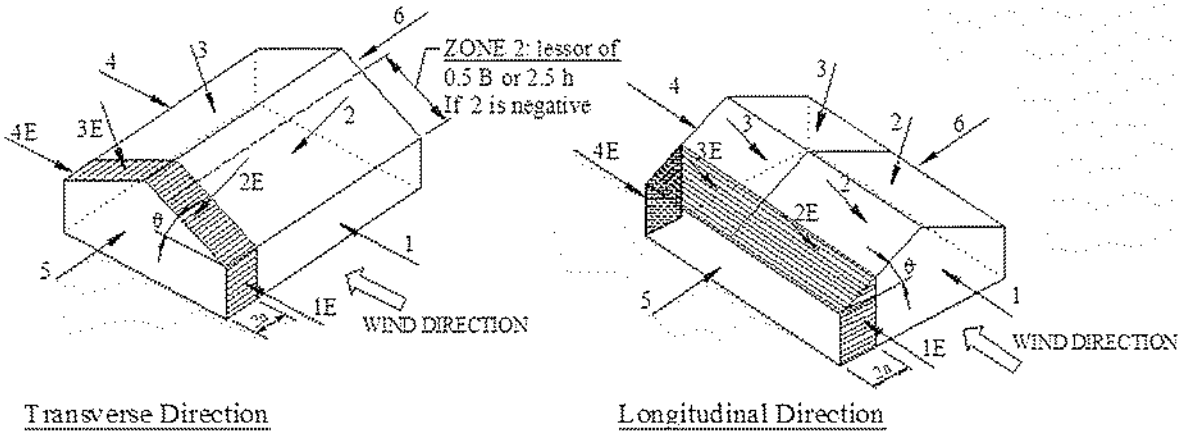
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CHECKED BY	HRN	**DATE**	

calculated elsewhere for an open or partially enclosed building.



NOTE: Torsional loads are 25% of zones 1 - 6. See code for loading diagram.
Exception: One story buildings h<30' and 1 to 2 storybuildings framed with light-frame construction or with flexible diaphragms need not be designed for the torsional load case.

ASCE 7-98 & ASCE 7-10 (& later) - MWFRS wind pressure zones



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NOTE: Torsional loads are 25% of zones 1 - 4. See code for loading diagram.
Exception: One story buildings h<30' and 1 to 2 storybuildings framed with light-frame construction or with flexible diaphragms need not be designed for the torsional load case.

ASCE 7-02 and ASCE 7-05 - MWFRS wind pressure zones

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Ultimate Wind Pressures

Wind Loads - Components & Cladding : h ≤ 60'

Kh (case 2) = 0.85 h = 15.4 ft 0.2h = 3.1 ft
Base pressure (qh) = **15.7 psf** 0.6h = 9.2 ft
Minimum parapet ht = 4.0 ft GCpi = +/-0.18
Roof Angle (θ) = 0.0 deg qi = qh = 15.7 psf
Type of roof = Monoslope

Roof

	Surface Pressure (psf)								User input	
Area	10 sf	20 sf	50 sf	100 sf	200 sf	350 sf	500 sf	1000 sf	10 sf	150 sf
Negative Zone 1	-29.5	-27.6	-25	-23.1	-21.1	-19.5	-18.5	-18.5	-29.5	-21.9
Negative Zone 1'	-17	-17	-17	-17	-16.0	-16.0	-16.0	-16.0	-17.0	-16.0
Negative Zone 2	-39	-36.5	-33.1	-30.6	-28.1	-26.1	-24.8	-24.8	-39.0	-29.2
Negative Zone 3	-39	-36.5	-33.1	-30.6	-28.1	-26.1	-24.8	-24.8	-39.0	-29.2
Positive Zone 1 & 1'	16	16	16	16	16.0	16.0	16.0	16.0	16.0	16.0
Positive Zones 2 & 3	17	16.2	16	16	16.0	16.0	16.0	16.0	17.0	16.0
Overhang Zone 1&1'	-26.7	-26.2	-25.6	-25.1	-21.1	-17.8	-16.0	-16.0	-26.7	-22.8
Overhang Zone 2	-36.1	-32.8	-28.4	-25	-21.7	-19.0	-17.3	-17.3	-36.1	-23.1
Overhang Zone 3	-36.1	-32.8	-28.4	-25	-21.7	-19.0	-17.3	-17.3	-36.1	-23.1

Negative zone 3 = zone 2, since parapet >= 3ft.
Overhang pressures in the table above assume an internal pressure coefficient (Gcpi) of 0.0
Overhang soffit pressure equals adj wall pressure (which includes internal pressure of 2.8 psf)

Parapet

qp = 16.5 psf

		Surface Pressure (psf)						User input
Solid Parapet Pressure		10 sf	20 sf	50 sf	100 sf	200 sf	500 sf	20 sf
CASE A:	Zone 2 :	52.8	49.4	44.8	41.4	38.0	33.5	49.4
	Zone 3 :	52.8	49.4	44.8	41.4	38.0	33.5	49.4
CASE B:	Interior zone :	-31.2	-29.6	-27.5	-25.9	-24.4	-22.3	-29.6
	Corner zone :	-35.6	-33.3	-30.1	-27.8	-25.4	-22.3	-33.3

wall a = 3.0 ft

Walls

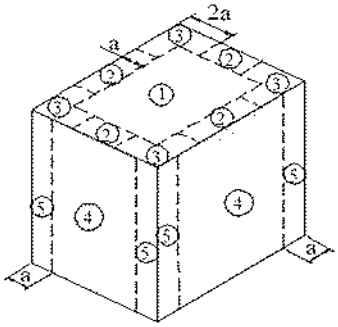
	GCp +/- GCpi				Surface Pressure at h				User input	
Area	10 sf	100 sf	200 sf	500 sf	10 sf	100 sf	200 sf	500 sf	20 sf	55 sf
Negative Zone 4	-1.17	-1.01	-0.96	-0.90	-18.4	-16.0	-16.0	-16.0	-17.6	-16.5
Negative Zone 5	-1.44	-1.12	-1.03	-0.90	-22.6	-17.6	-16.1	-16.0	-21.1	-18.9
Positive Zone 4 & 5	1.08	0.92	0.87	0.81	17.0	16.0	16.0	16.0	16.2	16.0

Note: GCp reduced by 10% due to roof angle <= 10 deg.

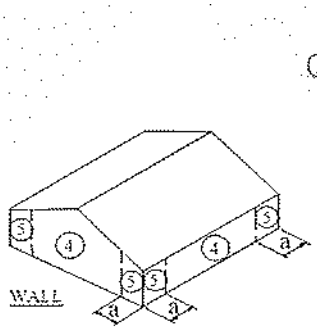
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JOB TITLE	Ben Lomond TS Scale House		
JOB NO.	200-42064-22005	**SHEET NO.**	
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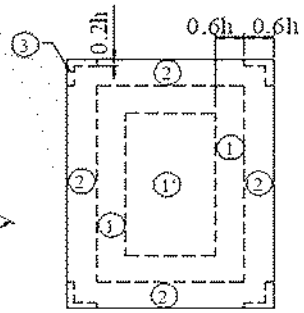
Location of C&C Wind Pressure Zones - ASCE 7-16



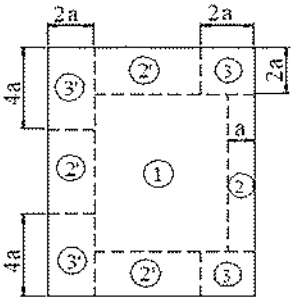
Roofs w/ θ ≤ 10°
and all walls
h > 60'



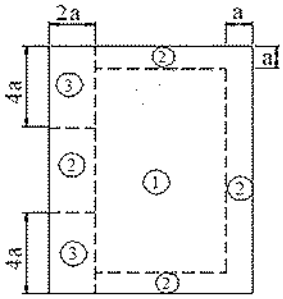
Walls h ≤ 60'
& alt design h<90'



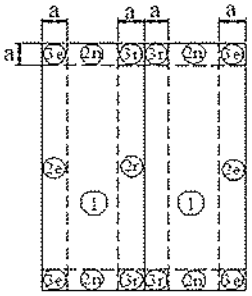
Gable, Sawtooth and
Multispan Gable θ ≤ 7 degrees &
Monoslope ≤ 3 degrees
h ≤ 60' & alt design h<90'



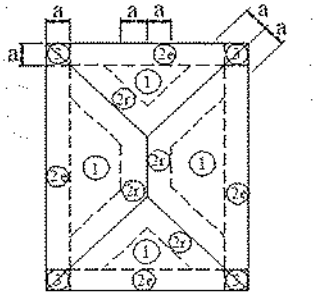
Monoslope roofs
3° < θ ≤ 10°
h ≤ 60' & alt design h<90'



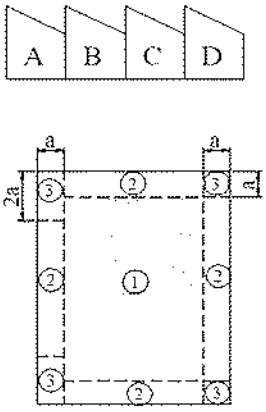
Monoslope roofs
10° < θ ≤ 30°
h ≤ 60' & alt design h<90'



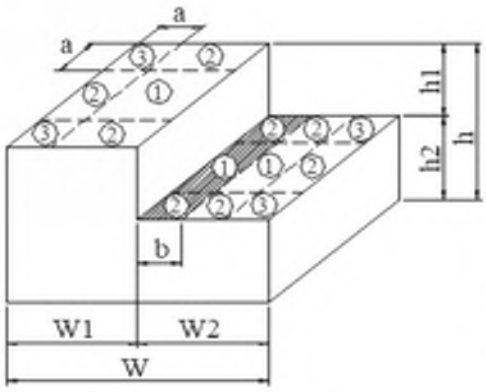
Multispan Gable &
Gable 7° < θ ≤ 45°

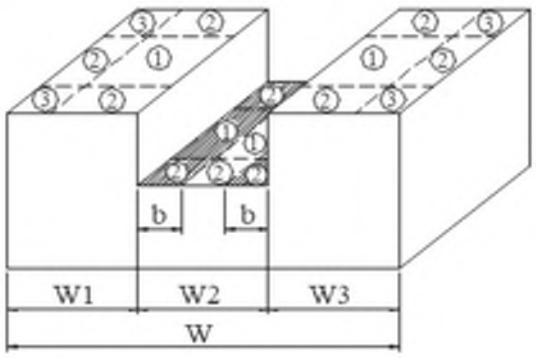


Hip 7° < θ ≤ 27°



Sawtooth 10° < θ ≤ 45°
h ≤ 60' & alt design h<90'





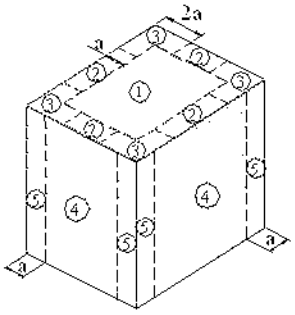
Stepped roofs θ ≤ 3°
h ≤ 60' & alt design h<90'

Note: The stepped roof zones above are as shown in ASCE 7-16 (except the upper roof zones 1 and 2 are shown at the inside edge per the notes). Prior editions didn't show zones, but the notes sent you to the low slope gable figure. The note in ASCE 7-16 still sends you to the low slope gable figure, but for some reasons the zones shown are per editions prior to ASCE 7-16. Therefore, the above zones may be a code mistake and the correct zone locations may be per the low slope gable roof shown at the top of this page.

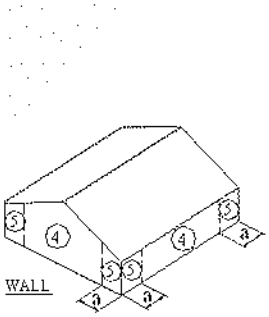
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JOB TITLE	Ben Lomond TS Scale House		
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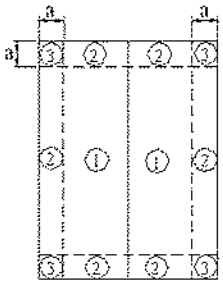
Location of C&C Wind Pressure Zones - ASCE 7-10 & earlier



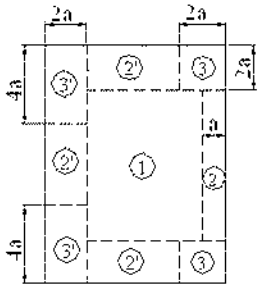
Roofs w/ θ ≤ 10°
and all walls
h > 60'



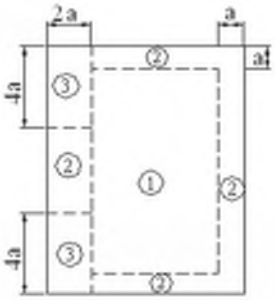
Walls h ≤ 60'
& alt design h<90'



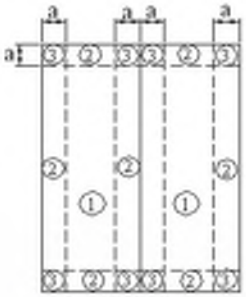
Gable, Sawtooth and
Multispan Gable θ ≤ 7 degrees &
Monoslope ≤ 3 degrees
h ≤ 60' & alt design h<90'



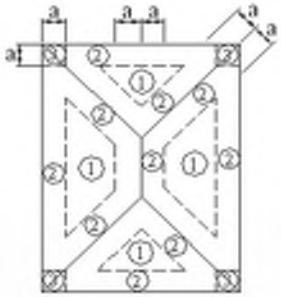
Monoslope roofs
3° < θ ≤ 10°
h ≤ 60' & alt design h<90'



Monoslope roofs
10° < θ ≤ 30°
h ≤ 60' & alt design h<90'

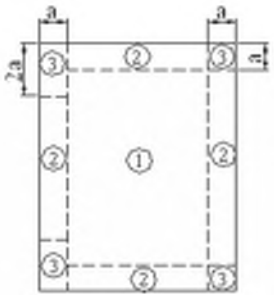


Multispan Gable &
Gable 7° < θ ≤ 45°

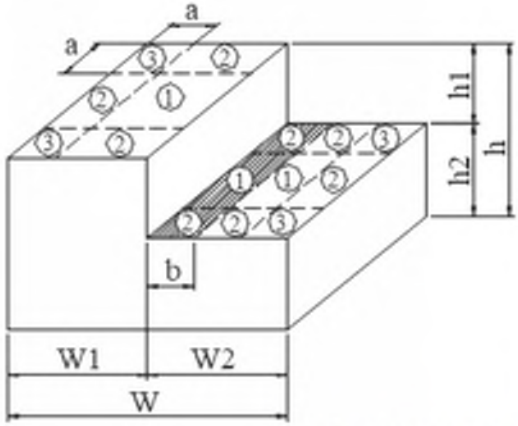


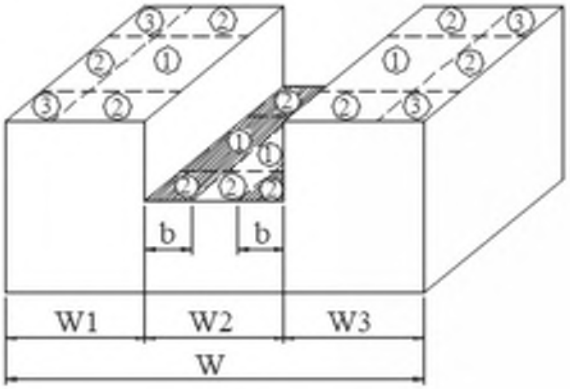
Hip 7° < θ ≤ 27°





Sawtooth 10° < θ ≤ 45°
h ≤ 60' & alt design h<90'





Stepped roofs θ ≤ 3°
h ≤ 60' & alt design h<90'

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CALCULATED BY	BMB	**DATE**	
CHECKED BY	HRN	**DATE**	

Seismic Loads: IBC 2021 Strength Level Forces

Risk Category : II
Importance Factor (Ie) : 1.00
Site Class : B

Ss (0.2 sec) = 197.00 %g
S1 (1.0 sec) = 78.30 %g

A site specific ground motion analysis is required for isolated structures or with damping systems seismically
Site specific ground motion analysis performed:

Fa =	0.900	Sms =	1.773	S_{DS} =	1.182	Design Category =	E
Fv =	0.800	Sm1 =	0.626	S_{D1} =	0.418	Design Category =	E

Seismic Design Category = **E**
Redundancy Coefficient ρ = 1.30
Number of Stories: 1
Structure Type: All other building systems
Horizontal Struct Irregularities: No plan Irregularity
Vertical Structural Irregularities: No vertical Irregularity
Flexible Diaphragms: Yes
Building System: **Moment-resisting Frame Systems**
Seismic resisting system: **Steel ordinary moment frames**
System Structural Height Limit: **System Not Permitted (see code footnote or 1613.4.1 for exceptions)**
Actual Structural Height (hn) = 15.4 ft
See ASCE7 Section 12.2.5 for exceptions and other system limitations

DESIGN COEFFICIENTS AND FACTORS

Response Modification Coefficient (R) = 3.5
Over-Strength Factor (Ωo) = 2.5
Deflection Amplification Factor (Cd) = 3
S_{DS} = 1.182
S_{D1} = 0.418

Seismic Load Effect (E) = Eh +/-Ev = ρ Q_E +/- 0.2S_{DS} D = 1.3Qe +/- 0.236D Q_E = horizontal seismic force
Special Seismic Load Effect (Em) = Emh +/- Ev = Ωo Q_E +/- 0.2S_{DS} D = 2.5Qe +/- 0.236D D = dead load

PERMITTED ANALYTICAL PROCEDURES

Simplified Analysis - Use Equivalent Lateral Force Analysis

Equivalent Lateral-Force Analysis - Permitted

Building period coef. (C_T) =	0.020			Cu =	1.40
Approx fundamental period (Ta) =	$C_T h_n^x$ =	0.155 sec	x= 0.75	Tmax = CuTa =	0.217 sec
User calculated fundamental period =				T =	0.155 sec
Long Period Transition Period (TL) =	ASCE7 map =	12 sec			
Seismic response coef. (Cs) =	SdsI/R =	0.338			
need not exceed Cs =	Sd1 I /RT =	0.769			
but not less than Cs =	0.5*S1I/R =	0.112			
USE Cs =		0.338			

Design Base Shear V = 0.338W

Model & Seismic Response Analysis - Permitted (see code for procedure)

ALLOWABLE STORY DRIFT

Structure Type: All other structures

Allowable story drift Δa = 0.020hsx where hsx is the story height below level x

Total Stories =	1	Floor Dead Load =	80.0 psf	Roof Dead Load =	20.0 psf
Building length L =	42.4 ft	Floor LL to include =	0.0 psf	Roof Snow Load =	0.0 psf
Building width W =	23.5 ft	Floor Equip wt =	0.0 kips	Roof Equip wt =	0.0 kips
hn =	15.4 ft	Partition weight =	10.0 psf	Parapet weight =	0.0 psf
k =	1.000	Ext Wall Weight =	0.0 psf	Parapet height =	0.0 ft
V =	0.338W				

Bottom Floor is a slab on grade

Diaphragm shall be designed for level force Fx, but not less than Fpx = (Σ Fi / Σ wi) wpx, but :
Fpx min = $0.2S_{DS}$ Ie wpx = 0.236 wpx
Fpx max = $0.4S_{DS}$ Ie wpx = 0.473 wpx

Seismic Forces Normal to Building Length

V = 6.7k

Level (x)	EL above Seismic Base hx (ft)	Level Weight Wx (kips)	Wx hx^k (ft-kips)	Cvx = Wx hx^k / Σ Wi hi^k	Base Shear Distribution Fx=CvxV	Σ Fx (k)	Story M	Diaphragm Force Fpx Σ Wi (k)	Fpx	Design Fpx
Roof	12.00	20	239	1.000	6.73	6.7	0	20	6.7	6.7
1	0.00	0	0	0.000	0.00	0.0	0	0	0.0	0.0
Base		20		1.000		6.7	81			
							81 = Base M			

Seismic Forces Parallel to Building Length

V = 6.7k

Level (x)	hx (ft)	Wx (kips)	Wx hx^k	Cvx =	Base Shear Distribution Fx=CvxV	Σ Fx (k)	Story M	Diaphragm Force Fpx Σ Wi (k)	Fpx	Design Fpx
Roof	12.00	20	239	1.000	6.73	6.7	0	20	6.7	6.7
1	0.00	0	0	0.000	0.00	0.0	0	0	0.0	0.0
Base	0.00	20		1.000		6.7	81			
							81 = Base M			

ENGINEER: Tony Arzate
SUBJECT: Ben Lomond Scalehouse Calcs.
TELEPHONE: (949) 809-5000
JOB NUMBER: 200-42064-22005

Building Wall Information

$H_{wall} := 15.1875\ ft$ Wall Height

$H_{parapet} := 4\ ft$ Parapet Wall Height

Load Development

Building Roof Dead Load Breakdown (ASCE 7-16 Table C3.1-1a):

$DL_{Deck} := 2.5\ psf$ 1-1/2" 20 GA Steel Deck

$DL_{Membrane} := 1\ psf$ Single Ply Roof Membrane

$T_{Gypsum} := 5$ Gypsum Thickness

$DL_{Gypsum} := 0.55\ psf \cdot T_{Gypsum} = 2.75\ psf$ 5/8" Gypsum Board/Cover

$DL_{Insulation} := \frac{0.75\ psf}{0.5\ in} \cdot 4\ in = 6\ psf$ Rigid Insulation 4" Assumed Thickness

$DL_{Equipment} := 8\ psf$ Mech./Electrical/Plumbing

$DL_{Misc.} := 2\ psf$ Miscellaneous

$A_{Roof} := 40.083\ ft \cdot 21.25\ ft + 3.5\ ft \cdot 18.583\ ft = 916.804\ ft^2$

$DL_{EquipmentMisc.} := A_{Roof} \cdot \left(DL_{Equipment} + DL_{Misc.}\right) = 9.168\ kip$

$DL_{Roof} := DL_{Deck} + DL_{Insulation} + DL_{Membrane} + DL_{Equipment} + DL_{Misc.} + 2 \cdot DL_{Gypsum}$

$DL_{Roof} = 0.025\ ksf$ Total Roof Dead Load

$LL_{Roof} := 0.020\ ksf$ Live Load (Non-Reducible)

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Building Wall Dead Load Breakdown (ASCE 7-16 Table C3.1-1a):

$DL_{WallSheet} := 2\ psf$ 1/8" Aluminum Sheet Metal

$DL_{WallBarrier} := 1\ psf$ Weather Barrier

$T_{WallGypsum} := 5$ Wall Gypsum Thickness

$DL_{WallGypsum} := 0.55\ psf \cdot T_{WallGypsum} = 2.75\ psf$ 5/8" Gypsum Board/Cover

$T_{ParapetGypsum} := 5$ Wall Gypsum Thickness

$DL_{ParapetGypsum} := 0.55\ psf \cdot T_{ParapetGypsum} = 2.75\ psf$ 5/8" Gypsum Board/Cover

$DL_{Stud} := \frac{1.71\ plf}{24\ in} = 0.855\ psf$ 800S137-43@24" Metal Stud Wall

$DL_{WallInsulation} := \frac{0.75\ psf}{0.5\ in} \cdot 2\ in = 3\ psf$ Rigid Insulation 2" Assumed Thickness

$DL_{wall_misc} := 2\ psf$

$DL_{Wall} := DL_{WallSheet} + DL_{WallBarrier} + 2 \cdot DL_{WallGypsum} + DL_{Stud} + DL_{WallInsulation} + DL_{wall_misc}$

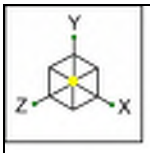
$DL_{Wall} = 0.014\ ksf$

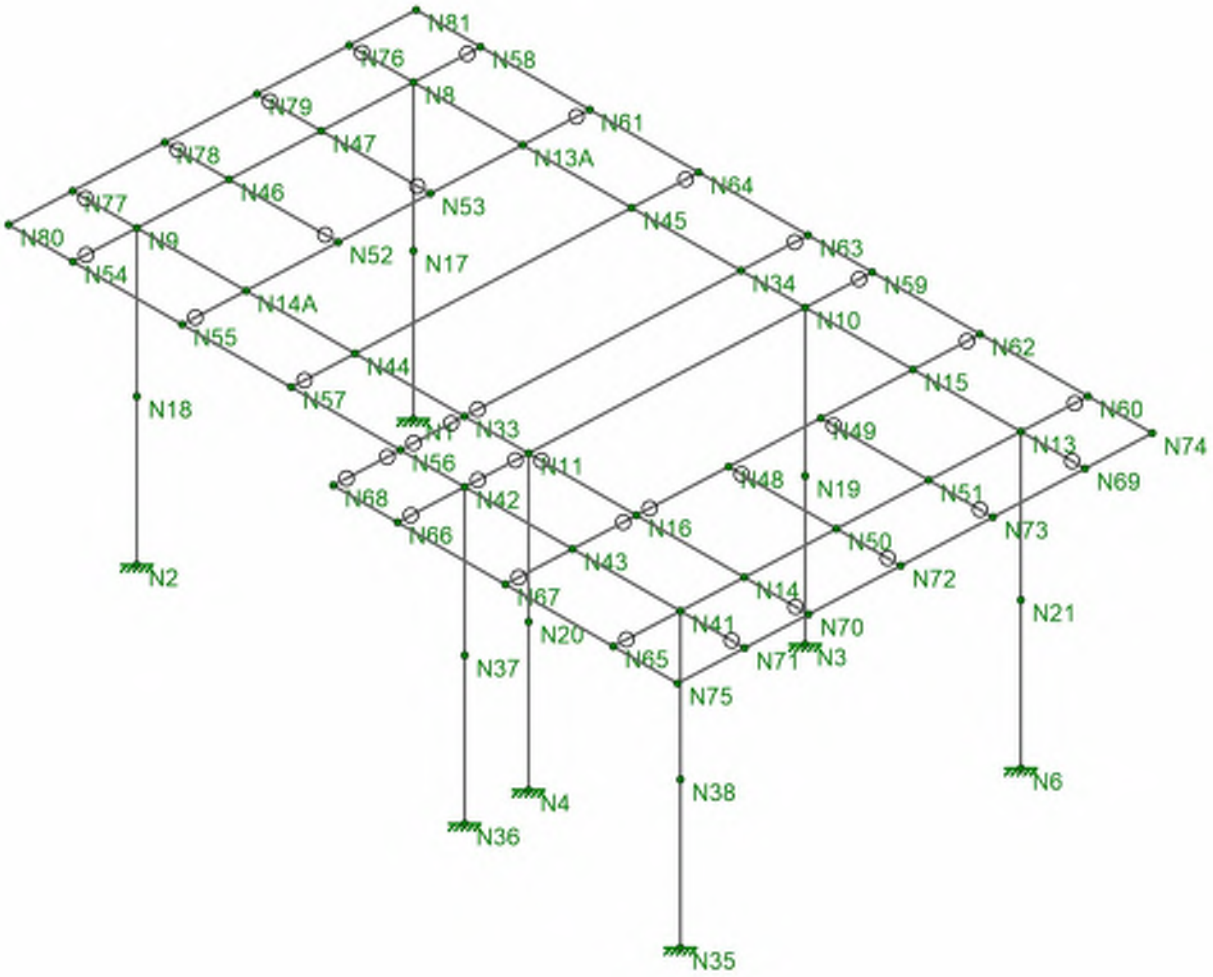
$DL_{plywood_sheathing} := \frac{0.4\ psf}{0.125\ in} \cdot \frac{5}{8}\ in = 2\ psf$

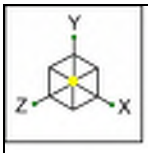
$DL_{Stud_parapet} := \frac{1.71\ plf}{16\ in} = 1.283\ psf$

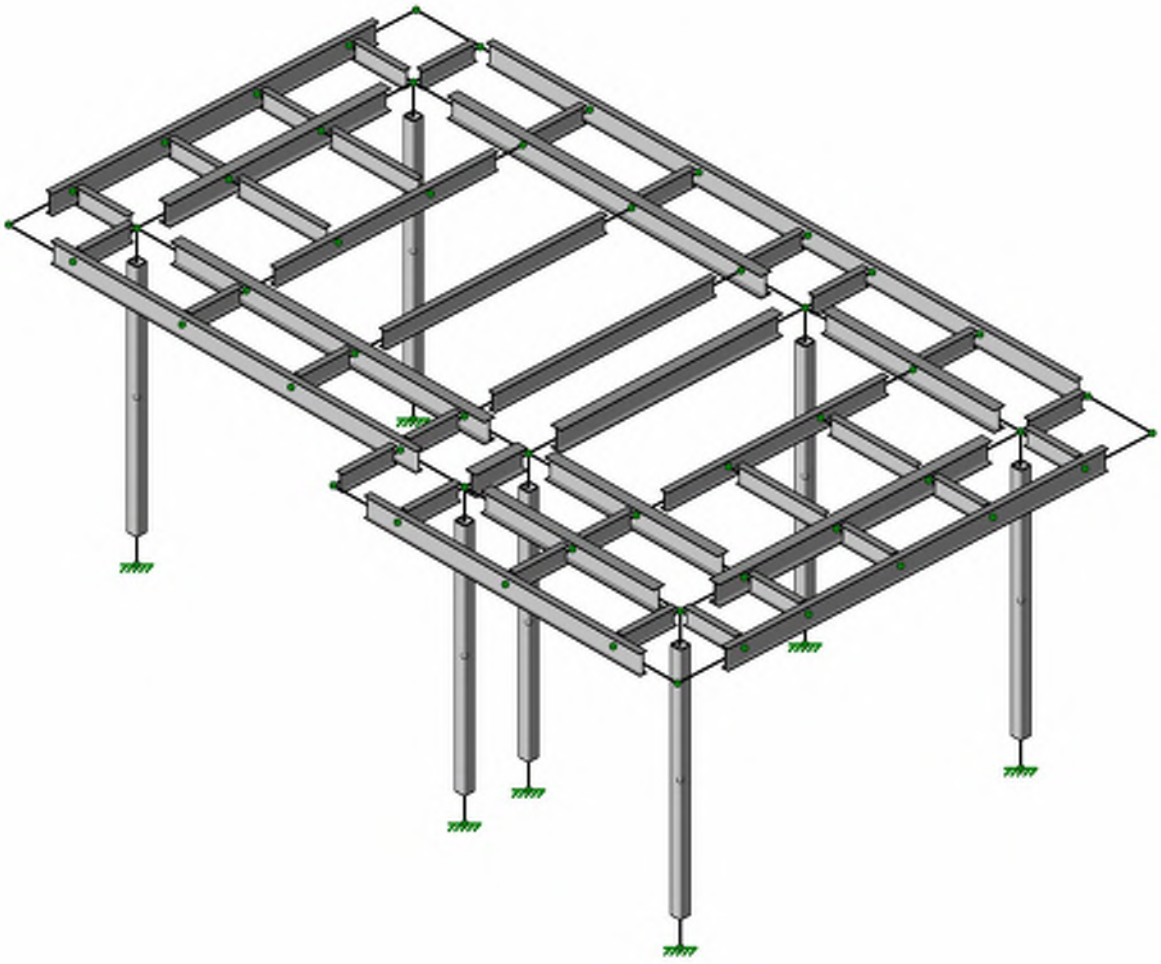
$DL_{Parapet} := H_{parapet} \cdot \left(DL_{WallSheet} + DL_{WallBarrier} + DL_{plywood_sheathing} + DL_{Stud_parapet} + DL_{WallInsulation}\right)$

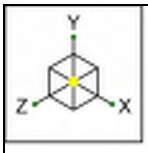
$DL_{Parapet} = 0.037\ klf$

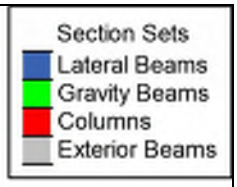

Y
Z
X

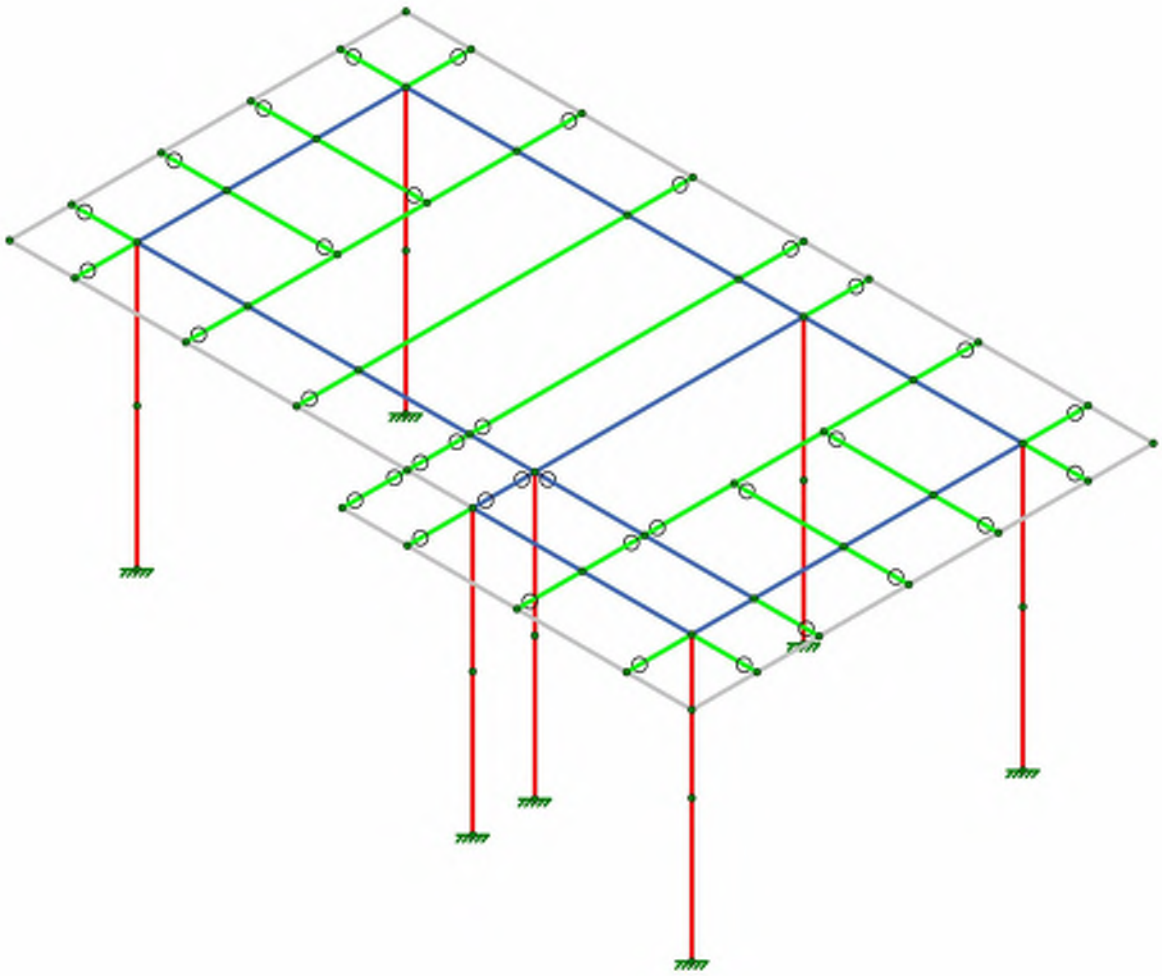

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Y
Z
X

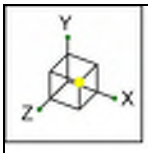


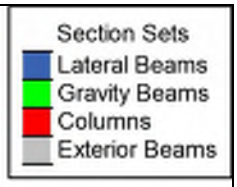


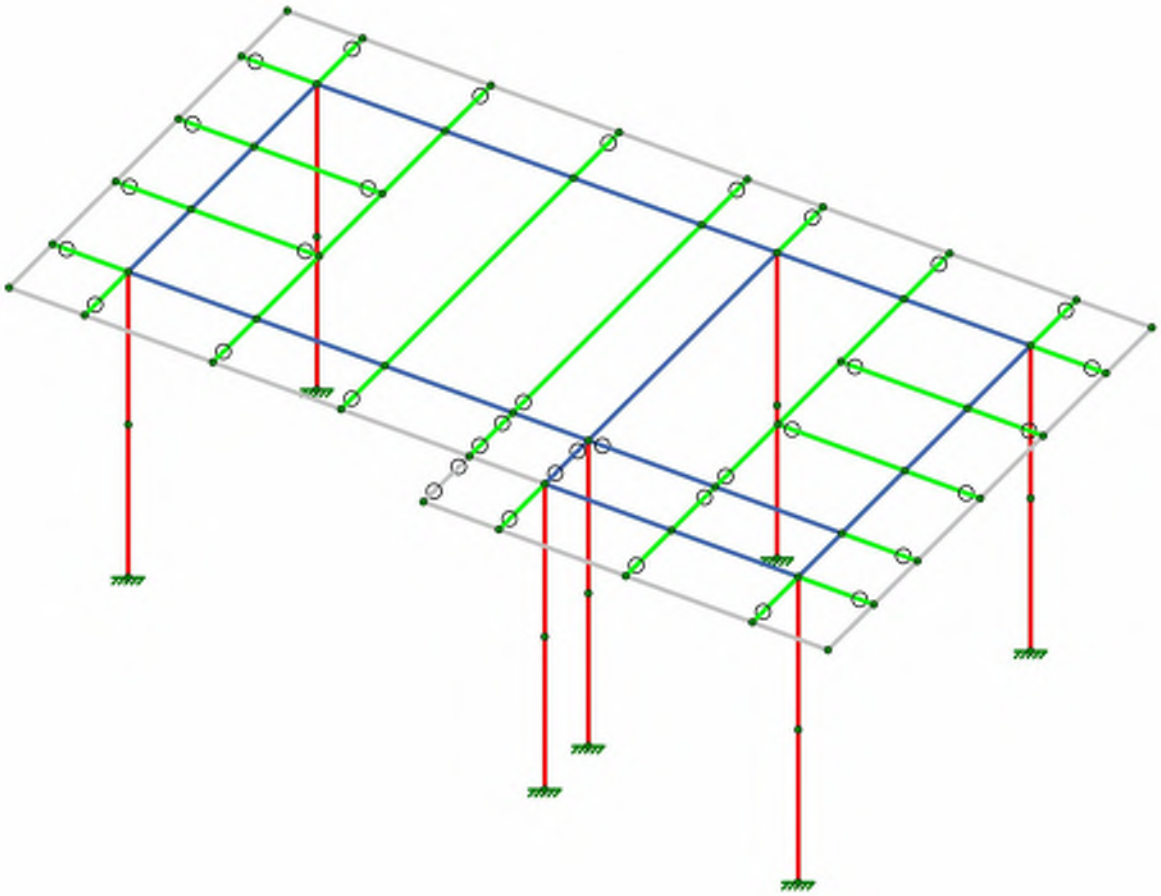




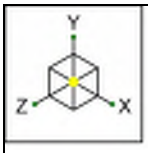
Label	Shape	Type	Design List	Material
Lateral Beams	W12X26	Beam	Wide Flange	A992
Gravity Beams	W10X15	Beam	Wide Flange	A992
Columns	HSS7X7X10	Column	Tube	A500 Gr.C Rect
Struts	HSS5X5X8	Beam	SquareTube	A500 Gr.B Rect
Exterior Beams	W12X16	Beam	Wide Flange	A992

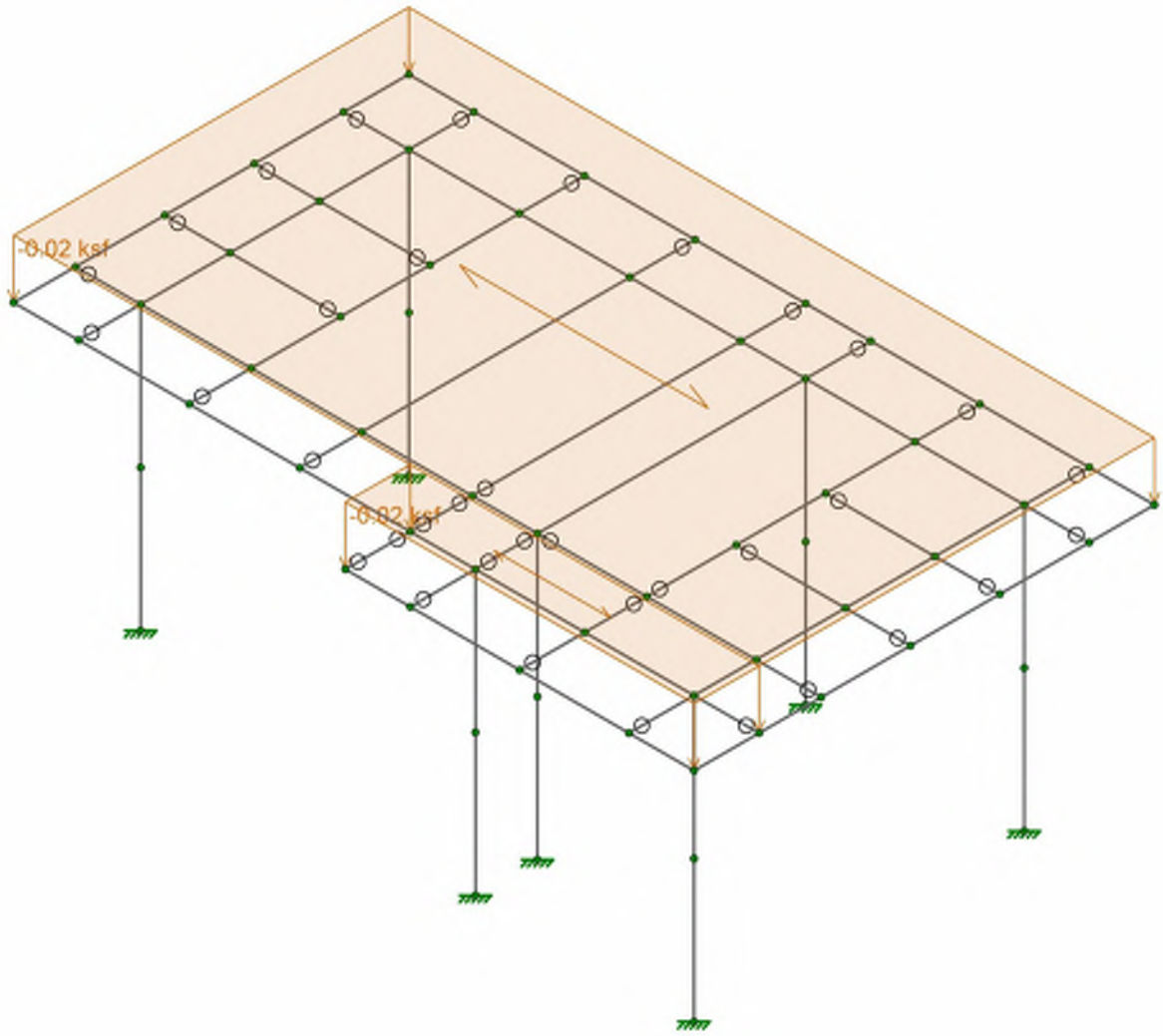






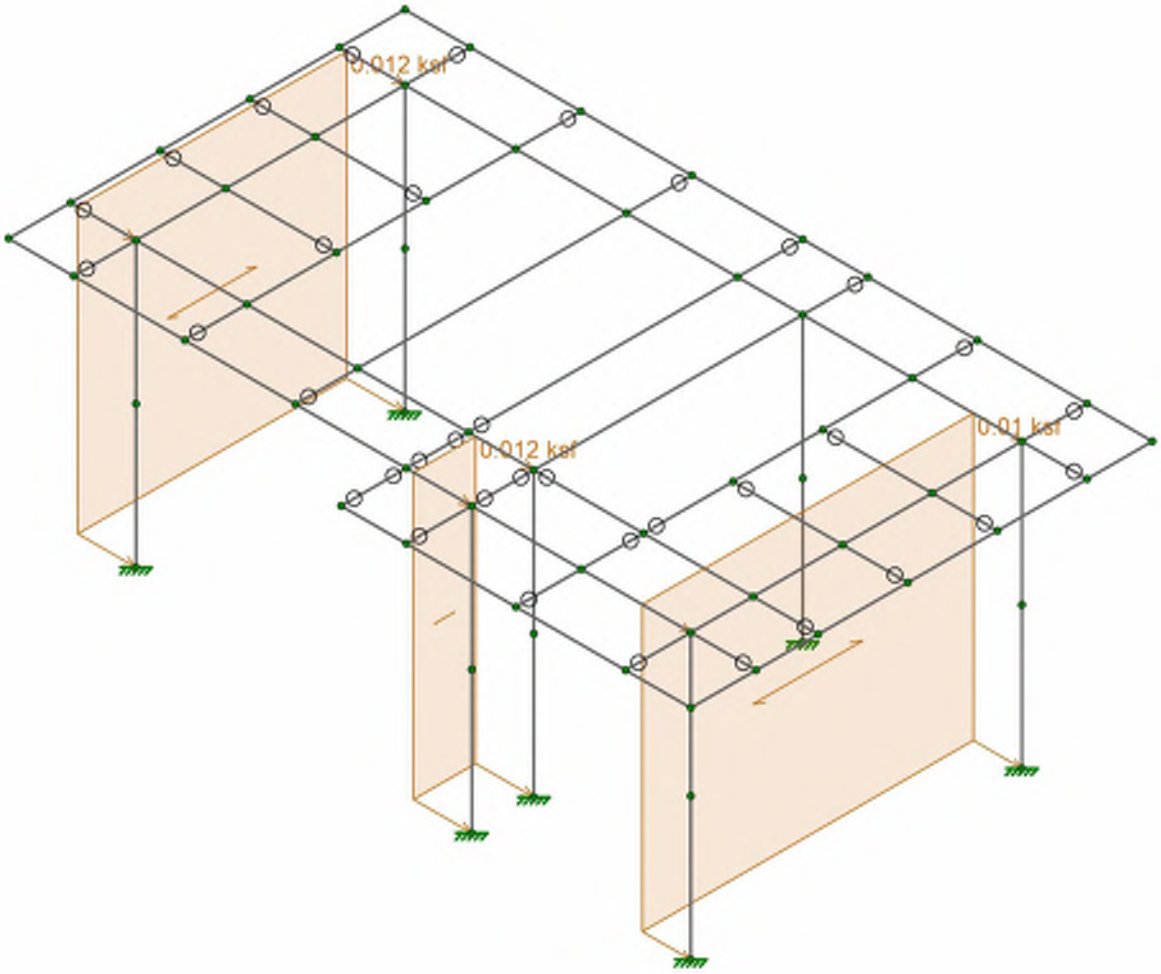
Label	Shape	Type	Design List	Material
Lateral Beams	W12X26	Beam	Wide Flange	A992
Gravity Beams	W10X15	Beam	Wide Flange	A992
Columns	HSS7X7X10	Column	Tube	A500 Gr.C Rect
Struts	HSS5X5X8	Beam	SquareTube	A500 Gr.B Rect
Exterior Beams	W12X16	Beam	Wide Flange	A992





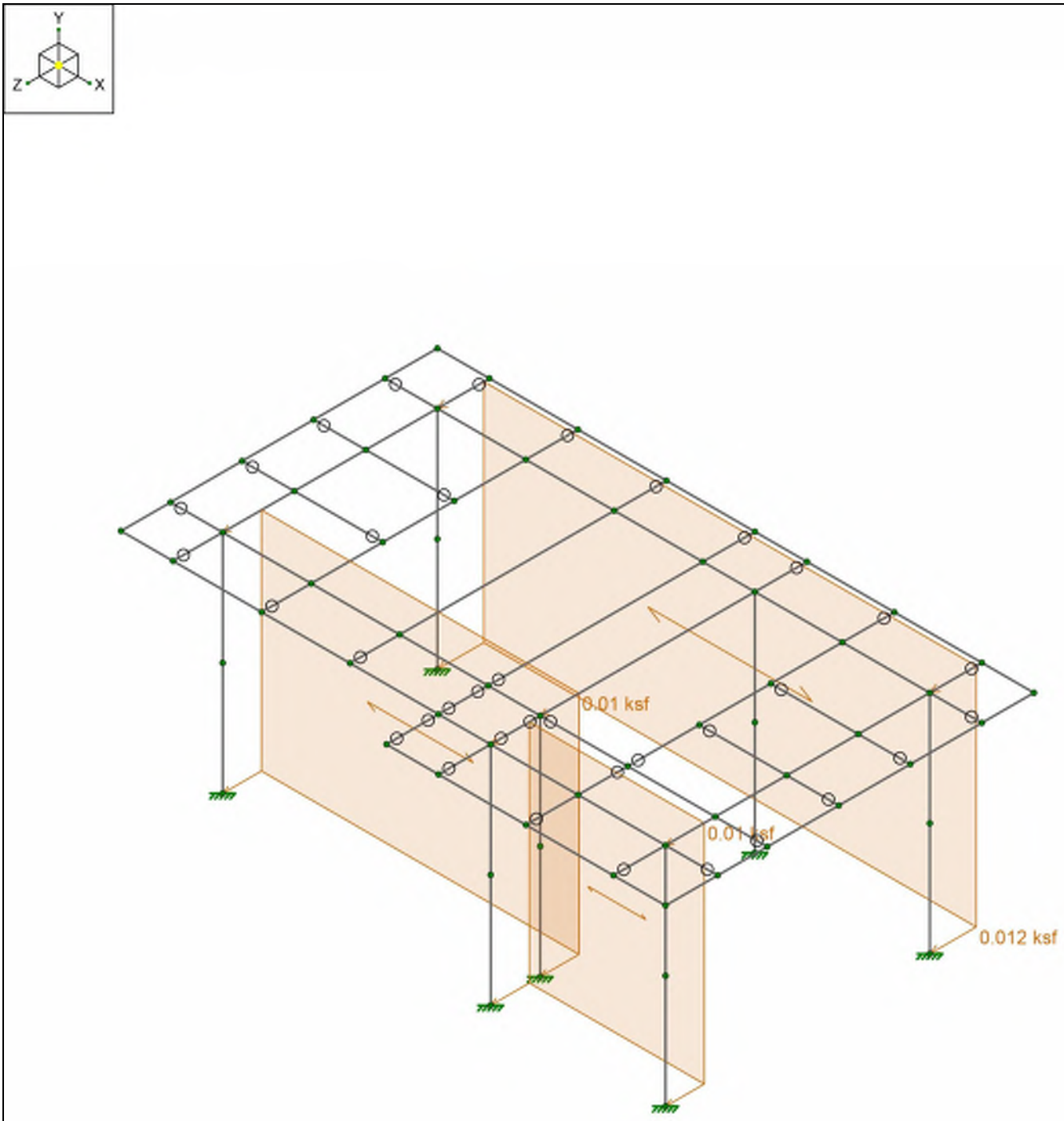
Loads: BLC 2, Roof Live Load

RISA A NEMETSCHEK COMPANY			5
		ROOF LIVE LOAD	Moment Frame Checks.r3d



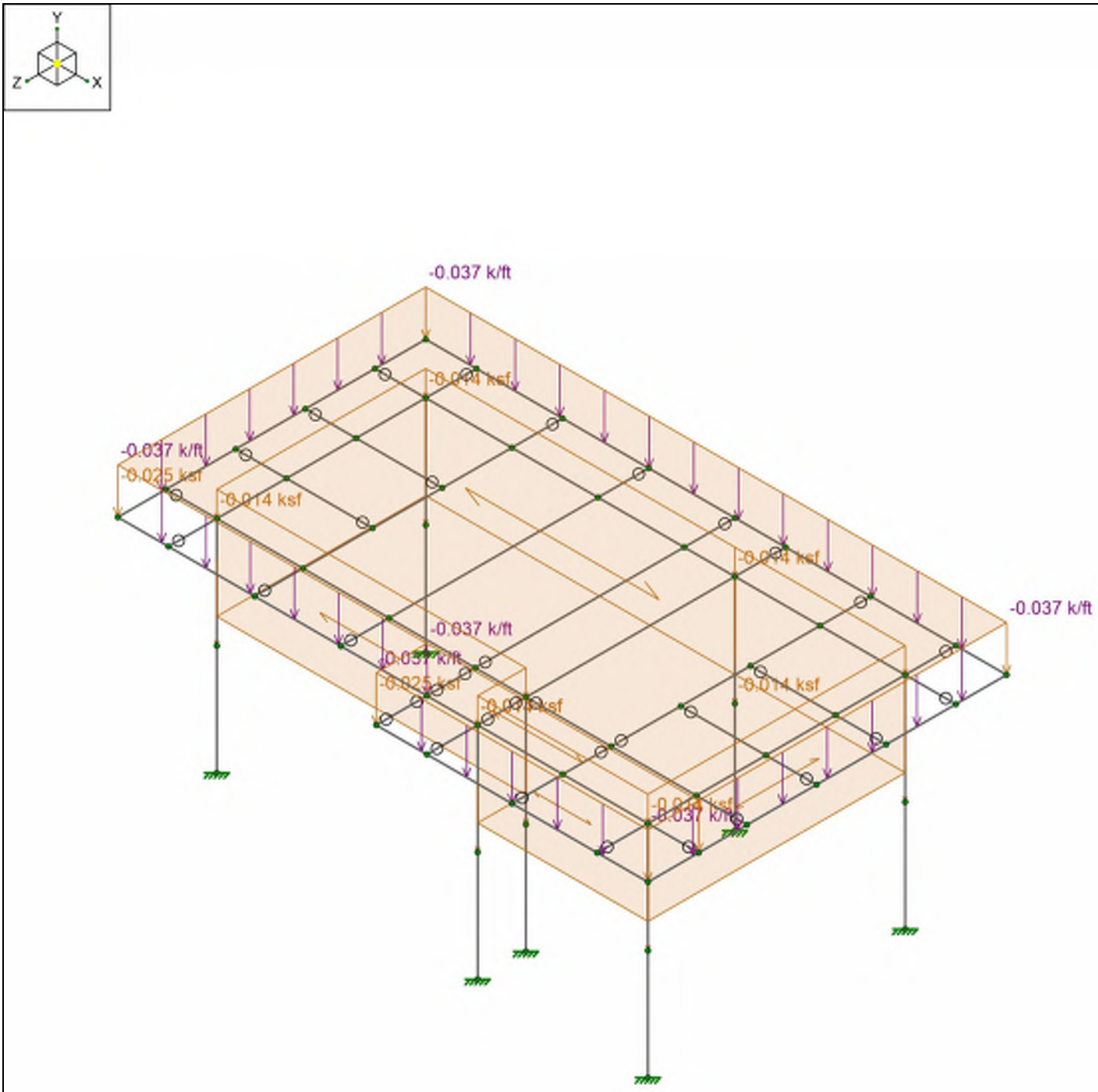
Loads: BLC 3, Wind Load X

RISA A NEMETSCHEK COMPANY			6
		WLX	Moment Frame Checks.r3d



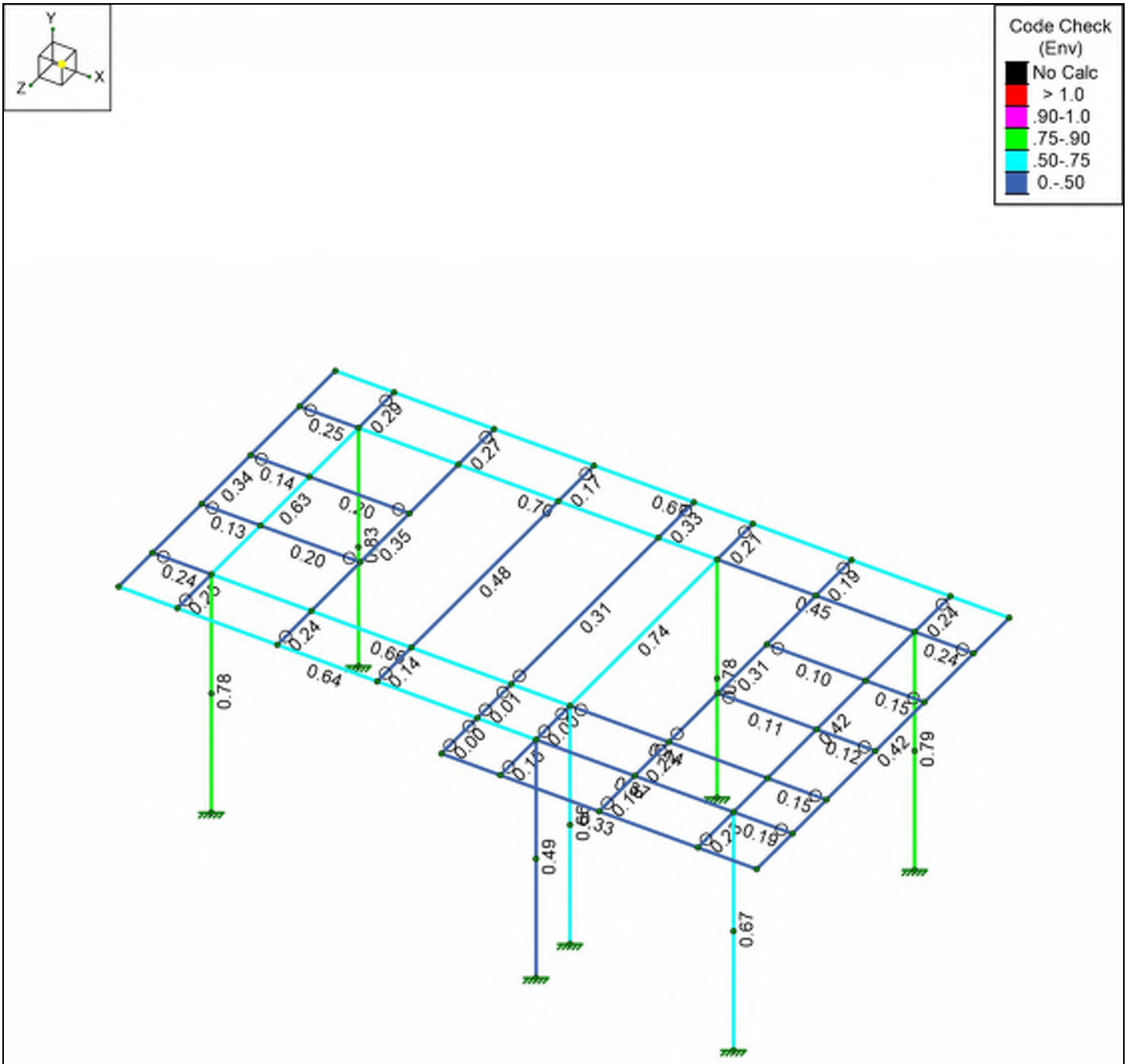
Loads: BLC 4, Wind Load Z

RISA A NEMETSCHEK COMPANY			7
		WLZ	Moment Frame Checks.r3d

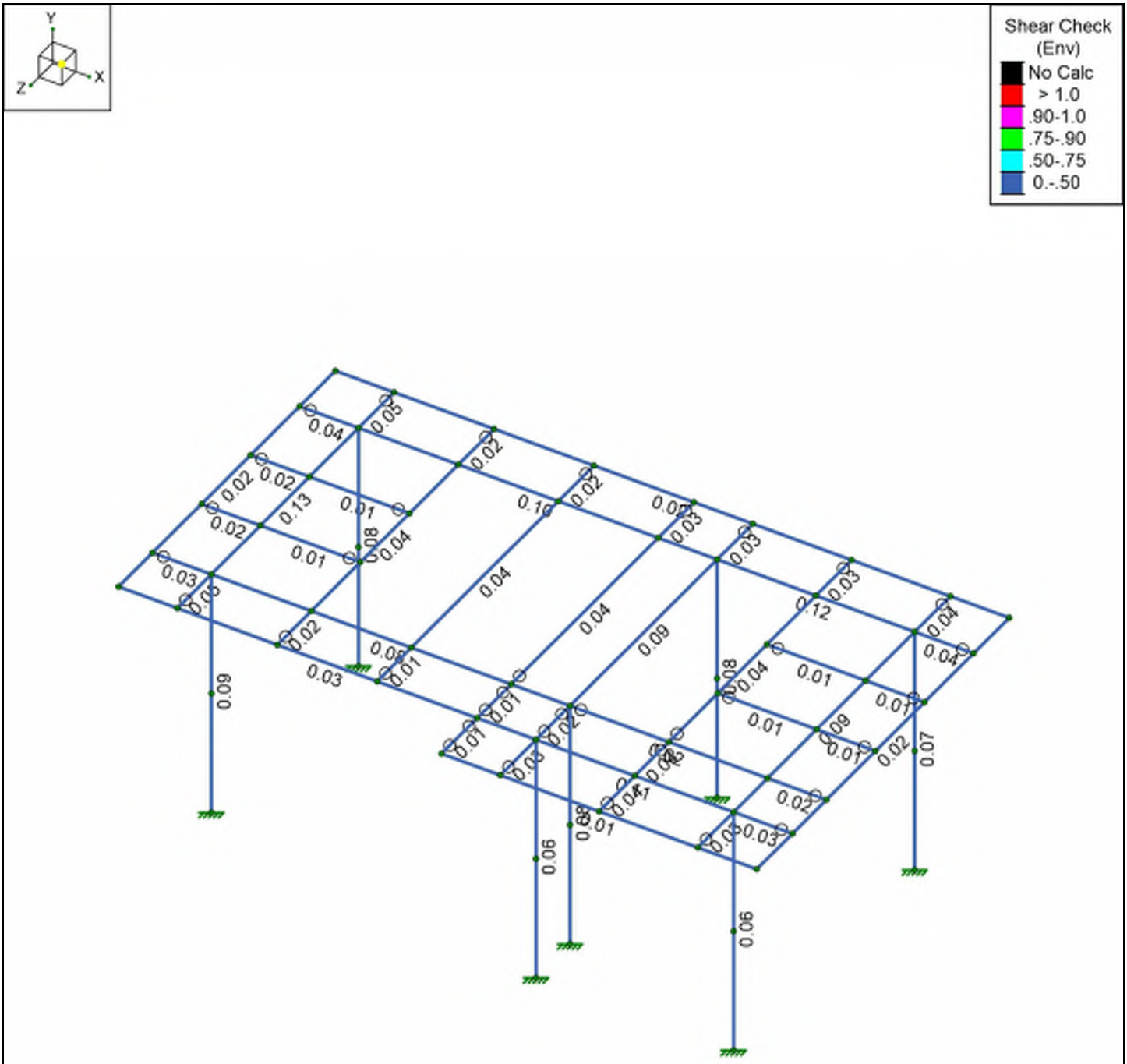


Loads: BLC 5, Mass

RISA A NEMETSCHEK COMPANY			8
		MASS LOADING	Moment Frame Checks.r3d



Member Code Checks Displayed (Enveloped)



Member Shear Checks Displayed (Enveloped)

RISA A NEMETSCHEK COMPANY			10
		SHEAR CHECK	Moment Frame Checks.r3d

Node Coordinates

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N1	0	0	0	
2	N2	0	0	173	
3	N3	256	0	0	
4	N4	256	0	173	
5	N6	397	0	0	
6	N8	0	182.25	0	
7	N9	0	182.25	173	
8	N10	256	182.25	0	
9	N11	256	182.25	173	
10	N13	397	182.25	0	
11	N14	397	182.25	173	
12	N13A	71.333333	182.25	0	
13	N14A	71.333333	182.25	173	
14	N15	326.5	182.25	0	
15	N16	326.5	182.25	173	
16	N17	0	91.125	0	
17	N18	0	91.125	173	
18	N19	256	91.125	0	
19	N20	256	91.125	173	
20	N21	397	91.125	0	
21	N33	214	182.25	173	
22	N34	214	182.25	0	
23	N35	397	0	213	
24	N36	256	0	213	
25	N37	256	91.125	213	
26	N38	397	91.125	213	
27	N41	397	182.25	213	
28	N42	256	182.25	213	
29	N43	326.5	182.25	213	
30	N44	142.666667	182.25	173	
31	N45	142.666667	182.25	0	
32	N46	0	182.25	115.333333	
33	N47	0	182.25	57.666667	
34	N48	326.5	182.25	115.333333	
35	N49	326.5	182.25	57.666667	
36	N50	397	182.25	115.333333	
37	N51	397	182.25	57.666667	
38	N52	71.333333	182.25	115.333333	
39	N53	71.333333	182.25	57.666667	
40	N54	0	182.25	213	
41	N55	71.333333	182.25	213	
42	N56	214	182.25	213	
43	N57	142.666667	182.25	213	
44	N58	0	182.25	-42	
45	N59	256	182.25	-42	
46	N60	397	182.25	-42	
47	N61	71.333333	182.25	-42	
48	N62	326.5	182.25	-42	
49	N63	214	182.25	-42	
50	N64	142.666667	182.25	-42	
51	N65	397	182.25	255	
52	N66	256	182.25	255	
53	N67	326.5	182.25	255	
54	N68	214	182.25	255	
55	N69	439	182.25	0	

Company :
Designer :
Job Number :
Model Name :

Checked By : _____

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
56	N70	439	182.25	173	
57	N71	439	182.25	213	
58	N72	439	182.25	115.333333	
59	N73	439	182.25	57.666667	
60	N74	439	182.25	-42	
61	N75	439	182.25	255	
62	N76	-42	182.25	0	
63	N77	-42	182.25	173	
64	N78	-42	182.25	115.333333	
65	N79	-42	182.25	57.666667	
66	N80	-42	182.25	213	
67	N81	-42	182.25	-42	

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e^{5}°F^{-1}]	Density [k/ft^{3}]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.C Rect	29000	11154	0.3	0.65	0.527	50	1.4	58	1.3
6	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
7	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
8	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in^{2}]	Iyy [in^{4}]	Izz [in^{4}]	J [in^{4}]
1	Lateral Beams	W12X26	Beam	Wide Flange	A992	Typical	7.65	17.3	204	0.3
2	Gravity Beams	W10X15	Beam	Wide Flange	A992	Typical	4.41	2.89	68.9	0.104
3	Columns	HSS7X7X10	Column	Tube	A500 Gr.C Rect	Typical	14	93.4	93.4	158
4	Struts	HSS5X5X8	Beam	SquareTube	A500 Gr.B Rect	Typical	7.88	26	26	44.6
5	Exterior Beams	W12X16	Beam	Wide Flange	A992	Typical	4.71	2.82	103	0.103

Member Primary Data

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
1	M8	N41	N13	Lateral Beams	Beam	Wide Flange	A992	Typical
2	M7A	N11	N14	Lateral Beams	Beam	Wide Flange	A992	Typical
3	M6	N9	N8	Lateral Beams	Beam	Wide Flange	A992	Typical
4	M5	N10	N13	Lateral Beams	Beam	Wide Flange	A992	Typical
5	M27	N42	N41	Lateral Beams	Beam	Wide Flange	A992	Typical
6	M23	N11	N42	Lateral Beams	Beam	Wide Flange	A992	Typical
7	M4	N8	N10	Lateral Beams	Beam	Wide Flange	A992	Typical
8	M7	N11	N10	Lateral Beams	Beam	Wide Flange	A992	Typical
9	M1	N9	N11	Lateral Beams	Beam	Wide Flange	A992	Typical
10	M24	N33	N34	Gravity Beams	Beam	Wide Flange	A992	Typical
11	M28	N16	N43	Gravity Beams	Beam	Wide Flange	A992	Typical
12	M14A	N14A	N13A	Gravity Beams	Beam	Wide Flange	A992	Typical
13	M15	N16	N15	Gravity Beams	Beam	Wide Flange	A992	Typical
14	M14	N6	N13	Columns	Column	Tube	A500 Gr.C Rect	Typical
15	M11	N3	N10	Columns	Column	Tube	A500 Gr.C Rect	Typical
16	M10	N4	N11	Columns	Column	Tube	A500 Gr.C Rect	Typical
17	M9	N1	N8	Columns	Column	Tube	A500 Gr.C Rect	Typical
18	M8A	N2	N9	Columns	Column	Tube	A500 Gr.C Rect	Typical

Company :
Designer :
Job Number :
Model Name :

Checked By : _____

Member Primary Data (Continued)

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
19	M25	N35	N41	Columns	Column	Tube	A500 Gr.C Rect	Typical
20	M26	N36	N42	Columns	Column	Tube	A500 Gr.C Rect	Typical
21	M21	N44	N45	Gravity Beams	Beam	Wide Flange	A992	Typical
22	M22	N75	N68	Exterior Beams	Beam	Wide Flange	A992	Typical
23	M29	N42	N80	Exterior Beams	Beam	Wide Flange	A992	Typical
24	M30	N80	N81	Exterior Beams	Beam	Wide Flange	A992	Typical
25	M31	N81	N74	Exterior Beams	Beam	Wide Flange	A992	Typical
26	M32	N74	N75	Exterior Beams	Beam	Wide Flange	A992	Typical
27	M33	N9	N77	Gravity Beams	Beam	Wide Flange	A992	Typical
28	M34	N46	N78	Gravity Beams	Beam	Wide Flange	A992	Typical
29	M35	N47	N79	Gravity Beams	Beam	Wide Flange	A992	Typical
30	M36	N8	N76	Gravity Beams	Beam	Wide Flange	A992	Typical
31	M37	N58	N8	Gravity Beams	Beam	Wide Flange	A992	Typical
32	M38	N13A	N61	Gravity Beams	Beam	Wide Flange	A992	Typical
33	M39	N45	N64	Gravity Beams	Beam	Wide Flange	A992	Typical
34	M40	N63	N34	Gravity Beams	Beam	Wide Flange	A992	Typical
35	M41	N10	N59	Gravity Beams	Beam	Wide Flange	A992	Typical
36	M42	N62	N15	Gravity Beams	Beam	Wide Flange	A992	Typical
37	M43	N60	N13	Gravity Beams	Beam	Wide Flange	A992	Typical
38	M44	N13	N69	Gravity Beams	Beam	Wide Flange	A992	Typical
39	M45	N73	N51	Gravity Beams	Beam	Wide Flange	A992	Typical
40	M46	N51	N49	Gravity Beams	Beam	Wide Flange	A992	Typical
41	M47	N48	N50	Gravity Beams	Beam	Wide Flange	A992	Typical
42	M48	N50	N72	Gravity Beams	Beam	Wide Flange	A992	Typical
43	M49	N70	N14	Gravity Beams	Beam	Wide Flange	A992	Typical
44	M50	N71	N41	Gravity Beams	Beam	Wide Flange	A992	Typical
45	M51	N41	N65	Gravity Beams	Beam	Wide Flange	A992	Typical
46	M52	N43	N67	Gravity Beams	Beam	Wide Flange	A992	Typical
47	M53	N42	N66	Gravity Beams	Beam	Wide Flange	A992	Typical
48	M54	N68	N56	Exterior Beams	Beam	Wide Flange	A992	Typical
49	M55	N56	N33	Gravity Beams	Beam	Wide Flange	A992	Typical
50	M56	N44	N57	Gravity Beams	Beam	Wide Flange	A992	Typical
51	M57	N14A	N55	Gravity Beams	Beam	Wide Flange	A992	Typical
52	M58	N54	N9	Gravity Beams	Beam	Wide Flange	A992	Typical
53	M59	N46	N52	Gravity Beams	Beam	Wide Flange	A992	Typical
54	M60	N53	N47	Gravity Beams	Beam	Wide Flange	A992	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
1	M8	Lateral Beams	213	Lbyy	N/A	N/A	Lateral
2	M7A	Lateral Beams	141	Lbyy	N/A	N/A	Gravity
3	M6	Lateral Beams	173	Lbyy	N/A	N/A	Lateral
4	M5	Lateral Beams	141	Lbyy	N/A	N/A	Lateral
5	M27	Lateral Beams	141	Lbyy	N/A	N/A	Lateral
6	M23	Lateral Beams	40	Lbyy	N/A	N/A	Gravity
7	M4	Lateral Beams	256	Lbyy	N/A	N/A	Lateral
8	M7	Lateral Beams	173	Lbyy	N/A	N/A	Lateral
9	M1	Lateral Beams	256	Lbyy	N/A	N/A	Lateral
10	M24	Gravity Beams	173	Lbyy	N/A	N/A	Lateral
11	M28	Gravity Beams	40	Lbyy	N/A	N/A	Lateral
12	M14A	Gravity Beams	173	Lbyy	N/A	N/A	Lateral
13	M15	Gravity Beams	173	Lbyy	N/A	N/A	Lateral
14	M14	Columns	182.25		N/A	N/A	Lateral
15	M11	Columns	182.25		N/A	N/A	Lateral
16	M10	Columns	182.25		N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
17	M9	Columns	182.25		N/A	N/A	Lateral
18	M8A	Columns	182.25		N/A	N/A	Lateral
19	M25	Columns	182.25		N/A	N/A	Lateral
20	M26	Columns	182.25		N/A	N/A	Lateral
21	M21	Gravity Beams	173	Lbyy	N/A	N/A	Lateral
22	M22	Exterior Beams	225	Lbyy	N/A	N/A	Lateral
23	M29	Exterior Beams	298	Lbyy	N/A	N/A	Lateral
24	M30	Exterior Beams	255	Lbyy	N/A	N/A	Lateral
25	M31	Exterior Beams	481	Lbyy	N/A	N/A	Lateral
26	M32	Exterior Beams	297	Lbyy	N/A	N/A	Lateral
27	M33	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
28	M34	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
29	M35	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
30	M36	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
31	M37	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
32	M38	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
33	M39	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
34	M40	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
35	M41	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
36	M42	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
37	M43	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
38	M44	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
39	M45	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
40	M46	Gravity Beams	70.5	Lbyy	N/A	N/A	Lateral
41	M47	Gravity Beams	70.5	Lbyy	N/A	N/A	Lateral
42	M48	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
43	M49	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
44	M50	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
45	M51	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
46	M52	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
47	M53	Gravity Beams	42	Lbyy	N/A	N/A	Lateral
48	M54	Exterior Beams	42	Lbyy	N/A	N/A	Lateral
49	M55	Gravity Beams	40	Lbyy	N/A	N/A	Lateral
50	M56	Gravity Beams	40	Lbyy	N/A	N/A	Lateral
51	M57	Gravity Beams	40	Lbyy	N/A	N/A	Lateral
52	M58	Gravity Beams	40	Lbyy	N/A	N/A	Lateral
53	M59	Gravity Beams	71.333	Lbyy	N/A	N/A	Lateral
54	M60	Gravity Beams	71.333	Lbyy	N/A	N/A	Lateral

Member Distributed Loads (BLC 1 : Dead Load)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M32	Y	-0.037	-0.037	0	%100
2	M22	Y	-0.037	-0.037	0	%100
3	M54	Y	-0.037	-0.037	0	%100
4	M30	Y	-0.037	-0.037	0	%100
5	M31	Y	-0.037	-0.037	0	%100
6	M29	Y	-0.037	-0.037	42	%100

Member Distributed Loads (BLC 5 : Mass)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M32	Y	-0.037	-0.037	0	%100
2	M22	Y	-0.037	-0.037	0	%100
3	M54	Y	-0.037	-0.037	0	%100

Member Distributed Loads (BLC 5 : Mass) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
4	M30	Y	-0.037	-0.037	0	%100
5	M31	Y	-0.037	-0.037	0	%100
6	M29	Y	-0.037	-0.037	42	%100

Member Distributed Loads (BLC 6 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M8	Y	-0.144	-0.119	0	26.625
2	M8	Y	-0.119	-0.116	26.625	53.25
3	M8	Y	-0.116	-0.126	53.25	79.875
4	M8	Y	-0.126	-0.094	79.875	106.5
5	M8	Y	-0.094	-0.094	106.5	133.125
6	M8	Y	-0.094	-0.126	133.125	159.75
7	M8	Y	-0.126	-0.126	159.75	186.375
8	M8	Y	-0.126	-0.126	186.375	213
9	M6	Y	-0.118	-0.118	8.763e-12	173
10	M23	Y	-0.117	-0.117	7.994e-15	40
11	M7	Y	-0.121	-0.118	0	24.714
12	M7	Y	-0.118	-0.114	24.714	49.429
13	M7	Y	-0.114	-0.107	49.429	74.143
14	M7	Y	-0.107	-0.109	74.143	98.857
15	M7	Y	-0.109	-0.118	98.857	123.571
16	M7	Y	-0.118	-0.12	123.571	148.286
17	M7	Y	-0.12	-0.12	148.286	173
18	M24	Y	-0.118	-0.118	1.954e-14	173
19	M28	Y	-0.147	-0.147	8.882e-15	40
20	M14A	Y	-0.195	-0.138	0	24.714
21	M14A	Y	-0.138	-0.125	24.714	49.429
22	M14A	Y	-0.125	-0.16	49.429	74.143
23	M14A	Y	-0.16	-0.165	74.143	98.857
24	M14A	Y	-0.165	-0.131	98.857	123.571
25	M14A	Y	-0.131	-0.14	123.571	148.286
26	M14A	Y	-0.14	-0.194	148.286	173
27	M15	Y	-0.192	-0.138	0	24.714
28	M15	Y	-0.138	-0.13	24.714	49.429
29	M15	Y	-0.13	-0.163	49.429	74.143
30	M15	Y	-0.163	-0.158	74.143	98.857
31	M15	Y	-0.158	-0.123	98.857	123.571
32	M15	Y	-0.123	-0.136	123.571	148.286
33	M15	Y	-0.136	-0.193	148.286	173
34	M21	Y	-0.152	-0.151	0	24.714
35	M21	Y	-0.151	-0.149	24.714	49.429
36	M21	Y	-0.149	-0.141	49.429	74.143
37	M21	Y	-0.141	-0.138	74.143	98.857
38	M21	Y	-0.138	-0.145	98.857	123.571
39	M21	Y	-0.145	-0.15	123.571	148.286
40	M21	Y	-0.15	-0.153	148.286	173
41	M30	Y	-0.057	-0.047	0	25.5
42	M30	Y	-0.047	-0.046	25.5	51
43	M30	Y	-0.046	-0.037	51	76.5
44	M30	Y	-0.037	-0.037	76.5	102
45	M30	Y	-0.037	-0.05	102	127.5
46	M30	Y	-0.05	-0.05	127.5	153
47	M30	Y	-0.05	-0.037	153	178.5
48	M30	Y	-0.037	-0.043	178.5	204
49	M30	Y	-0.043	-0.049	204	229.5

Member Distributed Loads (BLC 6 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
50	M30	Y	-0.049	-0.024	229.5	255
51	M32	Y	-0.057	-0.047	0	26.73
52	M32	Y	-0.047	-0.045	26.73	53.46
53	M32	Y	-0.045	-0.048	53.46	80.19
54	M32	Y	-0.048	-0.036	80.19	106.92
55	M32	Y	-0.036	-0.036	106.92	133.65
56	M32	Y	-0.036	-0.048	133.65	160.38
57	M32	Y	-0.048	-0.048	160.38	187.11
58	M32	Y	-0.048	-0.049	187.11	213.84
59	M32	Y	-0.049	-0.033	213.84	240.57
60	M32	Y	-0.033	-0.000549	240.57	267.3
61	M37	Y	-0.118	-0.118	1.332e-14	42
62	M38	Y	-0.149	-0.149	1.776e-15	42
63	M39	Y	-0.149	-0.149	4.441e-15	42
64	M40	Y	-0.118	-0.118	8.882e-16	42
65	M41	Y	-0.117	-0.117	0	42
66	M42	Y	-0.147	-0.147	0	42
67	M43	Y	-0.117	-0.117	0	42
68	M55	Y	-0.118	-0.118	0	40
69	M56	Y	-0.149	-0.149	0	40
70	M57	Y	-0.149	-0.149	0	40
71	M58	Y	-0.118	-0.118	0	40
72	M32	Y	-0.044	-0.044	255	297
73	M51	Y	-0.117	-0.117	0	42
74	M52	Y	-0.147	-0.147	0	42
75	M53	Y	-0.117	-0.117	0	42
76	M54	Y	-0.044	-0.044	0	42

Member Distributed Loads (BLC 7 : BLC 2 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M30	Y	-0.039	-0.019	229.5	255
2	M32	Y	-0.046	-0.037	0	26.73
3	M32	Y	-0.037	-0.036	26.73	53.46
4	M32	Y	-0.036	-0.038	53.46	80.19
5	M32	Y	-0.038	-0.029	80.19	106.92
6	M32	Y	-0.029	-0.029	106.92	133.65
7	M32	Y	-0.029	-0.038	133.65	160.38
8	M32	Y	-0.038	-0.038	160.38	187.11
9	M32	Y	-0.038	-0.039	187.11	213.84
10	M32	Y	-0.039	-0.027	213.84	240.57
11	M32	Y	-0.027	-0.0004392	240.57	267.3
12	M37	Y	-0.094	-0.094	1.332e-14	42
13	M38	Y	-0.119	-0.119	1.776e-15	42
14	M39	Y	-0.119	-0.119	4.441e-15	42
15	M40	Y	-0.094	-0.094	8.882e-16	42
16	M41	Y	-0.094	-0.094	0	42
17	M42	Y	-0.118	-0.118	0	42
18	M43	Y	-0.094	-0.094	0	42
19	M55	Y	-0.094	-0.094	0	40
20	M56	Y	-0.119	-0.119	0	40
21	M57	Y	-0.119	-0.119	0	40
22	M58	Y	-0.094	-0.094	0	40
23	M32	Y	-0.035	-0.035	255	297
24	M51	Y	-0.094	-0.094	0	42
25	M52	Y	-0.118	-0.118	0	42

Member Distributed Loads (BLC 7 : BLC 2 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
26	M53	Y	-0.094	-0.094	0	42
27	M54	Y	-0.035	-0.035	0	42
28	M8	Y	-0.115	-0.095	0	26.625
29	M8	Y	-0.095	-0.093	26.625	53.25
30	M8	Y	-0.093	-0.101	53.25	79.875
31	M8	Y	-0.101	-0.076	79.875	106.5
32	M8	Y	-0.076	-0.076	106.5	133.125
33	M8	Y	-0.076	-0.101	133.125	159.75
34	M8	Y	-0.101	-0.101	159.75	186.375
35	M8	Y	-0.101	-0.101	186.375	213
36	M6	Y	-0.094	-0.094	8.763e-12	173
37	M23	Y	-0.094	-0.094	7.994e-15	40
38	M7	Y	-0.097	-0.095	0	24.714
39	M7	Y	-0.095	-0.091	24.714	49.429
40	M7	Y	-0.091	-0.085	49.429	74.143
41	M7	Y	-0.085	-0.087	74.143	98.857
42	M7	Y	-0.087	-0.094	98.857	123.571
43	M7	Y	-0.094	-0.096	123.571	148.286
44	M7	Y	-0.096	-0.096	148.286	173
45	M24	Y	-0.094	-0.094	1.954e-14	173
46	M28	Y	-0.118	-0.118	8.882e-15	40
47	M14A	Y	-0.156	-0.11	0	24.714
48	M14A	Y	-0.11	-0.1	24.714	49.429
49	M14A	Y	-0.1	-0.128	49.429	74.143
50	M14A	Y	-0.128	-0.132	74.143	98.857
51	M14A	Y	-0.132	-0.105	98.857	123.571
52	M14A	Y	-0.105	-0.112	123.571	148.286
53	M14A	Y	-0.112	-0.155	148.286	173
54	M15	Y	-0.154	-0.11	0	24.714
55	M15	Y	-0.11	-0.104	24.714	49.429
56	M15	Y	-0.104	-0.131	49.429	74.143
57	M15	Y	-0.131	-0.127	74.143	98.857
58	M15	Y	-0.127	-0.099	98.857	123.571
59	M15	Y	-0.099	-0.109	123.571	148.286
60	M15	Y	-0.109	-0.154	148.286	173
61	M21	Y	-0.121	-0.121	0	24.714
62	M21	Y	-0.121	-0.12	24.714	49.429
63	M21	Y	-0.12	-0.113	49.429	74.143
64	M21	Y	-0.113	-0.11	74.143	98.857
65	M21	Y	-0.11	-0.116	98.857	123.571
66	M21	Y	-0.116	-0.12	123.571	148.286
67	M21	Y	-0.12	-0.122	148.286	173
68	M30	Y	-0.045	-0.038	0	25.5
69	M30	Y	-0.038	-0.037	25.5	51
70	M30	Y	-0.037	-0.03	51	76.5
71	M30	Y	-0.03	-0.03	76.5	102
72	M30	Y	-0.03	-0.04	102	127.5
73	M30	Y	-0.04	-0.04	127.5	153
74	M30	Y	-0.04	-0.03	153	178.5
75	M30	Y	-0.03	-0.035	178.5	204
76	M30	Y	-0.035	-0.039	204	229.5

Member Distributed Loads (BLC 8 : BLC 3 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M9	X	0.087	0.087	7.105e-15	182.25
2	M8A	X	0.087	0.087	1.421e-14	182.25
3	M14	X	0.089	0.089	7.105e-15	182.25
4	M25	X	0.089	0.089	2.665e-14	182.25
5	M10	X	0.02	0.02	1.243e-14	182.25
6	M26	X	0.02	0.02	1.51e-14	182.25

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M14	Z	0.07	0.07	7.105e-15	182.25
2	M11	Z	0.199	0.199	2.842e-14	182.25
3	M9	Z	0.128	0.128	2.665e-14	182.25
4	M10	Z	0.107	0.107	2.842e-14	182.25
5	M8A	Z	0.107	0.107	2.665e-14	182.25
6	M25	Z	0.059	0.059	0	182.25
7	M26	Z	0.059	0.059	1.243e-14	182.25

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M8	Y	-0.144	-0.119	0	26.625
2	M8	Y	-0.119	-0.116	26.625	53.25
3	M8	Y	-0.116	-0.126	53.25	79.875
4	M8	Y	-0.126	-0.094	79.875	106.5
5	M8	Y	-0.094	-0.094	106.5	133.125
6	M8	Y	-0.094	-0.126	133.125	159.75
7	M8	Y	-0.126	-0.126	159.75	186.375
8	M8	Y	-0.126	-0.126	186.375	213
9	M6	Y	-0.118	-0.118	8.763e-12	173
10	M23	Y	-0.117	-0.117	7.994e-15	40
11	M7	Y	-0.121	-0.118	0	24.714
12	M7	Y	-0.118	-0.114	24.714	49.429
13	M7	Y	-0.114	-0.107	49.429	74.143
14	M7	Y	-0.107	-0.109	74.143	98.857
15	M7	Y	-0.109	-0.118	98.857	123.571
16	M7	Y	-0.118	-0.12	123.571	148.286
17	M7	Y	-0.12	-0.12	148.286	173
18	M24	Y	-0.118	-0.118	1.954e-14	173
19	M28	Y	-0.147	-0.147	8.882e-15	40
20	M14A	Y	-0.195	-0.138	0	24.714
21	M14A	Y	-0.138	-0.125	24.714	49.429
22	M14A	Y	-0.125	-0.16	49.429	74.143
23	M14A	Y	-0.16	-0.165	74.143	98.857
24	M14A	Y	-0.165	-0.131	98.857	123.571
25	M14A	Y	-0.131	-0.14	123.571	148.286
26	M14A	Y	-0.14	-0.194	148.286	173
27	M15	Y	-0.192	-0.138	0	24.714
28	M15	Y	-0.138	-0.13	24.714	49.429
29	M15	Y	-0.13	-0.163	49.429	74.143
30	M15	Y	-0.163	-0.158	74.143	98.857
31	M15	Y	-0.158	-0.123	98.857	123.571
32	M15	Y	-0.123	-0.136	123.571	148.286
33	M15	Y	-0.136	-0.193	148.286	173

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
34	M21	Y	-0.152	-0.151	0	24.714
35	M21	Y	-0.151	-0.149	24.714	49.429
36	M21	Y	-0.149	-0.141	49.429	74.143
37	M21	Y	-0.141	-0.138	74.143	98.857
38	M21	Y	-0.138	-0.145	98.857	123.571
39	M21	Y	-0.145	-0.15	123.571	148.286
40	M21	Y	-0.15	-0.153	148.286	173
41	M30	Y	-0.057	-0.047	0	25.5
42	M30	Y	-0.047	-0.046	25.5	51
43	M30	Y	-0.046	-0.037	51	76.5
44	M30	Y	-0.037	-0.037	76.5	102
45	M30	Y	-0.037	-0.05	102	127.5
46	M30	Y	-0.05	-0.05	127.5	153
47	M30	Y	-0.05	-0.037	153	178.5
48	M30	Y	-0.037	-0.043	178.5	204
49	M30	Y	-0.043	-0.049	204	229.5
50	M30	Y	-0.049	-0.024	229.5	255
51	M32	Y	-0.057	-0.047	0	26.73
52	M32	Y	-0.047	-0.045	26.73	53.46
53	M32	Y	-0.045	-0.048	53.46	80.19
54	M32	Y	-0.048	-0.036	80.19	106.92
55	M32	Y	-0.036	-0.036	106.92	133.65
56	M32	Y	-0.036	-0.048	133.65	160.38
57	M32	Y	-0.048	-0.048	160.38	187.11
58	M32	Y	-0.048	-0.049	187.11	213.84
59	M32	Y	-0.049	-0.033	213.84	240.57
60	M32	Y	-0.033	-0.000549	240.57	267.3
61	M37	Y	-0.118	-0.118	1.332e-14	42
62	M38	Y	-0.149	-0.149	1.776e-15	42
63	M39	Y	-0.149	-0.149	4.441e-15	42
64	M40	Y	-0.118	-0.118	8.882e-16	42
65	M41	Y	-0.117	-0.117	0	42
66	M42	Y	-0.147	-0.147	0	42
67	M43	Y	-0.117	-0.117	0	42
68	M55	Y	-0.118	-0.118	0	40
69	M56	Y	-0.149	-0.149	0	40
70	M57	Y	-0.149	-0.149	0	40
71	M58	Y	-0.118	-0.118	0	40
72	M32	Y	-0.044	-0.044	255	297
73	M51	Y	-0.117	-0.117	0	42
74	M52	Y	-0.147	-0.147	0	42
75	M53	Y	-0.117	-0.117	0	42
76	M54	Y	-0.044	-0.044	0	42
77	M10	Y	-0.173	-0.173	91.125	182.25
78	M8A	Y	-0.25	-0.25	91.125	182.25
79	M25	Y	-0.206	-0.206	91.125	182.25
80	M26	Y	-0.106	-0.106	91.125	182.25
81	M14	Y	-0.207	-0.207	91.125	182.25
82	M11	Y	-0.232	-0.232	91.125	182.25
83	M9	Y	-0.25	-0.25	91.125	182.25

Member Area Loads (BLC 1 : Dead Load)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N80	N81	N74	N71	Y	B-C	-0.025
2	N68	N56	N71	N75	Y	B-C	-0.025

Member Area Loads (BLC 2 : Roof Live Load)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N80	N81	N74	N71	Y	B-C	-0.02
2	N68	N56	N71	N75	Y	B-C	-0.02

Member Area Loads (BLC 3 : Wind Load X)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N8	N9	N2	N1	X	A-B	0.012
2	N13	N41	N35	N6	X	A-B	0.01
3	N11	N42	N36	N4	X	A-B	0.012

Member Area Loads (BLC 4 : Wind Load Z)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N6	N13	N8	N1	Z	B-C	0.012
2	N11	N9	N2	N4	Z	A-B	0.01
3	N41	N42	N36	N35	Z	A-B	0.01

Member Area Loads (BLC 5 : Mass)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N80	N81	N74	N71	Y	B-C	-0.025
2	N68	N56	N71	N75	Y	B-C	-0.025
3	N9	N11	N20	N18	Y	A-B	-0.014
4	N42	N41	N38	N37	Y	A-B	-0.014
5	N41	N13	N21	N38	Y	A-B	-0.014
6	N19	N10	N8	N17	Y	B-C	-0.014
7	N10	N19	N21	N13	Y	B-C	-0.014
8	N8	N9	N18	N17	Y	A-B	-0.014
9	N42	N11	N20	N37	Y	A-B	-0.014

Basic Load Cases

	BLC Description	Category	Y Gravity	Distributed	Area(Member)
1	Dead Load	DL	-1	6	2
2	Roof Live Load	RLL			2
3	Wind Load X	WLX			3
4	Wind Load Z	WLZ			3
5	Mass	OL1	-1	6	9
6	BLC 1 Transient Area Loads	None		76	
7	BLC 2 Transient Area Loads	None		76	
8	BLC 3 Transient Area Loads	None		6	
9	BLC 4 Transient Area Loads	None		7	
10	BLC 5 Transient Area Loads	None		83	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	Deflection 1	Yes	Y	DL	1										
2	Deflection 2	Yes	Y	LL	1										
3	Deflection 3	Yes	Y	DL	1	LL	1								
4	Mass	Yes	Y	OL1	1										
5	IBC 16-1	Yes	Y	DL	1.4										
6	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6	RLL	0.5				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
7	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6						
8	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5	LLS	1				
9	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	WLX	0.5						
10	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	WLZ	0.5						
11	IBC 16-3 (b) (c)	Yes	Y	DL	1.2	RLL	1.6	WLX	-0.5						
12	IBC 16-3 (b) (d)	Yes	Y	DL	1.2	RLL	1.6	WLZ	-0.5						
13	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	WLX	0.5								
14	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	WLZ	0.5								
15	IBC 16-3 (d) (c)	Yes	Y	DL	1.2	WLX	-0.5								
16	IBC 16-3 (d) (d)	Yes	Y	DL	1.2	WLZ	-0.5								
17	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	RLL	0.5	LLS	1	RLL	0.5		
18	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	1	RLL	0.5	LLS	1	RLL	0.5		
19	IBC 16-4 (a) (c)	Yes	Y	DL	1.2	WLX	-1	RLL	0.5	LLS	1	RLL	0.5		
20	IBC 16-4 (a) (d)	Yes	Y	DL	1.2	WLZ	-1	RLL	0.5	LLS	1	RLL	0.5		
21	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	RLL	0.5	LLS	1				
22	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	1	RLL	0.5	LLS	1				
23	IBC 16-4 (b) (c)	Yes	Y	DL	1.2	WLX	-1	RLL	0.5	LLS	1				
24	IBC 16-4 (b) (d)	Yes	Y	DL	1.2	WLZ	-1	RLL	0.5	LLS	1				
25	IBC 16-6 (a)	Yes	Y	DL	0.9	WLX	1								
26	IBC 16-6 (b)	Yes	Y	DL	0.9	WLZ	1								
27	IBC 16-6 (c)	Yes	Y	DL	0.9	WLX	-1								
28	IBC 16-6 (d)	Yes	Y	DL	0.9	WLZ	-1								
29	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SX*SF	1	Rho*SZ*SF	0.3	LL	0.5	LLS	1
30	IBC 16-5 (b)	Yes	Y	DL	0.6	Sds*DL	0.2	Rho*SZ*SF	1	Rho*SX*SF	0.3	LL	0.5	LLS	1
31	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SX*SF	1	Rho*SZ*SF	-0.3	LL	0.5	LLS	1
32	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SZ*SF	1	Rho*SX*SF	-0.3	LL	0.5	LLS	1
33	IBC 16-5 (e)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SX*SF	-1	Rho*SZ*SF	-0.3	LL	0.5	LLS	1
34	IBC 16-5 (f)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SZ*SF	-1	Rho*SX*SF	-0.3	LL	0.5	LLS	1
35	IBC 16-5 (g)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SX*SF	-1	Rho*SZ*SF	0.3	LL	0.5	LLS	1
36	IBC 16-5 (h)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*SZ*SF	-1	Rho*SX*SF	0.3	LL	0.5	LLS	1
37	IBC 16-7 (a)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SX*SF	1	Rho*SZ*SF	0.3				
38	IBC 16-7 (b)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SZ*SF	1	Rho*SX*SF	0.3				
39	IBC 16-7 (c)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SX*SF	1	Rho*SZ*SF	-0.3				
40	IBC 16-7 (d)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SZ*SF	1	Rho*SX*SF	-0.3				
41	IBC 16-7 (e)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SX*SF	-1	Rho*SZ*SF	-0.3				
42	IBC 16-7 (f)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SZ*SF	-1	Rho*SX*SF	-0.3				
43	IBC 16-7 (g)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SX*SF	-1	Rho*SZ*SF	0.3				
44	IBC 16-7 (h)	Yes	Y	DL	0.9	Sds*DL	-0.2	Rho*SZ*SF	-1	Rho*SX*SF	0.3				
45	IBC 16-5 (os-a)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SX*SF	1	Om*SZ*SF	0.3	LL	0.5	LLS	1
46	IBC 16-5 (os-b)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SZ*SF	1	Om*SX*SF	0.3	LL	0.5	LLS	1
47	IBC 16-5 (os-c)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SX*SF	1	Om*SZ*SF	-0.3	LL	0.5	LLS	1
48	IBC 16-5 (os-d)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SZ*SF	1	Om*SX*SF	-0.3	LL	0.5	LLS	1
49	IBC 16-5 (os-e)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SX*SF	-1	Om*SZ*SF	-0.3	LL	0.5	LLS	1
50	IBC 16-5 (os-f)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SZ*SF	-1	Om*SX*SF	-0.3	LL	0.5	LLS	1
51	IBC 16-5 (os-g)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SX*SF	-1	Om*SZ*SF	0.3	LL	0.5	LLS	1
52	IBC 16-5 (os-h)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*SZ*SF	-1	Om*SX*SF	0.3	LL	0.5	LLS	1
53	IBC 16-7 (os-a)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SX*SF	1	Om*SZ*SF	0.3				
54	IBC 16-7 (os-b)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SZ*SF	1	Om*SX*SF	0.3				
55	IBC 16-7 (os-c)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SX*SF	1	Om*SZ*SF	-0.3				
56	IBC 16-7 (os-d)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SZ*SF	1	Om*SX*SF	-0.3				
57	IBC 16-7 (os-e)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SX*SF	-1	Om*SZ*SF	-0.3				
58	IBC 16-7 (os-f)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SZ*SF	-1	Om*SX*SF	-0.3				
59	IBC 16-7 (os-g)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SX*SF	-1	Om*SZ*SF	0.3				
60	IBC 16-7 (os-h)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*SZ*SF	-1	Om*SX*SF	0.3				
61															

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
62	--ASD (Drift) LC's--														
63	IBC 16-12 (a)	Yes	Y	DL	1	Sds*DL	0.14	SX*SF	0.7	SZ*SF	0.21				
64	IBC 16-12 (b)	Yes	Y	DL	1	Sds*DL	0.14	SZ*SF	0.7	SX*SF	0.21				
65	IBC 16-12 (c)	Yes	Y	DL	1	Sds*DL	0.14	SX*SF	0.7	SZ*SF	-0.21				
66	IBC 16-12 (d)	Yes	Y	DL	1	Sds*DL	0.14	SZ*SF	0.7	SX*SF	-0.21				
67	IBC 16-12 (e)	Yes	Y	DL	1	Sds*DL	0.14	SX*SF	-0.7	SZ*SF	-0.21				
68	IBC 16-12 (f)	Yes	Y	DL	1	Sds*DL	0.14	SZ*SF	-0.7	SX*SF	-0.21				
69	IBC 16-12 (g)	Yes	Y	DL	1	Sds*DL	0.14	SX*SF	-0.7	SZ*SF	0.21				
70	IBC 16-12 (h)	Yes	Y	DL	1	Sds*DL	0.14	SZ*SF	-0.7	SX*SF	0.21				
71	IBC 16-16 (a)	Yes	Y	DL	0.6	Sds*DL	-0.14	SX*SF	0.7	SZ*SF	0.21				
72	IBC 16-16 (b)	Yes	Y	DL	0.6	Sds*DL	-0.14	SZ*SF	0.7	SX*SF	0.21				
73	IBC 16-16 (c)	Yes	Y	DL	0.6	Sds*DL	-0.14	SX*SF	0.7	SZ*SF	-0.21				
74	IBC 16-16 (d)	Yes	Y	DL	0.6	Sds*DL	-0.14	SZ*SF	0.7	SX*SF	-0.21				
75	IBC 16-16 (e)	Yes	Y	DL	0.6	Sds*DL	-0.14	SX*SF	-0.7	SZ*SF	-0.21				
76	IBC 16-16 (f)	Yes	Y	DL	0.6	Sds*DL	-0.14	SZ*SF	-0.7	SX*SF	-0.21				
77	IBC 16-16 (g)	Yes	Y	DL	0.6	Sds*DL	-0.14	SX*SF	-0.7	SZ*SF	0.21				
78	IBC 16-16 (h)	Yes	Y	DL	0.6	Sds*DL	-0.14	SZ*SF	-0.7	SX*SF	0.21				
79															
80	--Service Level--														
81	Seismic (+X)		Y	SX*SF	1										
82	Seismic (+Z)		Y	SZ*SF	1										
83	Seismic (-X)		Y	SX*SF	-1										
84	Seismic (-Z)		Y	SZ*SF	-1										

Load Combination Design

	Description	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	Deflection 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Deflection 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	Deflection 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	Mass	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	IBC 16-1		Yes	Yes		Yes	Yes	Yes	Yes	Yes
6	IBC 16-2 (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
7	IBC 16-2 (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
8	IBC 16-3 (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
9	IBC 16-3 (b) (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
10	IBC 16-3 (b) (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
11	IBC 16-3 (b) (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
12	IBC 16-3 (b) (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
13	IBC 16-3 (d) (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
14	IBC 16-3 (d) (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
15	IBC 16-3 (d) (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
16	IBC 16-3 (d) (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
17	IBC 16-4 (a) (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
18	IBC 16-4 (a) (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
19	IBC 16-4 (a) (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
20	IBC 16-4 (a) (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
21	IBC 16-4 (b) (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
22	IBC 16-4 (b) (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
23	IBC 16-4 (b) (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
24	IBC 16-4 (b) (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
25	IBC 16-6 (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
26	IBC 16-6 (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
27	IBC 16-6 (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
28	IBC 16-6 (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
29	IBC 16-5 (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
30	IBC 16-5 (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
31	IBC 16-5 (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
32	IBC 16-5 (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
33	IBC 16-5 (e)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
34	IBC 16-5 (f)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
35	IBC 16-5 (g)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
36	IBC 16-5 (h)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
37	IBC 16-7 (a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
38	IBC 16-7 (b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
39	IBC 16-7 (c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
40	IBC 16-7 (d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
41	IBC 16-7 (e)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
42	IBC 16-7 (f)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
43	IBC 16-7 (g)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
44	IBC 16-7 (h)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
45	IBC 16-5 (os-a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
46	IBC 16-5 (os-b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
47	IBC 16-5 (os-c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
48	IBC 16-5 (os-d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
49	IBC 16-5 (os-e)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
50	IBC 16-5 (os-f)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
51	IBC 16-5 (os-g)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
52	IBC 16-5 (os-h)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
53	IBC 16-7 (os-a)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
54	IBC 16-7 (os-b)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
55	IBC 16-7 (os-c)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
56	IBC 16-7 (os-d)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
57	IBC 16-7 (os-e)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
58	IBC 16-7 (os-f)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
59	IBC 16-7 (os-g)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
60	IBC 16-7 (os-h)		Yes	Yes		Yes	Yes	Yes	Yes	Yes
61			Yes	Yes		Yes	Yes	Yes	Yes	Yes
62	--ASD (Drift) LC's--		Yes	Yes		Yes	Yes	Yes	Yes	Yes
63	IBC 16-12 (a)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
64	IBC 16-12 (b)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
65	IBC 16-12 (c)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
66	IBC 16-12 (d)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
67	IBC 16-12 (e)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
68	IBC 16-12 (f)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
69	IBC 16-12 (g)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
70	IBC 16-12 (h)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
71	IBC 16-16 (a)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
72	IBC 16-16 (b)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
73	IBC 16-16 (c)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
74	IBC 16-16 (d)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
75	IBC 16-16 (e)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
76	IBC 16-16 (f)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
77	IBC 16-16 (g)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
78	IBC 16-16 (h)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
79		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
80	--Service Level--	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
81	Seismic (+X)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
82	Seismic (+Z)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
83	Seismic (-X)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
84	Seismic (-Z)	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

Description	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection

Company :
Designer :
Job Number :
Model Name :

Checked By : _____

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N2	max	3.634	33	14.289	34	4.748	42	37.591	42	1.803	33	22.715	41
1		min	-2.741	37	-0.314	38	-4.861	30	-38.173	30	-1.689	37	-27.305	29
2	N1	max	4.271	33	14.204	34	4.902	34	38.358	34	1.559	34	29.634	41
3		min	-3.525	37	-0.337	38	-4.751	38	-37.619	38	-1.446	38	-33.059	29
4	N4	max	2.538	41	9.795	10	3.434	42	27.741	42	2.379	34	26.753	33
5		min	-3.537	29	0	2	-3.651	30	-29.1	30	-2.302	38	-21.802	37
6	N3	max	4.336	41	16.814	12	3.673	42	28.918	42	2.318	34	37.051	33
7		min	-4.974	29	0	2	-3.714	30	-29.391	30	-2.304	38	-33.483	37
8	N6	max	4.102	33	11.3	33	3.507	34	26.937	34	1.306	34	32.591	33
9		min	-4.091	37	-0.567	37	-3.126	38	-25.215	38	-1.264	38	-32.313	37
10	N35	max	3.012	33	11.906	33	3.04	42	24.658	42	1.514	33	23.138	41
11		min	-2.96	37	-0.067	37	-3.409	30	-26.661	30	-1.512	37	-23.514	29
12	N36	max	2.931	41	9.189	33	1.685	34	18.837	34	1.924	42	23.333	33
13		min	-2.996	29	-0.055	37	-1.181	38	-16.663	38	-1.97	30	-23.116	37
14	Totals:	max	24.197	41	83.329	34	24.608	34						
15		min	-24.197	29	0	2	-24.608	38						

Envelope Node Reactions - Overstrength or Capacity Limit

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N2	max	6.424	49*	18.655	50*	9.177	58*	72.528	58*	3.396	49*	45.019	57*
1		min	-5.531	53*	-4.68	54*	-9.335	46*	-73.344	46*	-3.281	53*	-49.608	45*
2	N1	max	7.743	49*	18.56	50*	9.331	50*	73.299	50*	2.927	50*	57.985	57*
3		min	-6.997	53*	-4.694	54*	-9.181	54*	-72.56	54*	-2.813	54*	-61.41	45*
4	N4	max	5.173	57*	12.029	50*	6.693	58*	53.904	58*	4.527	50*	48.32	49*
5		min	-6.171	45*	-2.421	54*	-6.996	46*	-55.811	46*	-4.449	54*	-43.368	53*
6	N3	max	8.524	57*	19.15	50*	7.08	58*	55.804	58*	4.449	50*	68.997	49*
7		min	-9.163	45*	-1.975	54*	-7.137	46*	-56.469	46*	-4.435	54*	-65.428	53*
8	N6	max	7.881	49*	14.954	49*	6.504	50*	50.715	50*	2.485	50*	62.499	49*
9		min	-7.87	53*	-4.221	53*	-6.123	54*	-48.992	54*	-2.443	54*	-62.221	53*
10	N35	max	5.759	49*	15.421	49*	5.997	58*	48.236	58*	2.91	49*	44.606	57*
11		min	-5.707	53*	-3.583	53*	-6.514	46*	-51.048	46*	-2.908	53*	-44.982	45*
12	N36	max	5.656	57*	11.904	49*	2.922	50*	34.852	50*	3.72	58*	44.734	49*
13		min	-5.721	45*	-2.77	53*	-2.418	54*	-32.678	54*	-3.784	46*	-44.518	53*
14	Totals:	max	46.533	57*	105.741	50*	47.323	50*						
15		min	-46.533	45*	-19.41	54*	-47.323	54*						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
0	M9	HSS7X7X10	0.828	0	50*	0.084	91.125	z	46*	437.769	630	124.125	124.125	2.546	H1-1b
1	M14	HSS7X7X10	0.788	0	45*	0.069	91.125	y	45*	437.769	630	124.125	124.125	2.233	H1-1b
2	M8A	HSS7X7X10	0.784	0	50*	0.086	91.125	z	46*	437.769	630	124.125	124.125	2.652	H1-1b
3	M11	HSS7X7X10	0.782	0	45*	0.084	91.125	y	50*	437.769	630	124.125	124.125	2.39	H1-1b
4	M7	W12X26	0.744	68.479	50*	0.091	173	y	50*	130.585	344.25	30.637	91.842	1.017	H1-1b
5	M4	W12X26	0.697	256	46*	0.103	237.333	y	49*	59.636	344.25	30.637	139.5	3	H1-1b
6	M31	W12X16	0.668	140.292	32	0.017	440.917	y	29	2.754	211.95	8.475	7.905	1.584	H1-1a
7	M25	HSS7X7X10	0.667	0	45*	0.064	91.125	z	50*	437.769	630	124.125	124.125	2.242	H1-1b
8	M10	HSS7X7X10	0.66	0	46*	0.083	91.125	z	50*	437.769	630	124.125	124.125	2.724	H1-1b
9	M1	W12X26	0.657	256	49*	0.079	69.333	y	45*	59.636	344.25	30.637	61.404	1.215	H1-1b
10	M29	W12X16	0.636	0	29	0.027	0	y	10	7.174	211.95	8.475	25.927	3	H1-1a
11	M6	W12X26	0.629	0	46*	0.128	0	y	46*	130.585	344.25	30.637	139.5	2.31	H1-1b
12	M26	HSS7X7X10	0.491	0	49*	0.06	91.125	y	49*	437.769	630	124.125	124.125	2.214	H1-1b
13	M21	W10X15	0.477	81.094	10	0.042	173	y	11	21.815	198.45	8.625	19.249	1.146	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
14	M5	W12X26	0.448	141	45*	0.115	70.5	y	45*	181.013	344.25	30.637	139.5	2.013	H1-1b
15	M8	W12X26	0.423	0	46*	0.089	213	y	50*	86.144	344.25	30.637	139.5	2.768	H1-1b
16	M32	W12X16	0.418	129.937	33	0.017	253.688	y	33	7.222	211.95	8.475	9.446	1.088	H1-1b
17	M27	W12X26	0.368	0	45*	0.106	63.156	y	45*	181.013	344.25	30.637	139.5	2.148	H1-1b
18	M14A	W10X15	0.347	86.5	9	0.035	173	y	12	21.815	198.45	8.625	19.733	1.175	H1-1b
19	M30	W12X16	0.338	212.5	30	0.018	215.156	y	29	9.797	211.95	8.475	14.404	1.374	H1-1b
20	M22	W12X16	0.329	112.5	30	0.013	112.5	y	34	12.584	211.95	8.475	16.574	1.344	H1-1b
21	M40	W10X15	0.326	42	30	0.029	42	y	12	162.995	198.45	8.625	60	1.769	H1-1b
22	M24	W10X15	0.309	75.688	10	0.037	173	y	12	21.815	198.45	8.625	20.258	1.206	H1-1b
23	M15	W10X15	0.307	73.885	10	0.043	173	y	11	21.815	198.45	8.625	21.044	1.253	H1-1b
24	M37	W10X15	0.292	42	30	0.045	42	y	34	162.995	198.45	8.625	60	1.709	H1-1b
25	M38	W10X15	0.267	0	30	0.019	0	y	32	162.995	198.45	8.625	60	1.832	H1-1b
26	M36	W10X15	0.247	0	30	0.036	0	y	29	162.995	198.45	8.625	60	1.672	H1-1b
27	M58	W10X15	0.247	40	30	0.049	40	y	34	166.005	198.45	8.625	60	1.705	H1-1b
28	M44	W10X15	0.242	0	29	0.037	0	y	29	162.995	198.45	8.625	60	1.674	H1-1b
29	M43	W10X15	0.239	42	29	0.037	42	y	33	162.995	198.45	8.625	60	1.746	H1-1b
30	M33	W10X15	0.238	0	30	0.034	0	y	29	162.995	198.45	8.625	60	1.673	H1-1b
31	M57	W10X15	0.238	0	30	0.018	0	y	10	166.005	198.45	8.625	60	1.838	H1-1b
32	M51	W10X15	0.23	0	29	0.034	0	y	29	162.995	198.45	8.625	60	1.753	H1-1b
33	M28	W10X15	0.218	40	30	0.043	40	y	34	166.005	198.45	8.625	60	1.719	H1-1b
34	M41	W10X15	0.21	0	29	0.03	0	y	32	162.995	198.45	8.625	60	1.797	H1-1b
35	M59	W10X15	0.203	0	30	0.013	0	y	29	112.483	198.45	8.625	60	1.694	H1-1b
36	M60	W10X15	0.199	71.333	30	0.013	71.333	y	34	112.483	198.45	8.625	60	1.695	H1-1b
37	M50	W10X15	0.191	42	29	0.031	42	y	33	162.995	198.45	8.625	60	1.676	H1-1b
38	M42	W10X15	0.187	42	29	0.034	42	y	12	162.995	198.45	8.625	60	1.812	H1-1b
39	M52	W10X15	0.183	0	30	0.039	0	y	32	162.995	198.45	8.625	60	1.726	H1-1b
40	M39	W10X15	0.171	0	29	0.017	0	y	12	162.995	198.45	8.625	60	2.09	H1-1b
41	M53	W10X15	0.154	0	29	0.031	0	y	32	162.995	198.45	8.625	60	1.792	H1-1b
42	M49	W10X15	0.151	42	29	0.017	42	y	33	162.995	198.45	8.625	60	1.683	H1-1b
43	M45	W10X15	0.15	42	29	0.014	42	y	33	162.995	198.45	8.625	60	1.686	H1-1b
44	M56	W10X15	0.142	0	33	0.011	40	y	11	166.005	198.45	8.625	60	1.119	H1-1b
45	M7A	W12X26	0.137	141	29	0.017	141	y	34	181.013	344.25	30.637	139.5	2.522	H1-1b
46	M35	W10X15	0.135	0	29	0.018	0	y	29	162.995	198.45	8.625	60	1.682	H1-1b
47	M34	W10X15	0.131	0	29	0.019	0	y	29	162.995	198.45	8.625	60	1.682	H1-1b
48	M48	W10X15	0.115	0	29	0.008	0	y	32	162.995	198.45	8.625	60	1.707	H1-1b
49	M47	W10X15	0.107	70.5	29	0.006	70.5	y	34	113.976	198.45	8.625	60	1.784	H1-1b
50	M46	W10X15	0.103	0	30	0.01	0	y	29	113.976	198.45	8.625	60	1.706	H1-1b
51	M55	W10X15	0.007	20	10	0.012	40	y	10	166.005	198.45	8.625	60	1.136	H1-1b
52	M23	W12X26	0.004	20	12	0.016	40	y	11	309.202	344.25	30.637	139.5	1.136	H1-1b
53	M54	W12X16	0.004	21	10	0.008	42	y	34	158.421	211.95	8.475	75.375	1.136	H1-1b

Envelope X-Direction Story Drift - Strength

	Story (Elevation)		Story Drift[in]	Loc (Z,X)	LC	Drift Ratio (%)	Loc (Z,X)	LC	2nd/1st Ratio	Loc (Z,X)	LC
0	182.25 in	max	2.09	0, 0	29	1.147	0, 0	29	1.02	0, 0	12
1		min	-2.018	0, 0	41	0.003	0, 0	26	0.997	0, 256	32

Envelope Z-Direction Story Drift - Strength

	Story (Elevation)		Story Drift[in]	Loc (Z,X)	LC	Drift Ratio (%)	Loc (Z,X)	LC	2nd/1st Ratio	Loc (Z,X)	LC
0	182.25 in	max	2.369	0, 0	30	1.3	0, 0	30	1.019	173, 0	12
1		min	-2.366	173, 0	42	0.008	213, 256	27	1	213, 397	43

Frequencies and Participation

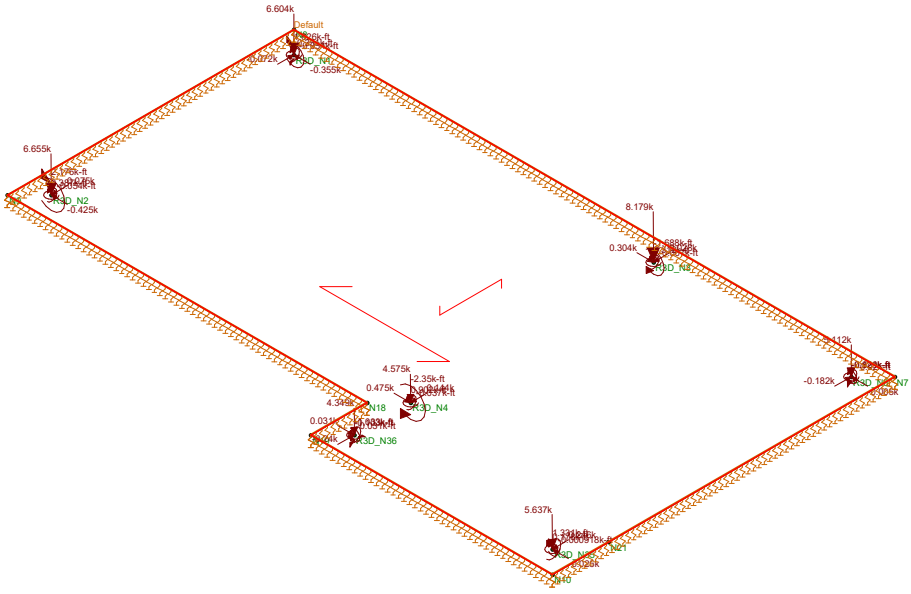
	Mode	Frequency (Hz)	Period (Sec)	SX Participation	SY Participation	SZ Participation
0	1	2.337	0.428	0.649		78.036
1	2	2.524	0.396	75.631		3.551
2	3	2.728	0.367	14.603		7.699
3	4	3.429	0.292	1.541		0.888
4	5	4.026	0.248	0.046		1.047
5	6	5.889	0.17			1.016
6	7	7.014	0.143	0.044		0.051
7	8	8.748	0.114			
8	9	8.893	0.112	0.043	0.012	
9	10	9.51	0.105	0.098	11.208	
10	11	9.764	0.102		0.011	0.051
11	12	10.606	0.094	0.125	0.011	0.102
12	13	10.869	0.092	0.029		0.014
13	14	11.413	0.088	0.373		
14	15	12.12	0.083		3.226	
15	16	13.137	0.076		3.271	
16	17	13.184	0.076	0.018	0.038	0.274
17	18	13.574	0.074	0.042	0.768	0.033
18	19	14.104	0.071	0.013	1.53	0.364
19	20	14.334	0.07		0.451	0.114
20	21	16.162	0.062			0.107
21	22	17.254	0.058	0.038	4.17	
22	23	20.478	0.049			0.23
23	24	20.811	0.048		0.014	
24	25	21.213	0.047		0.135	0.754
25	26	21.259	0.047		0.01	0.024
26	27	21.966	0.046	0.506	2.225	0.053
27	28	22.046	0.045	0.689	1.71	0.1
28	29	22.305	0.045	0.195	0.063	0.037
29	30	22.59	0.044	0.03	0.634	
30	31	23.072	0.043	0.141	1.029	0.345
31	32	23.64	0.042		0.018	0.429
32	33	23.809	0.042	0.117	2.682	0.054
33	34	24.25	0.041	0.127	1.78	
34	35	24.535	0.041	0.156	0.558	
35	36	24.893	0.04	0.236	2.145	0.05
36	37	25.849	0.039		0.075	0.535
37	38	26.181	0.038	0.119	1.591	0.041
38	39	26.594	0.038	0.075	0.728	0.09
39	40	27.001	0.037			0.216
40	41	27.055	0.037	1.035	0.793	0.044
41	42	27.436	0.036		12.249	0.13
42	43	27.767	0.036	0.048	0.081	0.238
43	44	27.949	0.036	0.185	0.302	0.035
44	45	29.326	0.034	0.177	0.035	
45	46	30.351	0.033	0.067	0.386	0.323
46	47	30.584	0.033	0.06	0.063	0.263
47	48	32.234	0.031		0.313	
48	49	33.958	0.029	0.025	1.37	
49	50	37.588	0.027	0.023		
50	51	39.842	0.025		0.347	
51	52	40.034	0.025			
52	53	42.881	0.023		2.692	
53	54	47.533	0.021		0.722	
54	55	47.957	0.021		0.211	

Company :
Designer :
Job Number :
Model Name :

Checked By : _____

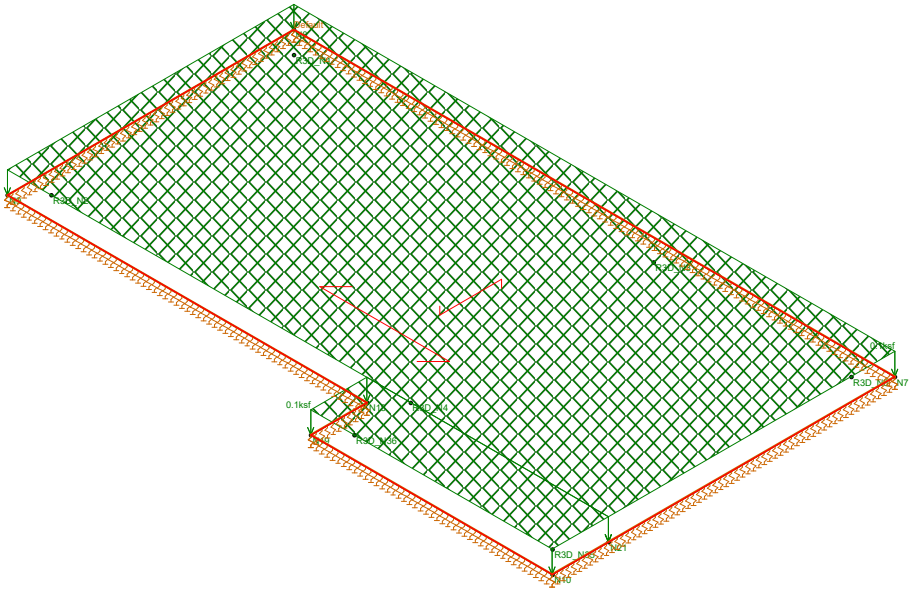
Frequencies and Participation (Continued)

	Mode	Frequency (Hz)	Period (Sec)	SX Participation	SY Participation	SZ Participation
55	56	48.729	0.021		1.484	
56	57	49.233	0.02		0.605	
57	58	52.328	0.019		0.592	
58	59	55.289	0.018		0.079	
59	60	62.591	0.016		0.113	
60	61	63.337	0.016		0.525	
61	62	64.124	0.016		1.495	
62	63	64.93	0.015			
63	64	65.753	0.015		0.835	
64	65	68.918	0.015		1.538	
65	66	69.866	0.014		0.09	
66	67	70.112	0.014		0.063	
67	68	71.278	0.014			
68	69	73.144	0.014			
69	70	73.691	0.014			
70	71	76.986	0.013		0.108	
71	72	80.445	0.012		0.218	
72	73	80.597	0.012			
73	74	80.663	0.012		0.018	
74	75	82.361	0.012			
75	76	83.461	0.012			
76	77	84.004	0.012			
77	78	84.758	0.012			
78	79	86.203	0.012			
79	80	90.484	0.011		0.251	
80	81	92.577	0.011		0.92	
81	82	93.076	0.011			
82	83	94.655	0.011			
83	84	96.407	0.01		4.136	
84	85	97.081	0.01			
85	86	98.545	0.01		2.981	
86	87	100.064	0.01		4.157	
87	88	101.767	0.01			
88	89	104.976	0.01		0.493	
89	90	105.618	0.009		0.04	
90	91	107.229	0.009			
91	92	107.641	0.009		7.239	
92	93	112.809	0.009		0.1	
93	94	113.795	0.009		2.099	
94	95	121.167	0.008		1.985	
95	Totals:			97.377	91.878	97.377



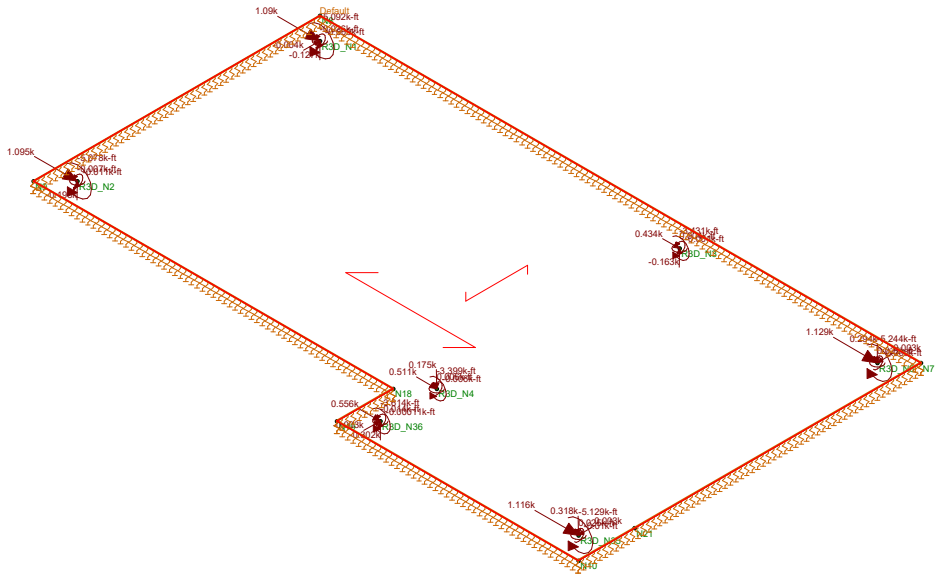
Loads: DL - Dead Load

	SCALEHOUSE FOUNDATION DEAD LOAD	1 Dec 4, 2024 at 10:37 AM Moment Frame Checks.r3d



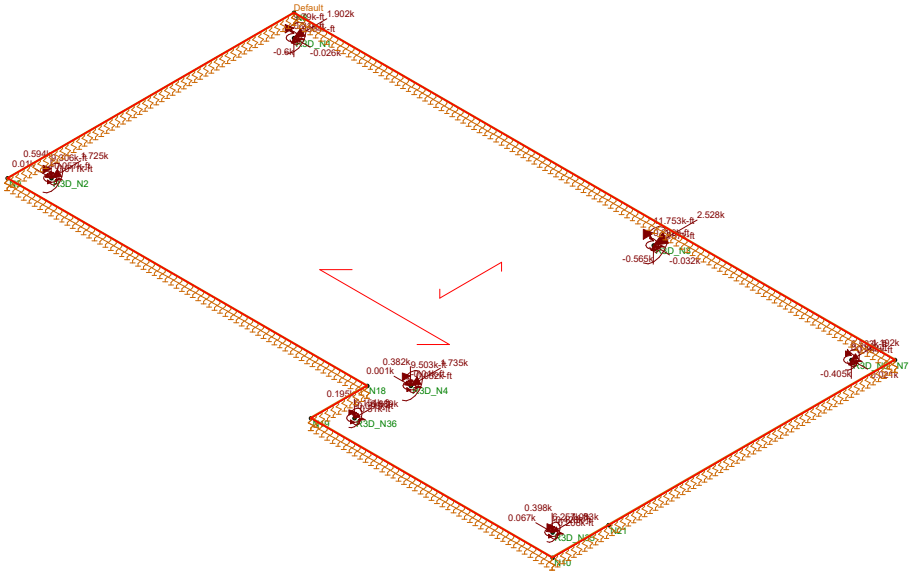
Loads: LL - Live Load

		2
	SCALEHOUSE FOUNDATION	Dec 4, 2024 at 10:37 AM
	LIVE LOAD	Moment Frame Checks.r3d



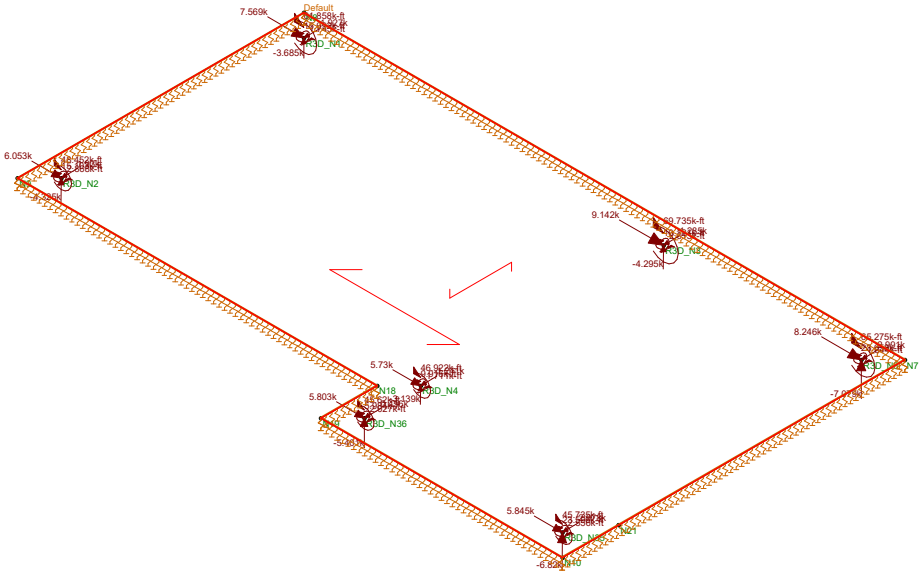
Loads: WLX - Wind Load X

	SCALEHOUSE FOUNDATION WLX	3 Dec 4, 2024 at 10:38 AM Moment Frame Checks.r3d



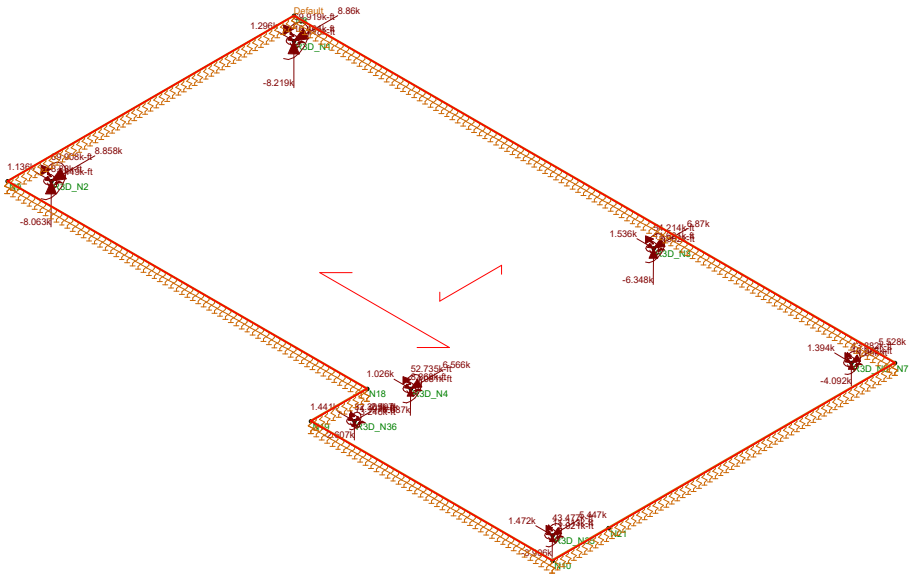
Loads: WLZ - Wind Load Z

	SCALEHOUSE FOUNDATION WLZ	4 Dec 4, 2024 at 10:38 AM Moment Frame Checks.r3d



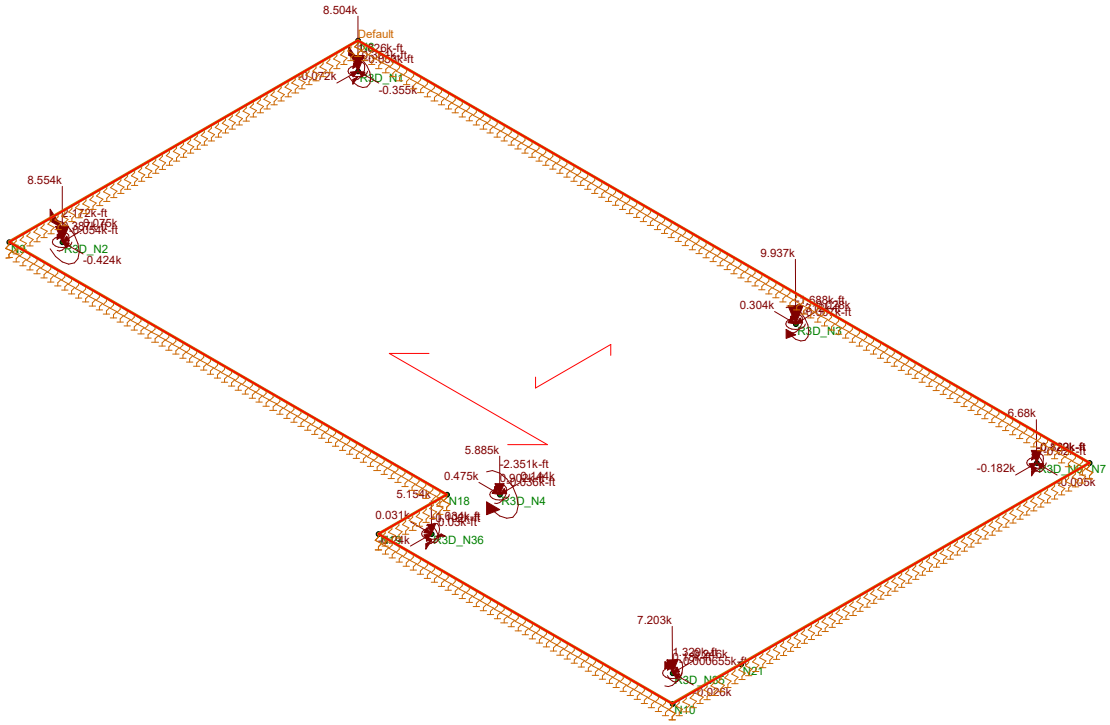
Loads: SX - X Direction Response Spectra

	SCALEHOUSE FOUNDATION	5
		Dec 4, 2024 at 10:39 AM
	SX	Moment Frame Checks.r3d



Loads: SZ - Z Direction Response Spectra

	SCALEHOUSE FOUNDATION	6
		Dec 4, 2024 at 10:39 AM
	SZ	Moment Frame Checks.r3d



Loads: OL1 - Other Load 1

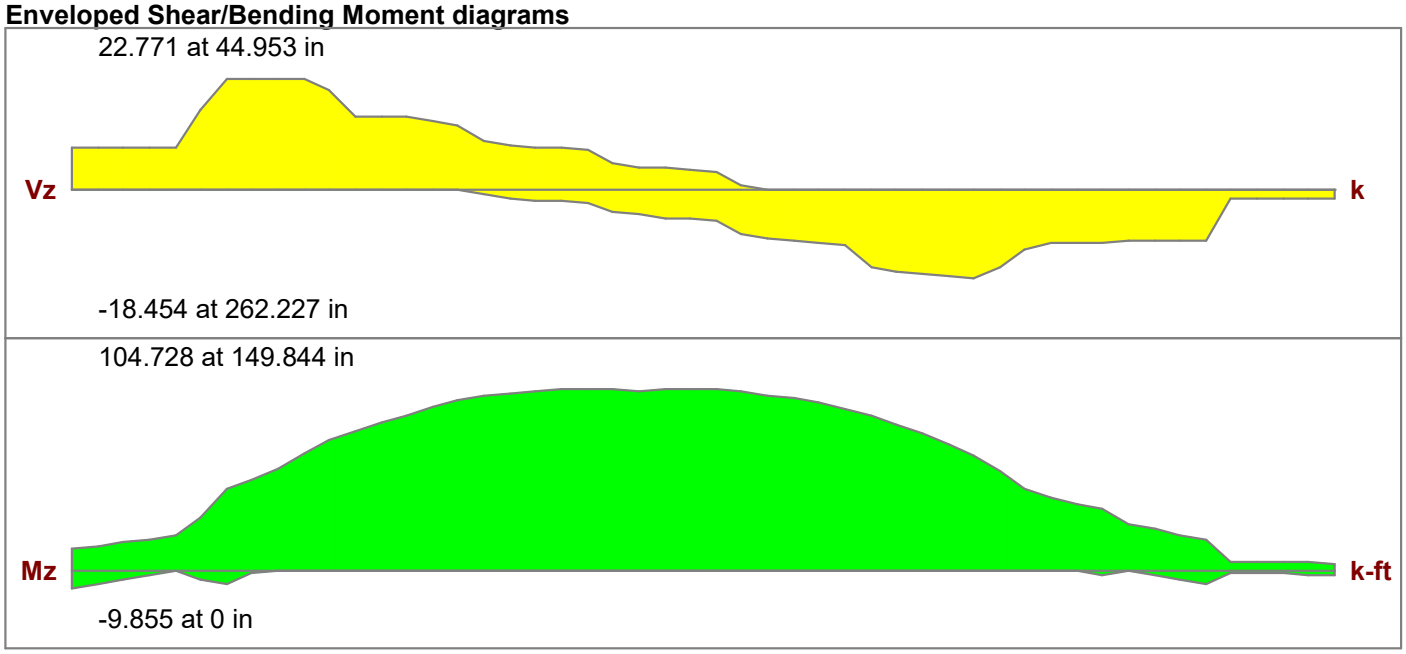
	SCALEHOUSE FOUNDATION MASS PARTICIPATION LOAD	7 Dec 4, 2024 at 10:39 AM Moment Frame Checks.r3d

Company :
Designer :
Job Number :
Model Name : SCALEHOUSE FOUNDATION

Dec 4, 2024
10:40 AM
Checked By:_____

Strip:	DS1	Max Top bar Spac.:	6 in	Stress Block:	Rectangular
Material:	Conc4500NW	Min Top bar Spac.:	6 in	Rebar Orientation:	0
Strip Width:	VARIES	Max Bot bar Spac.:	6 in	Rebar Spacing Inc:	1 in
Total Cuts:	50	Min Bot bar Spac.:	6 in	Design Rule:	Typical

Enveloped Shear/Bending Moment diagrams



ACI 318-14 Code Check

Top Bending Check	0.050	Bot Bending Check	0.009	1 Way Shear Check	0.030
Gov Mu Top	104.728 k-ft	Gov Mu Bot	-7.532 k-ft	Gov Vu	10.768 k
phi*Mn Top	2115.543 k-ft	phi*Mn Bot	812.02 k-ft	phi*Vn	358.042 k
Governing Cut	DS1-X21	Governing Cut	DS1-X45	Governing Cut	DS1-X45
Governing LC	10	Governing LC	24	Governing LC	10
Cut Width	428 in	Cut Width	172 in	Cut Width	172 in
Tension Bar Fy	60 ksi	Concrete Weight	0.15 k/ft^3	Top Cover	2 in
Shear Bar Fy	60 ksi	λ	1	Bottom Cover	3 in
F'c	4.5 ksi	E_Concrete	4066 ksi	Side Cover	0 in
Flex. Rebar Set	ASTM A615	Rho Bot Prvd	0.00250	Rho Top Prvd	0.00238
		Prvd Bot Bar Spac.	#5@6in	Prvd Top Bar Spac.	#5@6in

Bending Steel Reqd/Prvd, Units: in^2)

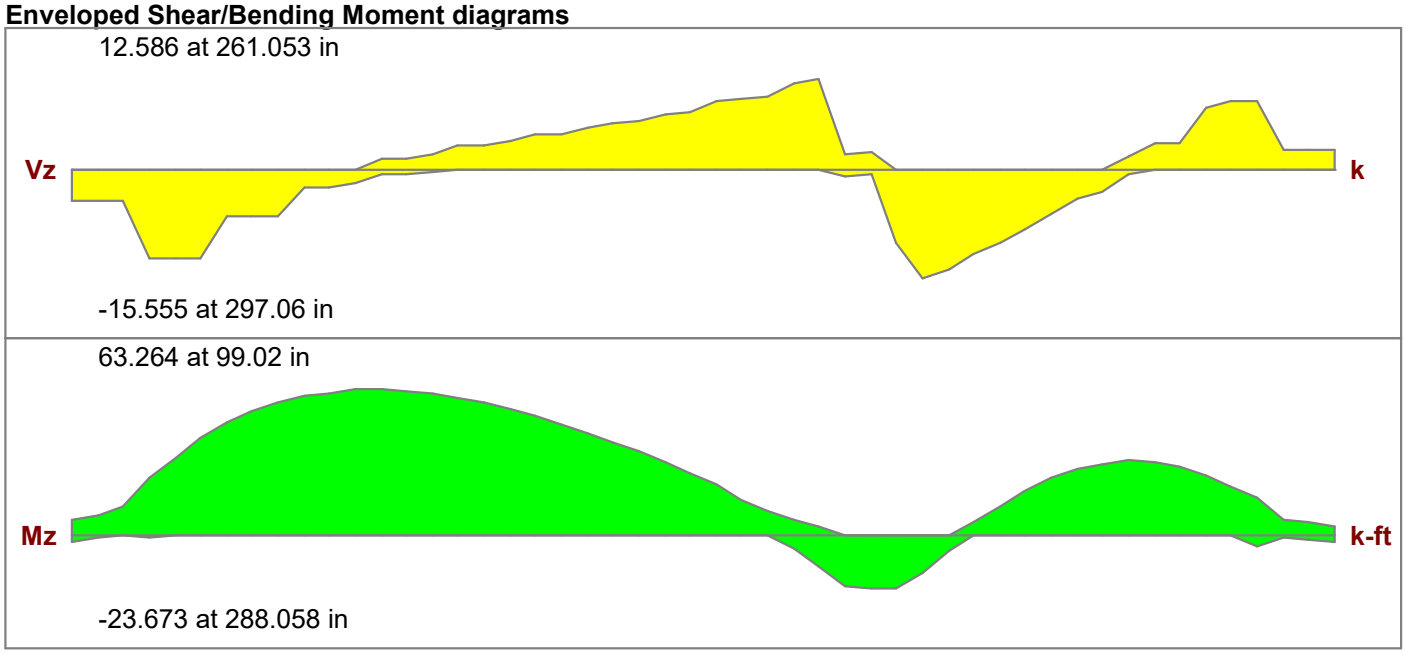
Cut Label	Top As Reqd	Top As Prvd	Bot As Reqd	Bot As Prvd	Rho Reqd(T/S)	Rho Reqd(Flex)	Rho Prvd(Gross)
DS1-X21	1.074	22.089	NA	22.089	0.00180	0.00180	0.00430
DS1-X45	0.173	8.897	0.081	8.897	0.00180	0.00180	0.00431

Company :
Designer :
Job Number :
Model Name : SCALEHOUSE FOUNDATION

Dec 4, 2024
10:40 AM
Checked By:_____

Strip:	DS2	Max Top bar Spac.:	6 in	Stress Block:	Rectangular
Material:	Conc4500NW	Min Top bar Spac.:	6 in	Rebar Orientation:	90
Strip Width:	VARIES	Max Bot bar Spac.:	6 in	Rebar Spacing Inc:	1 in
Total Cuts:	50	Min Bot bar Spac.:	6 in	Design Rule:	Typical

Enveloped Shear/Bending Moment diagrams



ACI 318-14 Code Check

Top Bending Check	0.062	Bot Bending Check	0.021	1 Way Shear Check	0.031
Gov Mu Top	63.264 k-ft	Gov Mu Bot	-23.673 k-ft	Gov Vu	15.555 k
phi*Mn Top	1028 k-ft	phi*Mn Bot	1148.106 k-ft	phi*Vn	507.92 k
Governing Cut	DS2-X12	Governing Cut	DS2-X33	Governing Cut	DS2-X34
Governing LC	9	Governing LC	10	Governing LC	7
Cut Width	204 in	Cut Width	244 in	Cut Width	244 in
Tension Bar Fy	60 ksi	Concrete Weight	0.15 k/ft^3	Top Cover	2 in
Shear Bar Fy	60 ksi	λ	1	Bottom Cover	3 in
F'c	4.5 ksi	E_Concrete	4066 ksi	Side Cover	0 in
Flex. Rebar Set	ASTM A615	Rho Bot Prvd	0.00249	Rho Top Prvd	0.00243
		Prvd Bot Bar Spac.	#5@6in	Prvd Top Bar Spac.	#5@6in

Bending Steel Reqd/Prvd, Units: in^2)

Cut Label	Top As Reqd	Top As Prvd	Bot As Reqd	Bot As Prvd	Rho Reqd(T/S)	Rho Reqd(Flex)	Rho Prvd(Gross)
DS2-X12	0.649	10.738	NA	10.738	0.00180	0.00180	0.00439
DS2-X33	NA	12.579	0.254	12.579	0.00180	0.00180	0.00430

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	2	3

Slab Rebar Parameters

	Label	Top Bar	Bottom ...	Max Top Bar...	Min Top Bar ...	Max Bot Bar ...	Min Bot Bar ...	Spacing I...	Side Cove...	Rebar Options
1	Typical	#5	#5	6	6	6	6	1	0	Optimize

Soil Properties

	Label	Overburden[ksf]	Passive[k]	Friction Coefficient	Gross/Net
1	Footing 1	0.1	0	0.3	Gross

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	346	2	None	Yes

Point Loads and Moments (Cat 1 : DL)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	-0.355
2	R3D_N1	Y	6.604
3	R3D_N1	Z	-0.072
4	R3D_N1	MX	-0.351
5	R3D_N1	MY	-0.054
6	R3D_N1	MZ	1.626
7	R3D_N2	X	-0.425
8	R3D_N2	Y	6.655
9	R3D_N2	Z	0.075
10	R3D_N2	MX	0.387
11	R3D_N2	MY	-0.054
12	R3D_N2	MZ	2.176
13	R3D_N3	X	0.304
14	R3D_N3	Y	8.179
15	R3D_N3	Z	0.028
16	R3D_N3	MX	0.312
17	R3D_N3	MY	-0.007
18	R3D_N3	MZ	-1.688
19	R3D_N4	X	0.475
20	R3D_N4	Y	4.575
21	R3D_N4	Z	0.144
22	R3D_N4	MX	0.902
23	R3D_N4	MY	-0.037
24	R3D_N4	MZ	-2.35
25	R3D_N6	X	-0.005
26	R3D_N6	Y	5.112
27	R3D_N6	Z	-0.182
28	R3D_N6	MX	-0.821
29	R3D_N6	MY	-0.02
30	R3D_N6	MZ	-0.129
31	R3D_N35	X	-0.025
32	R3D_N35	Y	5.637
33	R3D_N35	Z	0.246
34	R3D_N35	MX	1.331
35	R3D_N35	MY	-0.000918
36	R3D_N35	MZ	0.178
37	R3D_N36	X	0.031
38	R3D_N36	Y	4.349
39	R3D_N36	Z	-0.24

Point Loads and Moments (Cat 1 : DL) (Continued)

	Label	Direction	Magnitude[k,k-ft]
40	R3D_N36	MX	-1.033
41	R3D_N36	MY	0.031
42	R3D_N36	MZ	-0.103

Point Loads and Moments (Cat 6 : RLL)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	-0.237
2	R3D_N1	Y	2.874
3	R3D_N1	Z	-0.076
4	R3D_N1	MX	-0.384
5	R3D_N1	MY	-0.027
6	R3D_N1	MZ	1.088
7	R3D_N2	X	-0.285
8	R3D_N2	Y	2.941
9	R3D_N2	Z	0.072
10	R3D_N2	MX	0.361
11	R3D_N2	MY	-0.029
12	R3D_N2	MZ	1.442
13	R3D_N3	X	0.181
14	R3D_N3	Y	4.193
15	R3D_N3	Z	-0.045
16	R3D_N3	MX	-0.173
17	R3D_N3	MY	-0.009
18	R3D_N3	MZ	-1.014
19	R3D_N4	X	0.307
20	R3D_N4	Y	2.568
21	R3D_N4	Z	0.088
22	R3D_N4	MX	0.498
23	R3D_N4	MY	-0.019
24	R3D_N4	MZ	-1.536
25	R3D_N6	X	0.027
26	R3D_N6	Y	1.975
27	R3D_N6	Z	-0.127
28	R3D_N6	MX	-0.595
29	R3D_N6	MY	-0.018
30	R3D_N6	MZ	-0.238
31	R3D_N35	X	-0.002
32	R3D_N35	Y	2.269
33	R3D_N35	Z	0.15
34	R3D_N35	MX	0.797
35	R3D_N35	MY	-0.01
36	R3D_N35	MZ	0.027
37	R3D_N36	X	0.01
38	R3D_N36	Y	1.526
39	R3D_N36	Z	-0.063
40	R3D_N36	MX	-0.261
41	R3D_N36	MY	0.006
42	R3D_N36	MZ	-0.031

Point Loads and Moments (Cat 19 : WLX)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	1.09
2	R3D_N1	Y	-0.127
3	R3D_N1	Z	-0.004
4	R3D_N1	MX	-0.026
5	R3D_N1	MY	-0.009

Point Loads and Moments (Cat 19 : WLX) (Continued)

	Label	Direction	Magnitude[k,k-ft]
6	R3D_N1	MZ	-5.092
7	R3D_N2	X	1.095
8	R3D_N2	Y	-0.195
9	R3D_N2	MX	-0.007
10	R3D_N2	MY	-0.011
11	R3D_N2	MZ	-5.078
12	R3D_N3	X	0.434
13	R3D_N3	Y	-0.163
14	R3D_N3	MX	0.004
15	R3D_N3	MY	-0.004
16	R3D_N3	MZ	-3.431
17	R3D_N4	X	0.511
18	R3D_N4	Y	0.175
19	R3D_N4	MX	0.006
20	R3D_N4	MY	-0.006
21	R3D_N4	MZ	-3.399
22	R3D_N6	X	1.129
23	R3D_N6	Y	0.294
24	R3D_N6	Z	0.003
25	R3D_N6	MX	0.022
26	R3D_N6	MY	-0.009
27	R3D_N6	MZ	-5.244
28	R3D_N35	X	1.116
29	R3D_N35	Y	0.318
30	R3D_N35	Z	0.003
31	R3D_N35	MX	0.025
32	R3D_N35	MY	-0.01
33	R3D_N35	MZ	-5.129
34	R3D_N36	X	0.556
35	R3D_N36	Y	-0.302
36	R3D_N36	Z	-0.003
37	R3D_N36	MX	-0.014
38	R3D_N36	MY	-0.00011
39	R3D_N36	MZ	-3.614

Point Loads and Moments (Cat 21 : WLZ)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	-0.026
2	R3D_N1	Y	-0.6
3	R3D_N1	Z	1.902
4	R3D_N1	MX	9.79
5	R3D_N1	MY	0.004
6	R3D_N1	MZ	0.21
7	R3D_N2	X	0.01
8	R3D_N2	Y	0.594
9	R3D_N2	Z	1.725
10	R3D_N2	MX	9.306
11	R3D_N2	MY	0.011
12	R3D_N2	MZ	-0.057
13	R3D_N3	X	-0.032
14	R3D_N3	Y	-0.565
15	R3D_N3	Z	2.528
16	R3D_N3	MX	11.753
17	R3D_N3	MY	0.187
18	R3D_N3	MZ	0.239
19	R3D_N4	X	0.001

Point Loads and Moments (Cat 21 : WLZ) (Continued)

	Label	Direction	Magnitude[k,k-ft]
20	R3D_N4	Y	0.382
21	R3D_N4	Z	1.735
22	R3D_N4	MX	9.503
23	R3D_N4	MY	0.052
24	R3D_N4	MZ	-0.01
25	R3D_N6	X	-0.021
26	R3D_N6	Y	-0.405
27	R3D_N6	Z	1.192
28	R3D_N6	MX	6.583
29	R3D_N6	MY	0.184
30	R3D_N6	MZ	0.186
31	R3D_N35	X	0.067
32	R3D_N35	Y	0.398
33	R3D_N35	Z	1.083
34	R3D_N35	MX	6.257
35	R3D_N35	MY	0.208
36	R3D_N35	MZ	-0.428
37	R3D_N36	Y	0.195
38	R3D_N36	Z	0.889
39	R3D_N36	MX	6.154
40	R3D_N36	MY	0.31
41	R3D_N36	MZ	-0.095

Point Loads and Moments (Cat 64 : SX)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	7.569
2	R3D_N1	Y	-3.685
3	R3D_N1	Z	1.927
4	R3D_N1	MX	15.092
5	R3D_N1	MY	1.743
6	R3D_N1	MZ	61.858
7	R3D_N2	X	6.053
8	R3D_N2	Y	-4.325
9	R3D_N2	Z	1.93
10	R3D_N2	MX	15.103
11	R3D_N2	MY	2.868
12	R3D_N2	MZ	48.452
13	R3D_N3	X	9.142
14	R3D_N3	Y	-4.295
15	R3D_N3	Z	1.285
16	R3D_N3	MX	10.121
17	R3D_N3	MY	2.013
18	R3D_N3	MZ	69.735
19	R3D_N4	X	5.73
20	R3D_N4	Y	-3.139
21	R3D_N4	Z	1.241
22	R3D_N4	MX	9.916
23	R3D_N4	MY	1.711
24	R3D_N4	MZ	46.922
25	R3D_N6	X	8.246
26	R3D_N6	Y	-7.079
27	R3D_N6	Z	2.991
28	R3D_N6	MX	23.658
29	R3D_N6	MY	1.844
30	R3D_N6	MZ	65.275
31	R3D_N35	X	5.845

Point Loads and Moments (Cat 64 : SX) (Continued)

	Label	Direction	Magnitude[k,k-ft]
32	R3D_N35	Y	-6.82
33	R3D_N35	Z	2.978
34	R3D_N35	MX	23.596
35	R3D_N35	MY	2.556
36	R3D_N35	MZ	45.735
37	R3D_N36	X	5.803
38	R3D_N36	Y	-5.401
39	R3D_N36	Z	0.456
40	R3D_N36	MX	5.984
41	R3D_N36	MY	2.027
42	R3D_N36	MZ	45.62

Point Loads and Moments (Cat 65 : SY)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	0.914
2	R3D_N1	Y	-3.034
3	R3D_N1	Z	0.52
4	R3D_N1	MX	2.156
5	R3D_N1	MY	0.057
6	R3D_N1	MZ	4.101
7	R3D_N2	X	0.809
8	R3D_N2	Y	-3.087
9	R3D_N2	Z	0.537
10	R3D_N2	MX	2.226
11	R3D_N2	MY	0.063
12	R3D_N2	MZ	3.639
13	R3D_N3	X	0.428
14	R3D_N3	Y	-4.072
15	R3D_N3	Z	0.392
16	R3D_N3	MX	1.549
17	R3D_N3	MY	0.038
18	R3D_N3	MZ	1.932
19	R3D_N4	X	0.571
20	R3D_N4	Y	-2.002
21	R3D_N4	Z	0.163
22	R3D_N4	MX	0.701
23	R3D_N4	MY	0.043
24	R3D_N4	MZ	2.639
25	R3D_N6	X	0.259
26	R3D_N6	Y	-2.99
27	R3D_N6	Z	0.636
28	R3D_N6	MX	2.711
29	R3D_N6	MY	0.039
30	R3D_N6	MZ	1.148
31	R3D_N35	X	0.189
32	R3D_N35	Y	-2.601
33	R3D_N35	Z	0.544
34	R3D_N35	MX	2.384
35	R3D_N35	MY	0.051
36	R3D_N35	MZ	0.763
37	R3D_N36	X	0.167
38	R3D_N36	Y	-1.89
39	R3D_N36	Z	0.527
40	R3D_N36	MX	2.406
41	R3D_N36	MY	0.046
42	R3D_N36	MZ	0.775

Point Loads and Moments (Cat 66 : SZ)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	1.296
2	R3D_N1	Y	-8.219
3	R3D_N1	Z	8.86
4	R3D_N1	MX	69.919
5	R3D_N1	MY	2.418
6	R3D_N1	MZ	10.464
7	R3D_N2	X	1.136
8	R3D_N2	Y	-8.063
9	R3D_N2	Z	8.858
10	R3D_N2	MX	69.908
11	R3D_N2	MY	2.449
12	R3D_N2	MZ	8.88
13	R3D_N3	X	1.536
14	R3D_N3	Y	-6.348
15	R3D_N3	Z	6.87
16	R3D_N3	MX	54.214
17	R3D_N3	MY	3.962
18	R3D_N3	MZ	11.681
19	R3D_N4	X	1.026
20	R3D_N4	Y	-4.687
21	R3D_N4	Z	6.566
22	R3D_N4	MX	52.735
23	R3D_N4	MY	4.081
24	R3D_N4	MZ	8.368
25	R3D_N6	X	1.394
26	R3D_N6	Y	-4.092
27	R3D_N6	Z	5.528
28	R3D_N6	MX	43.882
29	R3D_N6	MY	1.99
30	R3D_N6	MZ	10.973
31	R3D_N35	X	1.472
32	R3D_N35	Y	-3.906
33	R3D_N35	Z	5.447
34	R3D_N35	MX	43.477
35	R3D_N35	MY	2.021
36	R3D_N35	MZ	11.313
37	R3D_N36	X	1.441
38	R3D_N36	Y	-2.607
39	R3D_N36	Z	2.497
40	R3D_N36	MX	32.305
41	R3D_N36	MY	3.246
42	R3D_N36	MZ	11.197

Point Loads and Moments (Cat 67 : OL1)

	Label	Direction	Magnitude[k,k-ft]
1	R3D_N1	X	-0.355
2	R3D_N1	Y	8.504
3	R3D_N1	Z	-0.072
4	R3D_N1	MX	-0.351
5	R3D_N1	MY	-0.053
6	R3D_N1	MZ	1.626
7	R3D_N2	X	-0.424
8	R3D_N2	Y	8.554
9	R3D_N2	Z	0.075
10	R3D_N2	MX	0.387
11	R3D_N2	MY	-0.054

Point Loads and Moments (Cat 67 : OL1) (Continued)

	Label	Direction	Magnitude[k,k-ft]
12	R3D_N2	MZ	2.172
13	R3D_N3	X	0.304
14	R3D_N3	Y	9.937
15	R3D_N3	Z	0.028
16	R3D_N3	MX	0.312
17	R3D_N3	MY	-0.007
18	R3D_N3	MZ	-1.688
19	R3D_N4	X	0.475
20	R3D_N4	Y	5.885
21	R3D_N4	Z	0.144
22	R3D_N4	MX	0.902
23	R3D_N4	MY	-0.036
24	R3D_N4	MZ	-2.351
25	R3D_N6	X	-0.005
26	R3D_N6	Y	6.68
27	R3D_N6	Z	-0.182
28	R3D_N6	MX	-0.822
29	R3D_N6	MY	-0.02
30	R3D_N6	MZ	-0.129
31	R3D_N35	X	-0.026
32	R3D_N35	Y	7.203
33	R3D_N35	Z	0.246
34	R3D_N35	MX	1.329
35	R3D_N35	MY	-0.000655
36	R3D_N35	MZ	0.18
37	R3D_N36	X	0.031
38	R3D_N36	Y	5.154
39	R3D_N36	Z	-0.24
40	R3D_N36	MX	-1.034
41	R3D_N36	MY	0.03
42	R3D_N36	MZ	-0.102

Area Loads (Cat 2 : LL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL1	0.1	0.1
2	AL2	0.1	0.1

Slabs

	Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburde...	Icr Factor
1	S1	24	Conc4500NW	0	0	0	0	1

Load Combinations

	Label	S...	S...	A...	SF	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
1	Service	Yes	Yes			DL	1	LL	1	HL	1													
2	Strength	Yes				DL	1.2	LL	1.6	HL	1.6													
3	IBC 21/ASCE Stren...	Yes				DL	1.4																	
4	IBC 21/ASCE Stren...	Yes				DL	1.2	LL	1.6			HL	1.6	RLL	0.5									
5	IBC 21/ASCE Stren...	Yes				DL	1.2	LL	1.6			HL	1.6	SL	0.5	SLN	0.5							
6	IBC 21/ASCE Stren...	Yes				DL	1.2	RLL	1.6	HL	1.6	LL	0.5	LLS	1									
7	IBC 21/ASCE Stren...	Yes				DL	1.2	RLL	1.6	HL	1.6	WLX	0.5											
8	IBC 21/ASCE Stren...	Yes				DL	1.2	RLL	1.6	HL	1.6	WLZ	0.5											
9	IBC 21/ASCE Stren...	Yes				DL	1.2	RLL	1.6	HL	1.6	WLX	-0.5											
10	IBC 21/ASCE Stren...	Yes				DL	1.2	RLL	1.6	HL	1.6	WLZ	-0.5											
11	IBC 21/ASCE Stren...	Yes				DL	1.2					HL	1.6	WLX	0.5									
12	IBC 21/ASCE Stren...	Yes				DL	1.2					HL	1.6	WLZ	0.5									

Load Combinations (Continued)

	Label	S...	S...	A...	SF	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
13	IBC 21/ASCE Stren...	Yes				DL	1.2					HL	1.6	WLX	-0.5										
14	IBC 21/ASCE Stren...	Yes				DL	1.2					HL	1.6	WLZ	-0.5										
15	IBC 21/ASCE Stren...	Yes				DL	1.2	WLX	1	LL	0.5			HL	1.6	RLL	0.5								
16	IBC 21/ASCE Stren...	Yes				DL	1.2	WLZ	1	LL	0.5			HL	1.6	RLL	0.5								
17	IBC 21/ASCE Stren...	Yes				DL	1.2	WLX	-1	LL	0.5			HL	1.6	RLL	0.5								
18	IBC 21/ASCE Stren...	Yes				DL	1.2	WLZ	-1	LL	0.5			HL	1.6	RLL	0.5								
19	IBC 21/ASCE Stren...	Yes				DL	1.2	WLX	1	LL	0.5			HL	1.6										
20	IBC 21/ASCE Stren...	Yes				DL	1.2	WLZ	1	LL	0.5			HL	1.6										
21	IBC 21/ASCE Stren...	Yes				DL	1.2	WLX	-1	LL	0.5			HL	1.6										
22	IBC 21/ASCE Stren...	Yes				DL	1.2	WLZ	-1	LL	0.5			HL	1.6										
23	IBC 21/ASCE Stren...	Yes				DL	0.9	WLX	1	HL	1.6														
24	IBC 21/ASCE Stren...	Yes				DL	0.9	WLZ	-1	HL	1.6														
25	IBC 21/ASCE Stren...	Yes				DL	0.9	WLX	1	HL	0.9														
26	IBC 21/ASCE Stren...	Yes				DL	0.9	WLZ	-1	HL	0.9														
27																									
28	ASD - LC																								
29	IBC 21/ASCE 1	Yes	Yes		1.5	DL	1																		
30	IBC 21/ASCE 2	Yes	Yes		1.5	DL	1	HL	1	LL	1														
31	IBC 21/ASCE 3 (a)	Yes	Yes		1.5	DL	1	HL	1	RLL	1														
32	IBC 21/ASCE 4 (a)	Yes	Yes		1.5	DL	1	HL	1	LL	0.75			RLL	0.75										
33	IBC 21/ASCE 5 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLX	0.6														
34	IBC 21/ASCE 5 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLZ	0.6														
35	IBC 21/ASCE 5 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLX	-0.6														
36	IBC 21/ASCE 5 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLZ	-0.6														
37	IBC 21/ASCE 6 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLX	0.45	LL	0.75			RLL	0.75								
38	IBC 21/ASCE 6 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLZ	0.45	LL	0.75			RLL	0.75								
39	IBC 21/ASCE 6 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLX	-0....	LL	0.75			RLL	0.75								
40	IBC 21/ASCE 6 (a) (...	Yes	Yes		1.5	DL	1	HL	1	WLZ	-0....	LL	0.75			RLL	0.75								
41	IBC 21/ASCE 6 (b) (...	Yes	Yes		1.5	DL	1	HL	1	WLX	0.45	LL	0.75												
42	IBC 21/ASCE 6 (b) (...	Yes	Yes		1.5	DL	1	HL	1	WLZ	0.45	LL	0.75												
43	IBC 21/ASCE 6 (b) (...	Yes	Yes		1.5	DL	1	HL	1	WLX	-0....	LL	0.75												
44	IBC 21/ASCE 6 (b) (...	Yes	Yes		1.5	DL	1	HL	1	WLZ	-0....	LL	0.75												
45	IBC 21/ASCE 7 (a) (...	Yes	Yes			DL	0.6	HL	1	WLX	0.6														
46	IBC 21/ASCE 7 (a) (...	Yes	Yes			DL	0.6	HL	1	WLZ	0.6														
47	IBC 21/ASCE 7 (a) (...	Yes	Yes			DL	0.6	HL	1	WLX	-0.6														
48	IBC 21/ASCE 7 (a) (...	Yes	Yes			DL	0.6	HL	1	WLZ	-0.6														
49																									
50	LRFD - Seismic LC																								
51	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	1	Rh...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
52	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	1	Rh...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
53	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	1	Rh...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
54	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	1	Rh...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
55	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	-1	Rh...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
56	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	-1	Rh...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
57	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	-1	Rh...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
58	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	Rh...	-1	Rh...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
59	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	0.3	HL	1.6										
60	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	0.3	HL	1.6										
61	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	-0.3	HL	1.6										
62	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	-0.3	HL	1.6										
63	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	-0.3	HL	1.6										
64	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	-0.3	HL	1.6										
65	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	0.3	HL	1.6										
66	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	0.3	HL	1.6										
67	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	0.3	HL	0.9										
68	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	0.3	HL	0.9										
69	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	-0.3	HL	0.9										

Load Combinations (Continued)

	Label	S...	S...	A...	SF	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
70	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	1	Rh...	-0.3	HL	0.9										
71	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	-0.3	HL	0.9										
72	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	-0.3	HL	0.9										
73	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	0.3	HL	0.9										
74	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	Rh...	-1	Rh...	0.3	HL	0.9										
75	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	1	O...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
76	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	1	O...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
77	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	1	O...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
78	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	1	O...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
79	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	-1	O...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
80	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	-1	O...	-0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
81	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	-1	O...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
82	IBC 21/ASCE Stren...	Yes				DL	1.2	Sd...	0.2	O...	-1	O...	0.3	LL	0.5	LLS	1	...	1.6	SL	0.2	SLN	0.7		
83	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	0.3	HL	1.6										
84	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	0.3	HL	1.6										
85	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	-0.3	HL	1.6										
86	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	-0.3	HL	1.6										
87	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	-0.3	HL	1.6										
88	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	-0.3	HL	1.6										
89	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	0.3	HL	1.6										
90	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	0.3	HL	1.6										
91	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	0.3	HL	0.9										
92	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	0.3	HL	0.9										
93	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	-0.3	HL	0.9										
94	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	1	O...	-0.3	HL	0.9										
95	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	-0.3	HL	0.9										
96	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	-0.3	HL	0.9										
97	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	0.3	HL	0.9										
98	IBC 21/ASCE Stren...	Yes				DL	0.9	Sd...	-0.2	O...	-1	O...	0.3	HL	0.9										
99																									
100	ASD - SEISMIC LC																								
101	IBC 21/ASCE 8 (a)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SX	0.7	SZ	0.21										
102	IBC 21/ASCE 8 (b)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SZ	0.7	SX	0.21										
103	IBC 21/ASCE 8 (c)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SX	0.7	SZ	-0....										
104	IBC 21/ASCE 8 (d)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SZ	0.7	SX	-0....										
105	IBC 21/ASCE 8 (a)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SX	-0.7	SZ	0.21										
106	IBC 21/ASCE 8 (b)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SZ	-0.7	SX	0.21										
107	IBC 21/ASCE 8 (c)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SX	-0.7	SZ	-0....										
108	IBC 21/ASCE 8 (d)	Yes	Yes		1.5	DL	1	Sd...	0.14	HL	1	SZ	-0.7	SX	-0....										
109	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SX	0.7	SZ	0.21										
110	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SZ	0.7	SX	0.21										
111	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SX	0.7	SZ	-0....										
112	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SZ	0.7	SX	-0....										
113	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SX	0.7	SZ	0.21										
114	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SZ	0.7	SX	0.21										
115	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SX	0.7	SZ	-0....										
116	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SZ	0.7	SX	-0....										
117	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SX	-0.7	SZ	0.21										
118	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SZ	-0.7	SX	0.21										
119	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SX	-0.7	SZ	-0....										
120	IBC 21/ASCE 10 (a)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	1	SZ	-0.7	SX	-0....										
121	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SX	-0.7	SZ	0.21										
122	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SZ	-0.7	SX	0.21										
123	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SX	-0.7	SZ	-0....										
124	IBC 21/ASCE 10 (b)...	Yes	Yes			DL	0.6	Sd...	-0....	HL	0.6	SZ	-0.7	SX	-0....										
125																									
126																									

Load Combinations (Continued)

	Label	S...	S...	A...	SF	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
127																									

Design Strips

	Label	Rebar Angle from Pl...	No. of Design Cuts	Design Rule
1	DS1	0	50	Typical
2	DS2	90	50	Typical

Envelope Slab Soil Pressures

	Label	Max UC	Max LC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
1	S1	0.466	107	0.932	2	N7

Slab Overturning Safety Factors

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	2811.246	0	5154.545	9.99+	9.99+
2	29	S1	0	0	2206.678	0	4039.01	9.99+	9.99+
3	30	S1	0	0	2811.246	0	5154.545	9.99+	9.99+
4	31	S1	0	0	2377.412	0	4352.217	9.99+	9.99+
5	32	S1	0	0	2788.155	0	5110.567	9.99+	9.99+
6	33	S1	0	0.001	2206.678	34.139	4039.01	9.99+	9.99+
7	34	S1	0	63.629	2619.296	0.001	4426.223	9.99+	9.99+
8	35	S1	0	0.001	2619.296	34.139	4426.223	9.99+	9.99+
9	36	S1	0	63.629	2206.678	0.001	4039.01	9.99+	9.99+
10	37	S1	0	0.001	2788.155	25.604	5110.567	9.99+	9.99+
11	38	S1	0	47.722	3315.145	0.001	5595.22	9.99+	9.99+
12	39	S1	0	0.001	3315.145	25.604	5595.22	9.99+	9.99+
13	40	S1	0	47.722	2788.155	0.001	5110.567	9.99+	9.99+
14	41	S1	0	0.001	2660.104	25.604	4875.661	9.99+	9.99+
15	42	S1	0	47.722	3163.389	0.001	5339.319	9.99+	9.99+
16	43	S1	0	0.001	3163.389	25.604	5339.319	9.99+	9.99+
17	44	S1	0	47.722	2660.104	0.001	4875.661	9.99+	9.99+
18	45	S1	0	0.001	1324.007	34.139	2423.406	9.99+	9.99+
19	46	S1	0	63.629	1571.578	0.001	2655.734	9.99+	9.99+
20	47	S1	0	0.001	1571.578	34.139	2655.734	9.99+	9.99+
21	48	S1	0	63.629	1324.007	0.001	2423.406	9.99+	9.99+
22	101	S1	0	510.76	2619.296	884.11	4426.223	5.128	5.006
23	102	S1	0	712.746	2619.296	684.936	4426.223	3.675	6.462
24	103	S1	0	326.303	2803.753	745.746	4564.587	8.592	6.121
25	104	S1	0	614.855	2717.187	485.552	4075.525	4.419	8.394
26	105	S1	0	184.457	2945.599	145.666	4160.726	9.99+	9.99+
27	106	S1	0	125.58	2206.678	223.724	4887.436	9.99+	9.99+
28	107	S1	0	22.533	2374.909	0	4306.392	9.99+	9.99+
29	108	S1	0	75.111	2257.147	0	4561.077	9.99+	9.99+
30	109	S1	0	510.76	1571.578	884.11	2655.734	3.077	3.004
31	110	S1	0	712.746	1571.578	684.936	2655.734	2.205	3.877
32	111	S1	0	326.303	1756.034	745.746	2794.098	5.382	3.747
33	112	S1	0	614.855	1669.469	485.552	2459.921	2.715	5.066
34	113	S1	0	510.76	1571.578	884.11	2655.734	3.077	3.004
35	114	S1	0	712.746	1571.578	684.936	2655.734	2.205	3.877
36	115	S1	0	326.303	1756.034	745.746	2794.098	5.382	3.747
37	116	S1	0	614.855	1669.469	485.552	2459.921	2.715	5.066
38	117	S1	0	184.457	1897.881	145.666	2545.122	9.99+	9.99+
39	118	S1	0	125.58	1324.007	223.724	3116.947	9.99+	9.99+
40	119	S1	0	22.533	1492.238	0	2690.788	9.99+	9.99+
41	120	S1	0	75.111	1374.476	0	2945.473	9.99+	9.99+
42	121	S1	0	184.457	1897.881	145.666	2545.122	9.99+	9.99+

Slab Overturning Safety Factors (Continued)

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
43	122	S1	0	125.58	1324.007	223.724	3116.947	9.99+	9.99+
44	123	S1	0	22.533	1492.238	0	2690.788	9.99+	9.99+
45	124	S1	0	75.111	1374.476	0	2945.473	9.99+	9.99+

ENGINEER: Tony Arzate
SUBJECT: Scale House Sliding Check

TELEPHONE: (949) 809-5000
JOB NUMBER: 200-42064-22005

Scale House Layout

$L := 35.667\ ft$ Foundation Length

$W := 19.667\ ft$ Foundation Width

$A := L \cdot W = 701.463\ ft^2$ Total Area

$VL := 21.333\ ft$ Void Length

$VW := 3.333\ ft$ Void Width

$VA := VL \cdot VW = 71.103\ ft^2$ Void Area

$A_{total} := A - VA = 630.36\ ft^2$ Total Area - Void Area

$Adhesion := 670\ psf$ Allowable Adhesion at Bottom of Mat

$Passive := Adhesion \cdot A_{total} = 422.341\ kip$ MAT Foundation Sliding Resistance

$SeismicWeight := 51.915\ kip$ RISA3D Seismic Weight

$SF := \frac{Passive}{SeismicWeight} = 8.135$ Sliding Unity Check

Global Parameters - Description:

Project Title	Moment Frame Checks
Company	
Designer	
Job Number	
Notes	

Global Parameters - Solution:

Design Method	AISC 15th (360-16): LRFD
Bolt Group Analysis Method	Center of Rotation
Weld Analysis Method	Elastic
Consider Bolt Hole Deformation?	Yes
Check Rotational Ductility?	Yes
Check Weld Filler Metal Matching?	No
Full Shear Eccentricity Considered?	No
Panel-Zone Shear Deformation Considered?	No
Check Weld Base Material Thickness?	Yes
Reduce Available Bolt Strength by Prying Effects Factor Q?	No

Project Explorer Summary:

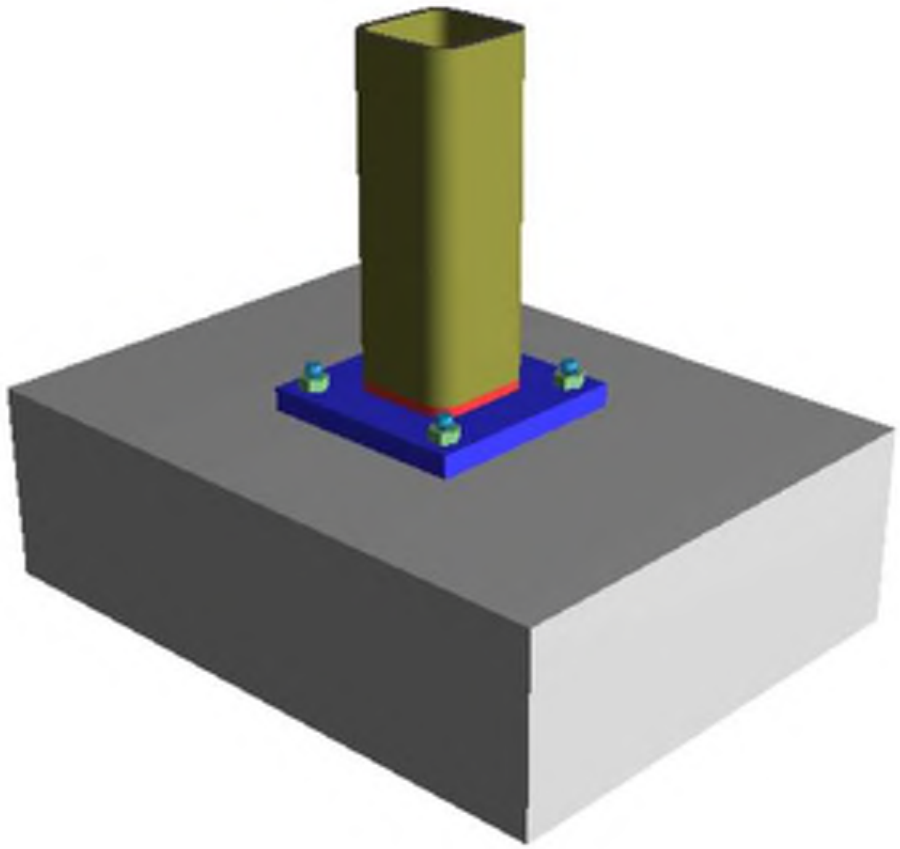
Base Plate (Lateral) (Tube)	
M10 I	**PASS (LC-18, UC-1.0)**
M11 I	**PASS (LC-40, UC-1.0)**
M14 I	**PASS (LC-19, UC-1.0)**
M25 I	**PASS (LC-23, UC-1.0)**
M26 I	**PASS (LC-42, UC-1.0)**
M8A I	**PASS (LC-68, UC-1.0)**
M9 I	**PASS (LC-22, UC-1.0)**
Col/Bm Shear Tab (Gravity) (Tube)	
M23 I - M10	**PASS (LC-50*, UC-0.0)**
M23 J - M26	**PASS (LC-50*, UC-0.0)**
M7A I - M10	**PASS (LC-46*, UC-0.1)**
Flange Plate Moment (Lateral) (Tube)	
M1 I - M8A	**PASS (LC-45*, UC-0.4)**
M1 J - M10	**PASS (LC-45*, UC-0.4)**
M27 I - M26	**PASS (LC-45*, UC-0.4)**
M27 J - M25	**PASS (LC-45*, UC-0.4)**
M4 I - M9	**PASS (LC-45*, UC-0.5)**
M4 J - M11	**PASS (LC-45*, UC-0.4)**
M5 I - M11	**PASS (LC-45*, UC-0.5)**
M5 J - M14	**PASS (LC-45*, UC-0.5)**
M6 I - M8A	**PASS (LC-46*, UC-0.6)**
M6 J - M9	**PASS (LC-46*, UC-0.6)**
M7 I - M10	**PASS (LC-46*, UC-0.5)**
M7 J - M11	**PASS (LC-46*, UC-0.5)**
M8 I - M25	**PASS (LC-46*, UC-0.4)**
M8 J - M14	**PASS (LC-46*, UC-0.4)**
Girder/Bm Shear Tab (Lateral)	
M15 I - M7A	**PASS (LC-45*, UC-0.1)**

continued on next page...

Project Explorer Summary (continued):

Girder/Bm Shear Tab (Lateral)	
M28 I - M7A	PASS (LC-50*, UC-0.2)
M46 J - M15	PASS (LC-45*, UC-0.0)
M47 I - M15	PASS (LC-49*, UC-0.0)
M59 J - M14A	PASS (LC-46*, UC-0.1)
M60 I - M14A	PASS (LC-50*, UC-0.1)

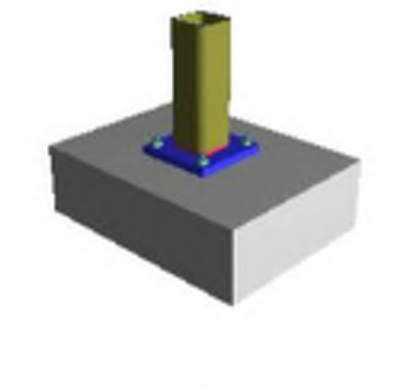
M10 I: 3D View Report



LRFD

M10 I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

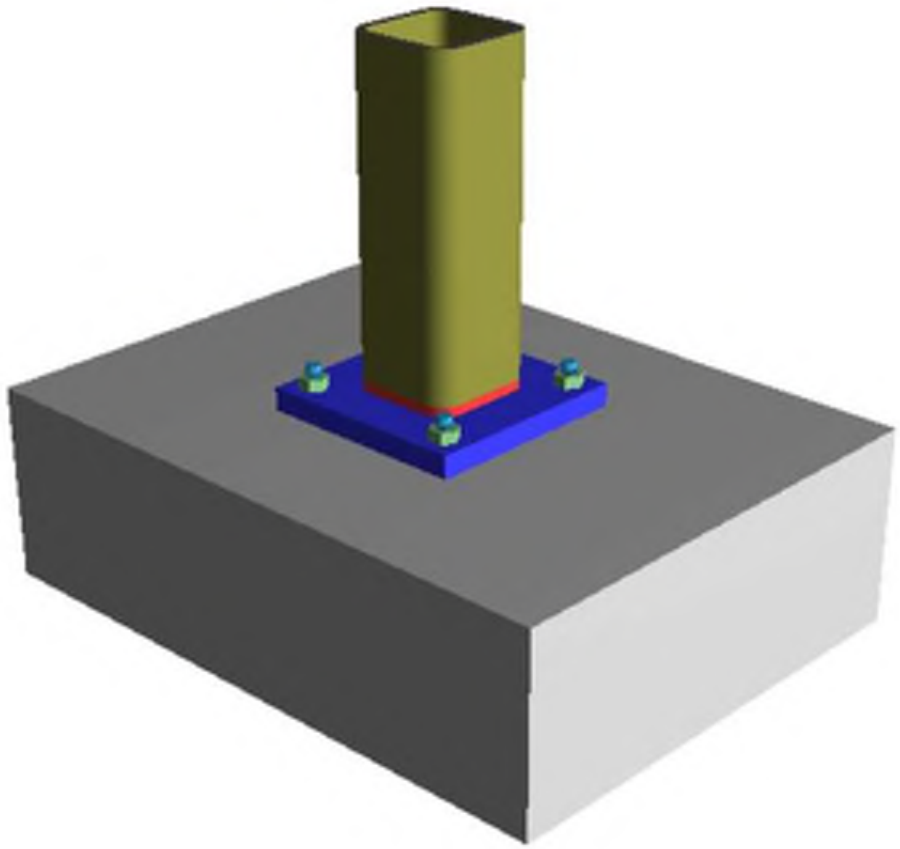
Input Data:		
Axial	8.45 kips	*Axial load on the column*
Strong Axis Shear	0.88 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-2.01 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	4.39 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	11.22 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 18 - LC 18: IBC 16-4 (a) (b)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing			**0.28**	**PASS**
Lateral Slip			**1.00**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.16 kips-ft/in	1.95 kips-ft/in	**0.08**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.32 kips-ft/in	1.95 kips-ft/in	**0.16**	**PASS**
Plate Flexural Yielding(Tension)(Weak Axis)	0.49 kips-ft	6.19 kips-ft	**0.08**	**PASS**
Anchor Bolt Tension (Weak Axis)				**N/A**

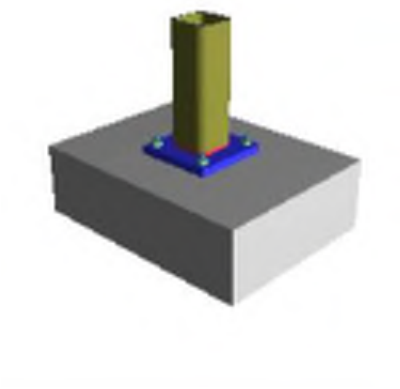
M11 I: 3D View Report



LRFD

M11 I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

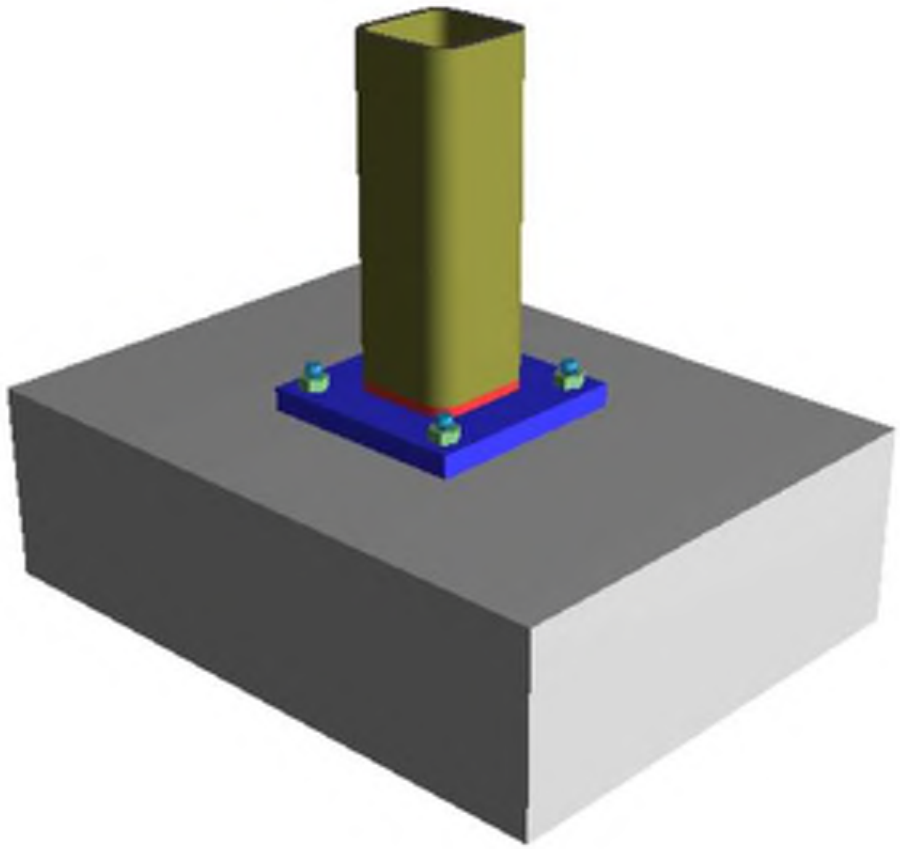
Input Data:		
Axial	8.06 kips	*Axial load on the column*
Strong Axis Shear	-0.30 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	3.31 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	-2.75 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	26.48 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 40 - LC 40: IBC 16-7 (d)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing			**0.03**	**PASS**
Lateral Slip			**1.00**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.05 kips-ft/in	1.95 kips-ft/in	**0.03**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.62 kips-ft/in	1.95 kips-ft/in	**0.32**	**PASS**
Plate Flexural Yielding(Tension)(Weak Axis)	1.65 kips-ft	6.19 kips-ft	**0.27**	**PASS**
Anchor Bolt Tension (Weak Axis)				**N/A**

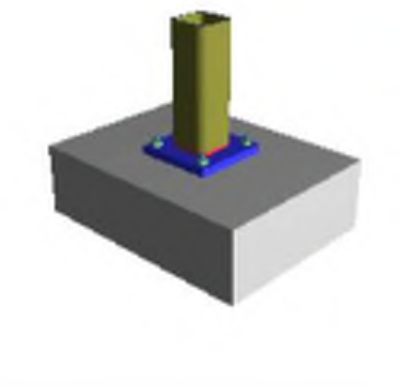
M14 I: 3D View Report



LRFD

M14 I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

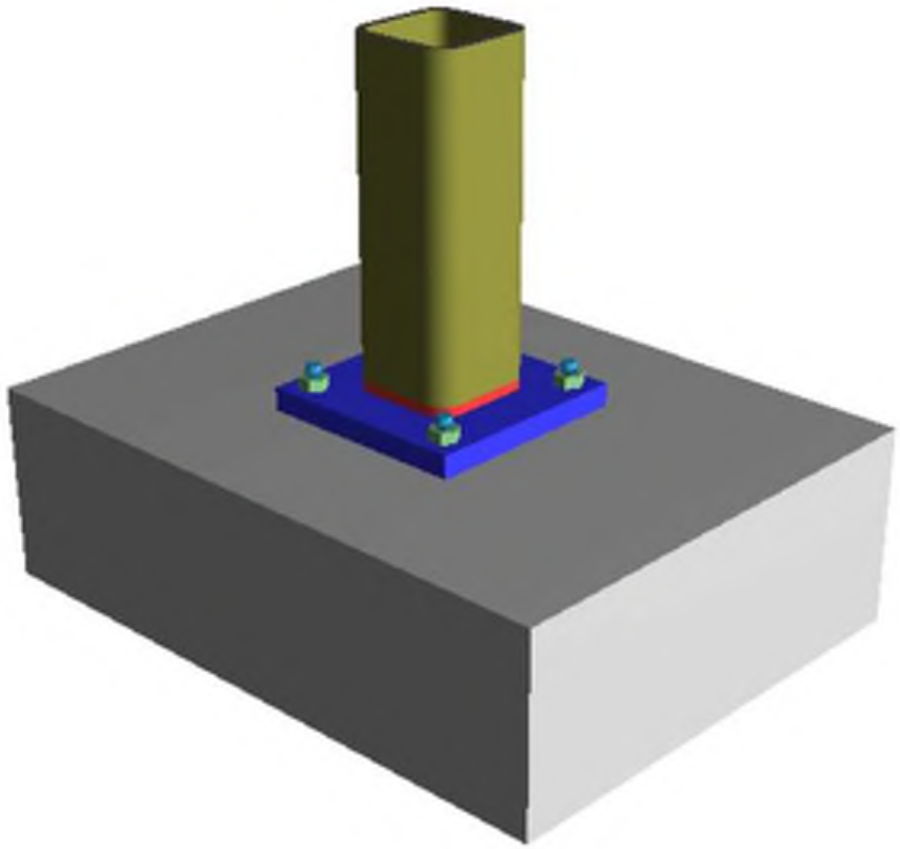
Input Data:		
Axial	7.81 kips	*Axial load on the column*
Strong Axis Shear	-1.11 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	0.35 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	-4.90 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	-1.60 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 19 - LC 19: IBC 16-4 (a) (c)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing			**0.02**	**PASS**
Lateral Slip			**1.00**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.17 kips-ft/in	1.95 kips-ft/in	**0.09**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.03 kips-ft/in	1.95 kips-ft/in	**0.02**	**PASS**
Plate Flexural Yielding(Tension)(Strong Axis)	0.05 kips-ft	6.19 kips-ft	**0.01**	**PASS**
Anchor Bolt Tension (Strong Axis)				**N/A**

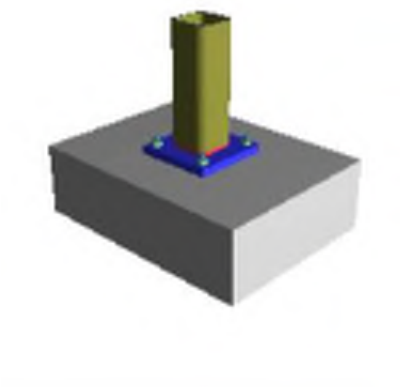
M25 I: 3D View Report



LRFD

M25 I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

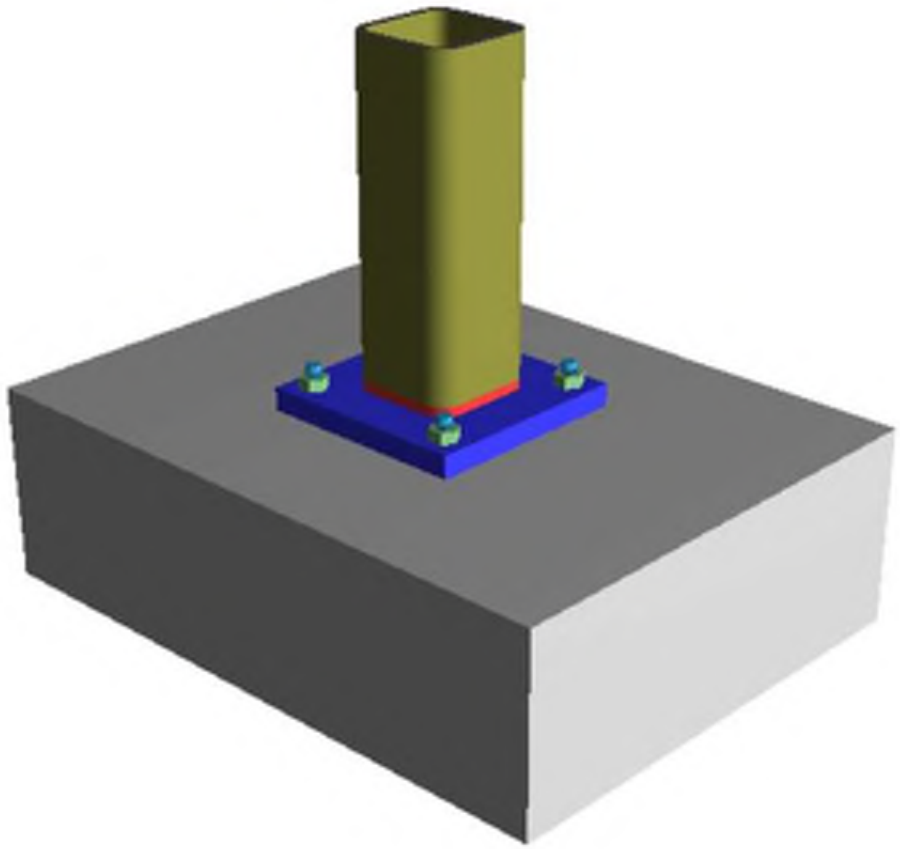
Input Data:		
Axial	7.58 kips	*Axial load on the column*
Strong Axis Shear	-1.15 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-0.37 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	-5.40 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	1.98 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 23 - LC 23: IBC 16-4 (b) (c)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing			**0.02**	**PASS**
Lateral Slip			**0.98**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.18 kips-ft/in	1.95 kips-ft/in	**0.09**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.04 kips-ft/in	1.95 kips-ft/in	**0.02**	**PASS**
Plate Flexural Yielding(Tension)(Strong Axis)	0.10 kips-ft	6.19 kips-ft	**0.02**	**PASS**
Anchor Bolt Tension (Strong Axis)				**N/A**

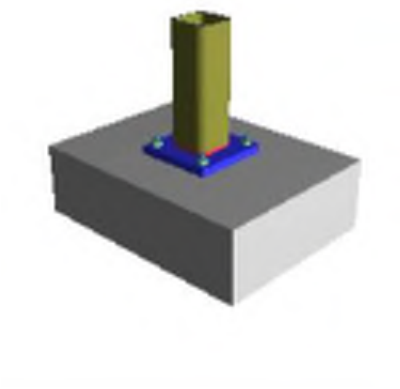
M26 I: 3D View Report



LRFD

M26 I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

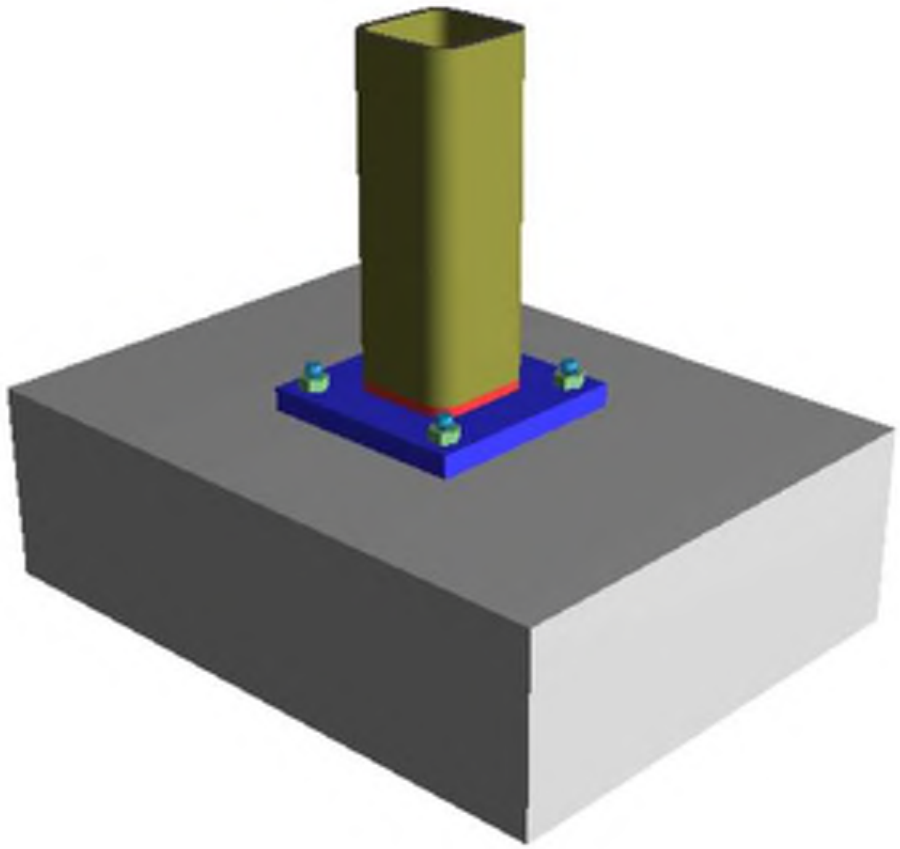
Input Data:		
Axial	0.79 kips	*Axial load on the column*
Strong Axis Shear	-1.54 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.18 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	-12.09 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	-18.04 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 42 - LC 42: IBC 16-7 (f)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing				**PASS**
Lateral Slip			**1.00**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.28 kips-ft/in	1.95 kips-ft/in	**0.14**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.41 kips-ft/in	1.95 kips-ft/in	**0.21**	**PASS**
Plate Flexural Yielding(Tension)(Strong Axis)	0.85 kips-ft	6.19 kips-ft	**0.14**	**PASS**
Plate Flexural Yielding(Tension)(Weak Axis)	1.29 kips-ft	6.19 kips-ft	**0.21**	**PASS**
Anchor Bolt Tension (Strong Axis)				**N/A**
Anchor Bolt Tension (Weak Axis)				**N/A**

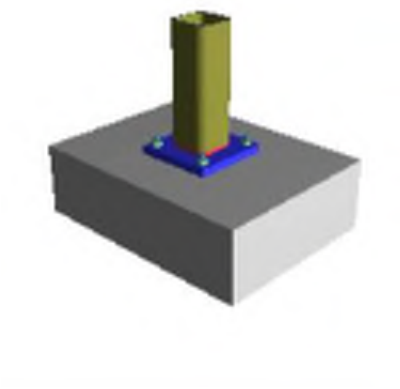
M8A I: 3D View Report



LRFD

M8A I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

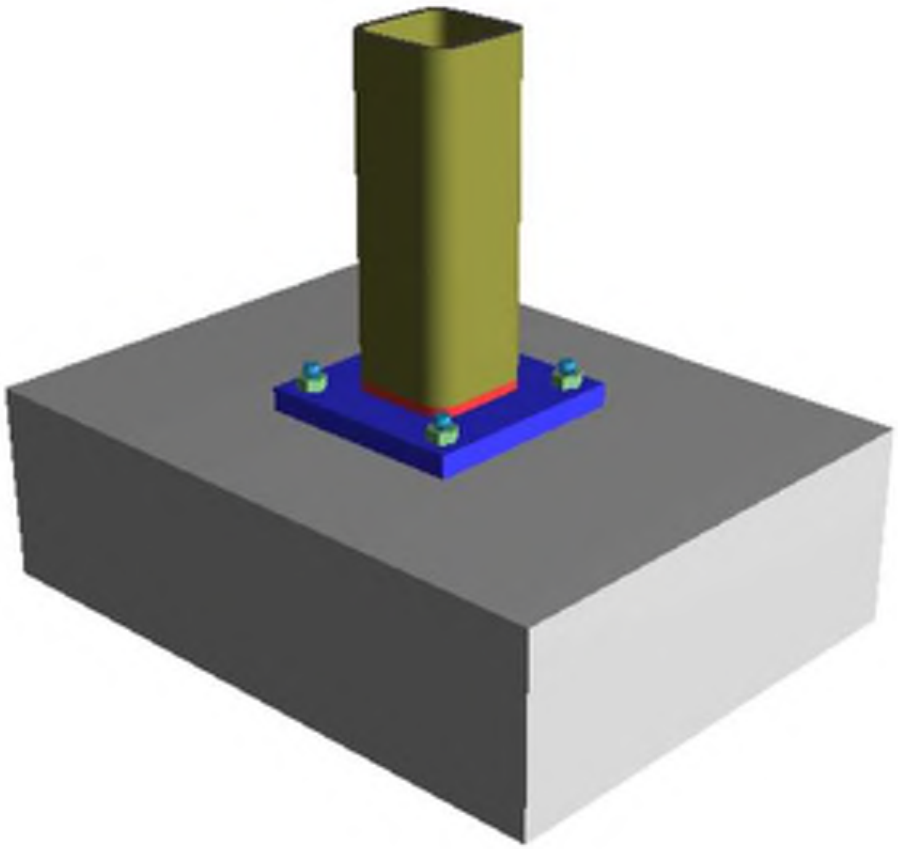
Input Data:		
Axial	5.87 kips	*Axial load on the column*
Strong Axis Shear	-0.35 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-2.38 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	-1.31 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	-17.63 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 70 - LC 70: IBC 16-12 (h)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing			**0.01**	**PASS**
Lateral Slip			**0.99**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.02 kips-ft/in	1.95 kips-ft/in	**0.01**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.43 kips-ft/in	1.95 kips-ft/in	**0.22**	**PASS**
Plate Flexural Yielding(Tension)(Weak Axis)	1.07 kips-ft	6.19 kips-ft	**0.17**	**PASS**
Anchor Bolt Tension (Weak Axis)				**N/A**

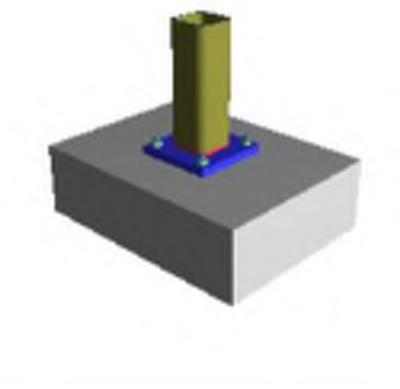
M9 I: 3D View Report



LRFD

M9 I: LRFD Results Report

Single Column Base Plate Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Base Plate	P1.38x13.00x13.00	A572 Gr.55	F_y = 55.00 ksi	F_u = 70.00 ksi

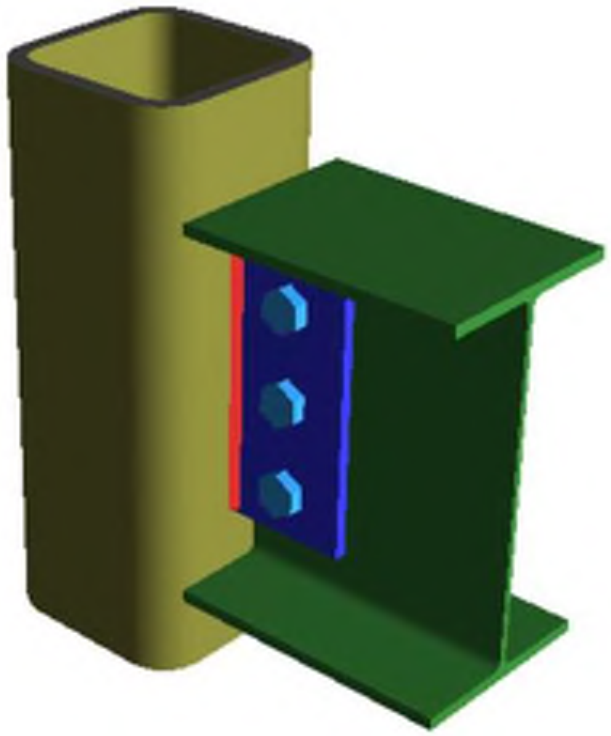
Input Data:		
Axial	8.75 kips	*Axial load on the column*
Strong Axis Shear	-0.57 kips	*Shear load on the column that causes strong axis bending*
Weak Axis Shear	-1.79 kips	*Shear load on the column that causes weak axis bending*
Strong Axis Moment	-2.72 kips-ft	*Column moment about the strong axis*
Weak Axis Moment	9.28 kips-ft	*Column moment about the weak axis*

Governing LC: 3D - 22 - LC 22: IBC 16-4 (b) (b)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions				**PASS**
Load Distribution (Strong Axis)				**n/a**
Load Distribution (Weak Axis)				**n/a**
Concrete Bearing			**0.03**	**PASS**
Lateral Slip			**0.98**	**PASS**
Plate Flexural Yielding(Compression)(Strong Axis)	0.05 kips-ft/in	1.95 kips-ft/in	**0.03**	**PASS**
Plate Flexural Yielding(Compression)(Weak Axis)	0.28 kips-ft/in	1.95 kips-ft/in	**0.14**	**PASS**
Plate Flexural Yielding(Tension)(Weak Axis)	0.34 kips-ft	6.19 kips-ft	**0.05**	**PASS**
Anchor Bolt Tension (Weak Axis)				**N/A**

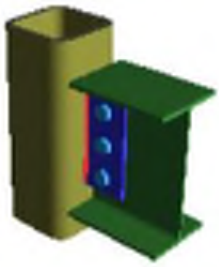
M23 I - M10: 3D View Report



LRFD

M23 I - M10: LRFD Results Report

Column/Beam Shear Tab Shear Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	0.34 kips	*User Input Shear Load*
Axial Load	-1.23 kips	*User Input Axial Force (tension)*
Column Force	0.01 kips	*User Input Column Force*
Column Moment	-22.94 kips-ft	*User Input Column Moment*

Governing LC: 3D - 50 - LC 50*: IBC 16-5 (os-f)

Note: Unless specified, all code references are from AISC 360-16

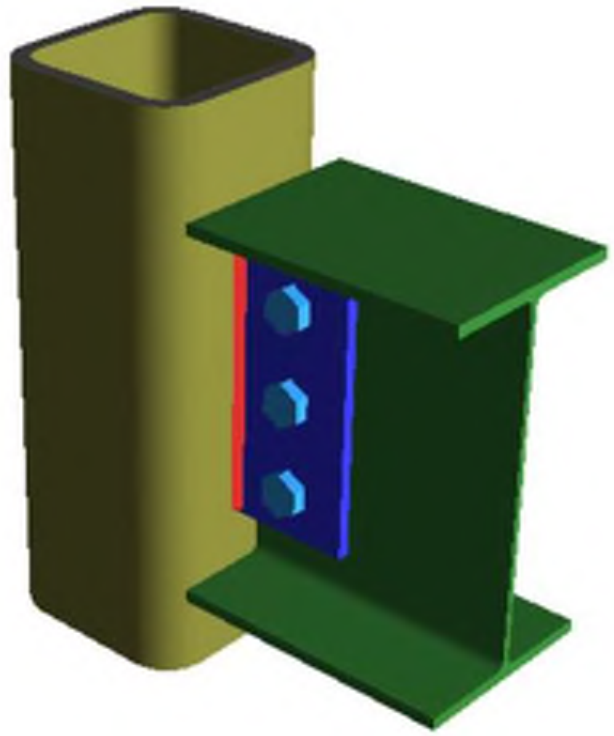
Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Geometry Restrictions at Beam				**PASS**
Column Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	0.34 kips	84.18 kips	**0.00**	**PASS**
Plate Shear Yield	0.34 kips	72.90 kips	**0.00**	**PASS**
Beam Shear Rupture	0.34 kips	64.42 kips	**0.01**	**PASS**
Plate Shear Rupture at Beam	0.34 kips	62.40 kips	**0.01**	**PASS**
Beam Axial Yield	1.23 kips	344.25 kips	**0.00**	**PASS**
Plate Axial Yield	1.23 kips	109.35 kips	**0.01**	**PASS**
Beam Tension Rupture	1.23 kips	118.15 kips	**0.01**	**PASS**
Plate Tension Rupture at Beam	1.23 kips	103.99 kips	**0.01**	**PASS**
Beam Block Shear	0.34 kips	84.14 kips	**0.00**	**PASS**
Plate Block Shear	0.34 kips	71.05 kips	**0.00**	**PASS**
Beam Tearout	1.23 kips	61.95 kips	**0.02**	**PASS**
Plate Tearout on Plate at Beam	1.23 kips	93.63 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	1.28 kips	503.22 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling	0.34 kips	123.02 kips	**0.00**	**PASS**
Bolt Bearing on Beam	1.28 kips	46.46 kips	**0.03**	**PASS**
Bolt Bearing on Plate at Beam	1.28 kips	53.68 kips	**0.02**	**PASS**
Bolt Shear at Beam	1.28 kips	46.11 kips	**0.03**	**PASS**
Bolt Group Eccentricity		***0.86***		

continued on next page...

M23 I - M10: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Weld at Column	2.19 kips/ft	133.63 kips/ft	**0.02**	**PASS**
HSS Punching Shear	0.05 kips-ft	34.12 kips-ft	**0.00**	**PASS**
HSS Column Transverse Plastification	1.23 kips	123.81 kips	**0.01**	**PASS**

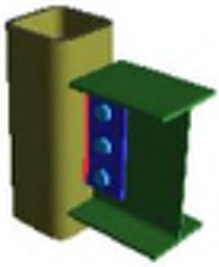
M23 J - M26: 3D View Report



LRFD

M23 J - M26: LRFD Results Report

Column/Beam Shear Tab Shear Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	-0.34 kips	*User Input Shear Load*
Axial Load	-1.23 kips	*User Input Axial Force (tension)*
Column Force	1.12 kips	*User Input Column Force*
Column Moment	-20.86 kips-ft	*User Input Column Moment*

Governing LC: 3D - 50 - LC 50*: IBC 16-5 (os-f)

Note: Unless specified, all code references are from AISC 360-16

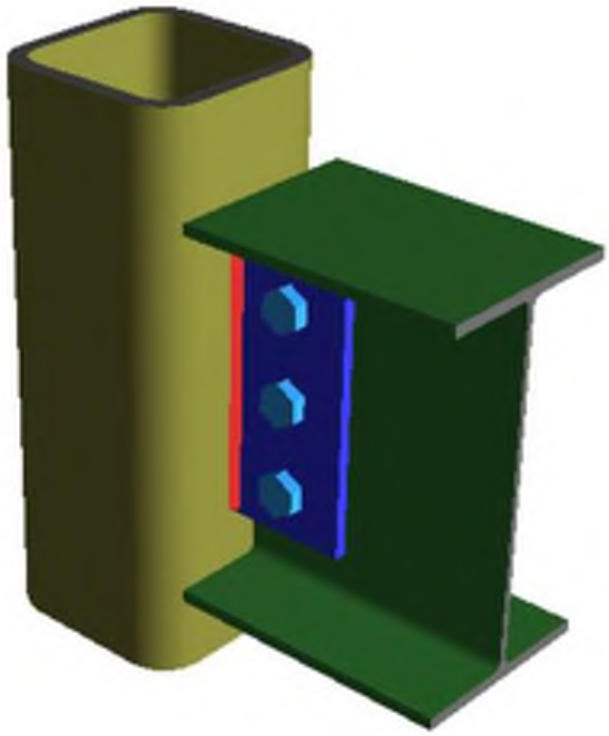
Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Geometry Restrictions at Beam				**PASS**
Column Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	0.34 kips	84.18 kips	**0.00**	**PASS**
Plate Shear Yield	0.34 kips	72.90 kips	**0.00**	**PASS**
Beam Shear Rupture	0.34 kips	64.42 kips	**0.01**	**PASS**
Plate Shear Rupture at Beam	0.34 kips	62.40 kips	**0.01**	**PASS**
Beam Axial Yield	1.23 kips	344.25 kips	**0.00**	**PASS**
Plate Axial Yield	1.23 kips	109.35 kips	**0.01**	**PASS**
Beam Tension Rupture	1.23 kips	118.15 kips	**0.01**	**PASS**
Plate Tension Rupture at Beam	1.23 kips	103.99 kips	**0.01**	**PASS**
Beam Block Shear	0.34 kips	85.17 kips	**0.00**	**PASS**
Plate Block Shear	0.34 kips	71.05 kips	**0.00**	**PASS**
Beam Tearout	1.23 kips	61.95 kips	**0.02**	**PASS**
Plate Tearout on Plate at Beam	1.23 kips	93.63 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	1.28 kips	503.22 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling	0.34 kips	123.02 kips	**0.00**	**PASS**
Bolt Bearing on Beam	1.28 kips	46.46 kips	**0.03**	**PASS**
Bolt Bearing on Plate at Beam	1.28 kips	53.68 kips	**0.02**	**PASS**
Bolt Shear at Beam	1.28 kips	46.11 kips	**0.03**	**PASS**
Bolt Group Eccentricity		***0.86***		

continued on next page...

M23 J - M26: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Weld at Column	2.40 kips/ft	133.63 kips/ft	**0.02**	**PASS**
HSS Punching Shear	0.07 kips-ft	34.12 kips-ft	**0.00**	**PASS**
HSS Column Transverse Plastification	1.23 kips	124.77 kips	**0.01**	**PASS**

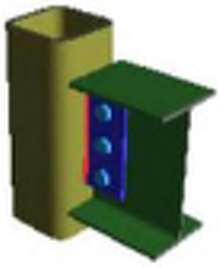
M7A I - M10: 3D View Report



LRFD

M7A I - M10: LRFD Results Report

Column/Beam Shear Tab Shear Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	2.08 kips	*User Input Shear Load*
Axial Load	1.29 kips	*User Input Axial Force (compression)*
Column Force	10.92 kips	*User Input Column Force*
Column Moment	-42.59 kips-ft	*User Input Column Moment*

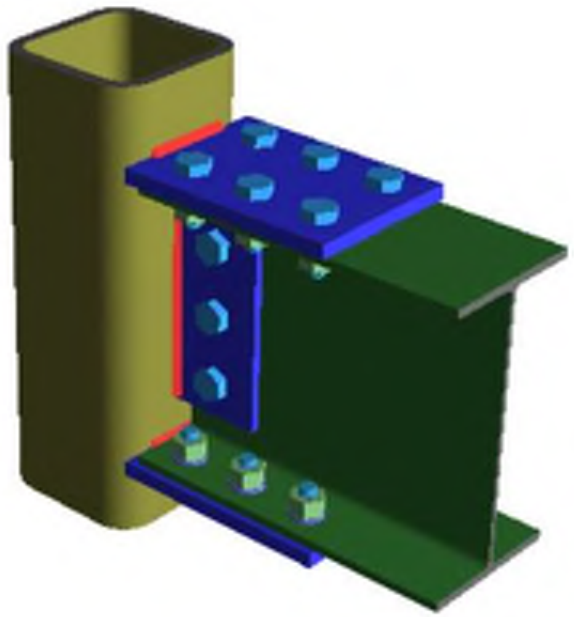
Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
HSS Limitations				**PASS**
Geometry Restrictions at Beam				**PASS**
Column Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	2.08 kips	84.18 kips	**0.02**	**PASS**
Plate Shear Yield	2.08 kips	72.90 kips	**0.03**	**PASS**
Beam Shear Rupture	2.08 kips	64.42 kips	**0.03**	**PASS**
Plate Shear Rupture at Beam	2.08 kips	62.40 kips	**0.03**	**PASS**
Beam Axial Yield	1.29 kips	344.25 kips	**0.00**	**PASS**
Plate Axial Yield	1.29 kips	109.35 kips	**0.01**	**PASS**
Beam Block Shear	2.08 kips	84.14 kips	**0.02**	**PASS**
Plate Block Shear	2.08 kips	71.05 kips	**0.03**	**PASS**
Compression Buckling of the Plate	1.29 kips	109.35 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	2.45 kips	503.22 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling			**0.03**	**PASS**
Bolt Bearing on Beam	2.45 kips	53.68 kips	**0.05**	**PASS**
Bolt Bearing on Plate at Beam	2.45 kips	53.68 kips	**0.05**	**PASS**
Bolt Shear at Beam	2.45 kips	39.86 kips	**0.06**	**PASS**
Bolt Group Eccentricity		***0.74***		
Weld at Column	3.48 kips/ft	133.63 kips/ft	**0.03**	**PASS**
HSS Punching Shear	0.36 kips-ft	34.12 kips-ft	**0.01**	**PASS**
HSS Column Transverse Plastification	1.29 kips	111.42 kips	**0.01**	**PASS**

M1 I - M8A: 3D View Report

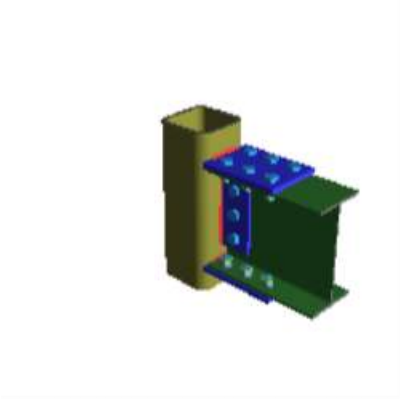
Column/Beam Flange Plate Moment Connection



LRFD

M1 I - M8A: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	6.20 kips	*User Input Shear Load*
Moment	41.34 kips-ft	*User Input Moment*
Axial Load	2.19 kips	*User Input Axial Force (compression)*
Puf_c	39.78 kips	*Required Flange Force (compression)*
Puf_t	37.59 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	14.74 kips	*User Input Column Force*
Story Shear	4.65 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

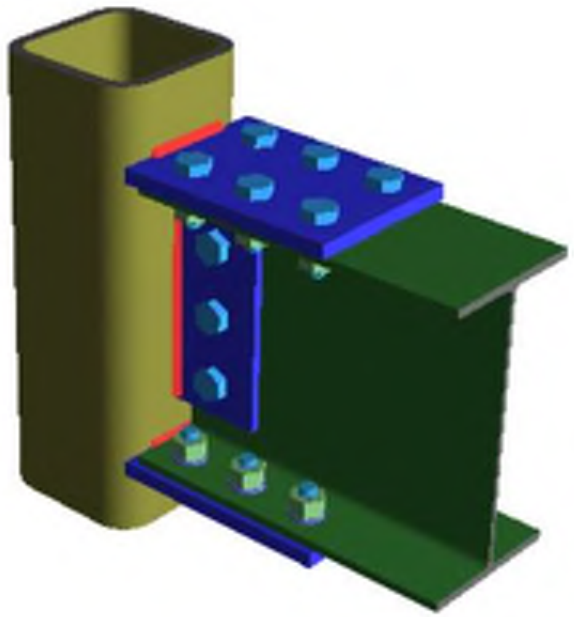
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	6.20 kips	100.22 kips	**0.06**	**PASS**
Beam Web Shear Yield	6.20 kips	84.18 kips	**0.07**	**PASS**
Vert. Plate Shear Yield	6.20 kips	72.90 kips	**0.09**	**PASS**
Beam Web Shear Rupture	6.20 kips	64.42 kips	**0.10**	**PASS**
Vert. Plate Shear Rupture	6.20 kips	62.40 kips	**0.10**	**PASS**
Beam Web Block Shear	6.20 kips	84.14 kips	**0.07**	**PASS**
Vert. Plate Block Shear	6.20 kips	71.05 kips	**0.09**	**PASS**
Bolt Shear at Beam Web	6.20 kips	53.68 kips	**0.12**	**PASS**
Bolt Bearing at Beam Web	6.20 kips	53.68 kips	**0.12**	**PASS**
Bolt Bearing at Vert. Plate	6.20 kips	53.68 kips	**0.12**	**PASS**
Bolt Shear at Flange Plate	41.76 kips	107.35 kips	**0.39**	**PASS**
Bolt Bearing at Beam Flange	43.07 kips	107.35 kips	**0.40**	**PASS**
Bolt Bearing at Flange Plate	39.78 kips	107.35 kips	**0.37**	**PASS**
Beam Flange Block Shear	40.88 kips	152.65 kips	**0.27**	**PASS**
Flange Plate Block Shear	37.59 kips	216.45 kips	**0.17**	**PASS**
Flange Plate Tearout	37.59 kips	230.04 kips	**0.16**	**PASS**

continued on next page...

M1 I - M8A: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	37.59 kips	87.46 kips	**0.43**	**PASS**
Flange Plate Tensile Yield	37.59 kips	141.75 kips	**0.27**	**PASS**
Beam Flexural Rupture	41.34 kips-ft	119.07 kips-ft	**0.35**	**PASS**
Flange Plate Tensile Rupture	37.59 kips	142.73 kips	**0.26**	**PASS**
Flange Plate Compression	39.78 kips	141.75 kips	**0.28**	**PASS**
HSS Local Plate Yielding of Moment Plates	39.78 kips	141.75 kips	**0.28**	**PASS**
HSS Column Punching Shear	39.78 kips	167.81 kips	**0.24**	**PASS**
HSS Sidewall Yielding	39.78 kips	162.90 kips	**0.24**	**PASS**
HSS Sidewall Crippling	39.78 kips	309.21 kips	**0.13**	**PASS**
HSS Column Transverse Plastification	39.78 kips	169.51 kips	**0.23**	**PASS**

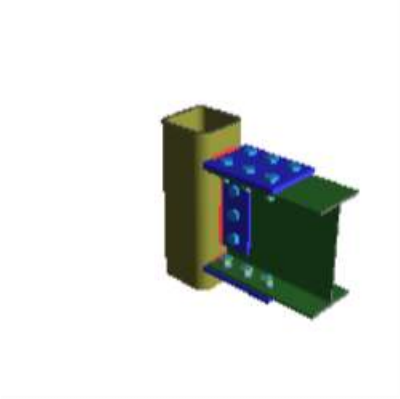
M1 J - M10: 3D View Report



LRFD

M1 J - M10: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	-0.03 kips	*User Input Shear Load*
Moment	42.17 kips-ft	*User Input Moment*
Axial Load	2.23 kips	*User Input Axial Force (compression)*
Puf_c	40.57 kips	*Required Flange Force (compression)*
Puf_t	38.34 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	9.69 kips	*User Input Column Force*
Story Shear	5.75 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	0.03 kips	100.22 kips	**0.00**	**PASS**
Beam Web Shear Yield	0.03 kips	84.18 kips	**0.00**	**PASS**
Vert. Plate Shear Yield	0.03 kips	72.90 kips	**0.00**	**PASS**
Beam Web Shear Rupture	0.03 kips	64.42 kips	**0.00**	**PASS**
Vert. Plate Shear Rupture	0.03 kips	62.40 kips	**0.00**	**PASS**
Beam Web Block Shear	0.03 kips	85.17 kips	**0.00**	**PASS**
Vert. Plate Block Shear	0.03 kips	71.05 kips	**0.00**	**PASS**
Bolt Shear at Beam Web	0.03 kips	53.68 kips	**0.00**	**PASS**
Bolt Bearing at Beam Web	0.03 kips	53.68 kips	**0.00**	**PASS**
Bolt Bearing at Vert. Plate	0.03 kips	53.68 kips	**0.00**	**PASS**
Bolt Shear at Flange Plate	42.59 kips	107.35 kips	**0.40**	**PASS**
Bolt Bearing at Beam Flange	43.93 kips	107.35 kips	**0.41**	**PASS**
Bolt Bearing at Flange Plate	40.57 kips	107.35 kips	**0.38**	**PASS**
Beam Flange Block Shear	41.70 kips	152.65 kips	**0.27**	**PASS**
Flange Plate Block Shear	38.34 kips	216.45 kips	**0.18**	**PASS**
Flange Plate Tearout	38.34 kips	230.04 kips	**0.17**	**PASS**

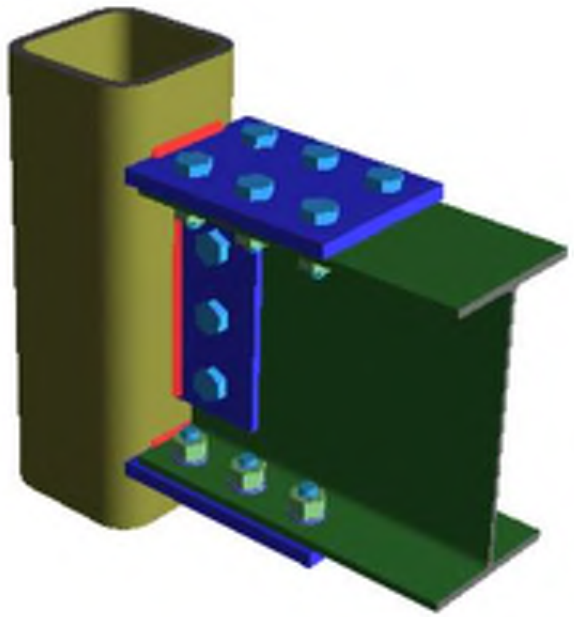
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M1 J - M10: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	38.34 kips	87.46 kips	**0.44**	**PASS**
Flange Plate Tensile Yield	38.34 kips	141.75 kips	**0.27**	**PASS**
Beam Flexural Rupture	42.17 kips-ft	119.07 kips-ft	**0.35**	**PASS**
Flange Plate Tensile Rupture	38.34 kips	142.73 kips	**0.27**	**PASS**
Flange Plate Compression	40.57 kips	141.75 kips	**0.29**	**PASS**
HSS Local Plate Yielding of Moment Plates	40.57 kips	141.75 kips	**0.29**	**PASS**
HSS Column Punching Shear	40.57 kips	167.81 kips	**0.24**	**PASS**
HSS Sidewall Yielding	40.57 kips	162.90 kips	**0.25**	**PASS**
HSS Sidewall Crippling	40.57 kips	309.21 kips	**0.13**	**PASS**
HSS Column Transverse Plastification	40.57 kips	169.51 kips	**0.24**	**PASS**

M27 I - M26: 3D View Report

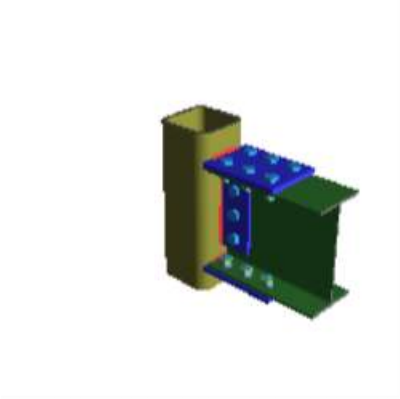
Column/Beam Flange Plate Moment Connection



LRFD

M27 I - M26: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	7.90 kips	*User Input Shear Load*
Moment	38.82 kips-ft	*User Input Moment*
Axial Load	1.53 kips	*User Input Axial Force (compression)*
Puf_c	37.09 kips	*Required Flange Force (compression)*
Puf_t	35.56 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	10.80 kips	*User Input Column Force*
Story Shear	5.40 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

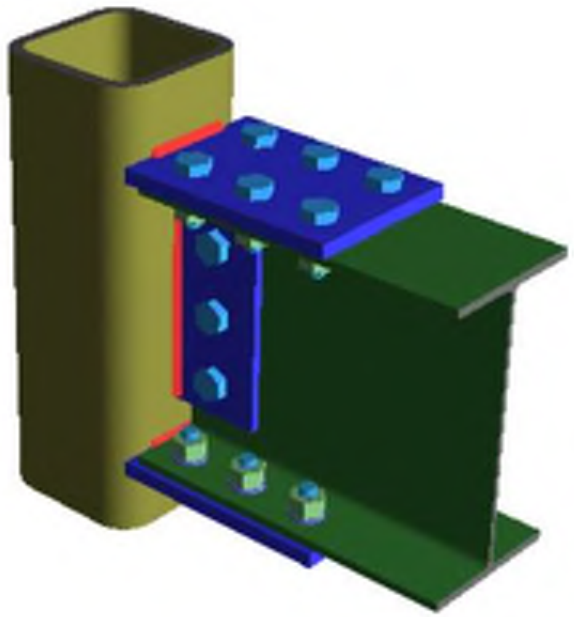
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	7.90 kips	100.22 kips	**0.08**	**PASS**
Beam Web Shear Yield	7.90 kips	84.18 kips	**0.09**	**PASS**
Vert. Plate Shear Yield	7.90 kips	72.90 kips	**0.11**	**PASS**
Beam Web Shear Rupture	7.90 kips	64.42 kips	**0.12**	**PASS**
Vert. Plate Shear Rupture	7.90 kips	62.40 kips	**0.13**	**PASS**
Beam Web Block Shear	7.90 kips	84.14 kips	**0.09**	**PASS**
Vert. Plate Block Shear	7.90 kips	71.05 kips	**0.11**	**PASS**
Bolt Shear at Beam Web	7.90 kips	53.68 kips	**0.15**	**PASS**
Bolt Bearing at Beam Web	7.90 kips	53.68 kips	**0.15**	**PASS**
Bolt Bearing at Vert. Plate	7.90 kips	53.68 kips	**0.15**	**PASS**
Bolt Shear at Flange Plate	38.96 kips	107.35 kips	**0.36**	**PASS**
Bolt Bearing at Beam Flange	40.18 kips	107.35 kips	**0.37**	**PASS**
Bolt Bearing at Flange Plate	37.09 kips	107.35 kips	**0.35**	**PASS**
Beam Flange Block Shear	38.65 kips	152.65 kips	**0.25**	**PASS**
Flange Plate Block Shear	35.56 kips	216.45 kips	**0.16**	**PASS**
Flange Plate Tearout	35.56 kips	230.04 kips	**0.15**	**PASS**

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M27 I - M26: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	35.56 kips	87.46 kips	**0.41**	**PASS**
Flange Plate Tensile Yield	35.56 kips	141.75 kips	**0.25**	**PASS**
Beam Flexural Rupture	38.82 kips-ft	119.07 kips-ft	**0.33**	**PASS**
Flange Plate Tensile Rupture	35.56 kips	142.73 kips	**0.25**	**PASS**
Flange Plate Compression	37.09 kips	141.75 kips	**0.26**	**PASS**
HSS Local Plate Yielding of Moment Plates	37.09 kips	141.75 kips	**0.26**	**PASS**
HSS Column Punching Shear	37.09 kips	167.81 kips	**0.22**	**PASS**
HSS Sidewall Yielding	37.09 kips	162.90 kips	**0.23**	**PASS**
HSS Sidewall Crippling	37.09 kips	309.21 kips	**0.12**	**PASS**
HSS Column Transverse Plastification	37.09 kips	169.51 kips	**0.22**	**PASS**

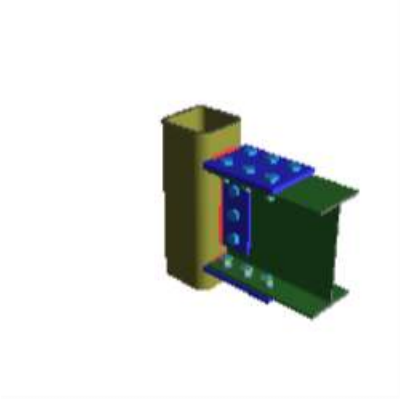
M27 J - M25: 3D View Report



LRFD

M27 J - M25: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	4.61 kips	*User Input Shear Load*
Moment	35.58 kips-ft	*User Input Moment*
Axial Load	0.52 kips	*User Input Axial Force (compression)*
Puf_c	33.55 kips	*Required Flange Force (compression)*
Puf_t	33.03 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	14.31 kips	*User Input Column Force*
Story Shear	5.22 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

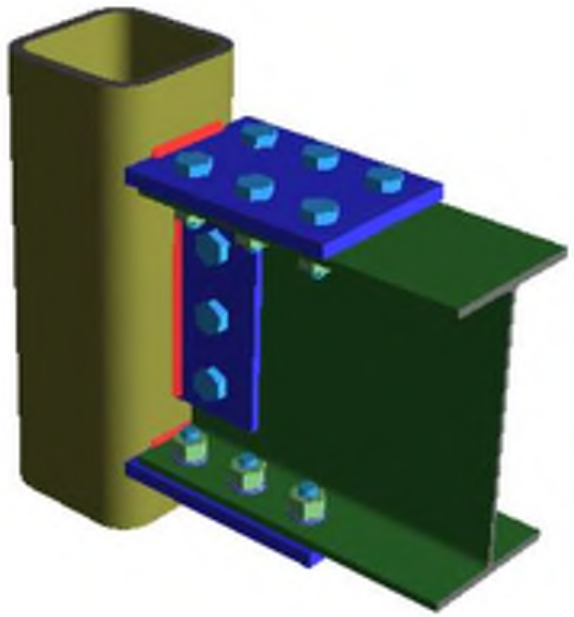
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	4.61 kips	100.22 kips	**0.05**	**PASS**
Beam Web Shear Yield	4.61 kips	84.18 kips	**0.05**	**PASS**
Vert. Plate Shear Yield	4.61 kips	72.90 kips	**0.06**	**PASS**
Beam Web Shear Rupture	4.61 kips	64.42 kips	**0.07**	**PASS**
Vert. Plate Shear Rupture	4.61 kips	62.40 kips	**0.07**	**PASS**
Beam Web Block Shear	4.61 kips	84.14 kips	**0.05**	**PASS**
Vert. Plate Block Shear	4.61 kips	71.05 kips	**0.06**	**PASS**
Bolt Shear at Beam Web	4.61 kips	53.68 kips	**0.09**	**PASS**
Bolt Bearing at Beam Web	4.61 kips	53.68 kips	**0.09**	**PASS**
Bolt Bearing at Vert. Plate	4.61 kips	53.68 kips	**0.09**	**PASS**
Bolt Shear at Flange Plate	35.26 kips	107.35 kips	**0.33**	**PASS**
Bolt Bearing at Beam Flange	36.38 kips	107.35 kips	**0.34**	**PASS**
Bolt Bearing at Flange Plate	33.55 kips	107.35 kips	**0.31**	**PASS**
Beam Flange Block Shear	35.86 kips	152.65 kips	**0.23**	**PASS**
Flange Plate Block Shear	33.03 kips	216.45 kips	**0.15**	**PASS**
Flange Plate Tearout	33.03 kips	230.04 kips	**0.14**	**PASS**

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M27 J - M25: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	33.03 kips	87.46 kips	**0.38**	**PASS**
Flange Plate Tensile Yield	33.03 kips	141.75 kips	**0.23**	**PASS**
Beam Flexural Rupture	35.58 kips-ft	119.07 kips-ft	**0.30**	**PASS**
Flange Plate Tensile Rupture	33.03 kips	142.73 kips	**0.23**	**PASS**
Flange Plate Compression	33.55 kips	141.75 kips	**0.24**	**PASS**
HSS Local Plate Yielding of Moment Plates	33.55 kips	141.75 kips	**0.24**	**PASS**
HSS Column Punching Shear	33.55 kips	167.81 kips	**0.20**	**PASS**
HSS Sidewall Yielding	33.55 kips	162.90 kips	**0.21**	**PASS**
HSS Sidewall Crippling	33.55 kips	309.21 kips	**0.11**	**PASS**
HSS Column Transverse Plastification	33.55 kips	169.51 kips	**0.20**	**PASS**

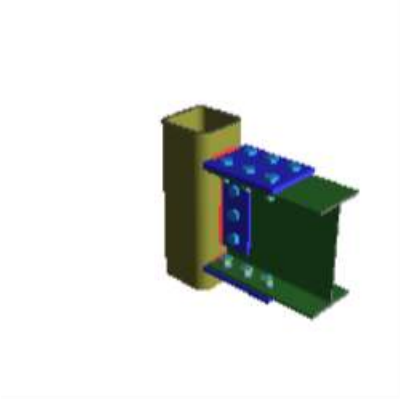
M4 I - M9: 3D View Report



LRFD

M4 I - M9: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	6.37 kips	*User Input Shear Load*
Moment	47.06 kips-ft	*User Input Moment*
Axial Load	1.79 kips	*User Input Axial Force (compression)*
Puf_c	44.93 kips	*Required Flange Force (compression)*
Puf_t	43.14 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	14.13 kips	*User Input Column Force*
Story Shear	6.06 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

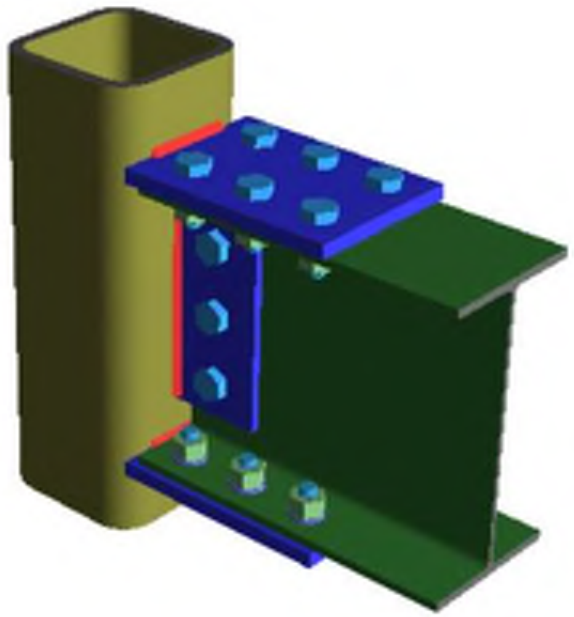
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	6.37 kips	100.22 kips	**0.06**	**PASS**
Beam Web Shear Yield	6.37 kips	84.18 kips	**0.08**	**PASS**
Vert. Plate Shear Yield	6.37 kips	72.90 kips	**0.09**	**PASS**
Beam Web Shear Rupture	6.37 kips	64.42 kips	**0.10**	**PASS**
Vert. Plate Shear Rupture	6.37 kips	62.40 kips	**0.10**	**PASS**
Beam Web Block Shear	6.37 kips	84.14 kips	**0.08**	**PASS**
Vert. Plate Block Shear	6.37 kips	71.05 kips	**0.09**	**PASS**
Bolt Shear at Beam Web	6.37 kips	53.68 kips	**0.12**	**PASS**
Bolt Bearing at Beam Web	6.37 kips	53.68 kips	**0.12**	**PASS**
Bolt Bearing at Vert. Plate	6.37 kips	53.68 kips	**0.12**	**PASS**
Bolt Shear at Flange Plate	47.19 kips	107.35 kips	**0.44**	**PASS**
Bolt Bearing at Beam Flange	48.68 kips	107.35 kips	**0.45**	**PASS**
Bolt Bearing at Flange Plate	44.93 kips	107.35 kips	**0.42**	**PASS**
Beam Flange Block Shear	46.88 kips	152.65 kips	**0.31**	**PASS**
Flange Plate Block Shear	43.14 kips	216.45 kips	**0.20**	**PASS**
Flange Plate Tearout	43.14 kips	230.04 kips	**0.19**	**PASS**

continued on next page...

M4 I - M9: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	43.14 kips	87.46 kips	**0.49**	**PASS**
Flange Plate Tensile Yield	43.14 kips	141.75 kips	**0.30**	**PASS**
Beam Flexural Rupture	47.06 kips-ft	119.07 kips-ft	**0.40**	**PASS**
Flange Plate Tensile Rupture	43.14 kips	142.73 kips	**0.30**	**PASS**
Flange Plate Compression	44.93 kips	141.75 kips	**0.32**	**PASS**
HSS Local Plate Yielding of Moment Plates	44.93 kips	141.75 kips	**0.32**	**PASS**
HSS Column Punching Shear	44.93 kips	167.81 kips	**0.27**	**PASS**
HSS Sidewall Yielding	44.93 kips	162.90 kips	**0.28**	**PASS**
HSS Sidewall Crippling	44.93 kips	309.21 kips	**0.15**	**PASS**
HSS Column Transverse Plastification	44.93 kips	169.51 kips	**0.27**	**PASS**

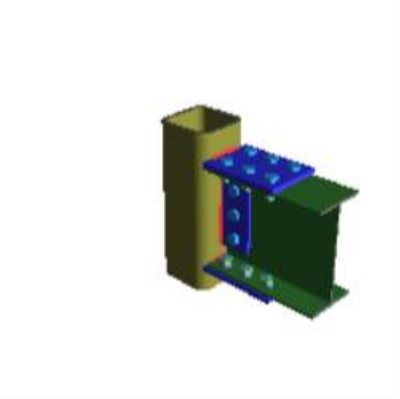
M4 J - M11: 3D View Report



LRFD

M4 J - M11: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	-1.61 kips	*User Input Shear Load*
Moment	44.19 kips-ft	*User Input Moment*
Axial Load	5.74 kips	*User Input Axial Force (compression)*
Puf_c	44.22 kips	*Required Flange Force (compression)*
Puf_t	38.48 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	16.40 kips	*User Input Column Force*
Story Shear	8.48 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	1.61 kips	100.22 kips	**0.02**	**PASS**
Beam Web Shear Yield	1.61 kips	84.18 kips	**0.02**	**PASS**
Vert. Plate Shear Yield	1.61 kips	72.90 kips	**0.02**	**PASS**
Beam Web Shear Rupture	1.61 kips	64.42 kips	**0.02**	**PASS**
Vert. Plate Shear Rupture	1.61 kips	62.40 kips	**0.03**	**PASS**
Beam Web Block Shear	1.61 kips	85.17 kips	**0.02**	**PASS**
Vert. Plate Block Shear	1.61 kips	71.05 kips	**0.02**	**PASS**
Bolt Shear at Beam Web	1.61 kips	53.68 kips	**0.03**	**PASS**
Bolt Bearing at Beam Web	1.61 kips	53.68 kips	**0.03**	**PASS**
Bolt Bearing at Vert. Plate	1.61 kips	53.68 kips	**0.03**	**PASS**
Bolt Shear at Flange Plate	46.34 kips	107.35 kips	**0.43**	**PASS**
Bolt Bearing at Beam Flange	47.74 kips	107.35 kips	**0.44**	**PASS**
Bolt Bearing at Flange Plate	44.22 kips	107.35 kips	**0.41**	**PASS**
Beam Flange Block Shear	42.00 kips	152.65 kips	**0.28**	**PASS**
Flange Plate Block Shear	38.48 kips	216.45 kips	**0.18**	**PASS**
Flange Plate Tearout	38.48 kips	230.04 kips	**0.17**	**PASS**

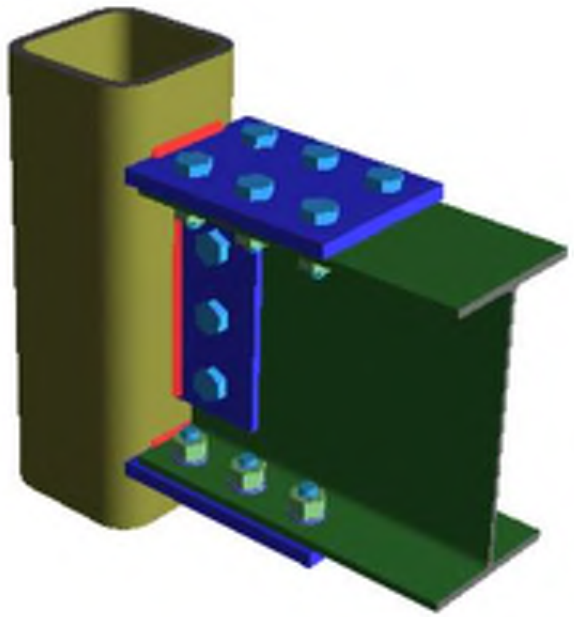
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M4 J - M11: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	38.48 kips	87.46 kips	**0.44**	**PASS**
Flange Plate Tensile Yield	38.48 kips	141.75 kips	**0.27**	**PASS**
Beam Flexural Rupture	44.19 kips-ft	119.07 kips-ft	**0.37**	**PASS**
Flange Plate Tensile Rupture	38.48 kips	142.73 kips	**0.27**	**PASS**
Flange Plate Compression	44.22 kips	141.75 kips	**0.31**	**PASS**
HSS Local Plate Yielding of Moment Plates	44.22 kips	141.75 kips	**0.31**	**PASS**
HSS Column Punching Shear	44.22 kips	167.81 kips	**0.26**	**PASS**
HSS Sidewall Yielding	44.22 kips	162.90 kips	**0.27**	**PASS**
HSS Sidewall Crippling	44.22 kips	309.21 kips	**0.14**	**PASS**
HSS Column Transverse Plastification	44.22 kips	169.51 kips	**0.26**	**PASS**

M5 I - M11: 3D View Report

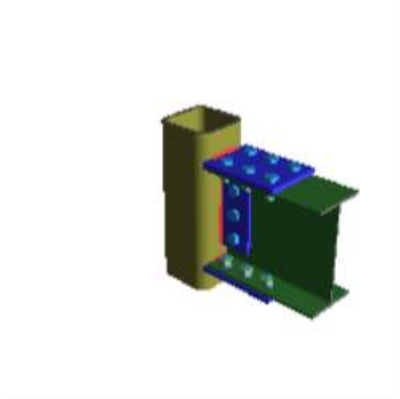
Column/Beam Flange Plate Moment Connection



M5 I - M11: LRFD Results Report

LRFD

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	9.69 kips	*User Input Shear Load*
Moment	47.69 kips-ft	*User Input Moment*
Axial Load	0.44 kips	*User Input Axial Force (compression)*
Puf_c	44.62 kips	*Required Flange Force (compression)*
Puf_t	44.62 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	16.40 kips	*User Input Column Force*
Story Shear	8.48 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

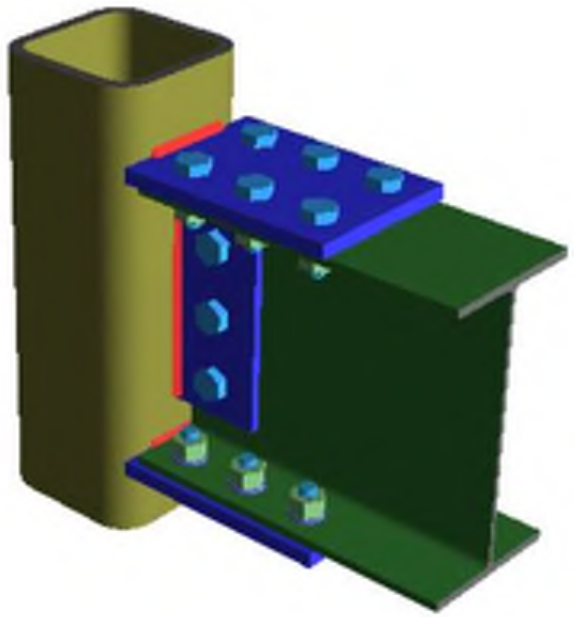
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	9.69 kips	100.22 kips	**0.10**	**PASS**
Beam Web Shear Yield	9.69 kips	84.18 kips	**0.12**	**PASS**
Vert. Plate Shear Yield	9.69 kips	72.90 kips	**0.13**	**PASS**
Beam Web Shear Rupture	9.69 kips	64.42 kips	**0.15**	**PASS**
Vert. Plate Shear Rupture	9.69 kips	62.40 kips	**0.16**	**PASS**
Beam Web Block Shear	9.69 kips	84.14 kips	**0.12**	**PASS**
Vert. Plate Block Shear	9.69 kips	71.05 kips	**0.14**	**PASS**
Bolt Shear at Beam Web	9.69 kips	53.68 kips	**0.18**	**PASS**
Bolt Bearing at Beam Web	9.69 kips	53.68 kips	**0.18**	**PASS**
Bolt Bearing at Vert. Plate	9.69 kips	53.68 kips	**0.18**	**PASS**
Bolt Shear at Flange Plate	46.91 kips	107.35 kips	**0.44**	**PASS**
Bolt Bearing at Beam Flange	48.42 kips	107.35 kips	**0.45**	**PASS**
Bolt Bearing at Flange Plate	44.62 kips	107.35 kips	**0.42**	**PASS**
Beam Flange Block Shear	48.42 kips	152.65 kips	**0.32**	**PASS**
Flange Plate Block Shear	44.62 kips	216.45 kips	**0.21**	**PASS**
Flange Plate Tearout	44.62 kips	230.04 kips	**0.19**	**PASS**

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M5 I - M11: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	44.62 kips	87.46 kips	**0.51**	**PASS**
Flange Plate Tensile Yield	44.62 kips	141.75 kips	**0.31**	**PASS**
Beam Flexural Rupture	47.69 kips-ft	119.07 kips-ft	**0.40**	**PASS**
Flange Plate Tensile Rupture	44.62 kips	142.73 kips	**0.31**	**PASS**
Flange Plate Compression	44.62 kips	141.75 kips	**0.31**	**PASS**
HSS Local Plate Yielding of Moment Plates	44.62 kips	141.75 kips	**0.31**	**PASS**
HSS Column Punching Shear	44.62 kips	167.81 kips	**0.27**	**PASS**
HSS Sidewall Yielding	44.62 kips	162.90 kips	**0.27**	**PASS**
HSS Sidewall Crippling	44.62 kips	309.21 kips	**0.14**	**PASS**
HSS Column Transverse Plastification	44.62 kips	169.51 kips	**0.26**	**PASS**

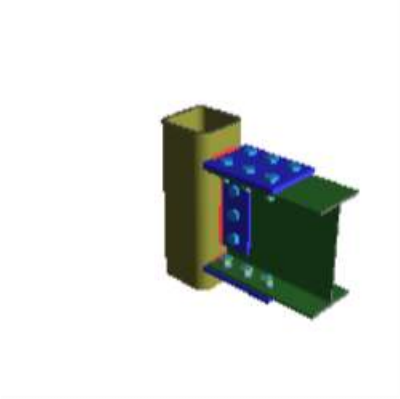
M5 J - M14: 3D View Report



LRFD

M5 J - M14: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	5.42 kips	*User Input Shear Load*
Moment	48.09 kips-ft	*User Input Moment*
Axial Load	1.96 kips	*User Input Axial Force (compression)*
Puf_c	45.98 kips	*Required Flange Force (compression)*
Puf_t	44.02 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	13.85 kips	*User Input Column Force*
Story Shear	7.26 kips	*User Input Story Shear*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	5.42 kips	100.22 kips	**0.05**	**PASS**
Beam Web Shear Yield	5.42 kips	84.18 kips	**0.06**	**PASS**
Vert. Plate Shear Yield	5.42 kips	72.90 kips	**0.07**	**PASS**
Beam Web Shear Rupture	5.42 kips	64.42 kips	**0.08**	**PASS**
Vert. Plate Shear Rupture	5.42 kips	62.40 kips	**0.09**	**PASS**
Beam Web Block Shear	5.42 kips	84.14 kips	**0.06**	**PASS**
Vert. Plate Block Shear	5.42 kips	71.05 kips	**0.08**	**PASS**
Bolt Shear at Beam Web	5.42 kips	53.68 kips	**0.10**	**PASS**
Bolt Bearing at Beam Web	5.42 kips	53.68 kips	**0.10**	**PASS**
Bolt Bearing at Vert. Plate	5.42 kips	53.68 kips	**0.10**	**PASS**
Bolt Shear at Flange Plate	48.29 kips	107.35 kips	**0.45**	**PASS**
Bolt Bearing at Beam Flange	49.81 kips	107.35 kips	**0.46**	**PASS**
Bolt Bearing at Flange Plate	45.98 kips	107.35 kips	**0.43**	**PASS**
Beam Flange Block Shear	47.84 kips	152.65 kips	**0.31**	**PASS**
Flange Plate Block Shear	44.02 kips	216.45 kips	**0.20**	**PASS**
Flange Plate Tearout	44.02 kips	230.04 kips	**0.19**	**PASS**

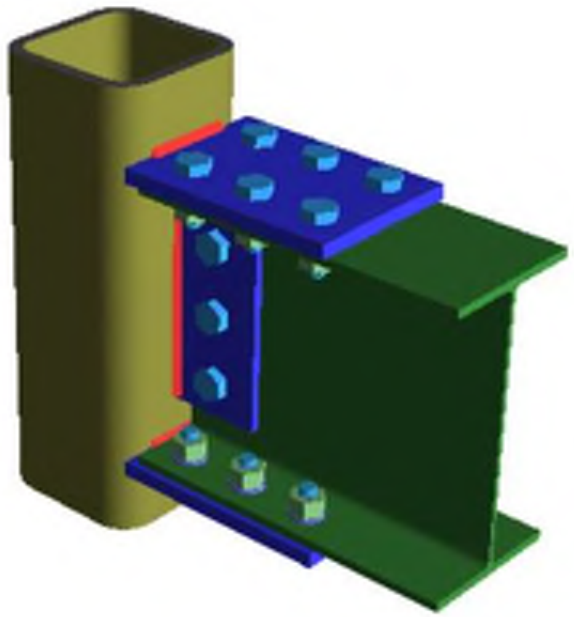
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M5 J - M14: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	44.02 kips	87.46 kips	**0.50**	**PASS**
Flange Plate Tensile Yield	44.02 kips	141.75 kips	**0.31**	**PASS**
Beam Flexural Rupture	48.09 kips-ft	119.07 kips-ft	**0.40**	**PASS**
Flange Plate Tensile Rupture	44.02 kips	142.73 kips	**0.31**	**PASS**
Flange Plate Compression	45.98 kips	141.75 kips	**0.32**	**PASS**
HSS Local Plate Yielding of Moment Plates	45.98 kips	141.75 kips	**0.32**	**PASS**
HSS Column Punching Shear	45.98 kips	167.81 kips	**0.27**	**PASS**
HSS Sidewall Yielding	45.98 kips	162.90 kips	**0.28**	**PASS**
HSS Sidewall Crippling	45.98 kips	309.21 kips	**0.15**	**PASS**
HSS Column Transverse Plastification	45.98 kips	169.51 kips	**0.27**	**PASS**

M6 I - M8A: 3D View Report

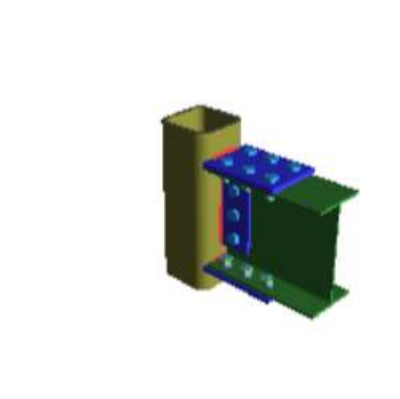
Column/Beam Flange Plate Moment Connection



LRFD

M6 I - M8A: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	10.78 kips	*User Input Shear Load*
Moment	59.44 kips-ft	*User Input Moment*
Axial Load	1.52 kips	*User Input Axial Force (compression)*
Puf_c	56.38 kips	*Required Flange Force (compression)*
Puf_t	54.86 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	17.55 kips	*User Input Column Force*
Story Shear	-8.42 kips	*User Input Story Shear*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

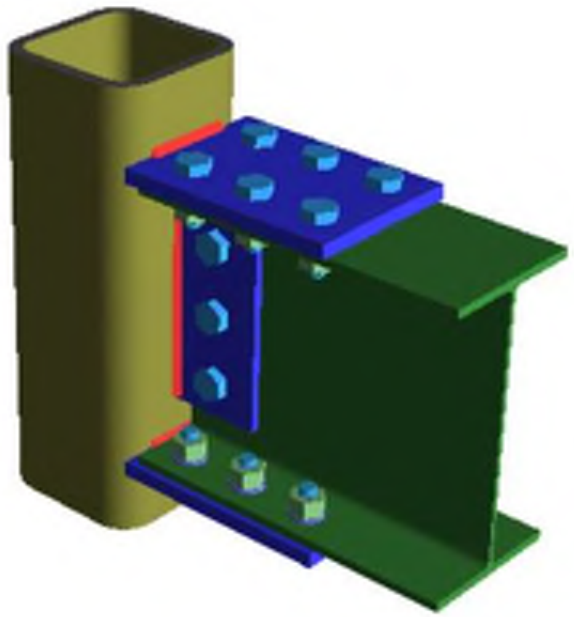
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	10.78 kips	100.22 kips	**0.11**	**PASS**
Beam Web Shear Yield	10.78 kips	84.18 kips	**0.13**	**PASS**
Vert. Plate Shear Yield	10.78 kips	72.90 kips	**0.15**	**PASS**
Beam Web Shear Rupture	10.78 kips	64.42 kips	**0.17**	**PASS**
Vert. Plate Shear Rupture	10.78 kips	62.40 kips	**0.17**	**PASS**
Beam Web Block Shear	10.78 kips	84.14 kips	**0.13**	**PASS**
Vert. Plate Block Shear	10.78 kips	71.05 kips	**0.15**	**PASS**
Bolt Shear at Beam Web	10.78 kips	53.68 kips	**0.20**	**PASS**
Bolt Bearing at Beam Web	10.78 kips	53.68 kips	**0.20**	**PASS**
Bolt Bearing at Vert. Plate	10.78 kips	53.68 kips	**0.20**	**PASS**
Bolt Shear at Flange Plate	59.23 kips	107.35 kips	**0.55**	**PASS**
Bolt Bearing at Beam Flange	61.11 kips	107.35 kips	**0.57**	**PASS**
Bolt Bearing at Flange Plate	56.38 kips	107.35 kips	**0.53**	**PASS**
Beam Flange Block Shear	59.58 kips	152.65 kips	**0.39**	**PASS**
Flange Plate Block Shear	54.86 kips	216.45 kips	**0.25**	**PASS**
Flange Plate Tearout	54.86 kips	230.04 kips	**0.24**	**PASS**

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M6 I - M8A: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	54.86 kips	87.46 kips	**0.63**	**PASS**
Flange Plate Tensile Yield	54.86 kips	141.75 kips	**0.39**	**PASS**
Beam Flexural Rupture	59.44 kips-ft	119.07 kips-ft	**0.50**	**PASS**
Flange Plate Tensile Rupture	54.86 kips	142.73 kips	**0.38**	**PASS**
Flange Plate Compression	56.38 kips	141.75 kips	**0.40**	**PASS**
HSS Local Plate Yielding of Moment Plates	56.38 kips	141.75 kips	**0.40**	**PASS**
HSS Column Punching Shear	56.38 kips	167.81 kips	**0.34**	**PASS**
HSS Sidewall Yielding	56.38 kips	162.90 kips	**0.35**	**PASS**
HSS Sidewall Crippling	56.38 kips	309.21 kips	**0.18**	**PASS**
HSS Column Transverse Plastification	56.38 kips	169.51 kips	**0.33**	**PASS**

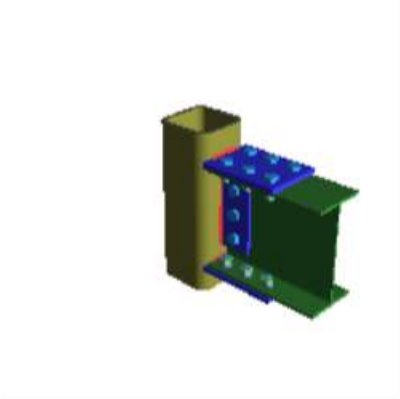
M6 J - M9: 3D View Report



LRFD

M6 J - M9: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	5.61 kips	*User Input Shear Load*
Moment	58.86 kips-ft	*User Input Moment*
Axial Load	1.59 kips	*User Input Axial Force (compression)*
Puf_c	55.87 kips	*Required Flange Force (compression)*
Puf_t	54.28 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	17.45 kips	*User Input Column Force*
Story Shear	-8.63 kips	*User Input Story Shear*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	5.61 kips	100.22 kips	**0.06**	**PASS**
Beam Web Shear Yield	5.61 kips	84.18 kips	**0.07**	**PASS**
Vert. Plate Shear Yield	5.61 kips	72.90 kips	**0.08**	**PASS**
Beam Web Shear Rupture	5.61 kips	64.42 kips	**0.09**	**PASS**
Vert. Plate Shear Rupture	5.61 kips	62.40 kips	**0.09**	**PASS**
Beam Web Block Shear	5.61 kips	84.14 kips	**0.07**	**PASS**
Vert. Plate Block Shear	5.61 kips	71.05 kips	**0.08**	**PASS**
Bolt Shear at Beam Web	5.61 kips	53.68 kips	**0.10**	**PASS**
Bolt Bearing at Beam Web	5.61 kips	53.68 kips	**0.10**	**PASS**
Bolt Bearing at Vert. Plate	5.61 kips	53.68 kips	**0.10**	**PASS**
Bolt Shear at Flange Plate	58.69 kips	107.35 kips	**0.55**	**PASS**
Bolt Bearing at Beam Flange	60.55 kips	107.35 kips	**0.56**	**PASS**
Bolt Bearing at Flange Plate	55.87 kips	107.35 kips	**0.52**	**PASS**
Beam Flange Block Shear	58.96 kips	152.65 kips	**0.39**	**PASS**
Flange Plate Block Shear	54.28 kips	216.45 kips	**0.25**	**PASS**
Flange Plate Tearout	54.28 kips	230.04 kips	**0.24**	**PASS**

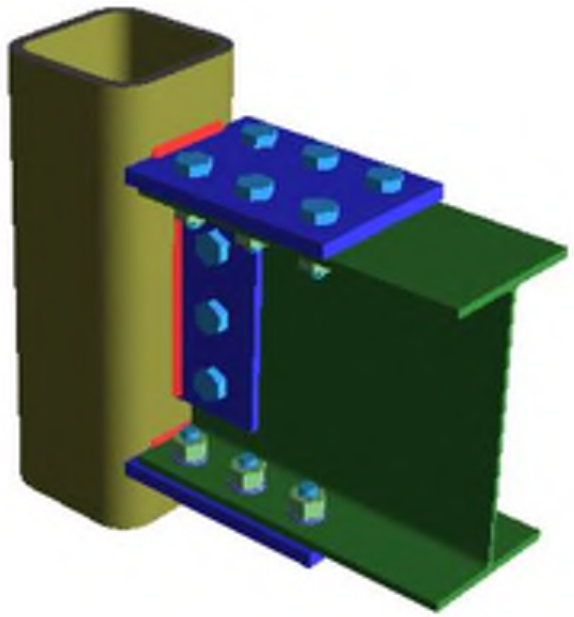
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M6 J - M9: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	54.28 kips	87.46 kips	**0.62**	**PASS**
Flange Plate Tensile Yield	54.28 kips	141.75 kips	**0.38**	**PASS**
Beam Flexural Rupture	58.86 kips-ft	119.07 kips-ft	**0.49**	**PASS**
Flange Plate Tensile Rupture	54.28 kips	142.73 kips	**0.38**	**PASS**
Flange Plate Compression	55.87 kips	141.75 kips	**0.39**	**PASS**
HSS Local Plate Yielding of Moment Plates	55.87 kips	141.75 kips	**0.39**	**PASS**
HSS Column Punching Shear	55.87 kips	167.81 kips	**0.33**	**PASS**
HSS Sidewall Yielding	55.87 kips	162.90 kips	**0.34**	**PASS**
HSS Sidewall Crippling	55.87 kips	309.21 kips	**0.18**	**PASS**
HSS Column Transverse Plastification	55.87 kips	169.51 kips	**0.33**	**PASS**

M7 I - M10: 3D View Report

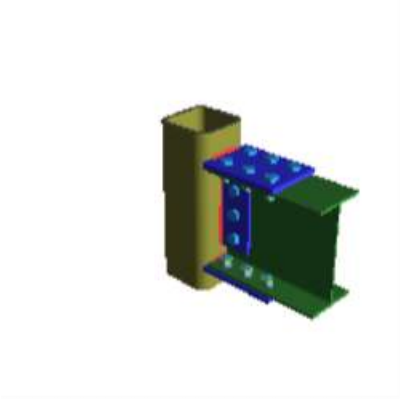
Column/Beam Flange Plate Moment Connection



LRFD

M7 I - M10: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	7.44 kips	*User Input Shear Load*
Moment	47.12 kips-ft	*User Input Moment*
Axial Load	1.35 kips	*User Input Axial Force (compression)*
Puf_c	44.77 kips	*Required Flange Force (compression)*
Puf_t	43.42 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	10.92 kips	*User Input Column Force*
Story Shear	-6.15 kips	*User Input Story Shear*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

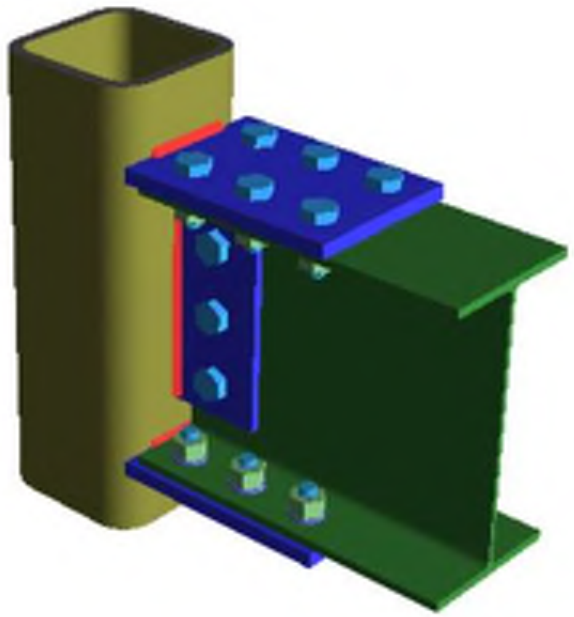
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	7.44 kips	100.22 kips	**0.07**	**PASS**
Beam Web Shear Yield	7.44 kips	84.18 kips	**0.09**	**PASS**
Vert. Plate Shear Yield	7.44 kips	72.90 kips	**0.10**	**PASS**
Beam Web Shear Rupture	7.44 kips	64.42 kips	**0.12**	**PASS**
Vert. Plate Shear Rupture	7.44 kips	62.40 kips	**0.12**	**PASS**
Beam Web Block Shear	7.44 kips	84.14 kips	**0.09**	**PASS**
Vert. Plate Block Shear	7.44 kips	71.05 kips	**0.10**	**PASS**
Bolt Shear at Beam Web	7.44 kips	53.68 kips	**0.14**	**PASS**
Bolt Bearing at Beam Web	7.44 kips	53.68 kips	**0.14**	**PASS**
Bolt Bearing at Vert. Plate	7.44 kips	53.68 kips	**0.14**	**PASS**
Bolt Shear at Flange Plate	47.03 kips	107.35 kips	**0.44**	**PASS**
Bolt Bearing at Beam Flange	48.52 kips	107.35 kips	**0.45**	**PASS**
Bolt Bearing at Flange Plate	44.77 kips	107.35 kips	**0.42**	**PASS**
Beam Flange Block Shear	47.16 kips	152.65 kips	**0.31**	**PASS**
Flange Plate Block Shear	43.42 kips	216.45 kips	**0.20**	**PASS**
Flange Plate Tearout	43.42 kips	230.04 kips	**0.19**	**PASS**

continued on next page...

M7 I - M10: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	43.42 kips	87.46 kips	**0.50**	**PASS**
Flange Plate Tensile Yield	43.42 kips	141.75 kips	**0.31**	**PASS**
Beam Flexural Rupture	47.12 kips-ft	119.07 kips-ft	**0.40**	**PASS**
Flange Plate Tensile Rupture	43.42 kips	142.73 kips	**0.30**	**PASS**
Flange Plate Compression	44.77 kips	141.75 kips	**0.32**	**PASS**
HSS Local Plate Yielding of Moment Plates	44.77 kips	141.75 kips	**0.32**	**PASS**
HSS Column Punching Shear	44.77 kips	167.81 kips	**0.27**	**PASS**
HSS Sidewall Yielding	44.77 kips	162.90 kips	**0.27**	**PASS**
HSS Sidewall Crippling	44.77 kips	309.21 kips	**0.14**	**PASS**
HSS Column Transverse Plastification	44.77 kips	169.51 kips	**0.26**	**PASS**

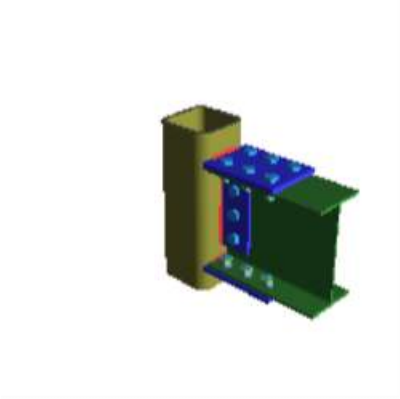
M7 J - M11: 3D View Report



LRFD

M7 J - M11: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	4.52 kips	*User Input Shear Load*
Moment	45.42 kips-ft	*User Input Moment*
Axial Load	1.35 kips	*User Input Axial Force (compression)*
Puf_c	43.18 kips	*Required Flange Force (compression)*
Puf_t	41.83 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	18.04 kips	*User Input Column Force*
Story Shear	-6.53 kips	*User Input Story Shear*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

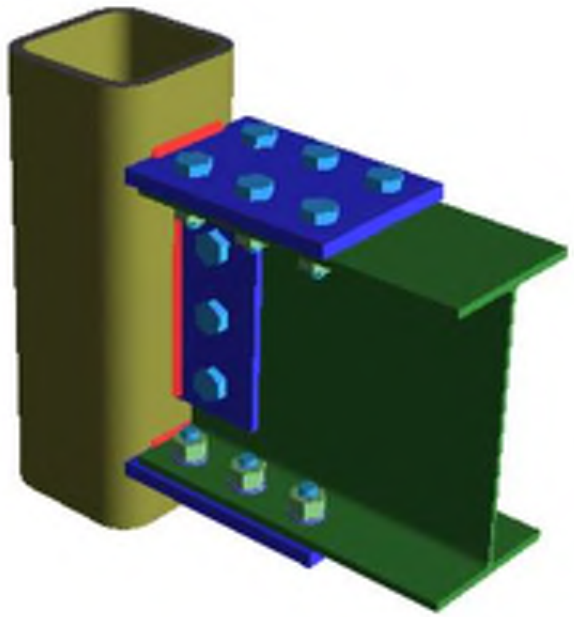
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	4.52 kips	100.22 kips	**0.05**	**PASS**
Beam Web Shear Yield	4.52 kips	84.18 kips	**0.05**	**PASS**
Vert. Plate Shear Yield	4.52 kips	72.90 kips	**0.06**	**PASS**
Beam Web Shear Rupture	4.52 kips	64.42 kips	**0.07**	**PASS**
Vert. Plate Shear Rupture	4.52 kips	62.40 kips	**0.07**	**PASS**
Beam Web Block Shear	4.52 kips	84.14 kips	**0.05**	**PASS**
Vert. Plate Block Shear	4.52 kips	71.05 kips	**0.06**	**PASS**
Bolt Shear at Beam Web	4.52 kips	53.68 kips	**0.08**	**PASS**
Bolt Bearing at Beam Web	4.52 kips	53.68 kips	**0.08**	**PASS**
Bolt Bearing at Vert. Plate	4.52 kips	53.68 kips	**0.08**	**PASS**
Bolt Shear at Flange Plate	45.35 kips	107.35 kips	**0.42**	**PASS**
Bolt Bearing at Beam Flange	46.79 kips	107.35 kips	**0.44**	**PASS**
Bolt Bearing at Flange Plate	43.18 kips	107.35 kips	**0.40**	**PASS**
Beam Flange Block Shear	45.44 kips	152.65 kips	**0.30**	**PASS**
Flange Plate Block Shear	41.83 kips	216.45 kips	**0.19**	**PASS**
Flange Plate Tearout	41.83 kips	230.04 kips	**0.18**	**PASS**

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M7 J - M11: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	41.83 kips	87.46 kips	**0.48**	**PASS**
Flange Plate Tensile Yield	41.83 kips	141.75 kips	**0.30**	**PASS**
Beam Flexural Rupture	45.42 kips-ft	119.07 kips-ft	**0.38**	**PASS**
Flange Plate Tensile Rupture	41.83 kips	142.73 kips	**0.29**	**PASS**
Flange Plate Compression	43.18 kips	141.75 kips	**0.30**	**PASS**
HSS Local Plate Yielding of Moment Plates	43.18 kips	141.75 kips	**0.30**	**PASS**
HSS Column Punching Shear	43.18 kips	167.81 kips	**0.26**	**PASS**
HSS Sidewall Yielding	43.18 kips	162.90 kips	**0.27**	**PASS**
HSS Sidewall Crippling	43.18 kips	309.21 kips	**0.14**	**PASS**
HSS Column Transverse Plastification	43.18 kips	169.51 kips	**0.25**	**PASS**

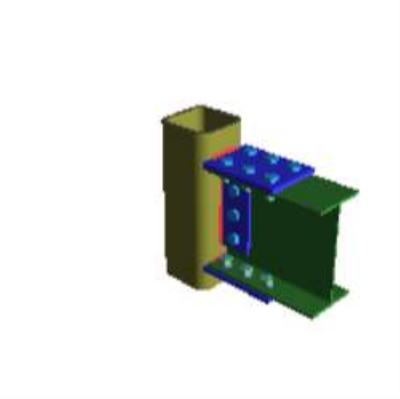
M8 I - M25: 3D View Report



M8 I - M25: LRFD Results Report

LRFD

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	7.04 kips	*User Input Shear Load*
Moment	40.64 kips-ft	*User Input Moment*
Axial Load	2.21 kips	*User Input Axial Force (compression)*
Puf_c	39.13 kips	*Required Flange Force (compression)*
Puf_t	36.92 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	12.68 kips	*User Input Column Force*
Story Shear	-5.32 kips	*User Input Story Shear*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

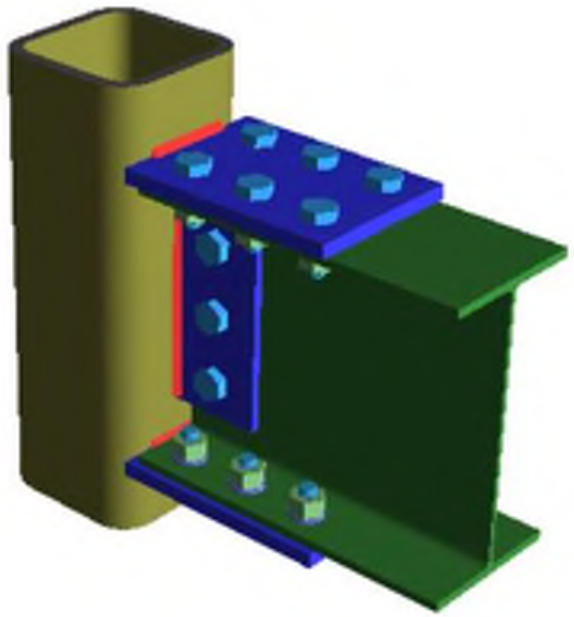
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	7.04 kips	100.22 kips	**0.07**	**PASS**
Beam Web Shear Yield	7.04 kips	84.18 kips	**0.08**	**PASS**
Vert. Plate Shear Yield	7.04 kips	72.90 kips	**0.10**	**PASS**
Beam Web Shear Rupture	7.04 kips	64.42 kips	**0.11**	**PASS**
Vert. Plate Shear Rupture	7.04 kips	62.40 kips	**0.11**	**PASS**
Beam Web Block Shear	7.04 kips	84.14 kips	**0.08**	**PASS**
Vert. Plate Block Shear	7.04 kips	71.05 kips	**0.10**	**PASS**
Bolt Shear at Beam Web	7.04 kips	53.68 kips	**0.13**	**PASS**
Bolt Bearing at Beam Web	7.04 kips	53.68 kips	**0.13**	**PASS**
Bolt Bearing at Vert. Plate	7.04 kips	53.68 kips	**0.13**	**PASS**
Bolt Shear at Flange Plate	41.07 kips	107.35 kips	**0.38**	**PASS**
Bolt Bearing at Beam Flange	42.36 kips	107.35 kips	**0.39**	**PASS**
Bolt Bearing at Flange Plate	39.13 kips	107.35 kips	**0.36**	**PASS**
Beam Flange Block Shear	40.15 kips	152.65 kips	**0.26**	**PASS**
Flange Plate Block Shear	36.92 kips	216.45 kips	**0.17**	**PASS**
Flange Plate Tearout	36.92 kips	230.04 kips	**0.16**	**PASS**

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M8 I - M25: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	36.92 kips	87.46 kips	**0.42**	**PASS**
Flange Plate Tensile Yield	36.92 kips	141.75 kips	**0.26**	**PASS**
Beam Flexural Rupture	40.64 kips-ft	119.07 kips-ft	**0.34**	**PASS**
Flange Plate Tensile Rupture	36.92 kips	142.73 kips	**0.26**	**PASS**
Flange Plate Compression	39.13 kips	141.75 kips	**0.28**	**PASS**
HSS Local Plate Yielding of Moment Plates	39.13 kips	141.75 kips	**0.28**	**PASS**
HSS Column Punching Shear	39.13 kips	167.81 kips	**0.23**	**PASS**
HSS Sidewall Yielding	39.13 kips	162.90 kips	**0.24**	**PASS**
HSS Sidewall Crippling	39.13 kips	309.21 kips	**0.13**	**PASS**
HSS Column Transverse Plastification	39.13 kips	169.51 kips	**0.23**	**PASS**

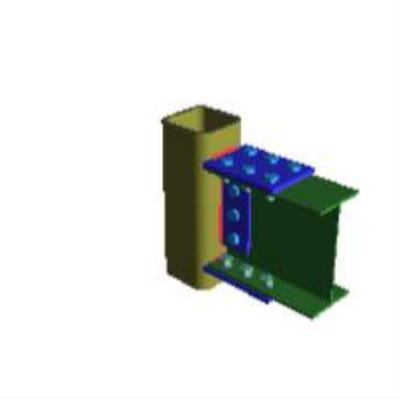
M8 J - M14: 3D View Report



LRFD

M8 J - M14: LRFD Results Report

Column/Beam Flange Plate Moment Connection



Material Properties:				
Column	HSS7X7X10	A500 Gr.C Rect	F_y = 50.00 ksi	F_u = 58.00 ksi
Beam	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x9.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi
Moment Plate	P0.62x7.00x9.50	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

Input Data:		
Shear Load	1.85 kips	*User Input Shear Load*
Moment	41.23 kips-ft	*User Input Moment*
Axial Load	2.24 kips	*User Input Axial Force (compression)*
Puf_c	39.70 kips	*Required Flange Force (compression)*
Puf_t	37.46 kips	*Required Flange Force (tension)*
Top Column Dist	0.00 in	*User Input Top Column Dist*
Column Force	12.18 kips	*User Input Column Force*
Story Shear	-6.01 kips	*User Input Story Shear*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

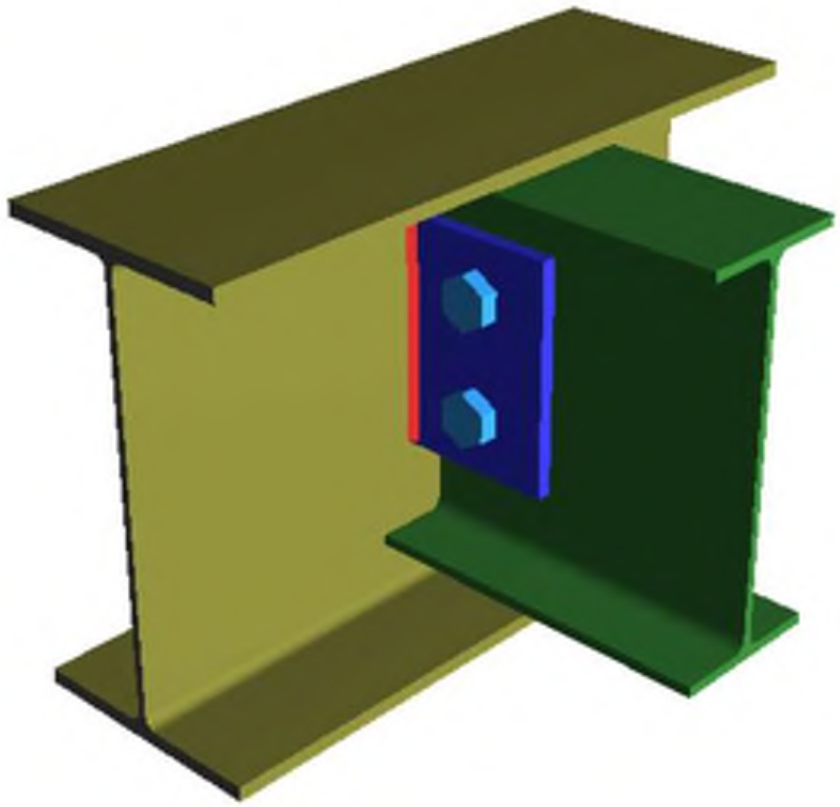
Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Geometry Restrictions at Flange Beam				**PASS**
Flange Plate Weld at Column Limitations				**PASS**
Shear Plate Weld at Column Limitations				**PASS**
Shear Plate Weld Strength at Column	1.85 kips	100.22 kips	**0.02**	**PASS**
Beam Web Shear Yield	1.85 kips	84.18 kips	**0.02**	**PASS**
Vert. Plate Shear Yield	1.85 kips	72.90 kips	**0.03**	**PASS**
Beam Web Shear Rupture	1.85 kips	64.42 kips	**0.03**	**PASS**
Vert. Plate Shear Rupture	1.85 kips	62.40 kips	**0.03**	**PASS**
Beam Web Block Shear	1.85 kips	84.14 kips	**0.02**	**PASS**
Vert. Plate Block Shear	1.85 kips	71.05 kips	**0.03**	**PASS**
Bolt Shear at Beam Web	1.85 kips	53.68 kips	**0.03**	**PASS**
Bolt Bearing at Beam Web	1.85 kips	53.68 kips	**0.03**	**PASS**
Bolt Bearing at Vert. Plate	1.85 kips	53.68 kips	**0.03**	**PASS**
Bolt Shear at Flange Plate	41.67 kips	107.35 kips	**0.39**	**PASS**
Bolt Bearing at Beam Flange	42.98 kips	107.35 kips	**0.40**	**PASS**
Bolt Bearing at Flange Plate	39.70 kips	107.35 kips	**0.37**	**PASS**
Beam Flange Block Shear	40.74 kips	152.65 kips	**0.27**	**PASS**
Flange Plate Block Shear	37.46 kips	216.45 kips	**0.17**	**PASS**
Flange Plate Tearout	37.46 kips	230.04 kips	**0.16**	**PASS**

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M8 J - M14: LRFD Results Report (continued):

Limit State	Required	Available	Unity Check	Result
Flange Plate Weld Strength at Column	37.46 kips	87.46 kips	**0.43**	**PASS**
Flange Plate Tensile Yield	37.46 kips	141.75 kips	**0.26**	**PASS**
Beam Flexural Rupture	41.23 kips-ft	119.07 kips-ft	**0.35**	**PASS**
Flange Plate Tensile Rupture	37.46 kips	142.73 kips	**0.26**	**PASS**
Flange Plate Compression	39.70 kips	141.75 kips	**0.28**	**PASS**
HSS Local Plate Yielding of Moment Plates	39.70 kips	141.75 kips	**0.28**	**PASS**
HSS Column Punching Shear	39.70 kips	167.81 kips	**0.24**	**PASS**
HSS Sidewall Yielding	39.70 kips	162.90 kips	**0.24**	**PASS**
HSS Sidewall Crippling	39.70 kips	309.21 kips	**0.13**	**PASS**
HSS Column Transverse Plastification	39.70 kips	169.51 kips	**0.23**	**PASS**

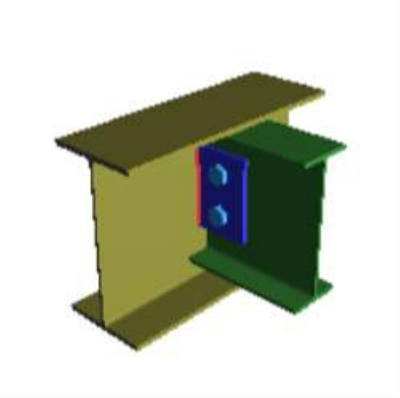
M15 I - M7A: 3D View Report



LRFD

M15 I - M7A: LRFD Results Report

Girder/Beam Shear Tab Shear Connection



Material Properties:				
Girder	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Beam	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x6.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

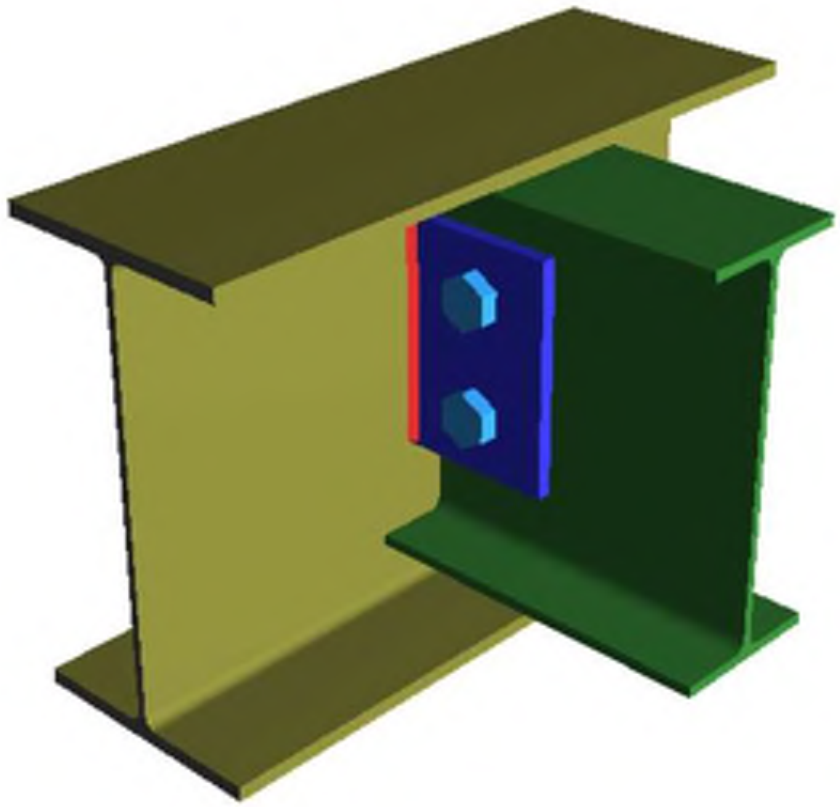
Input Data:		
Shear Load	1.60 kips	*User Input Shear Load*
Axial Load	1.30 kips	*User Input Axial Force (compression)*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Girder Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	1.60 kips	61.96 kips	**0.03**	**PASS**
Plate Shear Yield	1.60 kips	48.60 kips	**0.03**	**PASS**
Beam Shear Rupture	1.60 kips	48.64 kips	**0.03**	**PASS**
Plate Shear Rupture at Beam	1.60 kips	41.60 kips	**0.04**	**PASS**
Beam Axial Yield	1.30 kips	140.47 kips	**0.01**	**PASS**
Plate Axial Yield	1.30 kips	72.90 kips	**0.02**	**PASS**
Beam Block Shear	1.60 kips	40.02 kips	**0.04**	**PASS**
Plate Block Shear	1.60 kips	52.83 kips	**0.03**	**PASS**
Compression Buckling of the Plate	1.30 kips	72.90 kips	**0.02**	**PASS**
Lateral Stability / Stabilizer Plates	2.06 kips	335.48 kips	**0.01**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling			**0.05**	**PASS**
Coped Beam Flexural Rupture	1.60 kips	57.92 kips	**0.03**	**PASS**
Coped Beam Local Web Buckling	1.60 kips	53.46 kips	**0.03**	**PASS**
Bolt Bearing on Beam	2.06 kips	35.78 kips	**0.06**	**PASS**
Bolt Bearing on Plate at Beam	2.06 kips	35.78 kips	**0.06**	**PASS**
Bolt Shear at Beam	2.06 kips	20.59 kips	**0.10**	**PASS**
Bolt Group Eccentricity		***0.58***		
Girder Weld Strength	4.99 kips/ft	100.22 kips/ft	**0.05**	**PASS**

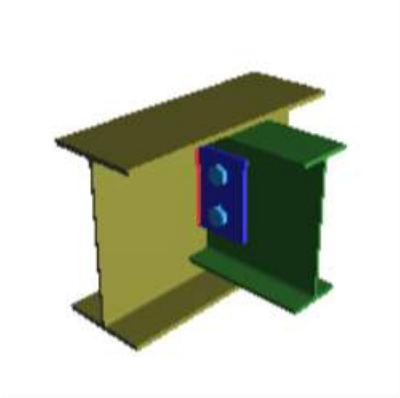
M28 I - M7A: 3D View Report



LRFD

M28 I - M7A: LRFD Results Report

Girder/Beam Shear Tab Shear Connection



Material Properties:				
Girder	W12X26	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Beam	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x6.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

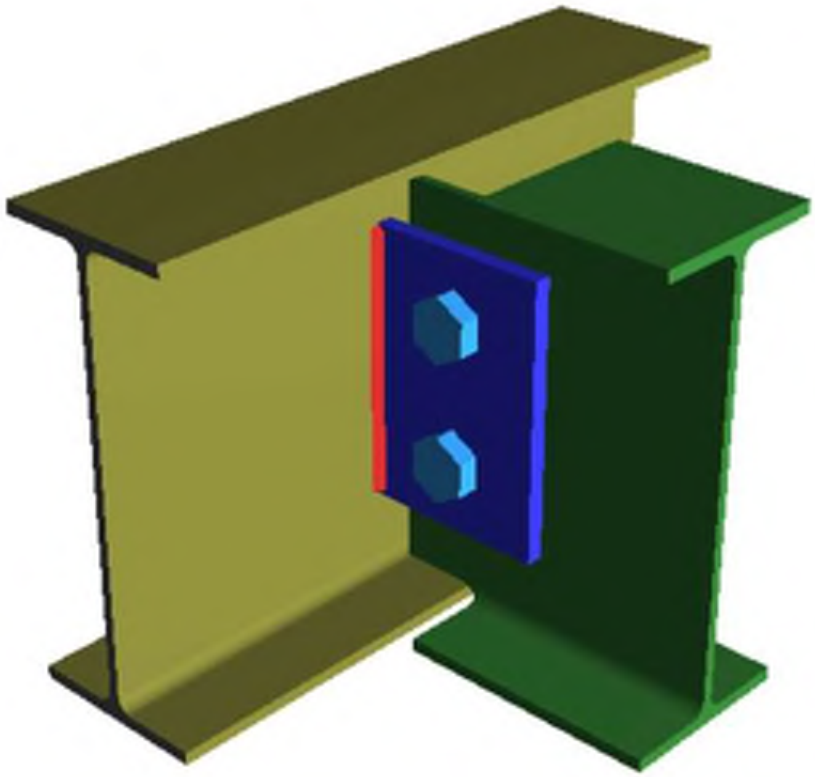
Input Data:		
Shear Load	-3.51 kips	*User Input Shear Load*
Axial Load	-0.49 kips	*User Input Axial Force (tension)*

Governing LC: 3D - 50 - LC 50*: IBC 16-5 (os-f)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Girder Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	3.51 kips	61.96 kips	**0.06**	**PASS**
Plate Shear Yield	3.51 kips	48.60 kips	**0.07**	**PASS**
Beam Shear Rupture	3.51 kips	48.64 kips	**0.07**	**PASS**
Plate Shear Rupture at Beam	3.51 kips	41.60 kips	**0.08**	**PASS**
Beam Axial Yield	0.49 kips	140.47 kips	**0.00**	**PASS**
Plate Axial Yield	0.49 kips	72.90 kips	**0.01**	**PASS**
Beam Tension Rupture	0.49 kips	85.07 kips	**0.01**	**PASS**
Plate Tension Rupture at Beam	0.49 kips	69.33 kips	**0.01**	**PASS**
Beam Block Shear	3.51 kips	63.72 kips	**0.06**	**PASS**
Plate Block Shear	3.51 kips	52.83 kips	**0.07**	**PASS**
Beam Tearout	0.49 kips	38.12 kips	**0.01**	**PASS**
Plate Tearout on Plate at Beam	0.49 kips	58.96 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	3.54 kips	335.48 kips	**0.01**	**PASS**
Plate Flexural Yield			**0.01**	**PASS**
Plate Flexural Rupture			**0.01**	**PASS**
Plate Flexural Buckling	3.51 kips	54.68 kips	**0.06**	**PASS**
Coped Beam Flexural Rupture	3.51 kips	57.92 kips	**0.06**	**PASS**
Coped Beam Local Web Buckling	3.51 kips	53.46 kips	**0.07**	**PASS**
Bolt Bearing on Beam	3.54 kips	35.78 kips	**0.10**	**PASS**
Bolt Bearing on Plate at Beam	3.54 kips	35.78 kips	**0.10**	**PASS**
Bolt Shear at Beam	3.54 kips	20.82 kips	**0.17**	**PASS**
Bolt Group Eccentricity		***0.58***		
Girder Weld Strength	16.58 kips/ft	100.22 kips/ft	**0.17**	**PASS**

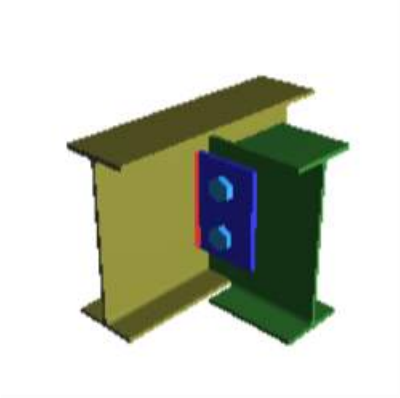
M46 J - M15: 3D View Report



LRFD

M46 J - M15: LRFD Results Report

Girder/Beam Shear Tab Shear Connection



Material Properties:				
Girder	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Beam	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x6.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

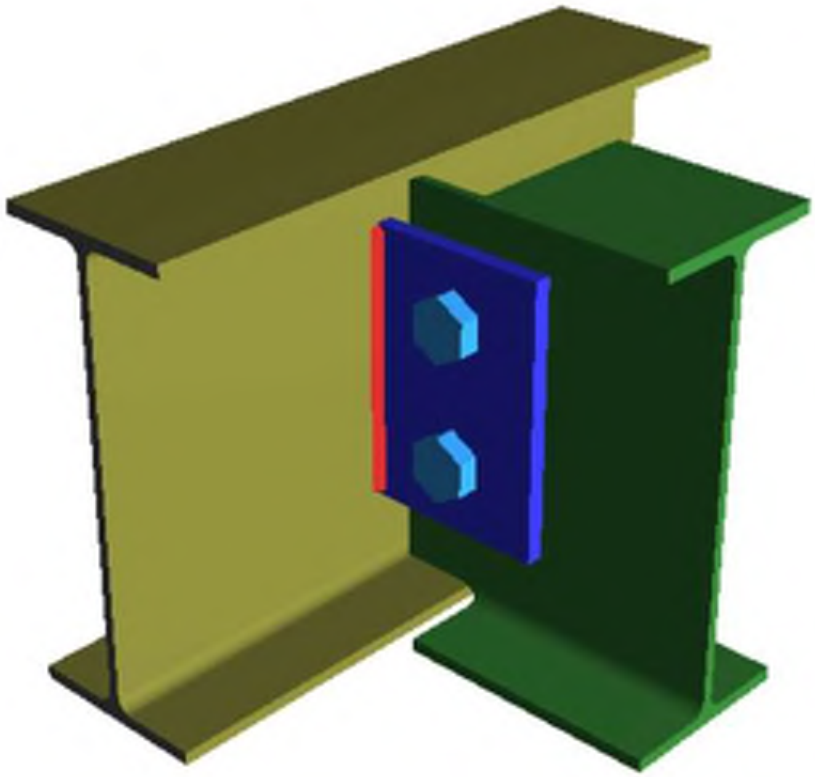
Input Data:		
Shear Load	0.77 kips	*User Input Shear Load*
Axial Load	0.65 kips	*User Input Axial Force (compression)*

Governing LC: 3D - 45 - LC 45*: IBC 16-5 (os-a)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Girder Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	0.77 kips	58.03 kips	**0.01**	**PASS**
Plate Shear Yield	0.77 kips	48.60 kips	**0.02**	**PASS**
Beam Shear Rupture	0.77 kips	44.81 kips	**0.02**	**PASS**
Plate Shear Rupture at Beam	0.77 kips	41.60 kips	**0.02**	**PASS**
Beam Axial Yield	0.65 kips	87.04 kips	**0.01**	**PASS**
Plate Axial Yield	0.65 kips	72.90 kips	**0.01**	**PASS**
Beam Block Shear	0.77 kips	40.02 kips	**0.02**	**PASS**
Plate Block Shear	0.77 kips	52.83 kips	**0.01**	**PASS**
Compression Buckling of the Plate	0.65 kips	72.90 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	1.00 kips	335.48 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling			**0.02**	**PASS**
Coped Beam Flexural Rupture	0.77 kips	34.71 kips	**0.02**	**PASS**
Coped Beam Lateral Torsional Buckling	0.77 kips	32.04 kips	**0.02**	**PASS**
Bolt Bearing on Beam	1.00 kips	35.78 kips	**0.03**	**PASS**
Bolt Bearing on Plate at Beam	1.00 kips	35.78 kips	**0.03**	**PASS**
Bolt Shear at Beam	1.00 kips	20.65 kips	**0.05**	**PASS**
Bolt Group Eccentricity		***0.58***		
Girder Weld Strength	2.36 kips/ft	100.22 kips/ft	**0.02**	**PASS**

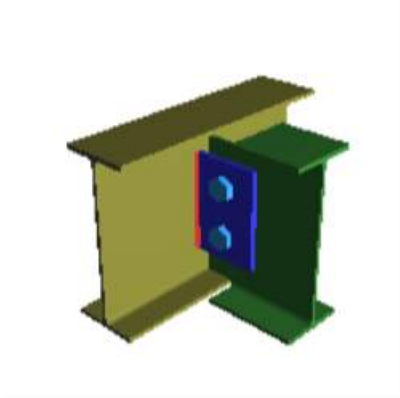
M47 I - M15: 3D View Report



LRFD

M47 I - M15: LRFD Results Report

Girder/Beam Shear Tab Shear Connection



Material Properties:				
Girder	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Beam	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x6.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

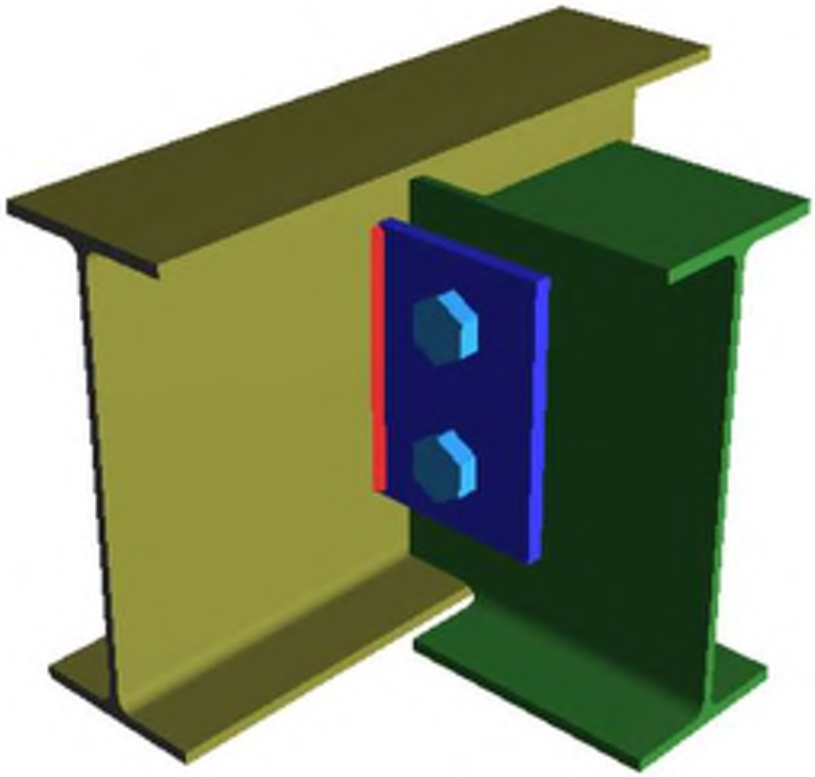
Input Data:		
Shear Load	-0.31 kips	*User Input Shear Load*
Axial Load	-0.90 kips	*User Input Axial Force (tension)*

Governing LC: 3D - 49 - LC 49*: IBC 16-5 (os-e)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Girder Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	0.31 kips	58.03 kips	**0.01**	**PASS**
Plate Shear Yield	0.31 kips	48.60 kips	**0.01**	**PASS**
Beam Shear Rupture	0.31 kips	44.81 kips	**0.01**	**PASS**
Plate Shear Rupture at Beam	0.31 kips	41.60 kips	**0.01**	**PASS**
Beam Axial Yield	0.90 kips	87.04 kips	**0.01**	**PASS**
Plate Axial Yield	0.90 kips	72.90 kips	**0.01**	**PASS**
Beam Tension Rupture	0.90 kips	74.68 kips	**0.01**	**PASS**
Plate Tension Rupture at Beam	0.90 kips	69.33 kips	**0.01**	**PASS**
Beam Block Shear	0.31 kips	42.55 kips	**0.01**	**PASS**
Plate Block Shear	0.31 kips	52.83 kips	**0.01**	**PASS**
Beam Tearout	0.90 kips	38.12 kips	**0.02**	**PASS**
Plate Tearout on Plate at Beam	0.90 kips	58.96 kips	**0.02**	**PASS**
Lateral Stability / Stabilizer Plates	0.95 kips	335.48 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling	0.31 kips	54.68 kips	**0.01**	**PASS**
Coped Beam Flexural Rupture	0.31 kips	34.71 kips	**0.01**	**PASS**
Coped Beam Lateral Torsional Buckling	0.31 kips	32.04 kips	**0.01**	**PASS**
Bolt Bearing on Beam	0.95 kips	31.74 kips	**0.03**	**PASS**
Bolt Bearing on Plate at Beam	0.95 kips	35.78 kips	**0.03**	**PASS**
Bolt Shear at Beam	0.95 kips	25.46 kips	**0.04**	**PASS**
Bolt Group Eccentricity		***0.71***		
Girder Weld Strength	3.10 kips/ft	100.22 kips/ft	**0.03**	**PASS**

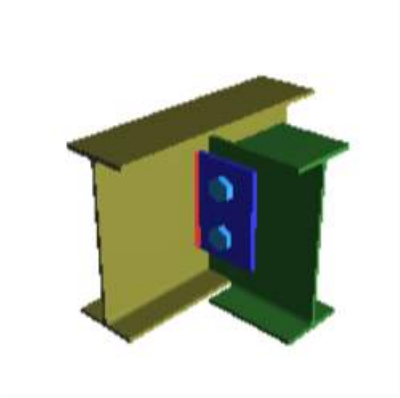
M59 J - M14A: 3D View Report



LRFD

M59 J - M14A: LRFD Results Report

Girder/Beam Shear Tab Shear Connection



Material Properties:				
Girder	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Beam	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x6.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

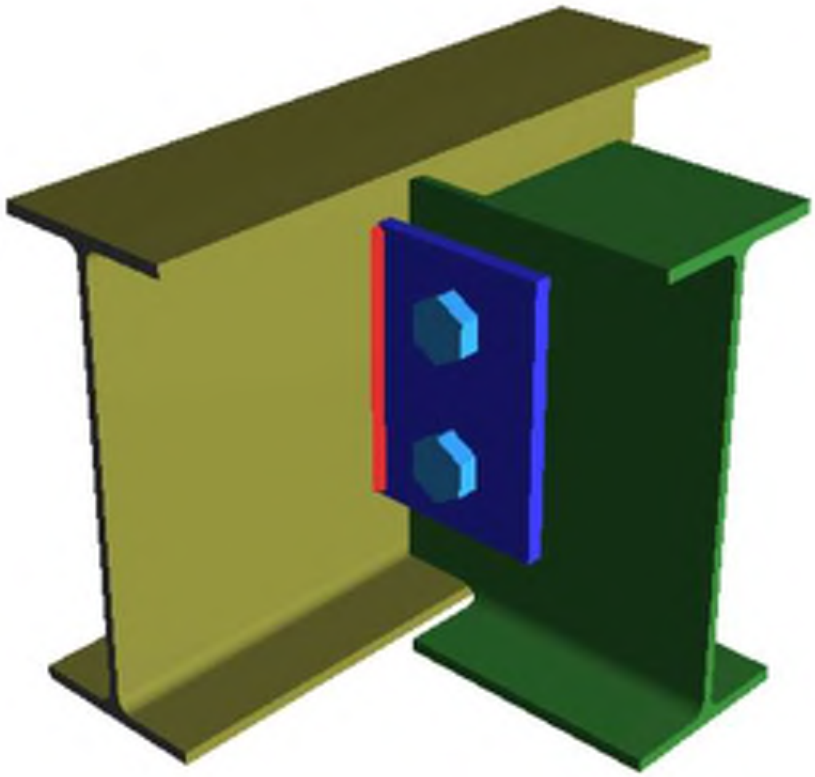
Input Data:		
Shear Load	1.15 kips	*User Input Shear Load*
Axial Load	0.60 kips	*User Input Axial Force (compression)*

Governing LC: 3D - 46 - LC 46*: IBC 16-5 (os-b)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Girder Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	1.15 kips	58.03 kips	**0.02**	**PASS**
Plate Shear Yield	1.15 kips	48.60 kips	**0.02**	**PASS**
Beam Shear Rupture	1.15 kips	44.81 kips	**0.03**	**PASS**
Plate Shear Rupture at Beam	1.15 kips	41.60 kips	**0.03**	**PASS**
Beam Axial Yield	0.60 kips	87.04 kips	**0.01**	**PASS**
Plate Axial Yield	0.60 kips	72.90 kips	**0.01**	**PASS**
Beam Block Shear	1.15 kips	40.02 kips	**0.03**	**PASS**
Plate Block Shear	1.15 kips	52.83 kips	**0.02**	**PASS**
Compression Buckling of the Plate	0.60 kips	72.90 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	1.30 kips	335.48 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling			**0.03**	**PASS**
Coped Beam Flexural Rupture	1.15 kips	34.71 kips	**0.03**	**PASS**
Coped Beam Lateral Torsional Buckling	1.15 kips	32.04 kips	**0.04**	**PASS**
Bolt Bearing on Beam	1.30 kips	35.78 kips	**0.04**	**PASS**
Bolt Bearing on Plate at Beam	1.30 kips	35.78 kips	**0.04**	**PASS**
Bolt Shear at Beam	1.30 kips	20.37 kips	**0.06**	**PASS**
Bolt Group Eccentricity		***0.57***		
Girder Weld Strength	4.11 kips/ft	100.22 kips/ft	**0.04**	**PASS**

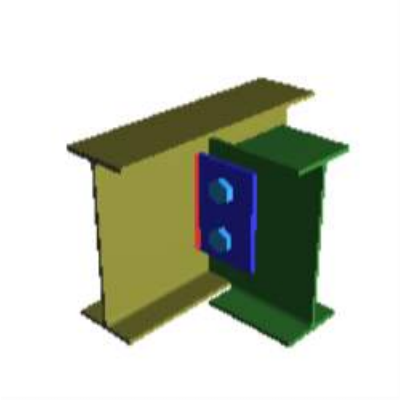
M60 I - M14A: 3D View Report



LRFD

M60 I - M14A: LRFD Results Report

Girder/Beam Shear Tab Shear Connection



Material Properties:				
Girder	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Beam	W10X15	A992	F_y = 50.00 ksi	F_u = 65.00 ksi
Plate	P0.38x4.00x6.00	A36	F_y = 36.00 ksi	F_u = 58.00 ksi

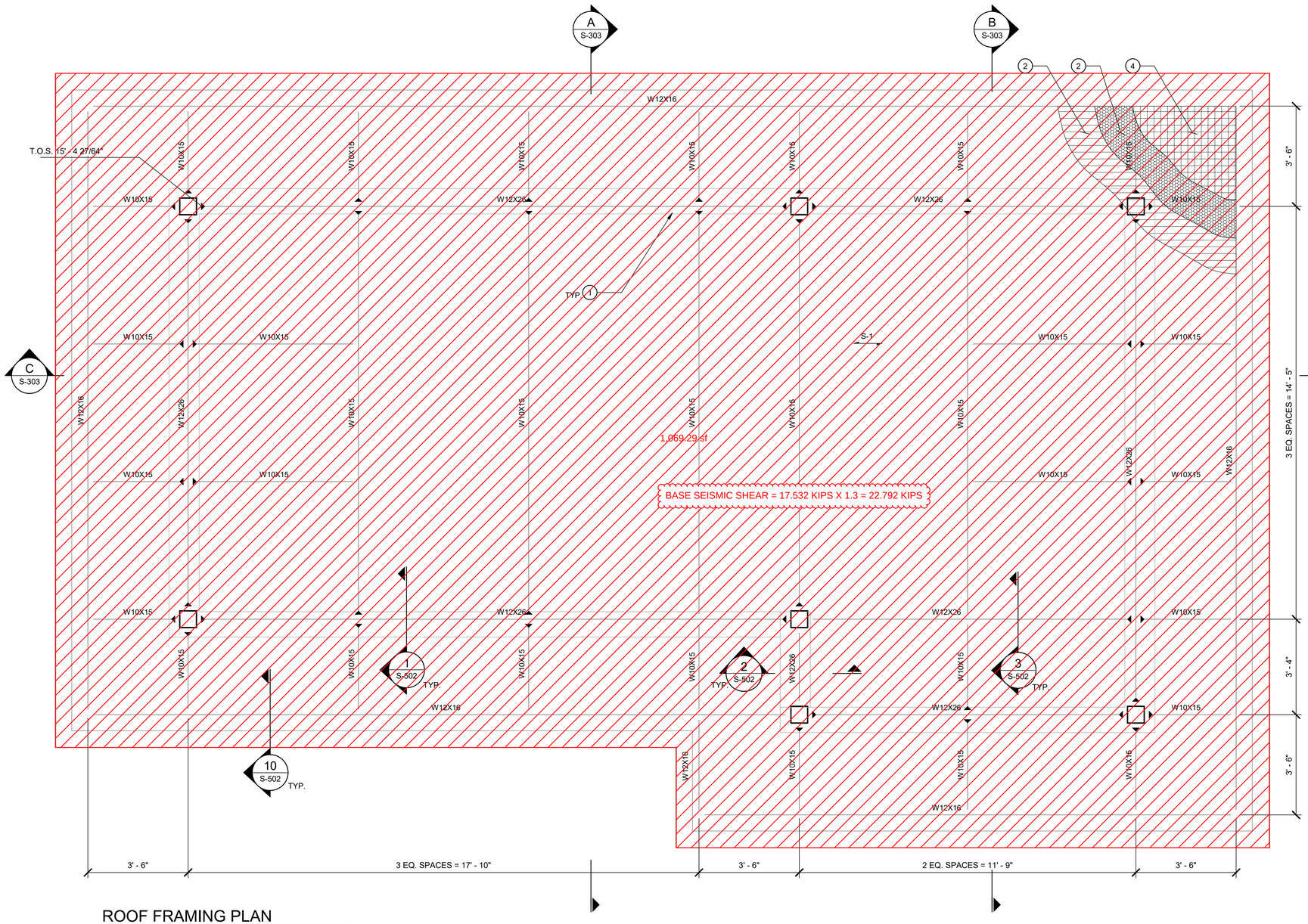
Input Data:		
Shear Load	-1.13 kips	*User Input Shear Load*
Axial Load	-0.69 kips	*User Input Axial Force (tension)*

Governing LC: 3D - 50 - LC 50*: IBC 16-5 (os-f)

Note: Unless specified, all code references are from AISC 360-16

Limit State	Required	Available	Unity Check	Result
Geometry Restrictions at Beam				**PASS**
Girder Weld Limitations				**PASS**
Rotational Ductility				**PASS**
Beam Shear Yield	1.13 kips	58.03 kips	**0.02**	**PASS**
Plate Shear Yield	1.13 kips	48.60 kips	**0.02**	**PASS**
Beam Shear Rupture	1.13 kips	44.81 kips	**0.03**	**PASS**
Plate Shear Rupture at Beam	1.13 kips	41.60 kips	**0.03**	**PASS**
Beam Axial Yield	0.69 kips	87.04 kips	**0.01**	**PASS**
Plate Axial Yield	0.69 kips	72.90 kips	**0.01**	**PASS**
Beam Tension Rupture	0.69 kips	74.68 kips	**0.01**	**PASS**
Plate Tension Rupture at Beam	0.69 kips	69.33 kips	**0.01**	**PASS**
Beam Block Shear	1.13 kips	42.55 kips	**0.03**	**PASS**
Plate Block Shear	1.13 kips	52.83 kips	**0.02**	**PASS**
Beam Tearout	0.69 kips	38.12 kips	**0.02**	**PASS**
Plate Tearout on Plate at Beam	0.69 kips	58.96 kips	**0.01**	**PASS**
Lateral Stability / Stabilizer Plates	1.32 kips	335.48 kips	**0.00**	**PASS**
Plate Flexural Yield			**0.00**	**PASS**
Plate Flexural Rupture			**0.00**	**PASS**
Plate Flexural Buckling	1.13 kips	54.68 kips	**0.02**	**PASS**
Coped Beam Flexural Rupture	1.13 kips	34.71 kips	**0.03**	**PASS**
Coped Beam Lateral Torsional Buckling	1.13 kips	32.04 kips	**0.04**	**PASS**
Bolt Bearing on Beam	1.32 kips	35.78 kips	**0.04**	**PASS**
Bolt Bearing on Plate at Beam	1.32 kips	35.78 kips	**0.04**	**PASS**
Bolt Shear at Beam	1.32 kips	20.38 kips	**0.07**	**PASS**
Bolt Group Eccentricity		***0.57***		
Girder Weld Strength	6.33 kips/ft	100.22 kips/ft	**0.06**	**PASS**

ROOF DIAPHRAGM CALCULATIONS



ROOF FRAMING PLAN

SCALE: 1/2" = 1'-0"

ROOF PLAN LEGEND:

S-1 — DENOTES SPAN DIRECTION OF ROOF DICK, WHICH SHALL BE 1 1/2" X 20 GA., TYPE B, G90 GALVANIZED METAL DECK. FASTEN DECK WITH HILTI X-ENP 19 PAF FASTENERS IN A 36/4 PATTERN. INSTALL PUNCHLOK II CONNECTION (VSC2) SIDELAP CONNECTIONS @ 12" O.C. PER DECK SPAN. ATTACH DECK EDGES @ 12" O.C. = 36/4 U.N.O.

STEEL MOMENT CONNECTION; SEE NOTES FOR MORE INFORMATION

KEYNOTES: (X)

1. CFS STUD WALL. SEE FOUNDATION PLAN.
2. METAL DECK ROOF DECK
3. GYPSUM ROOF BOARD
4. RIGID INSULATION

STEEL ROOF FRAMING NOTES:

1. BOLTS THAT ARE PART OF A STEEL MOMENT CONNECTION SHALL BE PRETENSIONED ACCORDING TO TABLE 8.1 OF THE RCSC AND THE FAYING SURFACES SHALL MEET THE REQUIREMENTS FOR SLIP CRITICAL CONNECTIONS.
2. ALL OTHER CONNECTIONS SHALL BE SNUG TIGHT U.N.O.
3. OVERSIZED BOLT HOLES ARE NOT ALLOWED FOR CONNECTIONS THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM.
4. WELDS OF MEMBERS AND CONNECTIONS WHICH ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM AS IDENTIFIED IN THE DRAWINGS SHALL CONFORM TO AWS D1.8 "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT." WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDING PROCEDURE SPECIFICATION AS REQUIRED IN AWS D1.1 AND AWS D1.8 AND SHALL BE APPROVED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. WELDS SHALL BE MADE WITH A FILLER MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF AWS D1.8.
5. WELDS SPECIFIED AS "DEMAND CRITICAL" ON THE DRAWINGS SHALL BE MADE WITH A FILLER METAL MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF AWS D1.8.
6. ITEMS 1, 3, 4, AND 5 APPLY TO STEEL MOMENT FRAMES AND STEEL MOMENT CONNECTIONS AS SPECIFIED ON THESE PLANS.
7. SEE SHEETS S-001 THRU S-002 FOR GENERAL NOTES AND FOUNDATION DESIGN CRITERIA.
8. SEE S-500 SERIES DRAWINGS FOR TYPICAL DETAILS NOT CUT ON PLAN.

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90% DESIGN

NOT FOR CONSTRUCTION

MARK	DATE	DESCRIPTION	BY
	1/29/24	30% DESIGN	BMB

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION

SCALE HOUSE ROOF FRAMING PLAN

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

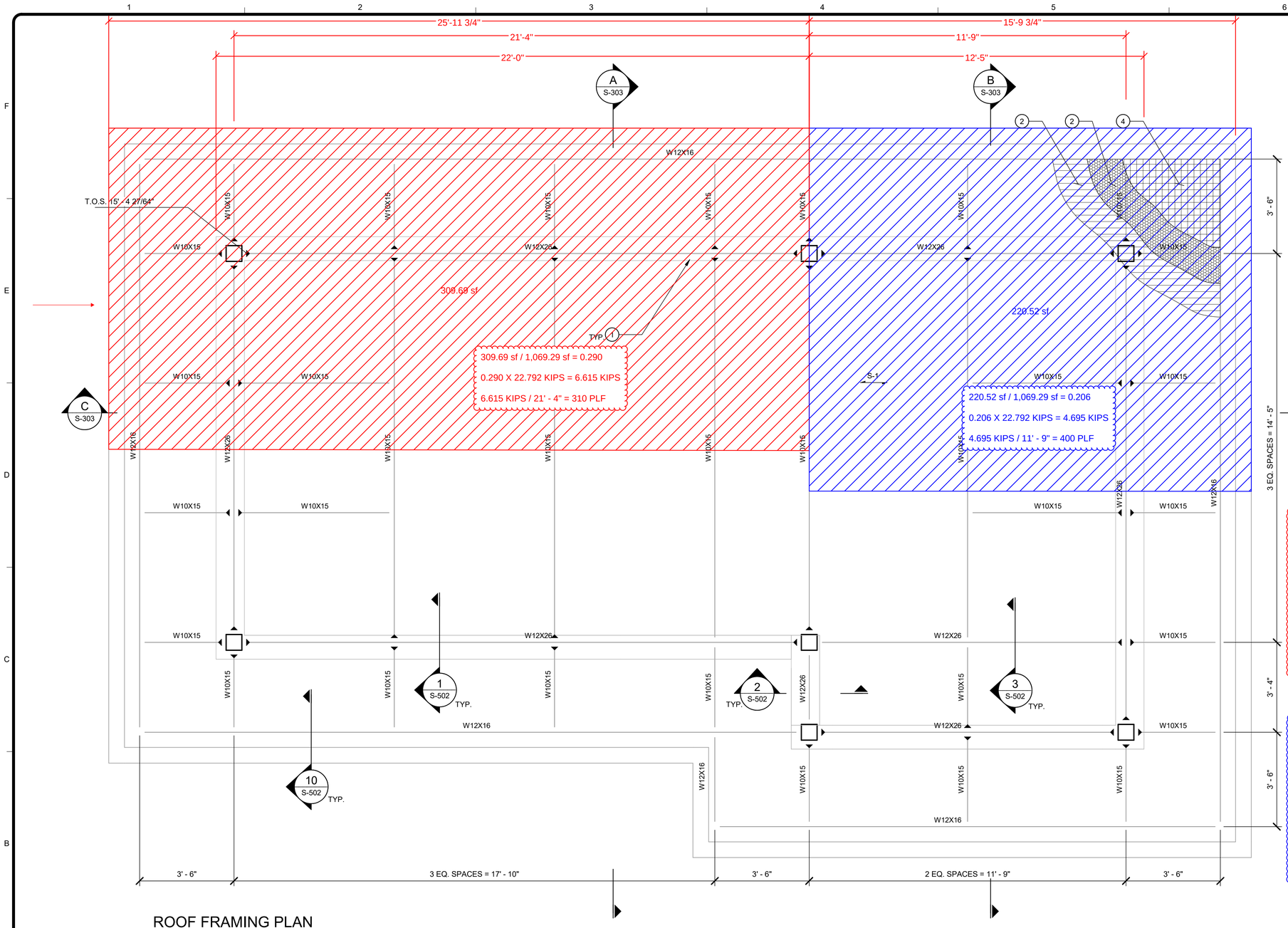
S-107

2' 0' 2' 4'
SCALE: 1/2" = 1'-0"

Bar measures 1 inch, otherwise drawing is not to scale

Copyright: Tetra Tech

6/6/2024 5:23:36 PM Autodesk Docs://213-42064-24001 BL Scale House/S-BEN LOMOND 200-42064-22005-v2023.rvt



ROOF FRAMING PLAN

SCALE: 1/2" = 1'-0"

ROOF PLAN LEGEND:

S-1 — DENOTES SPAN DIRECTION OF ROOF DICK, WHICH SHALL BE 1 1/2" X 20 GA., TYPE B, G90 GALVANIZED METAL DECK. FASTEN DECK WITH HILTI X-ENP 19 PAF FASTENERS IN A 36/4 PATTERN. INSTALL PUNCHLOK II CONNECTION (VSC2) SIDELAP CONNECTIONS @ 12" O.C. PER DECK SPAN. ATTACH DECK EDGES @ 12" O.C. = 36/4 U.N.O.

STEEL MOMENT CONNECTION; SEE NOTES FOR MORE INFORMATION

KEYNOTES: (X)

1. CFS STUD WALL. SEE FOUNDATION PLAN.
2. METAL DECK ROOF DECK
3. GYPSUM ROOF BOARD
4. RIGID INSULATION

MAXIMUM WIND DIAPHRAGM PRESSURE

7' - 8 1/8" (HALF OF ROOF HEIGHT) X 1E - 7' - 8 1/8" X 4E = 169 PLF

1E = 12.4 PSF; 4E = -9.6 PSF

3' - 7" (PARAPET HEIGHT) X WW PARAPET - 3'-7' X LW PARAPET = 148 PLF

WW PARAPET = 24.7 PSF; LW PARAPET = -16.5 PSF

169 PLF X 22'-0" / 21'-4" = 175 PLF

148 PLF X 26' / 21'-4" = 181 PLF

175 PLF + 181 PLF = 356 PLF > SEISMIC DIAPHRAGM PRESSURE

MAXIMUM WIND DIAPHRAGM PRESSURE

7' - 8 1/8" (HALF OF ROOF HEIGHT) X 1E - 7' - 8 1/8" X 4E = 169 PLF

1E = 12.4 PSF; 4E = -9.6 PSF

3' - 7" (PARAPET HEIGHT) X WW PARAPET - 3'-7' X LW PARAPET = 148 PLF

WW PARAPET = 24.7 PSF; LW PARAPET = -16.5 PSF

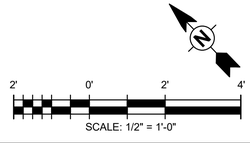
169 PLF X 12'-5" / 11'-9" = 179 PLF

148 PLF X 15'-10" / 11'-9" = 200 PLF

179 PLF + 200 PLF = 379 PLF < SEISMIC DIAPHRAGM PRESSURE

STEEL ROOF FRAMING NOTES:

1. BOLTS THAT ARE PART OF A STEEL MOMENT CONNECTION SHALL BE PRETENSIONED ACCORDING TO TABLE 8.1 OF THE RCSC AND THE FAYING SURFACES SHALL MEET THE REQUIREMENTS FOR SLIP CRITICAL CONNECTIONS.
2. ALL OTHER CONNECTIONS SHALL BE SNUG TIGHT U.N.O.
3. OVERSIZED BOLT HOLES ARE NOT ALLOWED FOR CONNECTIONS THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM.
4. WELDS OF MEMBERS AND CONNECTIONS WHICH ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM AS IDENTIFIED IN THE DRAWINGS SHALL CONFORM TO AWS D1.8 "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT." WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDING PROCEDURE SPECIFICATION AS REQUIRED IN AWS D1.1 AND AWS D1.8 AND SHALL BE APPROVED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. WELDS SHALL BE MADE WITH A FILLER MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF AWS D1.8.
5. WELDS SPECIFIED AS "DEMAND CRITICAL" ON THE DRAWINGS SHALL BE MADE WITH A FILLER METAL MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF AWS D1.8.
6. ITEMS 1, 3, 4, AND 5 APPLY TO STEEL MOMENT FRAMES AND STEEL MOMENT CONNECTIONS AS SPECIFIED ON THESE PLANS.
7. SEE SHEETS S-001 THRU S-002 FOR GENERAL NOTES AND FOUNDATION DESIGN CRITERIA.
8. SEE S-500 SERIES DRAWINGS FOR TYPICAL DETAILS NOT CUT ON PLAN.



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BEN LOMOND TRANSFER STATION

SCALE HOUSE ROOF FRAMING PLAN

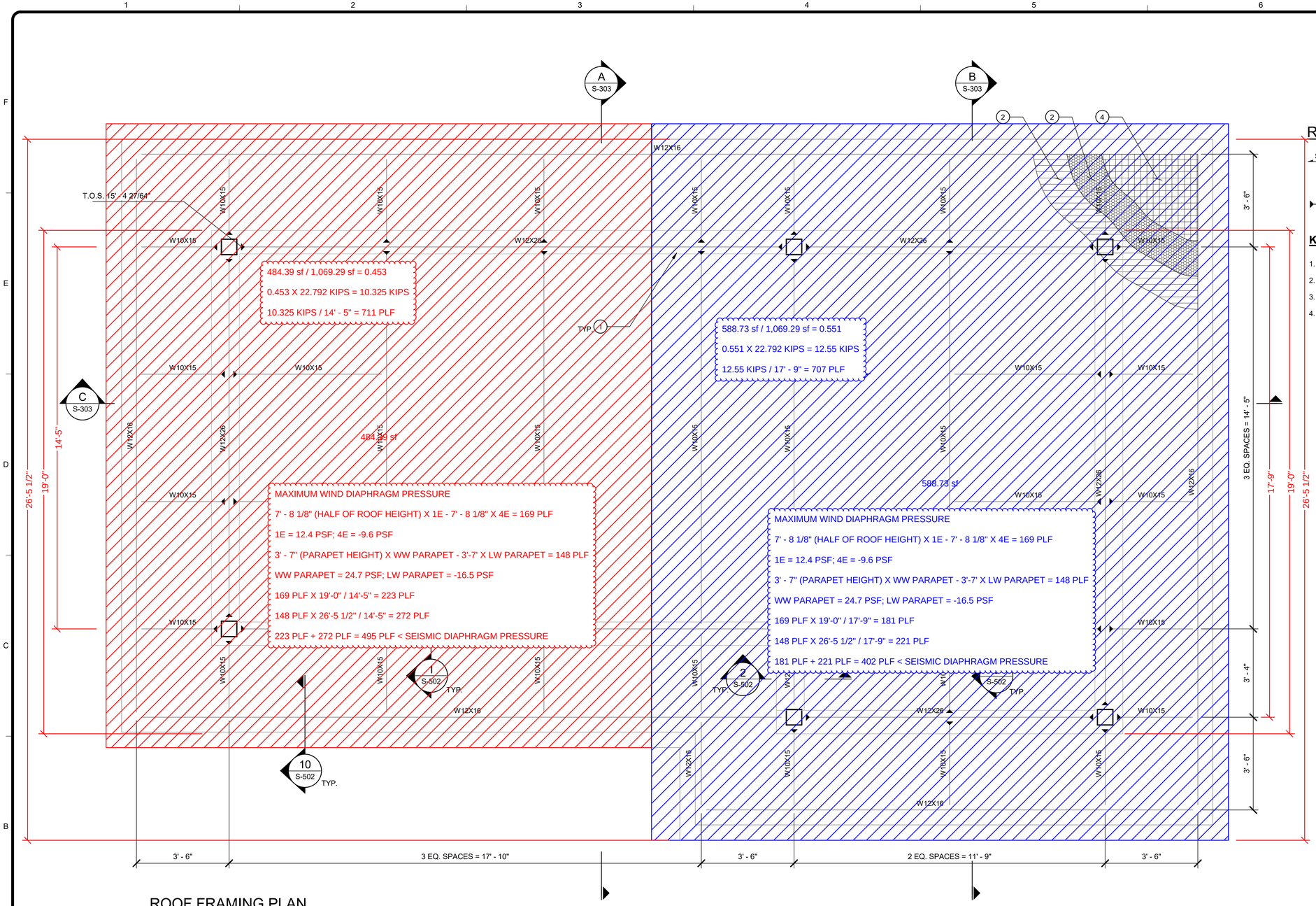
PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

S-107

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Bar measures 1 inch, otherwise drawing is not to scale



ROOF FRAMING PLAN

SCALE: 1/2" = 1'-0"

ROOF PLAN LEGEND:

S-1 — DENOTES SPAN DIRECTION OF ROOF DICK, WHICH SHALL BE 1 1/2" X 20 GA., TYPE B, G90 GALVANIZED METAL DECK. FASTEN DECK WITH HILTI X-ENP 19 PAF FASTENERS IN A 36/4 PATTERN. INSTALL PUNCHLOK II CONNECTION (VSC2) SIDELAP CONNECTIONS @ 12" O.C. PER DECK SPAN. ATTACH DECK EDGES @ 12" O.C. = 36/4 U.N.O.

STEEL MOMENT CONNECTION; SEE NOTES FOR MORE INFORMATION

KEYNOTES: (X)

1. CFS STUD WALL. SEE FOUNDATION PLAN.
2. METAL DECK ROOF DECK
3. GYPSUM ROOF BOARD
4. RIGID INSULATION

STEEL ROOF FRAMING NOTES:

1. BOLTS THAT ARE PART OF A STEEL MOMENT CONNECTION SHALL BE PRETENSIONED ACCORDING TO TABLE 8.1 OF THE RCSC AND THE FAYING SURFACES SHALL MEET THE REQUIREMENTS FOR SLIP CRITICAL CONNECTIONS.
2. ALL OTHER CONNECTIONS SHALL BE SNUG TIGHT U.N.O.
3. OVERSIZED BOLT HOLES ARE NOT ALLOWED FOR CONNECTIONS THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM.
4. WELDS OF MEMBERS AND CONNECTIONS WHICH ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM AS IDENTIFIED IN THE DRAWINGS SHALL CONFORM TO AWS D1.8 "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT," WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDING PROCEDURE SPECIFICATION AS REQUIRED IN AWS D1.1 AND AWS D1.8 AND SHALL BE APPROVED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. WELDS SHALL BE MADE WITH A FILLER MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF AWS D1.8.
5. WELDS SPECIFIED AS "DEMAND CRITICAL" ON THE DRAWINGS SHALL BE MADE WITH A FILLER METAL MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF AWS D1.8.
6. ITEMS 1, 3, 4, AND 5 APPLY TO STEEL MOMENT FRAMES AND STEEL MOMENT CONNECTIONS AS SPECIFIED ON THESE PLANS.
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8. SEE S-500 SERIES DRAWINGS FOR TYPICAL DETAILS NOT CUT ON PLAN.

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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION

SCALE HOUSE ROOF FRAMING PLAN

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

S-107

2' 0' 2' 4'
SCALE: 1/2" = 1'-0"

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Bar measures 1 inch, otherwise drawing is not to scale

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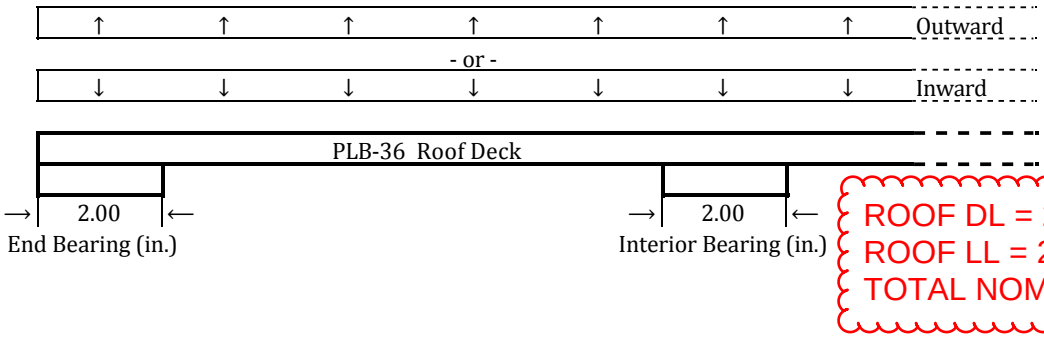
20 Gage PLB™-36 Grade 50

Uniform Allowable Load Table, ASD (psf)

For End Lapped Deck

36/4 Connection Pattern to Supports with
Hilti X-ENP-19 PAF

Support Member A572 GR50
$0.27 \le t_2$ (in.)



ROOF DL = 25 PSF
ROOF LL = 20 PSF
TOTAL NOMINAL LOAD = 45 PSF

Inward Uniform Allowable Load Table, ASD (psf)

Span	Span	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"
1	Wn/Ω	184	152	127	109	94	82	72	64
	L/240	115	86	66	52	42	34	28	23
2	Wn/Ω	186	154	130	111	96	84	73	65
	L/240	-	-	-	-	-	-	71	59
3	Wn/Ω	231	192	162	138	119	104	92	81
	L/240	229	172	132	104	83	68	56	47

Outward (Uplift) Uniform Allowable Load Table, ASD (psf)

Span	Span	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"
1	Wn/Ω	189	156	131	112	97	84	74	66
	Rn/Ω	184	167	153	141	131	123	115	108
	L/240	121	91	70	55	44	36	30	25
2	Wn/Ω	181	150	126	108	93	81	71	63
	Rn/Ω	147	134	123	113	105	98	92	87
	L/240	-	-	-	-	-	-	68	56
3	Wn/Ω	224	186	157	134	116	101	89	79
	Rn/Ω	167	152	139	129	119	111	104	98
	L/240	-	-	125	99	79	64	53	44

Steel Deck Properties

t	Design Fy	wdd	Id+	Id-	Se+	Se-	Mn+/Ω	Mn-/Ω	Vn/Ω
in	ksi	psf	$in.^4/ft$	$in.^4/ft$	$in.^3/ft$	$in.^3/ft$	lbs-ft/ft	lbs-ft/ft	lbs/ft
0.0359	50	2.30	0.219	0.231	0.230	0.237	574	592	3220

Where: $W \le Wn/\Omega$

W = Required strength of the governing ASD load combination
Wn/Ω = Allowable strength governed by the steel deck
Rn/Ω = Allowable strength governed by connection tension

Bare Deck Uniform Load V1.0.7 in accordance with:
AISI S100-16 (2020) w/ S2-20
IAPMO UES ER-0423
IAPMO UES ER-2018

Date: 6/7/2024

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20 ga PLB™-36 Grade 50 Roof Deck

Seismic Diaphragm Shear

For Both Ends Lapped Deck

Vmax = 711 PLF x 25% = 889 PLF

Hilti X-ENP19 PAF Connections to Supports
36 / 4 Perpendicular Connection Pattern to Supports
PunchLok II Connection (VSC2) Sidelap Connections

A572 GR50 Support Member or Equivalent
0.27 ≤ Support Thickness (in.)
2 in. Minimum Deck End Bearing Length

LRFD Design Seismic Diaphragm Shear Strength ΦSn (plf) — 1 Span Condition

Sidelap Connection Spacing (in.)	Span 4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
4	1357	1357	1357	1357	1357	1357	1198	990	832
6	1357	1357	1357	1357	1357	1357	1198	990	832
8	1357	1357	1357	1357	1357	1357	1198	990	832
12	1357	1357	1357	1357	1357	1357	1198	990	832
18	1357	1357	1291	1300	1308	1232	1198	990	832
24	1254	1276	1155	1189	1098	1134	1061	990	832
36	1254	1103	976	1048	956	875	943	878	821

Average Connection Spacing to Supports at Parallel Chords & Collectors (in.)

Sidelap Connection Spacing (in.)	Span 4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
4	9	9	9	9	9	9	9	9	9
6	14	14	14	14	14	14	14	14	14
8	16	15	14	14	14	14	15	19	19
12	16	15	14	14	14	14	15	19	24
18	16	15	14	14	14	15	15	19	24
24	16	15	18	17	19	18	17	19	24
36	16	20	24	21	19	22	20	22	24

Seismic or Wind Diaphragm Shear Stiffness, G' (kip/in.) — 1 Span Condition

Sidelap Connection Spacing (in.)	Span 4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
4	236	234	233	232	231	230	230	229	229
6	220	217	215	213	212	211	210	209	209
8	209	208	202	202	198	198	195	195	193
12	193	187	183	179	177	174	173	171	170
18	183	178	165	164	162	154	154	154	147
24	170	167	154	154	144	145	138	139	133
36	170	154	141	143	133	124	128	121	115

UPLIFT = 30.5 PSF (END ZONE PRESSURE) - 2.3 PSF (20 GAUGE WEIGHT) = 28.2 PSF

20 ga PLB™-36 Grade 50 Roof Deck

Diaphragm Shear & Wind Uplift Interaction

For Both Ends Lapped Deck
with MWFRS Design Net Wind Uplift (LRFD) of 28.2 psf

Hilti X-ENP19 PAF Connections to Supports
36 / 4 Perpendicular Connection Pattern to Supports
PunchLok II Connection (VSC2) Sidelap Connections

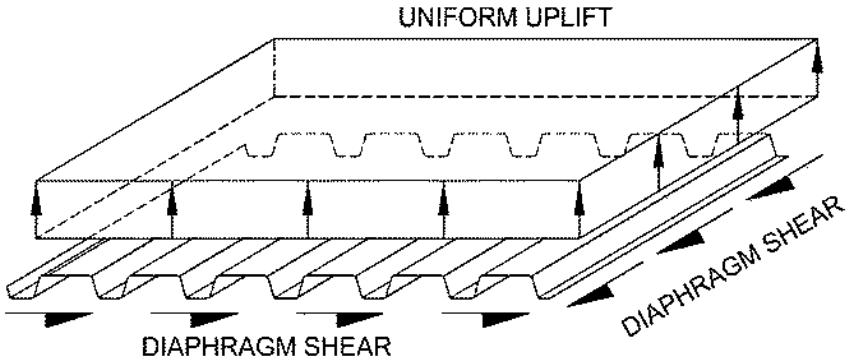
A572 GR50 Support Member or Equivalent
0.27 ≤ Support Thickness (in.)
2 in. Minimum Deck End Bearing Length

LRFD Design Combined Wind Uplift & Diaphragm Shear Strength ΦSn (plf) 1 Span Condition

Sidelap Connection Spacing (in.)	Span 4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
4	1392	1352	1313	1273	1234	1194	1154	990	832
6	1392	1352	1313	1273	1234	1194	1154	990	832
8	1392	1352	1313	1273	1234	1194	1154	990	832
12	1392	1352	1313	1273	1234	1194	1154	990	832
18	1392	1352	1313	1273	1234	1194	1154	990	832
24	1329	1332	1193	1208	1106	1121	1041	990	832
36	1329	1156	1013	1074	971	882	936	865	803

Average Connection Spacing to Supports at Parallel Chords & Collectors (in.)

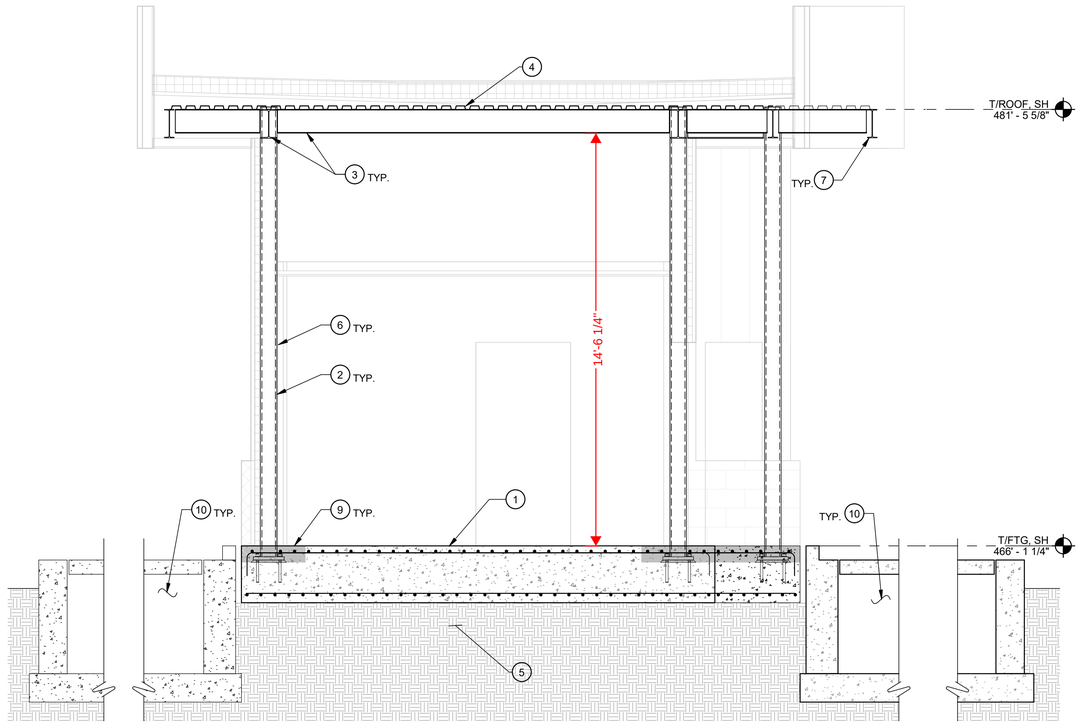
Sidelap Connection Spacing (in.)	Span 4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
4	9	9	9	9	9	9	9	9	9
6	14	14	14	14	14	14	13	14	14
8	16	15	14	14	14	14	13	15	18
12	16	15	14	14	14	14	13	15	18
18	16	15	14	14	14	14	13	15	18
24	16	15	18	14	16	15	15	15	18
36	16	20	18	17	19	18	17	19	18



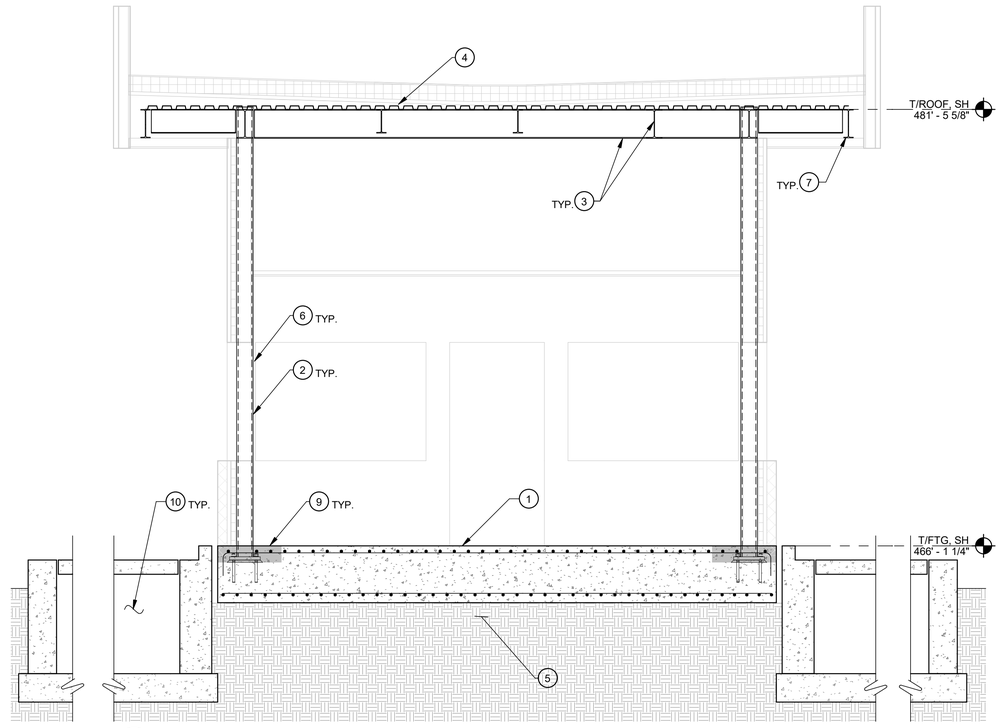
V1.0.4 of calculator based on AISI S100-16 (2020) w/S2-20 & AISI S310-16 as modified by IAPMO ER-2018 or ER-0432 Date: 6/7/2024

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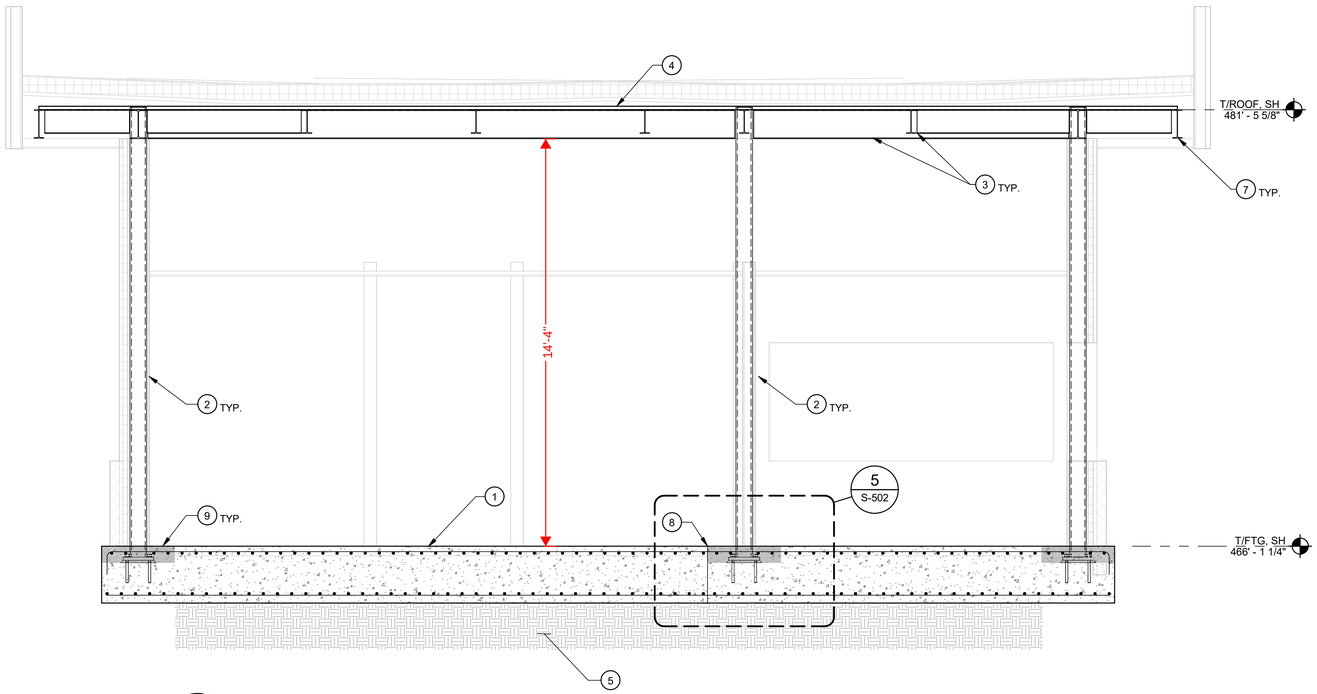
STUD WALL CALCULATIONS



A S-303 SCALE HOUSE SECTION A
SCALE: 3/8" = 1'-0"



B S-303 SCALE HOUSE SECTION B
SCALE: 3/8" = 1'-0"



C S-303 SCALE HOUSE SECTION C
SCALE: 3/8" = 1'-0"

KEYNOTES: (X)

1. MAT FOUNDATION. SEE PLAN FOR INFORMATION.
2. HSS COLUMN. SIZE PER PLAN
3. WF BEAM. SIZE PER PLAN
4. 1 1/2" METAL DECK
5. SUBGRADE PREPARATION PER DETAIL 5 / S-501
6. CFS STUD WALL
7. WF BEAM. SIZE PER PLAN
8. MAT SLAB CONSTRUCTION JOINT PER DETAIL 3 / S-501
9. CONCRETE LATE POUR POCKET PER DETAIL 5 / S-502
10. PROPOSED 12'-1 1/2" x 72'-8" x 5'-0" DEEP SCALE PIT PROVIDED BY THE EMERY WINSLOW SCALE COMPANY AND/OR BY APPROVED OTHERS. STRUCTURAL CALCULATIONS, STRUCTURAL DRAWINGS, AND DETAILS TO BE DESIGNED AND SUBMITTED BY A LICENSED ENGINEER IN CALIFORNIA FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. REINFORCING NOT SHOWN FOR CLARITY. PLEASE REFER TO THE PROJECT SPECIFICATION FOR ADDITIONAL INFORMATION.

WIND PRESSURE
STUD AREA = 24" O.C. X 14' - 4" = 28.67 SQ FT
USE ZONE PRESSURE 5 = 22.6 PSF

2' 0' 2' 4' 6'
SCALE: 3/8" = 1'-0"

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	1/29/24	30% DESIGN	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION
SCALE HOUSE SECTIONS

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

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Bar measures 1 inch, otherwise drawing is not to scale

Curtain Wall Limiting Heights - Single Span

Section	Fy (ksi)	Spacing (in) oc	5 psf			15 psf			20 psf			25 psf			30 psf			35 psf			40 psf			50 psf		
			L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
600S200-68	50	12	47' 7"	37' 9"	33' 0"	29' 6"	25' 9"	21' 9"	26' 9"	23' 5"	19' 9"	24' 10"	21' 9"	18' 4"	23' 5"	20' 5"	17' 3"	22' 3"	19' 5"	16' 4"	21' 3"	18' 7"	15' 8"	19' 9"	17' 3"	14' 6"
		16	43' 2"	34' 3"	29' 11"	26' 9"	23' 5"	19' 9"	24' 4"	21' 3"	17' 11"	22' 7"	19' 9"	16' 8"	21' 3"	18' 7"	15' 8"	20' 2"	17' 8"	14' 11"	19' 4"	16' 10"	14' 3"	17' 11"	15' 8"	13' 2"
		24	37' 9"	29' 11"	26' 2"	23' 5"	20' 5"	17' 3"	21' 3"	18' 7"	15' 8"	19' 9"	17' 3"	14' 6"	18' 7"	16' 3"	13' 8"	17' 8"	15' 5"	13' 0"	16' 10"	14' 9"	12' 5"	15' 8"	13' 8"	11' 6"
600S137-97	50	12	47' 11"	38' 0"	33' 2"	29' 8"	25' 11"	21' 10"	27' 0"	23' 7"	19' 10"	25' 0"	21' 10"	18' 5"	23' 7"	20' 7"	17' 4"	22' 5"	19' 7"	16' 6"	21' 5"	18' 8"	15' 9"	19' 10"	17' 4"	14' 8"
		16	43' 6"	34' 6"	30' 2"	27' 0"	23' 7"	19' 10"	24' 6"	21' 5"	18' 1"	22' 9"	19' 10"	16' 9"	21' 5"	18' 8"	15' 9"	20' 4"	17' 9"	15' 0"	19' 5"	17' 0"	14' 4"	18' 1"	15' 9"	13' 4"
		24	38' 0"	30' 2"	26' 4"	23' 7"	20' 7"	17' 4"	21' 5"	18' 8"	15' 9"	19' 10"	17' 4"	14' 8"	18' 8"	16' 4"	13' 9"	17' 9"	15' 6"	13' 1"	17' 0"	14' 10"	12' 6"	15' 9"	13' 9"	11' 7"
600S162-97	50	12	50' 1"	39' 9"	34' 9"	31' 1"	27' 2"	22' 11"	28' 3"	24' 8"	20' 9"	26' 2"	22' 11"	19' 4"	24' 8"	21' 6"	18' 2"	23' 5"	20' 5"	17' 3"	22' 5"	19' 7"	16' 6"	20' 9"	18' 2"	15' 4"
		16	45' 6"	36' 2"	31' 7"	28' 3"	24' 8"	20' 9"	25' 8"	22' 5"	18' 11"	23' 10"	20' 9"	17' 6"	22' 5"	19' 7"	16' 6"	21' 3"	18' 7"	15' 8"	20' 4"	17' 9"	15' 0"	18' 11"	16' 6"	13' 11"
		24	39' 9"	31' 7"	27' 7"	24' 8"	21' 6"	18' 2"	22' 5"	19' 7"	16' 6"	20' 9"	18' 2"	15' 4"	19' 7"	17' 1"	14' 5"	18' 7"	16' 3"	13' 8"	17' 9"	15' 6"	13' 1"	16' 6"	14' 5"	12' 2"
600S200-97	50	12	52' 10"	41' 11"	36' 7"	32' 9"	28' 7"	24' 1"	29' 9"	26' 0"	21' 11"	27' 7"	24' 1"	20' 4"	26' 0"	22' 8"	19' 2"	24' 8"	21' 7"	18' 2"	23' 7"	20' 7"	17' 5"	21' 11"	19' 2"	16' 2"
		16	48' 0"	38' 1"	33' 3"	29' 9"	26' 0"	21' 11"	27' 0"	23' 7"	19' 11"	25' 1"	21' 11"	18' 6"	23' 7"	20' 7"	17' 5"	22' 5"	19' 7"	16' 6"	21' 5"	18' 9"	15' 10"	19' 11"	17' 5"	14' 8"
		24	41' 11"	33' 3"	29' 1"	26' 0"	22' 8"	19' 2"	23' 7"	20' 7"	17' 5"	21' 11"	19' 2"	16' 2"	20' 7"	18' 0"	15' 2"	19' 7"	17' 1"	14' 5"	18' 9"	16' 4"	13' 10"	17' 5"	15' 2"	12' 10"
600S162-118	50	12	52' 11"	42' 0"	36' 8"	32' 10"	28' 8"	24' 2"	29' 10"	26' 0"	21' 11"	27' 8"	24' 2"	20' 5"	26' 0"	22' 9"	19' 2"	24' 9"	21' 7"	18' 3"	23' 8"	20' 8"	17' 5"	21' 11"	19' 2"	16' 2"
		16	48' 1"	38' 2"	33' 4"	29' 10"	26' 0"	21' 11"	27' 1"	23' 8"	19' 11"	25' 2"	21' 11"	18' 6"	23' 8"	20' 8"	17' 5"	22' 6"	19' 8"	16' 7"	21' 6"	18' 9"	15' 10"	19' 11"	17' 5"	14' 8"
		24	42' 0"	33' 4"	29' 1"	26' 0"	22' 9"	19' 2"	23' 8"	20' 8"	17' 5"	21' 11"	19' 2"	16' 2"	20' 8"	18' 1"	15' 3"	19' 8"	17' 2"	14' 6"	18' 9"	16' 5"	13' 10"	17' 5"	15' 3"	12' 10"
600S200-118	50	12	55' 10"	44' 4"	38' 9"	34' 7"	30' 3"	25' 6"	31' 5"	27' 6"	23' 2"	29' 2"	25' 6"	21' 6"	27' 6"	24' 0"	20' 3"	26' 1"	22' 10"	19' 3"	25' 0"	21' 10"	18' 5"	23' 2"	20' 3"	17' 1"
		16	50' 9"	40' 3"	35' 2"	31' 5"	27' 6"	23' 2"	28' 7"	25' 0"	21' 1"	26' 6"	23' 2"	19' 7"	25' 0"	21' 10"	18' 5"	23' 9"	20' 9"	17' 6"	22' 8"	19' 10"	16' 9"	21' 1"	18' 5"	15' 6"
		24	44' 4"	35' 2"	30' 9"	27' 6"	24' 0"	20' 3"	25' 0"	21' 10"	18' 5"	23' 2"	20' 3"	17' 1"	21' 10"	19' 1"	16' 1"	20' 9"	18' 1"	15' 3"	19' 10"	17' 4"	14' 7"	18' 5"	16' 1"	13' 7"
800S137-43	33	12	45' 10"	37' 10"	33' 1"	26' 6"	25' 10"	21' 9"	22' 11"	22' 11"	19' 9"	20' 6"e	20' 6"e	18' 4"	18' 9"e	18' 9"e	17' 3"e	17' 4"e	17' 4"e	16' 5"e	16' 3"e	16' 3"e	15' 8"e	14' 6"e	14' 6"e	14' 6"e
		16	39' 9"	34' 4"	30' 0"	22' 11"	22' 11"	19' 9"	19' 10"e	19' 10"e	18' 0"	17' 9"e	17' 9"e	16' 8"e	16' 3"e	16' 3"e	15' 8"e	15' 0"e	15' 0"e	14' 11"e	14' 1"e	14' 1"e	14' 1"e	12' 7"e	12' 7"e	12' 7"e
		24	32' 5"	29' 11"	26' 3"	18' 9"e	18' 9"e	17' 3"e	16' 3"e	16' 3"e	15' 8"e	14' 6"e	14' 6"e	14' 6"e	13' 3"e	13' 3"e	13' 3"e	12' 3"e	12' 3"e	12' 3"e	11' 6"e	11' 6"e	11' 6"e	10' 3"e	10' 3"e	10' 3"e
800S162-43	33	12	49' 2"	39' 4"	34' 4"	28' 6"	26' 10"	22' 7"	24' 9"e	24' 4"	20' 7"	22' 1"e	22' 1"e	19' 1"	20' 2"e	20' 2"e	17' 11"e	18' 8"e	18' 8"e	17' 1"e	17' 6"e	17' 6"e	16' 4"e	15' 8"e	15' 8"e	15' 2"e
		16	42' 10"	35' 8"	31' 2"	24' 9"e	24' 4"	20' 7"	21' 5"e	21' 5"e	18' 8"e	19' 2"e	19' 2"e	17' 4"e	17' 6"e	17' 6"e	16' 4"e	16' 2"e	16' 2"e	15' 6"e	15' 2"e	15' 2"e	14' 10"e	13' 6"e	13' 6"e	13' 6"e
		24	34' 11"	31' 1"	27' 3"	20' 2"e	20' 2"e	17' 11"e	17' 6"e	17' 6"e	16' 4"e	15' 8"e	15' 8"e	15' 2"e	14' 3"e	14' 3"e	14' 3"e	13' 3"e	13' 3"e	13' 3"e	12' 4"e	12' 4"e	12' 4"e	11' 1"e	11' 1"e	11' 1"e
800S200-43	33	12	51' 10"	41' 1"	35' 11"	30' 6"	28' 1"	23' 8"	26' 5"e	25' 6"e	21' 6"	23' 8"e	23' 8"e	19' 11"e	21' 7"e	21' 7"e	18' 9"e	20' 0"e	20' 0"e	17' 10"e	18' 8"e	18' 8"e	17' 1"e	16' 9"e	16' 9"e	15' 10"e
		16	45' 10"	37' 4"	32' 8"	26' 5"e	25' 6"e	21' 6"	22' 11"e	22' 11"e	19' 6"e	20' 6"e	20' 6"e	18' 2"e	18' 8"e	18' 8"e	17' 1"e	17' 4"e	17' 4"e	16' 2"e	16' 2"e	16' 2"e	15' 6"e	14' 6"e	14' 6"e	14' 5"e
		24	37' 5"	32' 8"	28' 6"	21' 7"e	21' 7"e	18' 9"e	18' 8"e	18' 8"e	17' 1"e	16' 9"e	16' 9"e	15' 10"e	15' 3"e	15' 3"e	14' 11"e	14' 2"e	14' 2"e	14' 2"e	13' 3"e	13' 3"e	13' 3"e	11' 10"e	11' 10"e	11' 10"e
800S137-54	50	12	51' 2"	40' 7"	35' 6"	31' 9"	27' 8"	23' 4"	28' 10"	25' 2"	21' 3"	26' 9"	23' 4"	19' 9"	25' 2"	22' 0"	18' 7"	23' 3"	20' 11"	17' 7"	21' 9"	20' 0"	16' 10"	19' 6"	18' 7"	15' 8"
		16	46' 5"	36' 11"	32' 3"	28' 10"	25' 2"	21' 3"	26' 2"	22' 10"	19' 3"	23' 10"	21' 3"	17' 11"	21' 9"	20' 0"	16' 10"	20' 2"	19' 0"	16' 0"	18' 10"	18' 2"	15' 4"	16' 10"	16' 10"	14' 3"
		24	40' 6"	32' 3"	28' 2"	25' 2"	22' 0"	18' 7"	21' 9"	20' 0"	16' 10"	19' 6"	18' 7"	15' 8"	17' 9"	17' 5"	14' 9"	16' 6"e	16' 6"e	14' 0"	15' 5"e	15' 5"e	13' 4"	13' 9"e	13' 9"e	12' 5"e
800S162-54	50	12	53' 2"	42' 3"	36' 10"	33' 0"	28' 10"	24' 3"	29' 11"	26' 2"	22' 1"	27' 10"	24' 3"	20' 6"	26' 2"	22' 10"	19' 3"	24' 10"	21' 9"	18' 4"	23' 5"	20' 9"	17' 6"	20' 11"	19' 3"	16' 3"
		16	48' 4"	38' 4"	33' 6"	29' 11"	26' 2"	22' 1"	27' 3"	23' 9"	20' 1"	25' 3"	22' 1"	18' 7"	23' 5"	20' 9"	17' 6"	21' 8"	19' 9"	16' 8"	20' 3"	18' 10"	15' 11"	18' 1"e	17' 6"e	14' 9"
		24	42' 1"	33' 6"	29' 3"	26' 2"	22' 10"	19' 3"	23' 5"	20' 9"	17' 6"	20' 11"	19' 3"	16' 3"	19' 1"	18' 2"	15' 4"	17' 8"e	17' 3"e	14' 6"	16' 6"e	16' 6"e	13' 11"	14' 9"e	14' 9"e	12' 11"e
800S200-54	50	12	55' 8"	44' 2"	38' 7"	34' 6"	30' 2"	25' 5"	31' 4"	27' 5"	23' 1"	29' 1"	25' 5"	21' 5"	27' 5"	23' 11"	20' 2"	26' 0"	22' 9"	19' 2"	24' 10"	21' 9"	18' 4"	22' 4"	20' 2"	17' 0"
		16	50' 7"	40' 2"	35' 1"	31' 4"	27' 5"	23' 1"	28' 6"	24' 10"	21' 0"	26' 5"	23' 1"	19' 6"	24' 10"	21' 9"	18' 4"	23' 1"	20' 8"	17' 5"	21' 7"e	19' 9"	16' 8"	19' 4"e	18' 4"e	15' 5"
		24	44' 2"	35' 1"	30' 8"	27' 5"	23' 11"	20' 2"	24' 10"	21' 9"	18' 4"	22' 4"	20' 2"	17' 0"	20' 5"e	19' 0"	16' 0"	18' 10"e	18' 0"e	15' 2"	17' 8"e	17' 3"e	14' 7"e	15' 9"e	15' 9"e	13' 6"e
800S137-68	50	12	54' 11"	43' 7"	38' 1"	34' 0"	29' 9"	25' 1"	30' 11"	27' 0"	22' 9"	28' 8"	25' 1"	21' 2"	27' 0"	23' 7"	19' 11"	25' 8"	22' 5"	18' 11"	24' 6"	21' 5"	18' 1"	22' 9"	19' 11"	16' 9"
		16	49' 10"	39' 7"	34' 7"	30' 11"	27' 0"	22' 9"	28' 1"	24' 6"	20' 8"	26' 1"	22' 9"	19' 2"	24' 6"	21' 5"	18' 1"	23' 4"	20' 4"	17' 2"	22' 3"	19' 6"	16' 5"	19' 11"	18' 1"	15' 3"
		24	43' 7"	34' 7"	30' 2"	27' 0"	23' 7"	19' 11"	24' 6"	21' 5"	18' 1"	22' 9"	19' 11"	16' 9"	21' 0"	18' 9"	15' 9"	19' 5"	17' 9"	15' 0"	18' 2"	17' 0"	14' 4"	16' 3"	15' 9"	13' 4"
800S162-68	50	12	57' 1"	45' 4"	39' 7"	35' 4"	30' 11"	26' 1"	32' 2"	28' 1"	23' 8"	29' 10"	26' 1"	22' 0"	28' 1"	24' 6"	20' 8"	26' 8"	23' 4"	19' 8"	25' 6"	22' 3"	18' 10"	23' 8"	20' 8"	17' 5"
		16	51' 10"	41' 2"	35' 11"	32' 2"	28' 1"	23' 8"	29' 2"	25' 6"	21' 6"	27' 1"	23' 8"	20' 0"	25' 6"	22' 3"	18' 10"	24' 3"	21' 2"	17' 10"	23' 2"	20' 3"	17' 1"	21' 3"	18' 10"	15' 10"
		24	45' 4"	35' 11"	31' 5"	28' 1"	24' 6"	20' 8"	25' 6"	22' 3"	18' 10"	23' 8"	20' 8"	17' 5"	22' 3"	19' 6"	16' 5"	20' 9"	18' 6"	15' 7"	19' 5"	17' 8"	14' 11"	17' 4"	16' 5"	13' 10"
800S200-68	50	12	59' 9"	47' 5"	41' 5"	37' 0"	32' 4"	27' 4"	33' 8"	29' 5"	24' 10"	31' 3"	27' 4"	23' 0"	29' 5"	25' 8"	21' 8"	27' 11"	24' 5"	20' 7"	26' 9"	23' 4"	19' 8"	24' 10"	21' 8"	18' 3"
		16	54' 4"	43' 1"	37' 8"	33' 8"	29' 5"	24' 10"	30' 7"	26' 9"	22' 6"	28' 5"	24' 10"	20' 11"	26' 9"	23' 4"	19' 8"	25' 4"	22' 2"	18' 8"	24' 3"	21' 2"	17' 11"	22' 6"	19' 8"	16' 7"
		24	47' 5"	37' 8"	32' 11"	29' 5"	25' 8"	21' 8"	26' 9"	23' 4"	19' 8"	24' 10"	21' 8"	18' 3"	23' 4"	20' 5"	17' 2"	22' 2"	19' 4"	16' 4"	21' 2"	18' 6"	15' 7"	19' 1"e	17' 2"	14' 6"
800S137-97	50	12	60' 10"	48' 4"	42' 2"	37' 9"	32' 11"	27' 10"	34' 3"	29' 11"	25' 3"	31' 10"	27' 10"	23' 5"	29' 11"	26' 2"	22' 1"	28' 5"	24' 10"	20' 11"	27' 2"	23' 9"	20' 1"	25' 3"	22' 1"	18' 7"
		16	55' 4"	43' 11"	38' 4"	34' 3"	29' 11"	25' 3"	31' 2"	27' 2"	22' 11"	28' 11"	25' 3"	21' 4"	27' 2"	23' 9"	20' 1"	25' 10"	22' 7"	19' 0"	24' 9"	21' 7"	18' 3"	22' 11"	20' 1"	16' 11"
		24	48' 4"	38' 4"	33' 6"	29' 11"	26' 2"	22' 1"	27' 2"	23' 9"	20' 1"	25' 3"	22' 1"	18' 7"	23' 9"	20' 9"	17' 6"	22' 7"	19' 9"	16' 8"	21' 7"	18' 10"	15' 11"	20' 1"	17' 6"	14' 9"
800S162-97	50	12	63' 5"	50' 4"	43' 11"	39' 3"	34' 4"	28' 11"	35' 8"	31' 2"	26' 4"	33' 2"	28' 11"	24' 5"	31' 2"	27' 3"	23' 0"	29' 7"	25' 11"	21' 10"	28' 4"	24' 9"	20' 10"	26' 4"	23' 0"	19' 5"
		16	57' 7"	45' 9"	39' 11"	35' 8"	31' 2"	26' 4"	32' 5"	28' 4"	23' 11"	30' 1"	26' 4"	22' 2"	28' 4"	24' 9"	20' 10"	26' 11"	23' 6"	19' 10"	25' 9"	22' 6"	19' 0"	23' 11"	20' 10"	17' 7"
		24	50' 4"	39' 11"	34' 11"	31' 2"	27' 3"	23' 0"	28' 4"	24' 9"	20' 10"	26' 4"	23' 0"	19' 5"	24' 9"	21' 7"	18' 3"	23' 6"	20' 6"	17' 4"	22' 6"	19' 8"	16' 7"	20' 10"	18' 3"	15' 5"
800S200-97	50	12	66' 6"	52' 9"	46' 1"	41' 2"	36' 0"	30' 4"	37' 5"	32' 8"	27' 7"	34' 9"	30' 4"	25' 7"	32' 8"	28' 7"	24' 1"	31' 1"	27' 2"	22' 11"	29' 9"	25' 11"	21' 11"	27' 7"	24' 1"	20' 4"
		16	60' 5"	47' 11"	41' 11"	37' 5"	32' 8"	27' 7"	34' 0"	29' 9"	25' 1"	31' 7"	27' 7"	23' 3"	29' 9"	25' 11"	21' 11"	28' 3"	24' 8"	20' 10"	27' 0"	23' 7"	19' 11"	25' 1"	21' 11"	18' 6"
		24	52' 9"	41' 11"	36' 7"	32' 8"	28' 7"	24' 1"	29' 9"	25' 11"	21' 11"	27' 7"	24' 1"	20' 4"	25' 11"	22' 8"	19' 1"	24' 8"	21' 6"	18' 2"	23' 7"	20' 7"	17' 5"	21' 11"	19' 1"	16' 2"
800S162-118	50	12	67' 1"	53' 3"	46' 6"	41' 7"	36' 4"	30' 8"	37' 9"	33' 0"	27' 10"	35' 1"	30' 8"	25' 10"	33' 0"	28' 10"	24' 4"	31' 4"	27' 5"	23' 1"	30' 0"	26' 2"	22' 1"	27' 10"	24' 4"	20' 6"
		16	60' 11"	48' 4"	42' 3"	37' 9"	33' 0"	27' 10"	34' 4"	30' 0"	25' 3"	31' 10"	27' 10"	23' 6"	30' 0"	26' 2"	22' 1"	28' 6"	24' 10"	21' 0"	27' 3"	23' 9"	20' 1"	25' 3"	22' 1"	18' 8"
		24	53' 3"	42' 3"	36' 11"	33' 0"	28' 10"	24' 4"	30' 0"	26' 2"	22' 1"	27' 10"	24' 4"	20' 6"	26' 2"	22' 11"	19' 4"	24' 10"	21' 9"	18' 4"	23' 9"	20' 9"	17' 6"	22' 1"	19' 4"	16' 3"
800S200-118	50	12	70' 5"	55' 11"	48' 10"	43' 8"	38' 2"	32' 2"	39' 8"	34' 8"	29' 3"	36' 10"	32' 2"	27' 1"	34' 8"	30' 3"	25' 6"	32' 11"	28' 9"	24' 3"	31' 6"	27' 6"	23' 2"	29' 3"	25' 6"	21' 6"
		16	64' 0"	50' 9"	44' 4"	39' 8"	34' 8"	29' 3"	36' 0"	31' 6"	26' 7"	33' 5"	29' 3"	24' 8"	31' 6"	27' 6"	23' 2"	29' 11"	26' 1"	22' 0"	28' 7"	25' 0"	21' 1"	26' 7"	23' 2"	19' 7"
		24	55' 11"	44' 4"	38' 9"	34' 8"	30' 3"	25' 6"	31' 6"	27' 6"	23' 2"	29' 3"	25' 6"	21' 6"	27' 6"	24' 0"	20' 3"	26' 1"	22' 10"	19' 3"	25' 0"	21' 10"	18' 5"	23' 2"	20' 3"	17' 1"

"e" web stiffeners required at ends.

See Table Notes on page 25.

COLUMN ANCHORAGE CALCULATIONS

Regular | Overstrength/Capacity-Limited

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
47	50*	N1	3.839	18.56	9.331	73.299	2.927	24.731

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Company:		Page:	1
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Scale House Column N1	Date:	12/23/2024
Fastening point:			

Specifier's comments:

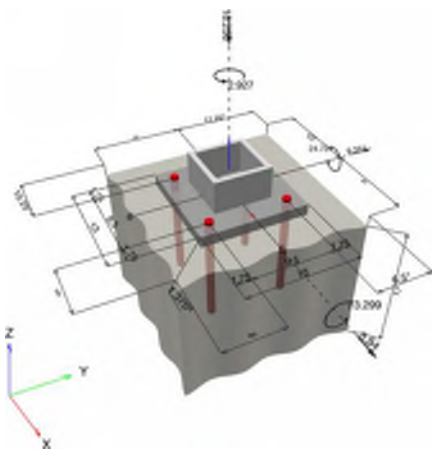
1 Input data



Anchor type and diameter:	**Heavy Hex Head ASTM F 1554 GR. 105 1**
Item number:	not available
Specification text:	∅ 1 in Heavy Hex Head ASTM F 1554 GR. 105 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII
Effective embedment depth:	h_{ef} = 12.000 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Shear edge breakout verification:	Row closest to edge (Case 3 only from ACI 318-19 Fig. R.17.7.2.1b)
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 1.375 in.
Anchor plate[R] :	l_x x l_y x t = 13.000 in. x 13.000 in. x 1.375 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC), HSS7X7X.625; (L x W x T) = 7.000 in. x 7.000 in. x 0.625 in.
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 17.000 in.
Reinforcement:	tension: present, shear: present; anchor reinforcement: tension, shear edge reinforcement: > No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [kip, ft.kip]



Input data and results must be checked for conformity with the existing conditions and for plausibility!
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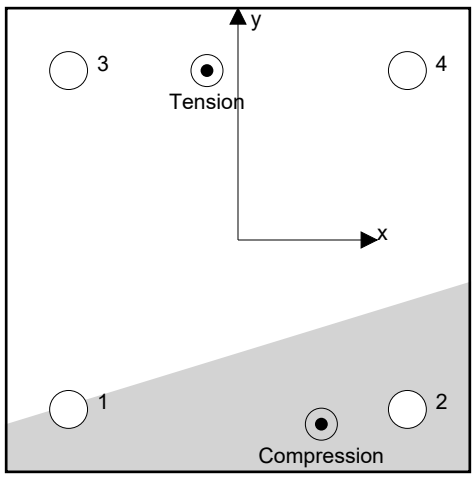
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Company:		Page:	2
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Scale House Column N1	Date:	12/23/2024
Fastening point:			

1.1 Design results

Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = -18.256; V_x = 3.840; V_y = 9.331; M_x = 73.29900; M_y = 24.73100; M_z = 2.92700;	yes	166

2 Load case/Resulting anchor forces



Anchor reactions [kip]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.000	2.353	1.884	1.408
2	0.000	3.763	1.884	3.257
3	46.861	1.409	0.036	1.408
4	32.358	3.257	0.036	3.257

Max. concrete compressive strain:	1.50 [‰]
Max. concrete compressive stress:	6,514 [psi]
Resulting tension force in (x/y)=(-0.870/4.750):	79.219 [kip]
Resulting compression force in (x/y)=(2.338/-5.163):	97.475 [kip]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [kip]	Capacity ϕ N_n [kip]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	46.861	56.812	83	OK
Pullout Strength*	46.861	28.369	166	not recommended
Concrete Breakout Failure**[1]	N/A	N/A	N/A	N/A
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)
[1] Tension Anchor Reinforcement has been selected!

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Scale House Column N1	Date:	12/23/2024
Fastening point:			

3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-19 Eq. (17.6.1.2)
$\phi N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.61	125,001

Calculations

N_{sa} [kip]
75.750

Results

N_{sa} [kip]	ϕ_{steel}	ϕN_{sa} [kip]	N_{ua} [kip]
75.750	0.750	56.812	46.861

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-19 Eq. (17.6.3.1)
$N_p = 8 A_{brg} f'_c$ ACI 318-19 Eq. (17.6.3.2.2a)
$\phi N_{pN} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	λ_a	f'_c [psi]
1.000	1.50	1.000	4,500

Calculations

N_p [kip]
54.036

Results

N_{pn} [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{pn} [kip]	N_{ua} [kip]
54.036	0.700	0.750	1.000	28.369	46.861

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [kip]	Capacity ϕ V_n [kip]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	3.763	29.542	13	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	10.090	59.783	17	OK
Concrete edge failure in direction **[1]	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (relevant anchors)
When the input edge distance is set to "infinity", edge breakout verification is not performed in that direction
[1] Shear Anchor Reinforcement has been selected!

4.1 Steel Strength

$V_{sa} = 0.6\ A_{se,V}\ f_{uta}$ ACI 318-19 Eq. (17.7.1.2b)
$\phi\ V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
0.61	125,001

Calculations

V_{sa} [kip]
45.450

Results

V_{sa} [kip]	ϕ_{steel}	$\phi\ V_{sa,eq}$ [kip]	V_{ua} [kip]
45.450	0.650	29.542	3.763

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16 \lambda_a \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-19 Eq. (17.6.2.2.3)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	12.000	3.219	1.325	6.500

$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
1.000	-	16	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [kip]
1,283.50	1,296.00	0.848	0.931	0.808	1.000	67.509

Results

V_{cpg} [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cpg} [kip]	V_{ua} [kip]
85.404	0.700	1.000	1.000	59.783	10.090

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
1.652	0.169	1.000	152	not recommended

$\beta_{NV} = (\beta_N + \beta_V) / 1.2 <= 1$

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- The equations presented in this report are based on imperial units. When inputs are displayed in metric units, the user should be aware that the equations remain in their imperial format.
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- The design of Anchor Reinforcement is beyond the scope of PROFIS Engineering. Refer to ACI 318-19, Section 17.5.2.1 (a) for information about Anchor Reinforcement.
- The design of Anchor Reinforcement is beyond the scope of PROFIS Engineering. Refer to ACI 318-19, Section 17.5.2.1 (b) for information about Anchor Reinforcement.
- Anchor Reinforcement has been selected as a design option, calculations should be compared with PROFIS Engineering calculations.

Fastening does not meet the design criteria!

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7 Installation data

Profile: Square HSS (AISC), HSS7X7X.625; (L x W x T) = 7.000 in. x 7.000 in. x 0.625 in.

Hole diameter in the fixture: d_f = 1.062 in.

Plate thickness (input): 1.375 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 105 1

Item number: not available

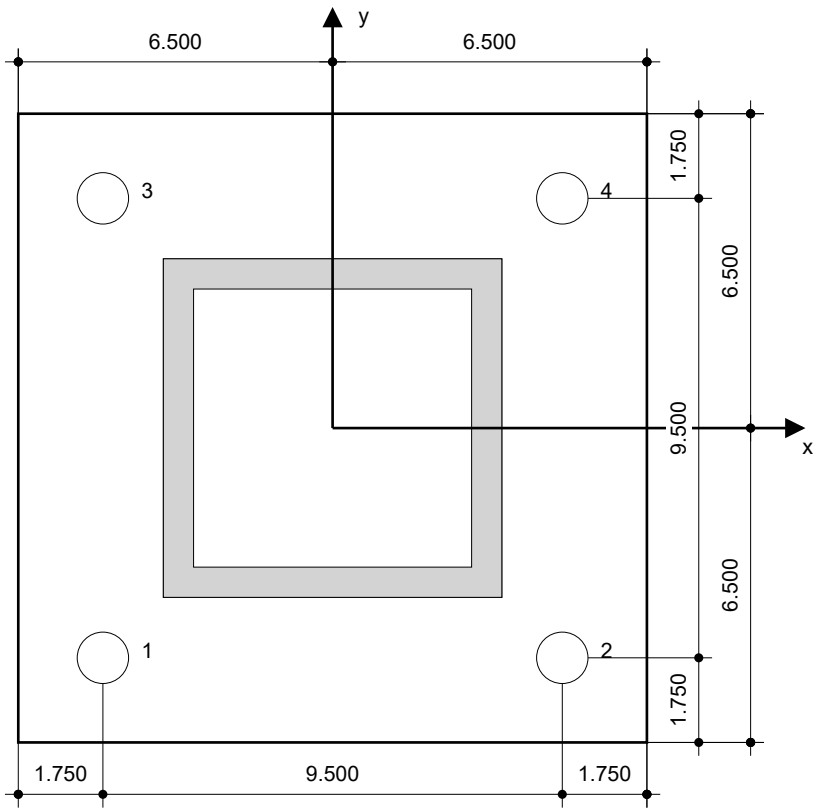
Maximum installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 12.000 in.

Minimum thickness of the base material: 13.172 in.

∅ 1 in Heavy Hex Head ASTM F 1554 GR. 105 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-4.750	-4.750	10.250	-	-	16.000
2	4.750	-4.750	19.750	-	-	16.000
3	-4.750	4.750	10.250	-	-	6.500
4	4.750	4.750	19.750	-	-	6.500

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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8 Remarks; Your Cooperation Duties

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Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Regular | Overstrength/Capacity-Limited

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
10	46*	N2	-2.148	0.463	-9.335	-73.344	-3.106	-25.022

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Specifier's comments:

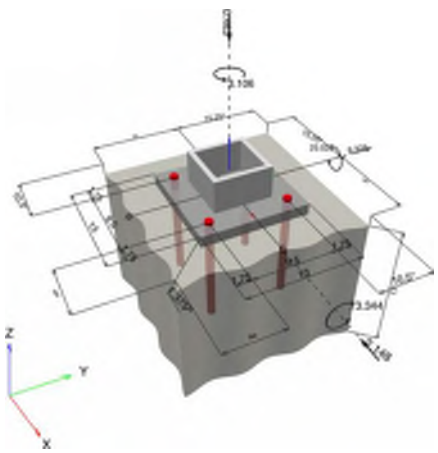
1 Input data



Anchor type and diameter:	**Heavy Hex Head ASTM F 1554 GR. 105 1**
Item number:	not available
Specification text:	∅ 1 in Heavy Hex Head ASTM F 1554 GR. 105 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII
Effective embedment depth:	h_{ef} = 12.000 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Shear edge breakout verification:	Row closest to edge (Case 3 only from ACI 318-19 Fig. R.17.7.2.1b)
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 1.375 in.
Anchor plate[R] :	l_x x l_y x t = 13.000 in. x 13.000 in. x 1.375 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC), HSS7X7X.625; (L x W x T) = 7.000 in. x 7.000 in. x 0.625 in.
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 17.000 in.
Reinforcement:	tension: present, shear: present; anchor reinforcement: tension, shear edge reinforcement: > No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [kip, ft.kip]



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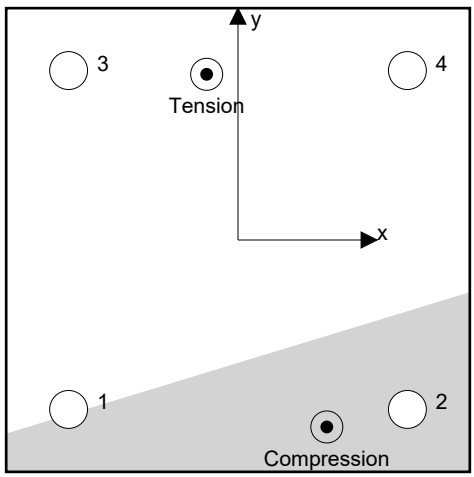
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1.1 Design results

Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = -0.463; V_x = -2.148; V_y = 9.335; M_x = 73.34400; M_y = 25.02200; M_z = 3.10600;	yes	182

2 Load case/Resulting anchor forces



Anchor reactions [kip]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.978	1.424	0.444	1.353
2	0.000	3.344	0.444	3.315
3	51.621	2.033	-1.518	1.353
4	36.175	3.646	-1.518	3.315

Max. concrete compressive strain:	1.52 [‰]
Max. concrete compressive stress:	6,595 [psi]
Resulting tension force in (x/y)=(-0.879/4.645):	88.773 [kip]
Resulting compression force in (x/y)=(2.491/-5.242):	89.236 [kip]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [kip]	Capacity ϕ N_n [kip]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	51.621	56.812	91	OK
Pullout Strength*	51.621	28.369	182	not recommended
Concrete Breakout Failure**[1]	N/A	N/A	N/A	N/A
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)
[1] Tension Anchor Reinforcement has been selected!

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-19 Eq. (17.6.1.2)
$\phi N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.61	125,001

Calculations

N_{sa} [kip]
75.750

Results

N_{sa} [kip]	ϕ_{steel}	ϕN_{sa} [kip]	N_{ua} [kip]
75.750	0.750	56.812	51.621

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-19 Eq. (17.6.3.1)
$N_p = 8 A_{brg} f'_c$ ACI 318-19 Eq. (17.6.3.2.2a)
$\phi N_{pN} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	λ_a	f'_c [psi]
1.000	1.50	1.000	4,500

Calculations

N_p [kip]
54.036

Results

N_{pn} [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{pn} [kip]	N_{ua} [kip]
54.036	0.700	0.750	1.000	28.369	51.621

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [kip]	Capacity ϕ V_n [kip]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	3.646	29.542	13	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	9.579	72.590	14	OK
Concrete edge failure in direction **[1]	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (relevant anchors)
When the input edge distance is set to "infinity", edge breakout verification is not performed in that direction
[1] Shear Anchor Reinforcement has been selected!

4.1 Steel Strength

$V_{sa} = 0.6\ A_{se,V}\ f_{uta}$ ACI 318-19 Eq. (17.7.1.2b)
$\phi\ V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
0.61	125,001

Calculations

V_{sa} [kip]
45.450

Results

V_{sa} [kip]	ϕ_{steel}	$\phi\ V_{sa,eq}$ [kip]	V_{ua} [kip]
45.450	0.650	29.542	3.646

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16 \lambda_a \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-19 Eq. (17.6.2.2.3)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	12.000	3.792	0.873	10.500

$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
1.000	-	16	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [kip]
1,444.00	1,296.00	0.826	0.954	0.875	1.000	67.509

Results

V_{cpg} [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cpg} [kip]	V_{ua} [kip]
103.700	0.700	1.000	1.000	72.590	9.579

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
1.820	0.132	1.000	163	not recommended

$\beta_{NV} = (\beta_N + \beta_V) / 1.2 <= 1$

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- The equations presented in this report are based on imperial units. When inputs are displayed in metric units, the user should be aware that the equations remain in their imperial format.
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- The design of Anchor Reinforcement is beyond the scope of PROFIS Engineering. Refer to ACI 318-19, Section 17.5.2.1 (a) for information about Anchor Reinforcement.
- The design of Anchor Reinforcement is beyond the scope of PROFIS Engineering. Refer to ACI 318-19, Section 17.5.2.1 (b) for information about Anchor Reinforcement.
- Anchor Reinforcement has been selected as a design option, calculations should be compared with PROFIS Engineering calculations.

Fastening does not meet the design criteria!

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Fastening point:			

7 Installation data

Profile: Square HSS (AISC), HSS7X7X.625; (L x W x T) = 7.000 in. x 7.000 in. x 0.625 in.

Hole diameter in the fixture: d_f = 1.062 in.

Plate thickness (input): 1.375 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 105 1

Item number: not available

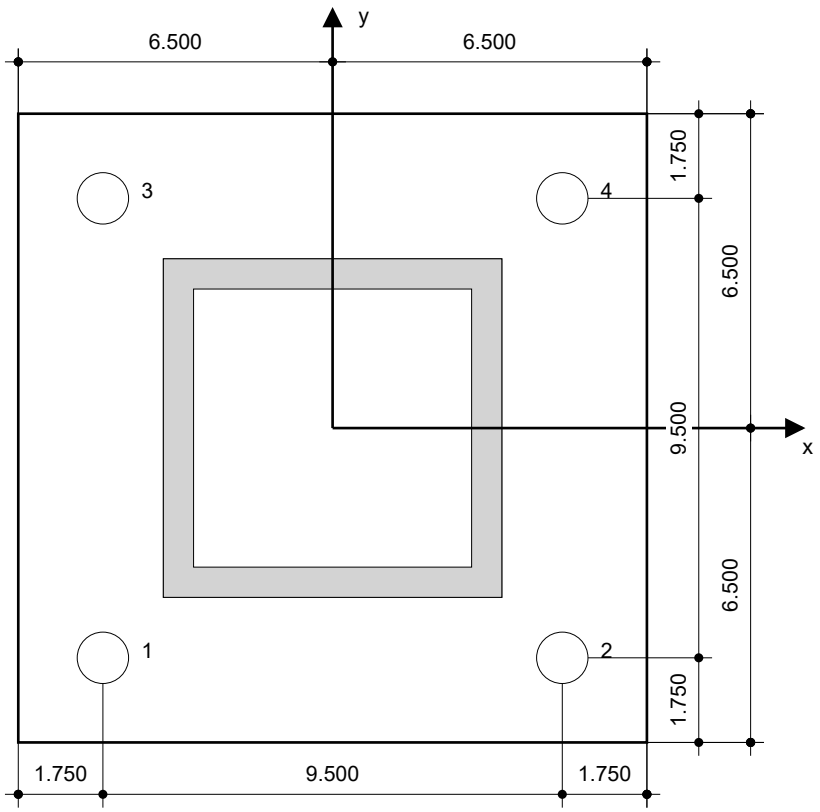
Maximum installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 12.000 in.

Minimum thickness of the base material: 13.172 in.

∅ 1 in Heavy Hex Head ASTM F 1554 GR. 105 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-4.750	-4.750	10.500	-	-	20.000
2	4.750	-4.750	20.000	-	-	20.000
3	-4.750	4.750	10.500	-	-	10.500
4	4.750	4.750	20.000	-	-	10.500

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Node Reactions - Loading...

Regular | Overstrength/Capacity-Limited

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
40	49*	N3	8.289	17.506	3.148	24.683	3	68.997

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Specifier's comments:

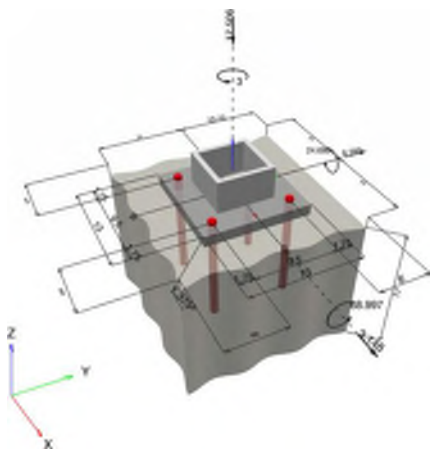
1 Input data



Anchor type and diameter:	**Heavy Hex Head ASTM F 1554 GR. 105 1**
Item number:	not available
Specification text:	∅ 1 in Heavy Hex Head ASTM F 1554 GR. 105 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII
Effective embedment depth:	h_{ef} = 12.000 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Shear edge breakout verification:	Row closest to edge (Case 3 only from ACI 318-19 Fig. R.17.7.2.1b)
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 1.375 in.
Anchor plate[R] :	l_x x l_y x t = 13.000 in. x 13.000 in. x 1.375 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC), HSS7X7X.625; (L x W x T) = 7.000 in. x 7.000 in. x 0.625 in.
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 17.000 in.
Reinforcement:	tension: present, shear: present; anchor reinforcement: tension, shear edge reinforcement: > No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [kip, ft.kip]



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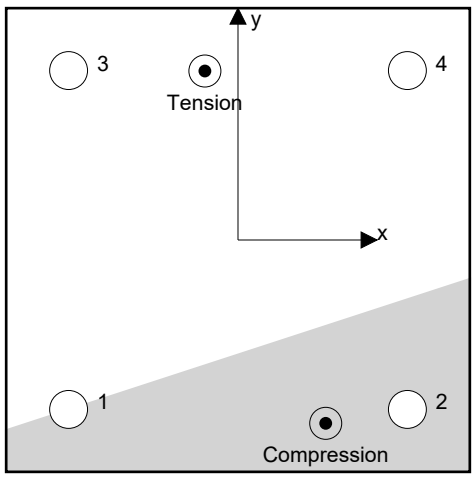
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1.1 Design results

Case	Description	Forces [kip] / Moments [ft.kip]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = -17.506; V_x = 3.148; V_y = 8.289; M_x = 68.99700; M_y = 24.68300; M_z = 3.00000;	yes	158

2 Load case/Resulting anchor forces



Anchor reactions [kip]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0.098	2.067	1.734	1.125
2	0.000	3.482	1.734	3.020
3	44.559	1.136	-0.160	1.125
4	30.058	3.024	-0.160	3.020

Max. concrete compressive strain:	1.44 [‰]
Max. concrete compressive stress:	6,254 [psi]
Resulting tension force in (x/y)=(-0.928/4.738):	74.715 [kip]
Resulting compression force in (x/y)=(2.460/-5.140):	92.221 [kip]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [kip]	Capacity ϕ N_n [kip]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	44.559	56.812	79	OK
Pullout Strength*	44.559	28.369	158	not recommended
Concrete Breakout Failure**[1]	N/A	N/A	N/A	N/A
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)
[1] Tension Anchor Reinforcement has been selected!

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-19 Eq. (17.6.1.2)
$\phi N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.61	125,001

Calculations

N_{sa} [kip]
75.750

Results

N_{sa} [kip]	ϕ_{steel}	ϕN_{sa} [kip]	N_{ua} [kip]
75.750	0.750	56.812	44.559

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-19 Eq. (17.6.3.1)
$N_p = 8 A_{brg} f'_c$ ACI 318-19 Eq. (17.6.3.2.2a)
$\phi N_{pN} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	λ_a	f'_c [psi]
1.000	1.50	1.000	4,500

Calculations

N_p [kip]
54.036

Results

N_{pn} [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{pn} [kip]	N_{ua} [kip]
54.036	0.700	0.750	1.000	28.369	44.559

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [kip]	Capacity ϕ V_n [kip]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	3.482	29.542	12	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	8.867	67.995	14	OK
Concrete edge failure in direction **[1]	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (relevant anchors)
When the input edge distance is set to "infinity", edge breakout verification is not performed in that direction
[1] Shear Anchor Reinforcement has been selected!

4.1 Steel Strength

$V_{sa} = 0.6\ A_{se,V}\ f_{uta}$ ACI 318-19 Eq. (17.7.1.2b)
$\phi\ V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
0.61	125,001

Calculations

V_{sa} [kip]
45.450

Results

V_{sa} [kip]	ϕ_{steel}	$\phi\ V_{sa,eq}$ [kip]	V_{ua} [kip]
45.450	0.650	29.542	3.482

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4.2 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16 \lambda_a \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-19 Eq. (17.6.2.2.3)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	12.000	3.796	1.442	6.000

$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
1.000	-	16	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [kip]
1,524.25	1,296.00	0.826	0.926	0.800	1.000	67.509

Results

V_{cpg} [kip]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cpg} [kip]	V_{ua} [kip]
97.135	0.700	1.000	1.000	67.995	8.867

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
1.571	0.130	1.000	142	not recommended

$\beta_{NV} = (\beta_N + \beta_V) / 1.2 <= 1$

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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- The equations presented in this report are based on imperial units. When inputs are displayed in metric units, the user should be aware that the equations remain in their imperial format.
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- The design of Anchor Reinforcement is beyond the scope of PROFIS Engineering. Refer to ACI 318-19, Section 17.5.2.1 (a) for information about Anchor Reinforcement.
- The design of Anchor Reinforcement is beyond the scope of PROFIS Engineering. Refer to ACI 318-19, Section 17.5.2.1 (b) for information about Anchor Reinforcement.
- Anchor Reinforcement has been selected as a design option, calculations should be compared with PROFIS Engineering calculations.

Fastening does not meet the design criteria!

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7 Installation data

Profile: Square HSS (AISC), HSS7X7X.625; (L x W x T) = 7.000 in. x 7.000 in. x 0.625 in.

Hole diameter in the fixture: d_f = 1.062 in.

Plate thickness (input): 1.375 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Heavy Hex Head ASTM F 1554 GR. 105 1

Item number: not available

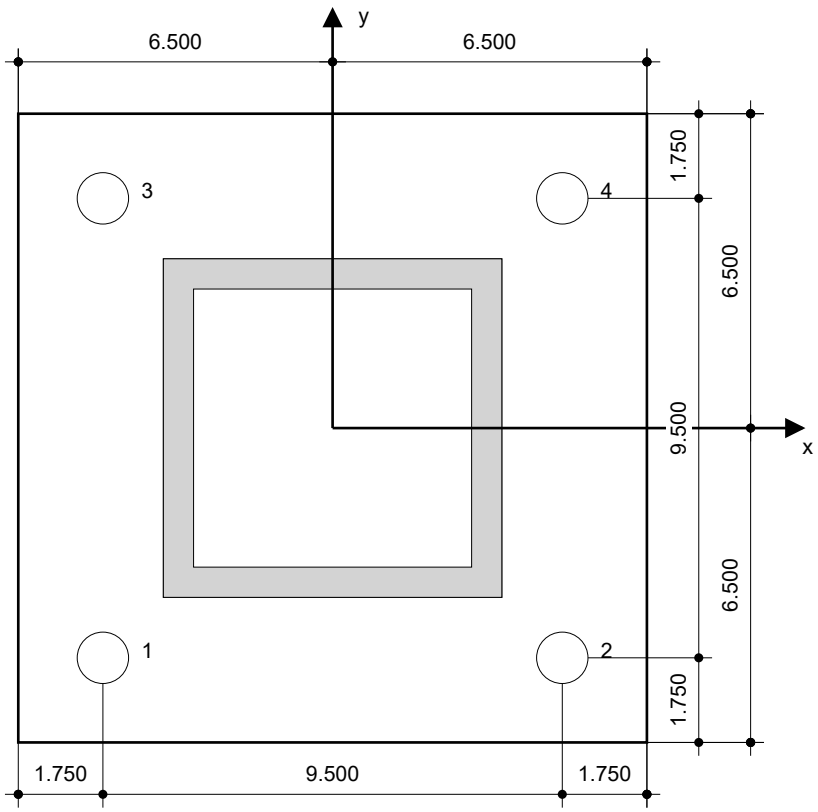
Maximum installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 12.000 in.

Minimum thickness of the base material: 13.172 in.

∅ 1 in Heavy Hex Head ASTM F 1554 GR. 105 with 12 in nominal embedment depth per Technical data , cast in place installation per MPII



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-4.750	-4.750	-	-	-	15.500
2	4.750	-4.750	-	-	-	15.500
3	-4.750	4.750	-	-	-	6.000
4	4.750	4.750	-	-	-	6.000

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ENGINEER: Tony Arzate
SUBJECT: Ben Lomond Scalehouse Calcs.

TELEPHONE: (949) 809-5000
JOB NUMBER: 200-42064-22005

Anchorage Reinforcement in Tension Calculations:

$f_y := 60\ ksi$

$\lambda := 1$

$f'_c := 4500\ psi$

$\psi_e := 1$

$\psi_r := 1$

$\psi_o := 1$

$\psi_c := \mathbf{if}\left(f'_c \geq 6000\ psi, 1, \frac{f'_c}{15000\ psi} + 0.6\right) = 0.9$

$d_{b_\#4} := \frac{4}{8}\ in = 0.5\ in$

$l_{dh} := \max\left(\left(\frac{f_y \cdot \psi_e \cdot \psi_r \cdot \psi_o \cdot \psi_c}{55 \cdot \lambda \cdot \sqrt{f'_c \cdot 1\ psi}}\right) \cdot \left(d_{b_\#4} \cdot (1\ in)^{\frac{-1}{3}}\right)^{1.5}, 8 \cdot d_{b_\#4}, 6\ in\right) = 6\ in$

$l_{dh} \cdot 2 + 3\ in + 2\ in = 17\ in$

$A_{\#4} := \frac{\pi}{4} \cdot d_{b_\#4}{}^2 = 0.196\ in^2$

$\phi T_{n_\#4} := 0.75 \cdot f_y \cdot A_{\#4} = 8.836\ kip$

$6 \cdot \phi T_{n_\#4} = 53.014\ kip$

$T_u := 51.621\ kip$

$6 \cdot \phi T_{n_\#4} \geq T_u = 1$

∴ (6) #4 tension tension breakout reinforcing bars at each anchor is sufficient

ENGINEER: Tony Arzate
SUBJECT: Ben Lomond Scalehouse Calcs.
TELEPHONE: (949) 809-5000
JOB NUMBER: 200-42064-22005

Anchor Pullout Capacity Calculations:

Try 1" dia headed anchor w/ 3 1/2" square plate washer:

$\phi_{seismic} := 0.75$

$\phi_{concrete} := 0.7$

RISA3D Node N1

$N_{ua_N1} := 46.861\ kip$

$b_{washer} := 3.5\ in$

$A_{brg_sq_washer} := {b_{washer}}^2 - \frac{\pi}{4} \cdot (1\ in)^2 = 11.465\ in^2$

$N_{p_sq_washer} := 8 \cdot A_{brg_sq_washer} \cdot f'_c = 412.726\ kip$

$\phi N_{pn_sq_washer} := \phi_{seismic} \cdot \phi_{concrete} \cdot N_{p_sq_washer} = 216.681\ kip$

$UC_{tension_steel_N1} := 0.83$

$UC_{shear_N1} := 0.17$

$UC_{tension_N1} := \max\left(\frac{N_{ua_N1}}{\phi N_{pn_sq_washer}}, UC_{tension_steel_N1}\right) = 0.83$

$\frac{\left(UC_{tension_N1} + UC_{shear_N1}\right)}{1.2} = 0.833$

Unity Check for Tension & Shear Loading (Using 3 1/2" SQ plate washer for pullout resistance)

RISA3D Node N2

$N_{ua_N2} := 51.621\ kip$

$UC_{tension_steel_N2} := 0.91$

$UC_{shear_N2} := 0.14$

$UC_{tension_N2} := \max\left(\frac{N_{ua_N2}}{\phi N_{pn_sq_washer}}, UC_{tension_steel_N2}\right) = 0.91$

$\frac{\left(UC_{tension_N2} + UC_{shear_N2}\right)}{1.2} = 0.875$

Unity Check for Tension & Shear Loading (Using 3 1/2" SQ plate washer for pullout resistance)

ENGINEER: Tony Arzate
SUBJECT: Ben Lomond Scalehouse Calcs.

TELEPHONE: (949) 809-5000
JOB NUMBER: 200-42064-22005

RISA3D Node N3

$N_{ua_N3} := 44.559\ \textit{kip}$

$UC_{tension_steel_N3} := 0.79$

$UC_{shear_N3} := 0.14$

$$UC_{tension_N3} := \max\left(\frac{N_{ua_N3}}{\phi N_{pn_sq_washer}}, UC_{tension_steel_N3}\right) = 0.79$$

$$\frac{\left(UC_{tension_N3} + UC_{shear_N3}\right)}{1.2} = 0.775$$

Unity Check for Tension & Shear Loading (Using 3 1/2" SQ plate washer for pullout resistance)

MAPES CANOPY CALCULATIONS

Ben Lomond T.S. MAPES Canopy Calculation:

$h_{hanger_rod} := 2\ ft + 3.75\ in = 2.313\ ft$

$s_{hanger_rod} := 6.5\ ft$

$b_{canopy_projection} := 5\ ft + 4\ in = 5.333\ ft$

$\theta_{rod} := 30\ deg$

$x := \frac{\left(h_{hanger_rod} - 6.25\ in\right)}{\tan\left(\theta_{rod}\right)} = 3.103\ ft$

$DL_{canopy} := 8\ psf$

$LL_{canopy} := 20\ psf$

$V_{eyebolt_ASD} := \frac{\left(1.0 \cdot DL_{canopy} + 1.0 \cdot LL_{canopy}\right) \cdot s_{hanger_rod} \cdot b_{canopy_projection}^{2}}{2 \cdot x}$

$V_{eyebolt_ASD} = 0.834\ kip$ Transmitted to wall studs as axial (compressive) load

$T_{eyebolt_ASD} := \frac{V_{eyebolt_ASD}}{\tan\left(\theta_{rod}\right)} = 1.445\ kip$ Transmitted to wall studs as lateral shear load

$V_{eyebolt_LRFD} := \frac{\left(1.2 \cdot DL_{canopy} + 1.6 \cdot LL_{canopy}\right) \cdot s_{hanger_rod} \cdot b_{canopy_projection}^{2}}{2 \cdot x}$

$V_{eyebolt_LRFD} = 1.239\ kip$

$T_{eyebolt_LRFD} := \frac{V_{eyebolt_LRFD}}{\tan\left(\theta_{rod}\right)} = 2.146\ kip$

$L := 14.521\ ft$

Allowable axial load for 800S137-54 (Gr. 50) @ 24" O.C. w/ 25 psf lateral load = 1.06 kip

$\frac{V_{eyebolt_ASD}}{2} = 0.417\ kip$

> Compare to 417 lbs for each stud in back to back built-up section.

Ben Lomond T.S. MAPES Canopy Calculation:

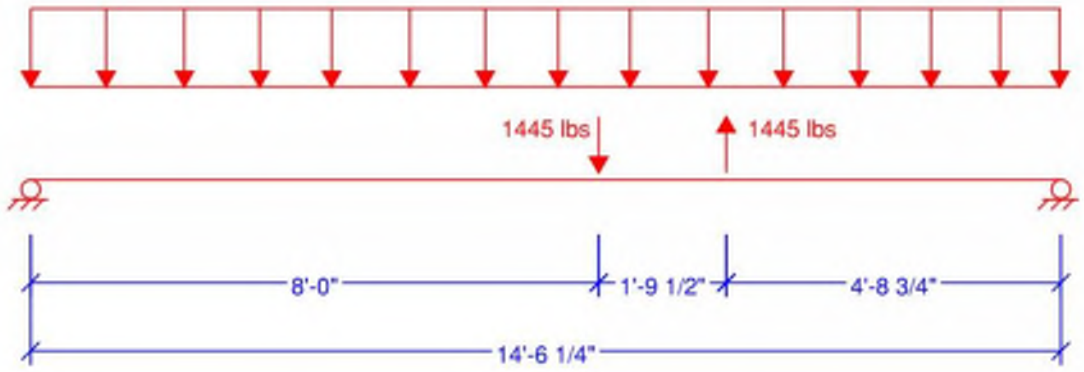
$S_x := 1.277\ in^3$ Lateral Shear Load

$F_y := 50\ ksi$

$\Omega := 1.67$

$M_n := F_y \cdot S_x = 5.321\ kip \cdot ft$

$\frac{M_n}{\Omega} = 3.19\ kip \cdot ft$



Section Properties for Built-Up Shapes:

$A := 0.627\ in^2 \cdot 2 = 1.254\ in^2$

$S_x \cdot 2 = 2.554\ in^3$

$I_x := 5.11\ in^4 \cdot 2 = 10.22\ in^4$

ASD Results per ENERCALC

$M_{max} := 1.756\ kip \cdot ft$

$V_{max} := 1.267\ kip$

$M_n := F_y \cdot S_x \cdot 2 = 10.642\ kip \cdot ft$

$\frac{M_n}{\Omega} = 6.372\ kip \cdot ft$ Mn/Ω > Mmax 0.28 D/C

Ben Lomond T.S. MAPES Canopy Calculation:

Shear Capacity:

$h := 7.717\ in$ $t := 0.0566\ in$ $E := 29000\ ksi$ $K_v := 5.34$ $F_y = 50\ ksi$

$\mu := 0.3$ $\frac{h}{t} = 136.343$ $\sqrt{\frac{E \cdot K_v}{F_y}} = 55.652$

$A_w := 2 \cdot t \cdot h = 0.87\ in^2$

$$F_v := \frac{\pi^2 \cdot E \cdot K_v}{12 \cdot \left(1 - \mu^2\right) \cdot \left(\frac{h}{t}\right)^2} = 7.529\ ksi$$

$V_n := \frac{A_w \cdot F_v}{1.6} = 4.111\ kip$ Vn/Ω > Vmax 0.3 D/C

Connector Spacing: [AISI D1.1]

$S_{max} := \frac{L}{6} = 2.42\ ft$

$d := 0.19\ in$ $w_f := 0.853\ in$

$m := \frac{{w_f}^2}{2 \cdot w_f + \frac{d}{3}} = 0.411\ in$ for 800S137-118 (Gr. 50)

$P_s := 1.445\ kip$

$g := 6\ in$ (Assumed dist. b/t connections near top + bot. flanges)

$T_r := \frac{P_s \cdot m}{2 \cdot g} = 0.05\ kip$

Tension Capacity of Connectors: Try #10 Screws

$T_n := 0.645\ kip$ $\frac{T_n}{\Omega} = 0.386\ kip$ (Per AISI) > Tr

$min_{spacing} := 3 \cdot d = 0.57\ in$ < 6" Spacing

$min_{EdgeDistance} := 1.5 \cdot d = 0.285\ in$ < 1" Spacing

Use 800S137-118 (Gr. 50) Back-to-Back, connected with (2) #10 screws @ 2'-0" O.C. along length of stud.

$Q_{max} := \sqrt{{V_{eyebolt_ASD}}^2 + {T_{eyebolt_ASD}}^2} = 1.668\ kip$

Ben Lomond T.S. MAPES Canopy Calculation:

Hanger Rod Connection Capacity:

- Try HILTI S-MD 1/4 - 14 x 1 1/2 HHWH #3 Screws (N.G.)
  - Max thickness of steel = 3/8" + 2 x (0.1242") = 0.6234"
  - Max allowable total thickness = 3/8" + 2 x (0.1242") = 1.062" > 0.6234" (OK)
  - Max. Drilling / Piercing Capacity = 0.22" < 3/8" (N.G.)
- Try HILTI S-MD 12 - 24 x 2 HWH #5 Kwik Cote Screws (OK)
  - Max allowable total thickness = 1.187" = 1.062" > 0.6234" (OK)
  - Max. Drilling / Piercing Capacity = 0.5" > 3/8" (OK)
  - Minimum Protrusion Length = 0.813" (OK)
  - Shear capacity of single screw = 420 lbs per ICC-ESR 2196 Table 4A

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JOB TITLE	Ben Lomond TS		
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CHECKED BY	MSO	**DATE**	

STRUCTURAL CALCULATIONS

FOR

Ben Lomond TS - Entrance Sign

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www.struware.com

Code Search

Code: International Building Code 2021

Occupancy:

Occupancy Group = B Business

Risk Category & Importance Factors:

Risk Category =	II
Wind factor =	1.00
Snow factor =	1.00
Seismic factor =	1.00

Type of Construction:

Fire Rating:

Roof =	0.0 hr
Floor =	0.0 hr

Building Geometry:

Roof angle (θ)	0.00 / 12	0.0 deg
Building length	0.0 ft	
Least width	0.0 ft	
Mean Roof Ht (h)	22.0 ft	
Parapet ht above grd	0.0 ft	
Minimum parapet ht	0.0 ft	

Live Loads:

Roof
0 to 200 sf: 20 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12 psf

Roofs used for roof gardens	100 psf

Floor:

Typical Floor	50 psf
Partitions	15 psf
Corridors above first floor	80 psf
Lobbies & first floor corridors	100 psf
Stairs and exit ways	100 psf
Storage areas above ceilings	20 psf

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Wind Loads : ASCE 7- 16

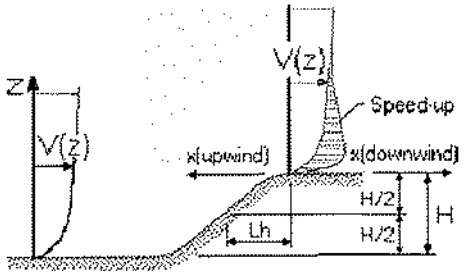
Ultimate Wind Speed	92 mph
Nominal Wind Speed	71.3 mph
Risk Category	II
Exposure Category	C
Enclosure Classif.	Enclosed Building
Internal pressure	+/-0.18
Directionality (Kd)	0.85
Kh case 1	0.920
Kh case 2	0.920
Type of roof	Gable

Topographic Factor (Kzt)

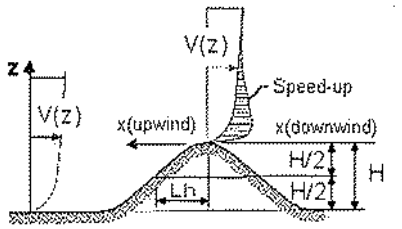
Topography		Flat
Hill Height	(H)	80.0 ft
Half Hill Length (Lh)		100.0 ft
Actual H/Lh	=	0.80
Use H/Lh	=	0.50
Modified Lh	=	160.0 ft
From top of crest: x =		50.0 ft
Bldg up/down wind?		downwind

H/Lh= 0.50 K_1 = 0.000
x/Lh = 0.31 K_2 = 0.792
z/Lh = 0.14 K_3 = 1.000

At Mean Roof Ht:
Kzt = $(1+K_1K_2K_3)^2$ = 1.00



ESCARPMENT



2D RIDGE or 3D AXISYMMETRICAL HILL

Gust Effect Factor

Flexible structure if natural frequency < 1 Hz (T > 1 second).
If building h/B>4 then may be flexible and should be investigated.

h =	22.0 ft	h/B =	#DIV/0! #DIV/0!
B =	0.0 ft		
/z (0.6h) =	15.0 ft		

G = 0.85 Using rigid structure formula

Rigid Structure

$\bar{e}$ =	0.20
ℓ =	500 ft
z_{min} =	15 ft
c =	0.20
g_Q, g_v =	3.4
L_z =	427.1 ft
Q =	0.95
I_z =	0.23
G =	**0.90** use G = 0.85

Flexible or Dynamically Sensitive Structure

Natural Frequency (η_1) =	0.0 Hz				
Damping ratio (β) =	0				
/b =	0.65				
/α =	0.15				
Vz =	77.7				
N_1 =	0.00				
R_n =	0.000				
R_h =	28.282	η =	0.000	h =	22.0 ft
R_B =	28.282	η =	0.000		
R_L =	28.282	η =	0.000		
g_R =	0.000				
R =	0.000				
Gf =	0.000				

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JOB TITLE Ben Lomond TS
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Enclosure Classification

Test for Enclosed Building: Ao < 0.01Ag or 4 sf, whichever is smaller

Test for Open Building: All walls are at least 80% open.
Ao ≥ 0.8Ag

Test for Partially Enclosed Building: Predominately open on one side only

	Input			Test	
Ao	500.0	sf	Ao ≥ 1.1Aoi	NO	
Ag	600.0	sf	Ao > 4' or 0.01Ag	YES	
Aoi	1000.0	sf	Aoi / Agi ≤ 0.20	YES	Building is NOT
Agi	10000.0	sf			Partially Enclosed

Conditions to qualify as Partially Enclosed Building. Must satisfy all of the following:
Ao ≥ 1.1Aoi
Ao > smaller of 4' or 0.01 Ag
Aoi / Agi ≤ 0.20
Where:
Ao = the total area of openings in a wall that receives positive external pressure.
Ag = the gross area of that wall in which Ao is identified.
Aoi = the sum of the areas of openings in the building envelope (walls and roof) not including Ao.
Agi = the sum of the gross surface areas of the building envelope (walls and roof) not including Ag.

Test for Partially Open Building: A building that does not qualify as open, enclosed or partially enclosed.
(This type building will have same wind pressures as an enclosed building.

Reduction Factor for large volume partially enclosed buildings (Ri) :

If the partially enclosed building contains a single room that is unpartitioned , the internal pressure coefficient may be multiplied by the reduction factor Ri.

Total area of all wall & roof openings (Aog): 0 sf
Unpartitioned internal volume (Vi) : 0 cf
Ri = 1.00

Ground Elevation Factor (Ke)

Grd level above sea level = 0.0 ft Ke = 1.0000
Constant = 0.00256 Adj Constant = 0.00256

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Wind Loads - Other Structures: ASCE 7- 16 Ultimate Wind Pressures

Wind Factor =	1.00				
Gust Effect Factor (G) =	0.85	Ultimate Wind Speed =	92	mph	
Kzt =	1.00	Exposure =	C		

A. Solid Freestanding Walls & Solid Signs (& open signs with less than 30% open)

		s/h =	0.27		**Case A & B**	
Dist to sign top (h)	22.0 ft	B/s =	13.33		C_f =	1.83
Height (s)	6.0 ft	Lr/s =	0.00		F = qz G Cf As =	**26.4 As**
Width (B)	80.0 ft	Kz =	0.920		As =	480.0 sf
Wall Return (Lr) =		qz =	16.9 psf		F =	12656 lbs
Directionality (Kd)	0.85					
Percent of open area		Open reduction			**CaseC**	
to gross area	0.0%	factor =	1.00	Horiz dist from windward edge	Cf	F=qzGCfAs (psf)
		Case C reduction factors		0 to s	4.00	57.7 **As**
		Factor if s/h>0.8 =	1.00	s to 2s	2.60	37.4 **As**
		Wall return factor		2s to 3s	2.00	28.8 **As**
		for Cf at 0 to s =	1.00	3s to 4s	1.50	21.7 **As**
				4s to 5s	1.36	19.5 **As**
				5s to 10s	0.90	16.0 **As**
				>10s	0.55	16.0 **As**

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Seismic Loads: IBC 2021

Strength Level Forces

Risk Category : II
Importance Factor (Ie) : 1.00
Site Class : B

Ss (0.2 sec) = 197.00 %g
S1 (1.0 sec) = 78.30 %g

A site specific ground motion analysis is required for isolated structures or with damping systems seismically

Site specific ground motion analysis performed:

Fa =	0.900	Sms =	1.773	S_{DS} =	1.182	Design Category =	E
Fv =	0.800	Sm1 =	0.626	S_{D1} =	0.418	Design Category =	E

Seismic Design Category = **E**
Redundancy Coefficient ρ = 1.30
Number of Stories: 1
Structure Type: Light Frame
Horizontal Struct Irregularities: No plan Irregularity
Vertical Structural Irregularities: No vertical Irregularity
Flexible Diaphragms: Yes
Building System: **Bearing Wall Systems** **(SAME R-FACTOR)**
Seismic resisting system: **Light frame walls with shear panels - all other materials**
System Structural Height Limit: **System not permitted for this seismic design category**
Actual Structural Height (hn) = 22.0 ft
See ASCE7 Section 12.2.5 for exceptions and other system limitations

DESIGN COEFFICIENTS AND FACTORS

Response Modification Coefficient (R) = 2
Over-Strength Factor (Ωo) = 2
Deflection Amplification Factor (Cd) = 2
S_{DS} = 1.182
S_{D1} = 0.418

Seismic Load Effect (E) = Eh +/-Ev = ρQ_E +/- $0.2S_{DS}$ D = 1.3Qe +/- 0.236D
Special Seismic Load Effect (Em) = Emh +/- Ev = $\Omega o\, Q_E$ +/- $0.2S_{DS}$ D = 2Qe +/- 0.236D

Q_E = horizontal seismic force
D = dead load

PERMITTED ANALYTICAL PROCEDURES

Simplified Analysis - Use Equivalent Lateral Force Analysis

Equivalent Lateral-Force Analysis - Permitted

Building period coef. (C_T) = 0.020
Approx fundamental period (Ta) = $C_T h_n^x$ = 0.203 sec x= 0.75
User calculated fundamental period =
Long Period Transition Period (TL) = ASCE7 map = 12 sec
Seismic response coef. (Cs) = SdsI/R = 0.591
need not exceed Cs = Sd1 I /RT = 1.028
but not less than Cs = 0.5*S1I/R = 0.196
USE Cs = 0.591

Cu = 1.40
Tmax = CuTa = 0.284 sec
T = 0.203 sec

Design Base Shear V = 0.591W

Model & Seismic Response Analysis - Permitted (see code for procedure

Ben Lomond Transfer Station: Entrance Sign Calculations

$C_s := 0.591$ (With Exception per 12.8.1.3)

$W_{HSS20x0.5} := 104$ *plf*

$W_{L6x4x0.5} := 16.2$ *plf*

$W_{L3.5x3.5x0.3125} := 7.2$ *plf*

$W_{L2.5x2.5x0.25} := 4.1$ *plf*

$W_{L3x3x0.3125} := 6.1$ *plf*

$V_{HSS20x0.5} := C_s \cdot W_{HSS20x0.5} = 0.061$ *klf*

$V_{L6x4x0.5} := C_s \cdot W_{L6x4x0.5} = 0.01$ *klf*

$V_{L3.5x3.5x0.3125} := C_s \cdot W_{L3.5x3.5x0.3125} = 0.004$ *klf*

$V_{L2.5x2.5x0.25} := C_s \cdot W_{L2.5x2.5x0.25} = 0.002$ *klf*

$V_{L3x3x0.3125} := C_s \cdot W_{L3x3x0.3125} = 0.004$ *klf*

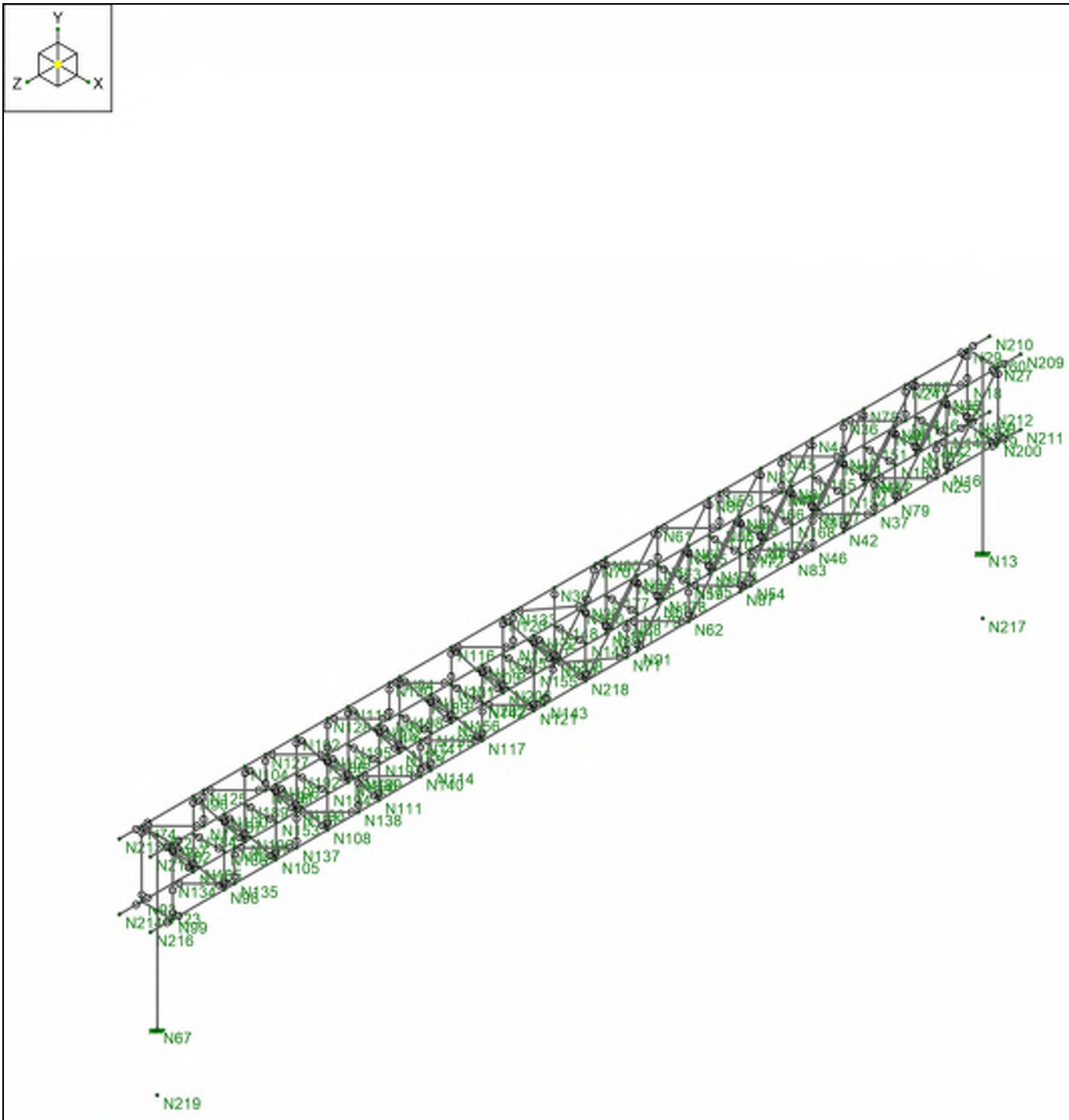
$h_{signs} := 6$ *ft*

$L_{signs} := 80$ *ft*

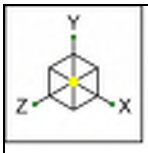
$W_{signs} := 1000$ *lbf*

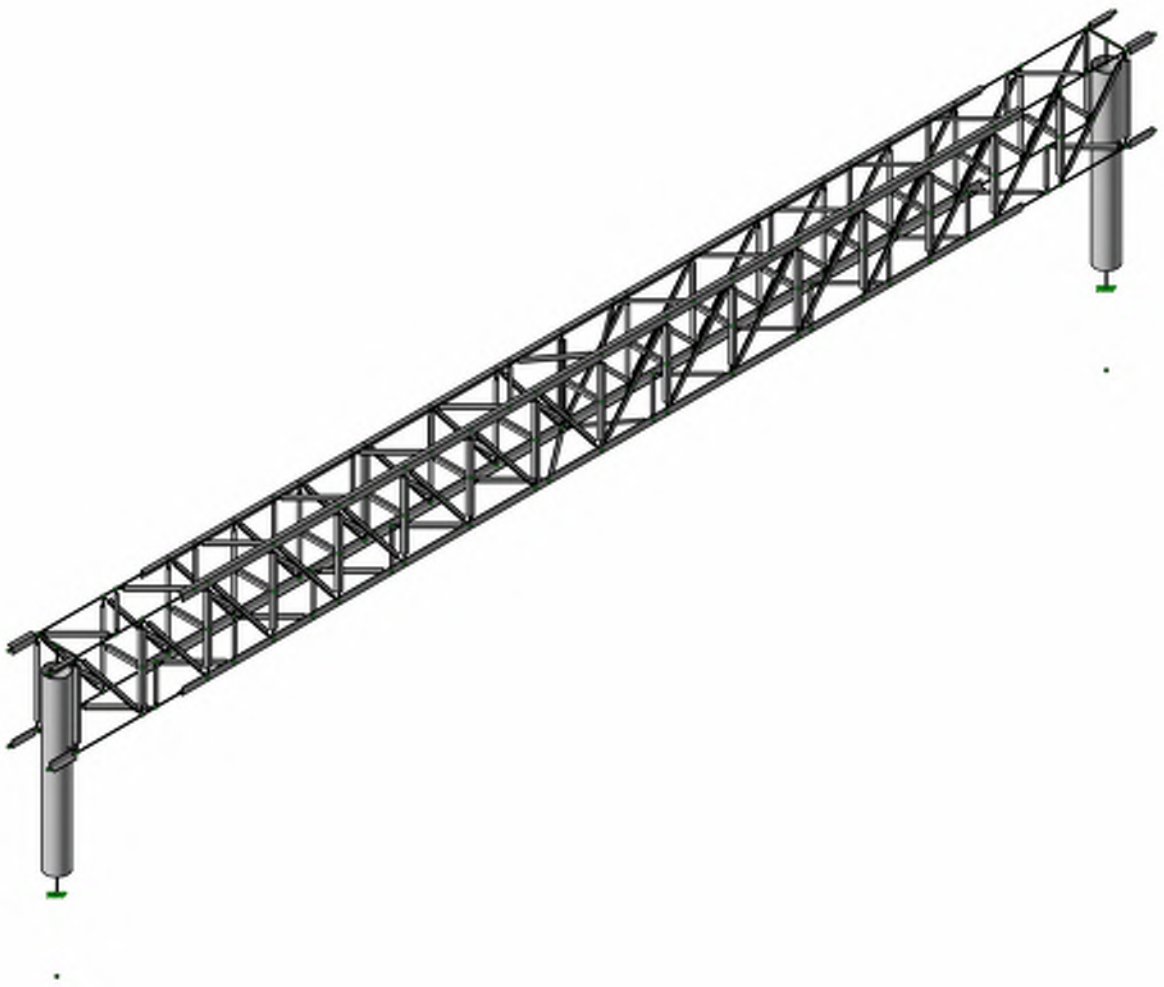
$$q_{DL_signs} := \frac{W_{signs}}{h_{signs} \cdot L_{signs}} = 2 \text{ psf}$$

$V_{signs} := q_{DL_signs} \cdot C_s = 1$ *psf*

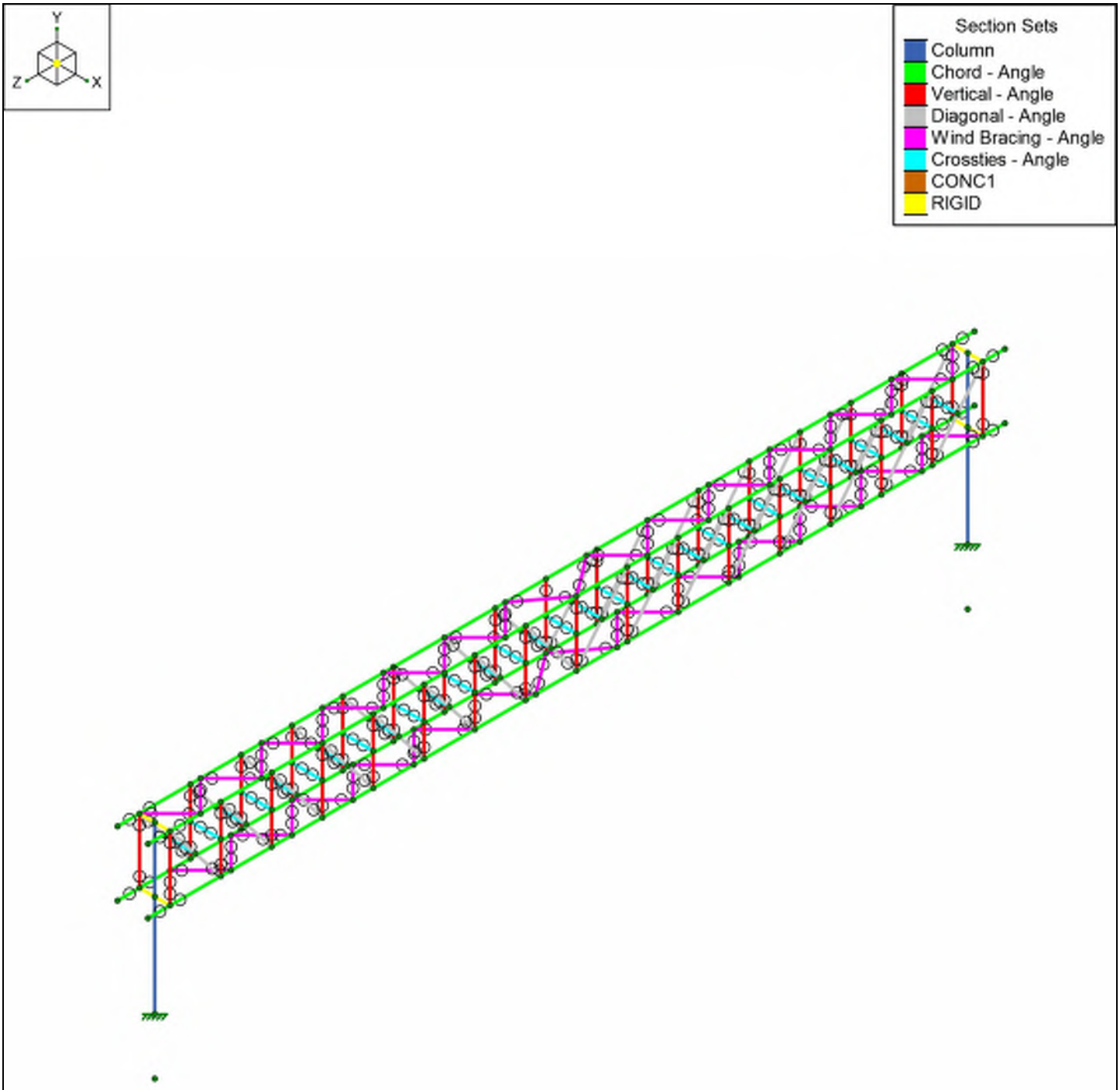


IRISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	1
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	NODES	

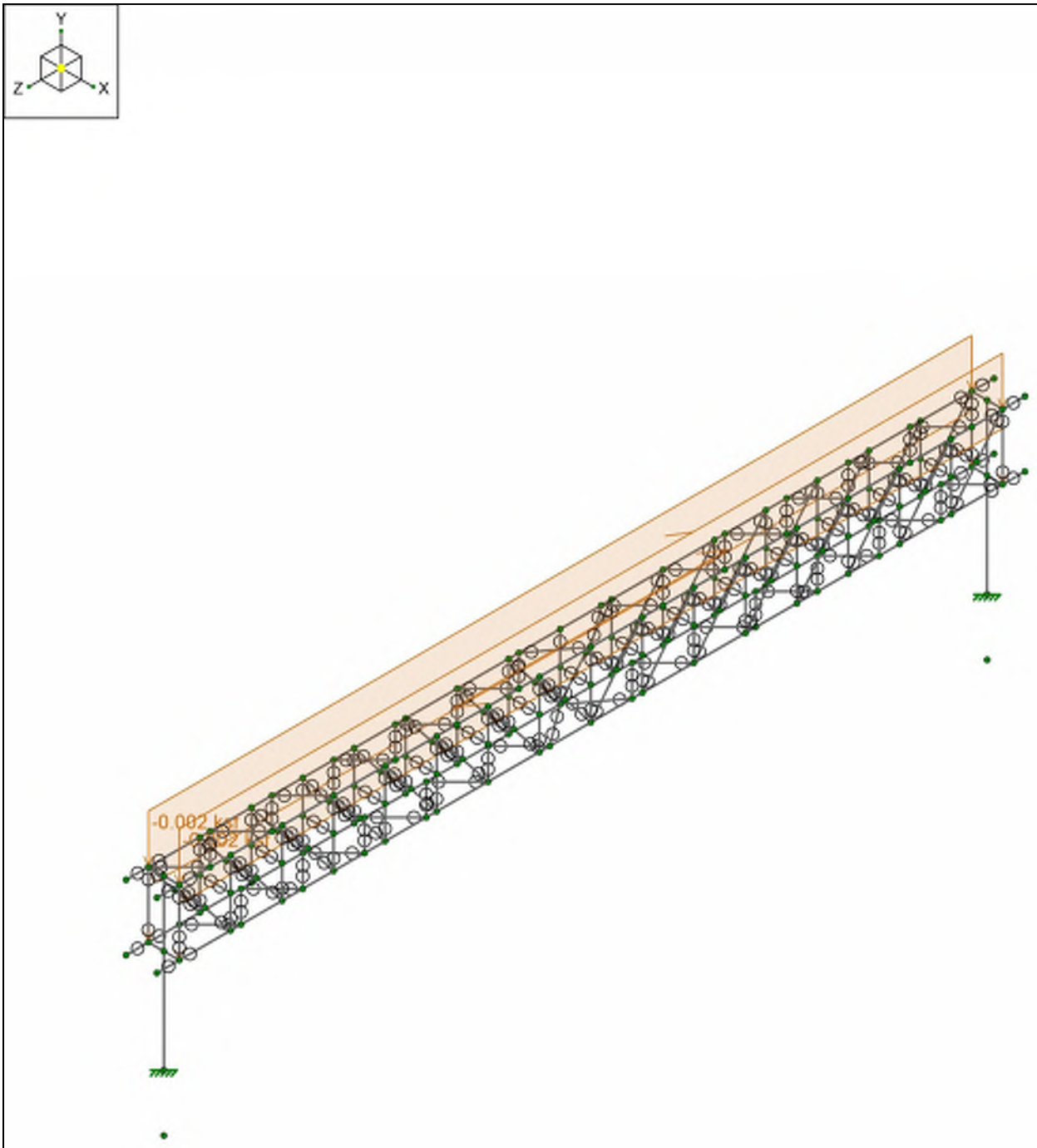




RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	2
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	RENDERED MODEL	

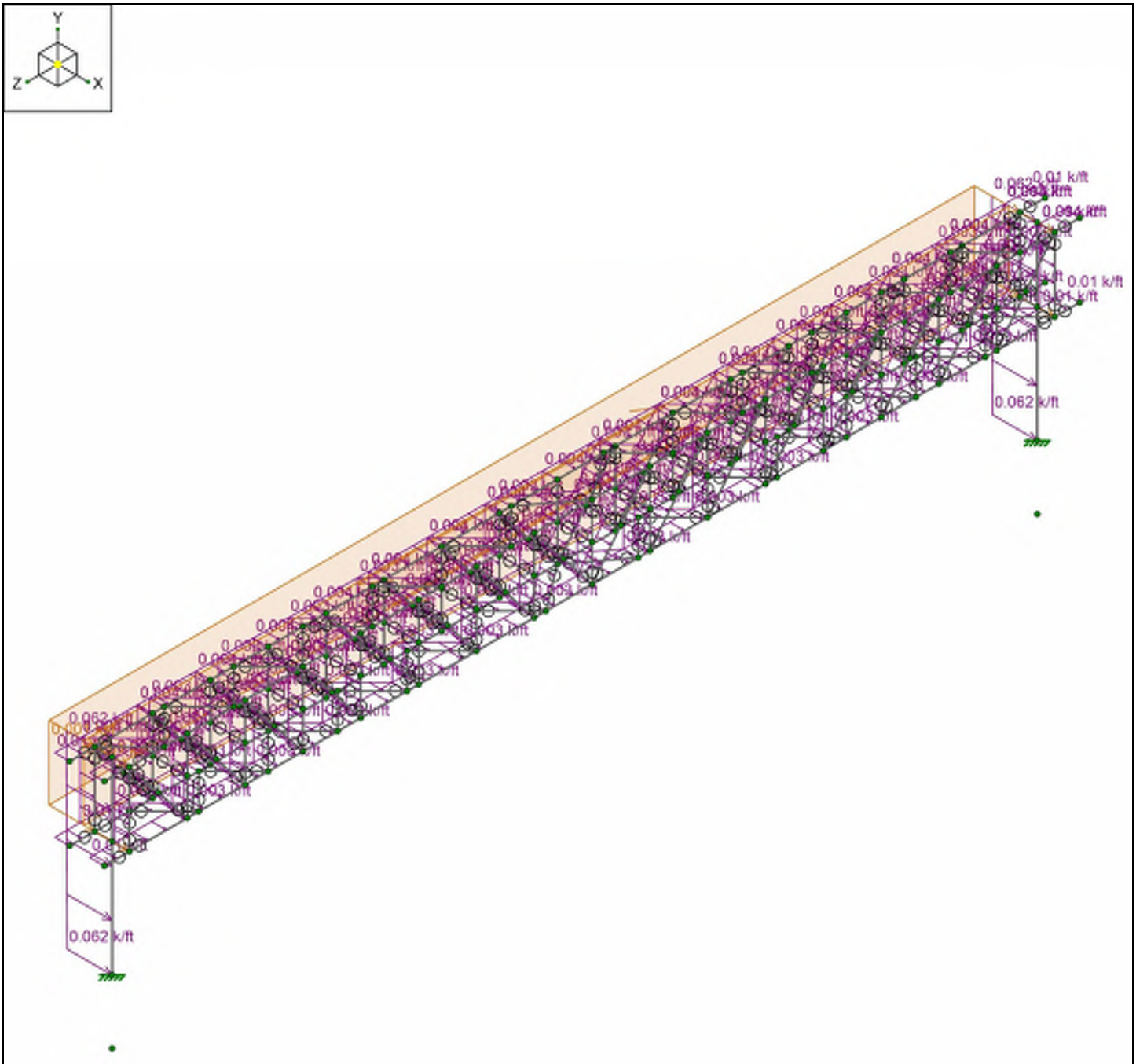


Label	Shape	Type	Design List	Material
Column	HSS20.000X0.500	Column	HSS Pipe	A500 Gr.C RND
Chord - Angle	L6X4X8	Beam	Single Angle	A36 Gr.36
Vertical - Angle	L3.5X3.5X5	VBrace	Single Angle	A36 Gr.36
Diagonal - Angle	L3.5X3.5X5	VBrace	Single Angle	A36 Gr.36
Wind Bracing -...	L2.5X2.5X4	HBrace	Single Angle	A36 Gr.36
Crossties - Angle	L3X3X5	Beam	Single Angle	A36 Gr.36



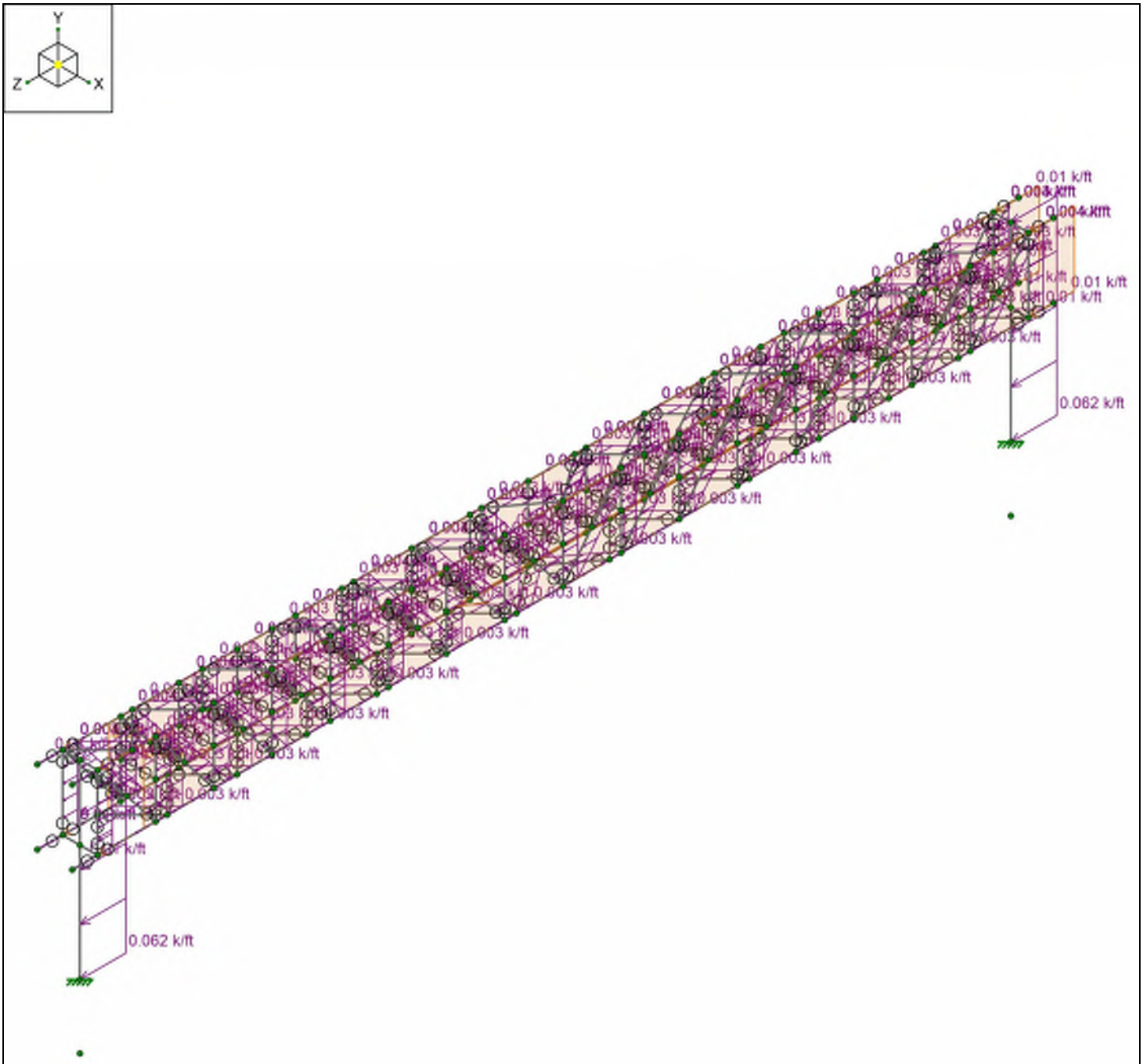
Loads: BLC 1, DL

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	4
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	DEAD LOAD	



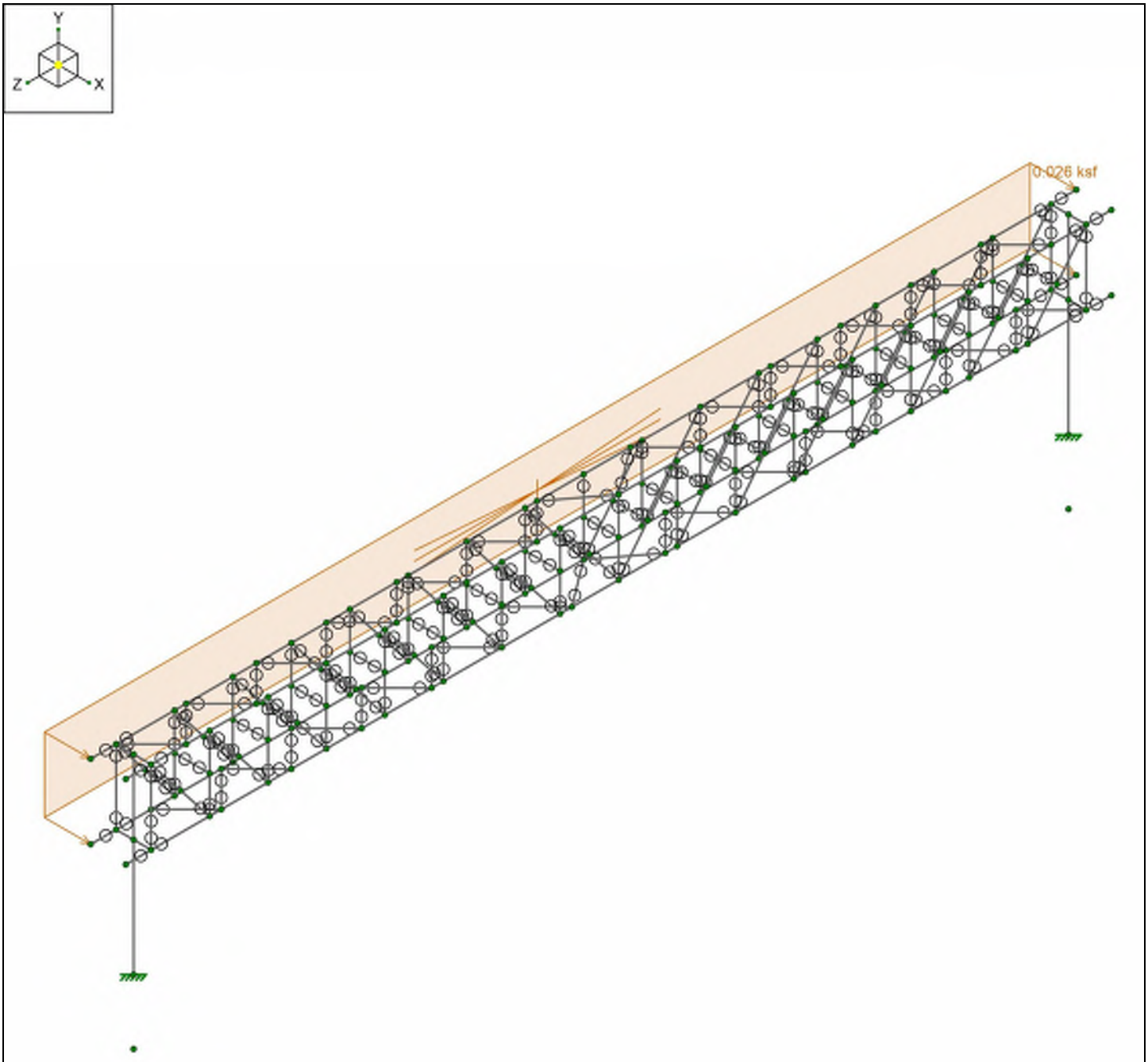
Loads: BLC 2, ELX

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	5
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	ELX	



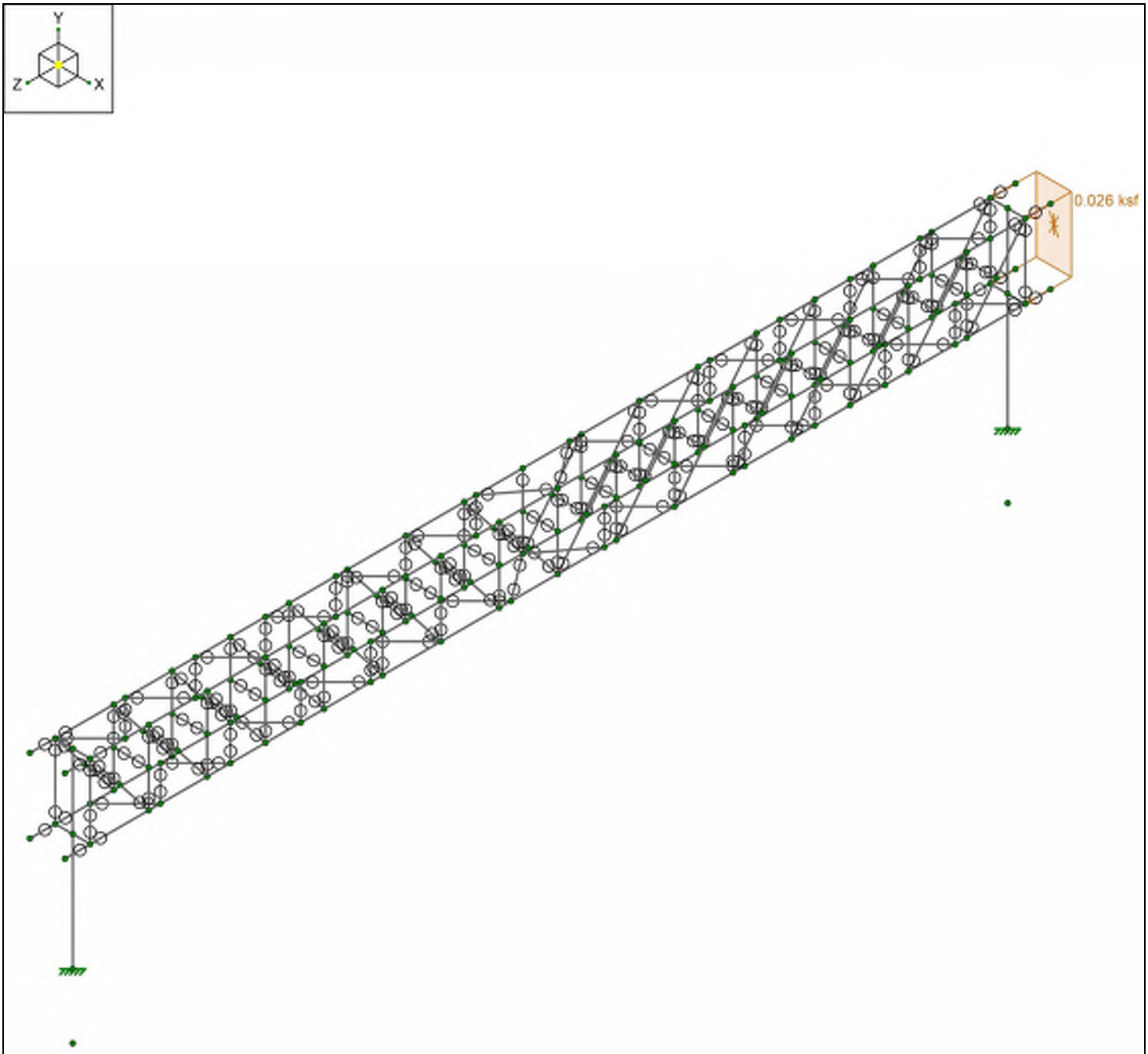
Loads: BLC 3, ELZ

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	6
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	ELZ	



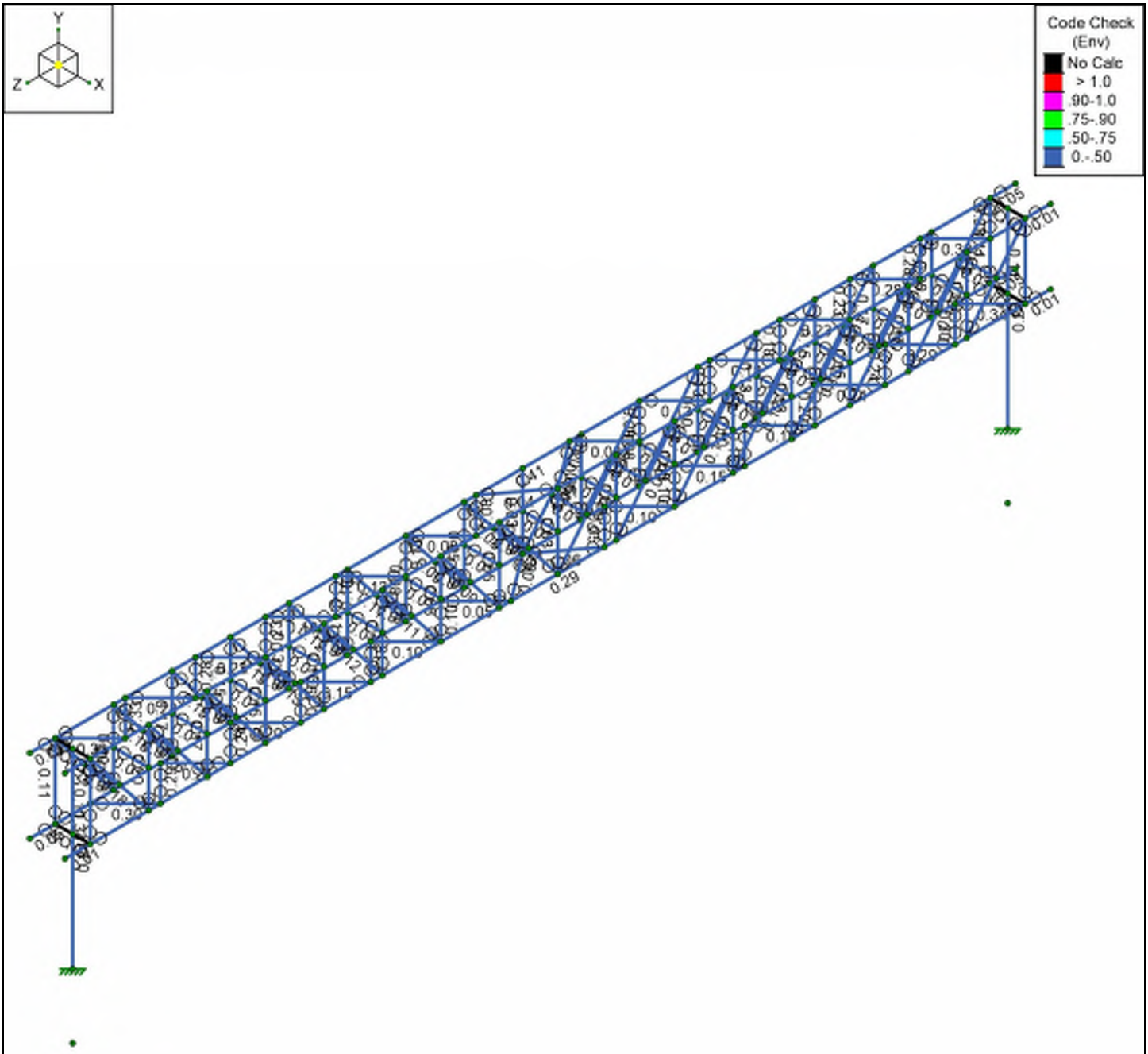
Loads: BLC 4, WLX

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	7
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	WLX	



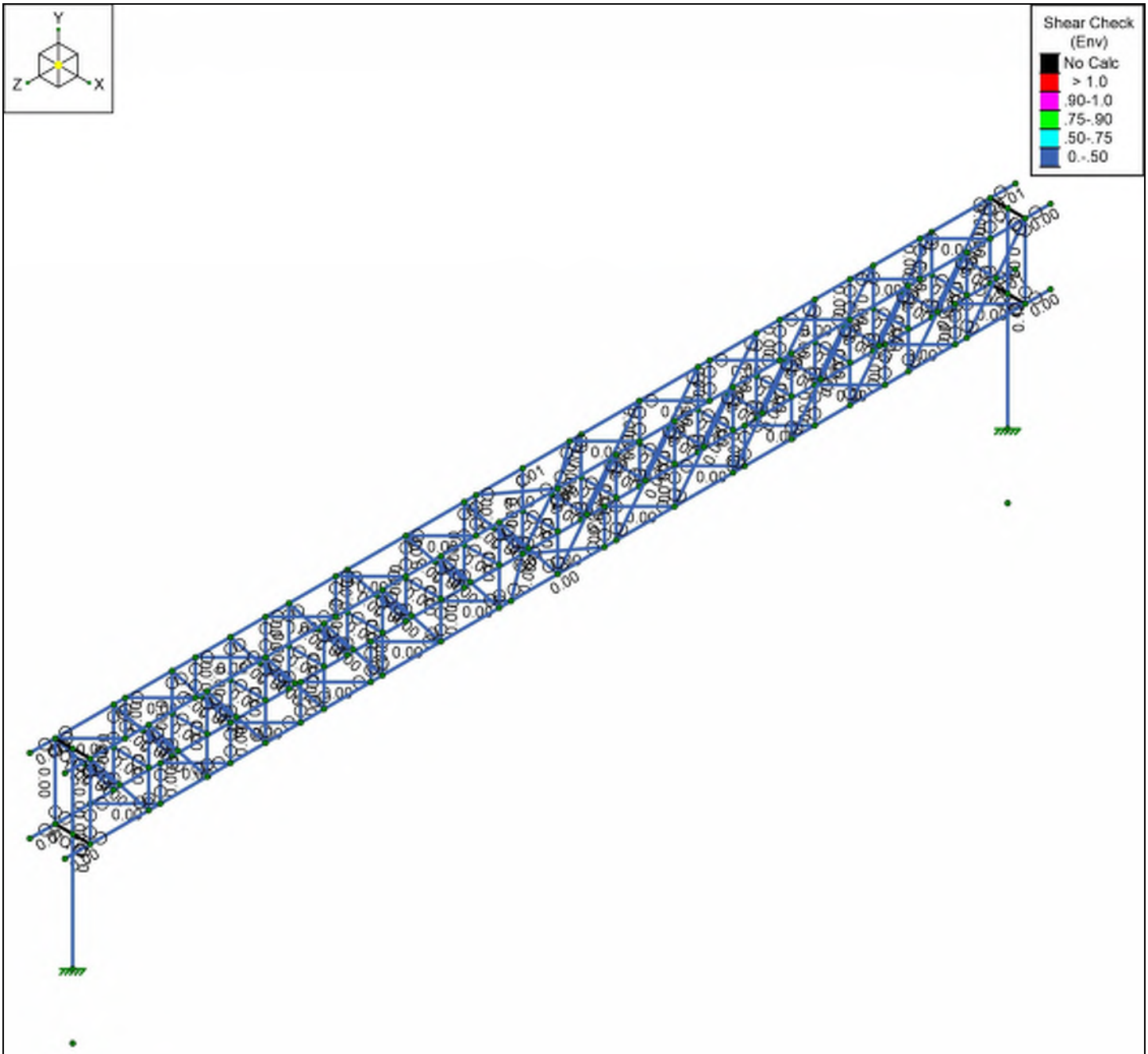
Loads: BLC 5, WLZ

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	8
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	WLZ	



Member Code Checks Displayed (Enveloped)

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	9
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	UNITY CHECK	



Member Shear Checks Displayed (Enveloped)

RISA A NEMETSCHEK COMPANY	Tetra Tech	Ben Lomond XFER Station - Entrance Sign	10
	TONY.ARZATE		Entrance Sign.r3d
	200-42064-22005	SHEAR CHECK	

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N13	1.5	0	0	
2	N27	3	16.333	0	
3	N28	3	16.333	40	
4	N29	0	16.333	0	
5	N30	0	16.333	40	
6	N38	3	16.333	5	
7	N66	0	16.333	5	
8	N160	1.5	16.333	0	
9	N200	3	10	0	
10	N204	0	10	0	
11	N218	3	10	40	
12	N221	0	10	40	
13	N16	3	10	5	
14	N17	0	10	5	
15	N19	1.5	10	0	
16	N18	3	16.333	3	
17	N22	0	10	3	
18	N24	0	16.333	6	
19	N25	3	10	6	
20	N31	3	16.333	9	
21	N34	0	10	9	
22	N36	0	16.333	12	
23	N37	3	10	12	
24	N40	3	16.333	15	
25	N41	0	16.333	15	
26	N42	3	10	15	
27	N43	0	10	15	
28	N45	0	16.333	18	
29	N46	3	10	18	
30	N48	3	16.333	21	
31	N51	0	10	21	
32	N53	0	16.333	24	
33	N54	3	10	24	
34	N56	3	16.333	27	
35	N59	0	10	27	
36	N60	3	16.333	30	
37	N61	0	16.333	30	
38	N62	3	10	30	
39	N63	0	10	30	
40	N64	3	16.333	33	
41	N68	0	10	33	
42	N70	0	16.333	36	
43	N71	3	10	36	
44	N77	0	10	10	
45	N78	0	16.333	10	
46	N79	3	10	10	
47	N80	3	16.333	10	
48	N81	0	10	20	
49	N82	0	16.333	20	
50	N83	3	10	20	
51	N84	3	16.333	20	
52	N85	0	10	25	
53	N86	0	16.333	25	
54	N87	3	10	25	
55	N88	3	16.333	25	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
56	N89	0	10	35	
57	N90	0	16.333	35	
58	N91	3	10	35	
59	N92	3	16.333	35	
60	N67	1.5	0	80	
61	N72	1.5	16.333	80	
62	N74	0	16.333	80	
63	N75	0	10	75	
64	N93	0	10	80	
65	N94	0	16.333	55	
66	N95	0	10	50	
67	N96	0	16.333	75	
68	N97	3	16.333	80	
69	N98	3	10	75	
70	N99	3	10	80	
71	N100	3	16.333	75	
72	N101	0	10	70	
73	N102	0	16.333	65	
74	N103	0	10	60	
75	N104	0	16.333	70	
76	N105	3	10	70	
77	N106	3	16.333	70	
78	N107	0	10	65	
79	N108	3	10	65	
80	N109	3	16.333	65	
81	N110	0	16.333	60	
82	N111	3	10	60	
83	N112	3	16.333	60	
84	N113	0	10	55	
85	N114	3	10	55	
86	N115	3	16.333	55	
87	N116	0	16.333	50	
88	N117	3	10	50	
89	N118	3	16.333	50	
90	N119	0	10	45	
91	N120	0	16.333	45	
92	N121	3	10	45	
93	N122	3	16.333	45	
94	N123	1.5	10	80	
95	N124	3	16.333	77	
96	N125	0	16.333	74	
97	N126	3	16.333	71	
98	N127	0	16.333	68	
99	N128	0	16.333	62	
100	N129	3	16.333	59	
101	N130	0	16.333	56	
102	N131	3	16.333	53	
103	N132	3	16.333	47	
104	N133	0	16.333	44	
105	N134	0	10	77	
106	N135	3	10	74	
107	N136	0	10	71	
108	N137	3	10	68	
109	N138	3	10	62	
110	N139	0	10	59	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
111	N140	3	10	56	
112	N141	0	10	53	
113	N142	0	10	47	
114	N143	3	10	44	
115	N144	0	13.1665	57.5	
116	N145	0	13.1665	27.5	
117	N146	0	13.1665	5	
118	N147	3	13.1665	5	
119	N148	0	13.1665	40	
120	N149	3	13.1665	40	
121	N150	0	13.1665	17.5	
122	N151	0	13.1665	10	
123	N152	3	13.1665	12.5	
124	N153	3	13.1665	70	
125	N154	3	13.1665	15	
126	N155	3	13.1665	45	
127	N156	3	13.1665	52.5	
128	N157	3	13.1665	57.5	
129	N158	0	13.1665	2.5	
130	N159	3	13.1665	2.5	
131	N161	0	13.1665	7.5	
132	N162	3	13.1665	7.5	
133	N163	3	13.1665	10	
134	N164	0	13.1665	12.5	
135	N165	0	13.1665	15	
136	N166	0	13.1665	20	
137	N167	3	13.1665	17.5	
138	N168	3	13.1665	20	
139	N169	0	13.1665	22.5	
140	N170	0	13.1665	25	
141	N171	3	13.1665	22.5	
142	N172	3	13.1665	25	
143	N173	0	13.1665	30	
144	N174	3	13.1665	27.5	
145	N175	3	13.1665	30	
146	N176	0	13.1665	32.5	
147	N177	0	13.1665	35	
148	N178	3	13.1665	32.5	
149	N179	3	13.1665	35	
150	N180	0	13.1665	37.5	
151	N181	3	13.1665	37.5	
152	N182	0	13.1665	77.5	
153	N183	0	13.1665	52.5	
154	N184	0	13.1665	75	
155	N185	3	13.1665	77.5	
156	N186	3	13.1665	75	
157	N187	0	13.1665	72.5	
158	N188	0	13.1665	62.5	
159	N189	0	13.1665	70	
160	N190	3	13.1665	72.5	
161	N191	0	13.1665	67.5	
162	N192	0	13.1665	65	
163	N193	3	13.1665	67.5	
164	N194	3	13.1665	65	
165	N195	0	13.1665	60	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
166	N196	3	13.1665	62.5	
167	N197	3	13.1665	60	
168	N198	0	13.1665	55	
169	N199	3	13.1665	55	
170	N201	0	13.1665	50	
171	N202	3	13.1665	50	
172	N203	0	13.1665	47.5	
173	N205	0	13.1665	45	
174	N206	3	13.1665	47.5	
175	N207	0	13.1665	42.5	
176	N208	3	13.1665	42.5	
177	N209	3	16.333	-2.167	
178	N210	0	16.333	-2.167	
179	N211	3	10	-2.167	
180	N212	0	10	-2.167	
181	N213	0	16.333	82.167	
182	N214	0	10	82.167	
183	N215	3	16.333	82.167	
184	N216	3	10	82.167	
185	N217	1.5	-5.5	0	
186	N219	1.5	-5.5	80	

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A500 Gr.C RND	29000	11154	0.3	0.65	0.527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
9	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Column	HSS20.000X0.500	Column	HSS Pipe	A500 Gr.C RND	Typical	28.5	1360	1360	2720
2	Chord - Angle	L6X4X8	Beam	Single Angle	A36 Gr.36	Typical	4.75	6.22	17.3	0.407
3	Vertical - Angle	L3.5X3.5X5	VBrace	Single Angle	A36 Gr.36	Typical	2.1	2.44	2.44	0.073
4	Diagonal - Angle	L3.5X3.5X5	VBrace	Single Angle	A36 Gr.36	Typical	2.1	2.44	2.44	0.073
5	Wind Bracing - Angle	L2.5X2.5X4	HBrace	Single Angle	A36 Gr.36	Typical	1.19	0.692	0.692	0.026
6	Crossties - Angle	L3X3X5	Beam	Single Angle	A36 Gr.36	Typical	1.78	1.5	1.5	0.06

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N13	N160		Column	Column	HSS Pipe	A500 Gr.C RND	Typical
2	M15	N29	N74	180	Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
3	M16	N97	N27	180	Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
4	M22	N160	N27		RIGID	None	None	RIGID	Typical
5	M46	N29	N17		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
6	M138	N93	N204		Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
7	M140	N200	N19		RIGID	None	None	RIGID	Typical
8	M141	N200	N99		Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
9	M12	N29	N160		RIGID	None	None	RIGID	Typical
10	M17	N19	N204		RIGID	None	None	RIGID	Typical
11	M18	N29	N204	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
12	M19	N66	N17	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
13	M20	N27	N16		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
14	M21	N27	N200		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
15	M23	N38	N16		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
16	M24	N29	N18		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
17	M25	N18	N24		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
18	M26	N24	N31		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
19	M27	N31	N36		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
20	M28	N36	N40		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
21	M29	N40	N45		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
22	M30	N45	N48		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
23	M31	N48	N53		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
24	M32	N53	N56		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
25	M33	N56	N61		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
26	M34	N61	N64		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
27	M35	N64	N70		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
28	M36	N70	N28		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
29	M37	N22	N200		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
30	M38	N22	N25		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
31	M39	N25	N34		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
32	M40	N34	N37		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
33	M41	N37	N43		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
34	M42	N43	N46		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
35	M43	N46	N51		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
36	M44	N51	N54		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
37	M45	N54	N59		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
38	M47	N59	N62		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
39	M48	N62	N68		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
40	M49	N68	N71		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
41	M50	N71	N221		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
42	M51	N66	N77		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
43	M52	N78	N77	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
44	M53	N38	N79		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
45	M54	N80	N79		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
46	M55	N78	N43		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
47	M56	N41	N43	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
48	M57	N80	N42		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
49	M58	N40	N42		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
50	M59	N41	N81		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
51	M60	N82	N81	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
52	M61	N40	N83		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
53	M62	N84	N83		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
54	M63	N82	N85		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
55	M64	N86	N85	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
56	M65	N84	N87		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
57	M66	N88	N87		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
58	M67	N86	N63		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
59	M68	N61	N63	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
60	M69	N88	N62		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
61	M70	N60	N62		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
62	M71	N61	N89		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
63	M72	N90	N89	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
64	M73	N60	N91		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
65	M74	N92	N91		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
66	M75	N90	N221		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
67	M76	N30	N221	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
68	M77	N92	N218		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
69	M78	N28	N218		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
70	M79	N67	N72		Column	Column	HSS Pipe	A500 Gr.C RND	Typical
71	M80	N74	N75		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
72	M81	N74	N93	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
73	M82	N94	N95		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
74	M83	N96	N75	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
75	M84	N97	N98		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
76	M85	N97	N99		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
77	M86	N100	N98		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
78	M87	N28	N218		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
79	M88	N96	N101		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
80	M89	N102	N103		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
81	M90	N104	N101	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
82	M91	N100	N105		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
83	M92	N106	N105		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
84	M93	N104	N107		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
85	M94	N102	N107	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
86	M95	N106	N108		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
87	M96	N109	N108		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
88	M97	N110	N103	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
89	M98	N109	N111		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
90	M99	N112	N111		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
91	M100	N110	N113		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
92	M101	N94	N113		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
93	M102	N112	N114		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
94	M103	N115	N114		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
95	M104	N116	N95	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
96	M105	N115	N117		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
97	M106	N118	N117		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
98	M107	N116	N119		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
99	M108	N120	N119	90	Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
100	M109	N118	N121		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
101	M110	N122	N121		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
102	M111	N120	N221		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
103	M112	N30	N221		Vertical - Angle	VBrace	Single Angle	A36 Gr.36	Typical
104	M113	N122	N218		Diagonal - Angle	VBrace	Single Angle	A36 Gr.36	Typical
105	M114	N99	N123		RIGID	None	None	RIGID	Typical
106	M115	N72	N97		RIGID	None	None	RIGID	Typical
107	M116	N74	N72		RIGID	None	None	RIGID	Typical
108	M117	N123	N93		RIGID	None	None	RIGID	Typical
109	M118	N74	N124		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
110	M119	N124	N125		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
111	M120	N125	N126		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
112	M121	N126	N127		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
113	M122	N127	N109		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
114	M123	N109	N128		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
115	M124	N128	N129		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
116	M125	N129	N130		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
117	M126	N130	N131		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
118	M127	N131	N116		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
119	M128	N116	N132		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
120	M129	N132	N133		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
121	M130	N134	N99		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
122	M131	N134	N135		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
123	M132	N135	N136		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
124	M133	N136	N137		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
125	M134	N137	N107		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
126	M135	N107	N138		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
127	M136	N138	N139		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
128	M137	N139	N140		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
129	M139	N140	N141		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
130	M142	N141	N117		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
131	M143	N117	N142		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
132	M144	N142	N143		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
133	M145	N143	N221		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
134	M146	N133	N28		Wind Bracing - Angle	HBrace	Single Angle	A36 Gr.36	Typical
135	M147	N182	N185	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
136	M148	N184	N186	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
137	M149	N187	N190	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
138	M150	N189	N153	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
139	M151	N191	N193	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
140	M152	N192	N194	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
141	M153	N188	N196	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
142	M154	N195	N197	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
143	M155	N198	N199	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
144	M156	N144	N157	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
145	M157	N183	N156	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
146	M158	N201	N202	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
147	M159	N203	N206		Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
148	M160	N205	N155	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
149	M161	N207	N208	45	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
150	M162	N148	N149	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
151	M163	N180	N181	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
152	M164	N177	N179	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
153	M165	N176	N178	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
154	M166	N173	N175	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
155	M167	N145	N174	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
156	M168	N170	N172	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
157	M169	N169	N171	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
158	M170	N166	N168	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
159	M171	N150	N167	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
160	M172	N165	N154	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
161	M173	N164	N152	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
162	M174	N151	N163	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
163	M175	N161	N162	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
164	M176	N146	N147	180	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
165	M177	N158	N159	135	Crossties - Angle	Beam	Single Angle	A36 Gr.36	Typical
166	M178	N27	N209	180	Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
167	M179	N210	N29	180	Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
168	M180	N204	N212		Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
169	M181	N211	N200		Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
170	M182	N93	N214		Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
171	M183	N213	N74	180	Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
172	M184	N216	N99		Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
173	M185	N97	N215	180	Chord - Angle	Beam	Single Angle	A36 Gr.36	Typical
174	M186	N67	N219		CONC1	Column	Round	Conc4500NW	Typical
175	M187	N13	N217		CONC1	Column	Round	Conc4500NW	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
1	M1	Column	16.333	24	24		N/A	N/A	Lateral
2	M15	Chord - Angle	80	4	5	Lbyy	N/A	N/A	Gravity
3	M16	Chord - Angle	80	4	5	Lbyy	N/A	N/A	Gravity
4	M46	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
5	M138	Chord - Angle	80	4	5	Lbyy	N/A	N/A	Gravity
6	M141	Chord - Angle	80	4	5	Lbyy	N/A	N/A	Gravity
7	M18	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
8	M19	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
9	M20	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
10	M21	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
11	M23	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
12	M24	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
13	M25	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
14	M26	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
15	M27	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
16	M28	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
17	M29	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
18	M30	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
19	M31	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
20	M32	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
21	M33	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
22	M34	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
23	M35	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
24	M36	Wind Bracing - Angle	5			Lbyy	N/A	N/A	Lateral
25	M37	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
26	M38	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
27	M39	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
28	M40	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
29	M41	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
30	M42	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
31	M43	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
32	M44	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
33	M45	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
34	M47	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
35	M48	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
36	M49	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
37	M50	Wind Bracing - Angle	5			Lbyy	N/A	N/A	Lateral
38	M51	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
39	M52	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
40	M53	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
41	M54	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
42	M55	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
43	M56	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
44	M57	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
45	M58	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
46	M59	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
47	M60	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
48	M61	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
49	M62	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
50	M63	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
51	M64	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
52	M65	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
53	M66	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
54	M67	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
55	M68	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
56	M69	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
57	M70	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
58	M71	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
59	M72	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
60	M73	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
61	M74	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
62	M75	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
63	M76	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
64	M77	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
65	M78	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
66	M79	Column	16.333	16.333	16.333		N/A	N/A	Lateral
67	M80	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
68	M81	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
69	M82	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
70	M83	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
71	M84	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
72	M85	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
73	M86	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
74	M87	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
75	M88	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
76	M89	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
77	M90	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
78	M91	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
79	M92	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
80	M93	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
81	M94	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
82	M95	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
83	M96	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
84	M97	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
85	M98	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
86	M99	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
87	M100	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
88	M101	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
89	M102	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
90	M103	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
91	M104	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
92	M105	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
93	M106	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
94	M107	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
95	M108	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
96	M109	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
97	M110	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
98	M111	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
99	M112	Vertical - Angle	6.333			Lbyy	N/A	N/A	Gravity
100	M113	Diagonal - Angle	8.069			Lbyy	N/A	N/A	Lateral
101	M118	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
102	M119	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
103	M120	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
104	M121	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
105	M122	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
106	M123	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
107	M124	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
108	M125	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
109	M126	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
110	M127	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
111	M128	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
112	M129	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
113	M130	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
114	M131	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
115	M132	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
116	M133	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
117	M134	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
118	M135	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
119	M136	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
120	M137	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
121	M139	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
122	M142	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
123	M143	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
124	M144	Wind Bracing - Angle	4.243			Lbyy	N/A	N/A	Lateral
125	M145	Wind Bracing - Angle	5			Lbyy	N/A	N/A	Lateral
126	M146	Wind Bracing - Angle	5			Lbyy	N/A	N/A	Lateral
127	M147	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
128	M148	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
129	M149	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
130	M150	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
131	M151	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
132	M152	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
133	M153	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
134	M154	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
135	M155	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
136	M156	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
137	M157	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
138	M158	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
139	M159	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
140	M160	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
141	M161	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
142	M162	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
143	M163	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
144	M164	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
145	M165	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
146	M166	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
147	M167	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
148	M168	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
149	M169	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
150	M170	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
151	M171	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
152	M172	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
153	M173	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
154	M174	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
155	M175	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
156	M176	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
157	M177	Crossties - Angle	3			Lbyy	N/A	N/A	Lateral
158	M178	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
159	M179	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity
160	M180	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity
161	M181	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity
162	M182	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity
163	M183	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity
164	M184	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity
165	M185	Chord - Angle	2.167	4	5	Lbyy	N/A	N/A	Gravity

Member Distributed Loads (BLC 1 : DL)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	0	0	0	%100

Member Distributed Loads (BLC 2 : ELX)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	X	0.061	0.062	0	%100
2	M15	X	0.01	0.01	0	%100
3	M16	X	0.01	0.01	0	%100
4	M18	X	0.004	0.004	0	%100
5	M19	X	0.004	0.004	0	%100
6	M20	X	0.004	0.004	0	%100
7	M21	X	0.004	0.004	0	%100
8	M23	X	0.004	0.004	0	%100
9	M24	X	0.003	0.003	0	%100
10	M25	X	0.003	0.003	0	%100
11	M26	X	0.003	0.003	0	%100
12	M27	X	0.003	0.003	0	%100
13	M28	X	0.003	0.003	0	%100
14	M29	X	0.003	0.003	0	%100
15	M30	X	0.003	0.003	0	%100
16	M31	X	0.003	0.003	0	%100
17	M32	X	0.003	0.003	0	%100
18	M33	X	0.003	0.003	0	%100
19	M34	X	0.003	0.003	0	%100
20	M35	X	0.003	0.003	0	%100
21	M36	X	0.003	0.003	0	%100
22	M37	X	0.003	0.003	0	%100
23	M38	X	0.003	0.003	0	%100
24	M39	X	0.003	0.003	0	%100
25	M40	X	0.003	0.003	0	%100
26	M41	X	0.003	0.003	0	%100
27	M42	X	0.003	0.003	0	%100
28	M43	X	0.003	0.003	0	%100
29	M44	X	0.003	0.003	0	%100
30	M45	X	0.003	0.003	0	%100
31	M46	X	0.004	0.004	0	%100
32	M47	X	0.003	0.003	0	%100
33	M48	X	0.003	0.003	0	%100
34	M49	X	0.003	0.003	0	%100
35	M50	X	0.003	0.003	0	%100
36	M51	X	0.004	0.004	0	%100
37	M52	X	0.004	0.004	0	%100
38	M53	X	0.004	0.004	0	%100
39	M54	X	0.004	0.004	0	%100

Member Distributed Loads (BLC 2 : ELX) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
40	M55	X	0.004	0.004	0	%100
41	M56	X	0.004	0.004	0	%100
42	M57	X	0.004	0.004	0	%100
43	M58	X	0.004	0.004	0	%100
44	M59	X	0.004	0.004	0	%100
45	M60	X	0.004	0.004	0	%100
46	M61	X	0.004	0.004	0	%100
47	M62	X	0.004	0.004	0	%100
48	M63	X	0.004	0.004	0	%100
49	M64	X	0.004	0.004	0	%100
50	M65	X	0.004	0.004	0	%100
51	M66	X	0.004	0.004	0	%100
52	M67	X	0.004	0.004	0	%100
53	M68	X	0.004	0.004	0	%100
54	M69	X	0.004	0.004	0	%100
55	M70	X	0.004	0.004	0	%100
56	M71	X	0.004	0.004	0	%100
57	M72	X	0.004	0.004	0	%100
58	M73	X	0.004	0.004	0	%100
59	M74	X	0.004	0.004	0	%100
60	M75	X	0.004	0.004	0	%100
61	M76	X	0.004	0.004	0	%100
62	M77	X	0.004	0.004	0	%100
63	M78	X	0.004	0.004	0	%100
64	M79	X	0.061	0.062	0	%100
65	M80	X	0.004	0.004	0	%100
66	M81	X	0.004	0.004	0	%100
67	M82	X	0.004	0.004	0	%100
68	M83	X	0.004	0.004	0	%100
69	M84	X	0.004	0.004	0	%100
70	M85	X	0.004	0.004	0	%100
71	M86	X	0.004	0.004	0	%100
72	M87	X	0.004	0.004	0	%100
73	M88	X	0.004	0.004	0	%100
74	M89	X	0.004	0.004	0	%100
75	M90	X	0.004	0.004	0	%100
76	M91	X	0.004	0.004	0	%100
77	M92	X	0.004	0.004	0	%100
78	M93	X	0.004	0.004	0	%100
79	M94	X	0.004	0.004	0	%100
80	M95	X	0.004	0.004	0	%100
81	M96	X	0.004	0.004	0	%100
82	M97	X	0.004	0.004	0	%100
83	M98	X	0.004	0.004	0	%100
84	M99	X	0.004	0.004	0	%100
85	M100	X	0.004	0.004	0	%100
86	M101	X	0.004	0.004	0	%100
87	M102	X	0.004	0.004	0	%100
88	M103	X	0.004	0.004	0	%100
89	M104	X	0.004	0.004	0	%100
90	M105	X	0.004	0.004	0	%100
91	M106	X	0.004	0.004	0	%100
92	M107	X	0.004	0.004	0	%100
93	M108	X	0.004	0.004	0	%100
94	M109	X	0.004	0.004	0	%100

Member Distributed Loads (BLC 2 : ELX) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
95	M110	X	0.004	0.004	0	%100
96	M111	X	0.004	0.004	0	%100
97	M112	X	0.004	0.004	0	%100
98	M113	X	0.004	0.004	0	%100
99	M118	X	0.003	0.003	0	%100
100	M119	X	0.003	0.003	0	%100
101	M120	X	0.003	0.003	0	%100
102	M121	X	0.003	0.003	0	%100
103	M122	X	0.003	0.003	0	%100
104	M123	X	0.003	0.003	0	%100
105	M124	X	0.003	0.003	0	%100
106	M125	X	0.003	0.003	0	%100
107	M126	X	0.003	0.003	0	%100
108	M127	X	0.003	0.003	0	%100
109	M128	X	0.003	0.003	0	%100
110	M129	X	0.003	0.003	0	%100
111	M130	X	0.003	0.003	0	%100
112	M131	X	0.003	0.003	0	%100
113	M132	X	0.003	0.003	0	%100
114	M133	X	0.003	0.003	0	%100
115	M134	X	0.003	0.003	0	%100
116	M135	X	0.003	0.003	0	%100
117	M136	X	0.003	0.003	0	%100
118	M137	X	0.003	0.003	0	%100
119	M138	X	0.01	0.01	0	%100
120	M139	X	0.003	0.003	0	%100
121	M141	X	0.01	0.01	0	%100
122	M142	X	0.003	0.003	0	%100
123	M143	X	0.003	0.003	0	%100
124	M144	X	0.003	0.003	0	%100
125	M145	X	0.003	0.003	0	%100
126	M146	X	0.003	0.003	0	%100
127	M147	X	0.004	0.004	0	%100
128	M148	X	0.004	0.004	0	%100
129	M149	X	0.004	0.004	0	%100
130	M150	X	0.004	0.004	0	%100
131	M151	X	0.004	0.004	0	%100
132	M152	X	0.004	0.004	0	%100
133	M153	X	0.004	0.004	0	%100
134	M154	X	0.004	0.004	0	%100
135	M155	X	0.004	0.004	0	%100
136	M156	X	0.004	0.004	0	%100
137	M157	X	0.004	0.004	0	%100
138	M158	X	0.004	0.004	0	%100
139	M159	X	0.004	0.004	0	%100
140	M160	X	0.004	0.004	0	%100
141	M161	X	0.004	0.004	0	%100
142	M162	X	0.004	0.004	0	%100
143	M163	X	0.004	0.004	0	%100
144	M164	X	0.004	0.004	0	%100
145	M165	X	0.004	0.004	0	%100
146	M166	X	0.004	0.004	0	%100
147	M167	X	0.004	0.004	0	%100
148	M168	X	0.004	0.004	0	%100
149	M169	X	0.004	0.004	0	%100

Member Distributed Loads (BLC 2 : ELX) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
150	M170	X	0.004	0.004	0	%100
151	M171	X	0.004	0.004	0	%100
152	M172	X	0.004	0.004	0	%100
153	M173	X	0.004	0.004	0	%100
154	M174	X	0.004	0.004	0	%100
155	M175	X	0.004	0.004	0	%100
156	M176	X	0.004	0.004	0	%100
157	M177	X	0.004	0.004	0	%100
158	M178	X	0.01	0.01	0	%100
159	M179	X	0.01	0.01	0	%100
160	M180	X	0.01	0.01	0	%100
161	M181	X	0.01	0.01	0	%100
162	M182	X	0.01	0.01	0	%100
163	M183	X	0.01	0.01	0	%100
164	M184	X	0.01	0.01	0	%100
165	M185	X	0.01	0.01	0	%100

Member Distributed Loads (BLC 3 : ELZ)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M185	Z	0.01	0.01	0	%100
2	M184	Z	0.01	0.01	0	%100
3	M183	Z	0.01	0.01	0	%100
4	M182	Z	0.01	0.01	0	%100
5	M181	Z	0.01	0.01	0	%100
6	M180	Z	0.01	0.01	0	%100
7	M179	Z	0.01	0.01	0	%100
8	M178	Z	0.01	0.01	0	%100
9	M177	Z	0.004	0.004	0	%100
10	M176	Z	0.004	0.004	0	%100
11	M175	Z	0.004	0.004	0	%100
12	M174	Z	0.004	0.004	0	%100
13	M173	Z	0.004	0.004	0	%100
14	M172	Z	0.004	0.004	0	%100
15	M171	Z	0.004	0.004	0	%100
16	M170	Z	0.004	0.004	0	%100
17	M169	Z	0.004	0.004	0	%100
18	M168	Z	0.004	0.004	0	%100
19	M167	Z	0.004	0.004	0	%100
20	M166	Z	0.004	0.004	0	%100
21	M165	Z	0.004	0.004	0	%100
22	M164	Z	0.004	0.004	0	%100
23	M163	Z	0.004	0.004	0	%100
24	M162	Z	0.004	0.004	0	%100
25	M161	Z	0.004	0.004	0	%100
26	M160	Z	0.004	0.004	0	%100
27	M159	Z	0.004	0.004	0	%100
28	M158	Z	0.004	0.004	0	%100
29	M157	Z	0.004	0.004	0	%100
30	M156	Z	0.004	0.004	0	%100
31	M155	Z	0.004	0.004	0	%100
32	M154	Z	0.004	0.004	0	%100
33	M153	Z	0.004	0.004	0	%100
34	M152	Z	0.004	0.004	0	%100
35	M151	Z	0.004	0.004	0	%100
36	M150	Z	0.004	0.004	0	%100

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
37	M149	Z	0.004	0.004	0	%100
38	M148	Z	0.004	0.004	0	%100
39	M147	Z	0.004	0.004	0	%100
40	M146	Z	0.003	0.003	0	%100
41	M145	Z	0.003	0.003	0	%100
42	M144	Z	0.003	0.003	0	%100
43	M143	Z	0.003	0.003	0	%100
44	M142	Z	0.003	0.003	0	%100
45	M141	Z	0.01	0.01	0	%100
46	M139	Z	0.003	0.003	0	%100
47	M138	Z	0.01	0.01	0	%100
48	M137	Z	0.003	0.003	0	%100
49	M136	Z	0.003	0.003	0	%100
50	M135	Z	0.003	0.003	0	%100
51	M134	Z	0.003	0.003	0	%100
52	M133	Z	0.003	0.003	0	%100
53	M132	Z	0.003	0.003	0	%100
54	M131	Z	0.003	0.003	0	%100
55	M130	Z	0.003	0.003	0	%100
56	M129	Z	0.003	0.003	0	%100
57	M128	Z	0.003	0.003	0	%100
58	M127	Z	0.003	0.003	0	%100
59	M126	Z	0.003	0.003	0	%100
60	M125	Z	0.003	0.003	0	%100
61	M124	Z	0.003	0.003	0	%100
62	M123	Z	0.003	0.003	0	%100
63	M122	Z	0.003	0.003	0	%100
64	M121	Z	0.003	0.003	0	%100
65	M120	Z	0.003	0.003	0	%100
66	M119	Z	0.003	0.003	0	%100
67	M118	Z	0.003	0.003	0	%100
68	M113	Z	0.004	0.004	0	%100
69	M112	Z	0.004	0.004	0	%100
70	M111	Z	0.004	0.004	0	%100
71	M110	Z	0.004	0.004	0	%100
72	M109	Z	0.004	0.004	0	%100
73	M108	Z	0.004	0.004	0	%100
74	M107	Z	0.004	0.004	0	%100
75	M106	Z	0.004	0.004	0	%100
76	M105	Z	0.004	0.004	0	%100
77	M104	Z	0.004	0.004	0	%100
78	M103	Z	0.004	0.004	0	%100
79	M102	Z	0.004	0.004	0	%100
80	M101	Z	0.004	0.004	0	%100
81	M100	Z	0.004	0.004	0	%100
82	M99	Z	0.004	0.004	0	%100
83	M98	Z	0.004	0.004	0	%100
84	M97	Z	0.004	0.004	0	%100
85	M96	Z	0.004	0.004	0	%100
86	M95	Z	0.004	0.004	0	%100
87	M94	Z	0.004	0.004	0	%100
88	M93	Z	0.004	0.004	0	%100
89	M92	Z	0.004	0.004	0	%100
90	M91	Z	0.004	0.004	0	%100
91	M90	Z	0.004	0.004	0	%100

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
92	M89	Z	0.004	0.004	0	%100
93	M88	Z	0.004	0.004	0	%100
94	M87	Z	0.004	0.004	0	%100
95	M86	Z	0.004	0.004	0	%100
96	M85	Z	0.004	0.004	0	%100
97	M84	Z	0.004	0.004	0	%100
98	M83	Z	0.004	0.004	0	%100
99	M82	Z	0.004	0.004	0	%100
100	M81	Z	0.004	0.004	0	%100
101	M80	Z	0.004	0.004	0	%100
102	M79	Z	0.062	0.062	0	%100
103	M78	Z	0.004	0.004	0	%100
104	M77	Z	0.004	0.004	0	%100
105	M76	Z	0.004	0.004	0	%100
106	M75	Z	0.004	0.004	0	%100
107	M74	Z	0.004	0.004	0	%100
108	M73	Z	0.004	0.004	0	%100
109	M72	Z	0.004	0.004	0	%100
110	M71	Z	0.004	0.004	0	%100
111	M70	Z	0.004	0.004	0	%100
112	M69	Z	0.004	0.004	0	%100
113	M68	Z	0.004	0.004	0	%100
114	M67	Z	0.004	0.004	0	%100
115	M66	Z	0.004	0.004	0	%100
116	M65	Z	0.004	0.004	0	%100
117	M64	Z	0.004	0.004	0	%100
118	M63	Z	0.004	0.004	0	%100
119	M62	Z	0.004	0.004	0	%100
120	M61	Z	0.004	0.004	0	%100
121	M60	Z	0.004	0.004	0	%100
122	M59	Z	0.004	0.004	0	%100
123	M58	Z	0.004	0.004	0	%100
124	M57	Z	0.004	0.004	0	%100
125	M56	Z	0.004	0.004	0	%100
126	M55	Z	0.004	0.004	0	%100
127	M54	Z	0.004	0.004	0	%100
128	M53	Z	0.004	0.004	0	%100
129	M52	Z	0.004	0.004	0	%100
130	M51	Z	0.004	0.004	0	%100
131	M50	Z	0.003	0.003	0	%100
132	M49	Z	0.003	0.003	0	%100
133	M48	Z	0.003	0.003	0	%100
134	M47	Z	0.003	0.003	0	%100
135	M46	Z	0.004	0.004	0	%100
136	M45	Z	0.003	0.003	0	%100
137	M44	Z	0.003	0.003	0	%100
138	M43	Z	0.003	0.003	0	%100
139	M42	Z	0.003	0.003	0	%100
140	M41	Z	0.003	0.003	0	%100
141	M40	Z	0.003	0.003	0	%100
142	M39	Z	0.003	0.003	0	%100
143	M38	Z	0.003	0.003	0	%100
144	M37	Z	0.003	0.003	0	%100
145	M36	Z	0.003	0.003	0	%100
146	M35	Z	0.003	0.003	0	%100

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
147	M34	Z	0.003	0.003	0	%100
148	M33	Z	0.003	0.003	0	%100
149	M32	Z	0.003	0.003	0	%100
150	M31	Z	0.003	0.003	0	%100
151	M30	Z	0.003	0.003	0	%100
152	M29	Z	0.003	0.003	0	%100
153	M28	Z	0.003	0.003	0	%100
154	M27	Z	0.003	0.003	0	%100
155	M26	Z	0.003	0.003	0	%100
156	M25	Z	0.003	0.003	0	%100
157	M24	Z	0.003	0.003	0	%100
158	M23	Z	0.004	0.004	0	%100
159	M21	Z	0.004	0.004	0	%100
160	M20	Z	0.004	0.004	0	%100
161	M19	Z	0.004	0.004	0	%100
162	M18	Z	0.004	0.004	0	%100
163	M16	Z	0.01	0.01	0	%100
164	M15	Z	0.01	0.01	0	%100
165	M1	Z	0.062	0.062	0	%100

Member Distributed Loads (BLC 6 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M16	Y	-0.006	-0.006	0	80
2	M141	Y	-0.006	-0.006	1.421e-14	80
3	M15	Y	-0.006	-0.006	1.976e-14	80
4	M138	Y	-0.006	-0.006	3.58e-14	80

Member Distributed Loads (BLC 7 : BLC 2 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M16	X	0.003	0.003	0	80
2	M141	X	0.003	0.003	1.421e-14	80
3	M15	X	0.003	0.003	1.976e-14	80
4	M138	X	0.003	0.003	3.58e-14	80

Member Distributed Loads (BLC 8 : BLC 3 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M15	Z	0.003	0.003	1.976e-14	80
2	M138	Z	0.003	0.003	3.58e-14	80
3	M16	Z	0.003	0.003	0	80
4	M141	Z	0.003	0.003	1.421e-14	80

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M15	X	0.086	0.085	0	2
2	M15	X	0.085	0.084	2	4
3	M15	X	0.084	0.084	4	6
4	M15	X	0.084	0.084	6	8
5	M15	X	0.084	0.084	8	10
6	M15	X	0.084	0.084	10	12
7	M15	X	0.084	0.084	12	14

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
8	M15	X	0.084	0.084	14	16
9	M15	X	0.084	0.084	16	18
10	M15	X	0.084	0.084	18	20
11	M15	X	0.084	0.084	20	22
12	M15	X	0.084	0.084	22	24
13	M15	X	0.084	0.084	24	26
14	M15	X	0.084	0.084	26	28
15	M15	X	0.084	0.084	28	30
16	M15	X	0.084	0.084	30	32
17	M15	X	0.084	0.084	32	34
18	M15	X	0.084	0.084	34	36
19	M15	X	0.084	0.084	36	38
20	M15	X	0.084	0.084	38	40
21	M15	X	0.084	0.084	40	42
22	M15	X	0.084	0.084	42	44
23	M15	X	0.084	0.084	44	46
24	M15	X	0.084	0.084	46	48
25	M15	X	0.084	0.084	48	50
26	M15	X	0.084	0.084	50	52
27	M15	X	0.084	0.084	52	54
28	M15	X	0.084	0.084	54	56
29	M15	X	0.084	0.084	56	58
30	M15	X	0.084	0.084	58	60
31	M15	X	0.084	0.084	60	62
32	M15	X	0.084	0.084	62	64
33	M15	X	0.084	0.084	64	66
34	M15	X	0.084	0.084	66	68
35	M15	X	0.084	0.084	68	70
36	M15	X	0.084	0.084	70	72
37	M15	X	0.084	0.084	72	74
38	M15	X	0.084	0.084	74	76
39	M15	X	0.084	0.085	76	78
40	M15	X	0.085	0.086	78	80
41	M138	X	0.086	0.085	0	2
42	M138	X	0.085	0.084	2	4
43	M138	X	0.084	0.084	4	6
44	M138	X	0.084	0.084	6	8
45	M138	X	0.084	0.084	8	10
46	M138	X	0.084	0.084	10	12
47	M138	X	0.084	0.084	12	14
48	M138	X	0.084	0.084	14	16
49	M138	X	0.084	0.084	16	18
50	M138	X	0.084	0.084	18	20
51	M138	X	0.084	0.084	20	22
52	M138	X	0.084	0.084	22	24
53	M138	X	0.084	0.084	24	26
54	M138	X	0.084	0.084	26	28
55	M138	X	0.084	0.084	28	30
56	M138	X	0.084	0.084	30	32
57	M138	X	0.084	0.084	32	34
58	M138	X	0.084	0.084	34	36
59	M138	X	0.084	0.084	36	38
60	M138	X	0.084	0.084	38	40
61	M138	X	0.084	0.084	40	42
62	M138	X	0.084	0.084	42	44

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
63	M138	X	0.084	0.084	44	46
64	M138	X	0.084	0.084	46	48
65	M138	X	0.084	0.084	48	50
66	M138	X	0.084	0.084	50	52
67	M138	X	0.084	0.084	52	54
68	M138	X	0.084	0.084	54	56
69	M138	X	0.084	0.084	56	58
70	M138	X	0.084	0.084	58	60
71	M138	X	0.084	0.084	60	62
72	M138	X	0.084	0.084	62	64
73	M138	X	0.084	0.084	64	66
74	M138	X	0.084	0.084	66	68
75	M138	X	0.084	0.084	68	70
76	M138	X	0.084	0.084	70	72
77	M138	X	0.084	0.084	72	74
78	M138	X	0.084	0.084	74	76
79	M138	X	0.084	0.085	76	78
80	M138	X	0.085	0.086	78	80
81	M179	X	0.082	0.081	0	1.083
82	M179	X	0.081	0.081	1.083	2.167
83	M180	X	0.081	0.081	0	1.083
84	M180	X	0.081	0.082	1.083	2.167
85	M182	X	0.081	0.081	0	1.084
86	M182	X	0.081	0.082	1.084	2.167
87	M183	X	0.082	0.081	0	1.084
88	M183	X	0.081	0.081	1.084	2.167

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M22	Z	0.022	0.022	0.625	1.5
2	M140	Z	0.022	0.022	0	0.875
3	M12	Z	0.022	0.022	0	0.875
4	M17	Z	0.022	0.022	0.625	1.5
5	M1	Z	0.049	0.073	9.8	11.978
6	M1	Z	0.073	0.073	11.978	14.155
7	M1	Z	0.073	0.049	14.155	16.333

Member Area Loads (BLC 1 : DL)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N97	N27	N200	N99	Y	A-B	-0.002
2	N74	N29	N204	N93	Y	A-B	-0.002

Member Area Loads (BLC 2 : ELX)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N97	N27	N200	N99	X	A-B	0.001
2	N74	N29	N204	N93	X	A-B	0.001

Member Area Loads (BLC 3 : ELZ)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N97	N27	N200	N99	Z	A-B	0.001
2	N74	N29	N204	N93	Z	A-B	0.001

Member Area Loads (BLC 4 : WLX)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N210	N212	N214	N213	X	Two Way	0.026

Member Area Loads (BLC 5 : WLZ)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N27	N29	N204	N200	Z	Two Way	0.026

Basic Load Cases

	BLC Description	Category	Y Gravity	Distributed	Area(Member)
1	DL	DL	-1	1	2
2	ELX	ELX		165	2
3	ELZ	ELZ		165	2
4	WLX	WLX			1
5	WLZ	WLZ			1
6	BLC 1 Transient Area Loads	None		4	
7	BLC 2 Transient Area Loads	None		4	
8	BLC 3 Transient Area Loads	None		4	
9	BLC 4 Transient Area Loads	None		88	
10	BLC 5 Transient Area Loads	None		7	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	Deflection 1	Yes	Y	DL	1								
2	Deflection 2	Yes	Y	LL	1								
3	Deflection 3	Yes	Y	DL	1	LL	1						
4	IBC 16-1	Yes	Y	DL	1.4								
5	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	LLS	1.6				
6	Deflection 1	Yes	Y	DL	1								
7	Deflection 2	Yes	Y	LL	1								
8	Deflection 3	Yes	Y	DL	1	LL	1						
9	IBC 16-8	Yes	Y	DL	1								
10	IBC 16-9	Yes	Y	DL	1	LL	1	LLS	1				
11	--- LRFD Combinations ---												
12	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	WLX	0.5						
13	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	WLZ	0.5						
14	IBC 16-3 (b) (c)	Yes	Y	DL	1.2	WLX	-0.5						
15	IBC 16-3 (b) (d)	Yes	Y	DL	1.2	WLZ	-0.5						
16	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	1	LLS	1		
17	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	1	LL	1	LLS	1		
18	IBC 16-4 (a) (c)	Yes	Y	DL	1.2	WLX	-1	LL	1	LLS	1		
19	IBC 16-4 (a) (d)	Yes	Y	DL	1.2	WLZ	-1	LL	1	LLS	1		
20	IBC 16-6 (a)	Yes	Y	DL	0.9	WLX	1						
21	IBC 16-6 (b)	Yes	Y	DL	0.9	WLZ	1						
22	IBC 16-6 (c)	Yes	Y	DL	0.9	WLX	-1						
23	IBC 16-6 (d)	Yes	Y	DL	0.9	WLZ	-1						

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
24	--- ASD Combinations ---												
25	IBC 16-12 (a) (a)	Yes	Y	DL	1	WLX	0.6						
26	IBC 16-12 (a) (b)	Yes	Y	DL	1	WLZ	0.6						
27	IBC 16-12 (a) (c)	Yes	Y	DL	1	WLX	-0.6						
28	IBC 16-12 (a) (d)	Yes	Y	DL	1	WLZ	-0.6						
29	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	LLS	0.75		
30	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	LLS	0.75		
31	IBC 16-13 (a) (c)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	LLS	0.75		
32	IBC 16-13 (a) (d)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	LLS	0.75		
33	IBC 16-15 (a)	Yes	Y	DL	0.6	WLX	0.6						
34	IBC 16-15 (b)	Yes	Y	DL	0.6	WLZ	0.6						
35	IBC 16-15 (c)	Yes	Y	DL	0.6	WLX	-0.6						
36	IBC 16-15 (d)	Yes	Y	DL	0.6	WLZ	-0.6						
37	--- ASD Seismic Combinations ---												
38	IBC 16-12 (b) (a)	Yes	Y	DL	1	Sds*DL	0.14	ELX	0.7				
39	IBC 16-12 (b) (b)	Yes	Y	DL	1	Sds*DL	0.14	ELZ	0.7				
40	IBC 16-12 (b) (c)	Yes	Y	DL	1	Sds*DL	0.14	ELX	-0.7				
41	IBC 16-12 (b) (d)	Yes	Y	DL	1	Sds*DL	0.14	ELZ	-0.7				
42	IBC 16-14 (a)	Yes	Y	DL	1	Sds*DL	0.105	ELX	0.525	LL	0.75	LLS	0.75
43	IBC 16-14 (b)	Yes	Y	DL	1	Sds*DL	0.105	ELZ	0.525	LL	0.75	LLS	0.75
44	IBC 16-14 (c)	Yes	Y	DL	1	Sds*DL	0.105	ELX	-0.525	LL	0.75	LLS	0.75
45	IBC 16-14 (d)	Yes	Y	DL	1	Sds*DL	0.105	ELZ	-0.525	LL	0.75	LLS	0.75
46	IBC 16-16 (a)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELX	0.7				
47	IBC 16-16 (b)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELZ	0.7				
48	IBC 16-16 (c)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELX	-0.7				
49	IBC 16-16 (d)	Yes	Y	DL	0.6	Sds*DL	-0.14	ELZ	-0.7				
50	--- LRFD Seismic Combinations ---												
51	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	1	LL	1	LLS	1
52	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ	1	LL	1	LLS	1
53	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	ELX	-1	LL	1	LLS	1
54	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	ELZ	-1	LL	1	LLS	1
55	IBC 16-7 (a)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	1				
56	IBC 16-7 (b)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ	1				
57	IBC 16-7 (c)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELX	-1				
58	IBC 16-7 (d)	Yes	Y	DL	0.9	Sds*DL	-0.2	ELZ	-1				
59	--- LRFD Seismic OS Combinations ---												
60	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*ELX	1	LL	1	LLS	1
61	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*ELZ	1	LL	1	LLS	1
62	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*ELX	-1	LL	1	LLS	1
63	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Om*ELZ	-1	LL	1	LLS	1
64	IBC 16-7 (a)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*ELX	1				
65	IBC 16-7 (b)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*ELZ	1				
66	IBC 16-7 (c)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*ELX	-1				
67	IBC 16-7 (d)	Yes	Y	DL	0.9	Sds*DL	-0.2	Om*ELZ	-1				
68													
69	ELX		Y					ELX	1				
70	ELZ		Y					ELZ	1				

Envelope X-Direction Story Drift - Strength

	Story (Elevation)		Story Drift[in]	Loc (Z,X)	LC	Drift Ratio (%)	Loc (Z,X)	LC	2nd/1st Ratio	Loc (Z,X)	LC
0	16.333 ft	max	1.303	40, 3	51	0.667	40, 0	53	1.023	40, 0	53
1		min	-1.308	40, 0	53	0.001	40, 3	36	1	40, 3	47

Envelope Z-Direction Story Drift - Strength

	Story (Elevation)		Story Drift[in]	Loc (Z,X)	LC	Drift Ratio (%)	Loc (Z,X)	LC	2nd/1st Ratio	Loc (Z,X)	LC
0	16.333 ft	max	0.15	0, 3	52	0.077	80, 3	54	1.012	5, 0	16
1		min	-0.15	80, 3	54	0.007	80, 3	36	1	0, 3	47

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N13	max	7.05	22	12.704	54	9.775	54	48.763	54	33.565	18	93.502	16
1		min	-7.05	16	0	2	-2.742	56	-20.429	56	-33.59	16	-93.452	18
2	N67	max	7.05	18	12.704	52	2.743	58	20.435	58	33.591	16	93.501	16
3		min	-7.05	20	0	2	-9.776	52	-48.77	52	-33.565	18	-93.452	18
4	N211	max	NC		NC		NC		LOCKED		LOCKED		NC	
5		min	NC		NC		NC		LOCKED		LOCKED		NC	
6	N215	max	NC		NC		NC		LOCKED		LOCKED		NC	
7		min	NC		NC		NC		LOCKED		LOCKED		NC	
8	N213	max	NC		NC		NC		LOCKED		LOCKED		NC	
9		min	NC		NC		NC		LOCKED		LOCKED		NC	
10	N216	max	NC		NC		NC		LOCKED		LOCKED		NC	
11		min	NC		NC		NC		LOCKED		LOCKED		NC	
12	N214	max	NC		NC		NC		LOCKED		LOCKED		NC	
13		min	NC		NC		NC		LOCKED		LOCKED		NC	
14	N212	max	NC		NC		NC		LOCKED		LOCKED		NC	
15		min	NC		NC		NC		LOCKED		LOCKED		NC	
16	N209	max	NC		NC		NC		LOCKED		LOCKED		NC	
17		min	NC		NC		NC		LOCKED		LOCKED		NC	
18	N210	max	NC		NC		NC		LOCKED		LOCKED		NC	
19		min	NC		NC		NC		LOCKED		LOCKED		NC	
20	Totals:	max	14.1	22	23.985	53	9.4	54						
21		min	-14.1	20	0	2	-9.4	56						

Envelope Node Reactions - Overstrength or Capacity Limit

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N13	max	9.391	66*	13.416	63*	14.473	63*	77.093	63*	36.185	62*	114.536	60*
1		min	-9.391	60*	3.204	65*	-7.442	65*	-48.737	65*	-36.189	60*	-114.535	62*
2	N67	max	9.391	62*	13.416	61*	7.444	67*	48.75	67*	36.189	60*	114.534	60*
3		min	-9.391	64*	3.204	67*	-14.475	61*	-77.107	61*	-36.184	62*	-114.535	62*
4	N211	max	NC		NC		NC		LOCKED		LOCKED		NC	
5		min	NC		NC		NC		LOCKED		LOCKED		NC	
6	N215	max	NC		NC		NC		LOCKED		LOCKED		NC	
7		min	NC		NC		NC		LOCKED		LOCKED		NC	
8	N213	max	NC		NC		NC		LOCKED		LOCKED		NC	
9		min	NC		NC		NC		LOCKED		LOCKED		NC	
10	N216	max	NC		NC		NC		LOCKED		LOCKED		NC	
11		min	NC		NC		NC		LOCKED		LOCKED		NC	
12	N214	max	NC		NC		NC		LOCKED		LOCKED		NC	
13		min	NC		NC		NC		LOCKED		LOCKED		NC	
14	N212	max	NC		NC		NC		LOCKED		LOCKED		NC	
15		min	NC		NC		NC		LOCKED		LOCKED		NC	
16	N209	max	NC		NC		NC		LOCKED		LOCKED		NC	
17		min	NC		NC		NC		LOCKED		LOCKED		NC	
18	N210	max	NC		NC		NC		LOCKED		LOCKED		NC	
19		min	NC		NC		NC		LOCKED		LOCKED		NC	
20	Totals:	max	18.783	66*	23.985	62*	18.799	63*						
21		min	-18.783	64*	9.257	64*	-18.799	65*						

Envelope AISC 15TH (360-16): ASD Member Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
0	M1	HSS20.000X0.500	0.24	0	16	0.124	9.868		16	698.405	785.03	406.287	406.287	1	H1-1b
1	M15	L6X4X8	0.41	35.833	16	0.011	5.833	z	16	87.039	102.395	4.416	4.023	1.365	H2-1
2	M16	L6X4X8	0.373	39.167	18	0.003	45	y	53	87.039	102.395	4.416	3.707	1.246	H2-1
3	M46	L3.5X3.5X5	0.18	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.553	1.163	H2-1
4	M138	L6X4X8	0.306	43.333	18	0.011	40	z	20	87.039	102.395	4.416	4.37	1.5	H2-1
5	M141	L6X4X8	0.29	40	16	0.004	35	y	53	87.039	102.395	4.416	4.37	1.5	H2-1
6	M18	L3.5X3.5X5	0.114	6.333	18	0.002	6.333	z	53	23.681	45.269	1.918	3.637	1	H2-1
7	M19	L3.5X3.5X5	0.198	3.166	54	0.002	6.333	z	53	23.681	45.269	1.918	3.817	1.236	H2-1
8	M20	L3.5X3.5X5	0.179	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.555	1.165	H2-1
9	M21	L3.5X3.5X5	0.115	6.333	16	0.002	6.333	y	53	23.681	45.269	1.918	3.637	1	H2-1
10	M23	L3.5X3.5X5	0.198	3.166	54	0.002	6.333	y	53	23.681	45.269	1.918	3.817	1.236	H2-1
11	M24	L2.5X2.5X4	0.335	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
12	M25	L2.5X2.5X4	0.333	2.121	16	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
13	M26	L2.5X2.5X4	0.277	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
14	M27	L2.5X2.5X4	0.277	2.121	16	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
15	M28	L2.5X2.5X4	0.229	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
16	M29	L2.5X2.5X4	0.229	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
17	M30	L2.5X2.5X4	0.179	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
18	M31	L2.5X2.5X4	0.178	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
19	M32	L2.5X2.5X4	0.128	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
20	M33	L2.5X2.5X4	0.126	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
21	M34	L2.5X2.5X4	0.079	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
22	M35	L2.5X2.5X4	0.08	2.121	16	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
23	M36	L2.5X2.5X4	0.037	2.5	53	0.002	5	y	51	11.346	25.653	0.741	1.497	1.136	H2-1
24	M37	L2.5X2.5X4	0.339	2.121	16	0.004	4.243	y	54	14.258	25.653	0.741	1.549	1.136	H2-1
25	M38	L2.5X2.5X4	0.297	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
26	M39	L2.5X2.5X4	0.294	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
27	M40	L2.5X2.5X4	0.243	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
28	M41	L2.5X2.5X4	0.244	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
29	M42	L2.5X2.5X4	0.195	2.121	18	0.002	4.243	y	16	14.258	25.653	0.741	1.549	1.136	H2-1
30	M43	L2.5X2.5X4	0.195	2.121	16	0.002	4.243	y	18	14.258	25.653	0.741	1.549	1.136	H2-1
31	M44	L2.5X2.5X4	0.146	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
32	M45	L2.5X2.5X4	0.146	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
33	M47	L2.5X2.5X4	0.098	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
34	M48	L2.5X2.5X4	0.098	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
35	M49	L2.5X2.5X4	0.045	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
36	M50	L2.5X2.5X4	0.063	2.5	16	0.002	5	y	53	11.346	25.653	0.741	1.497	1.136	H2-1
37	M51	L3.5X3.5X5	0.163	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.553	1.162	H2-1
38	M52	L3.5X3.5X5	0.175	3.166	54	0.002	6.333	z	51	23.681	45.269	1.918	3.816	1.234	H2-1
39	M53	L3.5X3.5X5	0.162	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.558	1.169	H2-1
40	M54	L3.5X3.5X5	0.174	3.166	54	0.002	6.333	y	53	23.681	45.269	1.918	3.816	1.234	H2-1
41	M55	L3.5X3.5X5	0.149	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.556	1.166	H2-1
42	M56	L3.5X3.5X5	0.15	3.166	54	0.002	6.333	z	53	23.681	45.269	1.918	3.817	1.236	H2-1
43	M57	L3.5X3.5X5	0.149	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.558	1.169	H2-1
44	M58	L3.5X3.5X5	0.15	3.166	54	0.002	6.333	y	53	23.681	45.269	1.918	3.817	1.236	H2-1
45	M59	L3.5X3.5X5	0.134	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.557	1.167	H2-1
46	M60	L3.5X3.5X5	0.126	3.166	54	0.002	6.333	z	18	23.681	45.269	1.918	3.816	1.235	H2-1
47	M61	L3.5X3.5X5	0.134	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.559	1.17	H2-1
48	M62	L3.5X3.5X5	0.126	3.166	54	0.001	6.333	y	53	23.681	45.269	1.918	3.816	1.235	H2-1
49	M63	L3.5X3.5X5	0.12	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.558	1.169	H2-1
50	M64	L3.5X3.5X5	0.102	3.166	54	0.002	6.333	z	18	23.681	45.269	1.918	3.816	1.235	H2-1
51	M65	L3.5X3.5X5	0.12	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.56	1.172	H2-1
52	M66	L3.5X3.5X5	0.102	3.166	54	0.001	6.333	y	53	23.681	45.269	1.918	3.816	1.235	H2-1
53	M67	L3.5X3.5X5	0.106	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.559	1.17	H2-1
54	M68	L3.5X3.5X5	0.078	3.166	54	0.001	6.333	z	51	23.681	45.269	1.918	3.816	1.235	H2-1

Envelope AISC 15TH (360-16): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
55	M69	L3.5X3.5X5	0.105	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.562	1.173	H2-1
56	M70	L3.5X3.5X5	0.078	3.166	54	0.001	6.333	y	53	23.681	45.269	1.918	3.816	1.235	H2-1
57	M71	L3.5X3.5X5	0.091	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.562	1.173	H2-1
58	M72	L3.5X3.5X5	0.054	3.166	54	0.001	6.333	z	51	23.681	45.269	1.918	3.816	1.234	H2-1
59	M73	L3.5X3.5X5	0.091	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.562	1.173	H2-1
60	M74	L3.5X3.5X5	0.053	3.166	54	0.002	6.333	y	51	23.681	45.269	1.918	3.816	1.234	H2-1
61	M75	L3.5X3.5X5	0.077	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.562	1.174	H2-1
62	M76	L3.5X3.5X5	0.028	3.166	16	0.001	6.333	y	52	23.681	45.269	1.918	3.867	1.316	H2-1
63	M77	L3.5X3.5X5	0.077	4.034	54	0.003	8.069	y	54	15.798	45.269	1.918	3.563	1.175	H2-1
64	M78	L3.5X3.5X5	0.033	3.166	16	0.001	6.333	y	16	23.681	45.269	1.918	3.867	1.316	H2-1
65	M79	HSS20.000X0.500	0.24	0	16	0.124	9.868		16	743.65	785.03	406.287	406.287	1	H1-1b
66	M80	L3.5X3.5X5	0.18	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.555	1.164	H2-1
67	M81	L3.5X3.5X5	0.114	6.333	18	0.002	6.333	z	53	23.681	45.269	1.918	3.637	1	H2-1
68	M82	L3.5X3.5X5	0.105	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.561	1.173	H2-1
69	M83	L3.5X3.5X5	0.197	3.166	52	0.002	6.333	z	53	23.681	45.269	1.918	3.822	1.244	H2-1
70	M84	L3.5X3.5X5	0.179	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.554	1.163	H2-1
71	M85	L3.5X3.5X5	0.115	6.333	16	0.002	6.333	y	53	23.681	45.269	1.918	3.637	1	H2-1
72	M86	L3.5X3.5X5	0.197	3.166	52	0.002	6.333	y	51	23.681	45.269	1.918	3.822	1.244	H2-1
73	M87	L3.5X3.5X5	0.033	3.166	16	0.001	6.333	y	16	23.681	45.269	1.918	3.867	1.316	H2-1
74	M88	L3.5X3.5X5	0.162	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.558	1.168	H2-1
75	M89	L3.5X3.5X5	0.134	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.559	1.169	H2-1
76	M90	L3.5X3.5X5	0.173	3.166	52	0.002	6.333	z	51	23.681	45.269	1.918	3.823	1.245	H2-1
77	M91	L3.5X3.5X5	0.163	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.554	1.163	H2-1
78	M92	L3.5X3.5X5	0.173	3.166	52	0.002	6.333	y	53	23.681	45.269	1.918	3.823	1.245	H2-1
79	M93	L3.5X3.5X5	0.149	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.557	1.168	H2-1
80	M94	L3.5X3.5X5	0.149	3.166	52	0.002	6.333	z	53	23.681	45.269	1.918	3.822	1.243	H2-1
81	M95	L3.5X3.5X5	0.149	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.556	1.166	H2-1
82	M96	L3.5X3.5X5	0.149	3.166	52	0.002	6.333	y	53	23.681	45.269	1.918	3.822	1.243	H2-1
83	M97	L3.5X3.5X5	0.125	3.166	52	0.002	6.333	z	18	23.681	45.269	1.918	3.821	1.242	H2-1
84	M98	L3.5X3.5X5	0.134	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.557	1.168	H2-1
85	M99	L3.5X3.5X5	0.125	3.166	52	0.001	6.333	y	53	23.681	45.269	1.918	3.821	1.242	H2-1
86	M100	L3.5X3.5X5	0.12	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.56	1.171	H2-1
87	M101	L3.5X3.5X5	0.106	3.166	52	0.002	6.333	y	18	23.681	45.269	1.918	3.779	1.179	H2-1
88	M102	L3.5X3.5X5	0.12	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.558	1.169	H2-1
89	M103	L3.5X3.5X5	0.105	3.166	52	0.001	6.333	y	53	23.681	45.269	1.918	3.793	1.2	H2-1
90	M104	L3.5X3.5X5	0.077	3.166	52	0.001	6.333	z	51	23.681	45.269	1.918	3.82	1.241	H2-1
91	M105	L3.5X3.5X5	0.106	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.559	1.17	H2-1
92	M106	L3.5X3.5X5	0.077	3.166	52	0.001	6.333	y	53	23.681	45.269	1.918	3.82	1.241	H2-1
93	M107	L3.5X3.5X5	0.091	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.561	1.173	H2-1
94	M108	L3.5X3.5X5	0.053	3.166	52	0.001	6.333	z	51	23.681	45.269	1.918	3.82	1.24	H2-1
95	M109	L3.5X3.5X5	0.091	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.562	1.174	H2-1
96	M110	L3.5X3.5X5	0.053	3.166	52	0.002	6.333	y	51	23.681	45.269	1.918	3.82	1.24	H2-1
97	M111	L3.5X3.5X5	0.077	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.563	1.174	H2-1
98	M112	L3.5X3.5X5	0.028	3.166	16	0.001	6.333	y	51	23.681	45.269	1.918	3.867	1.316	H2-1
99	M113	L3.5X3.5X5	0.077	4.034	52	0.003	8.069	y	52	15.798	45.269	1.918	3.563	1.175	H2-1
100	M118	L2.5X2.5X4	0.335	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
101	M119	L2.5X2.5X4	0.333	2.121	16	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
102	M120	L2.5X2.5X4	0.277	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
103	M121	L2.5X2.5X4	0.277	2.121	16	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
104	M122	L2.5X2.5X4	0.229	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
105	M123	L2.5X2.5X4	0.229	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
106	M124	L2.5X2.5X4	0.179	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
107	M125	L2.5X2.5X4	0.178	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
108	M126	L2.5X2.5X4	0.128	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
109	M127	L2.5X2.5X4	0.126	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1

Envelope AISC 15TH (360-16): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
110	M128	L2.5X2.5X4	0.079	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
111	M129	L2.5X2.5X4	0.08	2.121	16	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
112	M130	L2.5X2.5X4	0.339	2.121	16	0.004	4.243	y	52	14.258	25.653	0.741	1.549	1.136	H2-1
113	M131	L2.5X2.5X4	0.297	2.121	18	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
114	M132	L2.5X2.5X4	0.294	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
115	M133	L2.5X2.5X4	0.243	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
116	M134	L2.5X2.5X4	0.244	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
117	M135	L2.5X2.5X4	0.195	2.121	18	0.002	4.243	y	16	14.258	25.653	0.741	1.549	1.136	H2-1
118	M136	L2.5X2.5X4	0.195	2.121	16	0.002	4.243	y	18	14.258	25.653	0.741	1.549	1.136	H2-1
119	M137	L2.5X2.5X4	0.146	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
120	M139	L2.5X2.5X4	0.146	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
121	M142	L2.5X2.5X4	0.098	2.121	18	0.002	4.243	y	51	14.258	25.653	0.741	1.549	1.136	H2-1
122	M143	L2.5X2.5X4	0.098	2.121	16	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
123	M144	L2.5X2.5X4	0.049	2.121	53	0.002	4.243	y	53	14.258	25.653	0.741	1.549	1.136	H2-1
124	M145	L2.5X2.5X4	0.063	2.5	16	0.002	5	y	53	11.346	25.653	0.741	1.497	1.136	H2-1
125	M146	L2.5X2.5X4	0.045	2.5	53	0.002	5	y	51	11.346	25.653	0.741	1.497	1.136	H2-1
126	M147	L3X3X5	0.007	1.5	54	0.002	3	z	18	31.393	38.371	1.34	3.042	1.136	H2-1
127	M148	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
128	M149	L3X3X5	0.007	1.5	52	0.002	3	z	18	31.393	38.371	1.34	3.042	1.136	H2-1
129	M150	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
130	M151	L3X3X5	0.007	1.5	52	0.002	3	z	18	31.393	38.371	1.34	3.042	1.136	H2-1
131	M152	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
132	M153	L3X3X5	0.007	1.5	54	0.002	3	z	18	31.393	38.371	1.34	3.042	1.136	H2-1
133	M154	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
134	M155	L3X3X5	0.009	1.5	54	0.001	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
135	M156	L3X3X5	0.007	1.5	52	0.002	3	z	18	31.393	38.371	1.34	3.042	1.136	H2-1
136	M157	L3X3X5	0.007	1.5	52	0.002	3	z	18	31.393	38.371	1.34	3.042	1.136	H2-1
137	M158	L3X3X5	0.01	1.5	54	0.001	3	y	51	31.393	38.371	1.34	3.042	1.136	H2-1
138	M159	L3X3X5	0.009	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
139	M160	L3X3X5	0.01	1.5	54	0.001	3	y	51	31.393	38.371	1.34	3.042	1.136	H2-1
140	M161	L3X3X5	0.007	1.5	54	0.002	3	z	16	31.393	38.371	1.34	3.042	1.136	H2-1
141	M162	L3X3X5	0.009	1.5	54	0.001	3	y	54	31.393	38.371	1.34	3.042	1.136	H2-1
142	M163	L3X3X5	0.009	1.5	54	0.002	3	y	16	31.393	38.371	1.34	3.042	1.136	H2-1
143	M164	L3X3X5	0.01	1.5	54	0.001	3	y	51	31.393	38.371	1.34	3.042	1.136	H2-1
144	M165	L3X3X5	0.009	1.5	52	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
145	M166	L3X3X5	0.01	1.5	54	0.001	3	y	51	31.393	38.371	1.34	3.042	1.136	H2-1
146	M167	L3X3X5	0.009	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
147	M168	L3X3X5	0.01	1.5	54	0.001	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
148	M169	L3X3X5	0.009	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
149	M170	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
150	M171	L3X3X5	0.009	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
151	M172	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
152	M173	L3X3X5	0.009	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
153	M174	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
154	M175	L3X3X5	0.009	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
155	M176	L3X3X5	0.01	1.5	54	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
156	M177	L3X3X5	0.009	1.5	52	0.002	3	y	18	31.393	38.371	1.34	3.042	1.136	H2-1
157	M178	L6X4X8	0.013	2.167	53	0.001	0	y	52	87.039	102.395	4.416	13.212	1.299	H2-1
158	M179	L6X4X8	0.047	0	16	0.007	2.167	z	16	87.039	102.395	4.416	12.257	1	H2-1
159	M180	L6X4X8	0.046	2.167	18	0.007	0	z	22	87.039	102.395	4.416	13.212	1.3	H2-1
160	M181	L6X4X8	0.014	0	51	0.001	2.167	y	52	87.039	102.395	4.416	12.257	1	H2-1
161	M182	L6X4X8	0.046	2.167	16	0.007	0	z	22	87.039	102.395	4.416	13.212	1.3	H2-1
162	M183	L6X4X8	0.047	0	18	0.007	2.167	z	18	87.039	102.395	4.416	12.257	1	H2-1
163	M184	L6X4X8	0.014	0	53	0.001	2.167	y	54	87.039	102.395	4.416	12.257	1	H2-1
164	M185	L6X4X8	0.013	2.167	51	0.001	0	y	54	87.039	102.395	4.416	13.212	1.299	H2-1

Envelope AISC 15TH (360-16): ASD Member Steel Code Checks (Continued)

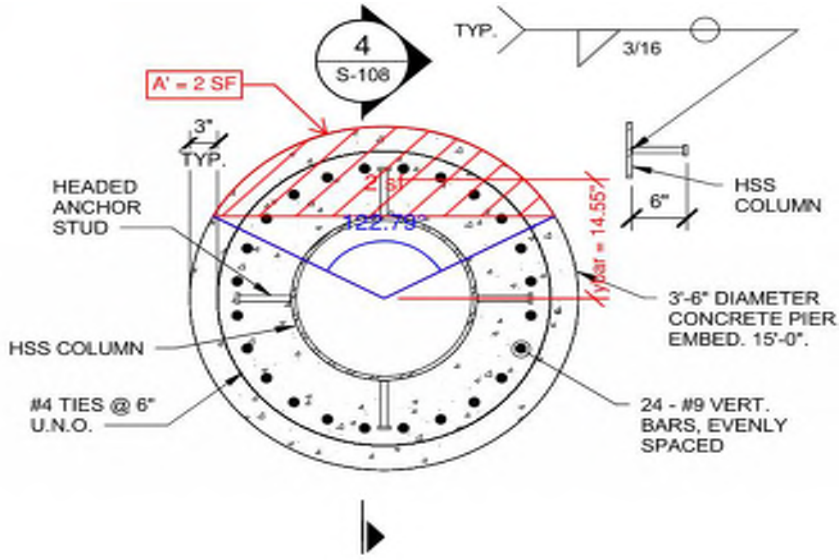
Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn

TETRA TECH

Sheet No.: _____ of _____ Date: _____
Checked By: _____ Office: _____
Telephone: _____

Engineer: BMB Job No.: _____
Subject: Ben Lomond Transfer Station
Entrance Sign - Column Pedestal Shear Flow

Pedestal Shear Flow



R	=	1.75	ft
ϕ	=	122.8	deg
y_c	=	14.55	in
d_c	=	4.49	in
D_{post}	=	1.67	ft
D_{ped}	=	3.50	ft
A'	=	2.00	ft^2
y'	=	1.21	ft
Q = A'y'	=	2.42	ft^3
V_{max}	=	14.5	kips **(Per RISA3D)**
$I = bh^3/12$	=	6.99	ft^4
q = VQ/I	=	5.02	kips/ft

$$Q_n = 0.5 A_{sa} \sqrt{f'_c E_c} \le R_g R_p A_{sa} F_u$$ **(AISC 360 Equation I8-1)**

ϕ	=	0.75	
Fy	=	51	ksi **(Type B, Fy = 51 ksi per AWS D1.1 Table 7.1)**
Fu	=	65	ksi
Ec	=	123.2	ksi
A_{sa}	=	0.442	in^2 **(3/4" Studs @12")**
f'c	=	4.5	ksi
Rg	=	1.00	No decking
Rp	=	0.75	No decking
Qn	=	5.20	< 21.54
V_u	=	5.02	kip/ft
φV_n	=	5.20	kip/ft
D/C	=	**0.97**	

UNFACTORED REACTIONS

LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	N13	0	7.915	3.349	13.479	0	0
1	N67	0	7.915	-3.349	-13.479	0	0
1	COG (ft):	X: 1.5	Y: 12.09	Z: 40			
69	N13	-4.696	0	0.016	0.068	-17.975	56.795
69	N67	-4.696	0	-0.016	-0.068	17.975	56.795
69	COG (ft):	NC	NC	NC			
70	N13	0	-0.713	-4.7	-28.294	0.015	0.006
70	N67	0	0.713	-4.7	-28.301	0.015	-0.006
70	COG (ft):	NC	NC	NC			
71	N13	-7.05	0	0.044	0.232	-33.429	92.85
71	N67	-7.05	0	-0.044	-0.232	33.429	92.85
71	COG (ft):	NC	NC	NC			
72	N13	0	-0.042	-0.264	-1.73	0.001	0
72	N67	0	0.042	-0.238	-1.506	0.001	0
72	COG (ft):	NC	NC	NC			

DL

ELX

ELZ

WLX

WLZ

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: Pedestal check_backup_1.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2018

General Information

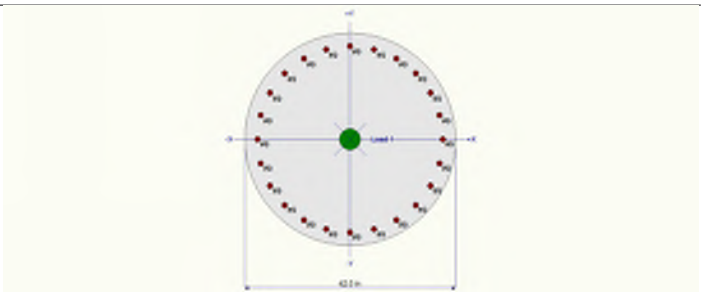
f'c : Concrete 28 day streng	=	4.50 ksi
E =	=	3,605.0 ksi
Density	=	150.0 pcf
β	=	0.8250
fy - Main Rebar	=	60.0 ksi
E - Main Rebar	=	29,000.0 ksi
Allow. Reinforcing Limits		*ASTM A615 Bars Used*
Min. Reinf.	=	0.50 %
Max. Reinf.	=	8.0 %

Overall Column Height = 20.50 ft
End Fixity Top Free, Bottom Fixed
Brace condition for deflection (buckling) along colur
X-X (width) axis :
Fully braced against buckling ABOUT Y-Y Axis
Y-Y (depth) axis :
Fully braced against buckling ABOUT Y-Y Axis

Column Cross Section

Column Dimensions : 42.0in Diameter, Column Edge to Rebar Edge Cover = 2.0in

Column Reinforcing : 24 - #9 bars



Applied Loads

Entered loads are factored per load combinations specified by user.

Column self weight included : 29,585.0 lbs * Dead Load Factor
AXIAL LOADS . . .
Max. Axial Load (Risa): Axial Load at 20.50 ft above base, D = 8.0, W = 0.050, E = 0.720 k
BENDING LOADS . . .
Lat. Point Load at 20.50 ft creating My-y, D = 3.40, W = 7.10, E = 4.70 k
Max. Moment (Risa): Moment acting about Y-Y axisat 20.50 ft, D = 13.50, W = 92.90, E = 56.80 k-ft

DESIGN SUMMARY

Load Combination	+1.20D+W
Location of max.above base	20.362 ft
Maximum Stress Ratio	**0.171 : 1**
Ratio = (Pu^2+Mu^2)^.5 / (PhiPn^2+PhiMn^2)^.5	

Pu =	45.152 k	φ * Pn =	268.144 k
Mu-x =	6.999 k-ft	φ * Mn-x =	34.083 k-ft
Mu-y =	-338.290 k-ft	φ* Mn-y =	1,993.71 k-ft
Mu Angle =	89.0 deg	φ =	0.90
Mu at Angle =	338.362 k-ft	φMn at Angle =	1,980.77 k-ft

Pn & Mn values located at Pu-Mu vector intersection with capacity curve

Column Capacities . .

Pnmax : Nominal Max. Compressive Axial Capac	6,647.52 k
Pnmin : Nominal Min. Tension Axial Capacity	k
φ Pn, max : Usable Compressive Axial Capacity	3,456.71 k
φ Pn, min : Usable Tension Axial Capacity	k

Maximum SERVICE Load Reactions .

Top along Y-Y	0.0 k	Bottom along Y-Y	7.660 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Deflections . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination :
Along X-X 0.1245 in at 20.50 ft above base
for load combination : W Only

General Section Informatio β = 0.8250 θ = 0.80

ρ : % Reinforcing 1.732 % Rebar % Ok
Reinforcing Area 24.0 in^2
Concrete Area 1,385.44 in^2

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: Pedestal check_backup_1.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Governing Load Combination Results

Governing Factored Load Combination	Moment X-X	Moment Y-Y	Dist. from base ft	Axial Load k Pu	φ * Pn	Bending Analysis k-ft δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Utilization Ratio
+1.40D	M2,min	Actual	20.36	52.62	1,051.92	1.000	8.16	1.000	-116.48	86.000	116.77	2,321.25	**0.050**
+1.20D	M2,min	Actual	20.36	45.10	1,051.92	1.000	6.99	1.000	-99.84	86.000	100.08	2,321.25	**0.043**
+1.20D+0.50W	M2,min	Actual	20.36	45.13	443.17	1.000	6.99	1.000	-219.07	88.000	219.18	2,132.30	**0.103**
+1.20D+W	M2,min	Actual	20.36	45.15	268.14	1.000	7.00	1.000	-338.29	89.000	338.36	1,980.77	**0.171**
+1.379D+1.30E	M2,min	Actual	20.36	52.77	355.29	1.000	8.18	1.000	-313.83	89.000	313.93	2,058.38	**0.153**
+0.90D+W	M2,min	Actual	20.36	33.88	209.56	1.000	5.25	1.000	-313.33	89.000	313.37	1,927.61	**0.163**
+0.7210D+1.30E	M2,min	Actual	20.36	28.03	209.56	1.000	4.35	1.000	-259.08	89.000	259.12	1,927.61	**0.134**

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction k @ Base	@ Top	Y-Y Axis Reaction @ Base	@ Top	Axial Reaction @ Base	Mx - End Moments k-ft @ Base	@ Top	My - End Moments @ Base	@ Top
D Only	3.400				37.585			-83.200	
+D+0.60W	7.660				37.615			-226.270	
+D+0.70E	6.690				38.089			-190.405	
+D+0.450W	6.595				37.607			-190.503	
+D+0.5250E	5.868				37.963			-163.604	
+0.60D+0.60W	6.300				22.581			-192.990	
+0.60D+0.70E	5.330				23.055			-157.125	
W Only	7.100				0.050			-238.450	
E Only	4.700				0.720			-153.150	

Maximum Moment Reactions

Note: Only non-zero reactions are listed.

Load Combination	Moment About X-X Axis @ Base	@ Top	Moment About Y-Y Axis @ Base	@ Top
D Only	k-ft		-83.200	k-ft
+D+0.60W	k-ft		-226.270	k-ft
+D+0.70E	k-ft		-190.405	k-ft
+D+0.450W	k-ft		-190.503	k-ft
+D+0.5250E	k-ft		-163.604	k-ft
+0.60D+0.60W	k-ft		-192.990	k-ft
+0.60D+0.70E	k-ft		-157.125	k-ft
W Only	k-ft		-238.450	k-ft
E Only	k-ft		-153.150	k-ft

Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
D Only	-0.0393 in	20.500 ft	0.000 in	0.000 ft
+D+0.60W	-0.1140 in	20.500 ft	0.000 in	0.000 ft
+D+0.70E	-0.0949 in	20.500 ft	0.000 in	0.000 ft
+D+0.450W	-0.0954 in	20.500 ft	0.000 in	0.000 ft
+D+0.5250E	-0.0810 in	20.500 ft	0.000 in	0.000 ft
+0.60D+0.60W	-0.0983 in	20.500 ft	0.000 in	0.000 ft
+0.60D+0.70E	-0.0791 in	20.500 ft	0.000 in	0.000 ft
W Only	-0.1245 in	20.500 ft	0.000 in	0.000 ft
E Only	-0.0784 in	20.362 ft	0.000 in	0.000 ft

Project Title:
Engineer:
Project ID:
Project Descr:

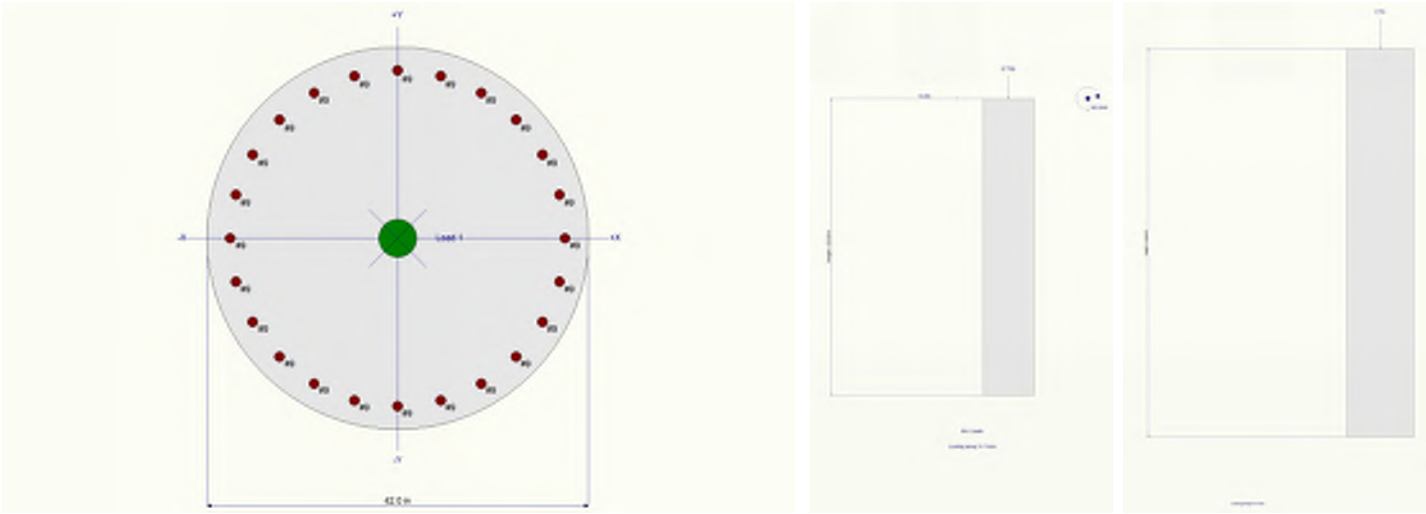
Concrete Column

Project File: Pedestal check_backup_1.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Sketches



Interaction Diagrams

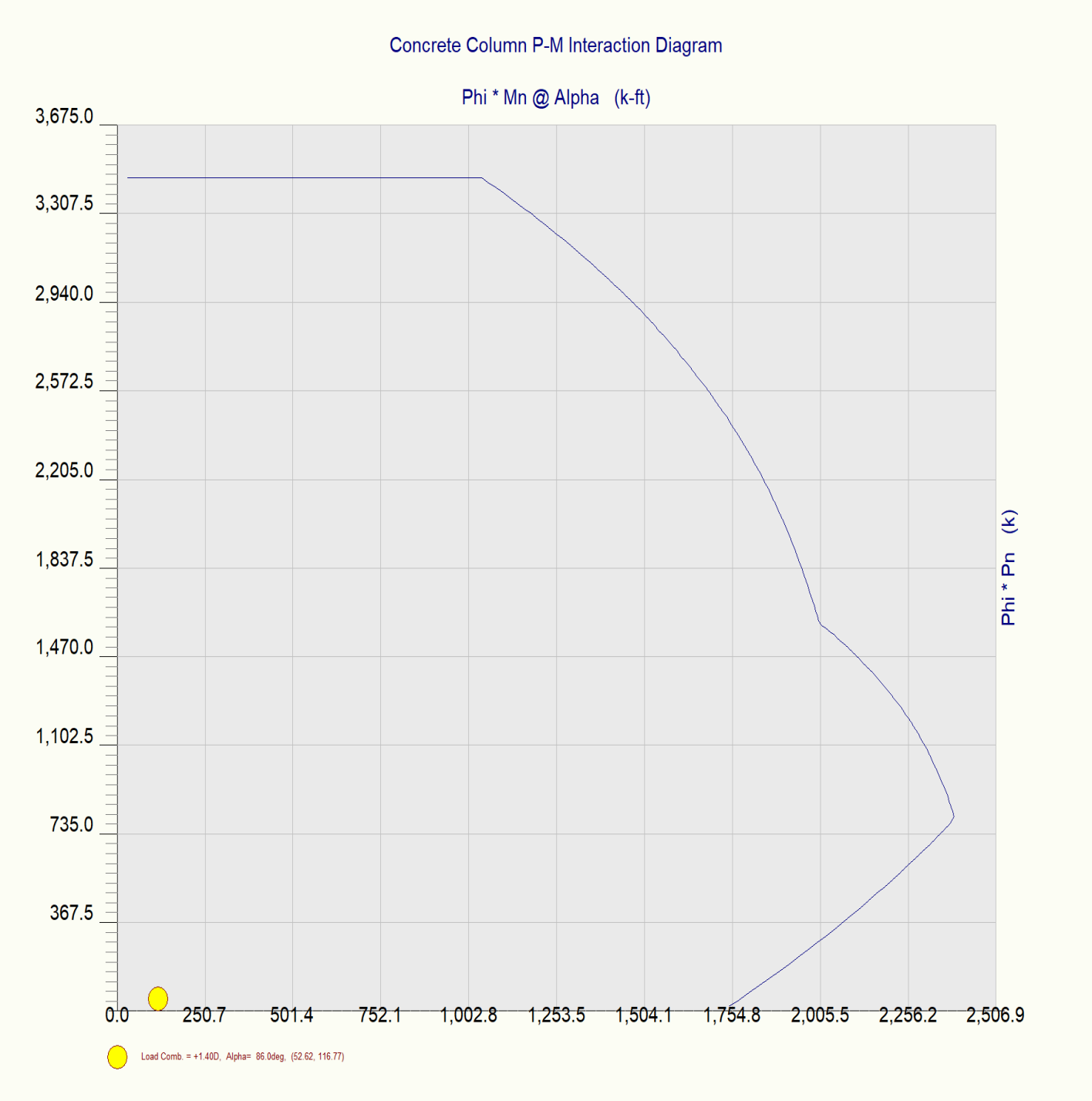
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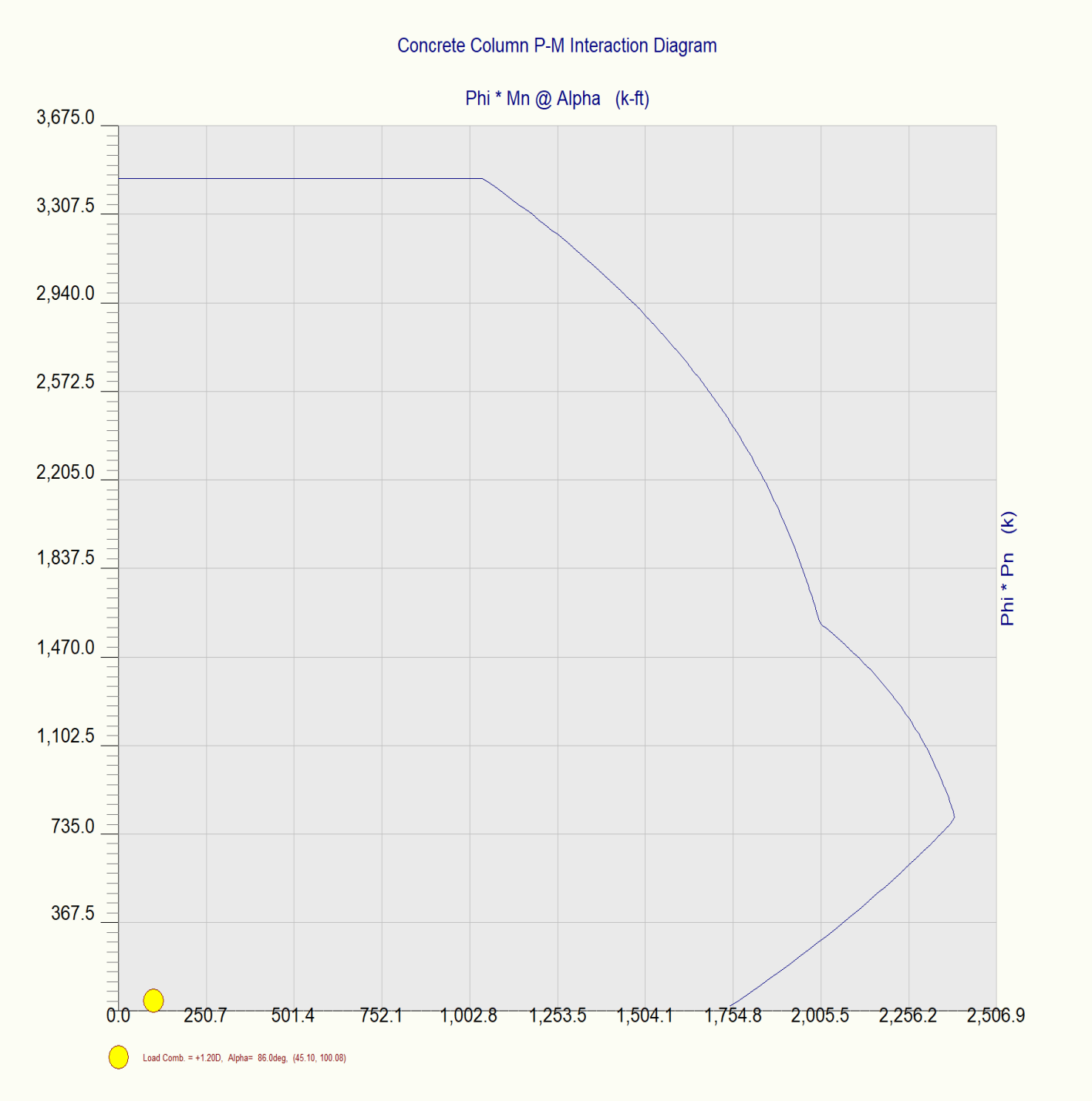
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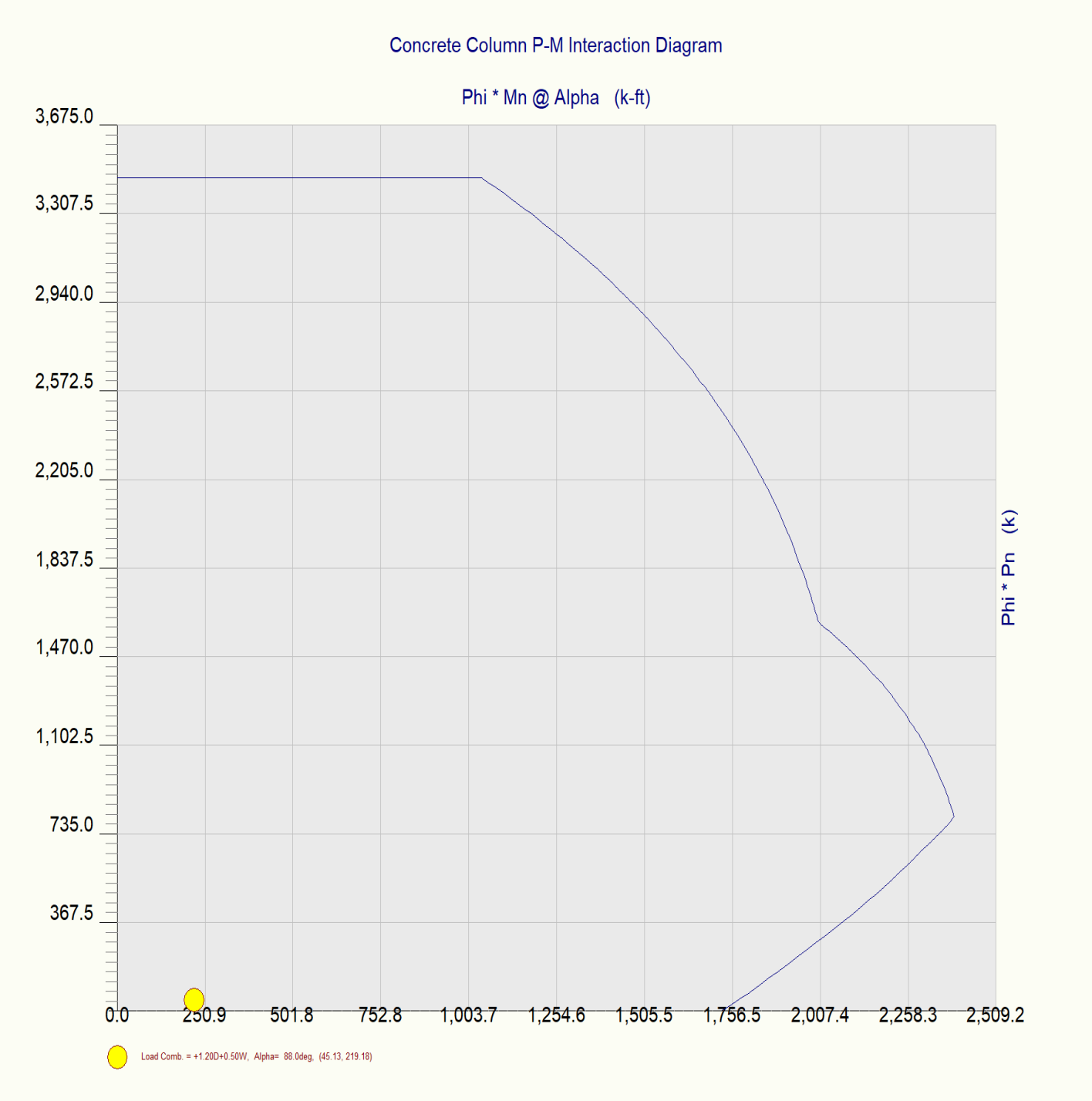
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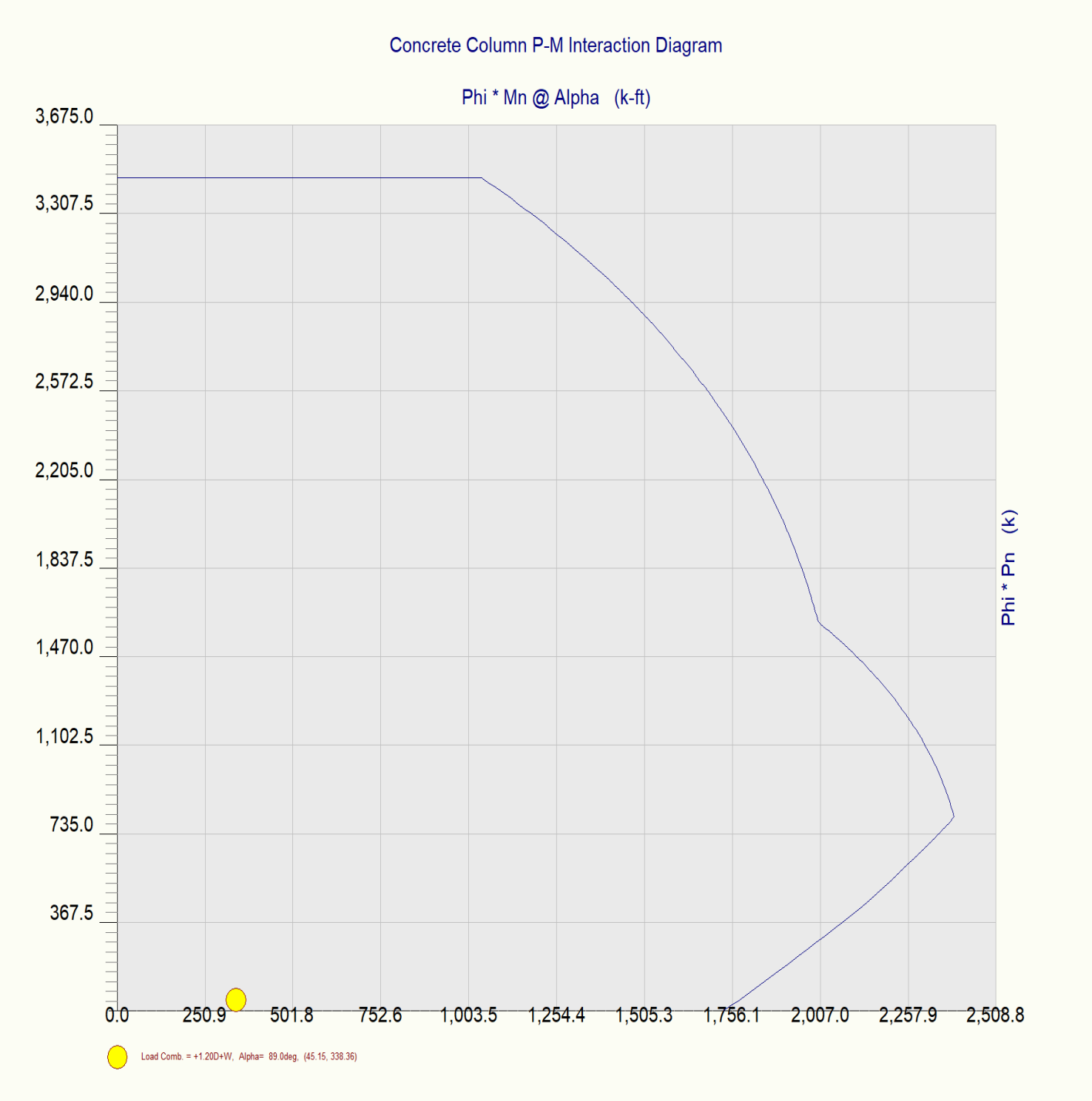
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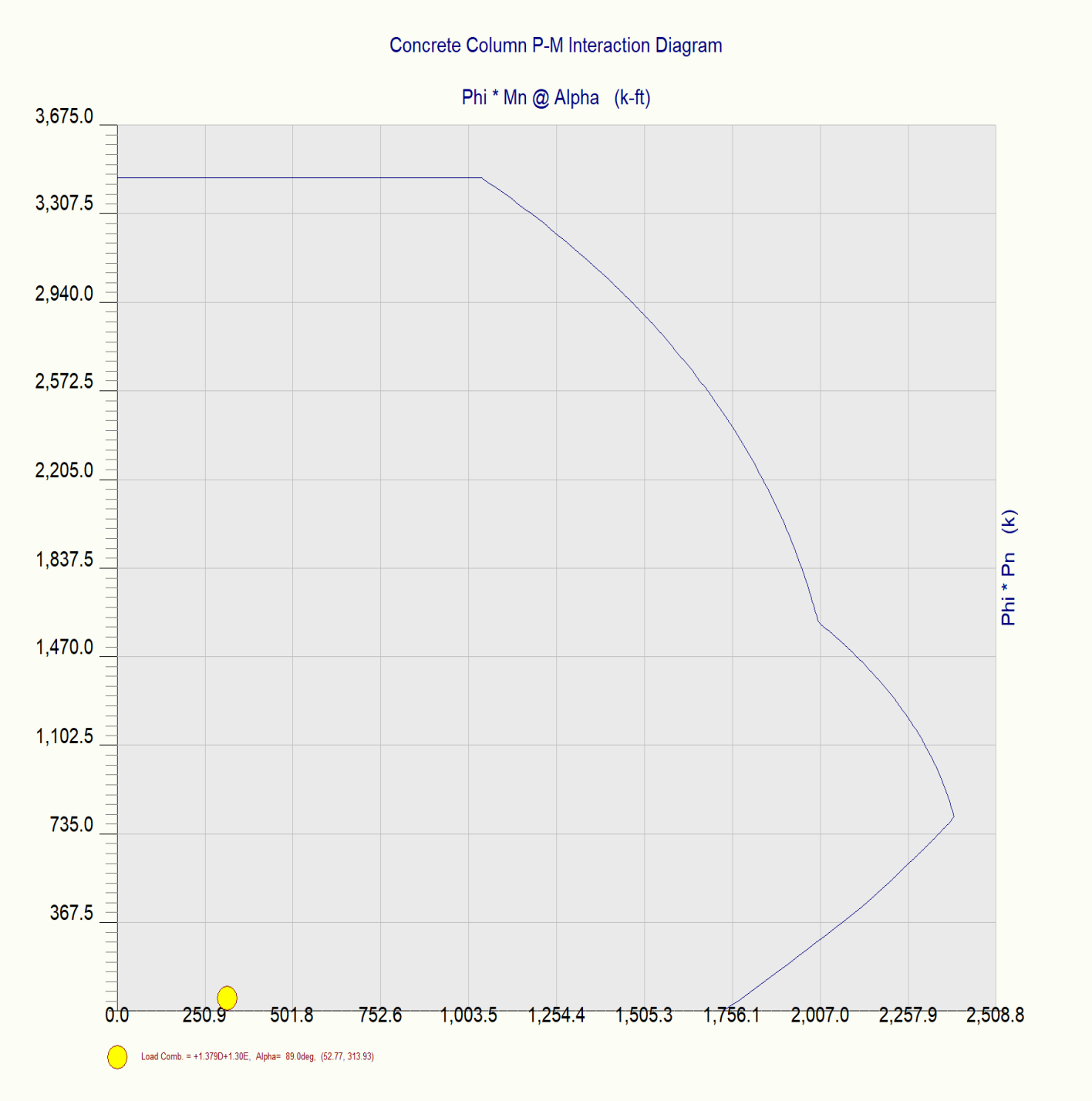
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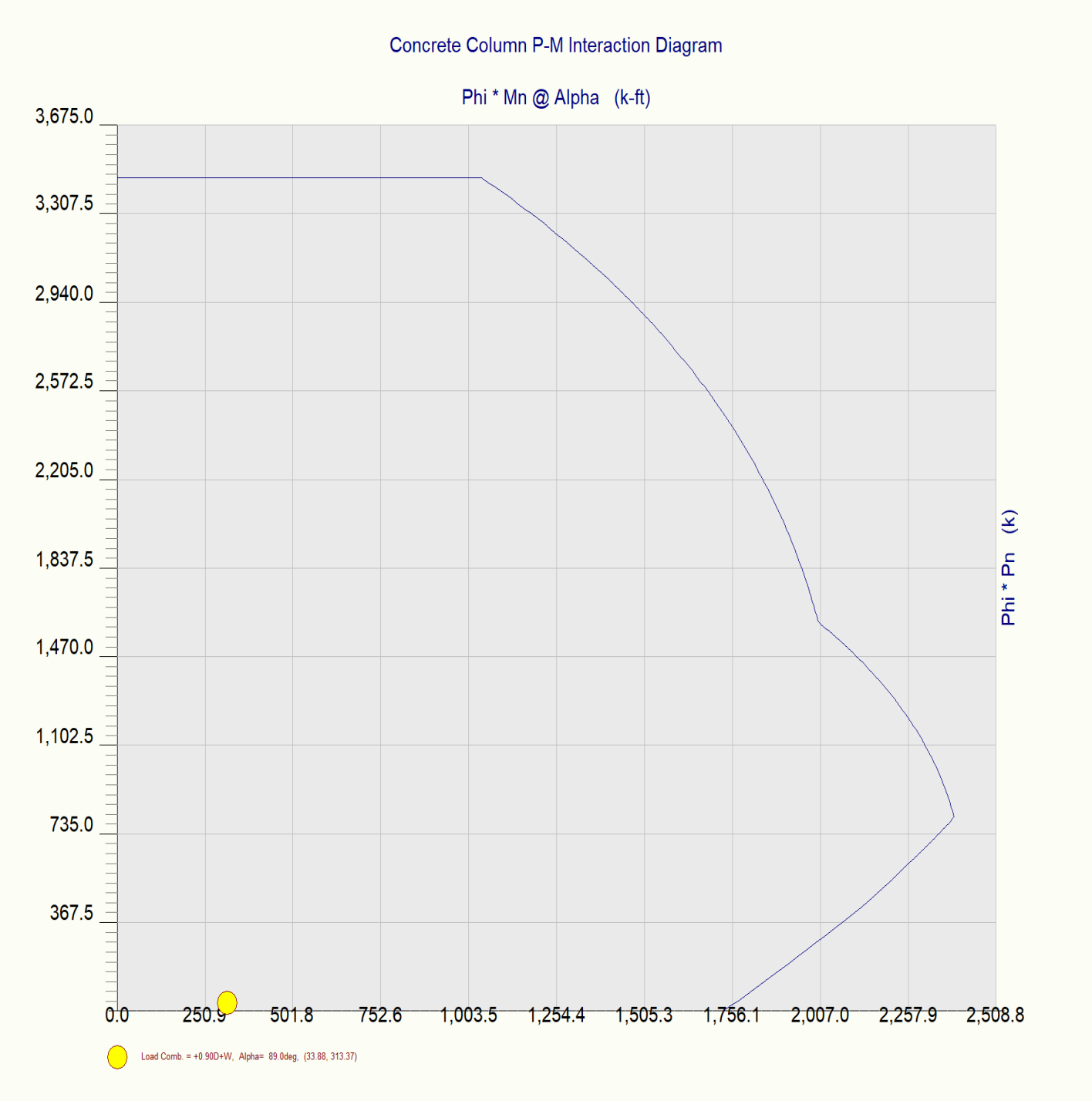
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Concrete Column

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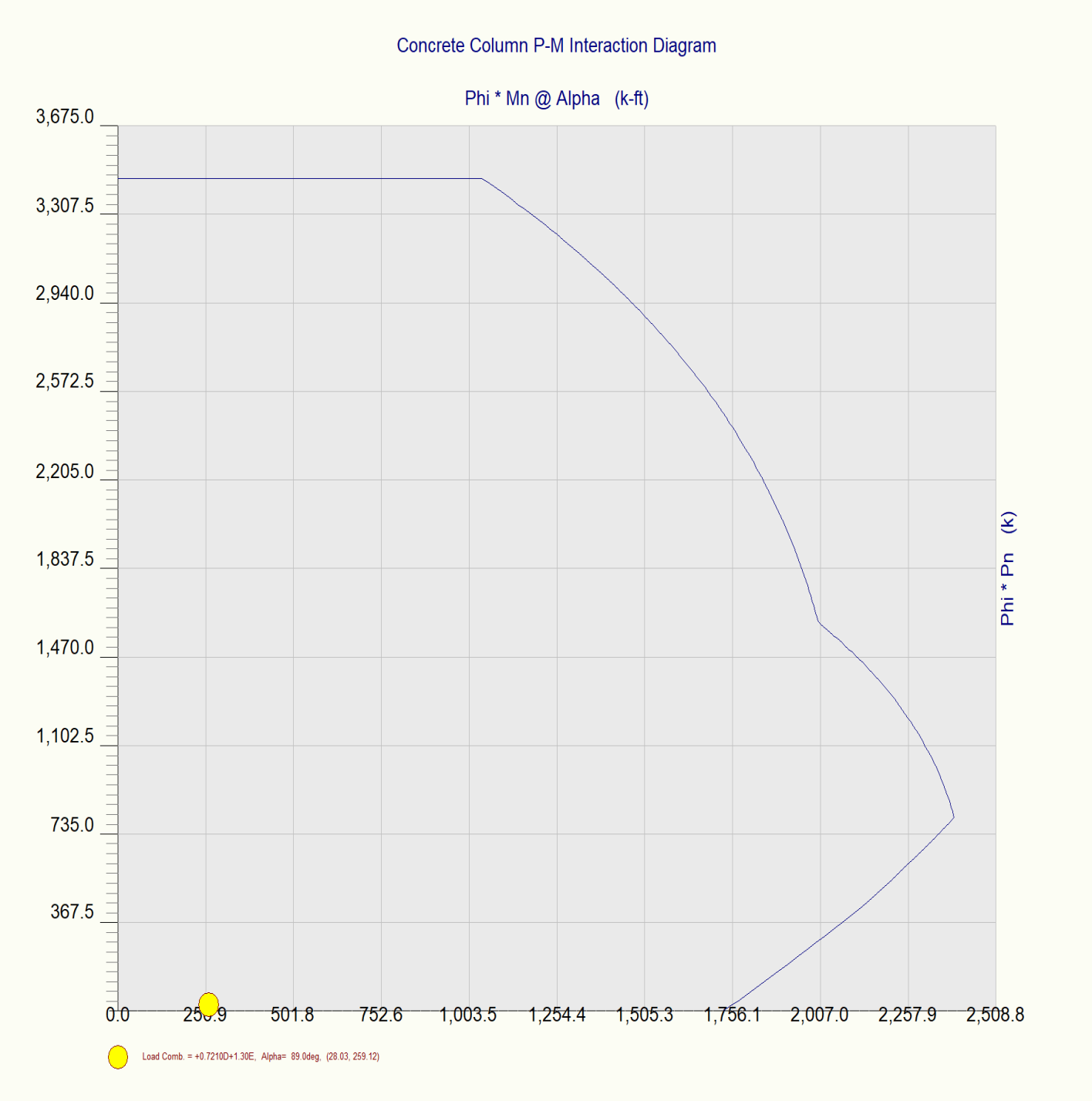
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LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal



Tetra Tech
17885 Von Karman Ave, Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE	Ben Lomond TS		
JOB NO.	200-42064-22005	**SHEET NO.**	
CALCULATED BY	BMB	**DATE**	
CHECKED BY	MSO	**DATE**	

CS2021 Ver 2022-04-02 www.struware.com

STRUCTURAL CALCULATIONS

FOR

Ben Lomond TS - HHW Canopy

Tetra Tech
17885 Von Karman Ave, Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE	Ben Lomond TS		
JOB NO.	200-42064-22005	**SHEET NO.**	
CALCULATED BY	BMB	**DATE**	
CHECKED BY	MSO	**DATE**	

www.struware.com

Code Search

Code: International Building Code 2021

Occupancy:

Occupancy Group = B Business

Risk Category & Importance Factors:

Risk Category =	II
Wind factor =	1.00
Snow factor =	1.00
Seismic factor =	1.00

Type of Construction:

Fire Rating:

Roof =	0.0 hr
Floor =	0.0 hr

Building Geometry:

Roof angle (θ)	4.00 / 12	18.4 deg
Building length	75.0 ft	
Least width	50.0 ft	
Mean Roof Ht (h)	21.2 ft	
Parapet ht above grd	0.0 ft	
Minimum parapet ht	0.0 ft	

Live Loads:

Roof

0 to 200 sf: 20 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12 psf

Roofs used for roof gardens	100 psf

Floor:

Typical Floor	50 psf
Partitions	15 psf
Corridors above first floor	80 psf
Lobbies & first floor corridors	100 psf
Stairs and exit ways	100 psf
Storage areas above ceilings	20 psf

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Wind Loads : ASCE 7- 16

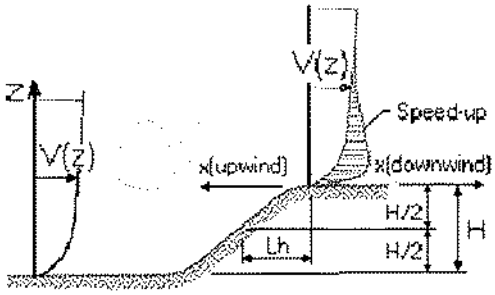
Ultimate Wind Speed	92 mph
Nominal Wind Speed	71.3 mph
Risk Category	II
Exposure Category	C
Enclosure Classif.	Open Building
Internal pressure	+/-0.00
Directionality (Kd)	0.85
Kh case 1	0.913
Kh case 2	0.913
Type of roof	Gable

Topographic Factor (Kzt)

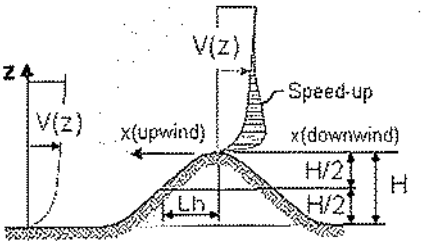
Topography		Flat
Hill Height	(H)	80.0 ft
Half Hill Length (Lh)		100.0 ft
Actual H/Lh	=	0.80
Use H/Lh	=	0.50
Modified Lh	=	160.0 ft
From top of crest: x =		50.0 ft
Bldg up/down wind?		downwind

H/Lh= 0.50 K_1 = 0.000
x/Lh = 0.31 K_2 = 0.792
z/Lh = 0.13 K_3 = 1.000

At Mean Roof Ht:
Kzt = $(1+K_1K_2K_3)^2$ = 1.00



ESCARPMENT



2D RIDGE or 3D AXISYMMETRICAL HILL

Gust Effect Factor

h = 21.2 ft
B = 50.0 ft
/z (0.6h) = 15.0 ft

Flexible structure if natural frequency < 1 Hz (T > 1 second).
If building h/B>4 then may be flexible and should be investigated.
h/B = 0.42 Rigid structure (low rise bldg)

G = 0.85 Using rigid structure formula

Rigid Structure

$\bar{e}$ =	0.20	
ℓ =	500 ft	
z_{min} =	15 ft	
c =	0.20	
g_Q, g_v =	3.4	
L_z =	427.1 ft	
Q =	0.91	
I_z =	0.23	
G =	**0.88**	use G = 0.85

Flexible or Dynamically Sensitive Structure

Natural Frequency (η_1) =	0.0 Hz				
Damping ratio (β) =	0				
/b =	0.65				
/α =	0.15				
Vz =	77.7				
N_1 =	0.00				
R_n =	0.000				
R_h =	28.282	η =	0.000	h =	21.2 ft
R_B =	28.282	η =	0.000		
R_L =	28.282	η =	0.000		
g_R =	0.000				
R =	0.000				
Gf =	0.000				

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Enclosure Classification

Test for Enclosed Building: Ao < 0.01Ag or 4 sf, whichever is smaller

Test for Open Building: All walls are at least 80% open.
Ao ≥ 0.8Ag

Test for Partially Enclosed Building: Predominately open on one side only

	Input			Test	
Ao	1060.0	sf	Ao ≥ 1.1Aoi	NO	
Ag	1060.0	sf	Ao > 4' or 0.01Ag	YES	
Aoi	5300.0	sf	Aoi / Agi ≤ 0.20	NO	Building is NOT
Agi	5300.0	sf			Partially Enclosed

Conditions to qualify as Partially Enclosed Building. Must satisfy all of the following:
Ao ≥ 1.1Aoi
Ao > smaller of 4' or 0.01 Ag
Aoi / Agi ≤ 0.20
Where:
Ao = the total area of openings in a wall that receives positive external pressure.
Ag = the gross area of that wall in which Ao is identified.
Aoi = the sum of the areas of openings in the building envelope (walls and roof) not including Ao.
Agi = the sum of the gross surface areas of the building envelope (walls and roof) not including Ag.

Test for Partially Open Building: A building that does not qualify as open, enclosed or partially enclosed.
(This type building will have same wind pressures as an enclosed building.

Reduction Factor for large volume partially enclosed buildings (Ri) :

If the partially enclosed building contains a single room that is unpartitioned , the internal pressure coefficient may be multiplied by the reduction factor Ri.

Total area of all wall & roof openings (Aog): 0 sf
Unpartitioned internal volume (Vi) : 0 cf
Ri = 1.00

Ground Elevation Factor (Ke)

Grd level above sea level = 0.0 ft Ke = 1.0000
Constant = 0.00256 Adj Constant = 0.00256

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Wind Loads - Open Buildings: 0.25 ≤ h/L ≤ 1.0

Ultimate Wind Pressures

Type of roof = Pitched Free Roofs G = 0.85
Wind Flow = Clear Roof Angle = 18.4 deg

NOTE: The code requires the MWFRS be designed for a minimum pressure of 16 psf.

Main Wind Force Resisting System

Kz = Kh (case 2) = 0.91 Base pressure (qh) = **16.8 psf**

Roof pressures - Wind Normal to Ridge

Wind Flow	Load Case		Wind Direction ɣ = 0 & 180 deg	
			Cnw	Cnl
Clear Wind Flow	A	Cn =	1.10	-0.17
		p =	15.7 psf	-2.4 psf
	B	Cn =	0.01	-0.96
		p =	0.1 psf	-13.8 psf

NOTE: 1). Cnw and Cnl denote combined pressures from top and bottom roof surfaces.
2). Cnw is pressure on windward half of roof. Cnl is pressure on leeward half of roof.
3). Positive pressures act toward the roof. Negative pressures act away from the roof.

Roof pressures - Wind Parallel to Ridge, ɣ = 90 deg

Wind Flow	Load Case		Horizontal Distance from Windward Edge		
			≤ h	>h ≤ 2h	> 2h
Clear Wind Flow	A	Cn =	-0.80	-0.60	-0.30
		p =	-11.4 psf	-8.6 psf	-4.3 psf
	B	Cn =	0.80	0.50	0.30
		p =	11.4 psf	7.1 psf	4.3 psf

h = 21.2 ft
2h = 42.3 ft

Fascia Panels -Horizontal pressures

Fascia pressures not applicable - roof angle exceeds 5 degrees.

qp = 0.0 psf
Windward fascia: 0.0 psf (GCpn = +1.5)
Leeward fascia: 0.0 psf (GCpn = -1.0)

Components & Cladding - roof pressures

Kz = Kh (case 1) = 0.91 a = 5.0 ft a^2 = 25.0 sf
Base pressure (qh) = **16.8 psf** $4a^2$ = 100.0 sf
G = 0.85

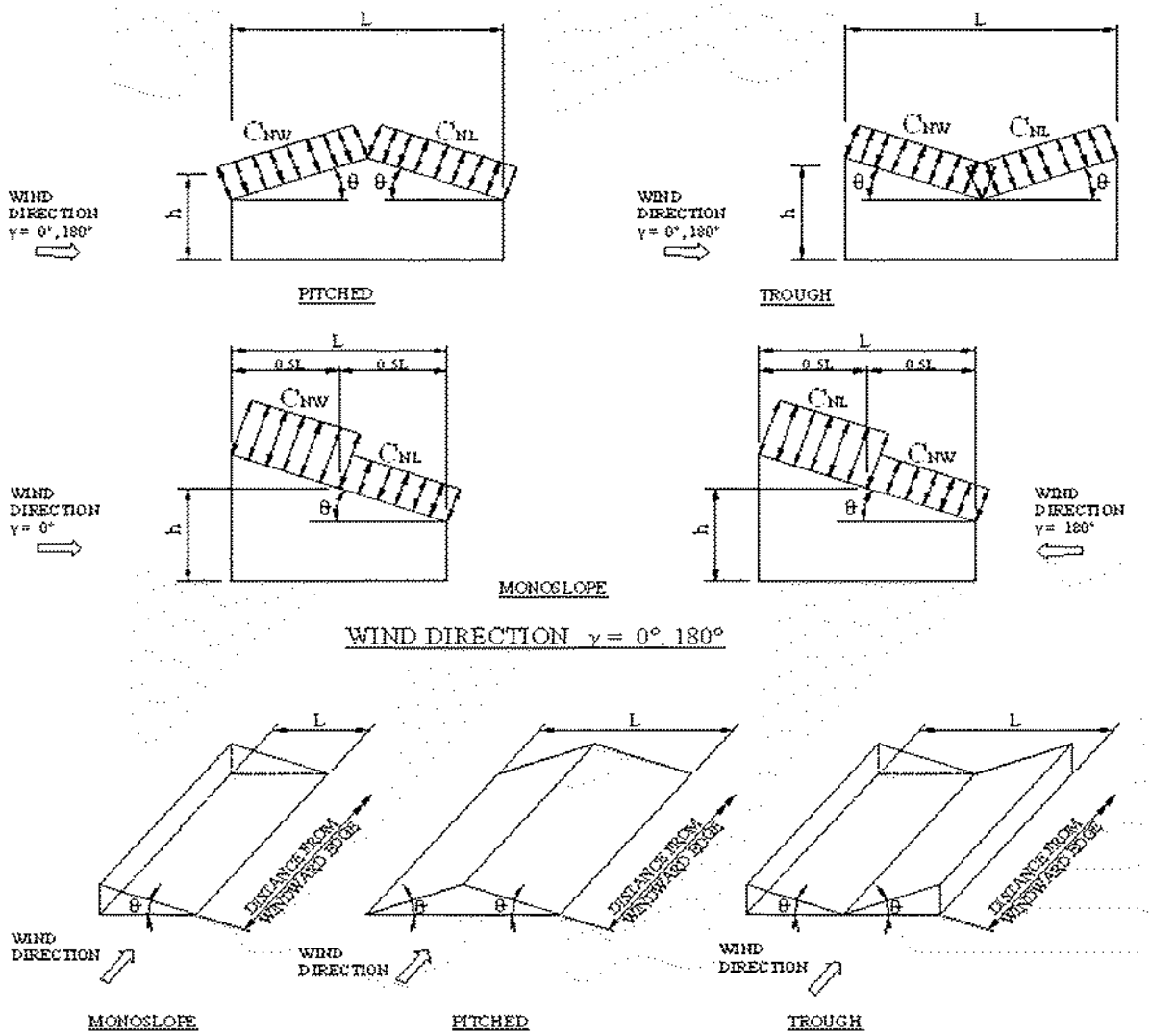
	Effective Wind Area	Clear Wind Flow					
		zone 3		zone 2		zone 1	
		positive	negative	positive	negative	positive	negative
C_N	≤ 25 sf	2.29	-2.11	1.77	-1.63	1.15	-1.05
	>25, ≤ 100 sf	1.77	-1.63	1.77	-1.63	1.15	-1.05
	> 100 sf	1.15	-1.05	1.15	-1.05	1.15	-1.05
Wind pressure	≤ 25 sf	32.7 psf	-30.1 psf	25.3 psf	-23.3 psf	16.4 psf	-15.1 psf
	>25, ≤ 100 sf	25.3 psf	-23.3 psf	25.3 psf	-23.3 psf	16.4 psf	-15.1 psf
	> 100 sf	16.4 psf	-15.1 psf	16.4 psf	-15.1 psf	16.4 psf	-15.1 psf

The C&C pressure shall not be less than 16 psf acting in either direction normal to the surface.

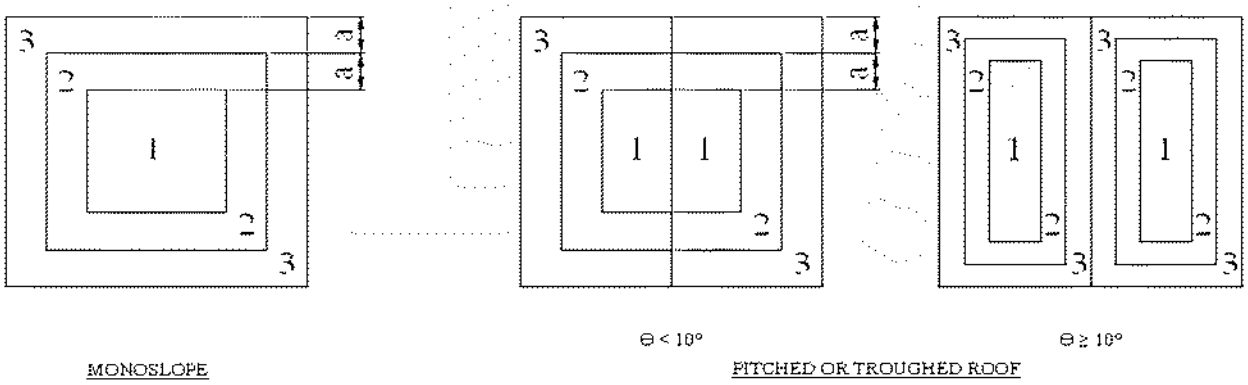
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Location of Open Building Wind Pressure Zones



MAIN WIND FORCE RESISTING SYSTEM



COMPONENTS AND CLADDING

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Seismic Loads: IBC 2021

Strength Level Forces

Risk Category : II
Importance Factor (Ie) : 1.00
Site Class : B

Ss (0.2 sec) = 197.00 %g
S1 (1.0 sec) = 78.30 %g

A site specific ground motion analysis is required for isolated structures or with damping systems seismically

Site specific ground motion analysis performed:

Fa =	0.900	Sms =	1.773	S_{DS} =	1.182	Design Category =	E
Fv =	0.800	Sm1 =	0.626	S_{D1} =	0.418	Design Category =	E

Seismic Design Category = **E**
Redundancy Coefficient ρ = 1.30
Number of Stories: 1
Structure Type: Moment-resisting frame systems of steel
Horizontal Struct Irregularities: No plan Irregularity
Vertical Structural Irregularities: No vertical Irregularity
Flexible Diaphragms: Yes
Building System: **Cantilevered Column Systems detailed to conform to the requirements for:**
Seismic resisting system: **Steel special cantilever column systems** **(SAME R-FACTOR)**
System Structural Height Limit: **35 ft**
Actual Structural Height (hn) = 21.2 ft
See ASCE7 Section 12.2.5 for exceptions and other system limitations

DESIGN COEFFICIENTS AND FACTORS

Response Modification Coefficient (R) = 2.5
Over-Strength Factor (Ωo) = 1.25
Deflection Amplification Factor (Cd) = 2.5
S_{DS} = 1.182
S_{D1} = 0.418

Seismic Load Effect (E) = Eh +/-Ev = ρ Q_E +/- 0.2S_{DS} D = 1.3Qe +/ 0.236D — Q_E = horizontal seismic force
Special Seismic Load Effect (Em) = Emh +/- Ev = Ωo Q_E +/- 0.2S_{DS} D = 1.25Qe + 0.236D — D = dead load

PERMITTED ANALYTICAL PROCEDURES

Simplified Analysis - Use Equivalent Lateral Force Analysis

Equivalent Lateral-Force Analysis - Permitted

Building period coef. (C_T) =	0.028			Cu = 1.40
Approx fundamental period (Ta) =	$C_T h_n^x$ =	0.322 sec	x= 0.80	Tmax = CuTa = 0.451 sec
User calculated fundamental period =				T = 0.322 sec
Long Period Transition Period (TL) =	ASCE7 map =	12 sec		
Seismic response coef. (Cs) =	SdsI/R =	0.473		
need not exceed Cs =	Sd1 I /RT =	0.519		
but not less than Cs =	0.5*S1I/R =	0.157		
USE Cs =		0.473		

Design Base Shear V = 0.473W

Model & Seismic Response Analysis - Permitted (see code for procedure)

ALLOWABLE STORY DRIFT

Structure Type: All other structures
Allowable story drift Δa = 0.020hsx where hsx is the story height below level x

Total Stories =	1	Floor Dead Load =	80.0 psf	Roof Dead Load =	20.0 psf
Building length L =	75.0 ft	Floor LL to include =	0.0 psf	Roof Snow Load =	0.0 psf
Building width W =	50.0 ft	Floor Equip wt =	0.0 kips	Roof Equip wt =	0.0 kips
hn =	21.2 ft	Partition weight =	10.0 psf	Parapet weight =	0.0 psf
k =	1.000	Ext Wall Weight =	0.0 psf	Parapet height =	0.0 ft
V =	0.473W				

Bottom Floor is a slab on grade

Diaphragm shall be designed for level force Fx, but not less than Fpx = (Σ Fi / Σ wi) wpx, but :
Fpx min = $0.2S_{DS}$ Ie wpx = 0.236 wpx
Fpx max = $0.4S_{DS}$ Ie wpx = 0.473 wpx

Seismic Forces Normal to Building Length

V = 35.5k

Level (x)	EL above Seismic Base hx (ft)	Level Weight Wx (kips)	$Wx\ hx^k$ (ft-kips)	Cvx = $\frac{Wx\ hx^k}{\Sigma\ Wi\ hi^k}$	Base Shear Distribution Fx=CvxV	Σ Fx (k)	Story M	Diaphragm Force Fpx Σ Wi (k)	Fpx	Design Fpx
Roof	35.00	75	2,625	1.000	35.46	35.5	0	75	35.5	35.5
1	0.00	0	0	0.000	0.00	0.0	0	0	0.0	0.0
Base		75		1.000		35.5	1,241			
							1,241 = Base M			

Seismic Forces Parallel to Building Length

V = 35.5k

Level (x)	hx (ft)	Wx (kips)	$Wx\ hx^k$	Cvx =	Base Shear Distribution Fx=CvxV	Σ Fx (k)	Story M	Diaphragm Force Fpx Σ Wi (k)	Fpx	Design Fpx
Roof	35.00	75	2,625	1.000	35.46	35.5	0	75	35.5	35.5
1	0.00	0	0	0.000	0.00	0.0	0	0	0.0	0.0
Base	0.00	75		1.000		35.5	1,241			
							1,241 = Base M			

HHW Canopy Roof Loads:

Roof Composition Weights:

$DL_{stand_seam_mtl_roof} := 1.5\ psf$ (Standing Seam Metal Roof - 24 gauge)

$DL_{coll} := 10\ psf$ (Collateral Dead Load)

$DL_{roof} := DL_{stand_seam_mtl_roof} + DL_{coll} = 11.5\ psf$ (Dead Load, Downward)

$DL_{roof_uplift} := DL_{stand_seam_mtl_roof} = 1.5\ psf$ (Dead Load, Uplift)

$LL_{roof} := 20\ psf$ (Roof Live Load)

$C_s := \text{READEXCEL}(\text{".\Seismic Loads Ch. 15 – HHW Canopy.xlsx"}, \text{"Seismic Base Shear!U49"})$

$C_s = [0.473]$ (Seismic Response Coefficient per ASCE 7-16 Eq. 12.8-1)

$q_h := \text{READEXCEL}(\text{".\Code Search 2021 – HHW Canopy.xlsx"}, \text{"Open Bldg!I18:I18"}) \cdot 1\ psf$

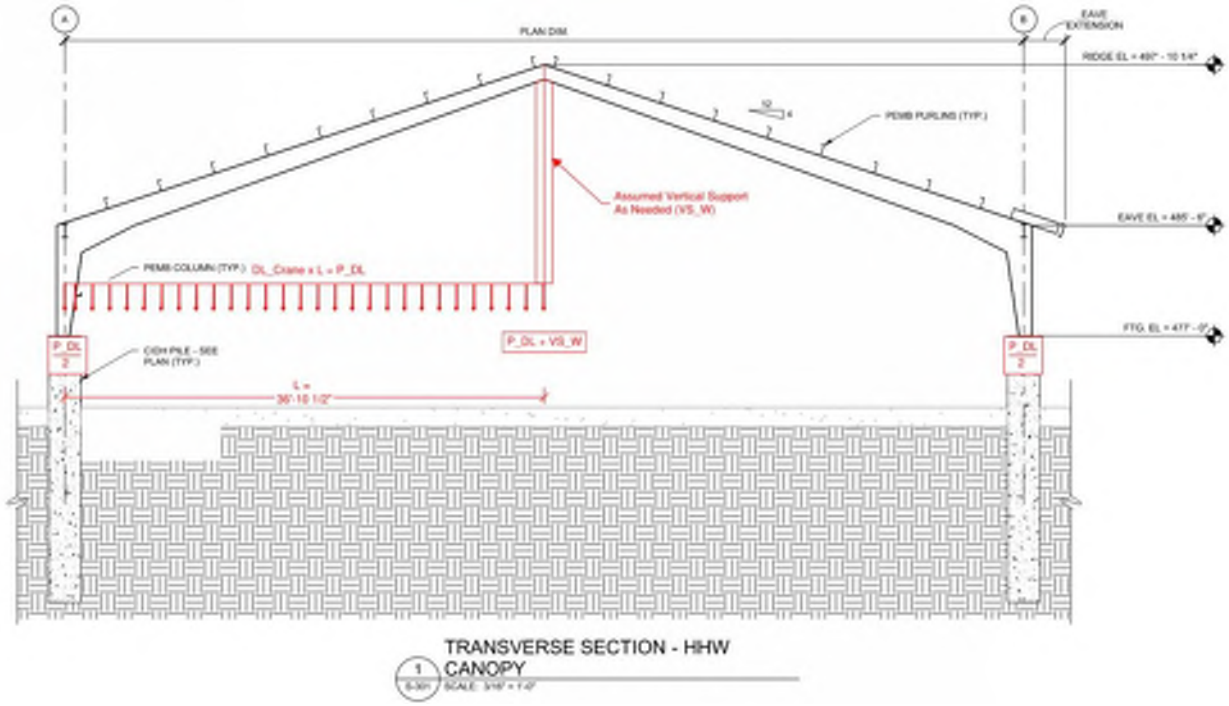
$q_h = [16.81]\ psf$

HHW Seismic Loads:

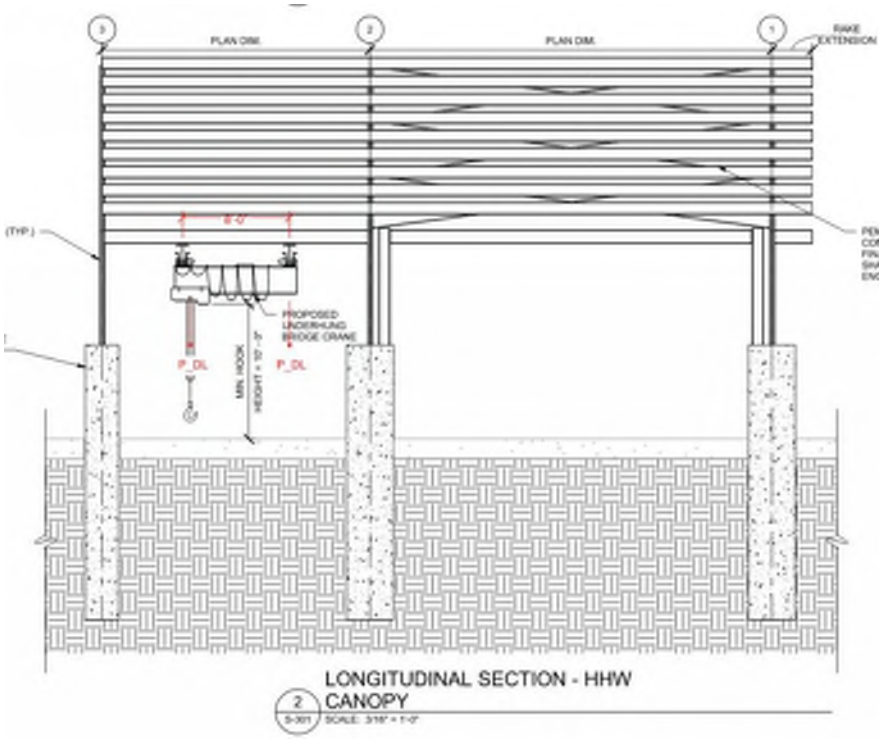
$C_s = [0.473]$

Steel Member Weights:		RISA3D Section Set Label
$W10x26 := 26\ plf \cdot C_s = [0.012]\ klf$		RIDGE
$W12x30 := 30\ plf \cdot C_s = [0.014]\ klf$		MF BEAM
$W10x19 := 19\ plf \cdot C_s = [0.009]\ klf$		MF COLUMN
$W10x12 := 12\ plf \cdot C_s = [0.006]\ klf$		EAVE BEAM
$C12x20.7 := 20.7\ plf \cdot C_s = [0.01]\ klf$		EAVE FASCIA
$PEMBCArea := 32.125\ in^2$	Pre-engineered Manufactured Building Column Area	
$PEMBBArea := 27.5\ in^2$	Pre-engineered Manufactured Building Beam Area	
$A992 := 0.284\ \frac{lb}{in^3}$		Density of Steel
$PEMBColumn := PEMBCArea \cdot A992 \cdot C_s = [51.763]\ \frac{lb}{ft}$		COLUMN
$PEMBBeam := PEMBBArea \cdot A992 \cdot C_s = [44.311]\ \frac{lb}{ft}$		BEAM
$Purlin10ZS3.25X105 := 6.797\ plf \cdot C_s = [0.003]\ klf$		PURLIN

Bridge Crane Loads:



TRANSVERSE SECTION - HHW
1 CANOPY
S-301 SCALE: 3/16" = 1'-0"



LONGITUDINAL SECTION - HHW
2 CANOPY
S-301 SCALE: 3/16" = 1'-0"

Bridge Crane Dead Loads:

$DL_{WF} := 35\ plf$ W12x35 Assumed Support Beam Weight

$DL_C := 15\ plf$ C10x15 Assumed Support Cap Channel Weight

$DL_{Crane} := DL_{WF} + DL_C = 50\ plf$ Combined Dead Load of W-Shape Beam & C-Shape Beam

$L_{Crane} := 36.865\ ft$ Support Beam Span Length

$P_{DL} := DL_{Crane} \cdot L_{Crane} = 1.843\ kip$ Combined Dead Load per Runway Beam (Full Tributary)

$\frac{P_{DL}}{2} = 0.922\ kip$ Combined Dead Load per Runway Beam (1/2 Tributary)

Bridge Crane Live Loads:

$LL_{max} := 1000\ lbf$ Maximum Rated Load (1/2 ton)

$Crane := 120\ lbf$ JLCET1032-15-1 COFFING Hoist Weight

$LL_{WF} := 26\ plf$ Crane Support Beam Weight (W10X26)

$W_{Crane} := 8\ ft$ Crane Span Width

$LL_{Crane} := LL_{WF} \cdot W_{Crane} = 208\ lbf$ Crane Support Beam Weight

$P_{LL25} := \left(LL_{max} + Crane + LL_{Crane}\right) \cdot 125\% = 1.66\ kip$ Total Live Load + Vertical Impact Force per ASCE 7-16 section 4.9.3 - Remotely Operated Bridge Cranes (powered)

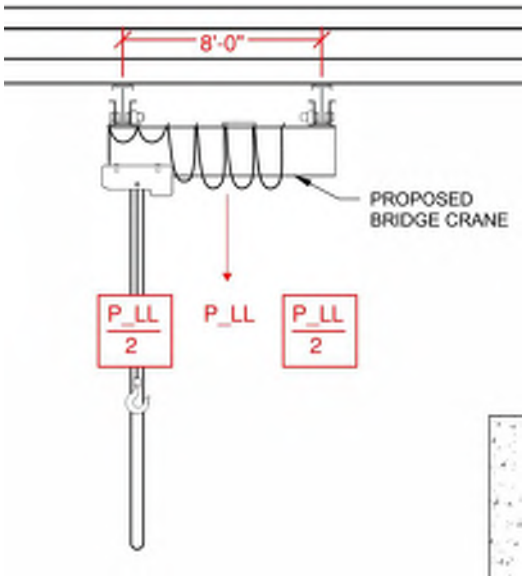
$P_{LL} := \left(LL_{max} + Crane + LL_{Crane}\right) = 1.328\ kip$

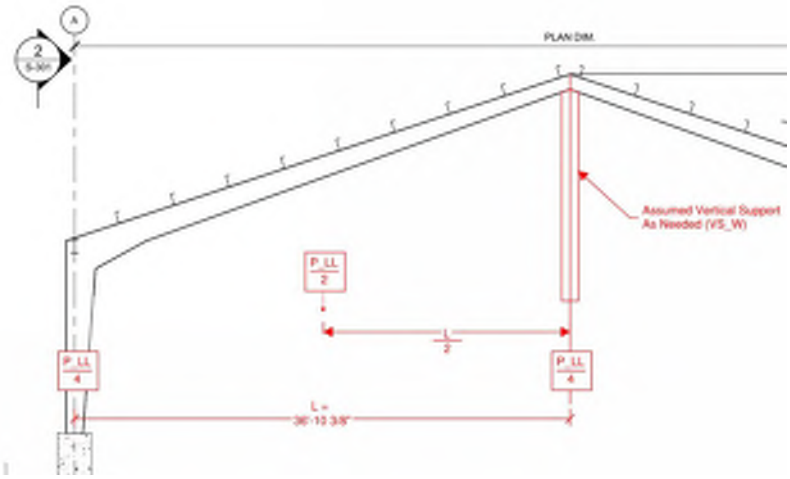
$LL_Z := P_{LL} \cdot 20\% = 0.266\ kip$ Total Lateral Force Perpendicular to Runway Beam per ASCE 7-16 section 4.9.4 (20% of the sum of the rated capacity of the crane and the weight of the hoist & trolley)

$LL_X := P_{LL} \cdot 10\% = 0.133\ kip$ Total Longitudinal Force Parallel to Runway Beam per ASCE 7-16 section 4.9.4 (10% of the maximum wheel loads of the crane)

Bridge Crane Live Loads Case #1:

CRANE LOCATED @ CENTER OF HOIST & CENTERED BETWEEN EDGE OF CANOPY + MIDDLE OF CANOPY





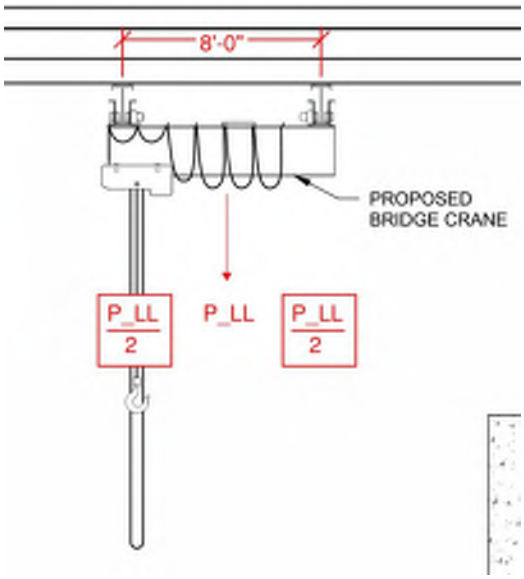
$$\frac{P_{LL25}}{4} = 0.415 \ \textit{kip}$$

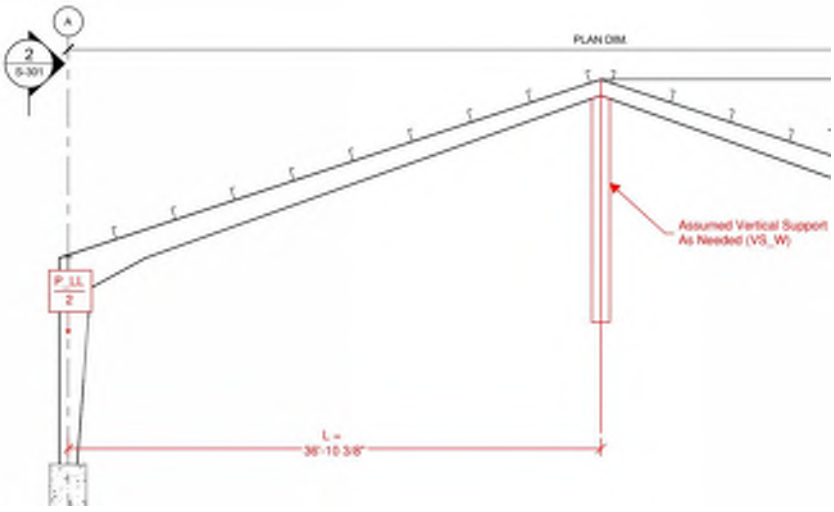
$$LL_Z := \frac{P_{LL}}{4} \cdot 20\% = 0.066 \ \textit{kip}$$

$$LL_X := \frac{P_{LL}}{4} \cdot 10\% = 0.033 \ \textit{kip}$$

Bridge Crane Live Loads Case #2:

CRANE LOCATED @ CENTER OF HOIST & EDGE OF CANOPY





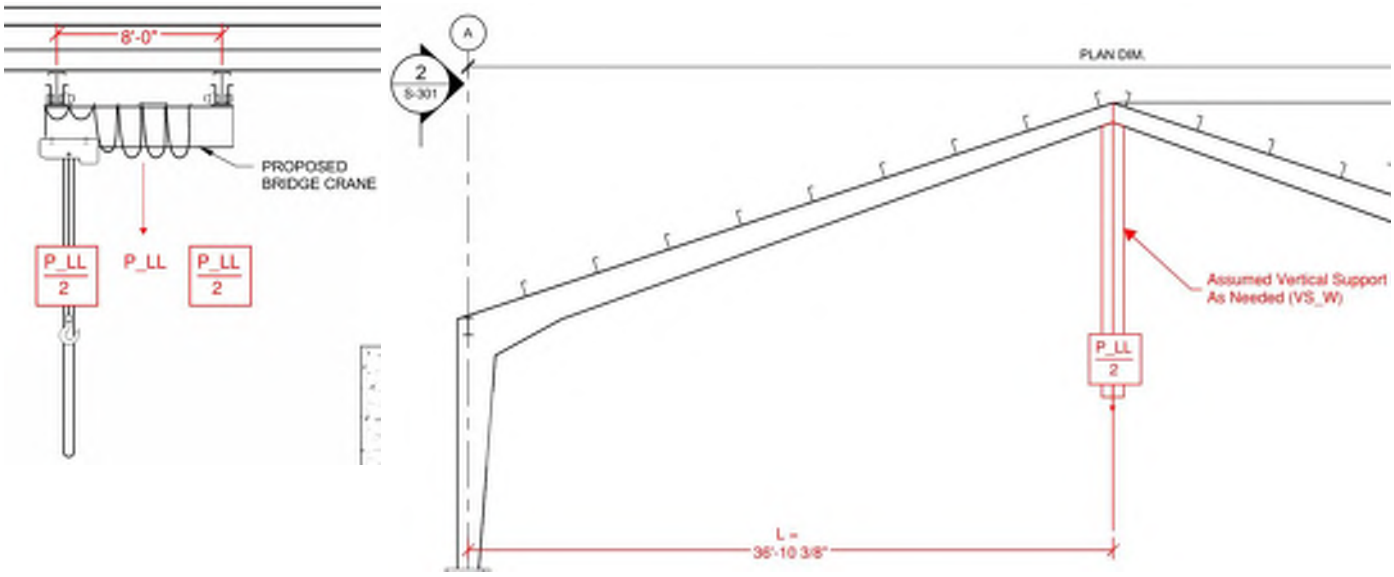
$$\frac{P_{LL25}}{2} = 0.83 \ \textit{kip}$$

$$LL_Z := \frac{P_{LL}}{2} \cdot 20\% = 0.133 \ \textit{kip}$$

$$LL_X := \frac{P_{LL}}{2} \cdot 10\% = 0.066 \ \textit{kip}$$

Bridge Crane Live Loads Case #3:

CRANE LOCATED @ CENTER OF HOIST & MIDDLE OF CANOPY



$$\frac{P_{LL25}}{2} = 0.83 \ kip$$

$$LL_Z := \frac{P_{LL}}{2} \cdot 20\% = 0.133 \ kip$$

$$LL_X := \frac{P_{LL}}{2} \cdot 10\% = 0.066 \ kip$$

"MONORAIL.xls" Program
Version 1.9

MONORAIL BEAM ANALYSIS

For W-shaped Underhung Monorails Analyzed as Simple-Spans with / without Overhang
Per AISC 9th Edition ASD Manual and CMAA Specification No. 74 (2004)

Job Name:	Ben Lomond Transfer Station Bridge Crane	Subject:			
Job Number:	200-42064-22005	Originator:	BMB	Checker:	

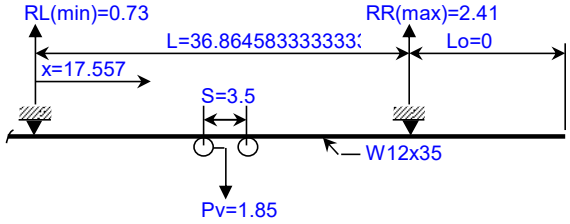
Input:

Monorail Size:

Select: W12x35

Design Parameters:

Beam Fy =	50	ksi
Beam Simple-Span, L =	36.8646	ft.
Unbraced Length, Lb =	36.8646	ft.
Bending Coef., Cb =	1.00	
Overhang Length, Lo =	0.0000	ft.
Unbraced Length, Lbo =	0.0000	ft.
Bending Coef., Cbo =	1.00	
Lifted Load, P =	1.000	kips
Trolley Weight, Wt =	0.300	kips
Hoist Weight, Wh =	0.300	kips
Vert. Impact Factor, Vi =	25	%
Horz. Load Factor, HLF =	20	%
Total No. Wheels, Nw =	4	
Wheel Spacing, S =	3.5000	ft.
Distance on Flange, a =	0.5000	in.



Nomenclature

W12x35 Member Properties:

A =	10.30	in.^2	d/Af =	3.66	
d =	12.500	in.	Ix =	285.00	in.^4
tw =	0.300	in.	Sx =	45.60	in.^3
bf =	6.560	in.	Iy =	24.50	in.^4
tf =	0.520	in.	Sy =	7.47	in.^3
k=	0.820	in.	J =	0.741	in.^4
rt =	1.740	in.	Cw =	879.0	in.^6

Support Reactions: (no overhang)

RR(max) =	2.41	= Pv*(L-S/2)/L+w/1000*L/2
RL(min) =	0.73	= Pv*(S/2)/L+w/1000*L/2

Results:

Parameters and Coefficients:

Pv =	1.850	kips	Pv = P*(1+Vi/100)+Wt+Wh (vertical load)
Pw =	0.463	kips/wheel	Pw = Pv/Nw (load per trolley wheel)
Ph =	0.200	kips	Ph = HLF*P (horizontal load)
ta =	0.520	in.	ta = tf (for W-shape)
λ =	0.160		λ = 2*a/(bf-tw)
Cxo =	-1.773		Cxo = -2.110+1.977*λ+0.0076*e^(6.53*λ)
Cx1 =	0.796		Cx1 = 10.108-7.408*λ-10.108*e^(-1.364*λ)
Czo =	0.197		Czo = 0.050-0.580*λ+0.148*e^(3.015*λ)
Cz1 =	2.066		Cz1 = 2.230-1.490*λ+1.390*e^(-18.33*λ)

Bending Moments for Simple-Span:

x =	17.557	ft.	x = 1/2*(L-S/2) (location of max. moments from left end of simple-span)
Mx =	21.40	ft-kips	Mx = (Pv/2)/(2*L)*(L-S/2)^2+w/1000*x/2*(L-x)
My =	1.67	ft-kips	My = (Ph/2)/(2*L)*(L-S/2)^2

Lateral Flange Bending Moment from Torsion for Simple-Span: (per USS Steel Design Manual, 1981)

e =	6.250	in.	e = d/2 (assume horiz. load taken at bot. flange)
at =	55.421		at = SQRT(E*Cw/(J*G)) , E=29000 ksi and G=11200 ksi
Mt =	0.24	ft-kips	Mt = Ph*e*at/(2*(d-tf))*TANH(L*12/(2*at))/12

X-axis Stresses for Simple-Span:

fbx =	5.63	ksi	fbx = Mx/Sx
Lb/rt =	254.24		Lb/rt = Lb*12/rt
Fbx =	7.41	ksi	Fbx = 12000*Cb/(Lb*12*(d/Af)) <= 0.60*Fy

fbx <= Fbx, O.K.

(continued)

"MONORAIL.xls" Program
Version 1.9

Y-axis Stresses for Simple-Span:

fby =	2.69	ksi	fby = My/Sy	
fwns =	0.77	ksi	fwns = Mt*12/(Sy/2) (warping normal stress)	
fby(total) =	3.46	ksi	fby(total) = fby+fwns	
Fby =	37.50	ksi	Fby = 0.75*Fy	**fby <= Fby, O.K.**

Combined Stress Ratio for Simple-Span:

S.R. =	0.852	S.R. = fbx/Fbx+fby(total)/Fby	**S.R. <= 1.0, O.K.**

Vertical Deflection for Simple-Span:

Pv =	1.600	kips	Pv = P+Wh+Wt (without vertical impact)	
Δ(max) =	0.5205	in.	Δ(max) = Pv/2*(L-S)/2/(24*E*I)*(3*L^2-4*((L-S)/2)^2)+5*w/12000*L^4/(384*E*I)	
Δ(ratio) =	L/850		Δ(ratio) = L*12/Δ(max)	
Δ(allow) =	0.9831	in.	Δ(allow) = L*12/450	**Defl.(max) <= Defl.(allow), O.K.**

Bending Moments for Overhang:

Mx =	N.A.	ft-kips	Mx = (Pv/2)*(Lo+(Lo-S))+w/1000*Lo^2/2
My =	N.A.	ft-kips	My = (Ph/2)*(Lo+(Lo-S))

Lateral Flange Bending Moment from Torsion for Overhang: (per USS Steel Design Manual, 1981)

e =	N.A.	in.	e = d/2 (assume horiz. load taken at bot. flange)
at =	N.A.		at = SQRT(E*Cw/(J*G)) , E=29000 ksi and G=11200 ksi
Mt =	N.A.	ft-kips	Mt = Ph*e*at/(d-tf)*TANH(Lo*12/at)/12

X-axis Stresses for Overhang:

fbx =	N.A.	ksi	fbx = Mx/Sx
Lbo/rt =	N.A.		Lbo/rt = Lbo*12/rt
Fbx =	N.A.	ksi	Fbx = 0.66*Fy

Y-axis Stresses for Overhang:

fby =	N.A	ksi	fby = My/Sy
fwns =	N.A.	ksi	fwns = Mt*12/(Sy/2) (warping normal stress)
fby(total) =	N.A.	ksi	fby(total) = fby+fwns
Fby =	N.A.	ksi	Fby = 0.75*Fy

Combined Stress Ratio for Overhang:

S.R. =	N.A.	S.R. = fbx/Fbx+fby(total)/Fby

Vertical Deflection for Overhang: (assuming full design load, Pv without impact, at end of overhang)

Pv =	N.A.	kips	Pv = P+Wh+Wt (without vertical impact)	
Δ(max) =	N.A.	in.	Δ(max) = Pv*Lo^2*(L+Lo)/(3*E*I)+w/12000*Lo*(4*Lo^2*L-L^3+3*Lo^3)/(24*E*I)	
Δ(ratio) =	N.A.		Δ(ratio) = Lo*12/Δ(max)	
Δ(allow) =	N.A.	in.	Δ(allow) = Lo*12/450	

Bottom Flange Bending (simplified):

be =	6.240	in.	Min. of: be = 12*tf or S*12 (effective flange bending length)	
am =	2.830	in.	am = (bf/2-tw/2)-(k-tf) (where: k-tf = radius of fillet)	
Mf =	1.078	in.-kips	Mf = Pw*(am-a)	
Sf =	0.281	in.^3	Sf = be*tf^2/6	
fb =	3.83	ksi	fb = Mf/Sf	
Fb =	37.50	ksi	Fb = 0.75*Fy	**fb <= Fb, O.K.**

(continued)

Bottom Flange Bending per CMAA Specification No. 74 (2004): (Note: torsion is neglected)

Local Flange Bending Stress @ Point 0: (Sign convention: + = tension, - = compression)

σxo =	-3.03	ksi	σxo = Cxo*Pw/ta^2
σzo =	0.34	ksi	σzo = Czo*Pw/ta^2

Local Flange Bending Stress @ Point 1:

σx1 =	1.36	ksi	σx1 = Cx1*Pw/ta^2
σz1 =	3.53	ksi	σz1 = Cz1*Pw/ta^2

Local Flange Bending Stress @ Point 2:

σx2 =	3.03	ksi	σx2 = -σxo
σz2 =	-0.34	ksi	σz2 = -σzo

Resultant Biaxial Stress @ Point 0:

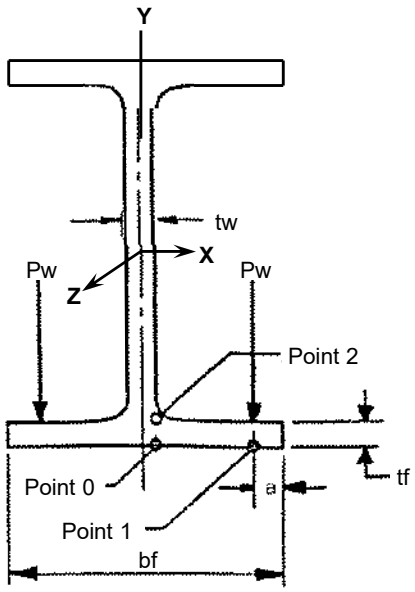
fbxo =	5.63		fbxo = Mx*(d/2)/Ix = Mx/Sx	
fbyo =	0.12		fbyo = My*(tw/2)/Iy	
σz =	6.01	ksi	σz = fbxo+fbyo+0.75*σzo	
σx =	-2.27	ksi	σx = 0.75*σxo	
τxz =	0.00	ksi	τxz = 0 (assumed negligible)	
σto =	7.41	ksi	σto = SQRT(σx^2+σz^2-σx*σz+3*τxz^2)	**<= Fb = 0.66*Fy = 33 ksi, O.K.**

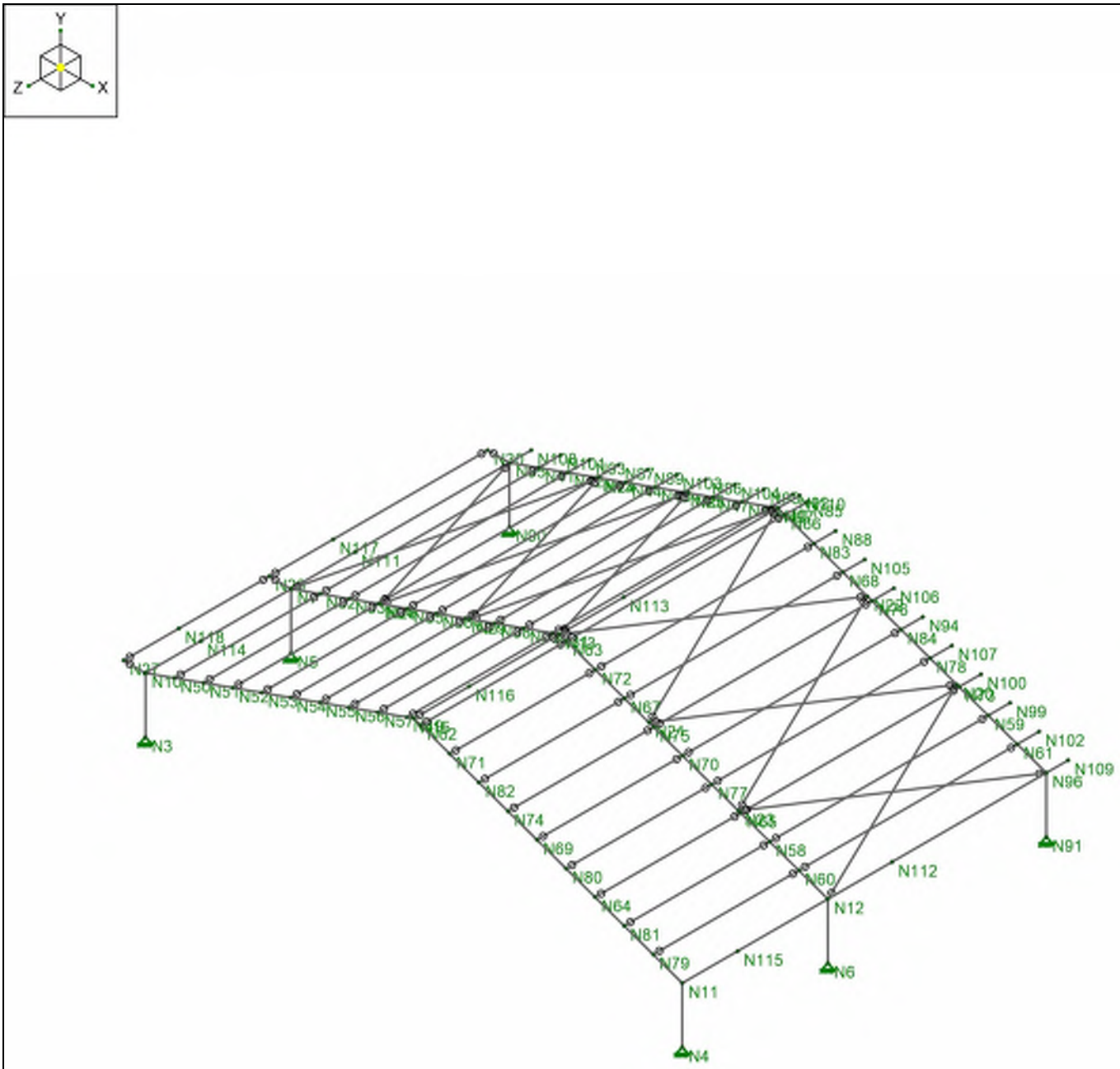
Resultant Biaxial Stress @ Point 1:

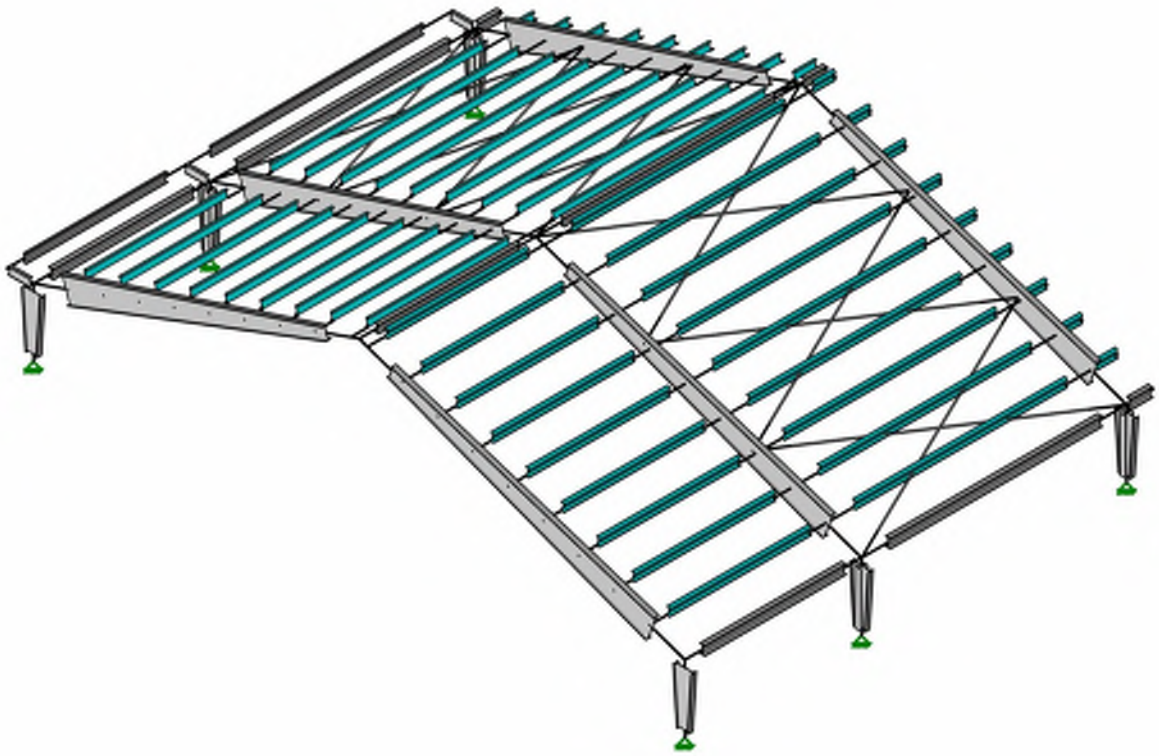
fbx1 =	5.63		fbx1 = Mx*(d/2)/Ix = Mx/Sx	
fby1 =	2.28		fby1 = My*(bf/2-a)/Iy	
σz =	10.56	ksi	σz = fbx1+fby1+0.75*σz1	
σx =	1.02	ksi	σx = 0.75*σx1	
τxz =	0.00	ksi	τxz = 0 (assumed negligible)	
σt1 =	10.09	ksi	σt1 = SQRT(σx^2+σz^2-σx*σz+3*τxz^2)	**<= Fb = 0.66*Fy = 33 ksi, O.K.**

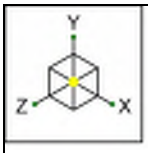
Resultant Biaxial Stress @ Point 2:

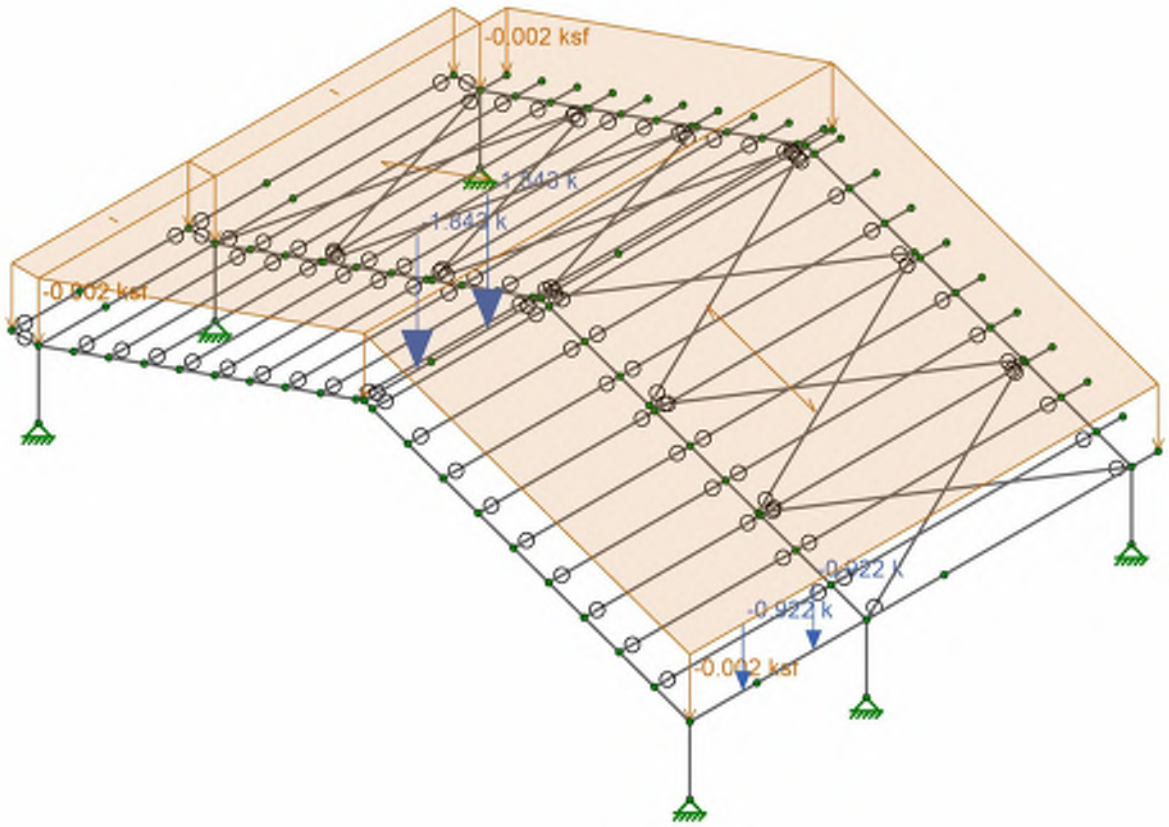
fbx2 =	5.16		fbx2 = Mx*(d/2-tf)/Ix	
fby2 =	0.12		fby2 = My*(tw/2)/Iy	
σz =	5.03	ksi	σz = fbx2+fby2+0.75*σz2	
σx =	2.27	ksi	σx = 0.75*σx2	
τxz =	0.00	ksi	τxz = 0 (assumed negligible)	
σt2 =	4.37	ksi	σt2 = SQRT(σx^2+σz^2-σx*σz+3*τxz^2)	**<= Fb = 0.66*Fy = 33 ksi, O.K.**




Y
Z
X
N117
N111
N113
N118
N114
N116
N3
N5
N72
N67
N71
N70
N82
N77
N74
N89
N58
N80
N60
N64
N12
N81
N79
N115
N6
N11
N4
N88
N83
N105
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N112

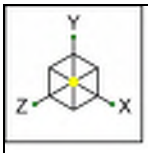


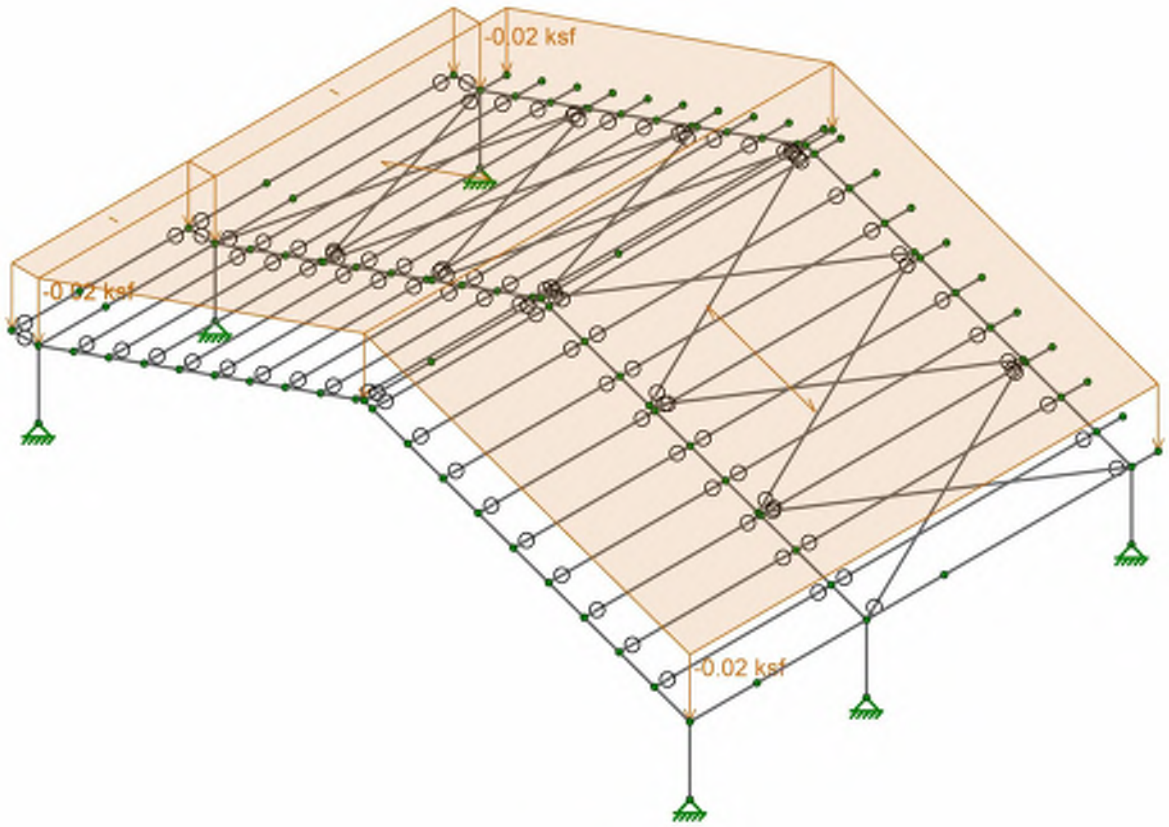




Loads: BLC 1, DL

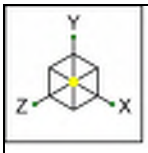
RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	3
	tony.arzate		RisaRD Model - Cover Struct…
		DEAD LOAD	

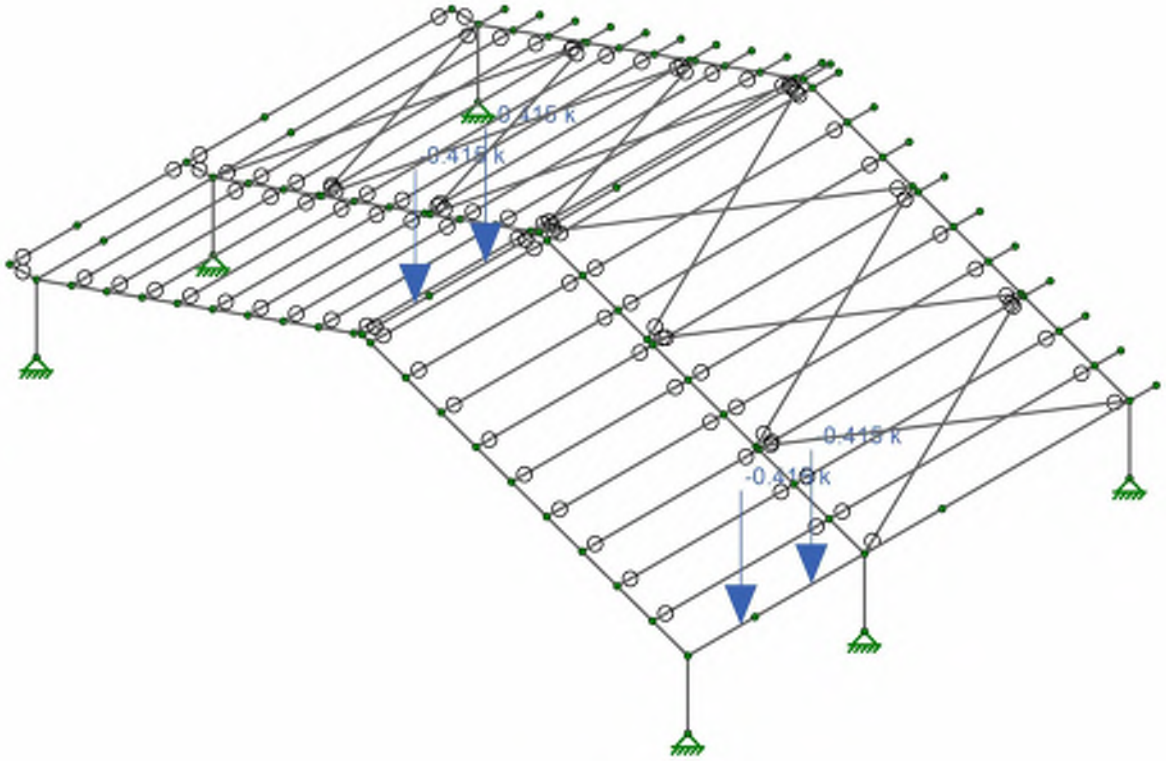




Loads: BLC 6, RLL

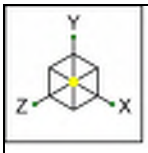
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	tony.arzate		RisaRD Model - Cover Struct…
		ROOF LIVE LOAD	

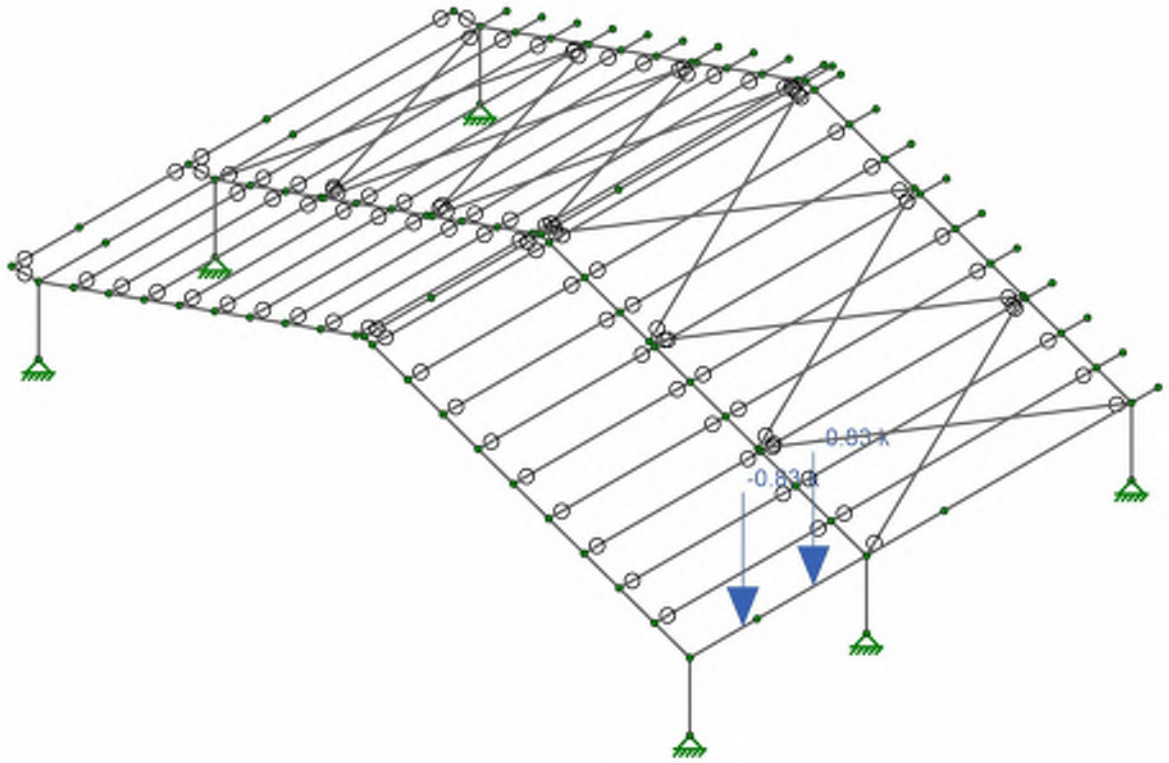




Loads: BLC 7, OL1

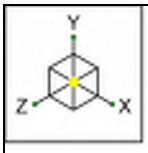
RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	5
	tony.arzate		RisaRD Model - Cover Struct…
		CRANE LL CASE #1	

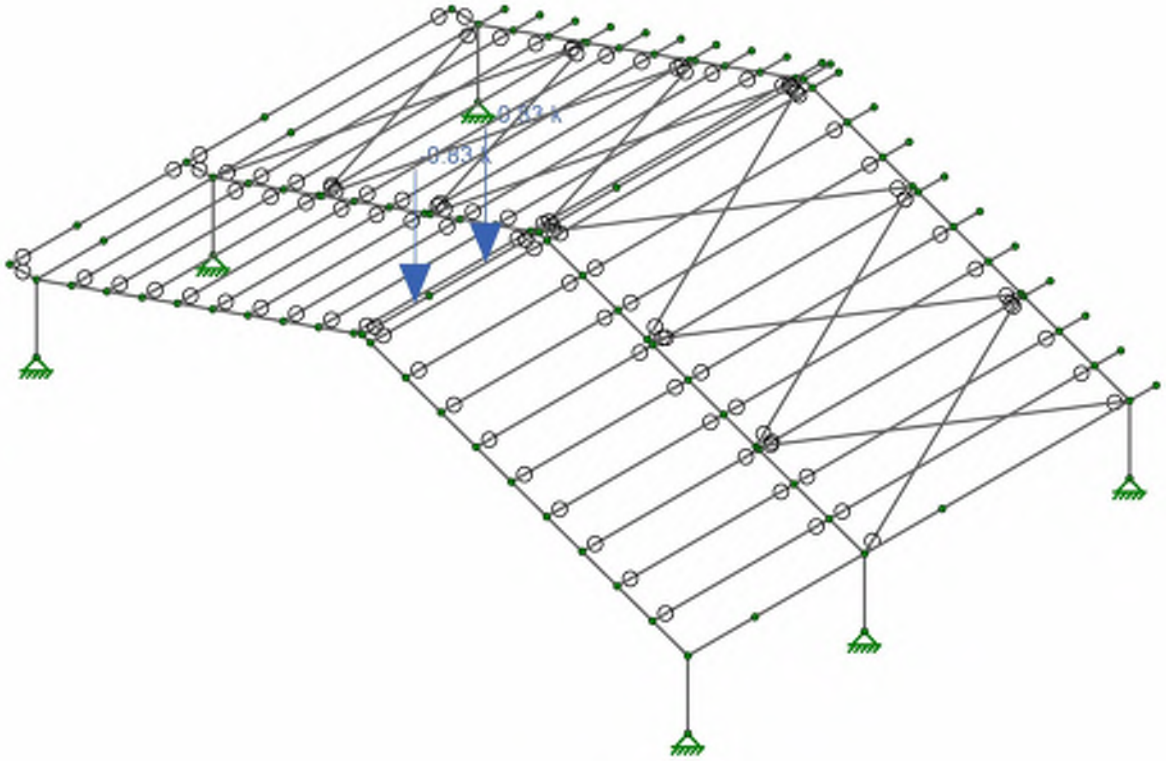




Loads: BLC 8, OL2

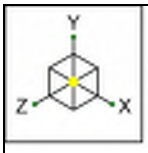
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	tony.arzate		RisaRD Model - Cover Struct…
		CRANE LL CASE #2	

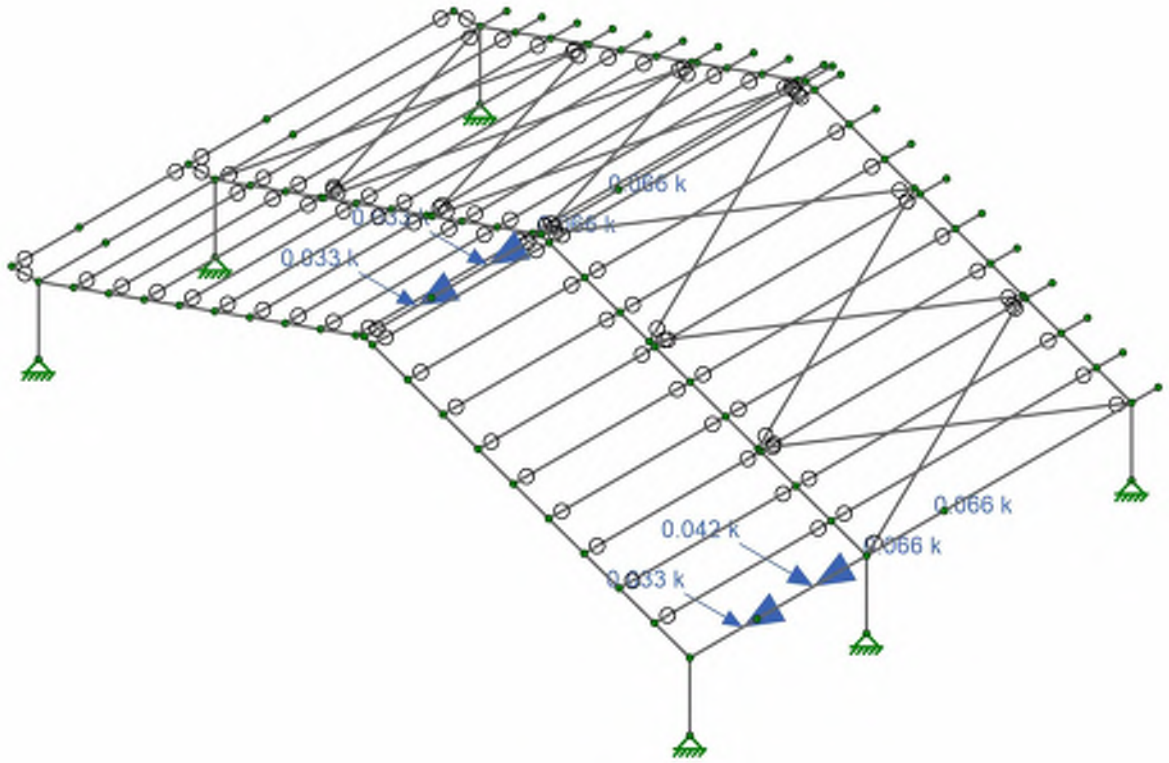




Loads: BLC 9, OL3

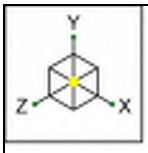
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		CRANE LL CASE #3	

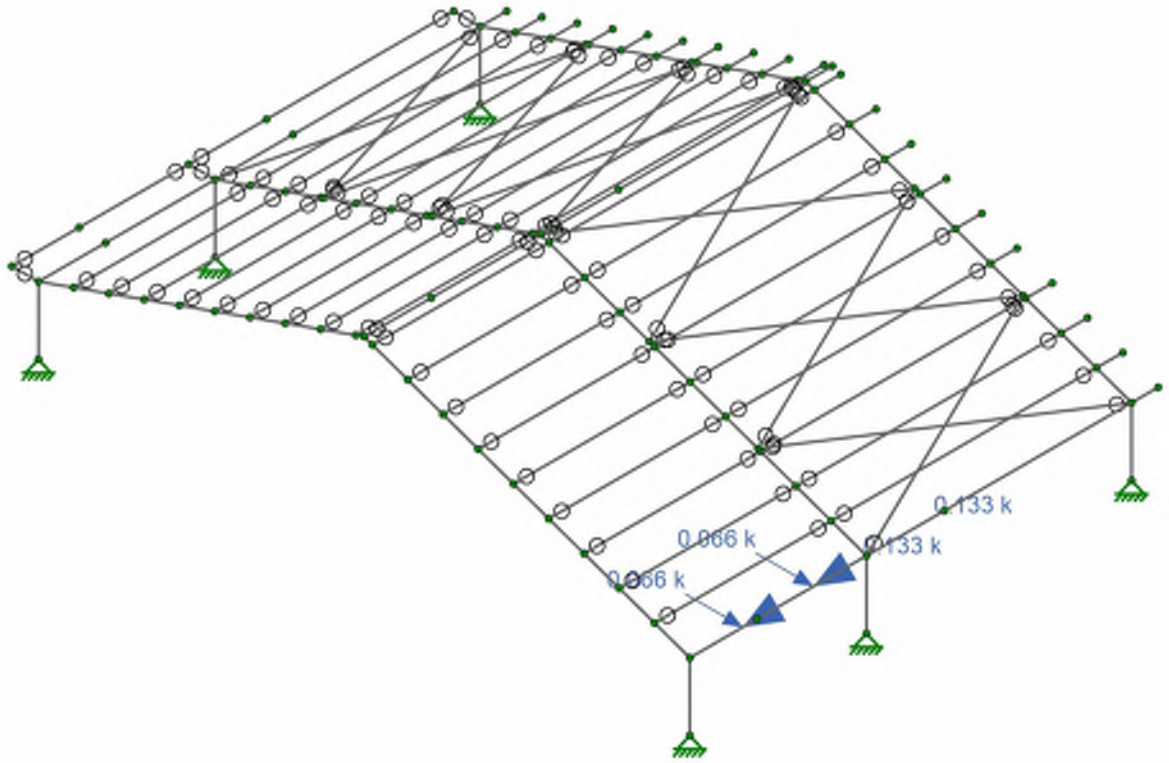




Loads: BLC 10, OL4

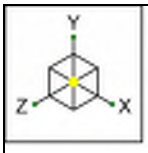
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		CRANE HORIZONTAL LL CASE #1	

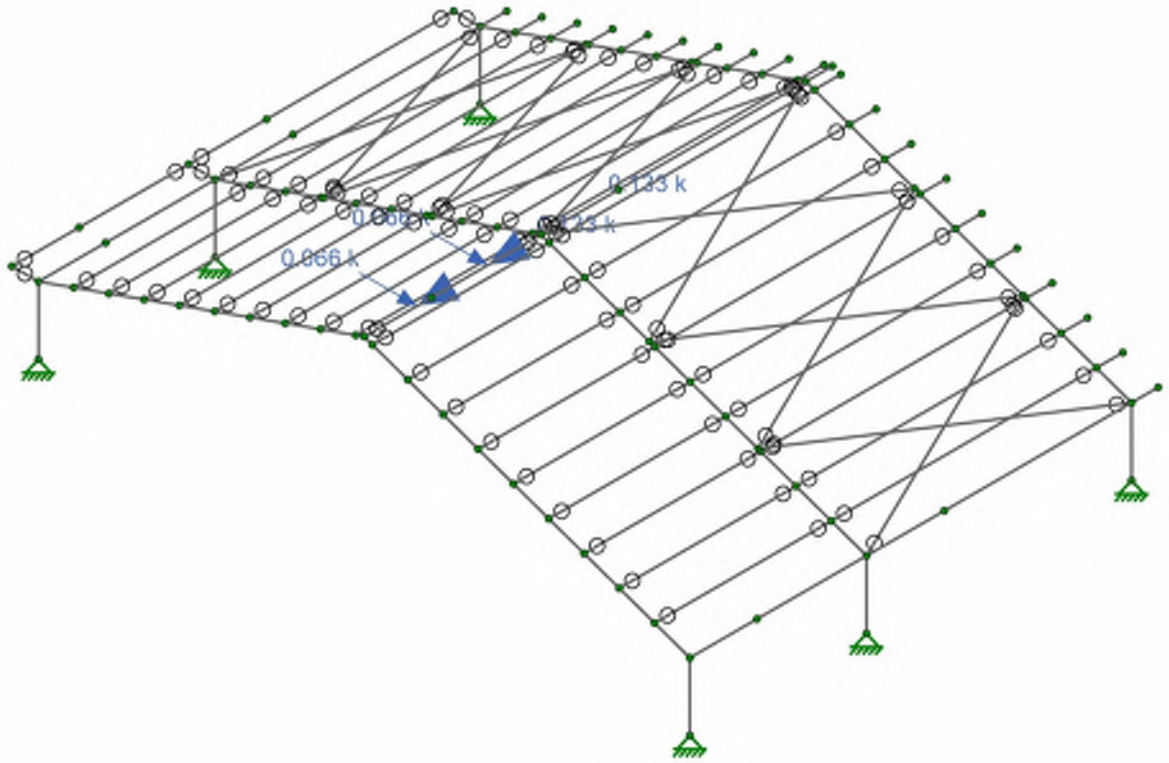




Loads: BLC 11, OL5

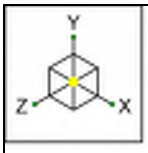
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		CRANE HORIZONTAL LL CASE #2	

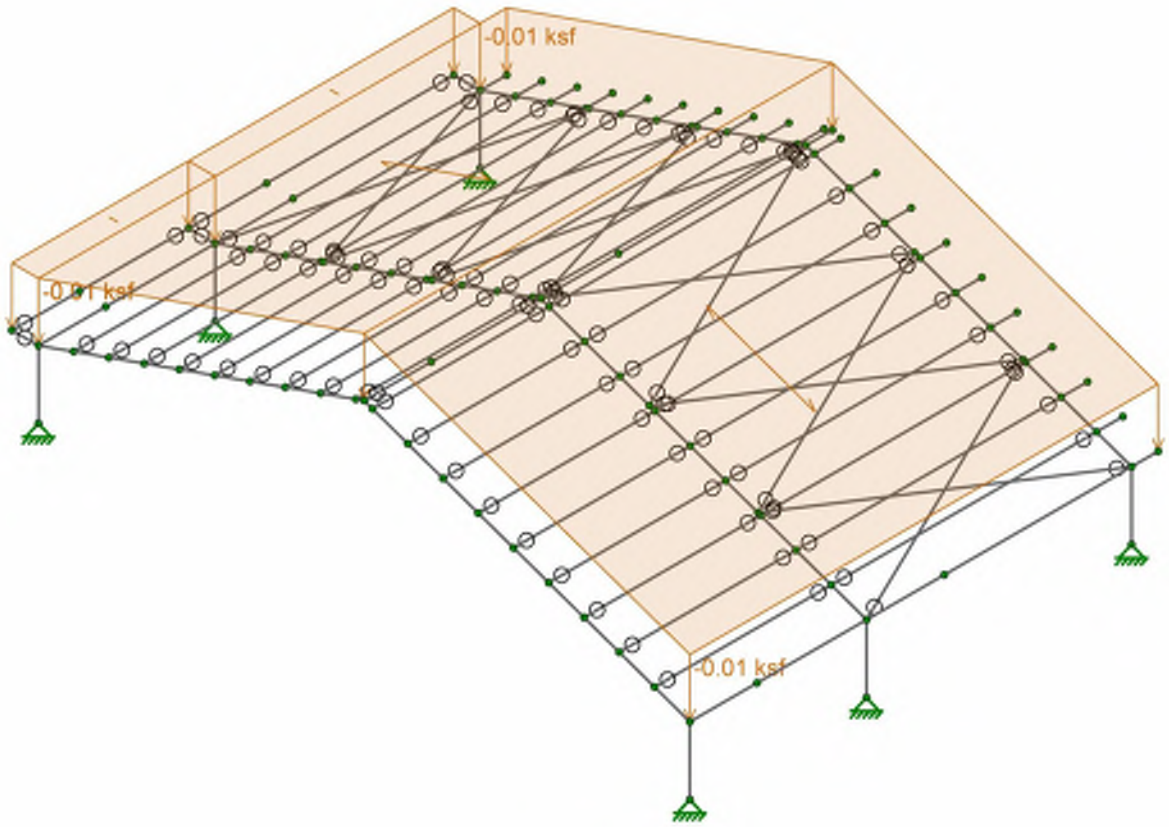




Loads: BLC 12, OL6

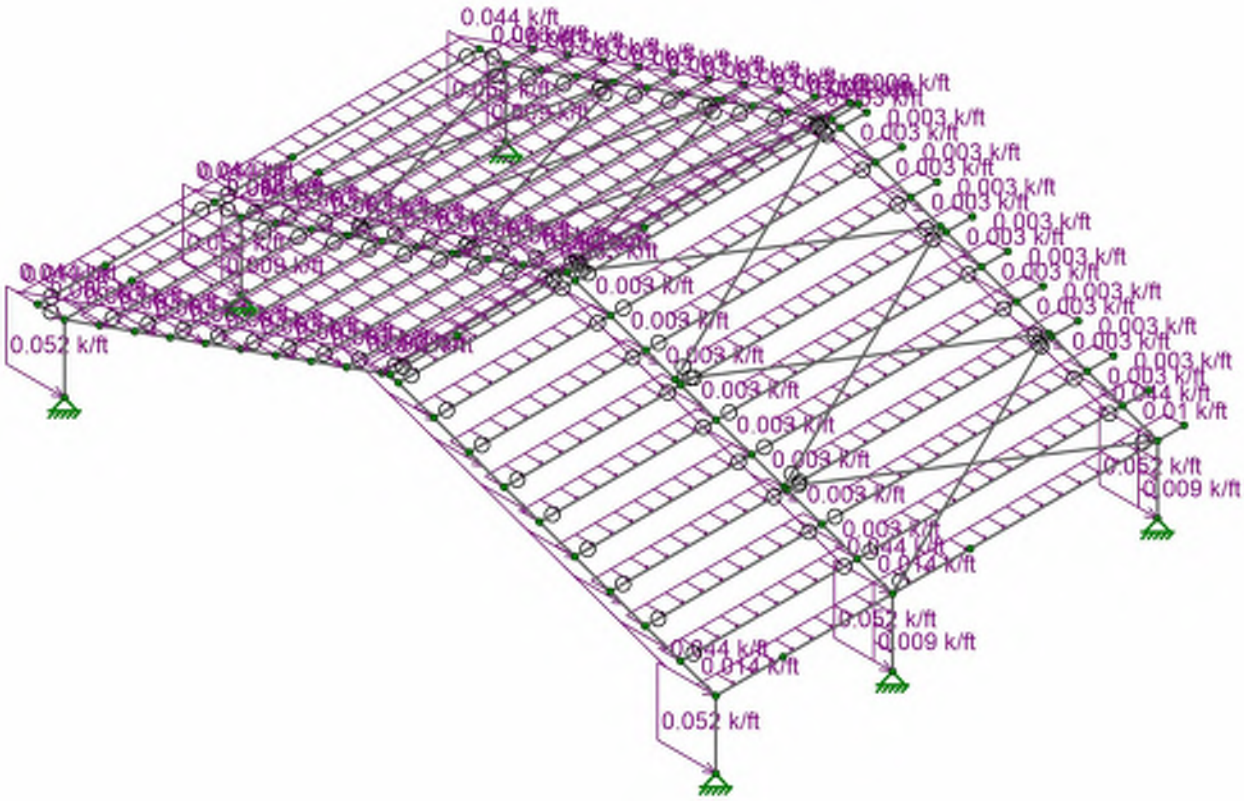
RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	10
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		CRANE HORIZONTAL LL CASE #3	





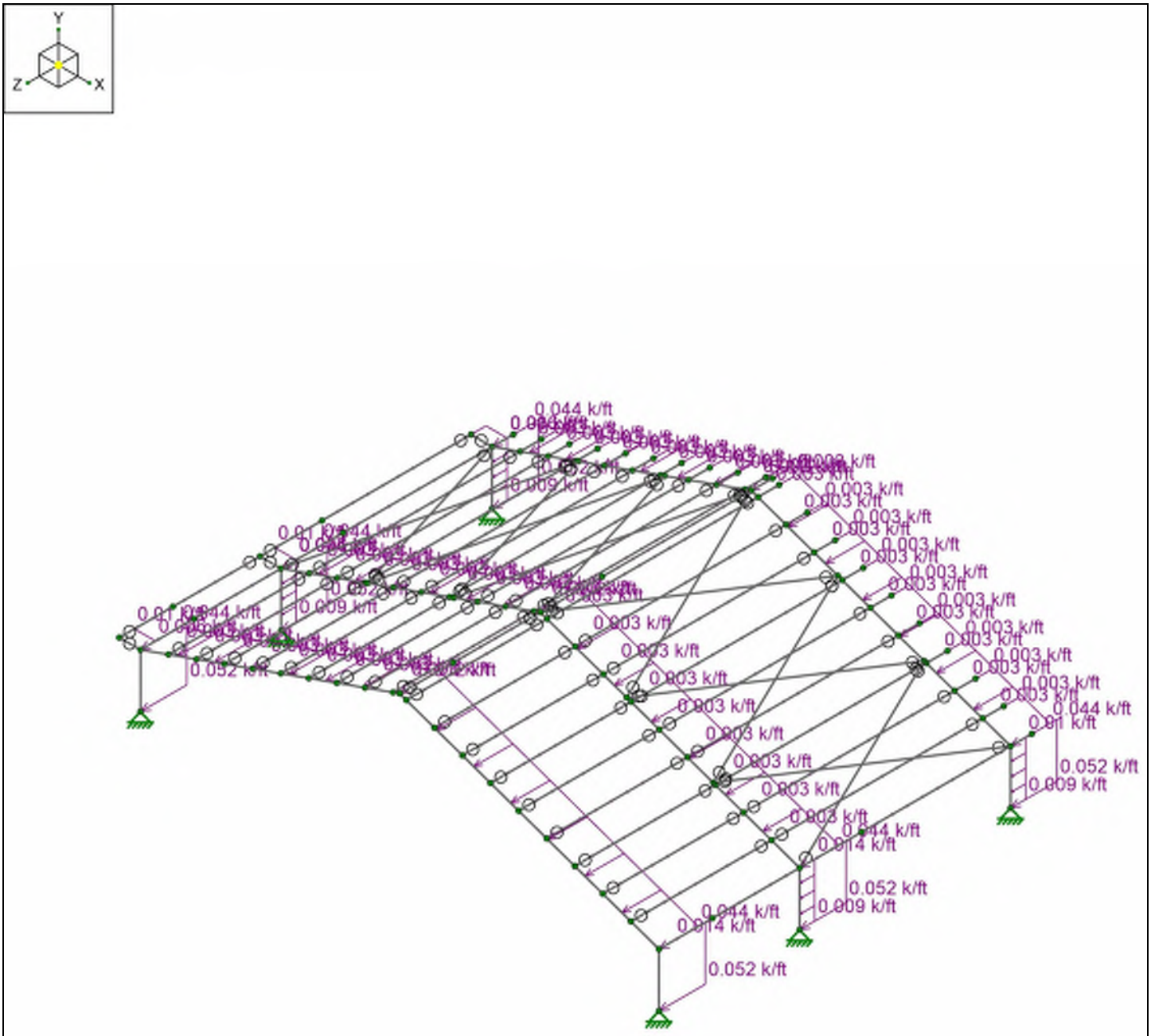
Loads: BLC 14, COLLATERAL DL

RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	11
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		COLLATERAL DEAD LOAD	



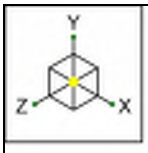
Loads: BLC 2, ELX

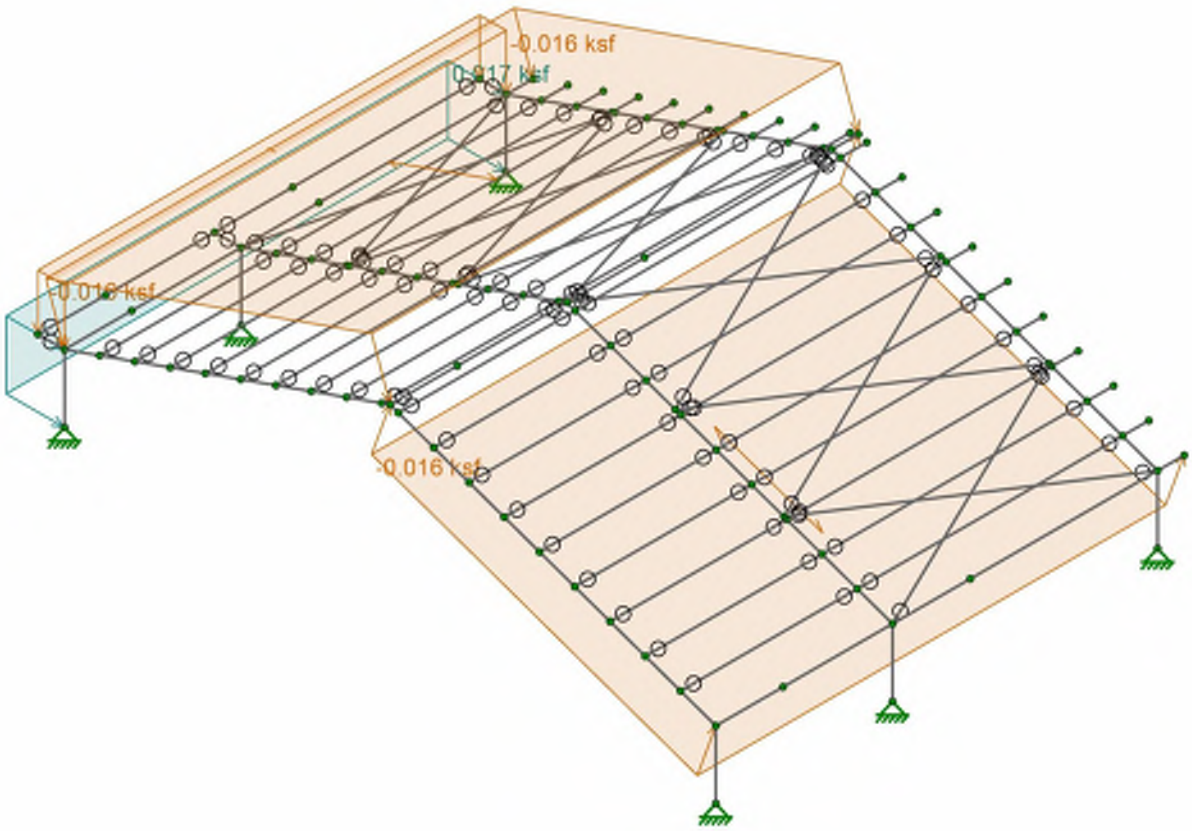
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	tony.arzate		RisaRD Model - Cover Struct…
		ELX	



Loads: BLC 3, ELZ

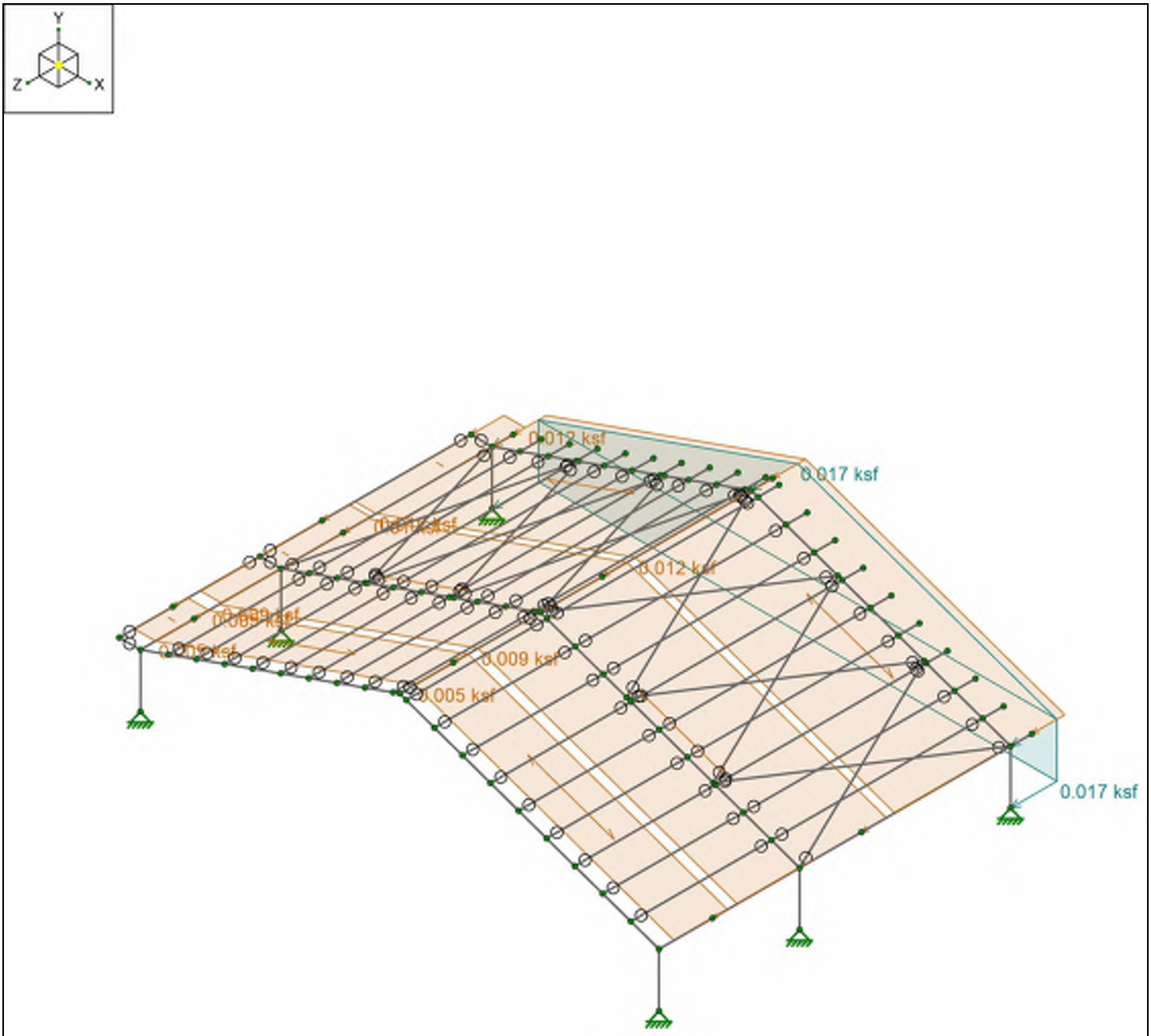
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	tony.arzate		RisaRD Model - Cover Struct…
		ELZ	





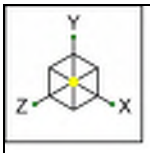
Loads: BLC 4, WLX

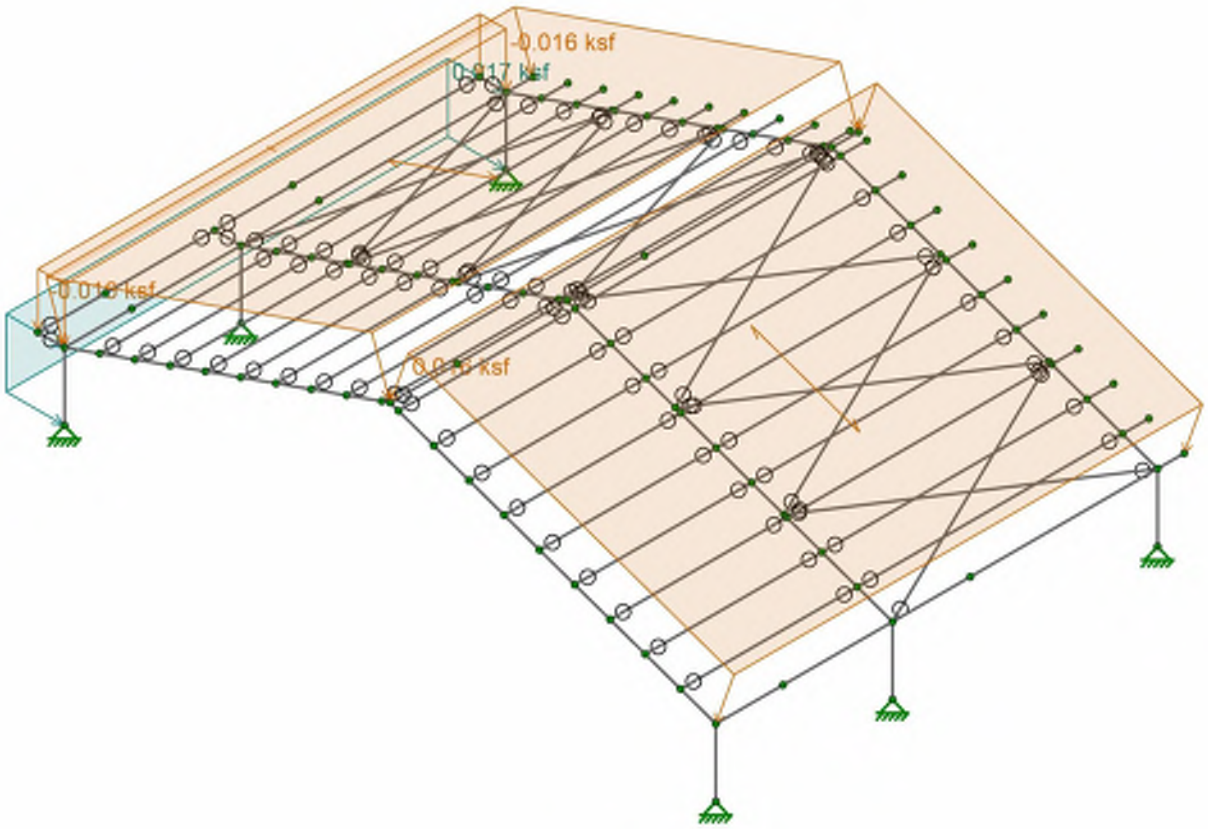
RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	14
	tony.arzate		RisaRD Model - Cover Struct…
		WLX	



Loads: BLC 5, WLZ

RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	15
	tony.arzate		RisaRD Model - Cover Struct…
		WLZ	





Loads: BLC 13, OL7

RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	16
	tony.arzate		RisaRD Model - Cover Struct…
		WLX (VERTICAL LOAD IN SAME DIRECTION)	

Node Coordinates

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N3	0	66	600	
2	N4	884.75	66	600	
3	N5	0	66	360	
4	N6	884.75	66	360	
5	N7	0	157.5	360	
6	N10	0	157.5	600	
7	N11	884.75	157.5	600	
8	N12	884.75	157.5	360	
9	N13	442.375	314	360	
10	N15	442.375	314	600	
11	N90	0	66	0	
12	N91	884.75	66	0	
13	N95	0	157.5	0	
14	N96	884.75	157.5	0	
15	N97	442.375	314	0	
16	N24	147.458333	209.666667	0	
17	N25	294.916667	261.833333	0	
18	N28	147.458333	209.666667	360	
19	N29	294.916667	261.833333	360	
20	N20	737.291667	209.666667	0	
21	N21	589.833333	261.833333	360	
22	N22	589.833333	261.833333	0	
23	N23	737.291667	209.666667	360	
24	N26	-36	157.5	360	
25	N27	-36	157.5	600	
26	N30	-36	157.5	0	
27	N31	431.062235	309.997857	360	
28	N32	47.895804	174.444206	360	
29	N33	95.791608	191.388413	360	
30	N34	143.687412	208.332619	360	
31	N35	191.583215	225.276826	360	
32	N36	239.479019	242.221032	360	
33	N37	287.374823	259.165238	360	
34	N38	335.270627	276.109445	360	
35	N39	383.166431	293.053651	360	
36	N40	431.062235	309.997857	0	
37	N41	47.895804	174.444206	0	
38	N42	95.791608	191.388413	0	
39	N43	143.687412	208.332619	0	
40	N44	191.583215	225.276826	0	
41	N45	239.479019	242.221032	0	
42	N46	287.374823	259.165238	0	
43	N47	335.270627	276.109445	0	
44	N48	383.166431	293.053651	0	
45	N49	431.062235	309.997857	600	
46	N50	47.895804	174.444206	600	
47	N51	95.791608	191.388413	600	
48	N52	143.687412	208.332619	600	
49	N53	191.583215	225.276826	600	
50	N54	239.479019	242.221032	600	
51	N55	287.374823	259.165238	600	
52	N56	335.270627	276.109445	600	
53	N57	383.166431	293.053651	600	
54	N58	788.958392	191.388413	360	
55	N59	788.958392	191.388413	0	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
56	N60	836.854196	174.444206	360	
57	N61	836.854196	174.444206	0	
58	N62	453.687765	309.997857	600	
59	N63	453.687765	309.997857	360	
60	N64	741.062588	208.332619	600	
61	N65	741.062588	208.332619	360	
62	N66	453.687765	309.997857	0	
63	N67	549.479373	276.109445	360	
64	N68	549.479373	276.109445	0	
65	N69	645.270981	242.221032	600	
66	N70	645.270981	242.221032	360	
67	N71	501.583569	293.053651	600	
68	N72	501.583569	293.053651	360	
69	N73	741.062588	208.332619	0	
70	N74	597.375177	259.165238	600	
71	N75	597.375177	259.165238	360	
72	N76	597.375177	259.165238	0	
73	N77	693.166785	225.276826	360	
74	N78	693.166785	225.276826	0	
75	N79	836.854196	174.444206	600	
76	N80	693.166785	225.276826	600	
77	N81	788.958392	191.388413	600	
78	N82	549.479373	276.109445	600	
79	N83	501.583569	293.053651	0	
80	N84	645.270981	242.221032	0	
81	N85	453.687765	309.997857	-36	
82	N86	287.374823	259.165238	-36	
83	N87	143.687412	208.332619	-36	
84	N88	501.583569	293.053651	-36	
85	N89	191.583215	225.276826	-36	
86	N92	431.062235	309.997857	-36	
87	N93	95.791608	191.388413	-36	
88	N94	645.270981	242.221032	-36	
89	N98	383.166431	293.053651	-36	
90	N99	788.958392	191.388413	-36	
91	N100	741.062588	208.332619	-36	
92	N101	47.895804	174.444206	-36	
93	N102	836.854196	174.444206	-36	
94	N103	239.479019	242.221032	-36	
95	N104	335.270627	276.109445	-36	
96	N105	549.479373	276.109445	-36	
97	N106	597.375177	259.165238	-36	
98	N107	693.166785	225.276826	-36	
99	N108	0	157.5	-36	
100	N109	884.75	157.5	-36	
101	N110	442.375	314	-36	
102	N111	0	157.5	254.4	
103	N112	884.75	157.5	254.4	
104	N113	442.375	314	254.4	
105	N114	0	157.5	508.8	
106	N115	884.75	157.5	508.8	
107	N116	442.375	314	508.8	
108	N117	-36	157.5	254.4	
109	N118	-36	157.5	508.8	

Company : <Licensed Company>
Designer : tony.arzate
Job Number :
Model Name : HHW Canopy

Checked By : _____

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A500 Gr.C RND	29000	11154	0.3	0.65	0.527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
9	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1
11	Cable	29000	11154	0.3	0.65	0	36	1.5	58	1.2

Cold Formed Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Fu [ksi]
1	A653 SS Gr33	29500	11346	0.3	0.65	0.49	33	45
2	A653 SS Gr50/1	29500	11346	0.3	0.65	0.49	50	65

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Column	PEMBCOLUMN_HRA_HRA_HRA_HRB	Column	Wide Flange	A992	Typical	11.422	25.072	409.531	0.664
2	Ridge	W10X26	Beam	Wide Flange	A992	Typical	7.61	14.1	144	0.402
3	MF Beam	W12X30	Beam	Wide Flange	A992	Typical	8.79	20.3	238	0.457
4	Brace	1.5"BAR	HBrace	BAR	Cable	Typical	1.767	0.249	0.249	0.497
5	MF Columns	W10X33	Column	Wide Flange	A992	Typical	9.71	36.6	171	0.583
6	Beam	PEMBBEAM_HRB_HRA	Beam	None	A992	Typical	13.731	23.252	2172.177	0.522
7	Eave Fascia	C12X20.7	Beam	Channel	A36 Gr.36	Typical	6.08	3.86	129	0.369
8	Eave Beam	W10X12	Beam	Wide Flange	A992	Typical	3.54	2.18	53.8	0.055

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Purlin	10ZS3.25X105	Beam	None	A653 SS Gr50/1	Typical	1.88	4.67	28.4	0.007

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M2	N6	N12		Column	Column	Wide Flange	A992	Typical
2	M3	N4	N11		Column	Column	Wide Flange	A992	Typical
3	M4	N3	N10		Column	Column	Wide Flange	A992	Typical
4	M5	N5	N7		Column	Column	Wide Flange	A992	Typical
5	M9	N7	N13		Beam	Beam	None	A992	Typical
6	M11	N11	N15		Beam	Beam	None	A992	Typical
7	M15	N11	N12		MF Beam	Beam	Wide Flange	A992	Typical
8	M18	N7	N10		MF Beam	Beam	Wide Flange	A992	Typical
9	M72	N15	N13		Ridge	Beam	Wide Flange	A992	Typical
10	M73	N13	N97		Ridge	Beam	Wide Flange	A992	Typical
11	M139	N10	N15		Beam	Beam	None	A992	Typical
12	M141	N12	N13		Beam	Beam	None	A992	Typical
13	M144	N91	N96		Column	Column	Wide Flange	A992	Typical
14	M145	N96	N97		Beam	Beam	None	A992	Typical
15	M146	N90	N95		Column	Column	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
16	M147	N95	N97		Beam	Beam	None	A992	Typical
17	M111	N7	N24		Brace	HBrace	BAR	Cable	Typical
18	M112	N28	N95		Brace	HBrace	BAR	Cable	Typical
19	M119	N97	N29		Brace	HBrace	BAR	Cable	Typical
20	M160	N25	N13		Brace	HBrace	BAR	Cable	Typical
21	M167	N6	N12	90	MF Columns	Column	Wide Flange	A992	Typical
22	M170	N5	N7	90	MF Columns	Column	Wide Flange	A992	Typical
23	M140	N12	N96		MF Beam	Beam	Wide Flange	A992	Typical
24	M180	N7	N95		MF Beam	Beam	Wide Flange	A992	Typical
25	M34	N25	N28		Brace	HBrace	BAR	Cable	Typical
26	M35	N24	N29		Brace	HBrace	BAR	Cable	Typical
27	M29	N90	N95	90	MF Columns	Column	Wide Flange	A992	Typical
28	M30	N91	N96	90	MF Columns	Column	Wide Flange	A992	Typical
29	M31	N20	N21		Brace	HBrace	BAR	Cable	Typical
30	M32	N97	N21		Brace	HBrace	BAR	Cable	Typical
31	M33	N22	N13		Brace	HBrace	BAR	Cable	Typical
32	M36	N12	N20		Brace	HBrace	BAR	Cable	Typical
33	M37	N23	N96		Brace	HBrace	BAR	Cable	Typical
34	M38	N22	N23		Brace	HBrace	BAR	Cable	Typical
35	M39	N27	N26		Eave Fascia	Beam	Channel	A36 Gr.36	Typical
36	M40	N26	N30		Eave Fascia	Beam	Channel	A36 Gr.36	Typical
37	M41	N95	N30		Eave Beam	Beam	Wide Flange	A992	Typical
38	M42	N7	N26		Eave Beam	Beam	Wide Flange	A992	Typical
39	M43	N10	N27		Eave Beam	Beam	Wide Flange	A992	Typical
40	M44	N31	N40	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
41	M45	N49	N31	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
42	M46	N57	N39	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
43	M47	N39	N48	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
44	M48	N56	N38	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
45	M49	N38	N47	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
46	M50	N55	N37	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
47	M51	N37	N46	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
48	M52	N54	N36	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
49	M53	N36	N45	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
50	M54	N53	N35	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
51	M55	N35	N44	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
52	M56	N52	N34	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
53	M57	N34	N43	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
54	M58	N51	N33	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
55	M59	N33	N42	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
56	M60	N50	N32	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
57	M61	N32	N41	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
58	M62	N59	N58	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
59	M63	N61	N60	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
60	M64	N63	N62	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
61	M65	N65	N64	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
62	M66	N66	N63	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
63	M67	N68	N67	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
64	M68	N70	N69	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
65	M69	N72	N71	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
66	M70	N73	N65	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
67	M71	N75	N74	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
68	M74	N76	N75	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
69	M75	N78	N77	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
70	M76	N60	N79	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
71	M77	N77	N80	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
72	M78	N58	N81	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
73	M79	N67	N82	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
74	M80	N83	N72	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
75	M81	N84	N70	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
76	M82	N85	N66	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
77	M83	N46	N86	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
78	M84	N43	N87	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
79	M85	N88	N83	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
80	M86	N44	N89	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
81	M87	N40	N92	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
82	M88	N42	N93	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
83	M89	N94	N84	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
84	M90	N48	N98	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
85	M91	N99	N59	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
86	M92	N100	N73	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
87	M93	N41	N101	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
88	M94	N102	N61	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
89	M95	N45	N103	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
90	M96	N47	N104	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
91	M97	N105	N68	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
92	M98	N106	N76	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
93	M99	N107	N78	340.518	Purlin	Beam	None	A653 SS Gr50/1	Typical
94	M100	N97	N110		Ridge	Beam	Wide Flange	A992	Typical
95	M101	N96	N109		MF Beam	Beam	Wide Flange	A992	Typical
96	M102	N95	N108		MF Beam	Beam	Wide Flange	A992	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	Channel Conn.	a [in]	Function
1	M2	Column	91.5					N/A	N/A	Lateral
2	M3	Column	91.5					N/A	N/A	Lateral
3	M4	Column	91.5					N/A	N/A	Lateral
4	M5	Column	91.5					N/A	N/A	Lateral
5	M9	Beam	469.242	0	0	50	0	N/A	N/A	Lateral
6	M11	Beam	469.242	0	0	50	0	N/A	N/A	Lateral
7	M15	MF Beam	240					N/A	N/A	Lateral
8	M18	MF Beam	240					N/A	N/A	Lateral
9	M72	Ridge	240					N/A	N/A	Lateral
10	M73	Ridge	360					N/A	N/A	Lateral
11	M139	Beam	469.242	0	0	50	0	N/A	N/A	Lateral
12	M141	Beam	469.242	0	0	50	0	N/A	N/A	Lateral
13	M144	Column	91.5					N/A	N/A	Lateral
14	M145	Beam	469.242	0	0	50	0	N/A	N/A	Lateral
15	M146	Column	91.5					N/A	N/A	Lateral
16	M147	Beam	469.242	0	0	50	0	N/A	N/A	Lateral
17	M111	Brace	392.512					N/A	N/A	Lateral
18	M112	Brace	392.512					N/A	N/A	Lateral
19	M119	Brace	392.512					N/A	N/A	Lateral
20	M160	Brace	392.512					N/A	N/A	Lateral
21	M167	MF Columns	91.5					N/A	N/A	Lateral
22	M170	MF Columns	91.5					N/A	N/A	Lateral
23	M140	MF Beam	360					N/A	N/A	Lateral
24	M180	MF Beam	360					N/A	N/A	Lateral
25	M34	Brace	392.512					N/A	N/A	Lateral
26	M35	Brace	392.512					N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	Channel Conn.	a [in]	Function
27	M29	MF Columns	91.5					N/A	N/A	Lateral
28	M30	MF Columns	91.5					N/A	N/A	Lateral
29	M31	Brace	392.512					N/A	N/A	Lateral
30	M32	Brace	392.512					N/A	N/A	Lateral
31	M33	Brace	392.512					N/A	N/A	Lateral
32	M36	Brace	392.512					N/A	N/A	Lateral
33	M37	Brace	392.512					N/A	N/A	Lateral
34	M38	Brace	392.512					N/A	N/A	Lateral
35	M39	Eave Fascia	240					N/A	N/A	Gravity
36	M40	Eave Fascia	360					N/A	N/A	Gravity
37	M41	Eave Beam	36			Lbyy		N/A	N/A	Gravity
38	M42	Eave Beam	36			Lbyy		N/A	N/A	Gravity
39	M43	Eave Beam	36			Lbyy		N/A	N/A	Gravity
40	M100	Ridge	36					N/A	N/A	Lateral
41	M101	MF Beam	36					N/A	N/A	Gravity
42	M102	MF Beam	36					N/A	N/A	Lateral

Cold Formed Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lcomp top [in]	Function
1	M44	Purlin	360	12	Lbyy	Gravity
2	M45	Purlin	240	12	Lbyy	Gravity
3	M46	Purlin	240	12	Lbyy	Gravity
4	M47	Purlin	360	12	Lbyy	Gravity
5	M48	Purlin	240	12	Lbyy	Gravity
6	M49	Purlin	360	12	Lbyy	Gravity
7	M50	Purlin	240	12	Lbyy	Gravity
8	M51	Purlin	360	12	Lbyy	Gravity
9	M52	Purlin	240	12	Lbyy	Gravity
10	M53	Purlin	360	12	Lbyy	Gravity
11	M54	Purlin	240	12	Lbyy	Gravity
12	M55	Purlin	360	12	Lbyy	Gravity
13	M56	Purlin	240	12	Lbyy	Gravity
14	M57	Purlin	360	12	Lbyy	Gravity
15	M58	Purlin	240	12	Lbyy	Gravity
16	M59	Purlin	360	12	Lbyy	Gravity
17	M60	Purlin	240	12	Lbyy	Gravity
18	M61	Purlin	360	12	Lbyy	Gravity
19	M62	Purlin	360	12	Lbyy	Gravity
20	M63	Purlin	360	12	Lbyy	Gravity
21	M64	Purlin	240	12	Lbyy	Gravity
22	M65	Purlin	240	12	Lbyy	Gravity
23	M66	Purlin	360	12	Lbyy	Gravity
24	M67	Purlin	360	12	Lbyy	Gravity
25	M68	Purlin	240	12	Lbyy	Gravity
26	M69	Purlin	240	12	Lbyy	Gravity
27	M70	Purlin	360	12	Lbyy	Gravity
28	M71	Purlin	240	12	Lbyy	Gravity
29	M74	Purlin	360	12	Lbyy	Gravity
30	M75	Purlin	360	12	Lbyy	Gravity
31	M76	Purlin	240	12	Lbyy	Gravity
32	M77	Purlin	240	12	Lbyy	Gravity
33	M78	Purlin	240	12	Lbyy	Gravity
34	M79	Purlin	240	12	Lbyy	Gravity
35	M80	Purlin	360	12	Lbyy	Gravity
36	M81	Purlin	360	12	Lbyy	Gravity

Cold Formed Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lcomp top [in]	Function
37	M82	Purlin	36	12	Lbyy	Gravity
38	M83	Purlin	36	12	Lbyy	Gravity
39	M84	Purlin	36	12	Lbyy	Gravity
40	M85	Purlin	36	12	Lbyy	Gravity
41	M86	Purlin	36	12	Lbyy	Gravity
42	M87	Purlin	36	12	Lbyy	Gravity
43	M88	Purlin	36	12	Lbyy	Gravity
44	M89	Purlin	36	12	Lbyy	Gravity
45	M90	Purlin	36	12	Lbyy	Gravity
46	M91	Purlin	36	12	Lbyy	Gravity
47	M92	Purlin	36	12	Lbyy	Gravity
48	M93	Purlin	36	12	Lbyy	Gravity
49	M94	Purlin	36	12	Lbyy	Gravity
50	M95	Purlin	36	12	Lbyy	Gravity
51	M96	Purlin	36	12	Lbyy	Gravity
52	M97	Purlin	36	12	Lbyy	Gravity
53	M98	Purlin	36	12	Lbyy	Gravity
54	M99	Purlin	36	12	Lbyy	Gravity

Member Distributed Loads (BLC 2 : ELX)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M2	X	0.052	0.052	0	%100
2	M3	X	0.052	0.052	0	%100
3	M4	X	0.052	0.052	0	%100
4	M5	X	0.052	0.052	0	%100
5	M9	X	0.044	0.044	0	%100
6	M11	X	0.044	0.044	0	%100
7	M15	X	0.014	0.014	0	%100
8	M18	X	0.014	0.014	0	%100
9	M29	X	0.009	0.009	0	%100
10	M30	X	0.009	0.009	0	%100
11	M39	X	0.01	0.01	0	%100
12	M40	X	0.01	0.01	0	%100
13	M41	X	0.006	0.006	0	%100
14	M42	X	0.006	0.006	0	%100
15	M43	X	0.006	0.006	0	%100
16	M44	X	0.003	0.003	0	%100
17	M45	X	0.003	0.003	0	%100
18	M46	X	0.003	0.003	0	%100
19	M47	X	0.003	0.003	0	%100
20	M48	X	0.003	0.003	0	%100
21	M49	X	0.003	0.003	0	%100
22	M50	X	0.003	0.003	0	%100
23	M51	X	0.003	0.003	0	%100
24	M52	X	0.003	0.003	0	%100
25	M53	X	0.003	0.003	0	%100
26	M54	X	0.003	0.003	0	%100
27	M55	X	0.003	0.003	0	%100
28	M56	X	0.003	0.003	0	%100
29	M57	X	0.003	0.003	0	%100
30	M58	X	0.003	0.003	0	%100
31	M59	X	0.003	0.003	0	%100
32	M60	X	0.003	0.003	0	%100
33	M61	X	0.003	0.003	0	%100
34	M62	X	0.003	0.003	0	300

Member Distributed Loads (BLC 2 : ELX) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
35	M63	X	0.003	0.003	0	300
36	M64	X	0.003	0.003	0	%100
37	M65	X	0.003	0.003	0	300
38	M66	X	0.003	0.003	0	%100
39	M67	X	0.003	0.003	0	300
40	M68	X	0.003	0.003	0	300
41	M69	X	0.003	0.003	0	300
42	M70	X	0.003	0.003	0	300
43	M71	X	0.003	0.003	0	300
44	M72	X	0.012	0.012	0	%100
45	M73	X	0.012	0.012	0	%100
46	M74	X	0.003	0.003	0	300
47	M75	X	0.003	0.003	0	300
48	M76	X	0.003	0.003	0	300
49	M77	X	0.003	0.003	0	300
50	M78	X	0.003	0.003	0	300
51	M79	X	0.003	0.003	0	300
52	M80	X	0.003	0.003	0	300
53	M81	X	0.003	0.003	0	300
54	M82	X	0.003	0.003	0	%100
55	M83	X	0.003	0.003	0	%100
56	M84	X	0.003	0.003	0	%100
57	M85	X	0.003	0.003	0	36
58	M86	X	0.003	0.003	0	%100
59	M87	X	0.003	0.003	0	%100
60	M88	X	0.003	0.003	0	%100
61	M89	X	0.003	0.003	0	36
62	M90	X	0.003	0.003	0	%100
63	M91	X	0.003	0.003	0	36
64	M92	X	0.003	0.003	0	36
65	M93	X	0.003	0.003	0	%100
66	M94	X	0.003	0.003	0	36
67	M95	X	0.003	0.003	0	%100
68	M96	X	0.003	0.003	0	%100
69	M97	X	0.003	0.003	0	36
70	M98	X	0.003	0.003	0	36
71	M99	X	0.003	0.003	0	36
72	M100	X	0.012	0.012	0	%100
73	M101	X	0.01	0.01	0	%100
74	M102	X	0.01	0.01	0	%100
75	M139	X	0.044	0.044	0	%100
76	M140	X	0.014	0.014	0	%100
77	M141	X	0.044	0.044	0	%100
78	M144	X	0.052	0.052	0	%100
79	M145	X	0.044	0.044	0	%100
80	M146	X	0.052	0.052	0	%100
81	M147	X	0.044	0.044	0	%100
82	M167	X	0.009	0.009	0	%100
83	M170	X	0.009	0.009	0	%100
84	M180	X	0.014	0.014	0	%100

Member Distributed Loads (BLC 3 : ELZ)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M2	Z	0.052	0.052	0	%100
2	M3	Z	0.052	0.052	0	%100

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
3	M4	Z	0.052	0.052	0	%100
4	M5	Z	0.052	0.052	0	%100
5	M9	Z	0.044	0.044	0	%100
6	M11	Z	0.044	0.044	0	%100
7	M15	Z	0.014	0.014	0	%100
8	M18	Z	0.014	0.014	0	%100
9	M29	Z	0.009	0.009	0	%100
10	M30	Z	0.009	0.009	0	%100
11	M39	Z	0.01	0.01	0	%100
12	M40	Z	0.01	0.01	0	%100
13	M41	Z	0.006	0.006	0	%100
14	M42	Z	0.006	0.006	0	%100
15	M43	Z	0.006	0.006	0	%100
16	M44	Z	0.003	0.003	0	%100
17	M45	Z	0.003	0.003	0	%100
18	M46	Z	0.003	0.003	0	%100
19	M47	Z	0.003	0.003	0	%100
20	M48	Z	0.003	0.003	0	%100
21	M49	Z	0.003	0.003	0	%100
22	M50	Z	0.003	0.003	0	%100
23	M51	Z	0.003	0.003	0	%100
24	M52	Z	0.003	0.003	0	%100
25	M53	Z	0.003	0.003	0	%100
26	M54	Z	0.003	0.003	0	%100
27	M55	Z	0.003	0.003	0	%100
28	M56	Z	0.003	0.003	0	%100
29	M57	Z	0.003	0.003	0	%100
30	M58	Z	0.003	0.003	0	%100
31	M59	Z	0.003	0.003	0	%100
32	M60	Z	0.003	0.003	0	%100
33	M61	Z	0.003	0.003	0	%100
34	M62	Z	0.003	0.003	0	300
35	M63	Z	0.003	0.003	0	300
36	M64	Z	0.003	0.003	0	%100
37	M65	Z	0.003	0.003	0	300
38	M66	Z	0.003	0.003	0	%100
39	M67	Z	0.003	0.003	0	300
40	M68	Z	0.003	0.003	0	300
41	M69	Z	0.003	0.003	0	300
42	M70	Z	0.003	0.003	0	300
43	M71	Z	0.003	0.003	0	300
44	M72	Z	0.012	0.012	0	%100
45	M73	Z	0.012	0.012	0	%100
46	M74	Z	0.003	0.003	0	300
47	M75	Z	0.003	0.003	0	300
48	M76	Z	0.003	0.003	0	300
49	M77	Z	0.003	0.003	0	300
50	M78	Z	0.003	0.003	0	300
51	M79	Z	0.003	0.003	0	300
52	M80	Z	0.003	0.003	0	300
53	M81	Z	0.003	0.003	0	300
54	M82	Z	0.003	0.003	0	%100
55	M83	Z	0.003	0.003	0	%100
56	M84	Z	0.003	0.003	0	%100
57	M85	Z	0.003	0.003	0	36

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
58	M86	Z	0.003	0.003	0	%100
59	M87	Z	0.003	0.003	0	%100
60	M88	Z	0.003	0.003	0	%100
61	M89	Z	0.003	0.003	0	36
62	M90	Z	0.003	0.003	0	%100
63	M91	Z	0.003	0.003	0	36
64	M92	Z	0.003	0.003	0	36
65	M93	Z	0.003	0.003	0	%100
66	M94	Z	0.003	0.003	0	36
67	M95	Z	0.003	0.003	0	%100
68	M96	Z	0.003	0.003	0	%100
69	M97	Z	0.003	0.003	0	36
70	M98	Z	0.003	0.003	0	36
71	M99	Z	0.003	0.003	0	36
72	M100	Z	0.012	0.012	0	%100
73	M101	Z	0.01	0.01	0	%100
74	M102	Z	0.01	0.01	0	%100
75	M139	Z	0.044	0.044	0	%100
76	M140	Z	0.014	0.014	0	%100
77	M141	Z	0.044	0.044	0	%100
78	M144	Z	0.052	0.052	0	%100
79	M145	Z	0.044	0.044	0	%100
80	M146	Z	0.052	0.052	0	%100
81	M147	Z	0.044	0.044	0	%100
82	M167	Z	0.009	0.009	0	%100
83	M170	Z	0.009	0.009	0	%100
84	M180	Z	0.014	0.014	0	%100

Member Distributed Loads (BLC 15 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M102	Y	-0.004	-0.004	1.776e-15	36
2	M15	Y	-0.004	-0.004	0	240
3	M140	Y	-0.004	-0.004	0	360
4	M62	Y	-0.008	-0.008	8.971e-14	360
5	M63	Y	-0.008	-0.008	7.55e-14	360
6	M64	Y	-0.007	-0.006	0	24
7	M64	Y	-0.006	-0.005	24	48
8	M64	Y	-0.005	-0.005	48	72
9	M64	Y	-0.005	-0.005	72	96
10	M64	Y	-0.005	-0.005	96	120
11	M64	Y	-0.005	-0.006	120	144
12	M64	Y	-0.006	-0.005	144	168
13	M64	Y	-0.005	-0.005	168	192
14	M64	Y	-0.005	-0.005	192	216
15	M64	Y	-0.005	-0.006	216	240
16	M65	Y	-0.008	-0.008	2.558e-13	240
17	M66	Y	-0.007	-0.005	0	24
18	M66	Y	-0.005	-0.005	24	48
19	M66	Y	-0.005	-0.005	48	72
20	M66	Y	-0.005	-0.005	72	96
21	M66	Y	-0.005	-0.005	96	120
22	M66	Y	-0.005	-0.005	120	144
23	M66	Y	-0.005	-0.005	144	168
24	M66	Y	-0.005	-0.006	168	192
25	M66	Y	-0.006	-0.006	192	216

Member Distributed Loads (BLC 15 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
26	M66	Y	-0.006	-0.005	216	240
27	M66	Y	-0.005	-0.005	240	264
28	M66	Y	-0.005	-0.005	264	288
29	M66	Y	-0.005	-0.005	288	312
30	M66	Y	-0.005	-0.005	312	336
31	M66	Y	-0.005	-0.006	336	360
32	M67	Y	-0.008	-0.008	8.082e-14	360
33	M68	Y	-0.008	-0.008	3.286e-14	240
34	M69	Y	-0.007	-0.008	0	24
35	M69	Y	-0.008	-0.009	24	48
36	M69	Y	-0.009	-0.009	48	72
37	M69	Y	-0.009	-0.009	72	96
38	M69	Y	-0.009	-0.009	96	120
39	M69	Y	-0.009	-0.008	120	144
40	M69	Y	-0.008	-0.008	144	168
41	M69	Y	-0.008	-0.009	168	192
42	M69	Y	-0.009	-0.009	192	216
43	M69	Y	-0.009	-0.008	216	240
44	M70	Y	-0.008	-0.008	1.75e-13	360
45	M71	Y	-0.008	-0.008	1.172e-13	240
46	M74	Y	-0.008	-0.008	5.684e-14	360
47	M75	Y	-0.008	-0.008	1.705e-13	360
48	M76	Y	-0.008	-0.008	5.551e-13	240
49	M77	Y	-0.008	-0.008	2.798e-13	240
50	M78	Y	-0.008	-0.008	1.99e-13	240
51	M79	Y	-0.008	-0.008	2.274e-13	240
52	M80	Y	-0.007	-0.008	0	24
53	M80	Y	-0.008	-0.009	24	48
54	M80	Y	-0.009	-0.009	48	72
55	M80	Y	-0.009	-0.009	72	96
56	M80	Y	-0.009	-0.008	96	120
57	M80	Y	-0.008	-0.008	120	144
58	M80	Y	-0.008	-0.008	144	168
59	M80	Y	-0.008	-0.008	168	192
60	M80	Y	-0.008	-0.008	192	216
61	M80	Y	-0.008	-0.008	216	240
62	M80	Y	-0.008	-0.008	240	264
63	M80	Y	-0.008	-0.009	264	288
64	M80	Y	-0.009	-0.009	288	312
65	M80	Y	-0.009	-0.009	312	336
66	M80	Y	-0.009	-0.008	336	360
67	M81	Y	-0.008	-0.008	6.661e-14	360
68	M82	Y	-0.005	-0.007	0	7.2
69	M82	Y	-0.007	-0.004	7.2	14.4
70	M82	Y	-0.004	-0.004	14.4	21.6
71	M82	Y	-0.004	-0.007	21.6	28.8
72	M82	Y	-0.007	-0.005	28.8	36
73	M85	Y	-0.002	-0.008	0	9
74	M85	Y	-0.008	-0.006	9	18
75	M85	Y	-0.006	-0.007	18	27
76	M85	Y	-0.007	-0.02	27	36
77	M89	Y	-0.008	-0.008	0	36
78	M91	Y	-0.008	-0.008	0	36
79	M92	Y	-0.008	-0.008	0	36
80	M94	Y	-0.008	-0.008	0	36

Member Distributed Loads (BLC 15 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
81	M97	Y	-0.008	-0.008	0	36
82	M98	Y	-0.008	-0.008	0	36
83	M99	Y	-0.008	-0.008	1.776e-15	36
84	M101	Y	-0.004	-0.004	3.553e-15	36
85	M180	Y	-0.003	-0.003	1.51e-14	360
86	M40	Y	-0.003	-0.003	1.51e-14	360
87	M18	Y	-0.003	-0.003	1.51e-14	240
88	M39	Y	-0.003	-0.003	1.51e-14	240
89	M18	Y	-0.004	-0.004	2.665e-14	240
90	M72	Y	-0.002	-0.002	0	24
91	M72	Y	-0.002	-0.002	24	48
92	M72	Y	-0.002	-0.002	48	72
93	M72	Y	-0.002	-0.002	72	96
94	M72	Y	-0.002	-0.002	96	120
95	M72	Y	-0.002	-0.002	120	144
96	M72	Y	-0.002	-0.002	144	168
97	M72	Y	-0.002	-0.002	168	192
98	M72	Y	-0.002	-0.002	192	216
99	M72	Y	-0.002	-0.002	216	240
100	M73	Y	-0.002	-0.002	0	24
101	M73	Y	-0.002	-0.002	24	48
102	M73	Y	-0.002	-0.002	48	72
103	M73	Y	-0.002	-0.002	72	96
104	M73	Y	-0.002	-0.002	96	120
105	M73	Y	-0.002	-0.002	120	144
106	M73	Y	-0.002	-0.002	144	168
107	M73	Y	-0.002	-0.002	168	192
108	M73	Y	-0.002	-0.002	192	216
109	M73	Y	-0.002	-0.002	216	240
110	M73	Y	-0.002	-0.002	240	264
111	M73	Y	-0.002	-0.002	264	288
112	M73	Y	-0.002	-0.002	288	312
113	M73	Y	-0.002	-0.002	312	336
114	M73	Y	-0.002	-0.002	336	360
115	M180	Y	-0.004	-0.004	1.865e-14	360
116	M44	Y	-0.006	-0.005	0	24
117	M44	Y	-0.005	-0.005	24	48
118	M44	Y	-0.005	-0.005	48	72
119	M44	Y	-0.005	-0.005	72	96
120	M44	Y	-0.005	-0.005	96	120
121	M44	Y	-0.005	-0.006	120	144
122	M44	Y	-0.006	-0.006	144	168
123	M44	Y	-0.006	-0.005	168	192
124	M44	Y	-0.005	-0.005	192	216
125	M44	Y	-0.005	-0.005	216	240
126	M44	Y	-0.005	-0.005	240	264
127	M44	Y	-0.005	-0.005	264	288
128	M44	Y	-0.005	-0.005	288	312
129	M44	Y	-0.005	-0.005	312	336
130	M44	Y	-0.005	-0.007	336	360
131	M45	Y	-0.006	-0.005	0	24
132	M45	Y	-0.005	-0.005	24	48
133	M45	Y	-0.005	-0.005	48	72
134	M45	Y	-0.005	-0.006	72	96
135	M45	Y	-0.006	-0.005	96	120

Member Distributed Loads (BLC 15 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
136	M45	Y	-0.005	-0.005	120	144
137	M45	Y	-0.005	-0.005	144	168
138	M45	Y	-0.005	-0.005	168	192
139	M45	Y	-0.005	-0.006	192	216
140	M45	Y	-0.006	-0.007	216	240
141	M46	Y	-0.008	-0.009	0	24
142	M46	Y	-0.009	-0.009	24	48
143	M46	Y	-0.009	-0.008	48	72
144	M46	Y	-0.008	-0.008	72	96
145	M46	Y	-0.008	-0.008	96	120
146	M46	Y	-0.008	-0.009	120	144
147	M46	Y	-0.009	-0.009	144	168
148	M46	Y	-0.009	-0.009	168	192
149	M46	Y	-0.009	-0.008	192	216
150	M46	Y	-0.008	-0.007	216	240
151	M47	Y	-0.008	-0.009	0	24
152	M47	Y	-0.009	-0.009	24	48
153	M47	Y	-0.009	-0.009	48	72
154	M47	Y	-0.009	-0.009	72	96
155	M47	Y	-0.009	-0.008	96	120
156	M47	Y	-0.008	-0.008	120	144
157	M47	Y	-0.008	-0.008	144	168
158	M47	Y	-0.008	-0.008	168	192
159	M47	Y	-0.008	-0.008	192	216
160	M47	Y	-0.008	-0.008	216	240
161	M47	Y	-0.008	-0.009	240	264
162	M47	Y	-0.009	-0.009	264	288
163	M47	Y	-0.009	-0.009	288	312
164	M47	Y	-0.009	-0.008	312	336
165	M47	Y	-0.008	-0.007	336	360
166	M48	Y	-0.008	-0.008	3.979e-13	240
167	M49	Y	-0.008	-0.008	7.816e-14	360
168	M50	Y	-0.008	-0.008	6.395e-14	240
169	M51	Y	-0.008	-0.008	2.371e-13	360
170	M52	Y	-0.008	-0.008	1.235e-13	240
171	M53	Y	-0.008	-0.008	3.819e-14	360
172	M54	Y	-0.008	-0.008	3.411e-13	240
173	M55	Y	-0.008	-0.008	0	360
174	M56	Y	-0.008	-0.008	2.94e-13	240
175	M57	Y	-0.008	-0.008	3.464e-14	360
176	M58	Y	-0.008	-0.008	6.661e-14	240
177	M59	Y	-0.008	-0.008	1.865e-14	360
178	M60	Y	-0.008	-0.008	1.865e-14	240
179	M61	Y	-0.008	-0.008	1.421e-14	360
180	M83	Y	-0.008	-0.008	0	36
181	M84	Y	-0.008	-0.008	1.421e-14	36
182	M86	Y	-0.008	-0.008	0	36
183	M87	Y	-0.005	-0.007	0	7.2
184	M87	Y	-0.007	-0.004	7.2	14.4
185	M87	Y	-0.004	-0.004	14.4	21.6
186	M87	Y	-0.004	-0.007	21.6	28.8
187	M87	Y	-0.007	-0.005	28.8	36
188	M88	Y	-0.008	-0.008	0	36
189	M90	Y	-0.002	-0.008	0	9
190	M90	Y	-0.008	-0.006	9	18

Member Distributed Loads (BLC 15 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
191	M90	Y	-0.006	-0.007	18	27
192	M90	Y	-0.007	-0.02	27	36
193	M93	Y	-0.008	-0.008	8.882e-15	36
194	M95	Y	-0.008	-0.008	0	36
195	M96	Y	-0.008	-0.008	1.421e-14	36
196	M100	Y	-0.002	-0.002	0	18
197	M100	Y	-0.002	-0.002	18	36

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M59	X	0.023	0.023	4.263e-14	360
2	M59	Y	-0.064	-0.064	4.263e-14	360
3	M60	X	0.023	0.023	1.421e-14	240
4	M60	Y	-0.064	-0.064	1.421e-14	240
5	M61	X	0.023	0.023	1.421e-14	360
6	M61	Y	-0.064	-0.064	1.421e-14	360
7	M83	X	0.023	0.023	1.599e-14	36
8	M83	Y	-0.064	-0.064	1.599e-14	36
9	M84	X	0.023	0.023	0	36
10	M84	Y	-0.064	-0.064	0	36
11	M86	X	0.023	0.023	1.243e-14	36
12	M86	Y	-0.064	-0.064	1.243e-14	36
13	M87	X	0.014	0.019	0	7.2
14	M87	Y	-0.039	-0.055	0	7.2
15	M87	X	0.019	0.011	7.2	14.4
16	M87	Y	-0.055	-0.032	7.2	14.4
17	M87	X	0.011	0.011	14.4	21.6
18	M87	Y	-0.032	-0.032	14.4	21.6
19	M87	X	0.011	0.019	21.6	28.8
20	M87	Y	-0.032	-0.055	21.6	28.8
21	M87	X	0.019	0.014	28.8	36
22	M87	Y	-0.055	-0.039	28.8	36
23	M88	X	0.023	0.023	1.066e-14	36
24	M88	Y	-0.064	-0.064	1.066e-14	36
25	M90	X	0.01	0.022	0	9
26	M90	Y	-0.028	-0.062	0	9
27	M90	X	0.022	0.031	9	18
28	M90	Y	-0.062	-0.087	9	18
29	M90	X	0.031	0.025	18	27
30	M90	Y	-0.087	-0.07	18	27
31	M90	X	0.025	0.007	27	36
32	M90	Y	-0.07	-0.02	27	36
33	M93	X	0.023	0.023	7.105e-15	36
34	M93	Y	-0.064	-0.064	7.105e-15	36
35	M95	X	0.023	0.023	3.553e-15	36
36	M95	Y	-0.064	-0.064	3.553e-15	36
37	M96	X	0.023	0.023	0	36
38	M96	Y	-0.064	-0.064	0	36
39	M100	X	0.005	0.005	0	18
40	M100	Y	1.258e-16	6.245e-17	0	18
41	M100	X	0.005	0.005	18	36
42	M100	Y	6.245e-17	1.735e-18	18	36
43	M102	X	0.011	0.011	1.776e-15	36
44	M102	Y	-0.032	-0.032	1.776e-15	36
45	M15	Y	0.032	0.032	0	240

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
46	M140	Y	0.032	0.032	0	360
47	M62	X	0.023	0.023	1.039e-13	360
48	M62	Y	0.064	0.064	1.039e-13	360
49	M63	X	0.023	0.023	9.504e-14	360
50	M63	Y	0.064	0.064	9.504e-14	360
51	M64	X	0.018	0.015	0	24
52	M64	Y	0.052	0.042	0	24
53	M64	X	0.015	0.013	24	48
54	M64	Y	0.042	0.037	24	48
55	M64	X	0.013	0.012	48	72
56	M64	Y	0.037	0.035	48	72
57	M64	X	0.012	0.012	72	96
58	M64	Y	0.035	0.035	72	96
59	M64	X	0.012	0.014	96	120
60	M64	Y	0.035	0.039	96	120
61	M64	X	0.014	0.016	120	144
62	M64	Y	0.039	0.046	120	144
63	M64	X	0.016	0.014	144	168
64	M64	Y	0.046	0.041	144	168
65	M64	X	0.014	0.012	168	192
66	M64	Y	0.041	0.034	168	192
67	M64	X	0.012	0.014	192	216
68	M64	Y	0.034	0.04	192	216
69	M64	X	0.014	0.017	216	240
70	M64	Y	0.04	0.047	216	240
71	M65	X	0.023	0.023	2.602e-13	240
72	M65	Y	0.064	0.064	2.602e-13	240
73	M66	X	0.018	0.014	0	24
74	M66	Y	0.052	0.041	0	24
75	M66	X	0.014	0.012	24	48
76	M66	Y	0.041	0.034	24	48
77	M66	X	0.012	0.012	48	72
78	M66	Y	0.034	0.035	48	72
79	M66	X	0.012	0.013	72	96
80	M66	Y	0.035	0.038	72	96
81	M66	X	0.013	0.014	96	120
82	M66	Y	0.038	0.039	96	120
83	M66	X	0.014	0.014	120	144
84	M66	Y	0.039	0.039	120	144
85	M66	X	0.014	0.015	144	168
86	M66	Y	0.039	0.041	144	168
87	M66	X	0.015	0.016	168	192
88	M66	Y	0.041	0.046	168	192
89	M66	X	0.016	0.016	192	216
90	M66	Y	0.046	0.044	192	216
91	M66	X	0.016	0.014	216	240
92	M66	Y	0.044	0.039	216	240
93	M66	X	0.014	0.014	240	264
94	M66	Y	0.039	0.04	240	264
95	M66	X	0.014	0.013	264	288
96	M66	Y	0.04	0.036	264	288
97	M66	X	0.013	0.012	288	312
98	M66	Y	0.036	0.034	288	312
99	M66	X	0.012	0.014	312	336
100	M66	Y	0.034	0.04	312	336

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
101	M66	X	0.014	0.017	336	360
102	M66	Y	0.04	0.047	336	360
103	M67	X	0.023	0.023	7.55e-14	360
104	M67	Y	0.064	0.064	7.55e-14	360
105	M68	X	0.023	0.023	2.398e-14	240
106	M68	Y	0.064	0.064	2.398e-14	240
107	M69	X	0.02	0.021	0	24
108	M69	Y	0.056	0.06	0	24
109	M69	X	0.021	0.023	24	48
110	M69	Y	0.06	0.066	24	48
111	M69	X	0.023	0.024	48	72
112	M69	Y	0.066	0.067	48	72
113	M69	X	0.024	0.024	72	96
114	M69	Y	0.067	0.067	72	96
115	M69	X	0.024	0.023	96	120
116	M69	Y	0.067	0.064	96	120
117	M69	X	0.023	0.021	120	144
118	M69	Y	0.064	0.059	120	144
119	M69	X	0.021	0.022	144	168
120	M69	Y	0.059	0.061	144	168
121	M69	X	0.022	0.023	168	192
122	M69	Y	0.061	0.066	168	192
123	M69	X	0.023	0.023	192	216
124	M69	Y	0.066	0.065	192	216
125	M69	X	0.023	0.021	216	240
126	M69	Y	0.065	0.06	216	240
127	M70	X	0.023	0.023	1.705e-13	360
128	M70	Y	0.064	0.064	1.705e-13	360
129	M71	X	0.023	0.023	1.137e-13	240
130	M71	Y	0.064	0.064	1.137e-13	240
131	M74	X	0.023	0.023	6.128e-14	360
132	M74	Y	0.064	0.064	6.128e-14	360
133	M75	X	0.023	0.023	1.705e-13	360
134	M75	Y	0.064	0.064	1.705e-13	360
135	M76	X	0.023	0.023	5.693e-13	240
136	M76	Y	0.064	0.064	5.693e-13	240
137	M77	X	0.023	0.023	2.771e-13	240
138	M77	Y	0.064	0.064	2.771e-13	240
139	M78	X	0.023	0.023	2.158e-13	240
140	M78	Y	0.064	0.064	2.158e-13	240
141	M79	X	0.023	0.023	2.158e-13	240
142	M79	Y	0.064	0.064	2.158e-13	240
143	M80	X	0.019	0.022	0	24
144	M80	Y	0.052	0.063	0	24
145	M80	X	0.022	0.024	24	48
146	M80	Y	0.063	0.067	24	48
147	M80	X	0.024	0.024	48	72
148	M80	Y	0.067	0.068	48	72
149	M80	X	0.024	0.024	72	96
150	M80	Y	0.068	0.067	72	96
151	M80	X	0.024	0.023	96	120
152	M80	Y	0.067	0.064	96	120
153	M80	X	0.023	0.022	120	144
154	M80	Y	0.064	0.063	120	144
155	M80	X	0.022	0.022	144	168

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
156	M80	Y	0.063	0.061	144	168
157	M80	X	0.022	0.021	168	192
158	M80	Y	0.061	0.059	168	192
159	M80	X	0.021	0.022	192	216
160	M80	Y	0.059	0.061	192	216
161	M80	X	0.022	0.022	216	240
162	M80	Y	0.061	0.063	216	240
163	M80	X	0.022	0.023	240	264
164	M80	Y	0.063	0.064	240	264
165	M80	X	0.023	0.023	264	288
166	M80	Y	0.064	0.065	264	288
167	M80	X	0.023	0.024	288	312
168	M80	Y	0.065	0.066	288	312
169	M80	X	0.024	0.023	312	336
170	M80	Y	0.066	0.065	312	336
171	M80	X	0.023	0.021	336	360
172	M80	Y	0.065	0.06	336	360
173	M81	X	0.023	0.023	7.105e-14	360
174	M81	Y	0.064	0.064	7.105e-14	360
175	M82	X	0.014	0.019	0	7.2
176	M82	Y	0.039	0.055	0	7.2
177	M82	X	0.019	0.011	7.2	14.4
178	M82	Y	0.055	0.032	7.2	14.4
179	M82	X	0.011	0.011	14.4	21.6
180	M82	Y	0.032	0.032	14.4	21.6
181	M82	X	0.011	0.019	21.6	28.8
182	M82	Y	0.032	0.055	21.6	28.8
183	M82	X	0.019	0.014	28.8	36
184	M82	Y	0.055	0.039	28.8	36
185	M85	X	0.004	0.022	0	9
186	M85	Y	0.012	0.062	0	9
187	M85	X	0.022	0.017	9	18
188	M85	Y	0.062	0.047	9	18
189	M85	X	0.017	0.019	18	27
190	M85	Y	0.047	0.054	18	27
191	M85	X	0.019	0.052	27	36
192	M85	Y	0.054	0.148	27	36
193	M89	X	0.023	0.023	0	36
194	M89	Y	0.064	0.064	0	36
195	M91	X	0.023	0.023	0	36
196	M91	Y	0.064	0.064	0	36
197	M92	X	0.023	0.023	0	36
198	M92	Y	0.064	0.064	0	36
199	M94	X	0.023	0.023	0	36
200	M94	Y	0.064	0.064	0	36
201	M97	X	0.023	0.023	0	36
202	M97	Y	0.064	0.064	0	36
203	M98	X	0.023	0.023	0	36
204	M98	Y	0.064	0.064	0	36
205	M99	X	0.023	0.023	0	36
206	M99	Y	0.064	0.064	0	36
207	M101	X	0.011	0.011	0	36
208	M101	Y	0.032	0.032	0	36
209	M18	Y	-0.024	-0.024	1.51e-14	240
210	M39	Y	-0.024	-0.024	1.51e-14	240

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
211	M40	Y	-0.024	-0.024	1.51e-14	360
212	M2	X	0.01	0.01	0	91.5
213	M3	X	0.01	0.01	0	91.5
214	M4	X	0.01	0.01	0	91.5
215	M5	X	0.01	0.01	0	91.5
216	M15	X	0.029	0.029	0	240
217	M18	X	0.017	0.017	0	240
218	M144	X	0.01	0.01	0	91.5
219	M146	X	0.01	0.01	0	91.5
220	M167	X	0.014	0.014	0	91.5
221	M170	X	0.014	0.014	0	91.5
222	M140	X	0.029	0.029	0	360
223	M180	X	0.017	0.017	0	360
224	M29	X	0.014	0.014	0	91.5
225	M30	X	0.014	0.014	0	91.5
226	M39	X	0.017	0.017	0	240
227	M40	X	0.017	0.017	0	360
228	M18	X	0.011	0.011	2.842e-14	240
229	M18	Y	-0.032	-0.032	2.842e-14	240
230	M72	X	0.006	0.005	0	24
231	M72	Y	-2.628e-15	-3.426e-16	0	24
232	M72	X	0.005	0.005	24	48
233	M72	Y	-3.426e-16	1.564e-15	24	48
234	M72	X	0.005	0.005	48	72
235	M72	Y	1.564e-15	-7.216e-16	48	72
236	M72	X	0.005	0.005	72	96
237	M72	Y	-7.216e-16	-3.4e-16	72	96
238	M72	X	0.005	0.005	96	120
239	M72	Y	-3.4e-16	1.183e-15	96	120
240	M72	X	0.005	0.005	120	144
241	M72	Y	1.183e-15	3.903e-17	120	144
242	M72	X	0.005	0.005	144	168
243	M72	Y	3.903e-17	2.325e-16	144	168
244	M72	X	0.005	0.005	168	192
245	M72	Y	2.325e-16	-3.4e-16	168	192
246	M72	X	0.005	0.005	192	216
247	M72	Y	-3.4e-16	4.163e-17	192	216
248	M72	X	0.005	0.006	216	240
249	M72	Y	4.163e-17	8.049e-16	216	240
250	M73	X	0.005	0.005	0	24
251	M73	Y	9.368e-16	5.603e-16	0	24
252	M73	X	0.005	0.005	24	48
253	M73	Y	5.603e-16	-1.128e-17	24	48
254	M73	X	0.005	0.005	48	72
255	M73	Y	-1.128e-17	5.603e-16	48	72
256	M73	X	0.005	0.005	72	96
257	M73	Y	5.603e-16	9.411e-16	72	96
258	M73	X	0.005	0.005	96	120
259	M73	Y	9.411e-16	-1.041e-17	96	120
260	M73	X	0.005	0.005	120	144
261	M73	Y	-1.041e-17	-2.966e-16	120	144
262	M73	X	0.005	0.005	144	168
263	M73	Y	-2.966e-16	8.5e-17	144	168
264	M73	X	0.005	0.005	168	192
265	M73	Y	8.5e-17	2.75e-16	168	192

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
266	M73	X	0.005	0.005	192	216
267	M73	Y	2.75e-16	8.5e-17	192	216
268	M73	X	0.005	0.005	216	240
269	M73	Y	8.5e-17	-1.544e-16	216	240
270	M73	X	0.005	0.005	240	264
271	M73	Y	-1.544e-16	-1.067e-16	240	264
272	M73	X	0.005	0.005	264	288
273	M73	Y	-1.067e-16	1.31e-16	264	288
274	M73	X	0.005	0.005	288	312
275	M73	Y	1.31e-16	8.24e-17	288	312
276	M73	X	0.005	0.005	312	336
277	M73	Y	8.24e-17	2.776e-17	312	336
278	M73	X	0.005	0.005	336	360
279	M73	Y	2.776e-17	1.128e-16	336	360
280	M180	X	0.011	0.011	1.51e-14	360
281	M180	Y	-0.056	-0.056	1.51e-14	360
282	M44	X	0.017	0.014	0	24
283	M44	Y	-0.047	-0.04	0	24
284	M44	X	0.014	0.012	24	48
285	M44	Y	-0.04	-0.034	24	48
286	M44	X	0.012	0.013	48	72
287	M44	Y	-0.034	-0.036	48	72
288	M44	X	0.013	0.014	72	96
289	M44	Y	-0.036	-0.04	72	96
290	M44	X	0.014	0.014	96	120
291	M44	Y	-0.04	-0.039	96	120
292	M44	X	0.014	0.016	120	144
293	M44	Y	-0.039	-0.044	120	144
294	M44	X	0.016	0.016	144	168
295	M44	Y	-0.044	-0.046	144	168
296	M44	X	0.016	0.015	168	192
297	M44	Y	-0.046	-0.041	168	192
298	M44	X	0.015	0.014	192	216
299	M44	Y	-0.041	-0.039	192	216
300	M44	X	0.014	0.014	216	240
301	M44	Y	-0.039	-0.039	216	240
302	M44	X	0.014	0.013	240	264
303	M44	Y	-0.039	-0.038	240	264
304	M44	X	0.013	0.012	264	288
305	M44	Y	-0.038	-0.035	264	288
306	M44	X	0.012	0.012	288	312
307	M44	Y	-0.035	-0.034	288	312
308	M44	X	0.012	0.014	312	336
309	M44	Y	-0.034	-0.041	312	336
310	M44	X	0.014	0.018	336	360
311	M44	Y	-0.041	-0.052	336	360
312	M45	X	0.017	0.014	0	24
313	M45	Y	-0.047	-0.04	0	24
314	M45	X	0.014	0.012	24	48
315	M45	Y	-0.04	-0.034	24	48
316	M45	X	0.012	0.014	48	72
317	M45	Y	-0.034	-0.041	48	72
318	M45	X	0.014	0.016	72	96
319	M45	Y	-0.041	-0.046	72	96
320	M45	X	0.016	0.014	96	120

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
321	M45	Y	-0.046	-0.039	96	120
322	M45	X	0.014	0.012	120	144
323	M45	Y	-0.039	-0.035	120	144
324	M45	X	0.012	0.012	144	168
325	M45	Y	-0.035	-0.035	144	168
326	M45	X	0.012	0.013	168	192
327	M45	Y	-0.035	-0.037	168	192
328	M45	X	0.013	0.015	192	216
329	M45	Y	-0.037	-0.042	192	216
330	M45	X	0.015	0.018	216	240
331	M45	Y	-0.042	-0.052	216	240
332	M46	X	0.021	0.023	0	24
333	M46	Y	-0.06	-0.065	0	24
334	M46	X	0.023	0.023	24	48
335	M46	Y	-0.065	-0.066	24	48
336	M46	X	0.023	0.022	48	72
337	M46	Y	-0.066	-0.061	48	72
338	M46	X	0.022	0.021	72	96
339	M46	Y	-0.061	-0.059	72	96
340	M46	X	0.021	0.023	96	120
341	M46	Y	-0.059	-0.064	96	120
342	M46	X	0.023	0.024	120	144
343	M46	Y	-0.064	-0.067	120	144
344	M46	X	0.024	0.024	144	168
345	M46	Y	-0.067	-0.067	144	168
346	M46	X	0.024	0.023	168	192
347	M46	Y	-0.067	-0.066	168	192
348	M46	X	0.023	0.021	192	216
349	M46	Y	-0.066	-0.06	192	216
350	M46	X	0.021	0.02	216	240
351	M46	Y	-0.06	-0.056	216	240
352	M47	X	0.021	0.023	0	24
353	M47	Y	-0.06	-0.065	0	24
354	M47	X	0.023	0.024	24	48
355	M47	Y	-0.065	-0.066	24	48
356	M47	X	0.024	0.023	48	72
357	M47	Y	-0.066	-0.065	48	72
358	M47	X	0.023	0.023	72	96
359	M47	Y	-0.065	-0.064	72	96
360	M47	X	0.023	0.022	96	120
361	M47	Y	-0.064	-0.063	96	120
362	M47	X	0.022	0.022	120	144
363	M47	Y	-0.063	-0.061	120	144
364	M47	X	0.022	0.021	144	168
365	M47	Y	-0.061	-0.059	144	168
366	M47	X	0.021	0.022	168	192
367	M47	Y	-0.059	-0.061	168	192
368	M47	X	0.022	0.022	192	216
369	M47	Y	-0.061	-0.063	192	216
370	M47	X	0.022	0.023	216	240
371	M47	Y	-0.063	-0.064	216	240
372	M47	X	0.023	0.024	240	264
373	M47	Y	-0.064	-0.067	240	264
374	M47	X	0.024	0.024	264	288
375	M47	Y	-0.067	-0.068	264	288

Member Distributed Loads (BLC 16 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
376	M47	X	0.024	0.024	288	312
377	M47	Y	-0.068	-0.067	288	312
378	M47	X	0.024	0.022	312	336
379	M47	Y	-0.067	-0.063	312	336
380	M47	X	0.022	0.019	336	360
381	M47	Y	-0.063	-0.052	336	360
382	M48	X	0.023	0.023	0	240
383	M48	Y	-0.064	-0.064	0	240
384	M49	X	0.023	0.023	0	360
385	M49	Y	-0.064	-0.064	0	360
386	M50	X	0.023	0.023	2.673e-13	240
387	M50	Y	-0.064	-0.064	2.673e-13	240
388	M51	X	0.023	0.023	0	360
389	M51	Y	-0.064	-0.064	0	360
390	M52	X	0.023	0.023	4.53e-14	240
391	M52	Y	-0.064	-0.064	4.53e-14	240
392	M53	X	0.023	0.023	5.596e-14	360
393	M53	Y	-0.064	-0.064	5.596e-14	360
394	M54	X	0.023	0.023	0	240
395	M54	Y	-0.064	-0.064	0	240
396	M55	X	0.023	0.023	0	360
397	M55	Y	-0.064	-0.064	0	360
398	M56	X	0.023	0.023	4.441e-15	240
399	M56	Y	-0.064	-0.064	4.441e-15	240
400	M57	X	0.023	0.023	5.773e-14	360
401	M57	Y	-0.064	-0.064	5.773e-14	360
402	M58	X	0.023	0.023	5.862e-14	240
403	M58	Y	-0.064	-0.064	5.862e-14	240

Member Distributed Loads (BLC 17 : BLC 5 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M2	Z	0.028	0.028	0	91.5
2	M3	Z	0.028	0.028	0	91.5
3	M4	Z	0.028	0.028	0	91.5
4	M5	Z	0.028	0.028	0	91.5
5	M144	Z	0.028	0.028	0	91.5
6	M146	Z	0.028	0.028	0	91.5
7	M167	Z	0.011	0.011	0	91.5
8	M170	Z	0.011	0.011	0	91.5
9	M29	Z	0.011	0.011	0	91.5
10	M30	Z	0.011	0.011	0	91.5
11	M9	Z	0.034	0.034	0	469.242
12	M11	Z	0.034	0.034	0	469.242
13	M139	Z	0.034	0.034	0	469.242
14	M141	Z	0.034	0.034	0	469.242
15	M145	Z	0.034	0.034	0	469.242
16	M147	Z	0.034	0.034	0	469.242
17	M73	Z	0.009	0.01	72	96
18	M73	Z	0.01	0.01	96	120
19	M73	Z	0.01	0.011	120	144
20	M73	Z	0.011	0.015	144	168
21	M73	Z	0.015	0.015	168	192
22	M73	Z	0.015	0.012	192	216
23	M73	Z	0.012	0.012	216	240
24	M73	Z	0.012	0.012	240	264

Member Distributed Loads (BLC 17 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
25	M73	Z	0.012	0.012	264	288
26	M73	Z	0.012	0.011	288	312
27	M73	Z	0.011	0.011	312	336
28	M73	Z	0.011	0.012	336	360
29	M180	Z	0.043	0.043	105.6	360
30	M44	Z	0.021	0.028	72	96
31	M44	Z	0.028	0.031	96	120
32	M44	Z	0.031	0.029	120	144
33	M44	Z	0.029	0.032	144	168
34	M44	Z	0.032	0.035	168	192
35	M44	Z	0.035	0.029	192	216
36	M44	Z	0.029	0.027	216	240
37	M44	Z	0.027	0.035	240	264
38	M44	Z	0.035	0.033	264	288
39	M44	Z	0.033	0.03	288	312
40	M44	Z	0.03	0.032	312	336
41	M44	Z	0.032	0.036	336	360
42	M47	Z	9.595e-5	0.011	72	96
43	M47	Z	0.011	0.038	96	120
44	M47	Z	0.038	0.05	120	144
45	M47	Z	0.05	0.051	144	168
46	M47	Z	0.051	0.059	168	192
47	M47	Z	0.059	0.056	192	216
48	M47	Z	0.056	0.054	216	240
49	M47	Z	0.054	0.05	240	264
50	M47	Z	0.05	0.044	264	288
51	M47	Z	0.044	0.049	288	312
52	M47	Z	0.049	0.05	312	336
53	M47	Z	0.05	0.046	336	360
54	M49	Z	0.051	0.051	105.6	360
55	M51	Z	0.051	0.051	105.6	360
56	M53	Z	0.051	0.051	105.6	360
57	M55	Z	0.051	0.051	105.6	360
58	M57	Z	0.051	0.051	105.6	360
59	M59	Z	0.051	0.051	105.6	360
60	M61	Z	0.051	0.051	105.6	360
61	M83	Z	0.051	0.051	1.599e-14	36
62	M84	Z	0.051	0.051	0	36
63	M86	Z	0.051	0.051	1.243e-14	36
64	M87	Z	0.031	0.044	0	7.2
65	M87	Z	0.044	0.026	7.2	14.4
66	M87	Z	0.026	0.026	14.4	21.6
67	M87	Z	0.026	0.044	21.6	28.8
68	M87	Z	0.044	0.031	28.8	36
69	M88	Z	0.051	0.051	1.066e-14	36
70	M90	Z	0.022	0.049	0	9
71	M90	Z	0.049	0.069	9	18
72	M90	Z	0.069	0.056	18	27
73	M90	Z	0.056	0.016	27	36
74	M93	Z	0.051	0.051	7.105e-15	36
75	M95	Z	0.051	0.051	3.553e-15	36
76	M96	Z	0.051	0.051	0	36
77	M100	Z	0.012	0.012	0	18
78	M100	Z	0.012	0.012	18	36
79	M102	Z	0.025	0.025	1.776e-15	36

Member Distributed Loads (BLC 17 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
80	M140	Z	0.025	0.025	105.6	360
81	M62	Z	0.051	0.051	4.174e-14	254.4
82	M63	Z	0.051	0.051	8.971e-14	254.4
83	M66	Z	0.04	0.033	0	24
84	M66	Z	0.033	0.027	24	48
85	M66	Z	0.027	0.028	48	72
86	M66	Z	0.028	0.03	72	96
87	M66	Z	0.03	0.032	96	120
88	M66	Z	0.032	0.034	120	144
89	M66	Z	0.034	0.033	144	168
90	M66	Z	0.033	0.032	168	192
91	M66	Z	0.032	0.033	192	216
92	M66	Z	0.033	0.032	216	240
93	M66	Z	0.032	0.026	240	264
94	M66	Z	0.026	0.021	264	288
95	M67	Z	0.051	0.051	7.461e-14	254.4
96	M70	Z	0.051	0.051	2.034e-13	254.4
97	M74	Z	0.051	0.051	5.151e-14	254.4
98	M75	Z	0.051	0.051	4.707e-14	254.4
99	M80	Z	0.042	0.047	0	24
100	M80	Z	0.047	0.053	24	48
101	M80	Z	0.053	0.054	48	72
102	M80	Z	0.054	0.048	72	96
103	M80	Z	0.048	0.049	96	120
104	M80	Z	0.049	0.057	120	144
105	M80	Z	0.057	0.055	144	168
106	M80	Z	0.055	0.05	168	192
107	M80	Z	0.05	0.051	192	216
108	M80	Z	0.051	0.037	216	240
109	M80	Z	0.037	0.011	240	264
110	M80	Z	0.011	0.0001078	264	288
111	M81	Z	0.051	0.051	6.128e-14	254.4
112	M82	Z	0.031	0.044	0	7.2
113	M82	Z	0.044	0.026	7.2	14.4
114	M82	Z	0.026	0.026	14.4	21.6
115	M82	Z	0.026	0.044	21.6	28.8
116	M82	Z	0.044	0.031	28.8	36
117	M85	Z	0.01	0.049	0	9
118	M85	Z	0.049	0.037	9	18
119	M85	Z	0.037	0.043	18	27
120	M85	Z	0.043	0.117	27	36
121	M89	Z	0.051	0.051	0	36
122	M91	Z	0.051	0.051	0	36
123	M92	Z	0.051	0.051	8.882e-15	36
124	M94	Z	0.051	0.051	0	36
125	M97	Z	0.051	0.051	0	36
126	M98	Z	0.051	0.051	0	36
127	M99	Z	0.051	0.051	0	36
128	M101	Z	0.025	0.025	0	36
129	M40	Z	0.018	0.018	105.6	360
130	M18	Z	0.019	0.019	8.349e-14	148.8
131	M72	Z	0.0007711	0.005	72	96
132	M72	Z	0.005	0.008	96	120
133	M72	Z	0.008	0.009	120	144
134	M72	Z	0.009	0.01	144	168

Member Distributed Loads (BLC 17 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
135	M72	Z	0.01	0.009	168	192
136	M72	Z	0.009	0.009	192	216
137	M72	Z	0.009	0.01	216	240
138	M73	Z	0.006	0.01	0	24
139	M73	Z	0.01	0.01	24	48
140	M73	Z	0.01	0.009	48	72
141	M180	Z	0.019	0.019	6.217e-14	105.6
142	M44	Z	0.023	0.026	0	24
143	M44	Z	0.026	0.023	24	48
144	M44	Z	0.023	0.021	48	72
145	M45	Z	0.0006213	0.015	72	96
146	M45	Z	0.015	0.023	96	120
147	M45	Z	0.023	0.023	120	144
148	M45	Z	0.023	0.022	144	168
149	M45	Z	0.022	0.022	168	192
150	M45	Z	0.022	0.026	192	216
151	M45	Z	0.026	0.033	216	240
152	M46	Z	9.699e-5	0.02	72	96
153	M46	Z	0.02	0.039	96	120
154	M46	Z	0.039	0.039	120	144
155	M46	Z	0.039	0.041	144	168
156	M46	Z	0.041	0.041	168	192
157	M46	Z	0.041	0.037	192	216
158	M46	Z	0.037	0.034	216	240
159	M47	Z	0.054	0.034	0	21.6
160	M47	Z	0.034	0.036	21.6	43.2
161	M47	Z	0.036	0.045	43.2	64.8
162	M47	Z	0.045	0.034	64.8	86.4
163	M47	Z	0.034	0.02	86.4	108
164	M48	Z	0.038	0.038	91.2	240
165	M49	Z	0.038	0.038	3.402e-13	105.6
166	M50	Z	0.038	0.038	91.2	240
167	M51	Z	0.038	0.038	2.665e-14	105.6
168	M52	Z	0.038	0.038	91.2	240
169	M53	Z	0.038	0.038	1.732e-13	105.6
170	M54	Z	0.038	0.038	91.2	240
171	M55	Z	0.038	0.038	1.688e-13	105.6
172	M56	Z	0.038	0.038	91.2	240
173	M57	Z	0.038	0.038	1.732e-13	105.6
174	M58	Z	0.038	0.038	91.2	240
175	M59	Z	0.038	0.038	5.773e-14	105.6
176	M60	Z	0.038	0.038	91.2	240
177	M61	Z	0.038	0.038	1.545e-13	105.6
178	M15	Z	0.019	0.019	91.2	240
179	M140	Z	0.019	0.019	5.684e-14	105.6
180	M62	Z	0.038	0.038	254.4	360
181	M63	Z	0.038	0.038	254.4	360
182	M64	Z	0.033	0.026	0	24
183	M64	Z	0.026	0.022	24	48
184	M64	Z	0.022	0.022	48	72
185	M64	Z	0.022	0.023	72	96
186	M64	Z	0.023	0.023	96	120
187	M64	Z	0.023	0.015	120	144
188	M64	Z	0.015	0.0006213	144	168
189	M65	Z	0.038	0.038	2.46e-13	148.8

Member Distributed Loads (BLC 17 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
190	M66	Z	0.021	0.023	288	312
191	M66	Z	0.023	0.026	312	336
192	M66	Z	0.026	0.023	336	360
193	M67	Z	0.038	0.038	254.4	360
194	M68	Z	0.038	0.038	1.99e-13	148.8
195	M69	Z	0.034	0.037	0	24
196	M69	Z	0.037	0.041	24	48
197	M69	Z	0.041	0.041	48	72
198	M69	Z	0.041	0.039	72	96
199	M69	Z	0.039	0.039	96	120
200	M69	Z	0.039	0.02	120	144
201	M69	Z	0.02	9.699e-5	144	168
202	M70	Z	0.038	0.038	254.4	360
203	M71	Z	0.038	0.038	1.403e-13	148.8
204	M74	Z	0.038	0.038	254.4	360
205	M75	Z	0.038	0.038	254.4	360
206	M76	Z	0.038	0.038	5.711e-13	148.8
207	M77	Z	0.038	0.038	0	148.8
208	M78	Z	0.038	0.038	1.572e-13	148.8
209	M79	Z	0.038	0.038	0	148.8
210	M80	Z	0.02	0.034	252	273.6
211	M80	Z	0.034	0.045	273.6	295.2
212	M80	Z	0.045	0.036	295.2	316.8
213	M80	Z	0.036	0.034	316.8	338.4
214	M80	Z	0.034	0.054	338.4	360
215	M81	Z	0.038	0.038	254.4	360
216	M18	Z	0.015	0.015	1.243e-14	148.8
217	M180	Z	0.015	0.015	5.596e-14	105.6
218	M39	Z	0.015	0.015	91.2	240
219	M40	Z	0.015	0.015	5.773e-14	105.6
220	M18	Z	0.018	0.018	148.8	240
221	M72	Z	0.008	0.004	0	19.2
222	M72	Z	0.004	0.004	19.2	38.4
223	M72	Z	0.004	0.005	38.4	57.6
224	M72	Z	0.005	0.004	57.6	76.8
225	M72	Z	0.004	0.003	76.8	96
226	M45	Z	0.016	0.014	0	19.2
227	M45	Z	0.014	0.011	19.2	38.4
228	M45	Z	0.011	0.012	38.4	57.6
229	M45	Z	0.012	0.013	57.6	76.8
230	M45	Z	0.013	0.01	76.8	96
231	M46	Z	0.03	0.019	0	19.2
232	M46	Z	0.019	0.02	19.2	38.4
233	M46	Z	0.02	0.025	38.4	57.6
234	M46	Z	0.025	0.018	57.6	76.8
235	M46	Z	0.018	0.005	76.8	96
236	M48	Z	0.021	0.021	0	91.2
237	M50	Z	0.021	0.021	6.306e-14	91.2
238	M52	Z	0.021	0.021	2.274e-13	91.2
239	M54	Z	0.021	0.021	0	91.2
240	M56	Z	0.021	0.021	0	91.2
241	M58	Z	0.021	0.021	1.261e-13	91.2
242	M60	Z	0.021	0.021	1.155e-13	91.2
243	M15	Z	0.011	0.011	3.419e-13	91.2
244	M64	Z	0.007	0.013	144	163.2

Member Distributed Loads (BLC 17 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
245	M64	Z	0.013	0.014	163.2	182.4
246	M64	Z	0.014	0.014	182.4	201.6
247	M64	Z	0.014	0.014	201.6	220.8
248	M64	Z	0.014	0.012	220.8	240
249	M65	Z	0.021	0.021	148.8	240
250	M68	Z	0.021	0.021	148.8	240
251	M69	Z	0.005	0.02	144	163.2
252	M69	Z	0.02	0.025	163.2	182.4
253	M69	Z	0.025	0.019	182.4	201.6
254	M69	Z	0.019	0.019	201.6	220.8
255	M69	Z	0.019	0.027	220.8	240
256	M71	Z	0.021	0.021	148.8	240
257	M76	Z	0.021	0.021	148.8	240
258	M77	Z	0.021	0.021	148.8	240
259	M78	Z	0.021	0.021	148.8	240
260	M79	Z	0.021	0.021	148.8	240
261	M39	Z	0.008	0.008	1.164e-13	91.2

Member Distributed Loads (BLC 18 : BLC 6 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M50	Y	-0.085	-0.085	6.395e-14	240
2	M51	Y	-0.085	-0.085	2.371e-13	360
3	M52	Y	-0.085	-0.085	1.235e-13	240
4	M53	Y	-0.085	-0.085	3.819e-14	360
5	M54	Y	-0.085	-0.085	3.411e-13	240
6	M55	Y	-0.085	-0.085	0	360
7	M56	Y	-0.085	-0.085	2.94e-13	240
8	M57	Y	-0.085	-0.085	3.464e-14	360
9	M58	Y	-0.085	-0.085	6.661e-14	240
10	M59	Y	-0.085	-0.085	1.865e-14	360
11	M60	Y	-0.085	-0.085	1.865e-14	240
12	M61	Y	-0.085	-0.085	1.421e-14	360
13	M83	Y	-0.085	-0.085	0	36
14	M84	Y	-0.085	-0.085	1.421e-14	36
15	M86	Y	-0.085	-0.085	0	36
16	M87	Y	-0.051	-0.073	0	7.2
17	M87	Y	-0.073	-0.043	7.2	14.4
18	M87	Y	-0.043	-0.043	14.4	21.6
19	M87	Y	-0.043	-0.073	21.6	28.8
20	M87	Y	-0.073	-0.051	28.8	36
21	M88	Y	-0.085	-0.085	0	36
22	M90	Y	-0.016	-0.082	0	9
23	M90	Y	-0.082	-0.062	9	18
24	M90	Y	-0.062	-0.072	18	27
25	M90	Y	-0.072	-0.196	27	36
26	M93	Y	-0.085	-0.085	8.882e-15	36
27	M95	Y	-0.085	-0.085	0	36
28	M96	Y	-0.085	-0.085	1.421e-14	36
29	M100	Y	-0.02	-0.02	0	18
30	M100	Y	-0.02	-0.02	18	36
31	M102	Y	-0.042	-0.042	1.776e-15	36
32	M15	Y	-0.042	-0.042	0	240
33	M140	Y	-0.042	-0.042	0	360
34	M62	Y	-0.085	-0.085	8.971e-14	360
35	M63	Y	-0.085	-0.085	7.55e-14	360

Member Distributed Loads (BLC 18 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
36	M64	Y	-0.068	-0.056	0	24
37	M64	Y	-0.056	-0.049	24	48
38	M64	Y	-0.049	-0.046	48	72
39	M64	Y	-0.046	-0.046	72	96
40	M64	Y	-0.046	-0.052	96	120
41	M64	Y	-0.052	-0.061	120	144
42	M64	Y	-0.061	-0.054	144	168
43	M64	Y	-0.054	-0.045	168	192
44	M64	Y	-0.045	-0.054	192	216
45	M64	Y	-0.054	-0.062	216	240
46	M65	Y	-0.085	-0.085	2.558e-13	240
47	M66	Y	-0.069	-0.054	0	24
48	M66	Y	-0.054	-0.045	24	48
49	M66	Y	-0.045	-0.046	48	72
50	M66	Y	-0.046	-0.05	72	96
51	M66	Y	-0.05	-0.052	96	120
52	M66	Y	-0.052	-0.052	120	144
53	M66	Y	-0.052	-0.055	144	168
54	M66	Y	-0.055	-0.061	168	192
55	M66	Y	-0.061	-0.059	192	216
56	M66	Y	-0.059	-0.052	216	240
57	M66	Y	-0.052	-0.052	240	264
58	M66	Y	-0.052	-0.047	264	288
59	M66	Y	-0.047	-0.046	288	312
60	M66	Y	-0.046	-0.054	312	336
61	M66	Y	-0.054	-0.062	336	360
62	M67	Y	-0.085	-0.085	8.082e-14	360
63	M68	Y	-0.085	-0.085	3.286e-14	240
64	M69	Y	-0.074	-0.08	0	24
65	M69	Y	-0.08	-0.088	24	48
66	M69	Y	-0.088	-0.089	48	72
67	M69	Y	-0.089	-0.089	72	96
68	M69	Y	-0.089	-0.085	96	120
69	M69	Y	-0.085	-0.078	120	144
70	M69	Y	-0.078	-0.081	144	168
71	M69	Y	-0.081	-0.087	168	192
72	M69	Y	-0.087	-0.087	192	216
73	M69	Y	-0.087	-0.08	216	240
74	M70	Y	-0.085	-0.085	1.75e-13	360
75	M71	Y	-0.085	-0.085	1.172e-13	240
76	M74	Y	-0.085	-0.085	5.684e-14	360
77	M75	Y	-0.085	-0.085	1.705e-13	360
78	M76	Y	-0.085	-0.085	5.551e-13	240
79	M77	Y	-0.085	-0.085	2.798e-13	240
80	M78	Y	-0.085	-0.085	1.99e-13	240
81	M79	Y	-0.085	-0.085	2.274e-13	240
82	M80	Y	-0.069	-0.084	0	24
83	M80	Y	-0.084	-0.088	24	48
84	M80	Y	-0.088	-0.09	48	72
85	M80	Y	-0.09	-0.089	72	96
86	M80	Y	-0.089	-0.085	96	120
87	M80	Y	-0.085	-0.084	120	144
88	M80	Y	-0.084	-0.081	144	168
89	M80	Y	-0.081	-0.078	168	192
90	M80	Y	-0.078	-0.081	192	216

Member Distributed Loads (BLC 18 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
91	M80	Y	-0.081	-0.084	216	240
92	M80	Y	-0.084	-0.085	240	264
93	M80	Y	-0.085	-0.086	264	288
94	M80	Y	-0.086	-0.088	288	312
95	M80	Y	-0.088	-0.087	312	336
96	M80	Y	-0.087	-0.08	336	360
97	M81	Y	-0.085	-0.085	6.661e-14	360
98	M82	Y	-0.051	-0.073	0	7.2
99	M82	Y	-0.073	-0.043	7.2	14.4
100	M82	Y	-0.043	-0.043	14.4	21.6
101	M82	Y	-0.043	-0.073	21.6	28.8
102	M82	Y	-0.073	-0.051	28.8	36
103	M85	Y	-0.016	-0.082	0	9
104	M85	Y	-0.082	-0.062	9	18
105	M85	Y	-0.062	-0.071	18	27
106	M85	Y	-0.071	-0.196	27	36
107	M89	Y	-0.085	-0.085	0	36
108	M91	Y	-0.085	-0.085	0	36
109	M92	Y	-0.085	-0.085	0	36
110	M94	Y	-0.085	-0.085	0	36
111	M97	Y	-0.085	-0.085	0	36
112	M98	Y	-0.085	-0.085	0	36
113	M99	Y	-0.085	-0.085	1.776e-15	36
114	M101	Y	-0.042	-0.042	3.553e-15	36
115	M180	Y	-0.03	-0.03	1.51e-14	360
116	M40	Y	-0.03	-0.03	1.51e-14	360
117	M18	Y	-0.03	-0.03	1.51e-14	240
118	M39	Y	-0.03	-0.03	1.51e-14	240
119	M18	Y	-0.042	-0.042	2.665e-14	240
120	M72	Y	-0.021	-0.02	0	24
121	M72	Y	-0.02	-0.02	24	48
122	M72	Y	-0.02	-0.02	48	72
123	M72	Y	-0.02	-0.02	72	96
124	M72	Y	-0.02	-0.02	96	120
125	M72	Y	-0.02	-0.02	120	144
126	M72	Y	-0.02	-0.02	144	168
127	M72	Y	-0.02	-0.02	168	192
128	M72	Y	-0.02	-0.02	192	216
129	M72	Y	-0.02	-0.021	216	240
130	M73	Y	-0.021	-0.019	0	24
131	M73	Y	-0.019	-0.019	24	48
132	M73	Y	-0.019	-0.02	48	72
133	M73	Y	-0.02	-0.02	72	96
134	M73	Y	-0.02	-0.02	96	120
135	M73	Y	-0.02	-0.02	120	144
136	M73	Y	-0.02	-0.02	144	168
137	M73	Y	-0.02	-0.02	168	192
138	M73	Y	-0.02	-0.02	192	216
139	M73	Y	-0.02	-0.02	216	240
140	M73	Y	-0.02	-0.02	240	264
141	M73	Y	-0.02	-0.02	264	288
142	M73	Y	-0.02	-0.019	288	312
143	M73	Y	-0.019	-0.019	312	336
144	M73	Y	-0.019	-0.021	336	360
145	M180	Y	-0.042	-0.042	1.865e-14	360

Member Distributed Loads (BLC 18 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
146	M44	Y	-0.062	-0.054	0	24
147	M44	Y	-0.054	-0.046	24	48
148	M44	Y	-0.046	-0.047	48	72
149	M44	Y	-0.047	-0.052	72	96
150	M44	Y	-0.052	-0.052	96	120
151	M44	Y	-0.052	-0.059	120	144
152	M44	Y	-0.059	-0.062	144	168
153	M44	Y	-0.062	-0.055	168	192
154	M44	Y	-0.055	-0.052	192	216
155	M44	Y	-0.052	-0.052	216	240
156	M44	Y	-0.052	-0.05	240	264
157	M44	Y	-0.05	-0.046	264	288
158	M44	Y	-0.046	-0.045	288	312
159	M44	Y	-0.045	-0.054	312	336
160	M44	Y	-0.054	-0.069	336	360
161	M45	Y	-0.062	-0.054	0	24
162	M45	Y	-0.054	-0.046	24	48
163	M45	Y	-0.046	-0.054	48	72
164	M45	Y	-0.054	-0.061	72	96
165	M45	Y	-0.061	-0.052	96	120
166	M45	Y	-0.052	-0.046	120	144
167	M45	Y	-0.046	-0.046	144	168
168	M45	Y	-0.046	-0.049	168	192
169	M45	Y	-0.049	-0.056	192	216
170	M45	Y	-0.056	-0.068	216	240
171	M46	Y	-0.08	-0.087	0	24
172	M46	Y	-0.087	-0.087	24	48
173	M46	Y	-0.087	-0.081	48	72
174	M46	Y	-0.081	-0.078	72	96
175	M46	Y	-0.078	-0.085	96	120
176	M46	Y	-0.085	-0.089	120	144
177	M46	Y	-0.089	-0.089	144	168
178	M46	Y	-0.089	-0.088	168	192
179	M46	Y	-0.088	-0.08	192	216
180	M46	Y	-0.08	-0.074	216	240
181	M47	Y	-0.08	-0.087	0	24
182	M47	Y	-0.087	-0.088	24	48
183	M47	Y	-0.088	-0.086	48	72
184	M47	Y	-0.086	-0.085	72	96
185	M47	Y	-0.085	-0.084	96	120
186	M47	Y	-0.084	-0.081	120	144
187	M47	Y	-0.081	-0.078	144	168
188	M47	Y	-0.078	-0.081	168	192
189	M47	Y	-0.081	-0.084	192	216
190	M47	Y	-0.084	-0.085	216	240
191	M47	Y	-0.085	-0.089	240	264
192	M47	Y	-0.089	-0.09	264	288
193	M47	Y	-0.09	-0.088	288	312
194	M47	Y	-0.088	-0.084	312	336
195	M47	Y	-0.084	-0.069	336	360
196	M48	Y	-0.085	-0.085	3.979e-13	240
197	M49	Y	-0.085	-0.085	7.816e-14	360

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M2	X	0.01	0.01	0	91.5
2	M3	X	0.01	0.01	0	91.5
3	M4	X	0.01	0.01	0	91.5
4	M5	X	0.01	0.01	0	91.5
5	M15	X	0.006	0.006	0	240
6	M18	X	0.017	0.017	0	240
7	M144	X	0.01	0.01	0	91.5
8	M146	X	0.01	0.01	0	91.5
9	M167	X	0.014	0.014	0	91.5
10	M170	X	0.014	0.014	0	91.5
11	M140	X	0.006	0.006	0	360
12	M180	X	0.017	0.017	0	360
13	M29	X	0.014	0.014	0	91.5
14	M30	X	0.014	0.014	0	91.5
15	M39	X	0.017	0.017	0	240
16	M40	X	0.017	0.017	0	360
17	M18	X	0.011	0.011	2.842e-14	240
18	M18	Y	-0.032	-0.032	2.842e-14	240
19	M72	X	9.294e-16	1.206e-16	0	24
20	M72	Y	-0.016	-0.015	0	24
21	M72	X	1.206e-16	-5.529e-16	24	48
22	M72	Y	-0.015	-0.015	24	48
23	M72	X	-5.529e-16	2.55e-16	48	72
24	M72	Y	-0.015	-0.015	48	72
25	M72	X	2.55e-16	1.201e-16	72	96
26	M72	Y	-0.015	-0.015	72	96
27	M72	X	1.201e-16	-4.189e-16	96	120
28	M72	Y	-0.015	-0.015	96	120
29	M72	X	-4.189e-16	-1.431e-17	120	144
30	M72	Y	-0.015	-0.015	120	144
31	M72	X	-1.431e-17	-8.197e-17	144	168
32	M72	Y	-0.015	-0.015	144	168
33	M72	X	-8.197e-17	1.206e-16	168	192
34	M72	Y	-0.015	-0.015	168	192
35	M72	X	1.206e-16	-1.475e-17	192	216
36	M72	Y	-0.015	-0.015	192	216
37	M72	X	-1.475e-17	-2.849e-16	216	240
38	M72	Y	-0.015	-0.016	216	240
39	M73	X	-3.318e-16	-1.982e-16	0	24
40	M73	Y	-0.016	-0.015	0	24
41	M73	X	-1.982e-16	3.903e-18	24	48
42	M73	Y	-0.015	-0.015	24	48
43	M73	X	3.903e-18	-1.978e-16	48	72
44	M73	Y	-0.015	-0.015	48	72
45	M73	X	-1.978e-16	-3.326e-16	72	96
46	M73	Y	-0.015	-0.015	72	96
47	M73	X	-3.326e-16	3.903e-18	96	120
48	M73	Y	-0.015	-0.015	96	120
49	M73	X	3.903e-18	1.054e-16	120	144
50	M73	Y	-0.015	-0.015	120	144
51	M73	X	1.054e-16	-2.906e-17	144	168
52	M73	Y	-0.015	-0.015	144	168
53	M73	X	-2.906e-17	-9.671e-17	168	192
54	M73	Y	-0.015	-0.015	168	192
55	M73	X	-9.671e-17	-2.906e-17	192	216

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
56	M73	Y	-0.015	-0.015	192	216
57	M73	X	-2.906e-17	5.464e-17	216	240
58	M73	Y	-0.015	-0.015	216	240
59	M73	X	5.464e-17	3.816e-17	240	264
60	M73	Y	-0.015	-0.015	240	264
61	M73	X	3.816e-17	-4.64e-17	264	288
62	M73	Y	-0.015	-0.015	264	288
63	M73	X	-4.64e-17	-2.862e-17	288	312
64	M73	Y	-0.015	-0.015	288	312
65	M73	X	-2.862e-17	-1.084e-17	312	336
66	M73	Y	-0.015	-0.015	312	336
67	M73	X	-1.084e-17	-3.99e-17	336	360
68	M73	Y	-0.015	-0.016	336	360
69	M180	X	0.011	0.011	1.51e-14	360
70	M180	Y	-0.056	-0.056	1.51e-14	360
71	M44	X	0.017	0.014	0	24
72	M44	Y	-0.047	-0.04	0	24
73	M44	X	0.014	0.012	24	48
74	M44	Y	-0.04	-0.034	24	48
75	M44	X	0.012	0.013	48	72
76	M44	Y	-0.034	-0.036	48	72
77	M44	X	0.013	0.014	72	96
78	M44	Y	-0.036	-0.04	72	96
79	M44	X	0.014	0.014	96	120
80	M44	Y	-0.04	-0.039	96	120
81	M44	X	0.014	0.016	120	144
82	M44	Y	-0.039	-0.044	120	144
83	M44	X	0.016	0.016	144	168
84	M44	Y	-0.044	-0.046	144	168
85	M44	X	0.016	0.015	168	192
86	M44	Y	-0.046	-0.041	168	192
87	M44	X	0.015	0.014	192	216
88	M44	Y	-0.041	-0.039	192	216
89	M44	X	0.014	0.014	216	240
90	M44	Y	-0.039	-0.039	216	240
91	M44	X	0.014	0.013	240	264
92	M44	Y	-0.039	-0.038	240	264
93	M44	X	0.013	0.012	264	288
94	M44	Y	-0.038	-0.035	264	288
95	M44	X	0.012	0.012	288	312
96	M44	Y	-0.035	-0.034	288	312
97	M44	X	0.012	0.014	312	336
98	M44	Y	-0.034	-0.041	312	336
99	M44	X	0.014	0.018	336	360
100	M44	Y	-0.041	-0.052	336	360
101	M45	X	0.017	0.014	0	24
102	M45	Y	-0.047	-0.04	0	24
103	M45	X	0.014	0.012	24	48
104	M45	Y	-0.04	-0.034	24	48
105	M45	X	0.012	0.014	48	72
106	M45	Y	-0.034	-0.041	48	72
107	M45	X	0.014	0.016	72	96
108	M45	Y	-0.041	-0.046	72	96
109	M45	X	0.016	0.014	96	120
110	M45	Y	-0.046	-0.039	96	120

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
111	M45	X	0.014	0.012	120	144
112	M45	Y	-0.039	-0.035	120	144
113	M45	X	0.012	0.012	144	168
114	M45	Y	-0.035	-0.035	144	168
115	M45	X	0.012	0.013	168	192
116	M45	Y	-0.035	-0.037	168	192
117	M45	X	0.013	0.015	192	216
118	M45	Y	-0.037	-0.042	192	216
119	M45	X	0.015	0.018	216	240
120	M45	Y	-0.042	-0.052	216	240
121	M46	X	0.021	0.023	0	24
122	M46	Y	-0.06	-0.065	0	24
123	M46	X	0.023	0.023	24	48
124	M46	Y	-0.065	-0.066	24	48
125	M46	X	0.023	0.022	48	72
126	M46	Y	-0.066	-0.061	48	72
127	M46	X	0.022	0.021	72	96
128	M46	Y	-0.061	-0.059	72	96
129	M46	X	0.021	0.023	96	120
130	M46	Y	-0.059	-0.064	96	120
131	M46	X	0.023	0.024	120	144
132	M46	Y	-0.064	-0.067	120	144
133	M46	X	0.024	0.024	144	168
134	M46	Y	-0.067	-0.067	144	168
135	M46	X	0.024	0.023	168	192
136	M46	Y	-0.067	-0.066	168	192
137	M46	X	0.023	0.021	192	216
138	M46	Y	-0.066	-0.06	192	216
139	M46	X	0.021	0.02	216	240
140	M46	Y	-0.06	-0.056	216	240
141	M47	X	0.021	0.023	0	24
142	M47	Y	-0.06	-0.065	0	24
143	M47	X	0.023	0.024	24	48
144	M47	Y	-0.065	-0.066	24	48
145	M47	X	0.024	0.023	48	72
146	M47	Y	-0.066	-0.065	48	72
147	M47	X	0.023	0.023	72	96
148	M47	Y	-0.065	-0.064	72	96
149	M47	X	0.023	0.022	96	120
150	M47	Y	-0.064	-0.063	96	120
151	M47	X	0.022	0.022	120	144
152	M47	Y	-0.063	-0.061	120	144
153	M47	X	0.022	0.021	144	168
154	M47	Y	-0.061	-0.059	144	168
155	M47	X	0.021	0.022	168	192
156	M47	Y	-0.059	-0.061	168	192
157	M47	X	0.022	0.022	192	216
158	M47	Y	-0.061	-0.063	192	216
159	M47	X	0.022	0.023	216	240
160	M47	Y	-0.063	-0.064	216	240
161	M47	X	0.023	0.024	240	264
162	M47	Y	-0.064	-0.067	240	264
163	M47	X	0.024	0.024	264	288
164	M47	Y	-0.067	-0.068	264	288
165	M47	X	0.024	0.024	288	312

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
166	M47	Y	-0.068	-0.067	288	312
167	M47	X	0.024	0.022	312	336
168	M47	Y	-0.067	-0.063	312	336
169	M47	X	0.022	0.019	336	360
170	M47	Y	-0.063	-0.052	336	360
171	M48	X	0.023	0.023	0	240
172	M48	Y	-0.064	-0.064	0	240
173	M49	X	0.023	0.023	0	360
174	M49	Y	-0.064	-0.064	0	360
175	M50	X	0.023	0.023	2.673e-13	240
176	M50	Y	-0.064	-0.064	2.673e-13	240
177	M51	X	0.023	0.023	0	360
178	M51	Y	-0.064	-0.064	0	360
179	M52	X	0.023	0.023	4.53e-14	240
180	M52	Y	-0.064	-0.064	4.53e-14	240
181	M53	X	0.023	0.023	5.596e-14	360
182	M53	Y	-0.064	-0.064	5.596e-14	360
183	M54	X	0.023	0.023	0	240
184	M54	Y	-0.064	-0.064	0	240
185	M55	X	0.023	0.023	0	360
186	M55	Y	-0.064	-0.064	0	360
187	M56	X	0.023	0.023	4.441e-15	240
188	M56	Y	-0.064	-0.064	4.441e-15	240
189	M57	X	0.023	0.023	5.773e-14	360
190	M57	Y	-0.064	-0.064	5.773e-14	360
191	M58	X	0.023	0.023	5.862e-14	240
192	M58	Y	-0.064	-0.064	5.862e-14	240
193	M59	X	0.023	0.023	4.263e-14	360
194	M59	Y	-0.064	-0.064	4.263e-14	360
195	M60	X	0.023	0.023	1.421e-14	240
196	M60	Y	-0.064	-0.064	1.421e-14	240
197	M61	X	0.023	0.023	1.421e-14	360
198	M61	Y	-0.064	-0.064	1.421e-14	360
199	M83	X	0.023	0.023	1.599e-14	36
200	M83	Y	-0.064	-0.064	1.599e-14	36
201	M84	X	0.023	0.023	0	36
202	M84	Y	-0.064	-0.064	0	36
203	M86	X	0.023	0.023	1.243e-14	36
204	M86	Y	-0.064	-0.064	1.243e-14	36
205	M87	X	0.014	0.019	0	7.2
206	M87	Y	-0.039	-0.055	0	7.2
207	M87	X	0.019	0.011	7.2	14.4
208	M87	Y	-0.055	-0.032	7.2	14.4
209	M87	X	0.011	0.011	14.4	21.6
210	M87	Y	-0.032	-0.032	14.4	21.6
211	M87	X	0.011	0.019	21.6	28.8
212	M87	Y	-0.032	-0.055	21.6	28.8
213	M87	X	0.019	0.014	28.8	36
214	M87	Y	-0.055	-0.039	28.8	36
215	M88	X	0.023	0.023	1.066e-14	36
216	M88	Y	-0.064	-0.064	1.066e-14	36
217	M90	X	0.01	0.022	0	9
218	M90	Y	-0.028	-0.062	0	9
219	M90	X	0.022	0.031	9	18
220	M90	Y	-0.062	-0.087	9	18

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
221	M90	X	0.031	0.025	18	27
222	M90	Y	-0.087	-0.07	18	27
223	M90	X	0.025	0.007	27	36
224	M90	Y	-0.07	-0.02	27	36
225	M93	X	0.023	0.023	7.105e-15	36
226	M93	Y	-0.064	-0.064	7.105e-15	36
227	M95	X	0.023	0.023	3.553e-15	36
228	M95	Y	-0.064	-0.064	3.553e-15	36
229	M96	X	0.023	0.023	0	36
230	M96	Y	-0.064	-0.064	0	36
231	M100	X	-4.467e-17	-2.212e-17	0	18
232	M100	Y	-0.015	-0.015	0	18
233	M100	X	-2.212e-17	-8.674e-19	18	36
234	M100	Y	-0.015	-0.015	18	36
235	M102	X	0.011	0.011	1.776e-15	36
236	M102	Y	-0.032	-0.032	1.776e-15	36
237	M15	Y	-0.032	-0.032	0	240
238	M140	Y	-0.032	-0.032	0	360
239	M62	X	-0.023	-0.023	1.039e-13	360
240	M62	Y	-0.064	-0.064	1.039e-13	360
241	M63	X	-0.023	-0.023	9.504e-14	360
242	M63	Y	-0.064	-0.064	9.504e-14	360
243	M64	X	-0.018	-0.015	0	24
244	M64	Y	-0.052	-0.042	0	24
245	M64	X	-0.015	-0.013	24	48
246	M64	Y	-0.042	-0.037	24	48
247	M64	X	-0.013	-0.012	48	72
248	M64	Y	-0.037	-0.035	48	72
249	M64	X	-0.012	-0.012	72	96
250	M64	Y	-0.035	-0.035	72	96
251	M64	X	-0.012	-0.014	96	120
252	M64	Y	-0.035	-0.039	96	120
253	M64	X	-0.014	-0.016	120	144
254	M64	Y	-0.039	-0.046	120	144
255	M64	X	-0.016	-0.014	144	168
256	M64	Y	-0.046	-0.041	144	168
257	M64	X	-0.014	-0.012	168	192
258	M64	Y	-0.041	-0.034	168	192
259	M64	X	-0.012	-0.014	192	216
260	M64	Y	-0.034	-0.04	192	216
261	M64	X	-0.014	-0.017	216	240
262	M64	Y	-0.04	-0.047	216	240
263	M65	X	-0.023	-0.023	2.602e-13	240
264	M65	Y	-0.064	-0.064	2.602e-13	240
265	M66	X	-0.018	-0.014	0	24
266	M66	Y	-0.052	-0.041	0	24
267	M66	X	-0.014	-0.012	24	48
268	M66	Y	-0.041	-0.034	24	48
269	M66	X	-0.012	-0.012	48	72
270	M66	Y	-0.034	-0.035	48	72
271	M66	X	-0.012	-0.013	72	96
272	M66	Y	-0.035	-0.038	72	96
273	M66	X	-0.013	-0.014	96	120
274	M66	Y	-0.038	-0.039	96	120
275	M66	X	-0.014	-0.014	120	144

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
276	M66	Y	-0.039	-0.039	120	144
277	M66	X	-0.014	-0.015	144	168
278	M66	Y	-0.039	-0.041	144	168
279	M66	X	-0.015	-0.016	168	192
280	M66	Y	-0.041	-0.046	168	192
281	M66	X	-0.016	-0.016	192	216
282	M66	Y	-0.046	-0.044	192	216
283	M66	X	-0.016	-0.014	216	240
284	M66	Y	-0.044	-0.039	216	240
285	M66	X	-0.014	-0.014	240	264
286	M66	Y	-0.039	-0.04	240	264
287	M66	X	-0.014	-0.013	264	288
288	M66	Y	-0.04	-0.036	264	288
289	M66	X	-0.013	-0.012	288	312
290	M66	Y	-0.036	-0.034	288	312
291	M66	X	-0.012	-0.014	312	336
292	M66	Y	-0.034	-0.04	312	336
293	M66	X	-0.014	-0.017	336	360
294	M66	Y	-0.04	-0.047	336	360
295	M67	X	-0.023	-0.023	7.55e-14	360
296	M67	Y	-0.064	-0.064	7.55e-14	360
297	M68	X	-0.023	-0.023	2.398e-14	240
298	M68	Y	-0.064	-0.064	2.398e-14	240
299	M69	X	-0.02	-0.021	0	24
300	M69	Y	-0.056	-0.06	0	24
301	M69	X	-0.021	-0.023	24	48
302	M69	Y	-0.06	-0.066	24	48
303	M69	X	-0.023	-0.024	48	72
304	M69	Y	-0.066	-0.067	48	72
305	M69	X	-0.024	-0.024	72	96
306	M69	Y	-0.067	-0.067	72	96
307	M69	X	-0.024	-0.023	96	120
308	M69	Y	-0.067	-0.064	96	120
309	M69	X	-0.023	-0.021	120	144
310	M69	Y	-0.064	-0.059	120	144
311	M69	X	-0.021	-0.022	144	168
312	M69	Y	-0.059	-0.061	144	168
313	M69	X	-0.022	-0.023	168	192
314	M69	Y	-0.061	-0.066	168	192
315	M69	X	-0.023	-0.023	192	216
316	M69	Y	-0.066	-0.065	192	216
317	M69	X	-0.023	-0.021	216	240
318	M69	Y	-0.065	-0.06	216	240
319	M70	X	-0.023	-0.023	1.705e-13	360
320	M70	Y	-0.064	-0.064	1.705e-13	360
321	M71	X	-0.023	-0.023	1.137e-13	240
322	M71	Y	-0.064	-0.064	1.137e-13	240
323	M74	X	-0.023	-0.023	6.128e-14	360
324	M74	Y	-0.064	-0.064	6.128e-14	360
325	M75	X	-0.023	-0.023	1.705e-13	360
326	M75	Y	-0.064	-0.064	1.705e-13	360
327	M76	X	-0.023	-0.023	5.693e-13	240
328	M76	Y	-0.064	-0.064	5.693e-13	240
329	M77	X	-0.023	-0.023	2.771e-13	240
330	M77	Y	-0.064	-0.064	2.771e-13	240

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
331	M78	X	-0.023	-0.023	2.158e-13	240
332	M78	Y	-0.064	-0.064	2.158e-13	240
333	M79	X	-0.023	-0.023	2.158e-13	240
334	M79	Y	-0.064	-0.064	2.158e-13	240
335	M80	X	-0.019	-0.022	0	24
336	M80	Y	-0.052	-0.063	0	24
337	M80	X	-0.022	-0.024	24	48
338	M80	Y	-0.063	-0.067	24	48
339	M80	X	-0.024	-0.024	48	72
340	M80	Y	-0.067	-0.068	48	72
341	M80	X	-0.024	-0.024	72	96
342	M80	Y	-0.068	-0.067	72	96
343	M80	X	-0.024	-0.023	96	120
344	M80	Y	-0.067	-0.064	96	120
345	M80	X	-0.023	-0.022	120	144
346	M80	Y	-0.064	-0.063	120	144
347	M80	X	-0.022	-0.022	144	168
348	M80	Y	-0.063	-0.061	144	168
349	M80	X	-0.022	-0.021	168	192
350	M80	Y	-0.061	-0.059	168	192
351	M80	X	-0.021	-0.022	192	216
352	M80	Y	-0.059	-0.061	192	216
353	M80	X	-0.022	-0.022	216	240
354	M80	Y	-0.061	-0.063	216	240
355	M80	X	-0.022	-0.023	240	264
356	M80	Y	-0.063	-0.064	240	264
357	M80	X	-0.023	-0.023	264	288
358	M80	Y	-0.064	-0.065	264	288
359	M80	X	-0.023	-0.024	288	312
360	M80	Y	-0.065	-0.066	288	312
361	M80	X	-0.024	-0.023	312	336
362	M80	Y	-0.066	-0.065	312	336
363	M80	X	-0.023	-0.021	336	360
364	M80	Y	-0.065	-0.06	336	360
365	M81	X	-0.023	-0.023	7.105e-14	360
366	M81	Y	-0.064	-0.064	7.105e-14	360
367	M82	X	-0.014	-0.019	0	7.2
368	M82	Y	-0.039	-0.055	0	7.2
369	M82	X	-0.019	-0.011	7.2	14.4
370	M82	Y	-0.055	-0.032	7.2	14.4
371	M82	X	-0.011	-0.011	14.4	21.6
372	M82	Y	-0.032	-0.032	14.4	21.6
373	M82	X	-0.011	-0.019	21.6	28.8
374	M82	Y	-0.032	-0.055	21.6	28.8
375	M82	X	-0.019	-0.014	28.8	36
376	M82	Y	-0.055	-0.039	28.8	36
377	M85	X	-0.004	-0.022	0	9
378	M85	Y	-0.012	-0.062	0	9
379	M85	X	-0.022	-0.017	9	18
380	M85	Y	-0.062	-0.047	9	18
381	M85	X	-0.017	-0.019	18	27
382	M85	Y	-0.047	-0.054	18	27
383	M85	X	-0.019	-0.052	27	36
384	M85	Y	-0.054	-0.148	27	36
385	M89	X	-0.023	-0.023	0	36

Member Distributed Loads (BLC 19 : BLC 13 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
386	M89	Y	-0.064	-0.064	0	36
387	M91	X	-0.023	-0.023	0	36
388	M91	Y	-0.064	-0.064	0	36
389	M92	X	-0.023	-0.023	0	36
390	M92	Y	-0.064	-0.064	0	36
391	M94	X	-0.023	-0.023	0	36
392	M94	Y	-0.064	-0.064	0	36
393	M97	X	-0.023	-0.023	0	36
394	M97	Y	-0.064	-0.064	0	36
395	M98	X	-0.023	-0.023	0	36
396	M98	Y	-0.064	-0.064	0	36
397	M99	X	-0.023	-0.023	0	36
398	M99	Y	-0.064	-0.064	0	36
399	M101	X	-0.011	-0.011	0	36
400	M101	Y	-0.032	-0.032	0	36
401	M18	Y	-0.024	-0.024	1.51e-14	240
402	M39	Y	-0.024	-0.024	1.51e-14	240
403	M40	Y	-0.024	-0.024	1.51e-14	360

Member Distributed Loads (BLC 20 : BLC 14 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M45	Y	-0.031	-0.027	0	24
2	M45	Y	-0.027	-0.023	24	48
3	M45	Y	-0.023	-0.027	48	72
4	M45	Y	-0.027	-0.031	72	96
5	M45	Y	-0.031	-0.026	96	120
6	M45	Y	-0.026	-0.023	120	144
7	M45	Y	-0.023	-0.023	144	168
8	M45	Y	-0.023	-0.025	168	192
9	M45	Y	-0.025	-0.028	192	216
10	M45	Y	-0.028	-0.034	216	240
11	M46	Y	-0.04	-0.043	0	24
12	M46	Y	-0.043	-0.043	24	48
13	M46	Y	-0.043	-0.041	48	72
14	M46	Y	-0.041	-0.039	72	96
15	M46	Y	-0.039	-0.042	96	120
16	M46	Y	-0.042	-0.044	120	144
17	M46	Y	-0.044	-0.045	144	168
18	M46	Y	-0.045	-0.044	168	192
19	M46	Y	-0.044	-0.04	192	216
20	M46	Y	-0.04	-0.037	216	240
21	M47	Y	-0.04	-0.043	0	24
22	M47	Y	-0.043	-0.044	24	48
23	M47	Y	-0.044	-0.043	48	72
24	M47	Y	-0.043	-0.043	72	96
25	M47	Y	-0.043	-0.042	96	120
26	M47	Y	-0.042	-0.04	120	144
27	M47	Y	-0.04	-0.039	144	168
28	M47	Y	-0.039	-0.04	168	192
29	M47	Y	-0.04	-0.042	192	216
30	M47	Y	-0.042	-0.042	216	240
31	M47	Y	-0.042	-0.045	240	264
32	M47	Y	-0.045	-0.045	264	288
33	M47	Y	-0.045	-0.044	288	312
34	M47	Y	-0.044	-0.042	312	336

Member Distributed Loads (BLC 20 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
35	M47	Y	-0.042	-0.035	336	360
36	M48	Y	-0.042	-0.042	3.979e-13	240
37	M49	Y	-0.042	-0.042	7.816e-14	360
38	M50	Y	-0.042	-0.042	6.395e-14	240
39	M51	Y	-0.042	-0.042	2.371e-13	360
40	M52	Y	-0.042	-0.042	1.235e-13	240
41	M53	Y	-0.042	-0.042	3.819e-14	360
42	M54	Y	-0.042	-0.042	3.411e-13	240
43	M55	Y	-0.042	-0.042	0	360
44	M56	Y	-0.042	-0.042	2.94e-13	240
45	M57	Y	-0.042	-0.042	3.464e-14	360
46	M58	Y	-0.042	-0.042	6.661e-14	240
47	M59	Y	-0.042	-0.042	1.865e-14	360
48	M60	Y	-0.042	-0.042	1.865e-14	240
49	M61	Y	-0.042	-0.042	1.421e-14	360
50	M83	Y	-0.042	-0.042	0	36
51	M84	Y	-0.042	-0.042	1.421e-14	36
52	M86	Y	-0.042	-0.042	0	36
53	M87	Y	-0.026	-0.036	0	7.2
54	M87	Y	-0.036	-0.022	7.2	14.4
55	M87	Y	-0.022	-0.022	14.4	21.6
56	M87	Y	-0.022	-0.036	21.6	28.8
57	M87	Y	-0.036	-0.026	28.8	36
58	M88	Y	-0.042	-0.042	0	36
59	M90	Y	-0.008	-0.041	0	9
60	M90	Y	-0.041	-0.031	9	18
61	M90	Y	-0.031	-0.036	18	27
62	M90	Y	-0.036	-0.098	27	36
63	M93	Y	-0.042	-0.042	8.882e-15	36
64	M95	Y	-0.042	-0.042	0	36
65	M96	Y	-0.042	-0.042	1.421e-14	36
66	M100	Y	-0.01	-0.01	0	18
67	M100	Y	-0.01	-0.01	18	36
68	M102	Y	-0.021	-0.021	1.776e-15	36
69	M15	Y	-0.021	-0.021	0	240
70	M140	Y	-0.021	-0.021	0	360
71	M62	Y	-0.042	-0.042	8.971e-14	360
72	M63	Y	-0.042	-0.042	7.55e-14	360
73	M64	Y	-0.034	-0.028	0	24
74	M64	Y	-0.028	-0.025	24	48
75	M64	Y	-0.025	-0.023	48	72
76	M64	Y	-0.023	-0.023	72	96
77	M64	Y	-0.023	-0.026	96	120
78	M64	Y	-0.026	-0.031	120	144
79	M64	Y	-0.031	-0.027	144	168
80	M64	Y	-0.027	-0.023	168	192
81	M64	Y	-0.023	-0.027	192	216
82	M64	Y	-0.027	-0.031	216	240
83	M65	Y	-0.042	-0.042	2.558e-13	240
84	M66	Y	-0.034	-0.027	0	24
85	M66	Y	-0.027	-0.023	24	48
86	M66	Y	-0.023	-0.023	48	72
87	M66	Y	-0.023	-0.025	72	96
88	M66	Y	-0.025	-0.026	96	120
89	M66	Y	-0.026	-0.026	120	144

Member Distributed Loads (BLC 20 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
90	M66	Y	-0.026	-0.027	144	168
91	M66	Y	-0.027	-0.031	168	192
92	M66	Y	-0.031	-0.029	192	216
93	M66	Y	-0.029	-0.026	216	240
94	M66	Y	-0.026	-0.026	240	264
95	M66	Y	-0.026	-0.024	264	288
96	M66	Y	-0.024	-0.023	288	312
97	M66	Y	-0.023	-0.027	312	336
98	M66	Y	-0.027	-0.031	336	360
99	M67	Y	-0.042	-0.042	8.082e-14	360
100	M68	Y	-0.042	-0.042	3.286e-14	240
101	M69	Y	-0.037	-0.04	0	24
102	M69	Y	-0.04	-0.044	24	48
103	M69	Y	-0.044	-0.045	48	72
104	M69	Y	-0.045	-0.044	72	96
105	M69	Y	-0.044	-0.043	96	120
106	M69	Y	-0.043	-0.039	120	144
107	M69	Y	-0.039	-0.041	144	168
108	M69	Y	-0.041	-0.044	168	192
109	M69	Y	-0.044	-0.043	192	216
110	M69	Y	-0.043	-0.04	216	240
111	M70	Y	-0.042	-0.042	1.75e-13	360
112	M71	Y	-0.042	-0.042	1.172e-13	240
113	M74	Y	-0.042	-0.042	5.684e-14	360
114	M75	Y	-0.042	-0.042	1.705e-13	360
115	M76	Y	-0.042	-0.042	5.551e-13	240
116	M77	Y	-0.042	-0.042	2.798e-13	240
117	M78	Y	-0.042	-0.042	1.99e-13	240
118	M79	Y	-0.042	-0.042	2.274e-13	240
119	M80	Y	-0.035	-0.042	0	24
120	M80	Y	-0.042	-0.044	24	48
121	M80	Y	-0.044	-0.045	48	72
122	M80	Y	-0.045	-0.045	72	96
123	M80	Y	-0.045	-0.042	96	120
124	M80	Y	-0.042	-0.042	120	144
125	M80	Y	-0.042	-0.04	144	168
126	M80	Y	-0.04	-0.039	168	192
127	M80	Y	-0.039	-0.04	192	216
128	M80	Y	-0.04	-0.042	216	240
129	M80	Y	-0.042	-0.042	240	264
130	M80	Y	-0.042	-0.043	264	288
131	M80	Y	-0.043	-0.044	288	312
132	M80	Y	-0.044	-0.043	312	336
133	M80	Y	-0.043	-0.04	336	360
134	M81	Y	-0.042	-0.042	6.661e-14	360
135	M82	Y	-0.026	-0.036	0	7.2
136	M82	Y	-0.036	-0.022	7.2	14.4
137	M82	Y	-0.022	-0.022	14.4	21.6
138	M82	Y	-0.022	-0.037	21.6	28.8
139	M82	Y	-0.037	-0.026	28.8	36
140	M85	Y	-0.008	-0.041	0	9
141	M85	Y	-0.041	-0.031	9	18
142	M85	Y	-0.031	-0.036	18	27
143	M85	Y	-0.036	-0.098	27	36
144	M89	Y	-0.042	-0.042	0	36

Member Distributed Loads (BLC 20 : BLC 14 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
145	M91	Y	-0.042	-0.042	0	36
146	M92	Y	-0.042	-0.042	0	36
147	M94	Y	-0.042	-0.042	0	36
148	M97	Y	-0.042	-0.042	0	36
149	M98	Y	-0.042	-0.042	0	36
150	M99	Y	-0.042	-0.042	1.776e-15	36
151	M101	Y	-0.021	-0.021	3.553e-15	36
152	M180	Y	-0.015	-0.015	1.51e-14	360
153	M40	Y	-0.015	-0.015	1.51e-14	360
154	M18	Y	-0.015	-0.015	1.51e-14	240
155	M39	Y	-0.015	-0.015	1.51e-14	240
156	M18	Y	-0.021	-0.021	2.665e-14	240
157	M72	Y	-0.01	-0.01	0	24
158	M72	Y	-0.01	-0.01	24	48
159	M72	Y	-0.01	-0.01	48	72
160	M72	Y	-0.01	-0.01	72	96
161	M72	Y	-0.01	-0.01	96	120
162	M72	Y	-0.01	-0.01	120	144
163	M72	Y	-0.01	-0.01	144	168
164	M72	Y	-0.01	-0.01	168	192
165	M72	Y	-0.01	-0.01	192	216
166	M72	Y	-0.01	-0.01	216	240
167	M73	Y	-0.01	-0.01	0	24
168	M73	Y	-0.01	-0.01	24	48
169	M73	Y	-0.01	-0.01	48	72
170	M73	Y	-0.01	-0.01	72	96
171	M73	Y	-0.01	-0.01	96	120
172	M73	Y	-0.01	-0.01	120	144
173	M73	Y	-0.01	-0.01	144	168
174	M73	Y	-0.01	-0.01	168	192
175	M73	Y	-0.01	-0.01	192	216
176	M73	Y	-0.01	-0.01	216	240
177	M73	Y	-0.01	-0.01	240	264
178	M73	Y	-0.01	-0.01	264	288
179	M73	Y	-0.01	-0.01	288	312
180	M73	Y	-0.01	-0.01	312	336
181	M73	Y	-0.01	-0.01	336	360
182	M180	Y	-0.021	-0.021	1.865e-14	360
183	M44	Y	-0.031	-0.027	0	24
184	M44	Y	-0.027	-0.023	24	48
185	M44	Y	-0.023	-0.024	48	72
186	M44	Y	-0.024	-0.026	72	96
187	M44	Y	-0.026	-0.026	96	120
188	M44	Y	-0.026	-0.029	120	144
189	M44	Y	-0.029	-0.031	144	168
190	M44	Y	-0.031	-0.027	168	192
191	M44	Y	-0.027	-0.026	192	216
192	M44	Y	-0.026	-0.026	216	240
193	M44	Y	-0.026	-0.025	240	264
194	M44	Y	-0.025	-0.023	264	288
195	M44	Y	-0.023	-0.023	288	312
196	M44	Y	-0.023	-0.027	312	336
197	M44	Y	-0.027	-0.034	336	360

Member Area Loads (BLC 1 : DL)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N10	N108	N110	N15	Y	B-C	-0.002
2	N11	N15	N110	N109	Y	A-B	-0.002
3	N95	N30	N26	N7	Y	A-B	-0.002
4	N10	N27	N26	N7	Y	A-B	-0.002

Member Area Loads (BLC 4 : WLX)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N10	N15	N110	N108	Perp	A-B	-0.016
2	N15	N110	N109	N11	Perp	B-C	-0.016
3	N95	N30	N27	N10	Y	A-B	-0.016
4	N95	N10	N3	N90	X	Open Structure	0.017

Member Area Loads (BLC 5 : WLZ)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N91	N96	N95	N90	Z	Open Structure	0.017
2	N97	N96	N95		Z	Open Structure	0.017
3	N111	N113	N110	N108	Z	A-B	0.012
4	N113	N110	N109	N112	Z	B-C	0.012
5	N95	N30	N117	N111	Z	A-B	0.012
6	N114	N116	N113	N111	Z	A-B	0.009
7	N116	N113	N112	N115	Z	B-C	0.009
8	N111	N117	N118	N114	Z	A-B	0.01
9	N10	N15	N116	N114	Z	A-B	0.005
10	N15	N116	N115	N11	Z	B-C	0.005
11	N114	N118	N27	N10	Z	A-B	0.005

Member Area Loads (BLC 6 : RLL)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N10	N108	N110	N15	Y	B-C	-0.02
2	N11	N15	N110	N109	Y	A-B	-0.02
3	N95	N30	N26	N7	Y	A-B	-0.02
4	N10	N27	N26	N7	Y	A-B	-0.02

Member Area Loads (BLC 13 : OL7)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N10	N15	N110	N108	Perp	A-B	-0.016
2	N15	N110	N109	N11	Perp	B-C	0.016
3	N95	N30	N27	N10	Y	A-B	-0.016
4	N95	N10	N3	N90	X	Open Structure	0.017

Member Area Loads (BLC 14 : COLLATERAL DL)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N10	N108	N110	N15	Y	B-C	-0.01
2	N11	N15	N110	N109	Y	A-B	-0.01
3	N95	N30	N26	N7	Y	A-B	-0.01
4	N10	N27	N26	N7	Y	A-B	-0.01

Company : <Licensed Company>
Designer : tony.arzate
Job Number :
Model Name : HHW Canopy

Checked By : _____

Basic Load Cases

	BLC Description	Category	Y Gravity	Point	Distributed	Area(Member)
1	DL	DL	-1	4		4
2	ELX	ELX			84	
3	ELZ	ELZ			84	
4	WLX	WLX				4
5	WLZ	WLZ				11
6	RLL	RLL				4
7	OL1	OL1		4		
8	OL2	OL2		2		
9	OL3	OL3		2		
10	OL4	OL4		8		
11	OL5	OL5		4		
12	OL6	OL6		4		
13	OL7	OL7				4
14	COLLATERAL DL	OL8				4
15	BLC 1 Transient Area Loads	None			197	
16	BLC 4 Transient Area Loads	None			403	
17	BLC 5 Transient Area Loads	None			261	
18	BLC 6 Transient Area Loads	None			197	
19	BLC 13 Transient Area Loads	None			403	
20	BLC 14 Transient Area Loads	None			197	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	LRFD Gravity																
2	IBC 16-1	Yes	Y	DL	1.4											OL8	1.4
3	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5							OL8	1.2
4	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6									OL8	1.2
5	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5							OL8	1.2
6	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5									OL8	1.2
7	LRFD Seismic																
8	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5					OL8	1.2
9	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5					OL8	1.2
10	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5					OL8	1.2
11	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5					OL8	1.2
12	IBC 16-7 (a)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELX	1								
13	IBC 16-7 (b)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELZ	1								
14	IBC 16-7 (c)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELX	-1								
15	IBC 16-7 (d)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELZ	-1								
16	LRFD Wind															OL8	1.2
17	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	WLX	0.5							OL8	1.2
18	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	WLZ	0.5							OL8	1.2
19	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	WLX	-0.5							OL8	1.2
20	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	WLZ	-0.5							OL8	1.2
21	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	WLX	0.5									OL8	1.2
22	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	WLZ	0.5									OL8	1.2
23	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	WLX	-0.5									OL8	1.2
24	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	WLZ	-0.5									OL8	1.2
25	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5					OL8	1.2
26	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5					OL8	1.2
27	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5					OL8	1.2
28	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5					OL8	1.2
29	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5							OL8	1.2
30	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	1	LL	0.5							OL8	1.2
31	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	-1	LL	0.5							OL8	1.2

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
32	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5							OL8	1.2
33	IBC 16-6 (a)	Yes	Y	DL	0.45	WLX	1										
34	IBC 16-6 (b)	Yes	Y	DL	0.45	WLZ	-1										
35	ASD																
36	Deflection 1	Yes	Y	DL	1											OL8	1
37	Deflection 2	Yes	Y	LL	1												
38	Deflection 3	Yes	Y	DL	1	LL	1									OL8	1
39	IBC 16-10 (a)	Yes	Y	DL	1	RLL	1									OL8	1
40	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75							OL8	1
41	IBC 16-12 (a) (a)	Yes	Y	DL	1	WLX	0.6									OL8	1
42	IBC 16-12 (a) (b)	Yes	Y	DL	1	WLZ	0.6									OL8	1
43	IBC 16-12 (a) (a)	Yes	Y	DL	1	WLX	-0.6									OL8	1
44	IBC 16-12 (a) (b)	Yes	Y	DL	1	WLZ	-0.6									OL8	1
45	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75					OL8	1
46	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75					OL8	1
47	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75					OL8	1
48	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75					OL8	1
49	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75							OL8	1
50	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	0.45	LL	0.75							OL8	1
51	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	-0.45	LL	0.75							OL8	1
52	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75							OL8	1
53	IBC 16-15 (a)	Yes	Y	DL	0.3	WLX	0.6										
54	IBC 16-15 (b)	Yes	Y	DL	0.3	WLZ	0.6										
55	IBC 16-15 (a)	Yes	Y	DL	0.3	WLX	-0.6										
56	IBC 16-15 (b)	Yes	Y	DL	0.3	WLZ	-0.6										
57	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75							OL8	1
58	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75							OL8	1
59	IBC 16-16 (a)	Yes	Y	DL	0.3	ELX	0.7										
60	IBC 16-16 (b)	Yes	Y	DL	0.3	ELZ	-0.7										
61																	
62	Crane Load Case #1																
63	LRFD Gravity																
64	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5			OL1	1.6	OL4	1.6	OL8	1.2
65	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6					OL1	1.6	OL4	1.6	OL8	1.2
66	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
67	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5					OL1	0.5	OL4	0.5	OL8	1.2
68	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5			OL1	1.6	OL4	-1.6	OL8	1.2
69	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6					OL1	1.6	OL4	-1.6	OL8	1.2
70	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
71	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5					OL1	0.5	OL4	-0.5	OL8	1.2
72	LRFD Seismic																
73	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
74	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
75	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
76	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
77	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
78	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
79	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
80	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
81	LRFD Wind																
82	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
83	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
84	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
85	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
86	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
87	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
88	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
89	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
90	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
91	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
92	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
93	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
94	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
95	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
96	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
97	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
98	ASD																
99	Deflection 2	Yes	Y	LL	1							OL1	1	OL4	1		
100	Deflection 3	Yes	Y	DL	1	LL	1					OL1	1	OL4	1	OL8	1
101	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75			OL1	0.75	OL4	0.75	OL8	1
102	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
103	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
104	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
105	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
106	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
107	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
108	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
109	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
110	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
111	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
112	Deflection 2	Yes	Y	LL	1							OL1	1	OL4	-1		
113	Deflection 3	Yes	Y	DL	1	LL	1					OL1	1	OL4	-1	OL8	1
114	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75			OL1	0.75	OL4	-0.75	OL8	1
115	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
116	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
117	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
118	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
119	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
120	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
121	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
122	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
123	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
124	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
125																	
126	Crane Load Case #2																
127	LRFD Gravity																
128	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5			OL2	1.6	OL5	1.6	OL8	1.2
129	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6					OL2	1.6	OL5	1.6	OL8	1.2
130	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
131	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5					OL2	0.5	OL5	0.5	OL8	1.2
132	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5			OL2	1.6	OL5	-1.6	OL8	1.2
133	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6					OL2	1.6	OL5	-1.6	OL8	1.2
134	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
135	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5					OL2	0.5	OL5	-0.5	OL8	1.2
136	LRFD Seismic																
137	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
138	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
139	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
140	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
141	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
142	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
143	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
144	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
145	LRFD Wind																
146	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
147	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
148	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
149	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
150	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
151	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
152	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
153	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
154	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
155	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
156	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
157	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
158	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
159	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
160	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
161	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
162	ASD																
163	Deflection 2	Yes	Y	LL	1							OL2	1	OL5	1		
164	Deflection 3	Yes	Y	DL	1	LL	1					OL2	1	OL5	1	OL8	1
165	IBC 16-9	Yes	Y	DL	1	LL	1					OL2	1	OL5	1	OL8	1
166	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75			OL2	0.75	OL5	0.75	OL8	1
167	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
168	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
169	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
170	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
171	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
172	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
173	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
174	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
175	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
176	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
177	Deflection 2	Yes	Y	LL	1							OL2	1	OL5	-1		
178	Deflection 3	Yes	Y	DL	1	LL	1					OL2	1	OL5	-1	OL8	1
179	IBC 16-9	Yes	Y	DL	1	LL	1					OL2	1	OL5	-1	OL8	1
180	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75			OL2	0.75	OL5	-0.75	OL8	1
181	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
182	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
183	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
184	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
185	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
186	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
187	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
188	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
189	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
190	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
191																	
192	Crane Load Case #3																
193	LRFD Gravity																
194	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5			OL3	1.6	OL6	1.6	OL8	1.2
195	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6					OL3	1.6	OL6	1.6	OL8	1.2
196	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
197	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5					OL3	0.5	OL6	0.5	OL8	1.2
198	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5			OL3	1.6	OL6	-1.6	OL8	1.2
199	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6					OL3	1.6	OL6	-1.6	OL8	1.2
200	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
201	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5					OL3	0.5	OL6	-0.5	OL8	1.2
202	LRFD Seismic																
203	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
204	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
205	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
206	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
207	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
208	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
209	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
210	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
211	LRFD Wind																
212	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
213	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
214	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
215	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
216	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
217	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
218	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
219	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
220	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
221	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
222	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
223	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
224	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
225	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
226	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
227	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
228	ASD																
229	Deflection 2	Yes	Y	LL	1							OL3	1	OL6	1		
230	Deflection 3	Yes	Y	DL	1	LL	1					OL3	1	OL6	1	OL8	1
231	IBC 16-9	Yes	Y	DL	1	LL	1					OL3	1	OL6	1	OL8	1
232	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75			OL3	0.75	OL6	0.75	OL8	1
233	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
234	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
235	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
236	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
237	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
238	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
239	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
240	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
241	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
242	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
243	Deflection 2	Yes	Y	LL	1							OL3	1	OL6	-1		
244	Deflection 3	Yes	Y	DL	1	LL	1					OL3	1	OL6	-1	OL8	1
245	IBC 16-9	Yes	Y	DL	1	LL	1					OL3	1	OL6	-1	OL8	1
246	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75			OL3	0.75	OL6	-0.75	OL8	1
247	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
248	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
249	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
250	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
251	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
252	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLZ	0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
253	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLX	-0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
254	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
255	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
256	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
257																	
258	ROOF LOAD APPLIED IN SAME DIRECTION																
259	LRFD Wind																
260	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	OL7	0.5							OL8	1.2
261	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	OL7	0.5							OL8	1.2
262	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	OL7	-0.5							OL8	1.2
263	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	OL7	-0.5							OL8	1.2
264	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	OL7	0.5									OL8	1.2
265	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	OL7	0.5									OL8	1.2
266	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	OL7	-0.5									OL8	1.2
267	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	OL7	-0.5									OL8	1.2
268	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5					OL8	1.2
269	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5					OL8	1.2
270	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5					OL8	1.2
271	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5					OL8	1.2
272	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5							OL8	1.2
273	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	1	LL	0.5							OL8	1.2
274	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	-1	LL	0.5							OL8	1.2
275	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5							OL8	1.2
276	IBC 16-6 (a)	Yes	Y	DL	0.45	OL7	1										
277	IBC 16-6 (b)	Yes	Y	DL	0.45	OL7	-1										
278	ASD																
279	IBC 16-12 (a) (a)	Yes	Y	DL	1	OL7	0.6									OL8	1
280	IBC 16-12 (a) (b)	Yes	Y	DL	1	OL7	0.6									OL8	1
281	IBC 16-12 (a) (a)	Yes	Y	DL	1	OL7	-0.6									OL8	1
282	IBC 16-12 (a) (b)	Yes	Y	DL	1	OL7	-0.6									OL8	1
283	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75					OL8	1
284	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75					OL8	1
285	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75					OL8	1
286	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75					OL8	1
287	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75							OL8	1
288	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	0.45	LL	0.75							OL8	1
289	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	-0.45	LL	0.75							OL8	1
290	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75							OL8	1
291	IBC 16-15 (a)	Yes	Y	DL	0.3	OL7	0.6										
292	IBC 16-15 (b)	Yes	Y	DL	0.3	OL7	0.6										
293	IBC 16-15 (a)	Yes	Y	DL	0.3	OL7	-0.6										
294	IBC 16-15 (b)	Yes	Y	DL	0.3	OL7	-0.6										
295																	
296	Crane Load Case #1																
297	LRFD Wind																
298	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
299	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
300	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
301	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	0.5	OL8	1.2
302	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
303	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
304	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
305	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL1	0.5	OL4	0.5	OL8	1.2
306	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
307	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
308	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
309	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL1	0.5	OL4	-0.5	OL8	1.2
310	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
311	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
312	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
313	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL1	0.5	OL4	-0.5	OL8	1.2
314	ASD																
315	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
316	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
317	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
318	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	0.75	OL8	1
319	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
320	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
321	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
322	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL1	0.75	OL4	0.75	OL8	1
323	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
324	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
325	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
326	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL1	0.75	OL4	-0.75	OL8	1
327	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
328	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
329	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
330	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL1	0.75	OL4	-0.75	OL8	1
331																	
332	Crane Load Case #2																
333	LRFD Wind																
334	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
335	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
336	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
337	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	0.5	OL8	1.2
338	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
339	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
340	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
341	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL2	0.5	OL5	0.5	OL8	1.2
342	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
343	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
344	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
345	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL2	0.5	OL5	-0.5	OL8	1.2
346	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
347	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
348	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
349	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL2	0.5	OL5	-0.5	OL8	1.2
350	ASD																
351	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
352	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
353	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
354	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	0.75	OL8	1
355	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
356	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
357	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
358	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL2	0.75	OL5	0.75	OL8	1
359	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
360	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
361	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
362	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL2	0.75	OL5	-0.75	OL8	1
363	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
364	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
365	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
366	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL2	0.75	OL5	-0.75	OL8	1
367																	
368	Crane Load Case #3																
369	LRFD Wind																
370	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
371	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
372	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
373	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	0.5	OL8	1.2
374	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
375	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
376	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
377	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL3	0.5	OL6	0.5	OL8	1.2
378	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
379	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
380	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
381	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5	RLL	0.5	OL3	0.5	OL6	-0.5	OL8	1.2
382	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
383	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL7	1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
384	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
385	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	OL7	-1	LL	0.5			OL3	0.5	OL6	-0.5	OL8	1.2
386	ASD																
387	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
388	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
389	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
390	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	0.75	OL8	1
391	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
392	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
393	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
394	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL3	0.75	OL6	0.75	OL8	1
395	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
396	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
397	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
398	IBC 16-13 (a) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75	RLL	0.75	OL3	0.75	OL6	-0.75	OL8	1
399	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
400	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL7	0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
401	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
402	IBC 16-13 (b) (b)	Yes	Y	DL	1	OL7	-0.45	LL	0.75			OL3	0.75	OL6	-0.75	OL8	1
403																	
404	DL		Y	DL	1	OL8	1										
405	RLL		Y	RLL	1												
406	OL1		Y			OL1	1	OL4	1								
407	OL2		Y			OL2	1	OL5	1								
408	OL3		Y			OL3	1	OL6	1								
409	WLX		Y	WLX	1												
410	WLZ		Y	WLZ	1												
411	OL7 (DOWNWARD)		Y	OL7	1												
412	OL7 (UPLIFT)		Y	OL7	-1												
413	ELX		Y	ELX	1												
414	ELZ		Y	ELZ	1												

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	LRFD Gravity			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	IBC 16-1			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	LRFD Seismic			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	IBC 16-7 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	IBC 16-7 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	IBC 16-7 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	IBC 16-7 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	IBC 16-3 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	IBC 16-3 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
26	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
28	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
32	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
33	IBC 16-6 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
34	IBC 16-6 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
36	Deflection 1		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
37	Deflection 2		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
38	Deflection 3		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
39	IBC 16-10 (a)	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
40	IBC 16-11 (a)	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
41	IBC 16-12 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
42	IBC 16-12 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
43	IBC 16-12 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
44	IBC 16-12 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
45	IBC 16-13 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
46	IBC 16-13 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
47	IBC 16-13 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
48	IBC 16-13 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
49	IBC 16-13 (b) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
50	IBC 16-13 (b) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
51	IBC 16-13 (b) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
52	IBC 16-13 (b) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
53	IBC 16-15 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
54	IBC 16-15 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
55	IBC 16-15 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
56	IBC 16-15 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
57	IBC 16-14 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
58	IBC 16-14 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
59	IBC 16-16 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
60	IBC 16-16 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
61		1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
62	Crane Load Case #1	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
63	LRFD Gravity	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
64	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
65	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
66	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
67	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
68	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
69	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
70	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
71	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
72	LRFD Seismic			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
73	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
74	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
75	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
76	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
77	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
78	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
79	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
80	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
81	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
82	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
83	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
84	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
85	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
86	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
87	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
88	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
89	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
90	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
91	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
92	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
93	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
94	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
95	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
96	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
97	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
98	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
99	Deflection 2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
100	Deflection 3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
101	IBC 16-11 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
102	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
103	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
104	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
105	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
106	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
107	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
108	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
109	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
110	IBC 16-14 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
111	IBC 16-14 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
112	Deflection 2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
113	Deflection 3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
114	IBC 16-11 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
115	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
116	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
117	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
118	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
119	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
120	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
121	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
122	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
123	IBC 16-14 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
124	IBC 16-14 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
125				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
126	Crane Load Case #2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
127	LRFD Gravity			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
128	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
129	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
130	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
131	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
132	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
133	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
134	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
135	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
136	LRFD Seismic			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
137	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
138	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
139	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
140	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
141	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
142	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
143	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
144	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
145	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
146	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
147	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
148	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
149	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
150	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
151	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
152	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
153	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
154	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
155	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
156	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
157	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
158	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
159	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
160	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
161	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
162	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
163	Deflection 2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
164	Deflection 3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
165	IBC 16-9			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
166	IBC 16-11 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
167	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
168	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
169	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
170	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
171	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
172	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
173	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
174	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
175	IBC 16-14 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
176	IBC 16-14 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
177	Deflection 2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
178	Deflection 3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
179	IBC 16-9			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
180	IBC 16-11 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
181	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
182	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
183	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
184	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
185	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
186	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
187	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
188	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
189	IBC 16-14 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
190	IBC 16-14 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
191				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
192	Crane Load Case #3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
193	LRFD Gravity			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
194	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
195	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
196	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
197	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
198	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
199	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
200	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
201	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
202	LRFD Seismic			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
203	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
204	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
205	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
206	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
207	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
208	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
209	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
210	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
211	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
212	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
213	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
214	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
215	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
216	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
217	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
218	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
219	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
220	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
221	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
222	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
223	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
224	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
225	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
226	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
227	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
228	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
229	Deflection 2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
230	Deflection 3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
231	IBC 16-9			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
232	IBC 16-11 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
233	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
234	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
235	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
236	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
237	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
238	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
239	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
240	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
241	IBC 16-14 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
242	IBC 16-14 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
243	Deflection 2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
244	Deflection 3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
245	IBC 16-9			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
246	IBC 16-11 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
247	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
248	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
249	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
250	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
251	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
252	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
253	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
254	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
255	IBC 16-14 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
256	IBC 16-14 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
257				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
258	ROOF LOAD APPLIED IN SAME DIRECTION			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
259	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
260	IBC 16-3 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
261	IBC 16-3 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
262	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
263	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
264	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
265	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
266	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
267	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
268	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
269	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
270	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
271	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
272	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
273	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
274	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
275	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
276	IBC 16-6 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
277	IBC 16-6 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
278	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
279	IBC 16-12 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
280	IBC 16-12 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
281	IBC 16-12 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
282	IBC 16-12 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
283	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
284	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
285	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
286	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
287	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
288	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
289	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
290	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
291	IBC 16-15 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
292	IBC 16-15 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
293	IBC 16-15 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
294	IBC 16-15 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
295				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
296	Crane Load Case #1			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
297	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
298	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
299	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
300	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
301	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
302	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
303	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
304	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
305	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
306	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
307	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
308	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
309	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
310	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
311	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
312	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
313	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
314	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
315	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
316	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
317	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
318	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
319	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
320	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
321	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
322	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
323	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
324	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
325	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
326	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
327	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
328	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
329	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
330	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
331				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
332	Crane Load Case #2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
333	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
334	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
335	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
336	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
337	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
338	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
339	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
340	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
341	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
342	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
343	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
344	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
345	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
346	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
347	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
348	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
349	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
350	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
351	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
352	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
353	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
354	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
355	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
356	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
357	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
358	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
359	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
360	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
361	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
362	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
363	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
364	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
365	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
366	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
367				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
368	Crane Load Case #3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
369	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
370	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
371	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
372	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
373	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
374	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
375	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
376	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
377	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
378	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
379	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
380	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
381	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
382	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
383	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
384	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
385	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
386	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
387	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
388	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
389	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
390	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
391	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
392	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
393	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
394	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
395	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
396	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
397	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
398	IBC 16-13 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
399	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
400	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
401	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
402	IBC 16-13 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
403				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
404	DL			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
405	RLL			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
406	OL1			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
407	OL2			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
408	OL3			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
409	WLX			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
410	WLZ			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
411	OL7 (DOWNWARD)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
412	OL7 (UPLIFT)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
413	ELX			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
414	ELZ			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N3	max	23.273	261	27.174	261	3.326	34	0	402	0	402	0	402
1		min	-2.737	277	-4.045	277	-3.202	217	0	2	0	2	0	2
2	N4	max	3.39	277	26.342	261	3.113	34	0	402	0	402	0	402
3		min	-23.623	260	-3.512	277	-3.262	151	0	2	0	2	0	2
4	N5	max	52.364	261	64.569	261	14.295	34	0	402	0	402	0	402
5		min	-8.433	277	-12.176	277	-14.626	213	0	2	0	2	0	2
6	N6	max	10.107	277	60.882	261	13.99	161	0	402	0	402	0	402
7		min	-53.222	260	-10.96	277	-13.499	213	0	2	0	2	0	2
8	N90	max	37.657	261	45.596	261	9.301	223	0	402	0	402	0	402
9		min	-6.56	277	-8.66	277	-8.778	217	0	2	0	2	0	2
10	N91	max	7.7	277	42.66	261	8.567	223	0	402	0	402	0	402
11		min	-38.182	260	-8.401	277	-8.719	151	0	2	0	2	0	2

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

No Data to Print...

Envelope AISI S100-16: LRFD Member Cold Formed Steel Code Checks

No Data to Print...

ACI318-19: Section 25.4.2.1 (Development of Deformed Bars in Tension)

Table 25.4.2.3 (Development of Deformed Bars in Tension)

$f_y := 60000\ psi$

$f'c := 4500\ psi$

$sqrt(f'c) := \sqrt{4500} \cdot 1\ psi = 67.082\ psi$

$Bar\# := 5$ Rebar Size

$d_b := \frac{Bar\# \cdot in}{8} = 0.625\ in$ Rebar Diameter

$c_{a1} := \left(12 + \frac{13}{16}\right) in = 12.813\ in$

$c_{a2} := \left(12 + \frac{13}{16}\right) in = 12.813\ in$

$0.5 \cdot c_{a1} = 6.406\ in$ $0.3 \cdot c_{a2} = 3.844\ in$

$c_a := min\left(0.5 \cdot c_{a1}, 0.3 \cdot c_{a2}\right) = 3.844\ in$

$\psi_t := 1.3$ More than 12 in. of fresh concrete placed below horizontal reinforcement

$\psi_e := 1$ Uncoated or zinc-coated (galvanized) reinforcement

$\psi_g := 1$ Grade 40 or Grade 60

$\lambda := 1$ Normal Weight Concrete

$l_d := \left(\frac{f_y \cdot \psi_t \cdot \psi_e \cdot \psi_g}{25 \cdot \lambda \cdot sqrt(f'c)}\right) \cdot \frac{d_b}{psi} = 29.069\ in$ Development Length > 12 in

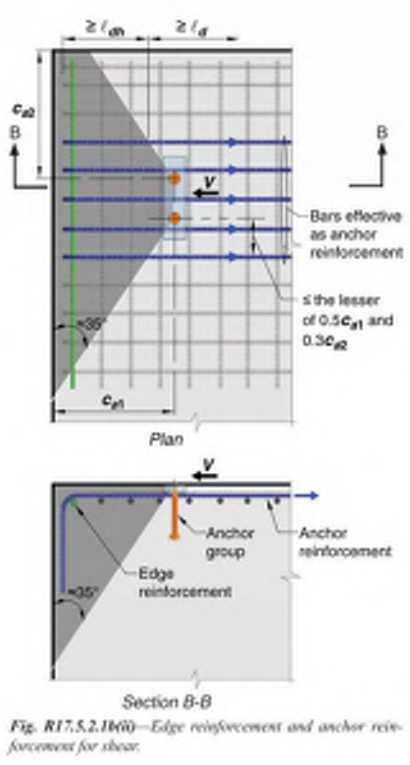


Fig. R17.5.2.1b(i)—Edge reinforcement and anchor reinforcement for shear.

$\psi_s := 0.8$ No.6 or smaller bar

$c_b := \frac{1.875\ in}{2} = 0.938\ in$

$\psi_e = 1$

$\psi_r := 1$

$\psi_o := 1$

$\psi_c := \frac{\frac{f'c}{1\ psi}}{15000} + 0.6 = 0.9$

$l_{dh} := \left(\frac{\frac{f_y}{psi} \cdot \psi_e \cdot \psi_r \cdot \psi_o \cdot \psi_c}{55 \cdot \lambda \cdot sqrt\left(\frac{f'c}{1\ psi}\right)}\right) \cdot \left(\frac{d_b}{1\ in}\right)^{1.5} \cdot in = 7.232\ in$

Anchor Shear Reinforcing

$Bar\# = 5$ Rebar Size

$d_b = 0.625\ in$ Rebar Diameter

$n := 5$ Total Rebar

$A_s := \pi \cdot \left(\frac{d_b}{2}\right)^2 \cdot n = 1.534\ in^2$

$f_y = 60000\ psi$

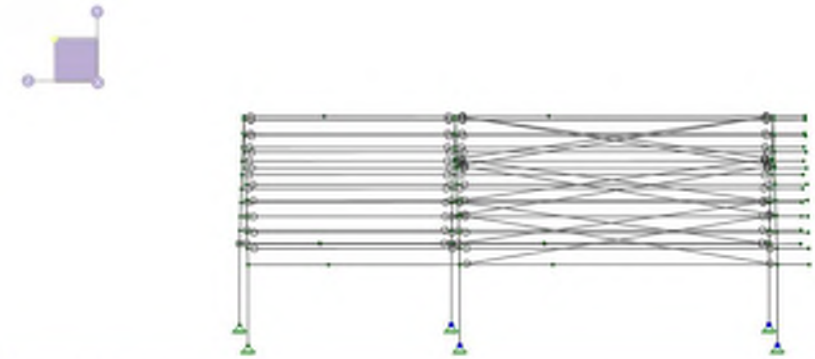
$\phi := 0.9$

$\phi T_n := \phi \cdot f_y \cdot A_s = 82.835\ kip$

$T_u := 53.22\ kip \cdot 125\% = 66.525\ kip$ MAXIMUM DEMAND w/ 25% CONTIGENCY

USE FIVE (5) - #5 U-BARS

Node Label		X [k]	LC	Y [k]	LC	Z [k]
N3	max	23.273	261	27.174	261	3.326
	min	-2.737	277	-4.045	277	-3.202
N4	max	3.39	277	26.342	261	3.113
	min	-23.623	260	-3.512	277	-3.262
N5	max	52.364	261	64.569	261	14.295
	min	-8.433	277	-12.176	277	-14.626
N6	max	10.107	277	60.882	261	13.99
	min	-53.222	260	-10.96	277	-13.499
N90	max	37.657	261	45.596	261	9.301
	min	-6.56	277	-8.66	277	-8.778
N91	max	7.7	277	42.66	261	8.567
	min	-38.182	260	-8.401	277	-8.719



Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N5	max	52.364	261	64.569	261	14.295	34	0	402	0	402	0	402
2		min	-8.433	277	-12.176	277	-14.626	253	0	2	0	2	0	2
3	N6	max	10.907	277	60.882	261	13.99	161	0	402	0	402	0	402
4		min	-53.222	260	-10.96	277	-13.499	253	0	2	0	2	0	2
5	N90	max	37.637	261	45.396	261	9.301	223	0	402	0	402	0	402
6		min	-6.56	277	-8.66	277	-8.778	257	0	2	0	2	0	2
7	N91	max	7.7	277	42.66	261	8.567	223	0	402	0	402	0	402
8		min	-38.182	260	-8.401	277	-8.719	151	0	2	0	2	0	2

MAX UPLIFT = 12.176 KIPS X 125% = 15.22 KIPS*
MAX SHEAR IN Z DIRECTION = 14.626 KIPS X 125% = 18.283 KIPS*

*WIND GOVERNS

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Specifier's comments:

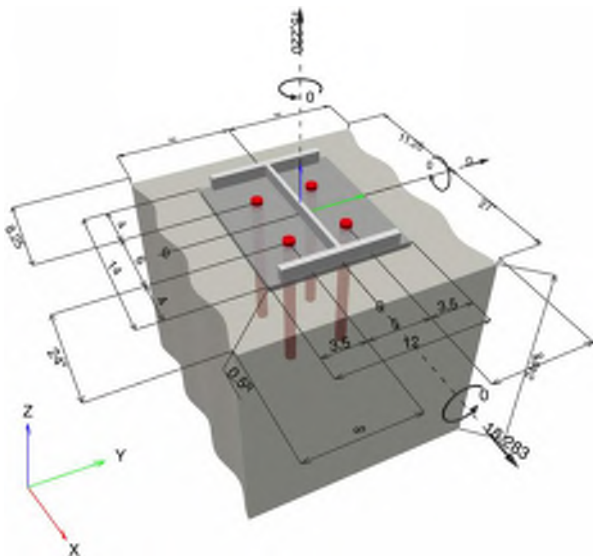
1 Input data



Anchor type and diameter:	**Hex Head ASTM F 1554 GR. 55 1**
Item number:	not available
Specification text:	Hilti Hex Head headed stud anchor with 12 in embedment, 1, Steel galvanized, installation per instruction for use
Effective embedment depth:	h_{ef} = 12.000 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 0.500 in.
Anchor plate[R]:	l_x x l_y x t = 14.000 in. x 12.000 in. x 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	W shape (AISC), W14X61; (L x W x T x FT) = 13.900 in. x 9.990 in. x 0.375 in. x 0.645 in.
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 246.000 in.
Reinforcement:	tension: not present, shear: not present; edge reinforcement: none or < No. 4 bar

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



Input data and results must be checked for conformity with the existing conditions and for plausibility!
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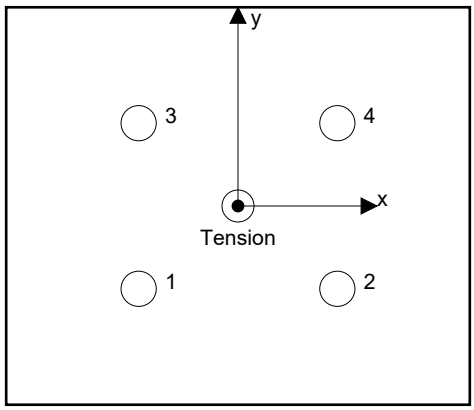
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1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 15,220; V_x = 18,283; V_y = 0; M_x = 0; M_y = 0; M_z = 0;	no	38

2 Load case/Resulting anchor forces



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	3,805	4,571	4,571	0
2	3,805	4,571	4,571	0
3	3,805	4,571	4,571	0
4	3,805	4,571	4,571	0

max. concrete compressive strain: - [‰]
max. concrete compressive stress: - [psi]
resulting tension force in (x/y)=(0.000/0.000): 15,220 [lb]
resulting compression force in (x/y)=(-/-): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	3,805	34,087	12	OK
Pullout Strength*	3,805	29,308	13	OK
Concrete Breakout Failure**	15,220	40,379	38	OK
Concrete Side-Face Blowout, direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (anchors in tension)

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3.1 Steel Strength

$N_{sa} = A_{se,N} f_{uta}$ ACI 318-19 Eq. (17.6.1.2)
$\phi N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.61	75,000

Calculations

N_{sa} [lb]
45,450

Results

N_{sa} [lb]	ϕ_{steel}	ϕN_{sa} [lb]	N_{ua} [lb]
45,450	0.750	34,087	3,805

3.2 Pullout Strength

$N_{pN} = \psi_{c,p} N_p$ ACI 318-19 Eq. (17.6.3.1)
$N_p = 8 A_{brg} f'_c$ ACI 318-19 Eq. (17.6.3.2.2a)
$\phi N_{pN} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$\psi_{c,p}$	A_{brg} [in.^{2}]	λ_a	f'_c [psi]
1.000	1.16	1.000	4,500

Calculations

N_p [lb]
41,868

Results

N_{pn} [lb]	$\phi_{concrete}$	ϕN_{pn} [lb]	N_{ua} [lb]
41,868	0.700	29,308	3,805

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.3 Concrete Breakout Failure

$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ec,N}\ \psi_{ed,N}\ \psi_{c,N}\ \psi_{cp,N}\ N_b$ — ACI 318-19 Eq. (17.6.2.1b)

$\phi\ N_{cbg} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9\ h_{ef}^2$ — ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2\ e'_N}{3\ h_{ef}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3\left(\frac{c_{a,min}}{1.5h_{ef}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16\ \lambda_a\ \sqrt{f'_c}\ h_{ef}^{5/3}$ — ACI 318-19 Eq. (17.6.2.2.3)

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
12.000	0.000	0.000	8.250	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
-	16	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
1,322.25	1,296.00	1.000	1.000	0.837	1.000	67,509

Results

N_{cbg} [lb]	$\phi_{concrete}$	$\phi\ N_{cbg}$ [lb]	N_{ua} [lb]
57,684	0.700	40,379	15,220

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	4,571	17,725	26	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	18,283	80,758	23	OK
Concrete edge failure in direction x+**	18,283	53,140	35	OK

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa} = 0.6\ A_{se,V}\ f_{uta}$ ACI 318-19 Eq. (17.7.1.2b)
$\phi\ V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
0.61	75,000

Calculations

V_{sa} [lb]
27,270

Results

V_{sa} [lb]	ϕ_{steel}	$\phi\ V_{sa}$ [lb]	V_{ua} [lb]
27,270	0.650	17,725	4,571

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = 16 \lambda_a \sqrt{f'_c} h_{ef}^{5/3}$ ACI 318-19 Eq. (17.6.2.2.3)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	12.000	0.000	0.000	8.250

$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
1.000	∞	16	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
1,322.25	1,296.00	1.000	1.000	0.837	1.000	67,509

Results

V_{cpg} [lb]	$\phi_{concrete}$	ϕV_{cpg} [lb]	V_{ua} [lb]
115,368	0.700	80,758	18,283

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4.3 Concrete edge failure in direction x+

$V_{cbg} = \left(\frac{A_{Vc}}{A_{Vc0}}\right) \Psi_{ec,V} \Psi_{ed,V} \Psi_{c,V} \Psi_{h,V} \Psi_{parallel,V} V_b$ — ACI 318-19 Eq. (17.7.2.1b)

$\phi V_{cbg} \geq V_{ua}$ — ACI 318-19 Table 17.5.2

A_{Vc} see ACI 318-19, Section 17.7.2.1, Fig. R 17.7.2.1(b)

$A_{Vc0} = 4.5 c_{a1}^2$ — ACI 318-19 Eq. (17.7.2.1.3)

$\Psi_{ec,V} = \left(\frac{1}{1 + \frac{e'_v}{1.5c_{a1}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.3.1)

$\Psi_{ed,V} = 0.7 + 0.3\left(\frac{c_{a2}}{1.5c_{a1}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.4.1b)

$\Psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0$ — ACI 318-19 Eq. (17.7.2.6.1)

$V_b = 9 \lambda_a \sqrt{f'_c} c_{a1}^{1.5}$ — ACI 318-19 Eq. (17.7.2.2.1b)

Variables

c_{a1} [in.]	c_{a2} [in.]	e_{cV} [in.]	$\Psi_{c,V}$	h_a [in.]
24.000	-	0.000	1.000	246.000

l_e [in.]	λ_a	d_a [in.]	f'_c [psi]	$\Psi_{parallel,V}$
8.000	1.000	1.000	4,500	1.000

Calculations

A_{Vc} [in.^{2}]	A_{Vc0} [in.^{2}]	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{h,V}$	V_b [lb]
2,772.00	2,592.00	1.000	1.000	1.000	70,985

Results

V_{cbg} [lb]	$\phi_{concrete}$	ϕV_{cbg} [lb]	V_{ua} [lb]
75,914	0.700	53,140	18,283

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.377	0.344	5/3	37	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/

Fastening meets the design criteria!

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7 Installation data

Profile: W shape (AISC), W14X61; (L x W x T x FT) = 13.900 in. x 9.990 in. x 0.375 in. x 0.645 in.

Hole diameter in the fixture: d_f = 1.062 in.

Plate thickness (input): 0.500 in.

Recommended plate thickness: not calculated

Anchor type and diameter: Hex Head ASTM F 1554 GR. 55 1

Item number: not available

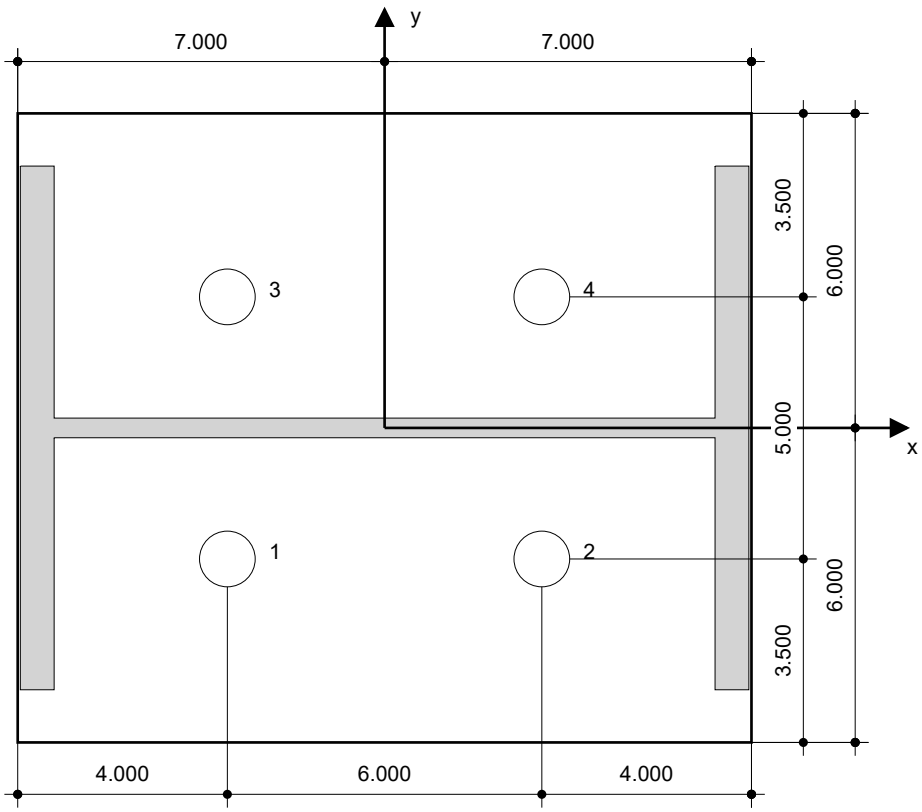
Maximum installation torque: -

Hole diameter in the base material: - in.

Hole depth in the base material: 12.000 in.

Minimum thickness of the base material: 13.172 in.

Hilti Hex Head headed stud anchor with 12 in embedment, 1, Steel galvanized, installation per instruction for use



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-3.000	-2.500	8.250	30.000	-	-
2	3.000	-2.500	14.250	24.000	-	-
3	-3.000	2.500	8.250	30.000	-	-
4	3.000	2.500	14.250	24.000	-	-

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8 Remarks; Your Cooperation Duties

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UNFACTORED REACTIONS

DEAD LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N5	max	15.162	404	18.925	404	-0.268	404
	min	15.162	404	18.925	404	-0.268	404
N6	max	-15.152	404	18.471	404	0.07	404
	min	-15.152	404	18.471	404	0.07	404
N90	max	10.476	404	13.28	404	0.325	404
	min	10.476	404	13.28	404	0.325	404
N91	max	-10.479	404	12.28	404	0.102	404
	min	-10.479	404	12.28	404	0.102	404

LIVE, ROOF LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N5	max	17.611	405	21.161	405	-0.217	405
	min	17.611	405	21.161	405	-0.217	405
N6	max	-17.666	405	19.546	405	-0.114	405
	min	-17.666	405	19.546	405	-0.114	405
N90	max	13.014	405	15.047	405	0.289	405
	min	13.014	405	15.047	405	0.289	405
N91	max	-12.95	405	14.098	405	0.106	405
	min	-12.95	405	14.098	405	0.106	405

LIVE LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N5	max	0.695	408	0.461	408	-0.029	407
	min	0.049	407	0.03	407	-0.076	408
N6	max	0.014	407	0.99	407	0.113	407
	min	-0.742	408	0.487	408	-0.067	408
N90	max	-0.065	407	-0.045	407	-0.018	407
	min	-0.097	408	-0.085	408	-0.048	408
N91	max	0.077	408	-0.071	406	-0.043	408
	min	-0.066	407	-0.072	408	-0.181	407

WIND LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N5	max	11.351	411	15.952	411	0.21	412
	min	-11.282	412	-15.931	412	-14.101	410
N6	max	12.941	412	14.841	411	0.403	409
	min	-12.906	411	-14.875	412	-13.434	410
N90	max	8.329	411	11.218	411	0.231	411
	min	-8.342	412	-11.252	412	-9.113	410
N91	max	9.494	412	10.796	411	0.083	411
	min	-9.587	411	-10.754	412	-8.701	410

SEISMIC LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N5	max	2.271	414	1.674	414	-0.059	413
	min	-3.428	413	-1.076	413	-4.971	414
N6	max	-2.409	414	1.757	414	0.062	413
	min	-3.26	413	1.074	413	-4.692	414
N90	max	-2.31	414	-1.108	413	-0.009	413
	min	-3.251	413	-2.942	414	-3.231	414
N91	max	2.481	414	1.109	413	0.005	413
	min	-3.15	413	-2.952	414	-3.067	414

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: HHW Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2018

General Information

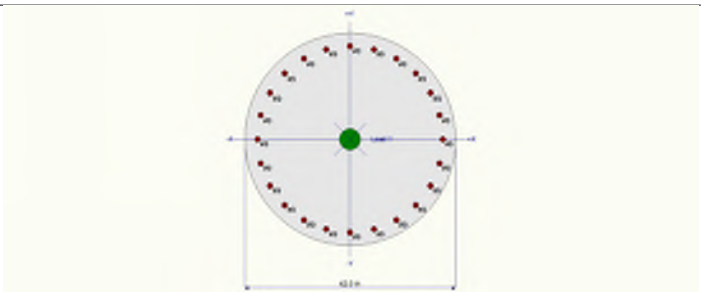
f'c : Concrete 28 day streng	=	4.50 ksi
E =	=	3,605.0 ksi
Density	=	150.0 pcf
β	=	0.8250
fy - Main Rebar	=	60.0 ksi
E - Main Rebar	=	29,000.0 ksi
Allow. Reinforcing Limits		*ASTM A615 Bars Used*
Min. Reinf.	=	0.50 %
Max. Reinf.	=	8.0 %

Overall Column Height = 20.50 ft
End Fixity Top Free, Bottom Fixed
Brace condition for deflection (buckling) along colur
X-X (width) axis :
Fully braced against buckling ABOUT Y-Y Axis
Y-Y (depth) axis :
Fully braced against buckling ABOUT Y-Y Axis

Column Cross Section

Column Dimensions : 42.0in Diameter, Column Edge to Rebar Edge Cover = 2.0in

Column Reinforcing : 24 - #9 bars



Applied Loads

Entered loads are factored per load combinations specified by user.

Column self weight included : 29,585.0 lbs * Dead Load Factor
AXIAL LOADS . . .
Max. Axial Load (Risa): Axial Load at 20.50 ft above base, D = 18.925, LR = 21.20, L = 1.0, W = 16.0, E = 1.70 k
BENDING LOADS . . .
Max. Axial Load (Risa): Lat. Point Load at 20.50 ft creating My-y, D = 15.20, LR = 17.70, L = 0.80, W = 14.20, E = 5.0 k

DESIGN SUMMARY

Load Combination +1.20D+1.60Lr+0.50W
Location of max.above base 20.362 ft

Maximum Stress Ratio **0.579 : 1**
Ratio = (Pu^2+Mu^2)^.5 / (PhiPn^2+PhiMn^2)^.5

Pu =	100.132 k	φ * Pn =	180.772 k
Mu-x =	15.520 k-ft	φ * Mn-x =	33.983 k-ft
Mu-y =	-1,100.03 k-ft	φ * Mn-y =	1,914.24 k-ft
Mu Angle =	89.0 deg	φ =	0.90
Mu at Angle =	1,100.14 k-ft	φMn at Angle =	1,901.18 k-ft

Pn & Mn values located at Pu-Mu vector intersection with capacity curve

Column Capacities . .

Pnmax : Nominal Max. Compressive Axial Capac	6,647.52 k
Pnmin : Nominal Min. Tension Axial Capacity	k
φ Pn, max : Usable Compressive Axial Capacity	3,456.71 k
φ Pn, min : Usable Tension Axial Capacity	k

Maximum SERVICE Load Reactions .

Top along Y-Y	0.0 k	Bottom along Y-Y	35.465 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Deflections . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination :
Along X-X 0.3180 in at 20.50 ft above base
for load combination : +D+0.750Lr+0.750L+0.450W

General Section Informatio β = 0.8250 θ = 0.80
ρ : % Reinforcing 1.732 % Rebar % Ok
Reinforcing Area 24.0 in^2
Concrete Area 1,385.44 in^2

Governing Load Combination Results

Governing Factored Load Combination	Moment		Dist. from base ft	Axial Load k Pu	φ * Pn	Bending Analysis k-ft δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Utilization Ratio
	X-X	Y-Y											
+1.40D	M2,min	Actual	20.36	67.91	326.44	1.000	10.53	1.000	-436.24	89.000	436.37	2,032.90	**0.215**

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Concrete Column

Project File: HHW Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Governing Load Combination Results

Governing Factored Load Combination	Moment X-X	Moment Y-Y	Dist. from base ft	Axial Load k Pu	φ * Pn	Bending Analysis k-ft δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Utilization Ratio
+1.20D+0.50Lr+1.60L	M2,min	Actual	20.36	70.41	238.66	1.000	10.91	1.000	-581.59	89.000	581.69	1,954.11	**0.298**
+1.20D+1.60L	M2,min	Actual	20.36	59.81	297.40	1.000	9.27	1.000	-400.16	89.000	400.27	2,007.04	**0.199**
+1.20D+1.60Lr+0.50L	M2,min	Actual	20.36	92.63	180.77	1.000	14.36	1.000	-962.68	89.000	962.79	1,901.18	**0.506**
+1.20D+1.60Lr+0.50W	M2,min	Actual	20.36	100.13	180.77	1.000	15.52	1.000	-1,100.03	89.000	1,100.14	1,901.18	**0.579**
+1.20D+0.50L	M2,min	Actual	20.36	58.71	297.40	1.000	9.10	1.000	-382.12	89.000	382.23	2,007.04	**0.190**
+1.20D+0.50W	M2,min	Actual	20.36	66.21	238.66	1.000	10.26	1.000	-519.47	89.000	519.57	1,954.11	**0.266**
+1.20D+0.50Lr+0.50L+W	M2,min	Actual	20.36	85.31	180.77	1.000	13.22	1.000	-854.64	89.000	854.75	1,901.18	**0.450**
+1.20D+0.50L+W	M2,min	Actual	20.36	74.71	209.56	1.000	11.58	1.000	-673.22	89.000	673.32	1,927.61	**0.349**
+1.436D+0.50L+E	M2,min	Actual	20.36	71.88	238.66	1.000	11.14	1.000	-558.28	89.000	558.39	1,954.11	**0.286**
+0.90D+W	M2,min	Actual	20.36	59.66	209.56	1.000	9.25	1.000	-571.54	89.000	571.61	1,927.61	**0.297**
+0.6636D+E	M2,min	Actual	20.36	33.89	209.56	1.000	5.25	1.000	-309.28	89.000	309.32	1,927.61	**0.160**

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction @ Base	@ Top	k	Y-Y Axis Reaction @ Base	@ Top	Axial Reaction @ Base	Mx - End Moments @ Base	@ Top	k-ft	My - End Moments @ Base	@ Top
D Only	15.200					48.510				-311.600	
+D+L	16.000					49.510				-328.000	
+D+Lr	32.900					69.710				-674.450	
+D+0.750Lr+0.750L	29.075					65.160				-596.037	
+D+0.750L	15.800					49.260				-323.900	
+D+0.60W	23.720					58.110				-486.260	
+D+0.70E	18.700					49.700				-383.350	
+D+0.750Lr+0.750L+0.450W	35.465					72.360				-727.033	
+D+0.750L+0.450W	22.190					56.460				-454.895	
+D+0.750L+0.5250E	18.425					50.152				-377.713	
+0.60D+0.60W	17.640					38.706				-361.620	
+0.60D+0.70E	12.620					30.296				-258.710	
Lr Only	17.700					21.200				-362.850	
L Only	0.800					1.000				-16.400	
W Only	14.200					16.000				-291.100	
E Only	5.000					1.700				-102.500	

Maximum Moment Reactions

Note: Only non-zero reactions are listed.

Load Combination	Moment About X-X Axis @ Base	@ Top		Moment About Y-Y Axis @ Base	@ Top	
D Only			k-ft	-311.600		k-ft
+D+L			k-ft	-328.000		k-ft
+D+Lr			k-ft	-674.450		k-ft
+D+0.750Lr+0.750L			k-ft	-596.037		k-ft
+D+0.750L			k-ft	-323.900		k-ft
+D+0.60W			k-ft	-486.260		k-ft
+D+0.70E			k-ft	-383.350		k-ft
+D+0.750Lr+0.750L+0.450W			k-ft	-727.033		k-ft
+D+0.750L+0.450W			k-ft	-454.895		k-ft
+D+0.750L+0.5250E			k-ft	-377.713		k-ft
+0.60D+0.60W			k-ft	-361.620		k-ft
+0.60D+0.70E			k-ft	-258.710		k-ft
Lr Only			k-ft	-362.850		k-ft
L Only			k-ft	-16.400		k-ft
W Only			k-ft	-291.100		k-ft
E Only			k-ft	-102.500		k-ft

Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
D Only	-0.1363 in	20.500 ft	0.000 in	0.000 ft
+D+L	-0.1435 in	20.500 ft	0.000 in	0.000 ft
+D+Lr	-0.2950 in	20.500 ft	0.000 in	0.000 ft
+D+0.750Lr+0.750L	-0.2607 in	20.500 ft	0.000 in	0.000 ft
+D+0.750L	-0.1417 in	20.500 ft	0.000 in	0.000 ft

Project Title:
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Project Descr:

Concrete Column

Project File: HHW Canopy Pedestal.ec6

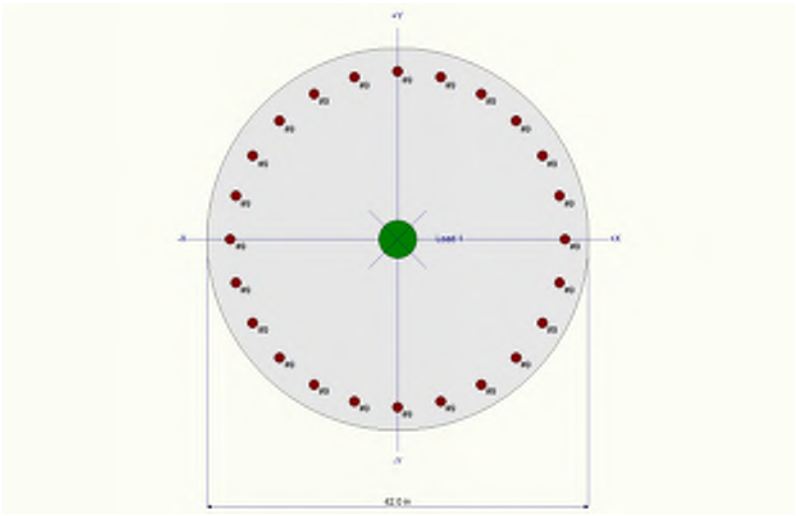
LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

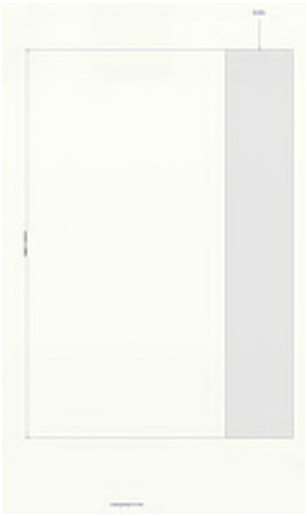
Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
+D+0.60W	-0.2127 in	20.500 ft	0.000 in	0.000 ft
+D+0.70E	-0.1677 in	20.500 ft	0.000 in	0.000 ft
+D+0.750Lr+0.750L+0.450W	-0.3180 in	20.500 ft	0.000 in	0.000 ft
+D+0.750L+0.450W	-0.1990 in	20.500 ft	0.000 in	0.000 ft
+D+0.750L+0.5250E	-0.1652 in	20.500 ft	0.000 in	0.000 ft
+0.60D+0.60W	-0.1582 in	20.500 ft	0.000 in	0.000 ft
+0.60D+0.70E	-0.1132 in	20.500 ft	0.000 in	0.000 ft
Lr Only	-0.1587 in	20.500 ft	0.000 in	0.000 ft
L Only	-0.0072 in	20.500 ft	0.000 in	0.000 ft
W Only	-0.1273 in	20.500 ft	0.000 in	0.000 ft
E Only	-0.0444 in	20.362 ft	0.000 in	0.000 ft

Sketches







Interaction Diagrams

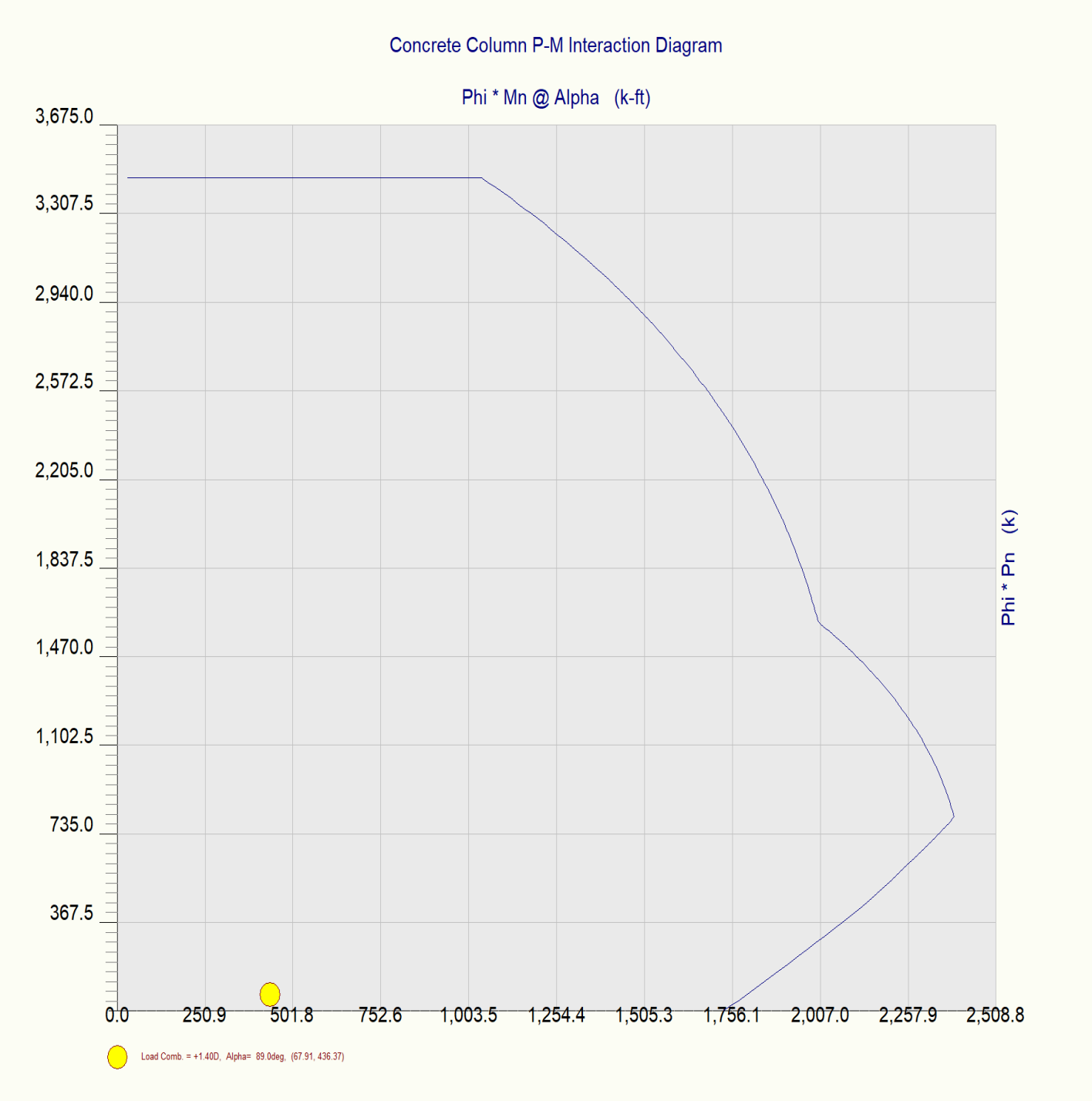
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Concrete Column

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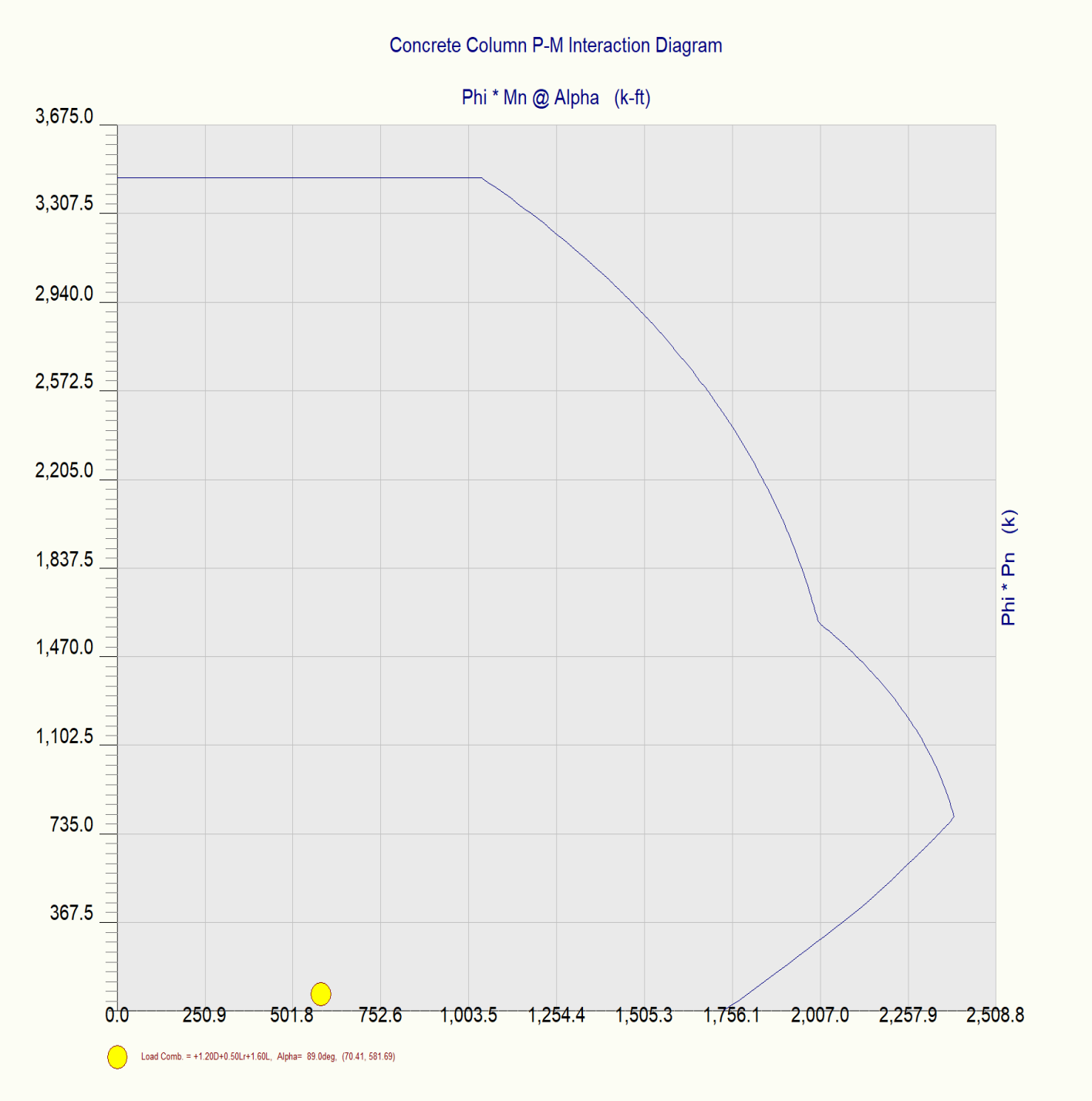
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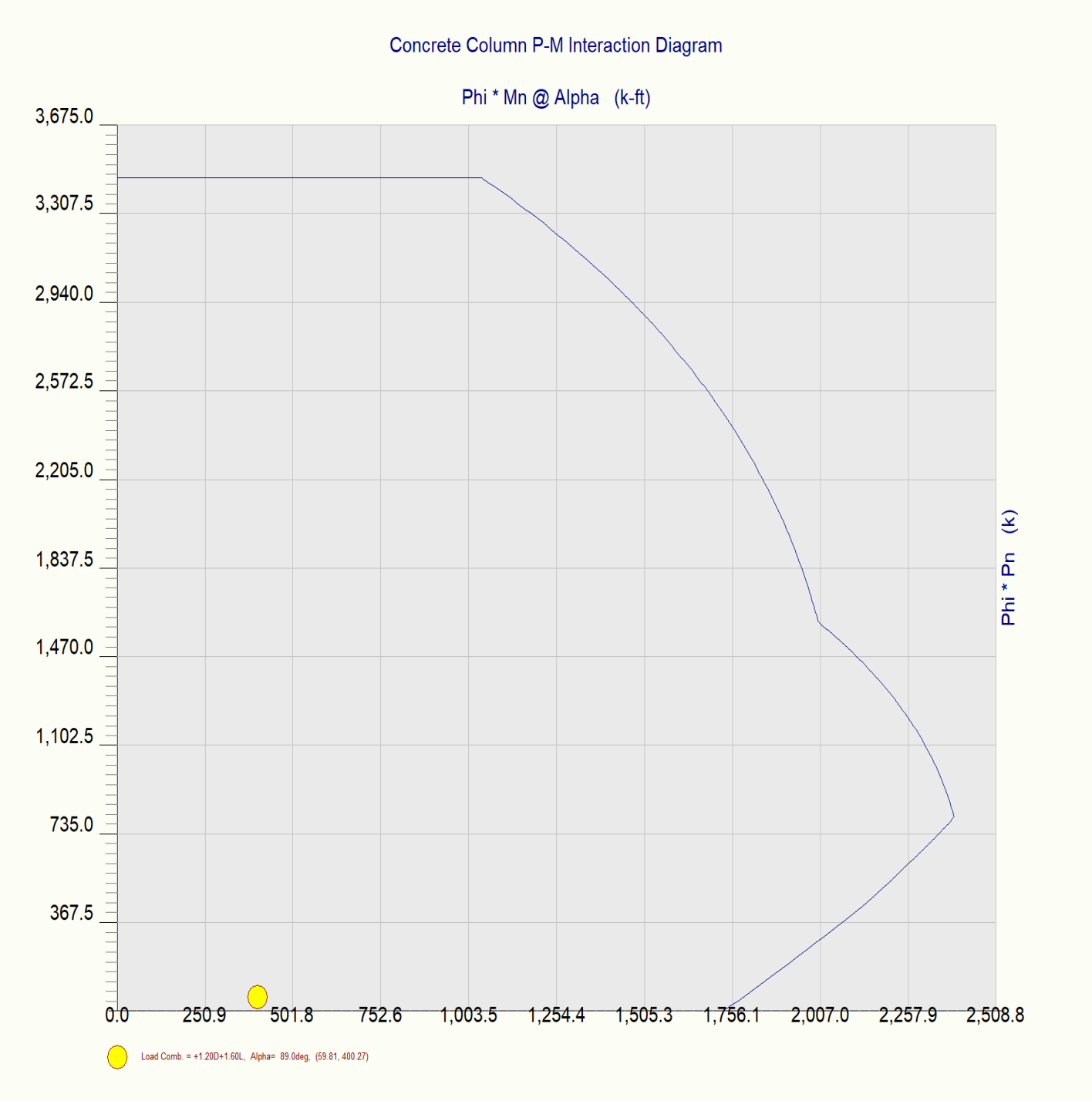
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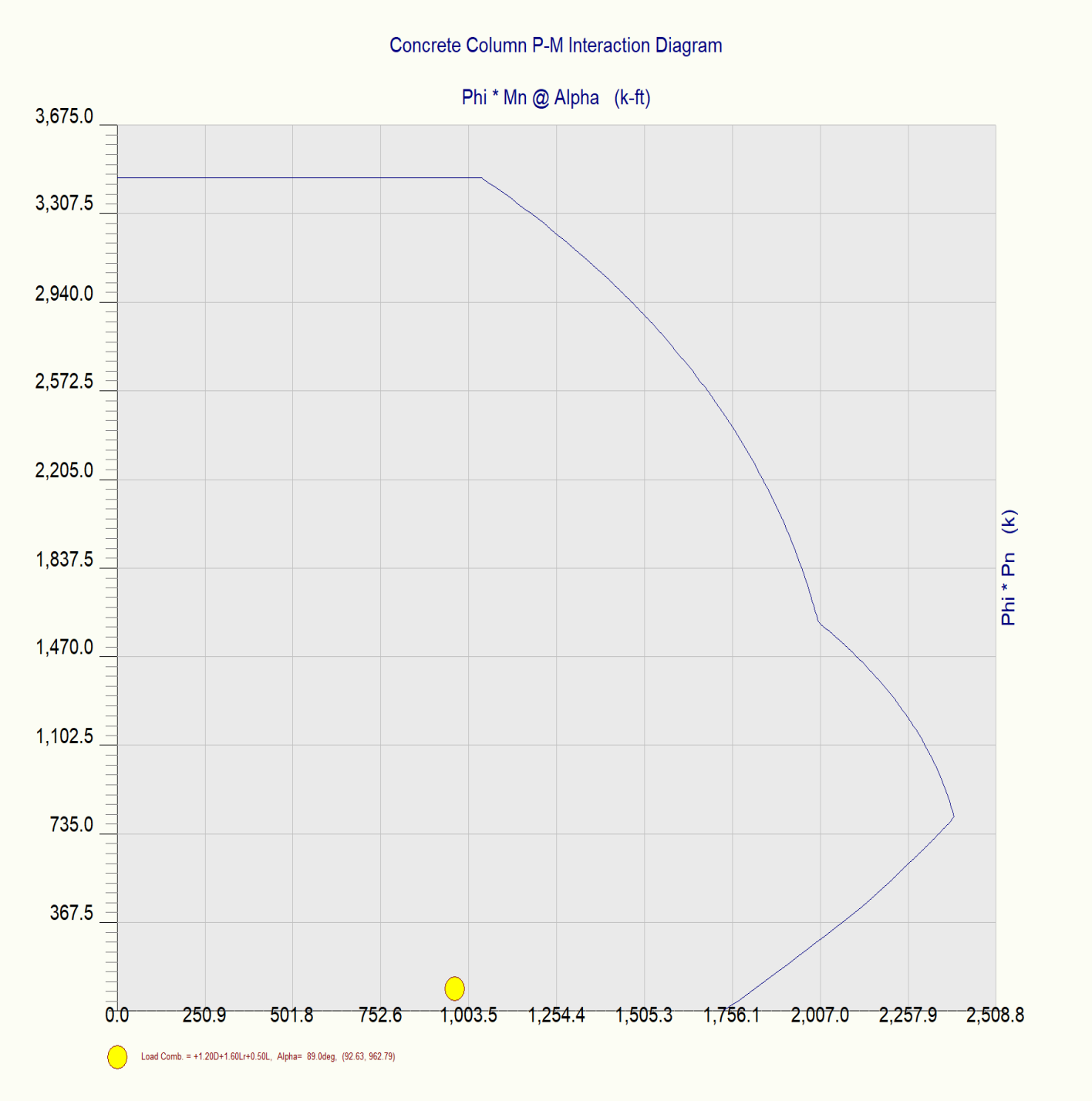
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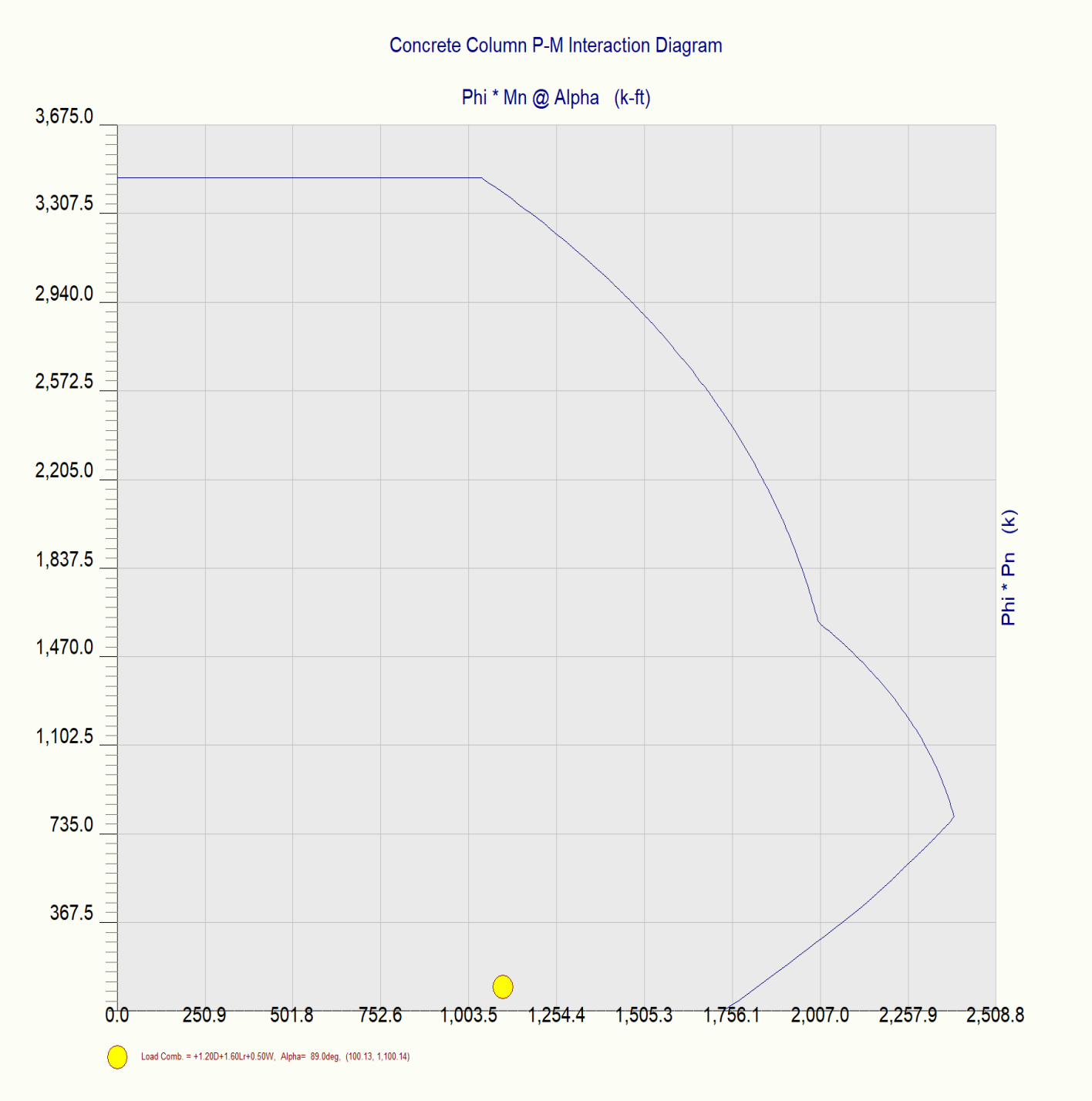
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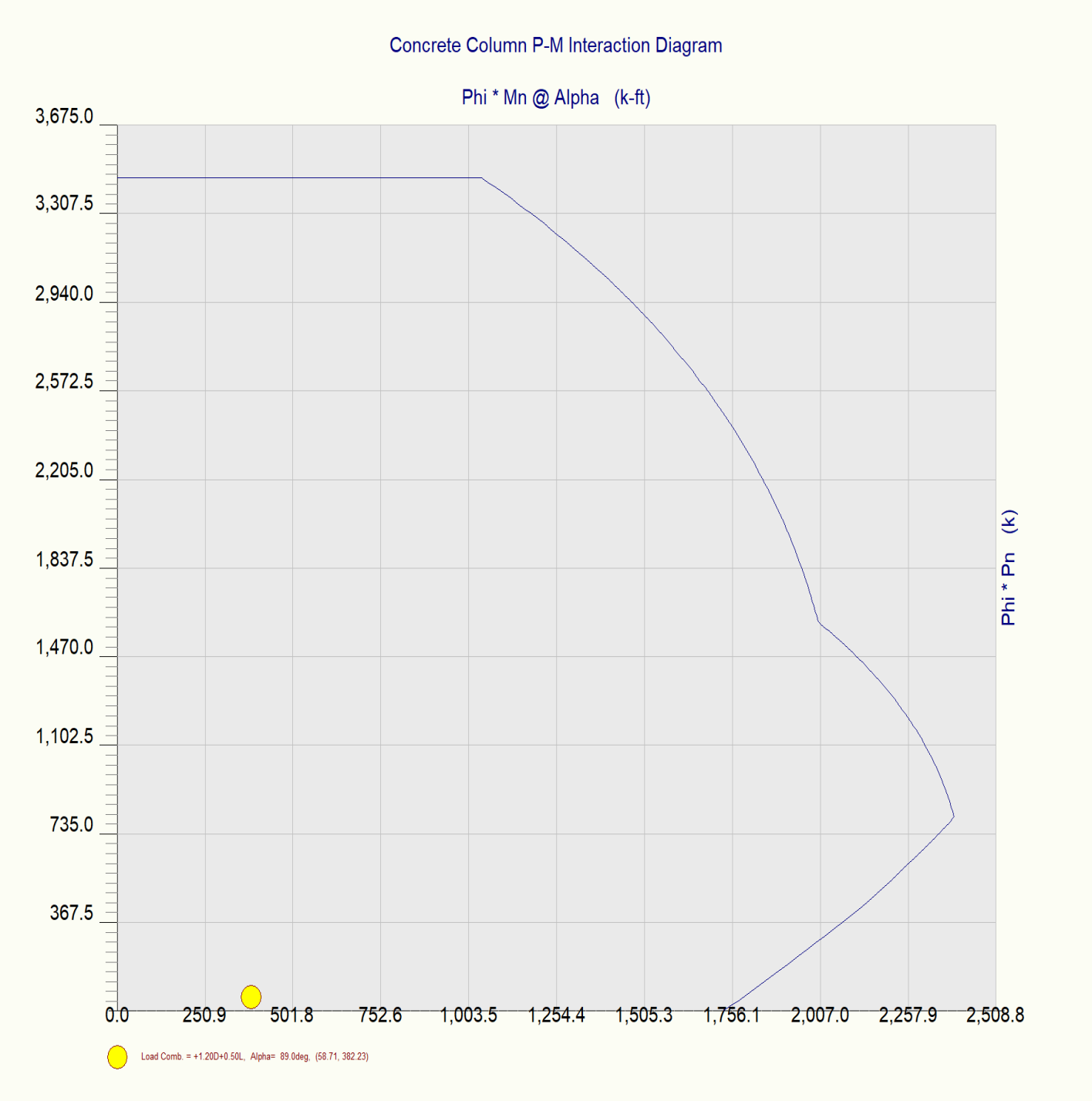
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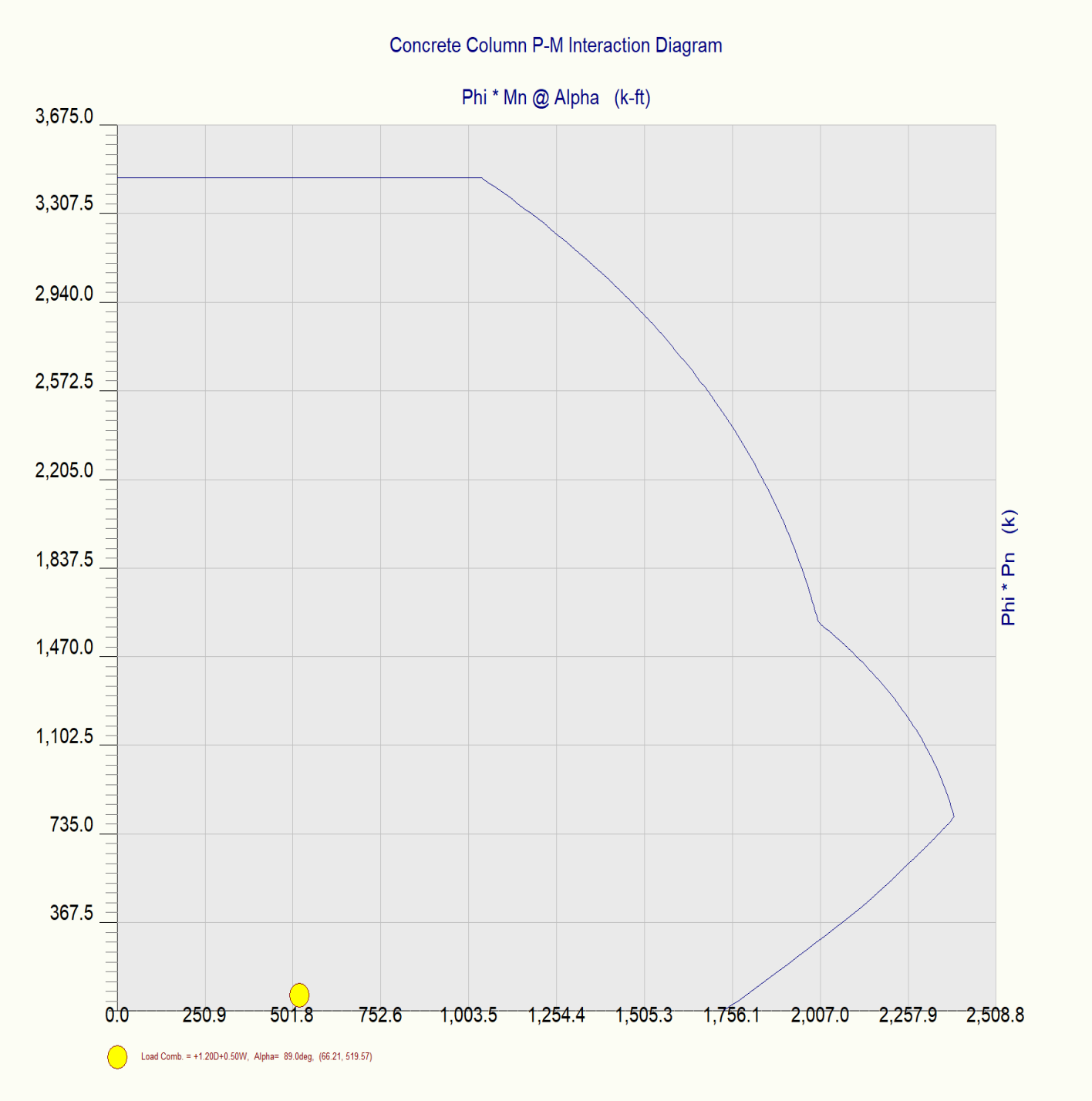
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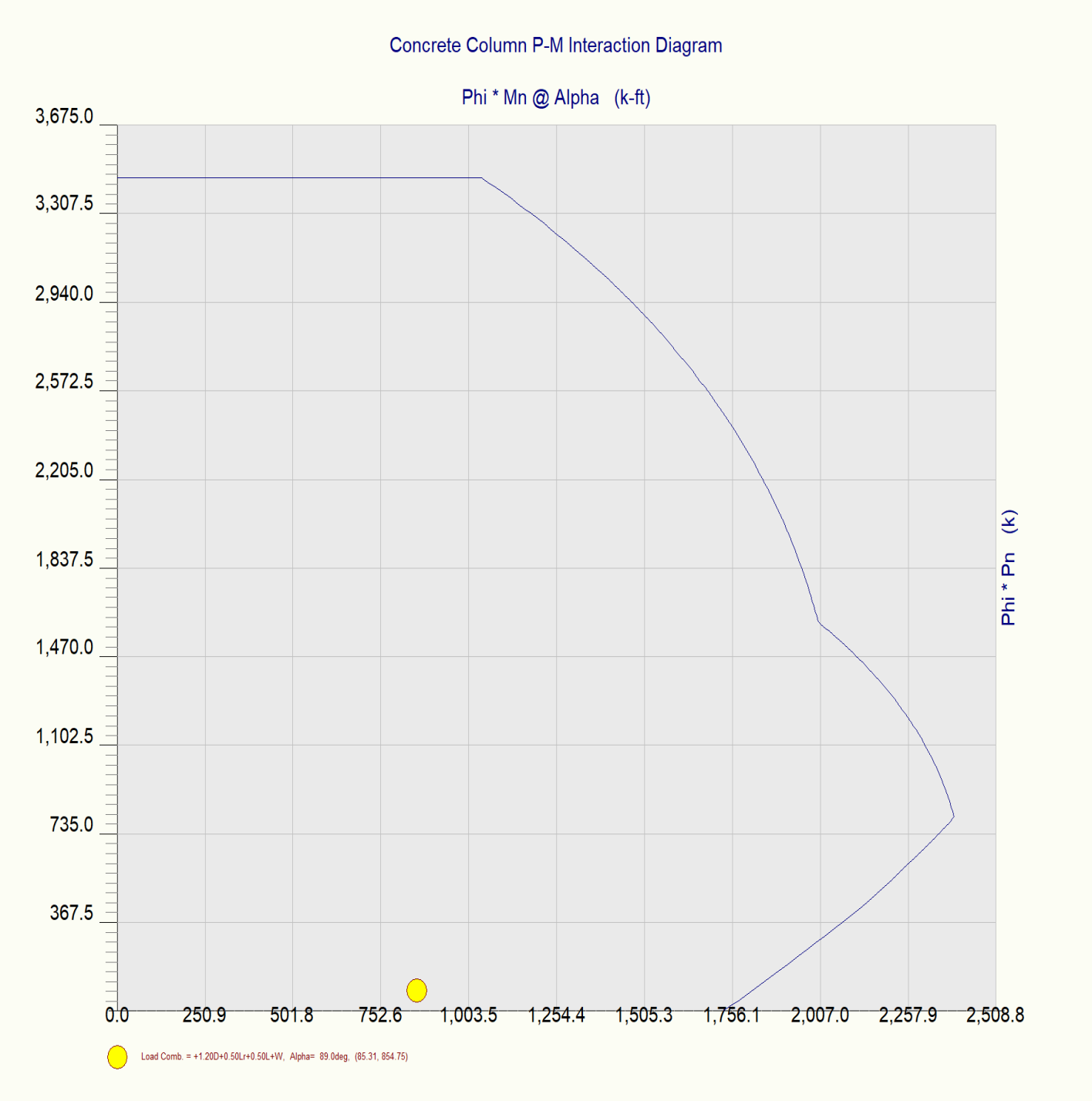
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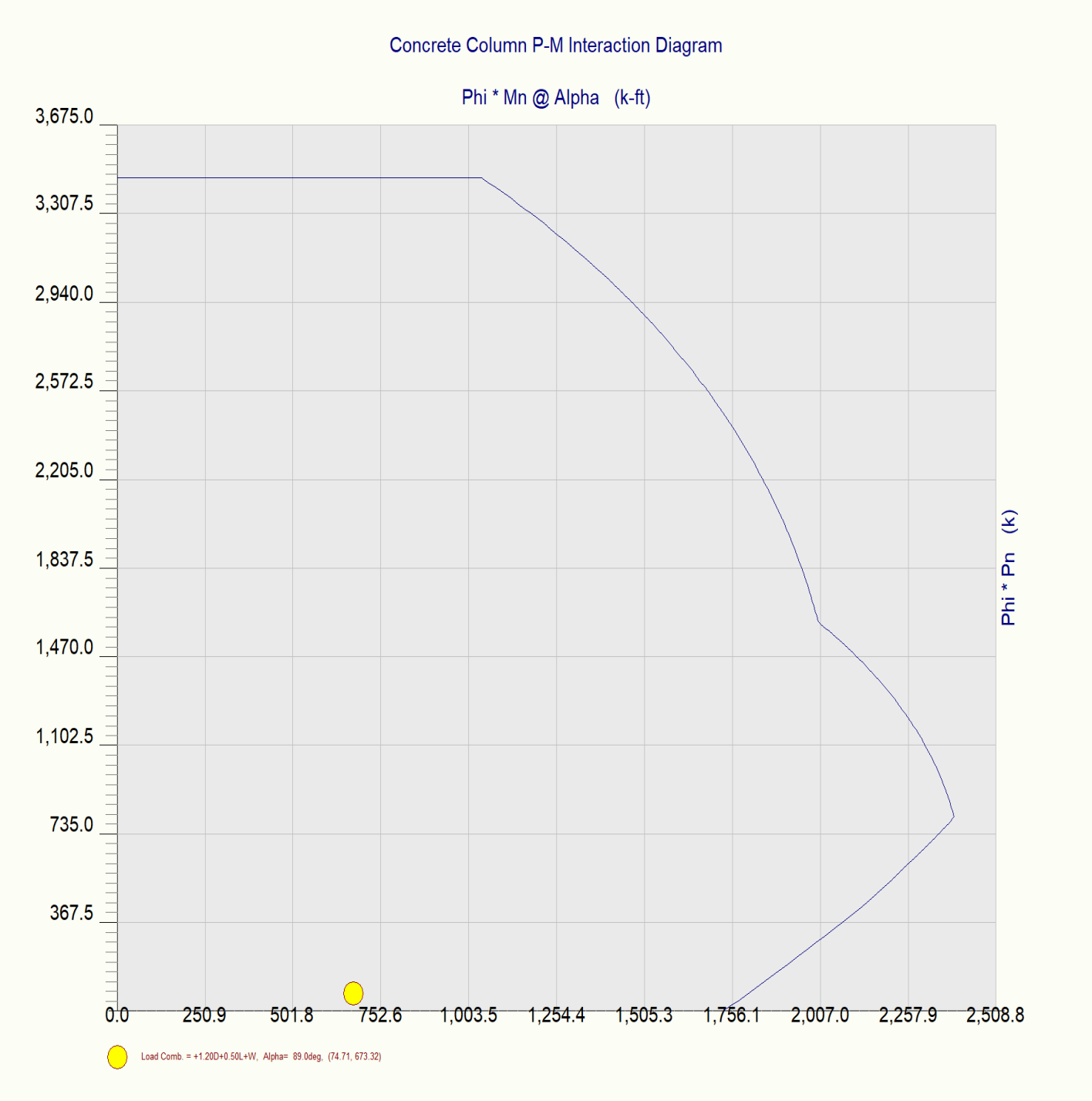
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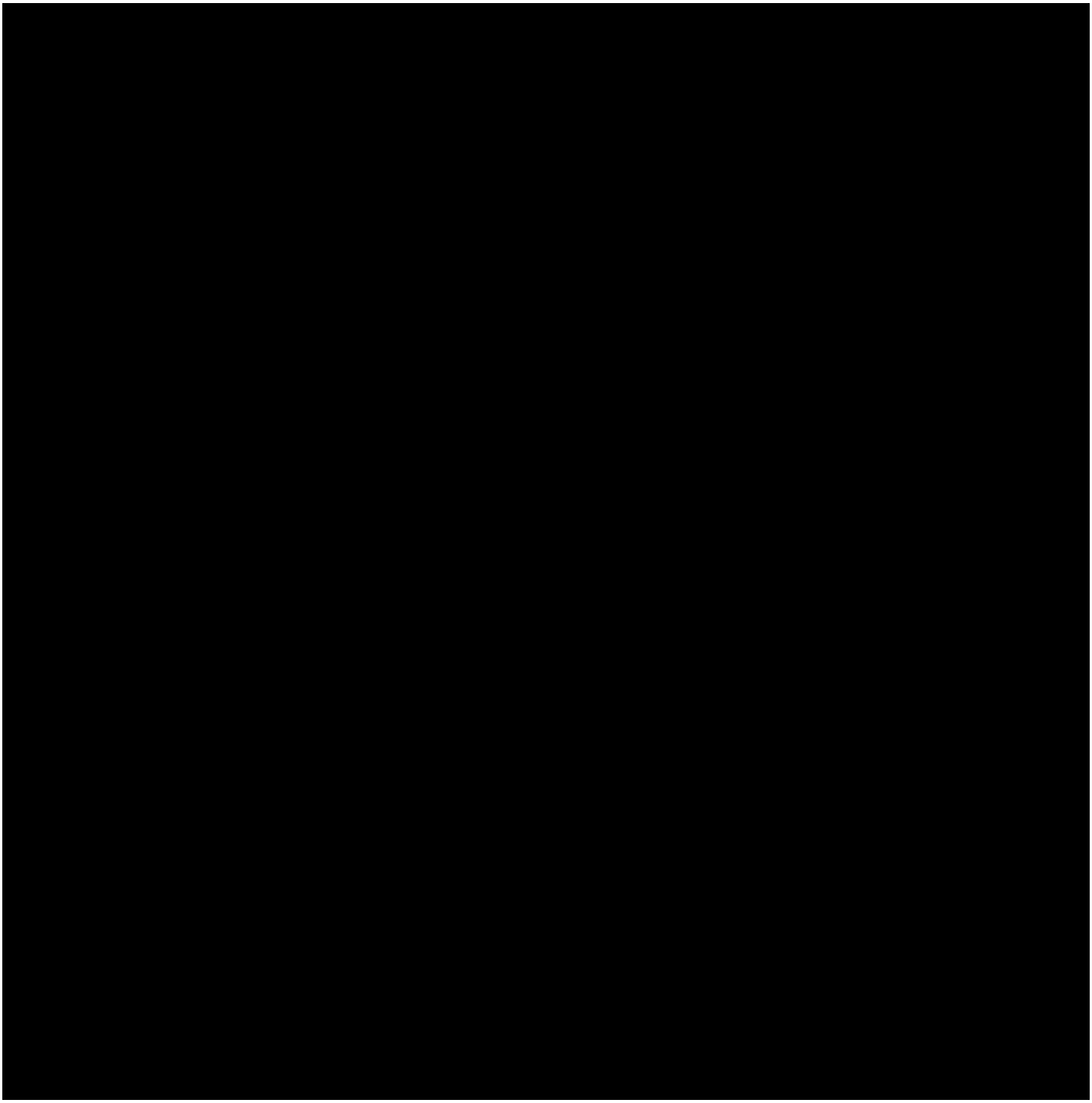
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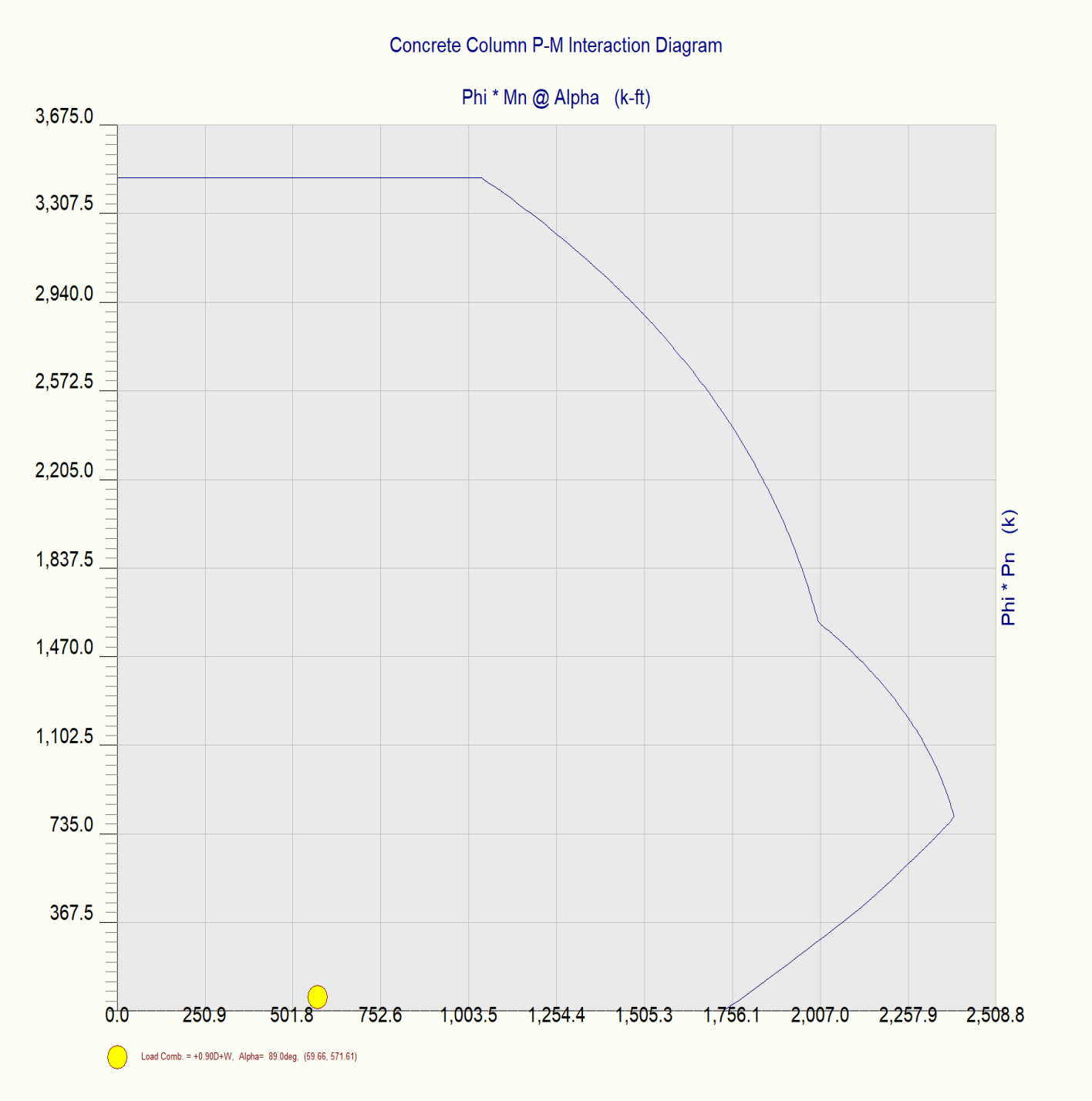
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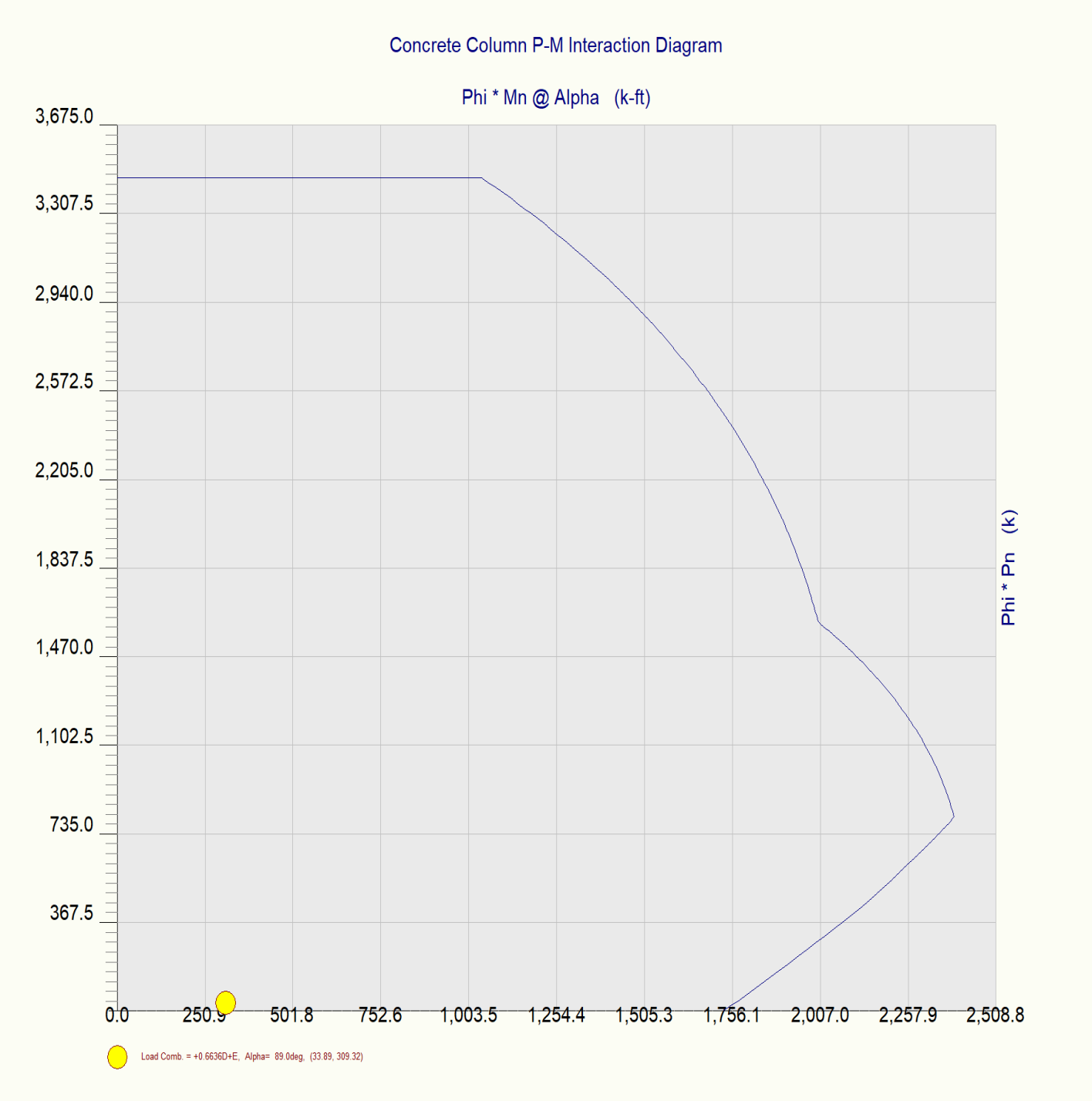
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LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal



UNFACTORED REACTIONS

DEAD LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N3	max	7.811	404	8.977	404	-0.056	404
	min	7.811	404	8.977	404	-0.056	404
N4	max	-7.818	404	9.169	404	-0.173	404
	min	-7.818	404	9.169	404	-0.173	404

LIVE, ROOF LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N3	max	7.201	405	8.304	405	-0.043	405
	min	7.201	405	8.304	405	-0.043	405
N4	max	-7.21	405	7.743	405	-0.021	405
	min	-7.21	405	7.743	405	-0.021	405

LIVE LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N3	max	0.602	408	0.417	408	-0.006	407
	min	-0.014	407	0.001	407	-0.017	408
N4	max	-0.05	407	0.755	407	-0.015	408
	min	-0.668	408	0.452	408	-0.144	407

WIND LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N3	max	4.646	411	6.225	411	0.046	412
	min	-4.625	412	-6.215	412	-3.207	410
N4	max	5.281	412	5.891	411	0.095	409
	min	-5.3	411	-5.895	412	-3.067	410

SEISMIC LOADING

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N3	max	0.034	414	1.268	414	-0.013	413
	min	-2.675	413	-0.882	413	-1.234	414
N4	max	-0.067	414	1.194	414	0.014	413
	min	-2.605	413	0.883	413	-1.174	414

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: HHW Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 30" Dia. Concrete Pedestal

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2018

General Information

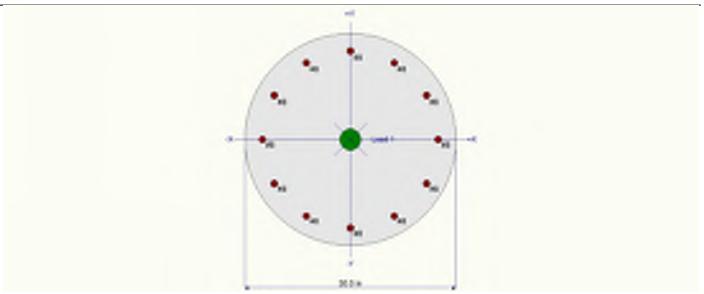
f'c : Concrete 28 day streng	=	4.50 ksi
E =	=	3,605.0 ksi
Density	=	150.0 pcf
β	=	0.8250
fy - Main Rebar	=	60.0 ksi
E - Main Rebar	=	29,000.0 ksi
Allow. Reinforcing Limits		*ASTM A615 Bars Used*
Min. Reinf.	=	0.50 %
Max. Reinf.	=	8.0 %

Overall Column Height = 20.50 ft
End Fixity Top Free, Bottom Fixed
Brace condition for deflection (buckling) along colur
X-X (width) axis :
Fully braced against buckling ABOUT Y-Y Axis
Y-Y (depth) axis :
Fully braced against buckling ABOUT Y-Y Axis

Column Cross Section

Column Dimensions : 30.0in Diameter, Column Edge to Rebar Edge Cover = 2.0in

Column Reinforcing : 12 - #8 bars



Applied Loads

Entered loads are factored per load combinations specified by user.

Column self weight included : 15,094.4 lbs * Dead Load Factor
AXIAL LOADS . . .
Max. Axial Load (Risa): Axial Load at 20.50 ft above base, D = 9.20, LR = 8.40, L = 0.80, W = 6.30, E = 1.30 k
BENDING LOADS . . .
Max. Load (Risa): Lat. Point Load at 20.50 ft creating My-y, D = 7.90, LR = 7.30, L = 0.70, W = 5.30, E = 2.70 k

DESIGN SUMMARY

Load Combination +1.20D+1.60Lr+0.50W
Location of max.above base 20.362 ft

Maximum Stress Ratio **0.940 : 1**
Ratio = (Pu^2+Mu^2)^.5 / (PhiPn^2+PhiMn^2)^.5

Pu =	45.743 k	φ * Pn =	45.018 k
Mu-x =	5.718 k-ft	φ * Mn-x =	9.381 k-ft
Mu-y =	-488.105 k-ft	φ * Mn-y =	524.37 k-ft
Mu Angle =	89.0 deg	φ =	0.90
Mu at Angle =	488.138 k-ft	φMn at Angle =	519.40 k-ft

Pn & Mn values located at Pu-Mu vector intersection with capacity curve

Column Capacities . .

Pnmax : Nominal Max. Compressive Axial Capac	3,236.27 k
Pnmin : Nominal Min. Tension Axial Capacity	k
φ Pn, max : Usable Compressive Axial Capacity	1,682.86 k
φ Pn, min : Usable Tension Axial Capacity	k

Maximum SERVICE Load Reactions .

Top along Y-Y	0.0 k	Bottom along Y-Y	16.285 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Deflections . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination :
Along X-X 0.5609 in at 20.50 ft above base
for load combination : +D+0.750Lr+0.750L+0.450W

General Section Informatio β = 0.8250 θ = 0.80
ρ : % Reinforcing 1.341 % Rebar % Ok
Reinforcing Area 9.480 in^2
Concrete Area 706.86 in^2

Governing Load Combination Results

Governing Factored Load Combination	Moment		Dist. from	Axial Load k		Bending Analysis k-ft							Utilization
	X-X	Y-Y	base ft	Pu	φ * Pn	δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Ratio
+1.40D	M2,min	Actual	20.36	34.01	86.44	1.000	4.25	1.000	-226.73	89.000	226.77	550.12	**0.412**

Project Title:
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Project ID:
Project Descr:

Concrete Column

Project File: HHW Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 30" Dia. Concrete Pedestal

Governing Load Combination Results

Governing Factored Load Combination	Moment X-X	Moment Y-Y	Dist. from base ft	Axial Load k Pu	φ * Pn	Bending Analysis k-ft δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Utilization Ratio
+1.20D+0.50Lr+1.60L	M2,min	Actual	20.36	34.63	58.75	1.000	4.33	1.000	-292.13	89.000	292.16	529.65	**0.552**
+1.20D+1.60L	M2,min	Actual	20.36	30.43	72.66	1.000	3.80	1.000	-217.30	89.000	217.33	539.96	**0.402**
+1.20D+1.60Lr+0.50L	M2,min	Actual	20.36	42.99	45.02	1.000	5.37	1.000	-440.96	89.000	440.99	519.40	**0.849**
+1.20D+1.60Lr+0.50W	M2,min	Actual	20.36	45.74	45.02	1.000	5.72	1.000	-488.11	89.000	488.14	519.40	**0.940**
+1.20D+0.50L	M2,min	Actual	20.36	29.55	86.44	1.000	3.69	1.000	-201.52	89.000	201.55	550.12	**0.366**
+1.20D+0.50W	M2,min	Actual	20.36	32.30	72.66	1.000	4.04	1.000	-248.67	89.000	248.70	539.96	**0.461**
+1.20D+0.50Lr+0.50L+W	M2,min	Actual	20.36	40.05	58.75	1.000	5.01	1.000	-384.99	89.000	385.02	529.65	**0.727**
+1.20D+0.50L+W	M2,min	Actual	20.36	35.85	58.75	1.000	4.48	1.000	-310.17	89.000	310.20	529.65	**0.586**
+1.436D+0.50L+E	M2,min	Actual	20.36	36.60	72.66	1.000	4.57	1.000	-295.15	89.000	295.19	539.96	**0.547**
+0.90D+W	M2,min	Actual	20.36	28.16	58.75	1.000	3.52	1.000	-254.41	89.000	254.43	529.65	**0.480**
+0.6636D+E	M2,min	Actual	20.36	17.42	58.75	1.000	2.18	1.000	-162.82	89.000	162.83	529.65	**0.307**

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction @ Base	@ Top	k	Y-Y Axis Reaction @ Base	@ Top	Axial Reaction @ Base	Mx - End Moments @ Base	@ Top	k-ft	My - End Moments @ Base	@ Top
D Only	7.900					24.294				-161.950	
+D+L	8.600					25.094				-176.300	
+D+Lr	15.200					32.694				-311.600	
+D+0.750Lr+0.750L	13.900					31.194				-284.950	
+D+0.750L	8.425					24.894				-172.713	
+D+0.60W	11.080					28.074				-227.140	
+D+0.70E	9.790					25.204				-200.695	
+D+0.750Lr+0.750L+0.450W	16.285					34.029				-333.843	
+D+0.750L+0.450W	10.810					27.729				-221.605	
+D+0.750L+0.5250E	9.843					25.577				-201.771	
+0.60D+0.60W	7.920					18.357				-162.360	
+0.60D+0.70E	6.630					15.487				-135.915	
Lr Only	7.300					8.400				-149.650	
L Only	0.700					0.800				-14.350	
W Only	5.300					6.300				-108.650	
E Only	2.700					1.300				-55.350	

Maximum Moment Reactions

Note: Only non-zero reactions are listed.

Load Combination	Moment About X-X Axis @ Base	@ Top		Moment About Y-Y Axis @ Base	@ Top	
D Only			k-ft	-161.950		k-ft
+D+L			k-ft	-176.300		k-ft
+D+Lr			k-ft	-311.600		k-ft
+D+0.750Lr+0.750L			k-ft	-284.950		k-ft
+D+0.750L			k-ft	-172.713		k-ft
+D+0.60W			k-ft	-227.140		k-ft
+D+0.70E			k-ft	-200.695		k-ft
+D+0.750Lr+0.750L+0.450W			k-ft	-333.843		k-ft
+D+0.750L+0.450W			k-ft	-221.605		k-ft
+D+0.750L+0.5250E			k-ft	-201.771		k-ft
+0.60D+0.60W			k-ft	-162.360		k-ft
+0.60D+0.70E			k-ft	-135.915		k-ft
Lr Only			k-ft	-149.650		k-ft
L Only			k-ft	-14.350		k-ft
W Only			k-ft	-108.650		k-ft
E Only			k-ft	-55.350		k-ft

Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
D Only	-0.2721 in	20.500 ft	0.000 in	0.000 ft
+D+L	-0.2962 in	20.500 ft	0.000 in	0.000 ft
+D+Lr	-0.5236 in	20.500 ft	0.000 in	0.000 ft
+D+0.750Lr+0.750L	-0.4788 in	20.500 ft	0.000 in	0.000 ft
+D+0.750L	-0.2902 in	20.500 ft	0.000 in	0.000 ft

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: HHW Canopy Pedestal.ec6

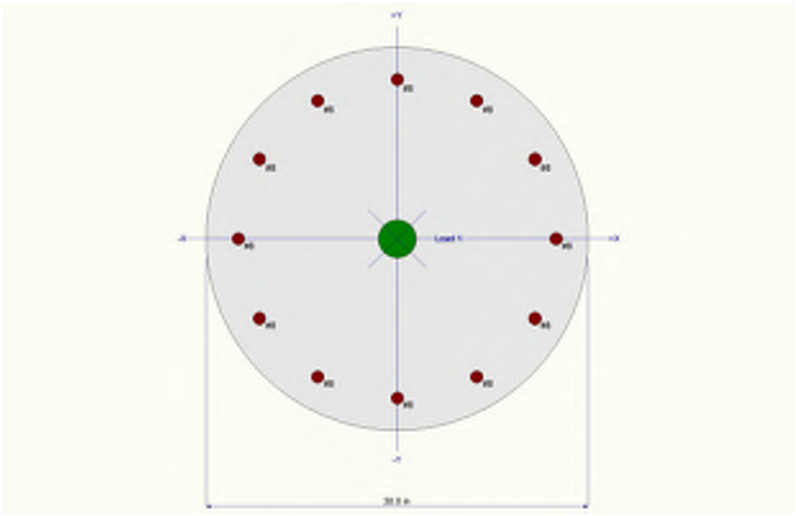
LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 30" Dia. Concrete Pedestal

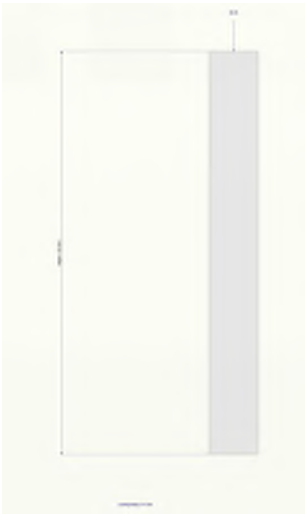
Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
+D+0.60W	-0.3817 in	20.500 ft	0.000 in	0.000 ft
+D+0.70E	-0.3372 in	20.500 ft	0.000 in	0.000 ft
+D+0.750Lr+0.750L+0.450W	-0.5609 in	20.500 ft	0.000 in	0.000 ft
+D+0.750L+0.450W	-0.3724 in	20.500 ft	0.000 in	0.000 ft
+D+0.750L+0.5250E	-0.3390 in	20.500 ft	0.000 in	0.000 ft
+0.60D+0.60W	-0.2728 in	20.500 ft	0.000 in	0.000 ft
+0.60D+0.70E	-0.2284 in	20.500 ft	0.000 in	0.000 ft
Lr Only	-0.2515 in	20.500 ft	0.000 in	0.000 ft
L Only	-0.0241 in	20.500 ft	0.000 in	0.000 ft
W Only	-0.1826 in	20.500 ft	0.000 in	0.000 ft
E Only	-0.0921 in	20.362 ft	0.000 in	0.000 ft

Sketches







Interaction Diagrams

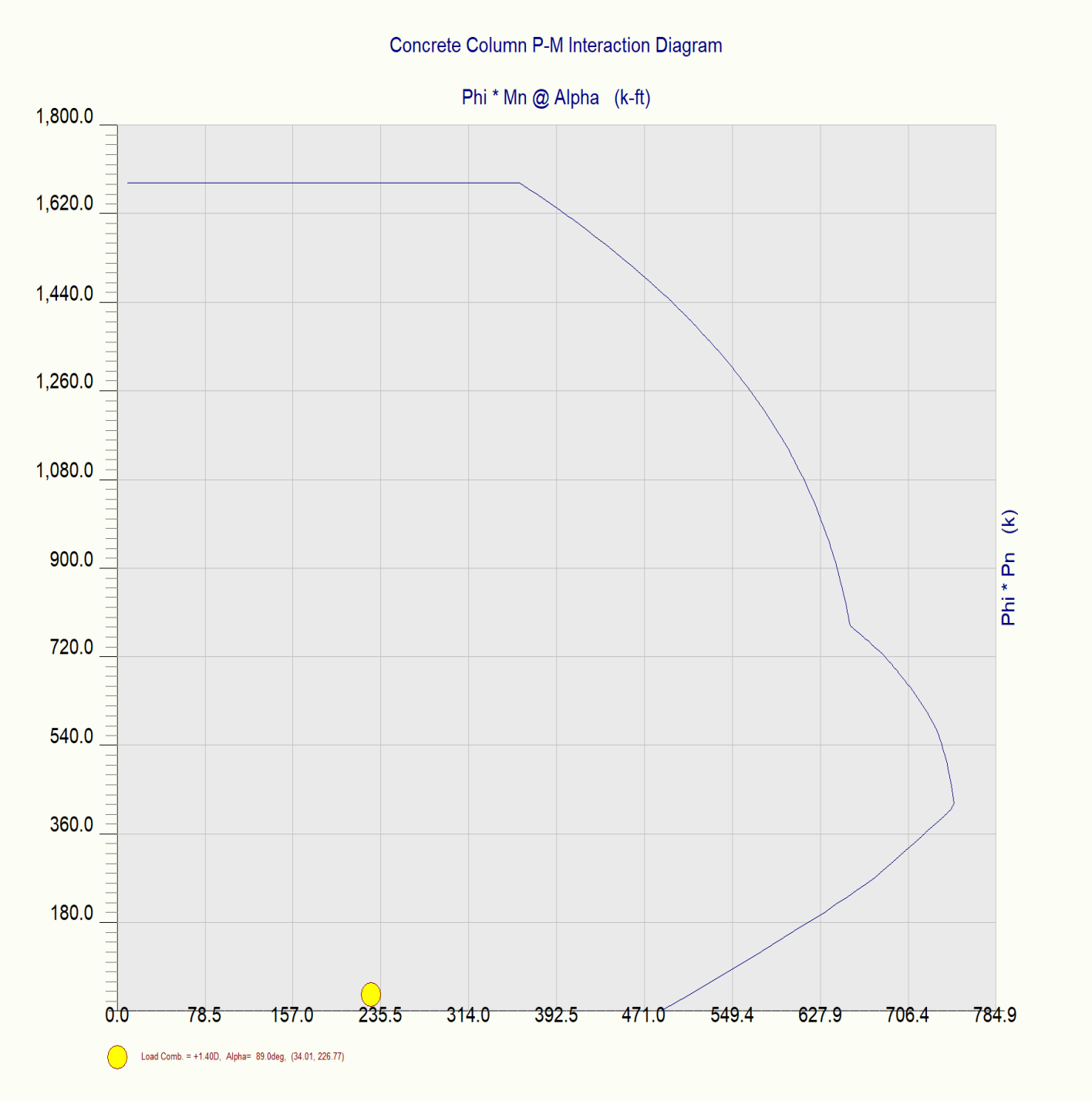
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Concrete Column

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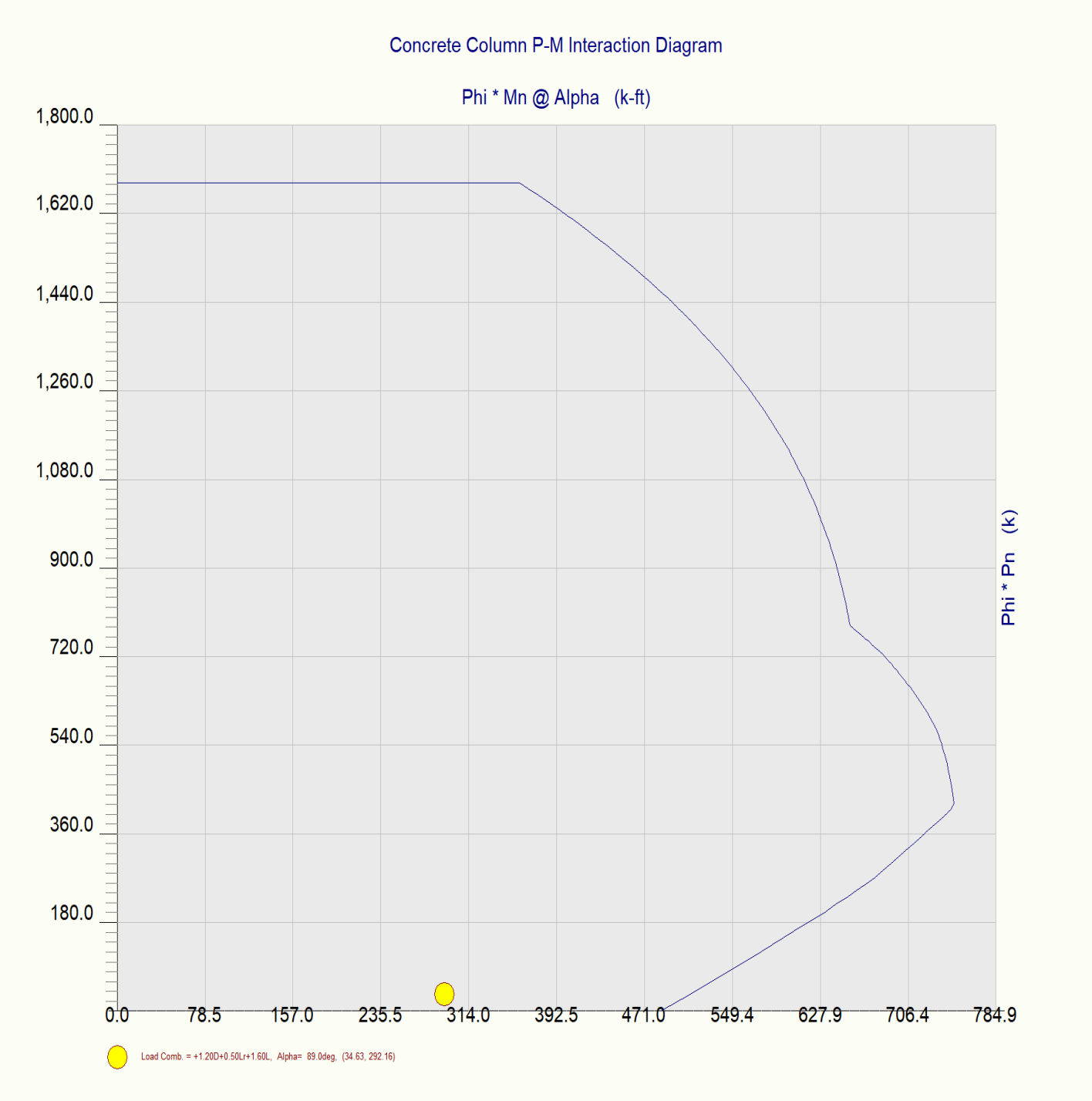
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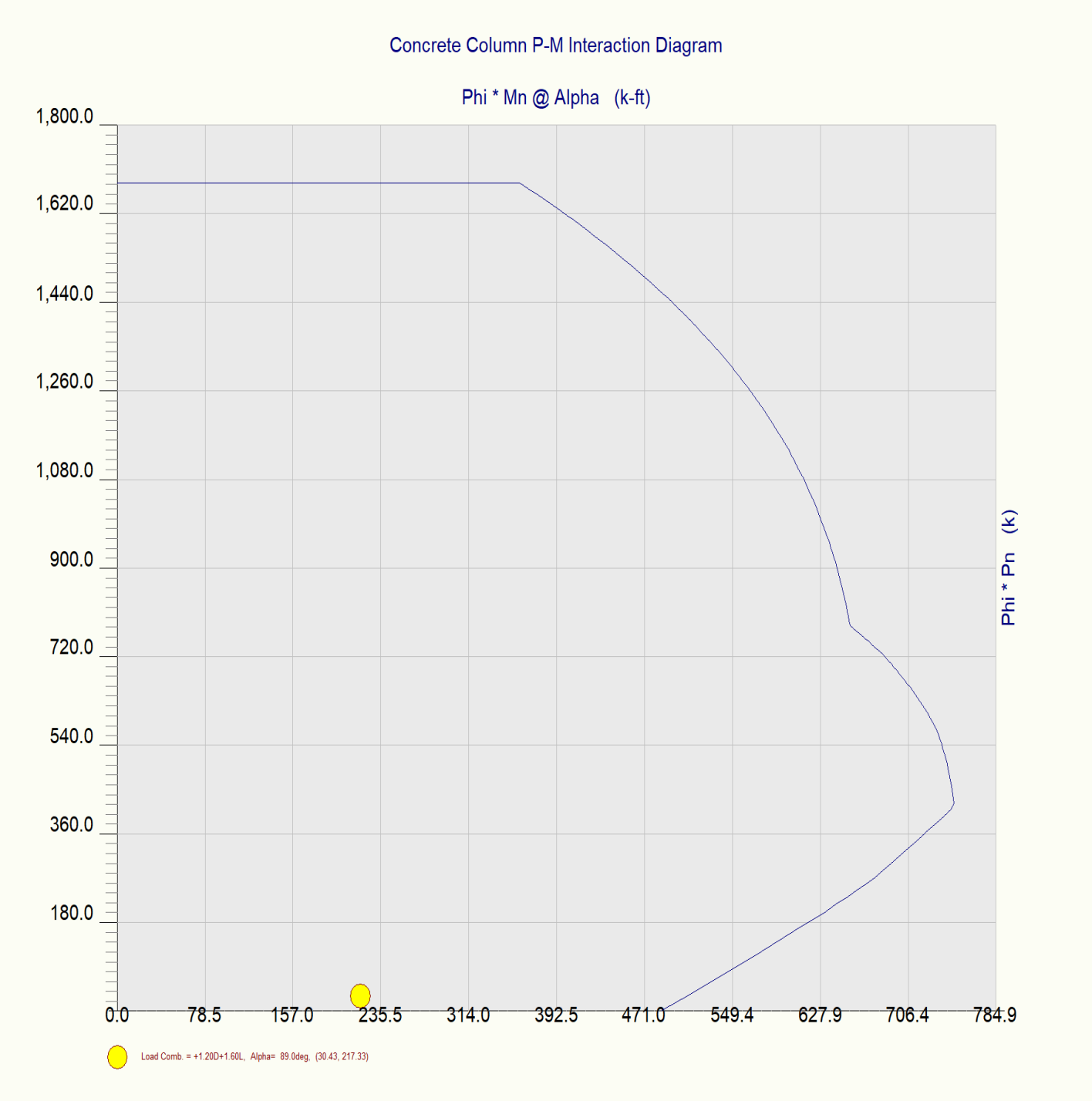
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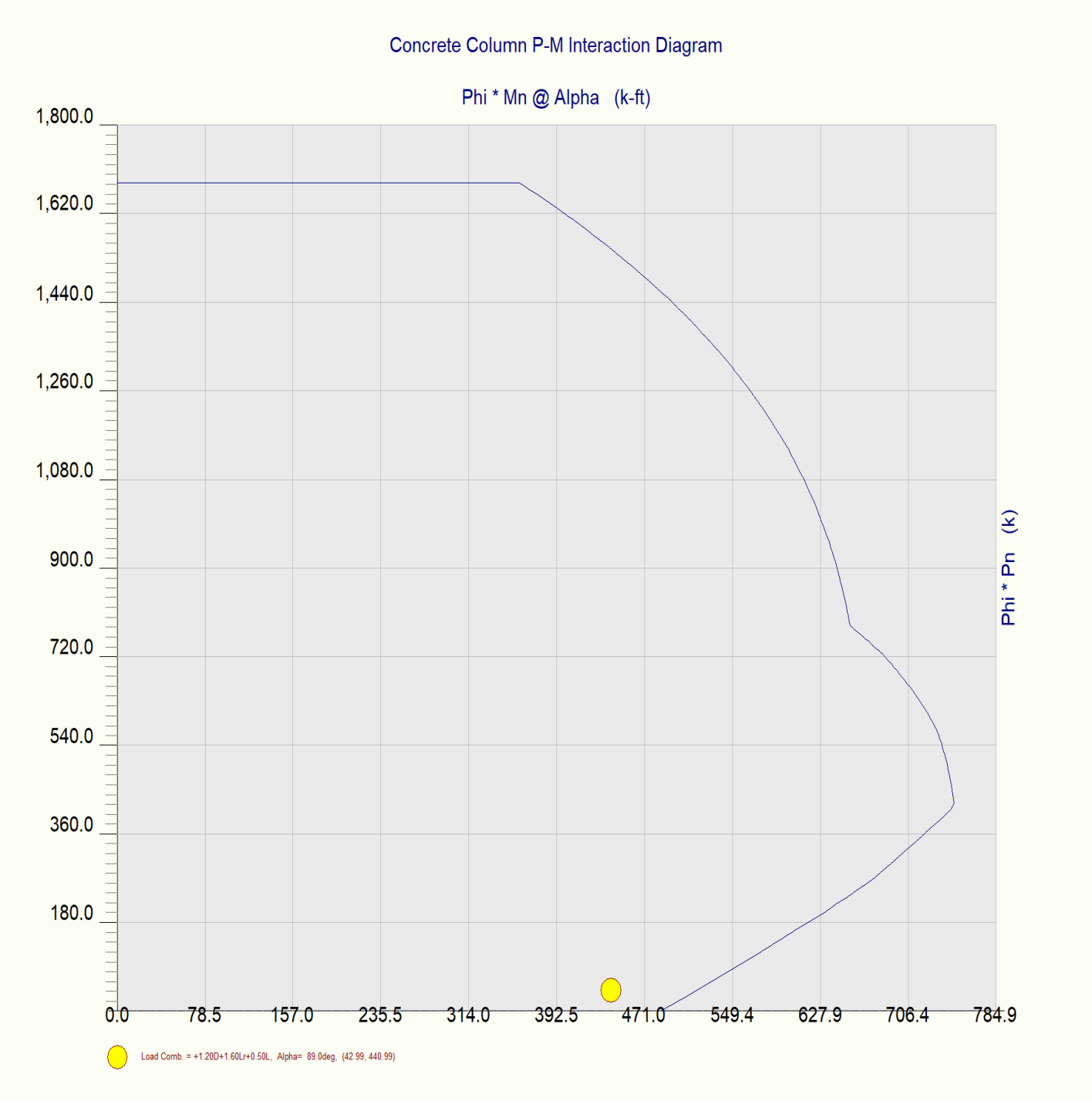
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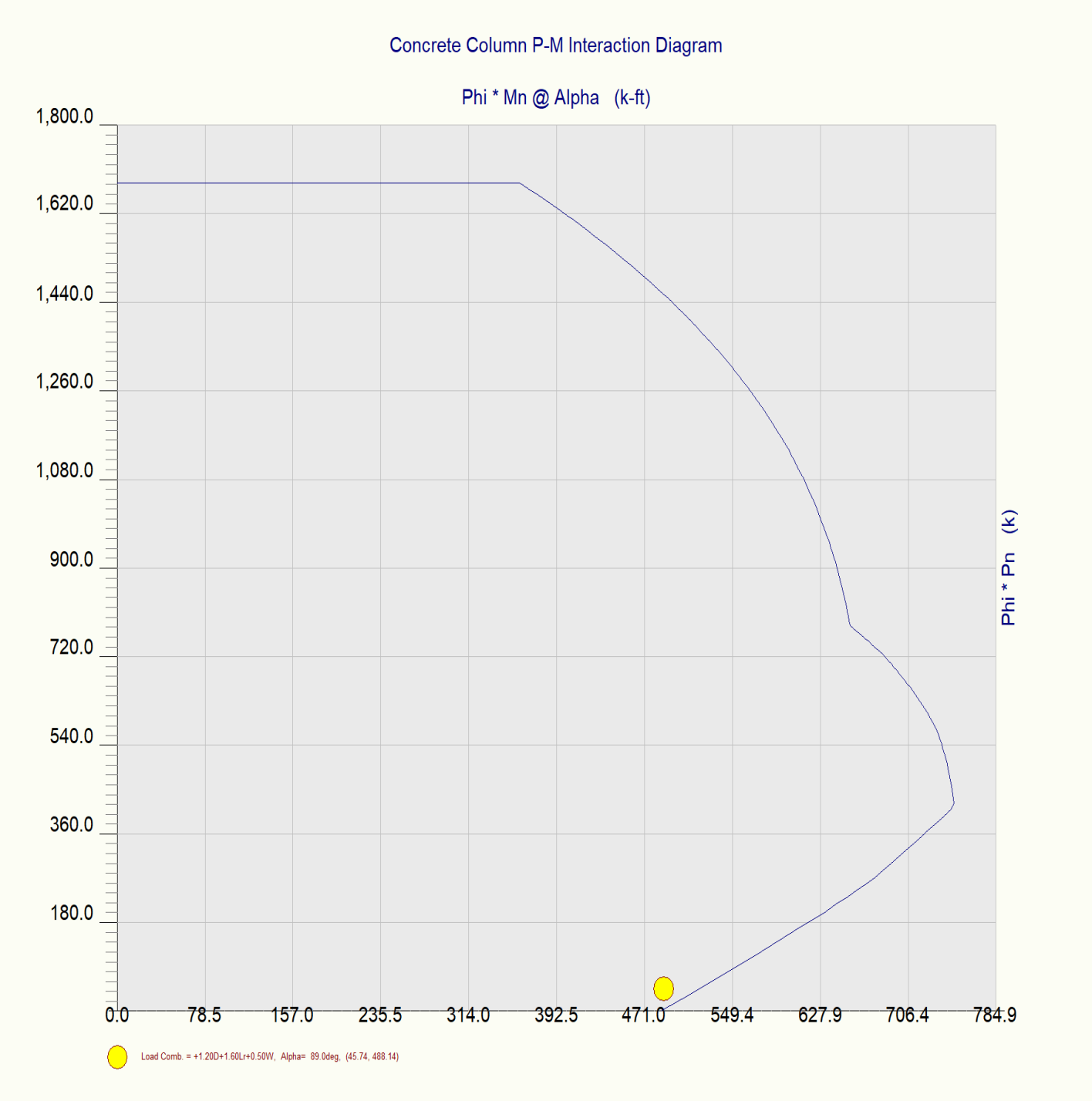
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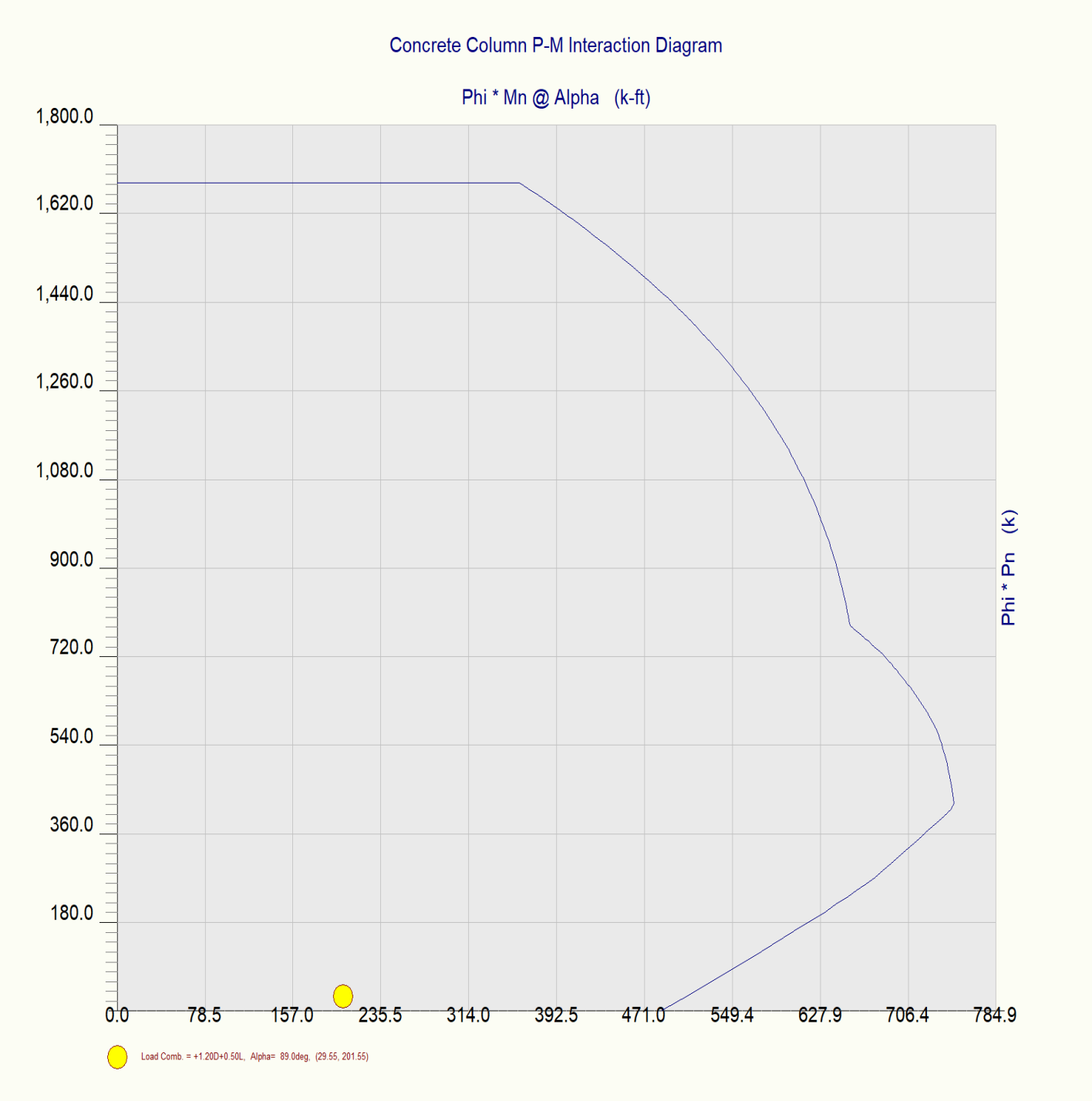
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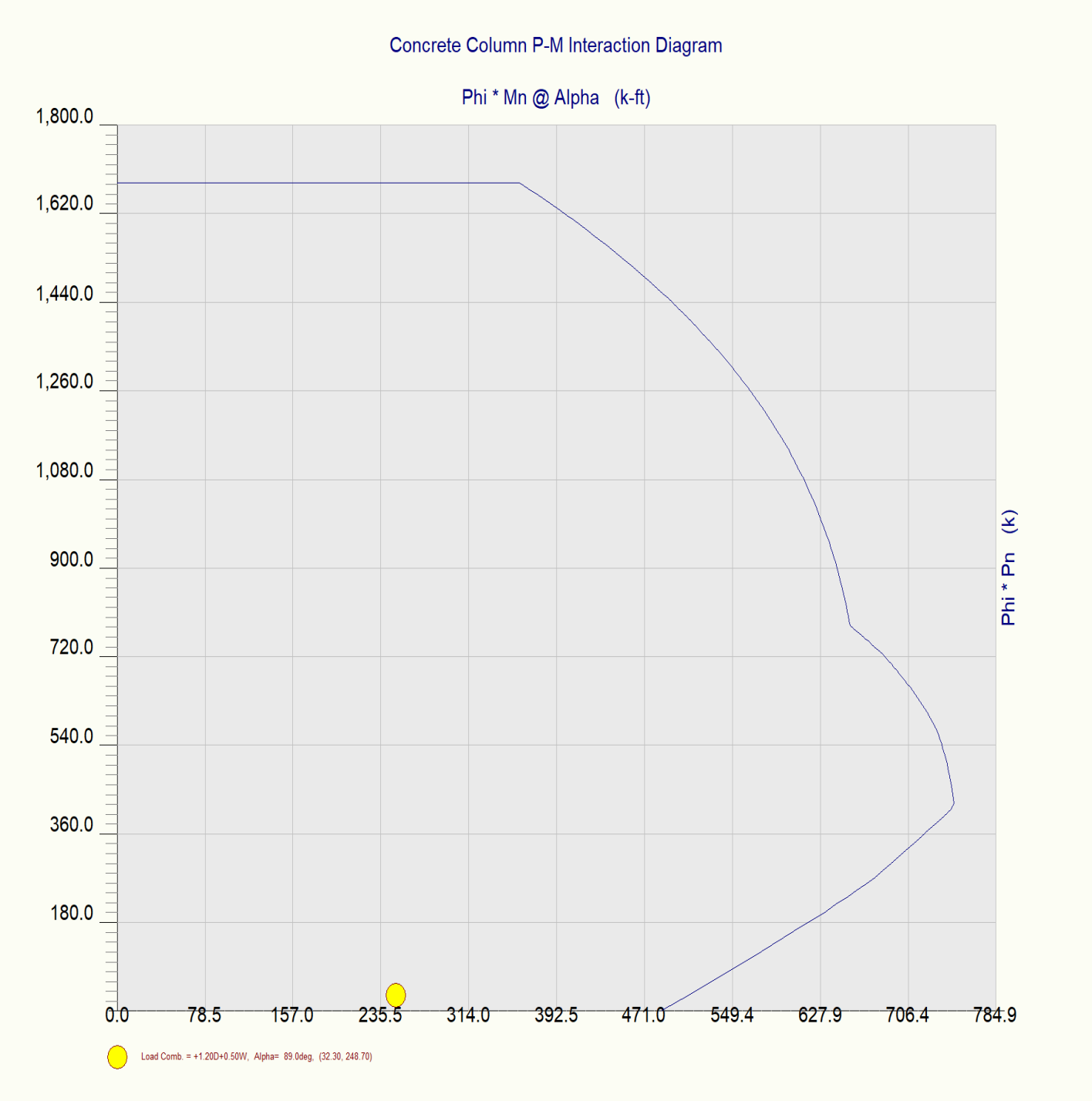
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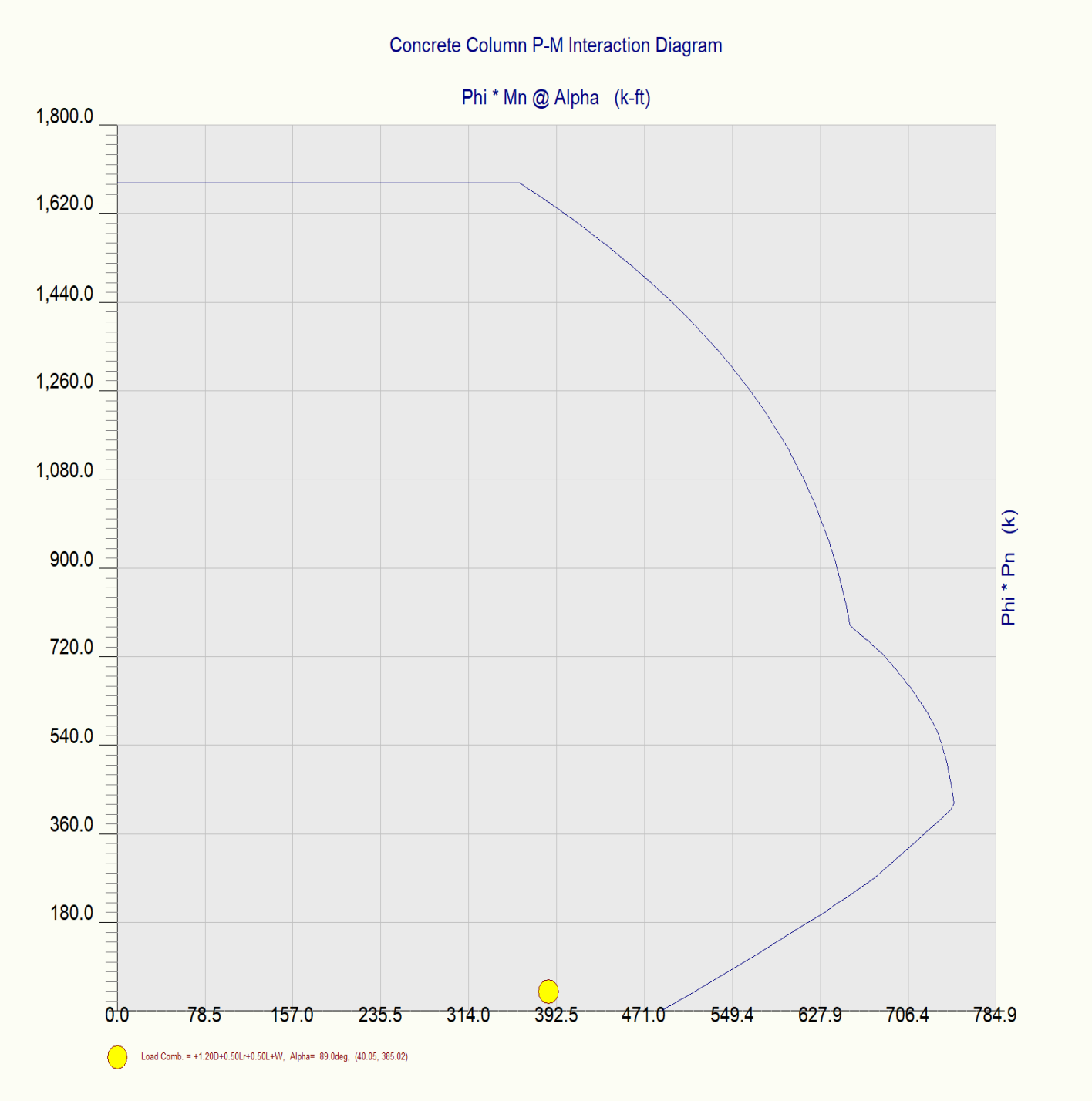
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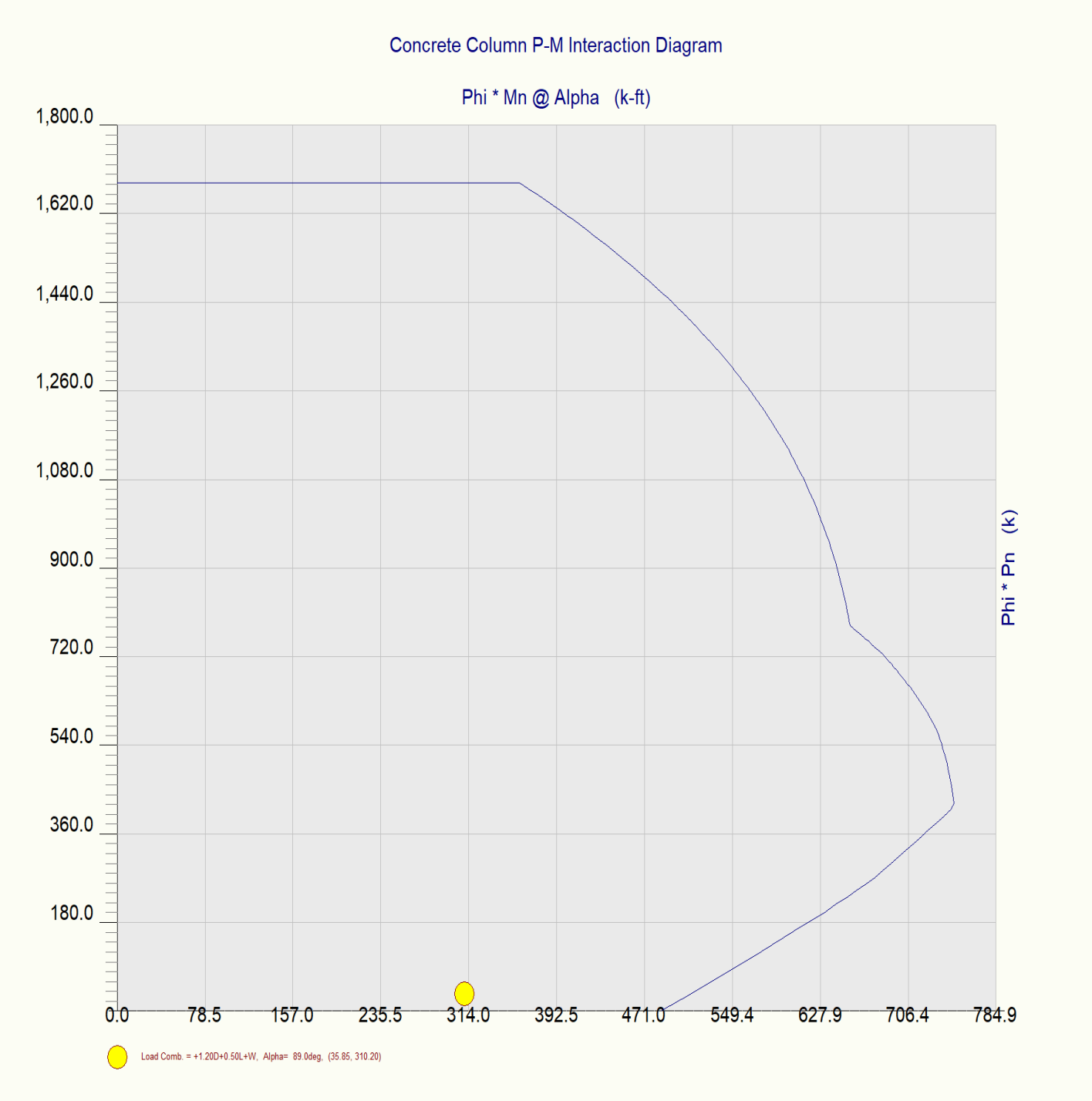
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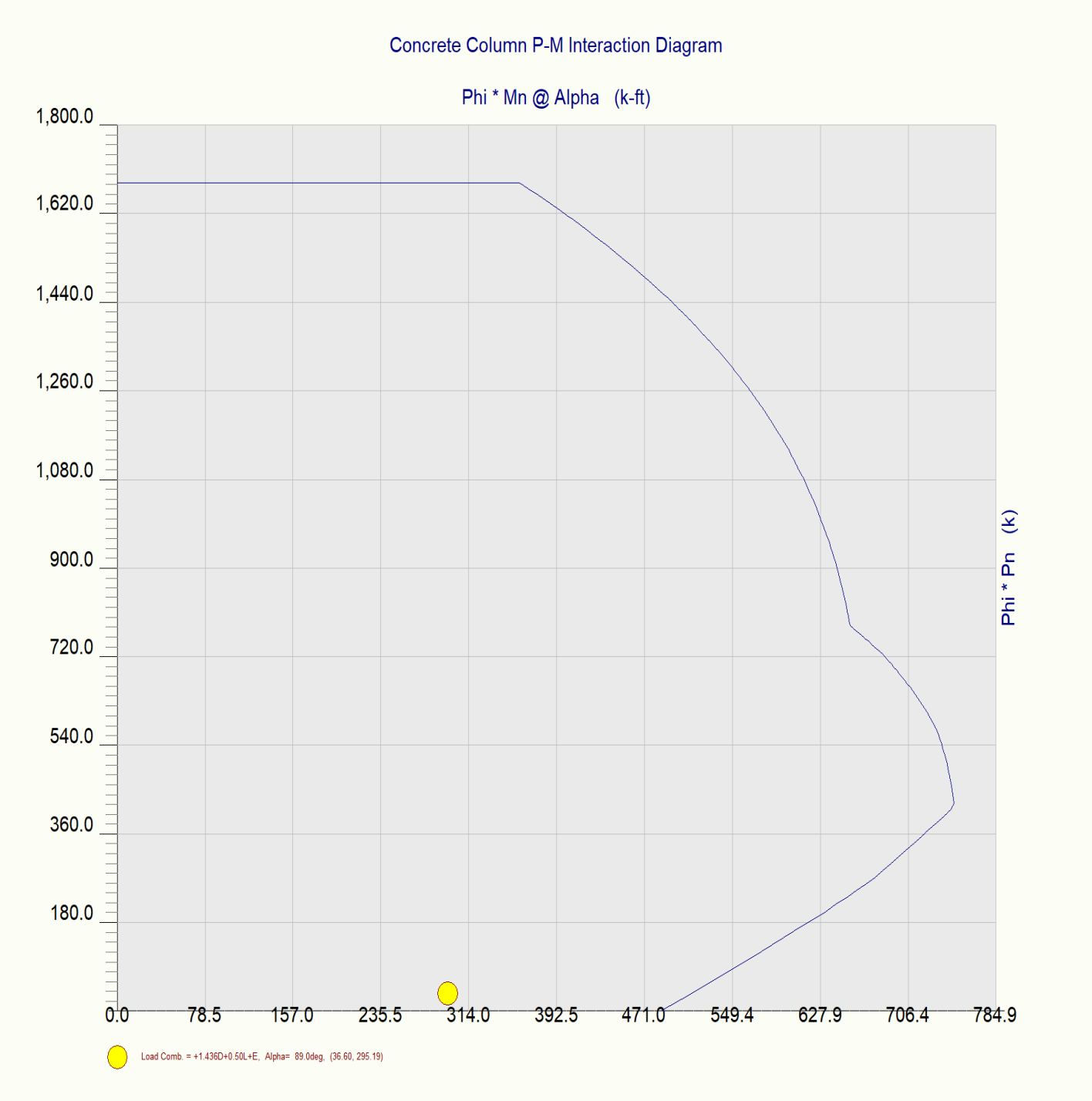
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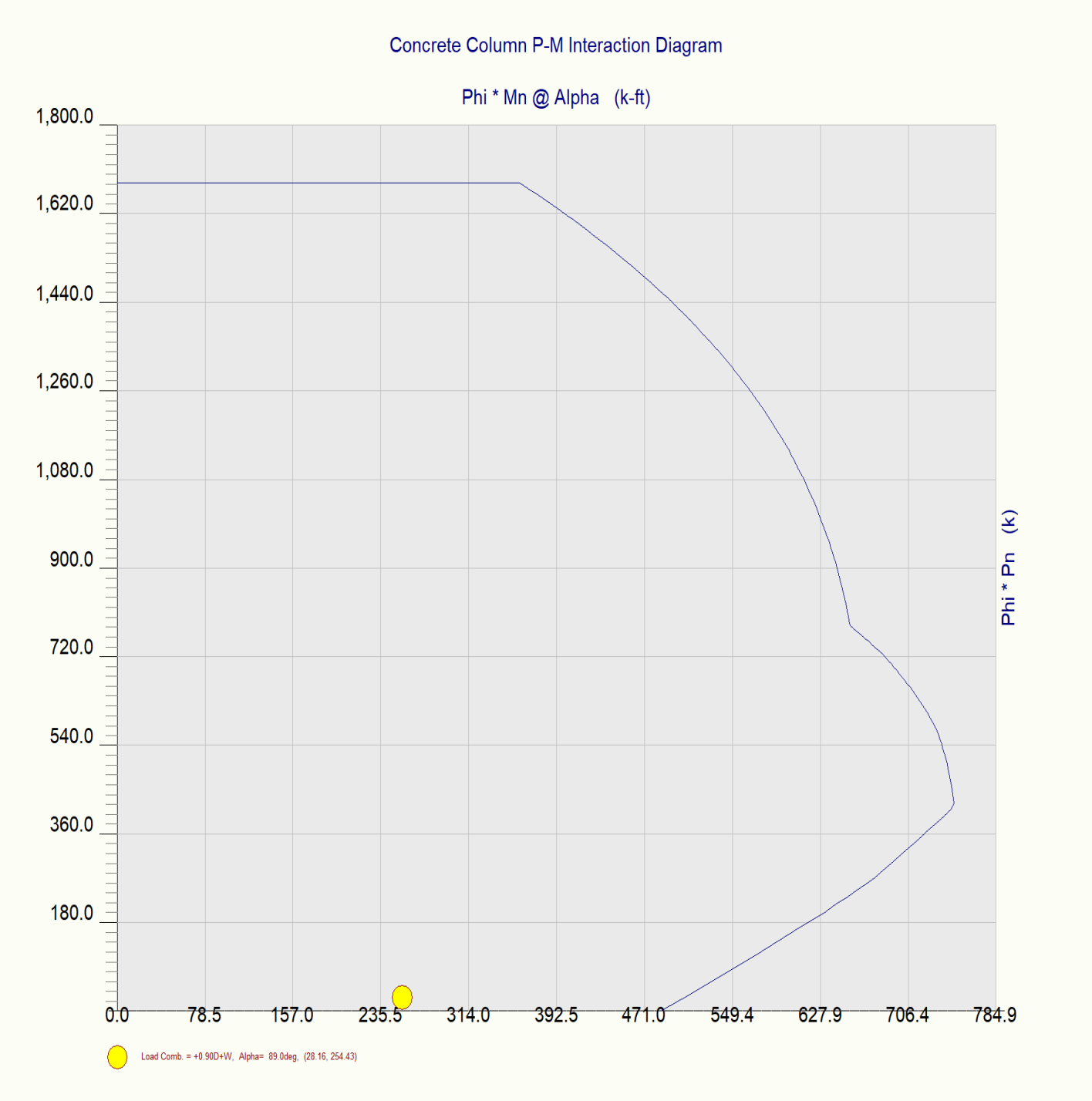
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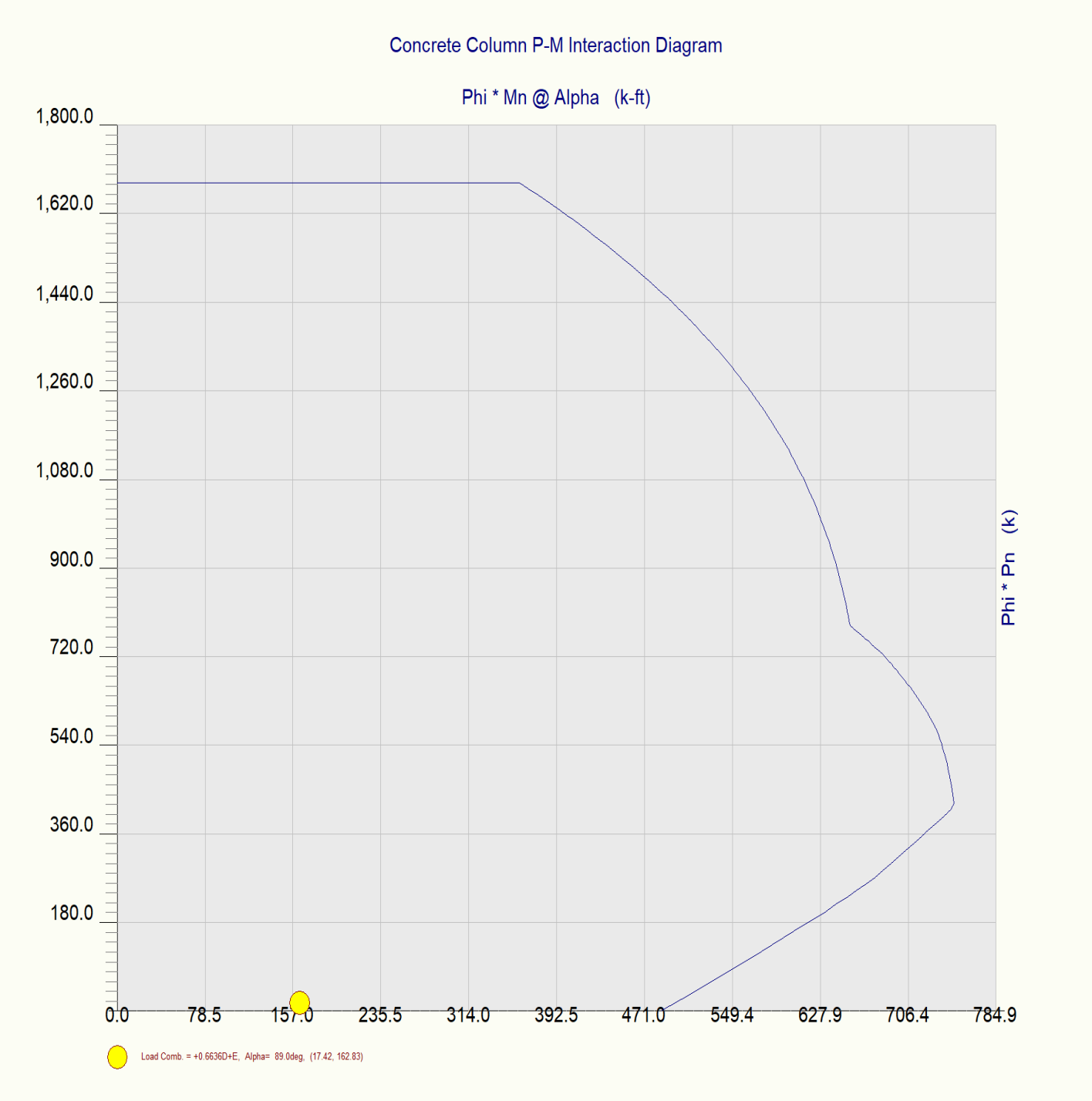
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LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 30" Dia. Concrete Pedestal



Tetra Tech
17885 Von Karman Ave, Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE	Ben Lomond TS		
JOB NO.	200-42064-22005	**SHEET NO.**	
CALCULATED BY	BMB	**DATE**	
CHECKED BY	MSO	**DATE**	

STRUCTURAL CALCULATIONS

FOR

Ben Lomond TS - RAA Canopy

Tetra Tech
17885 Von Karman Ave, Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE Ben Lomond TS

JOB NO. 200-42064-22005 **SHEET NO.**
CALCULATED BY BMB **DATE**
CHECKED BY MSO **DATE**

www.struware.com

Code Search

Code: International Building Code 2021

Occupancy:

Occupancy Group = B Business

Risk Category & Importance Factors:

Risk Category =	II
Wind factor =	1.00
Snow factor =	1.00
Seismic factor =	1.00

Type of Construction:

Fire Rating:

Roof =	0.0 hr
Floor =	0.0 hr

Building Geometry:

Roof angle (θ)	2.40 / 12	11.3 deg
Building length	144.0 ft	
Least width	117.6 ft	
Mean Roof Ht (h)	26.4 ft	
Parapet ht above grd	0.0 ft	
Minimum parapet ht	0.0 ft	

Live Loads:

Roof
0 to 200 sf: 20 psf
200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
over 600 sf: 12 psf

Roofs used for roof gardens 100 psf

Floor:

Typical Floor	50 psf
Partitions	15 psf
Corridors above first floor	80 psf
Lobbies & first floor corridors	100 psf
Stairs and exit ways	100 psf
Storage areas above ceilings	20 psf

Tetra Tech
17885 Von Karman Ave, Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE	Ben Lomond TS		
JOB NO.	200-42064-22005	**SHEET NO.**	
CALCULATED BY	BMB	**DATE**	
CHECKED BY	MSO	**DATE**	

Wind Loads : ASCE 7- 16

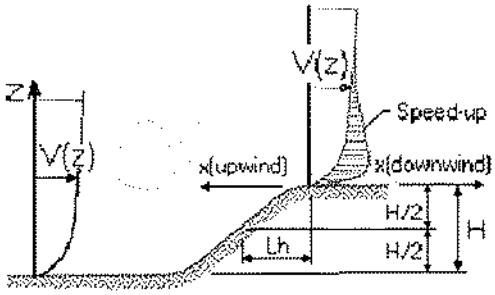
Ultimate Wind Speed	92 mph
Nominal Wind Speed	71.3 mph
Risk Category	II
Exposure Category	C
Enclosure Classif.	Open Building
Internal pressure	+/-0.00
Directionality (Kd)	0.85
Kh case 1	0.956
Kh case 2	0.956
Type of roof	Gable

Topographic Factor (Kzt)

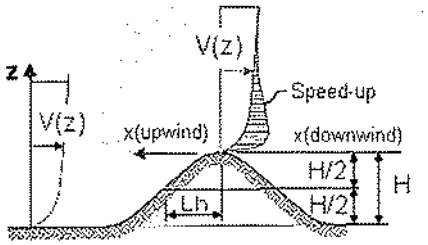
Topography		Flat
Hill Height	(H)	80.0 ft
Half Hill Length (Lh)		100.0 ft
Actual H/Lh	=	0.80
Use H/Lh	=	0.50
Modified Lh	=	160.0 ft
From top of crest: x =		50.0 ft
Bldg up/down wind?		downwind

H/Lh= 0.50 K_1 = 0.000
x/Lh = 0.31 K_2 = 0.792
z/Lh = 0.17 K_3 = 1.000

At Mean Roof Ht:
Kzt = $(1+K_1K_2K_3)^2$ = 1.00



ESCARPMENT



2D RIDGE or 3D AXISYMMETRICAL HILL

Gust Effect Factor

h =	26.4 ft
B =	117.6 ft
/z (0.6h) =	15.9 ft

Flexible structure if natural frequency < 1 Hz (T > 1 second).
If building h/B>4 then may be flexible and should be investigated.
h/B = 0.22 Rigid structure (low rise bldg)

G = 0.85 Using rigid structure formula

Rigid Structure

$\bar{e}$ =	0.20
ℓ =	500 ft
z_{min} =	15 ft
c =	0.20
g_Q, g_v =	3.4
L_z =	431.8 ft
Q =	0.87
I_z =	0.23
G =	**0.86** use G = 0.85

Flexible or Dynamically Sensitive Structure

Natural Frequency (η_1) =	0.0 Hz				
Damping ratio (β) =	0				
/b =	0.65				
/α =	0.15				
Vz =	78.4				
N_1 =	0.00				
R_n =	0.000				
R_h =	28.282	η =	0.000	h =	26.4 ft
R_B =	28.282	η =	0.000		
R_L =	28.282	η =	0.000		
g_R =	0.000				
R =	0.000				
Gf =	0.000				

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JOB TITLE Ben Lomond TS
JOB NO. 200-42064-22005 **SHEET NO.**
CALCULATED BY BMB **DATE**
CHECKED BY MSO **DATE**

Enclosure Classification

Test for Enclosed Building: Ao < 0.01Ag or 4 sf, whichever is smaller

Test for Open Building: All walls are at least 80% open.
Ao ≥ 0.8Ag

Test for Partially Enclosed Building: Predominately open on one side only

	Input			Test	
Ao	500.0	sf	Ao ≥ 1.1Aoi	NO	
Ag	600.0	sf	Ao > 4' or 0.01Ag	YES	
Aoi	1000.0	sf	Aoi / Agi ≤ 0.20	YES	Building is NOT Partially Enclosed
Agi	10000.0	sf			

Conditions to qualify as Partially Enclosed Building. Must satisfy all of the following:
Ao ≥ 1.1Aoi
Ao > smaller of 4' or 0.01 Ag
Aoi / Agi ≤ 0.20
Where:
Ao = the total area of openings in a wall that receives positive external pressure.
Ag = the gross area of that wall in which Ao is identified.
Aoi = the sum of the areas of openings in the building envelope (walls and roof) not including Ao.
Agi = the sum of the gross surface areas of the building envelope (walls and roof) not including Ag.

Test for Partially Open Building: A building that does not qualify as open, enclosed or partially enclosed.
(This type building will have same wind pressures as an enclosed building.

Reduction Factor for large volume partially enclosed buildings (Ri) :

If the partially enclosed building contains a single room that is unpartitioned , the internal pressure coefficient may be multiplied by the reduction factor Ri.

Total area of all wall & roof openings (Aog): 0 sf
Unpartitioned internal volume (Vi) : 0 cf
Ri = 1.00

Ground Elevation Factor (Ke)

Grd level above sea level = 0.0 ft Ke = 1.0000
Constant = 0.00256 Adj Constant = 0.00256

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Wind Loads - Open Buildings: 0.25 ≤ h/L ≤ 1.0

Ultimate Wind Pressures

Type of roof = Pitched Free Roofs G = 0.85
Wind Flow = Clear Roof Angle = 11.3 deg

Main Wind Force Resisting System

NOTE: The code requires the MWFRS be designed for a minimum pressure of 16 psf.

Kz = Kh (case 2) = 0.96 Base pressure (qh) = **17.6 psf**

Roof pressures - Wind Normal to Ridge

Procedure not allowed h/L is less than 0.25

Wind Flow	Load Case		Wind Direction γ = 0 & 180 deg	
			Cnw	Cnl
Clear Wind Flow	A	Cn =	1.10	-0.35
		p =	16.5 psf	-5.3 psf
	B	Cn =	0.15	-1.15
		p =	2.2 psf	-17.2 psf

NOTE: 1). Cnw and Cnl denote combined pressures from top and bottom roof surfaces.
2). Cnw is pressure on windward half of roof. Cnl is pressure on leeward half of roof.
3). Positive pressures act toward the roof. Negative pressures act away from the roof.

Roof pressures - Wind Parallel to Ridge, γ = 90 deg

Procedure not allowed h/L is less than 0.25

h = 26.4 ft
2h = 52.8 ft

Wind Flow	Load Case		Horizontal Distance from Windward Edge		
			≤ h	>h ≤ 2h	> 2h
Clear Wind Flow	A	Cn =	-0.80	-0.60	-0.30
		p =	-12.0 psf	-9.0 psf	-4.5 psf
	B	Cn =	0.80	0.50	0.30
		p =	12.0 psf	7.5 psf	4.5 psf

Fascia Panels -Horizontal pressures

Fascia pressures not applicable - roof angle exceeds 5 degrees.

qp = 0.0 psf
Windward fascia: 0.0 psf (GCpn = +1.5)
Leeward fascia: 0.0 psf (GCpn = -1.0)

Components & Cladding - roof pressures

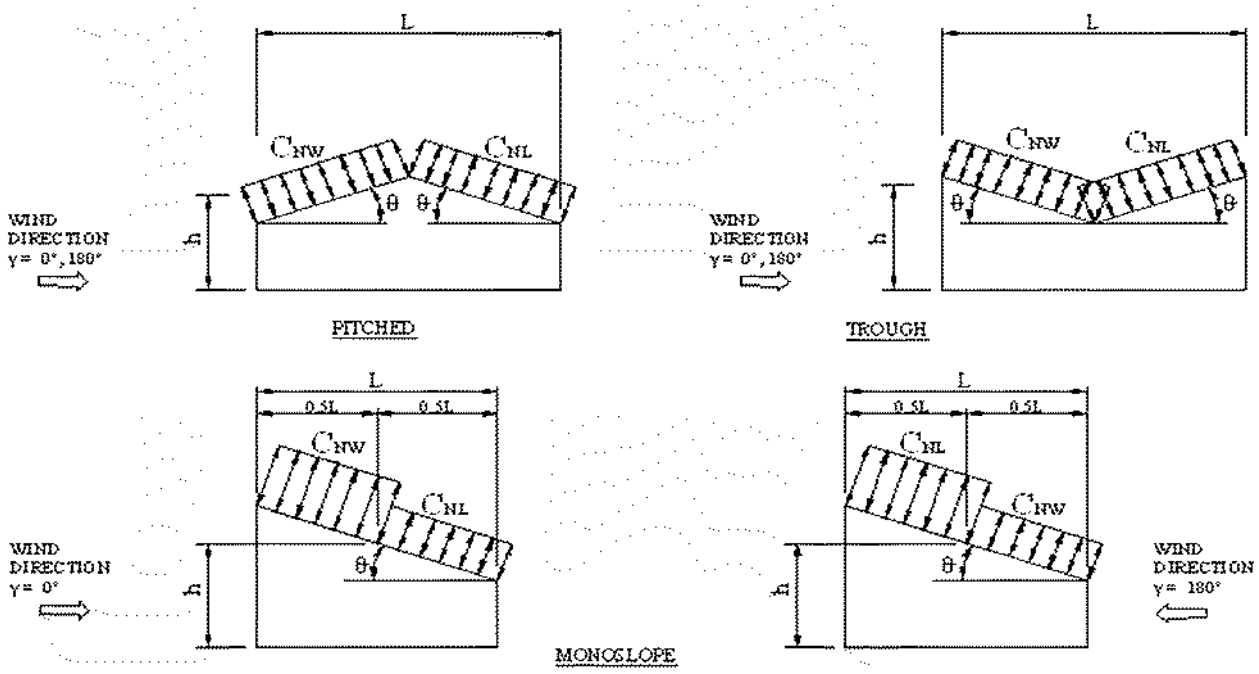
Kz = Kh (case 1) = 0.96 a = 10.6 ft a^2 = 111.7 sf
Base pressure (qh) = **17.6 psf** $4a^2$ = 446.6 sf
G = 0.85

	Effective Wind Area	Clear Wind Flow					
		zone 3		zone 2		zone 1	
		positive	negative	positive	negative	positive	negative
C_N	≤ 111.7 sf	2.20	-2.89	1.70	-1.75	1.10	-1.15
	>111.7, ≤ 446.6 sf	1.70	-1.75	1.70	-1.75	1.10	-1.15
	> 446.6 sf	1.10	-1.15	1.10	-1.15	1.10	-1.15
Wind pressure	≤ 111.7 sf	32.9 psf	-43.2 psf	25.5 psf	-26.2 psf	16.5 psf	-17.2 psf
	>111.7, ≤ 446.6 sf	25.5 psf	-26.2 psf	25.5 psf	-26.2 psf	16.5 psf	-17.2 psf
	> 446.6 sf	16.5 psf	-17.2 psf	16.5 psf	-17.2 psf	16.5 psf	-17.2 psf

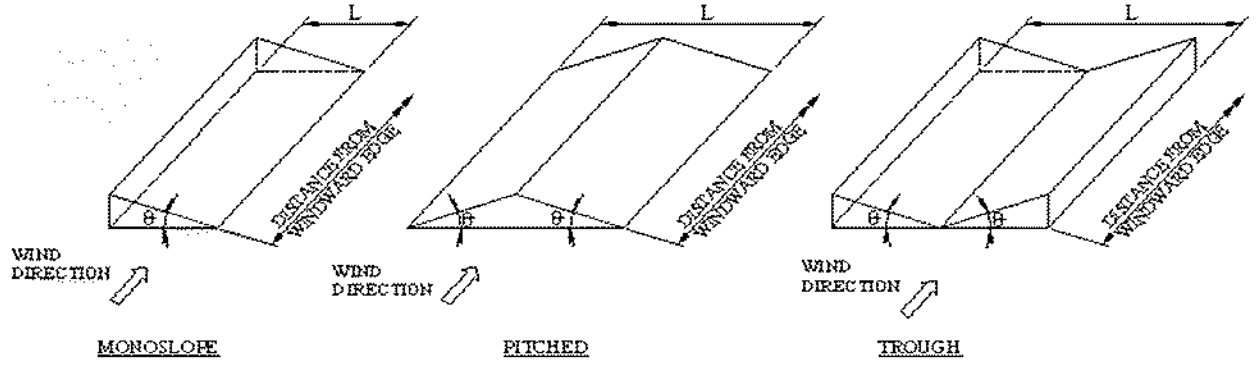
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JOB NO.	200-42064-22005	**SHEET NO.**	
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Location of Open Building Wind Pressure Zones

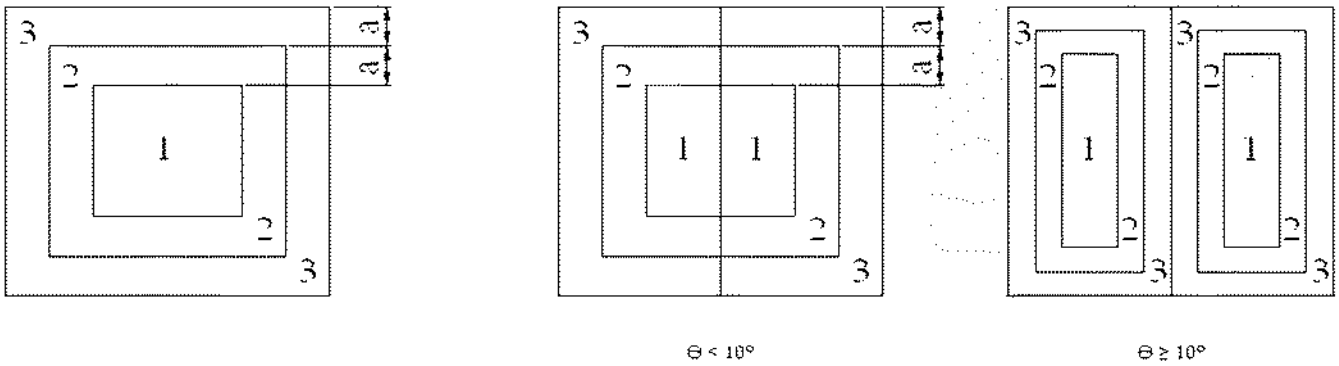


WIND DIRECTION $\gamma = 0°, 180°$



WIND DIRECTION $\gamma = 90°$

MAIN WIND FORCE RESISTING SYSTEM



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COMPONENTS AND CLADDING

TETRA TECH

SHEET NO.		**DATE**	6/7/2024
CHECKED BY		**OFFICE**	Irvine
TELEPHONE			(949) 809-5000
ENGINEER	AA	**JOB NUMBER**	200-42064-22005

SUBJECT HHW Canopy Structure
Ben Lemond Transfer Station

Seismic Base Shear (Non-Building Structure)

Per ASCE 7-16, Chapter 15

Design Spectral Response Acceleration

Risk Category	II		(Table 1.5-1)
Soil Site Class	B		(Table 20.3-1)
S_s =	1.97	g	
S_1 =	0.783	g	
F_a =	0.900	g	(Table 11.4-1)
F_v =	0.800	g	(Table 11.4-2)
$S_{DS} = 2/3 S_s F_a$ =	1.182	g	(Eq. 11.4-3)
$S_{D1} = 2/3 S_1 F_v$ =	0.418	g	(Eq. 11.4-4)

Seismic Design Category (SDC)

SDC =	E		(Table 11.6-1,2)

Period Determination

$T_s = S_{D1}/S_{DS}$ =	0.35	sec	(Sec.11.4.5)
$T_o = 0.2(S_{D1}/S_{DS})$ =	0.07	sec	(Sec.11.4.5)
T_L =	12.0	sec	(Figures 22-12)
Structure Type	All other structral systems		(Table 12.8-2)
h_n =	21.2	ft	
C_t =	0.020		
x =	0.75		
$T_a = C_t h_n^x$ =	0.197	sec	(Eqt. 12.8-7)

Seismic Response Coefficient (C_s) Determination

Steel Ordinary Cocentrically Braced Frame with Permitted Height Increase:

Importance Factor (I)		1.00		(Table 1.5-2)	
Response Modification Coefficient (R)		2.5		(Table 15.4-1)	
Overstrength Factor (Ω_0)		2.0		(Table 15.4-1)	
Deflection Amplification Factor (C_d)		2.5		(Table 15.4-1)	
For 0 sec ≤ Ta ≤ 0.354 sec, use	$C_S = S_{DS} \times I / R$	0.473	g	(Eq 12.8-2)	Governs
For 0.354 sec < Ta ≤ 12 sec, use	$C_S = (S_{D1} \times I) / (T_a \times R)$	0.846	g	(Eq 12.8-3)	
For Ta > 12 sec, use	$C_S = (S_{D1} \times T_L \times I) / (T_a^2 \times R)$	51.459	g	(Eq 12.8-4)	
For S_1 > 0.6, use	$C_S > 0.5 S_1 \times I / R$	0.157	g	(Eq 12.8-6)	
For any cases	$C_S > 0.044 S_{DS} I > 0.01g$	0.052	g	(Eq 12.8-5)	

Cs =	0.473	g	
$V = C_S W$	0.473	W	(Eq 12.8-1)
$E_v = 0.2 S_{DS} W$	0.236	W	

RAA Canopy Roof Loads:

Roof Composition Weights:

$DL_{stand_seam_mtl_roof} := 1.5\ psf$ (Standing Seam Metal Roof - 24 gauge)

$DL_{coll} := 10\ psf$ (Collateral Dead Load)

$DL_{roof} := DL_{stand_seam_mtl_roof} + DL_{coll} = 11.5\ psf$ (Dead Load, Downward)

$DL_{roof_uplift} := DL_{stand_seam_mtl_roof} = 1.5\ psf$ (Dead Load, Uplift)

$LL_{roof} := 20\ psf$ (Roof Live Load)

Reduced Uniformly Distributed Roof Live Load per ASCE 7-16 Section 4.8-1

$\theta := 2.4$ (Number of inches of rise per foot)

$m := \operatorname{atan}\left(\frac{\theta}{12}\right) \cdot \frac{180}{\pi} = 11.31$ (Slope in degrees)

$L_o := 20\ psf$ (Unreduced Roof Live Load)

$A_t := 28.75\ ft \cdot 58.792\ ft = 1690.27\ ft^2$ (Tributary Area (Span Length multiplied by effective width))

$R_1 := 0.6$ (Reduction Factor for $A_t \geq 600\ ft^2$)

$R_2 := 1$ (Reduction Factor $4 < m < 12$)

$L_r := L_o \cdot R_1 \cdot R_2 = 12\ psf$ (Reduced Roof Live Load)

$L_r := \max\left(L_r, 12\ psf\right) = 12\ psf$ (Reduced Roof Live Load, where $12 < L_o < 20$)

$C_s := \text{READEXCEL}(\text{".\Seismic Loads Ch. 15 – Recycling Area Canopy.xlsx"}, \text{"Seismic Base Shear!U49"})$

$C_s = [0.473]$ (Seismic Base Shear per ASCE 7-16 Eq. 12.8-1)

$q_h := \text{READEXCEL}(\text{".\Code Search 2021 – Recycling Area Canopy.xlsx"}, \text{"Open Bldg!I18"}) \cdot 1\ psf$

$q_h = [17.613]\ psf$ (Base Pressure per ASCE 7-16 Eq. 26.10-1)

Canopy Seismic Loads:

$C_s = [0.473]$

Steel Member Weights: RISA3D Section Set Label

$W10x26 := 26\ plf \cdot C_s = [0.012]\ klf$ RIDGE

$W12x40 := 40\ plf \cdot C_s = [0.019]\ klf$ MF BEAM

$Purlin12ZS3.25X105 := 7.552\ plf \cdot C_s = [0.004]\ klf$ PURLIN

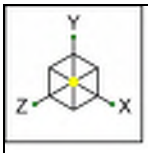
$PEMBCArea := 37.125\ in^2$ Pre-engineered Manufactured Building Column Area

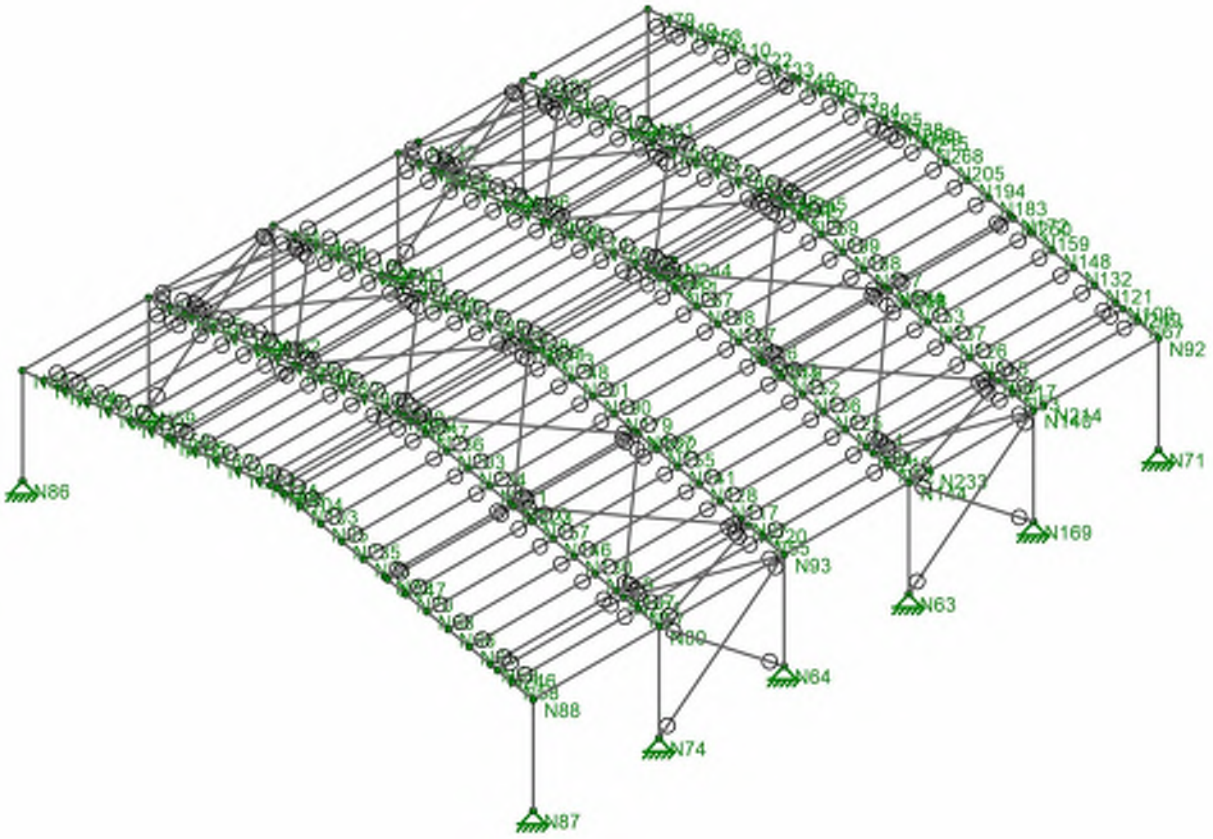
$PEMBBArea := 42.285\ in^2$ Pre-engineered Manufactured Building Beam Area

$A992 := 490\ \frac{lb}{ft^3}$

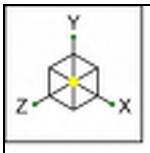
$PEMBColumn := PEMBCArea \cdot A992 \cdot C_s = [59.728]\ \frac{lb}{ft}$ COLUMN

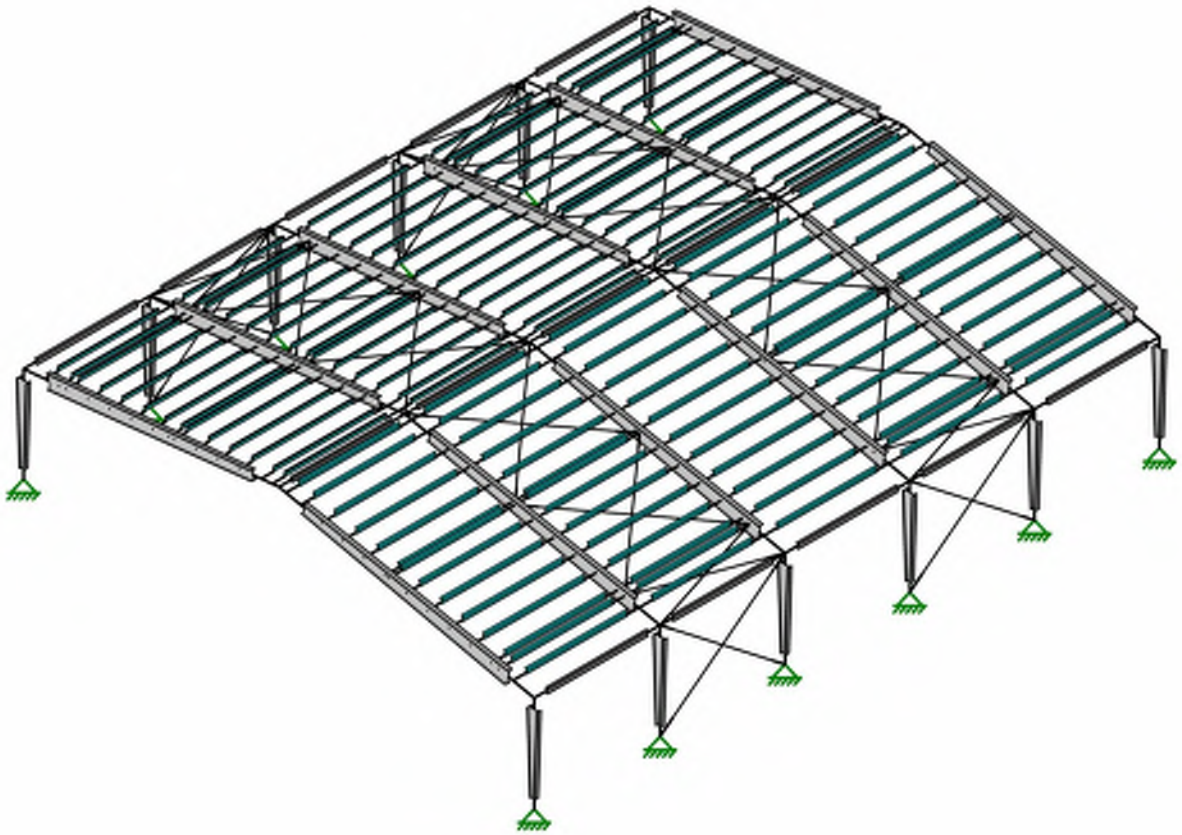
$PEMBBeam := PEMBBArea \cdot A992 \cdot C_s = [68.03]\ \frac{lb}{ft}$ BEAM

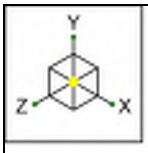


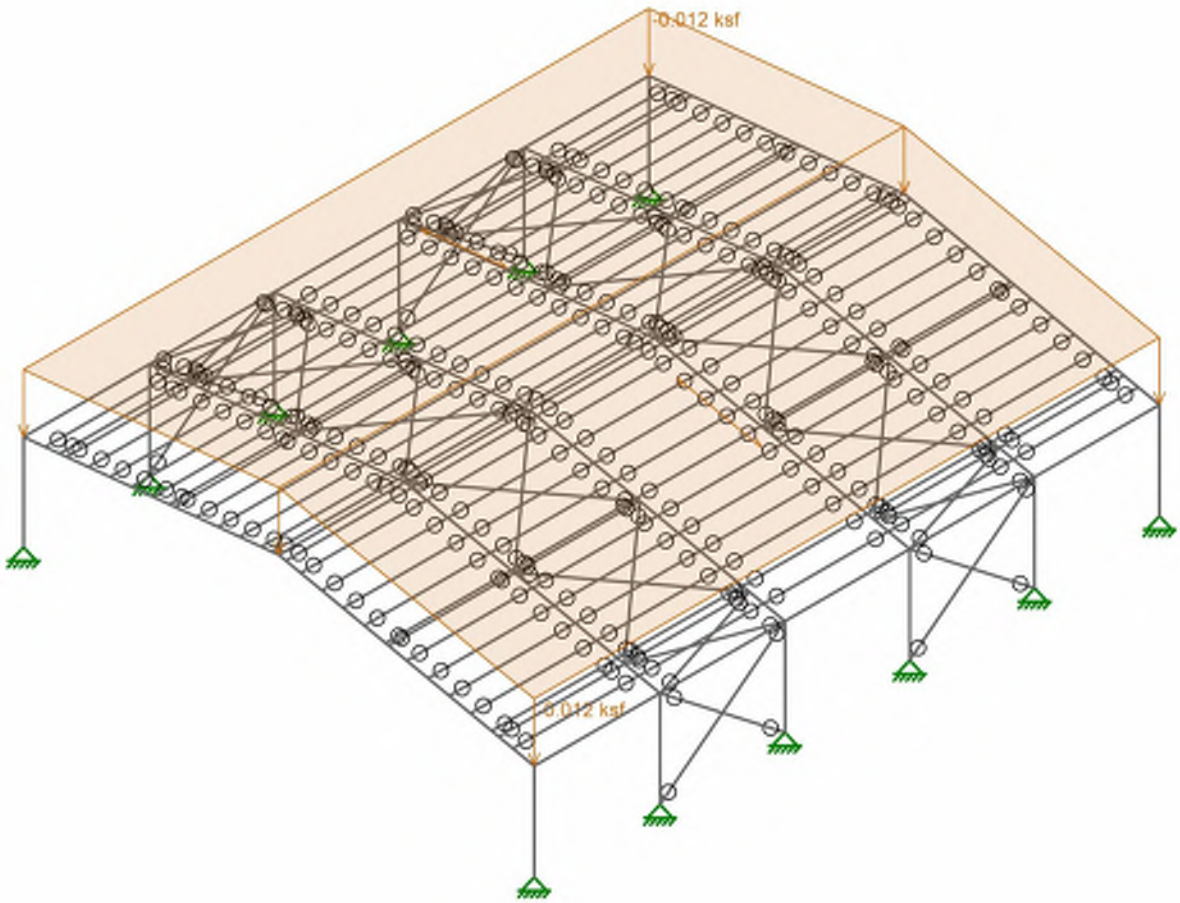


RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	1
	tony.arzate		RisaRD Model - Cover Struct…
		NODES	


Y
Z
X

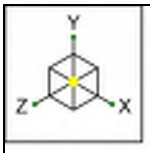


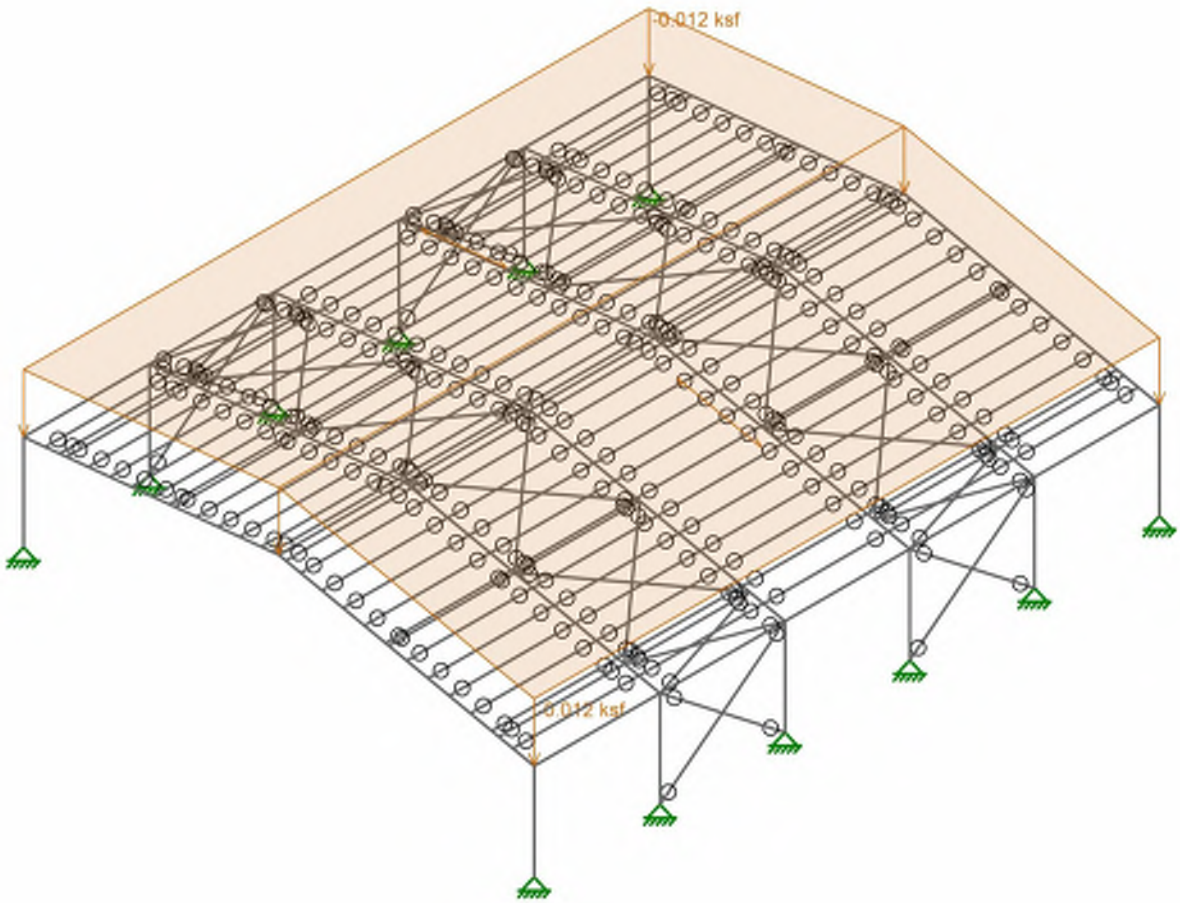




Loads: BLC 1, DL

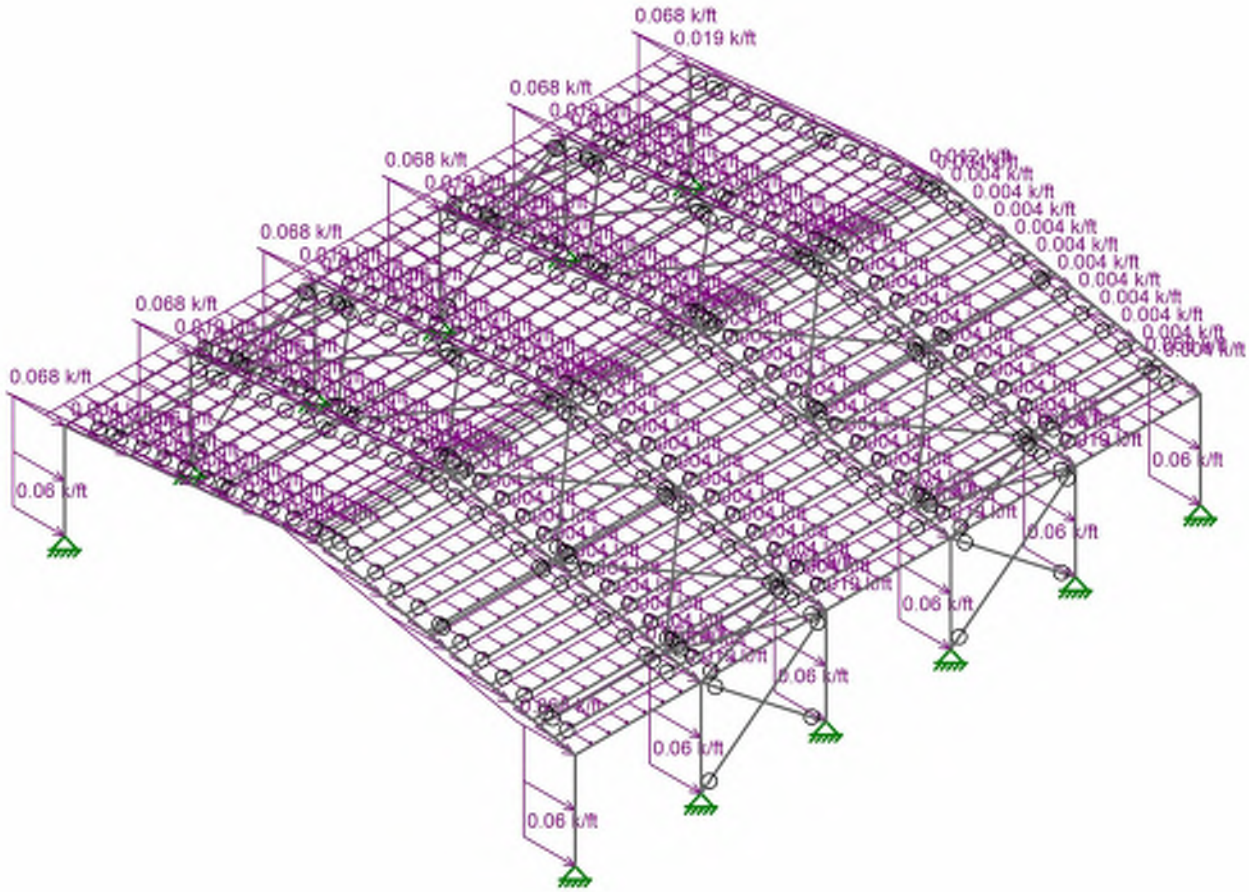
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	tony.arzate		RisaRD Model - Cover Struct…
		DEAD LOAD	





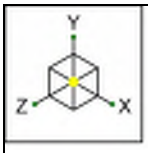
Loads: BLC 6, RLL

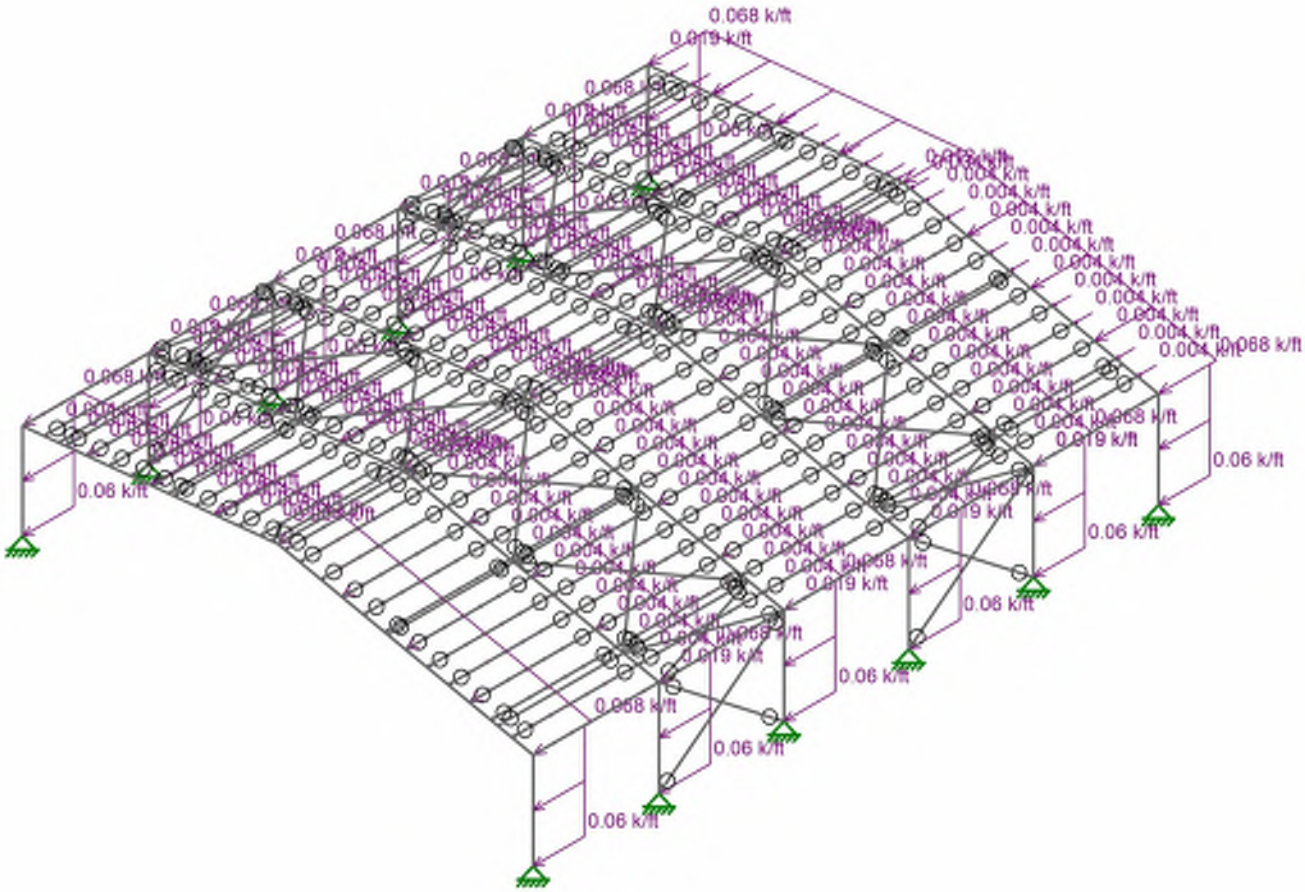
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	tony.arzate		RisaRD Model - Cover Struct…
		ROOF LIVE LOAD	



Loads: BLC 2, ELX

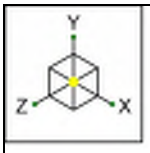
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	tony.arzate		RisaRD Model - Cover Struct…
		ELX	

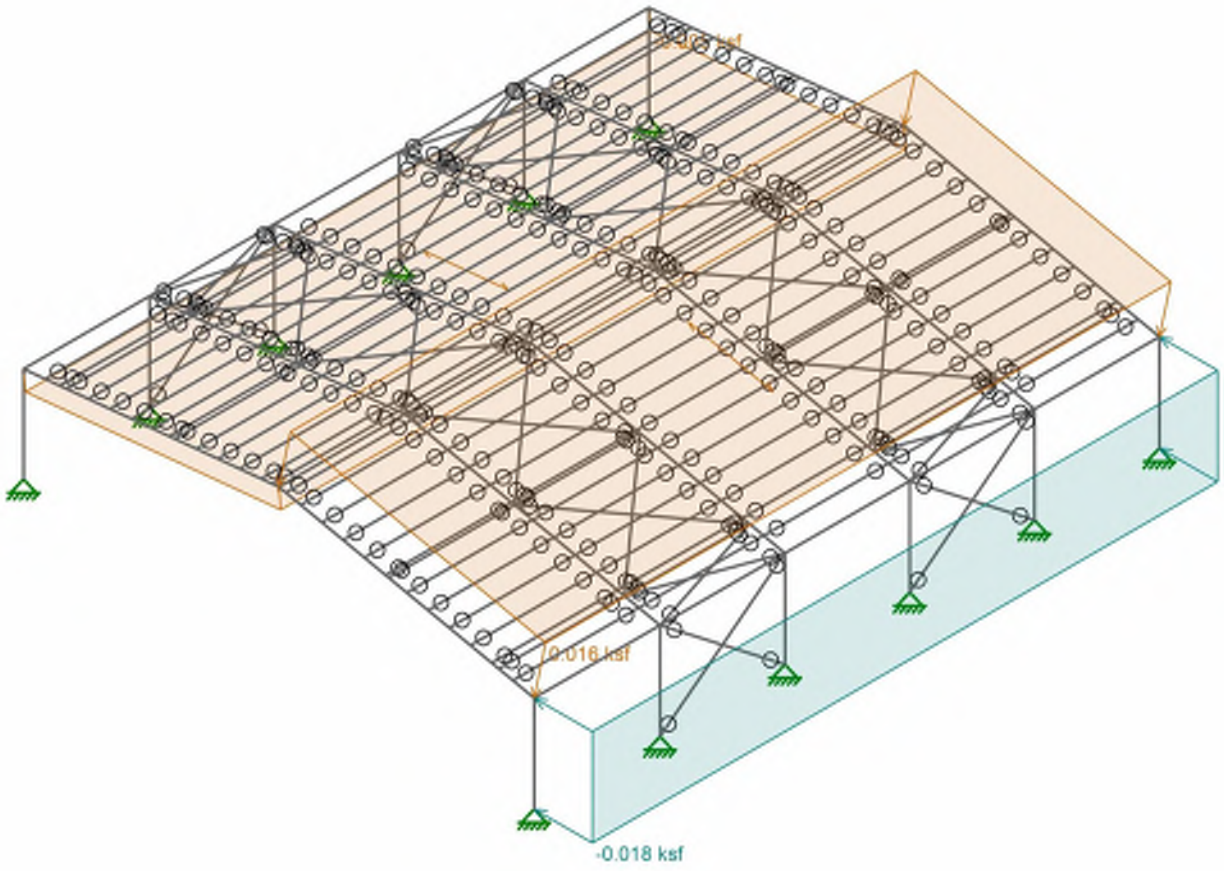




Loads: BLC 3, ELZ

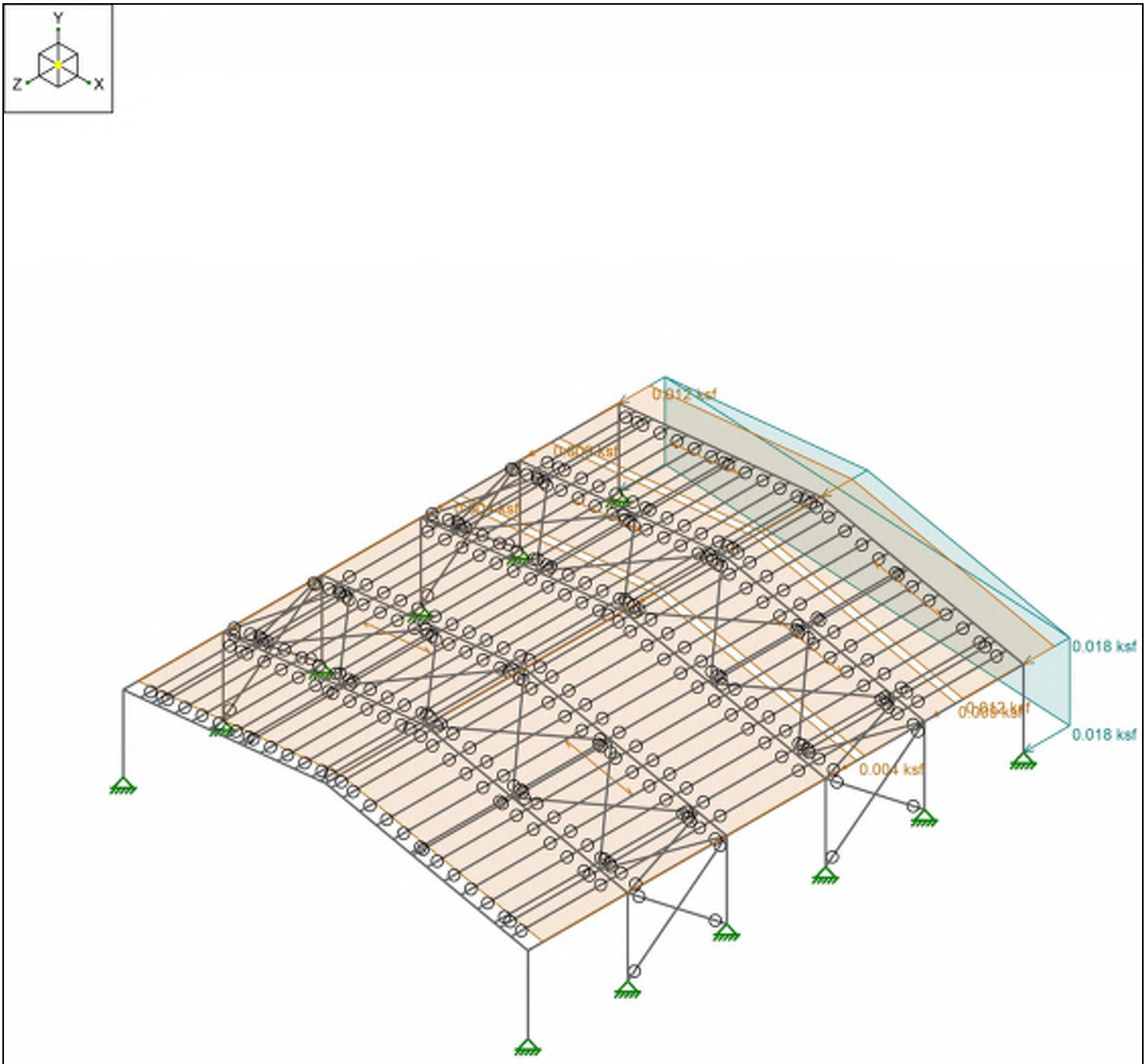
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	tony.arzate		RisaRD Model - Cover Struct…
		ELZ	





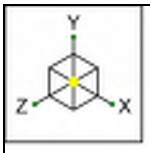
Loads: BLC 4, WLX

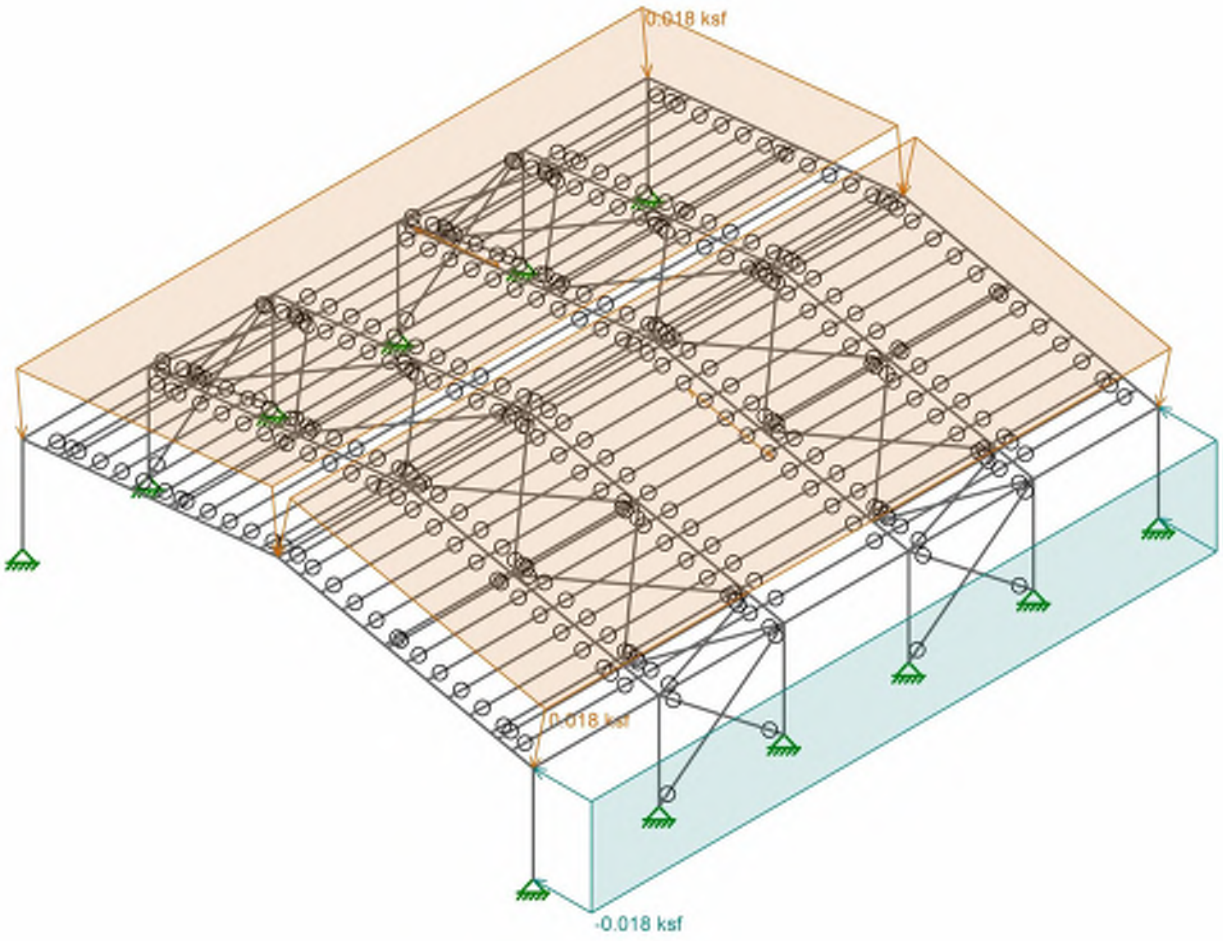
RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	7
	tony.arzate		RisaRD Model - Cover Struct…
		WLX	



Loads: BLC 5, WLZ

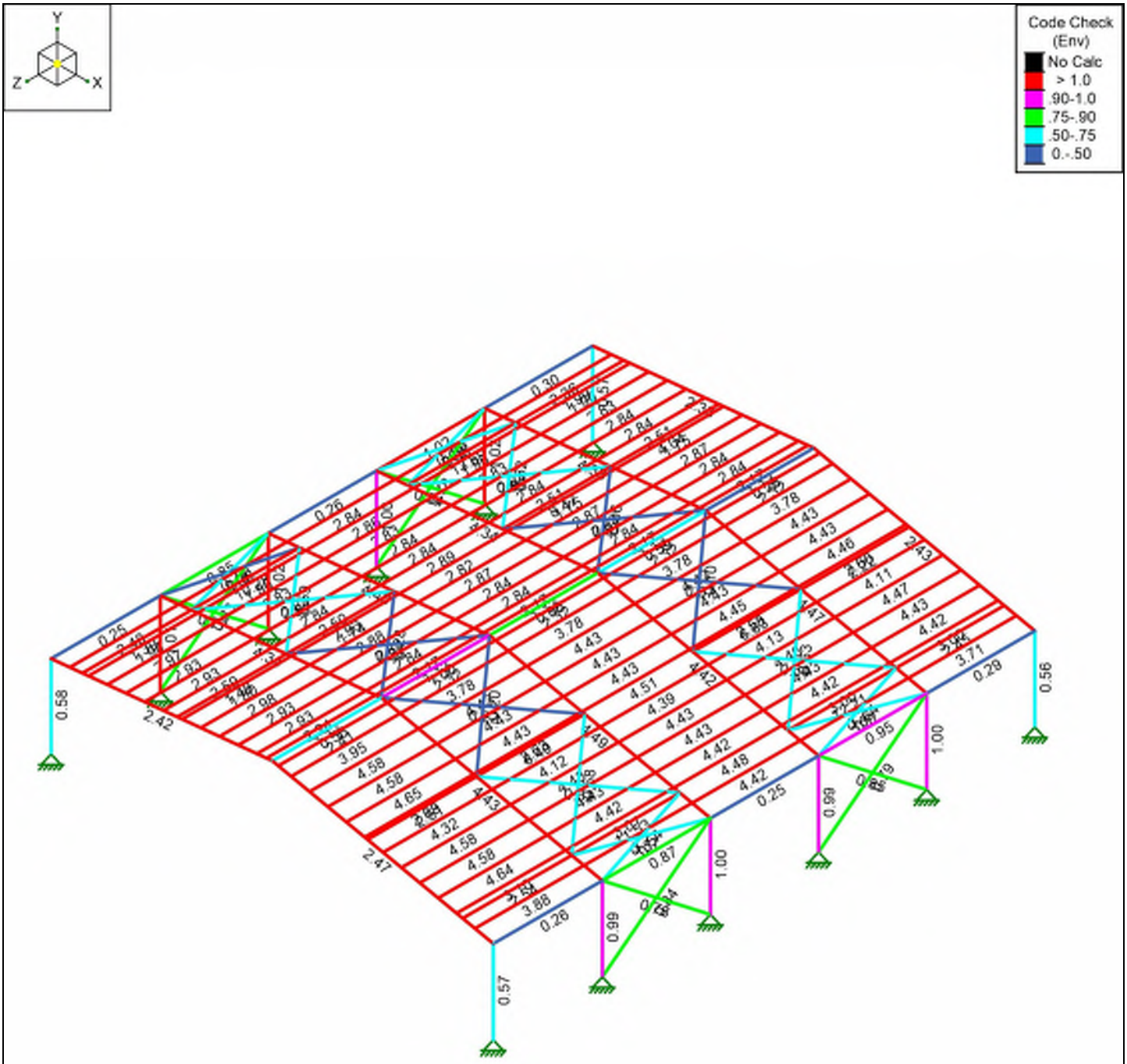
RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	8
	tony.arzate		RisaRD Model - Cover Struct…
		WLZ	





Loads: BLC 7, OL1

RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	9
	tony.arzate		RisaRD Model - Cover Struct…
		WLX (VERTICAL LOAD IN SAME DIRECTION)	



Member Code Checks Displayed (Enveloped)

RISA A NEMETSCHEK COMPANY	<Licensed Company>	HHW Canopy	10
	tony.arzate		RisaRD Model - Cover Struct…
		UNITY CHECK	

Node Coordinates

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N71	0	0	0	
2	N79	-1411	347.78	0	
3	N81	-1411	84	0	
4	N92	0	266.09	0	
5	N139	-705.25	418.5	0	
6	N61	-1411	84	690	
7	N63	0	0	690	
8	N78	-1411	347.78	345	
9	N96	-1411	84	345	
10	N140	0	266.09	345	
11	N142	-705.25	418.5	345	
12	N144	0	266.09	690	
13	N145	-1411	347.78	690	
14	N165	-705.25	418.5	690	
15	N169	0	0	345	
16	N62	-1411	84	1035	
17	N64	0	0	1035	
18	N93	0	266.09	1035	
19	N94	-1411	347.78	1035	
20	N111	-705.25	418.5	1035	
21	N69	-1411	84	1380	
22	N74	0	0	1380	
23	N80	0	266.09	1380	
24	N82	-1411	347.78	1380	
25	N85	-705.25	418.5	1380	
26	N86	-1411	84	1728	
27	N87	0	0	1728	
28	N88	0	266.09	1728	
29	N89	-1411	347.78	1728	
30	N98	-705.25	418.5	1728	
31	N104	-686.007	414.341	1728	
32	N58	-58.646	278.764	1728	
33	N59	-117.292	291.438	1728	
34	N65	-175.938	304.112	1728	
35	N66	-234.585	316.786	1728	
36	N68	-293.231	329.459	1728	
37	N70	-351.877	342.133	1728	
38	N72	-410.523	354.807	1728	
39	N73	-469.169	367.481	1728	
40	N95	-586.462	392.829	1728	
41	N103	-645.108	405.503	1728	
42	N48	-723.844	416.637	1728	
43	N49	-1351.299	353.762	0	
44	N50	-1351.299	353.762	690	
45	N51	-1351.299	353.762	345	
46	N52	-58.646	278.764	690	
47	N53	-58.646	278.764	345	
48	N54	-1351.299	353.762	1035	
49	N55	-58.646	278.764	1035	
50	N56	-1351.299	353.762	1380	
51	N57	-58.646	278.764	1380	
52	N60	-1351.299	353.762	1728	
53	N67	-58.646	278.764	0	
54	N75	-1291.598	359.745	0	
55	N77	-1291.598	359.745	690	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
56	N83	-1291.598	359.745	345	
57	N84	-117.292	291.438	690	
58	N90	-117.292	291.438	345	
59	N91	-1291.598	359.745	1035	
60	N97	-117.292	291.438	1035	
61	N106	-1291.598	359.745	1380	
62	N107	-117.292	291.438	1380	
63	N108	-1291.598	359.745	1728	
64	N109	-117.292	291.438	0	
65	N110	-1231.897	365.727	0	
66	N112	-1231.897	365.727	690	
67	N113	-1231.897	365.727	345	
68	N114	-175.938	304.112	690	
69	N115	-175.938	304.112	345	
70	N116	-1231.897	365.727	1035	
71	N117	-175.938	304.112	1035	
72	N118	-1231.897	365.727	1380	
73	N119	-175.938	304.112	1380	
74	N120	-1231.897	365.727	1728	
75	N121	-175.938	304.112	0	
76	N122	-1172.196	371.709	0	
77	N123	-1172.196	371.709	690	
78	N124	-1172.196	371.709	345	
79	N125	-234.585	316.786	690	
80	N126	-234.585	316.786	345	
81	N127	-1172.196	371.709	1035	
82	N128	-234.585	316.786	1035	
83	N129	-1172.196	371.709	1380	
84	N130	-234.585	316.786	1380	
85	N131	-1172.196	371.709	1728	
86	N132	-234.585	316.786	0	
87	N133	-1112.495	377.692	0	
88	N134	-1112.495	377.692	690	
89	N135	-1112.495	377.692	345	
90	N136	-293.231	329.459	690	
91	N137	-293.231	329.459	345	
92	N138	-1112.495	377.692	1035	
93	N141	-293.231	329.459	1035	
94	N143	-1112.495	377.692	1380	
95	N146	-293.231	329.459	1380	
96	N147	-1112.495	377.692	1728	
97	N148	-293.231	329.459	0	
98	N149	-1052.794	383.674	0	
99	N150	-1052.794	383.674	690	
100	N151	-1052.794	383.674	345	
101	N152	-351.877	342.133	690	
102	N153	-351.877	342.133	345	
103	N154	-1052.794	383.674	1035	
104	N155	-351.877	342.133	1035	
105	N156	-1052.794	383.674	1380	
106	N157	-351.877	342.133	1380	
107	N158	-1052.794	383.674	1728	
108	N159	-351.877	342.133	0	
109	N160	-993.093	389.657	0	
110	N161	-993.093	389.657	690	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
111	N162	-993.093	389.657	345	
112	N163	-410.523	354.807	690	
113	N164	-410.523	354.807	345	
114	N166	-993.093	389.657	1035	
115	N167	-410.523	354.807	1035	
116	N168	-993.093	389.657	1380	
117	N170	-410.523	354.807	1380	
118	N171	-993.093	389.657	1728	
119	N172	-410.523	354.807	0	
120	N173	-933.392	395.639	0	
121	N174	-933.392	395.639	690	
122	N175	-933.392	395.639	345	
123	N176	-469.169	367.481	690	
124	N177	-469.169	367.481	345	
125	N178	-933.392	395.639	1035	
126	N179	-469.169	367.481	1035	
127	N180	-933.392	395.639	1380	
128	N181	-469.169	367.481	1380	
129	N182	-933.392	395.639	1728	
130	N183	-469.169	367.481	0	
131	N184	-873.691	401.621	0	
132	N185	-873.691	401.621	690	
133	N186	-873.691	401.621	345	
134	N187	-527.815	380.155	690	
135	N188	-527.815	380.155	345	
136	N189	-873.691	401.621	1035	
137	N190	-527.815	380.155	1035	
138	N191	-873.691	401.621	1380	
139	N193	-873.691	401.621	1728	
140	N194	-527.815	380.155	0	
141	N195	-813.99	407.604	0	
142	N196	-813.99	407.604	690	
143	N197	-813.99	407.604	345	
144	N198	-586.462	392.829	690	
145	N199	-586.462	392.829	345	
146	N200	-813.99	407.604	1035	
147	N201	-586.462	392.829	1035	
148	N202	-813.99	407.604	1380	
149	N203	-586.462	392.829	1380	
150	N204	-813.99	407.604	1728	
151	N205	-586.462	392.829	0	
152	N206	-723.844	416.637	0	
153	N207	-723.844	416.637	690	
154	N208	-723.844	416.637	345	
155	N209	-723.844	416.637	1035	
156	N210	-723.844	416.637	1380	
157	N211	-686.007	414.341	690	
158	N212	-686.007	414.341	345	
159	N213	-686.007	414.341	1035	
160	N215	-686.007	414.341	0	
161	N216	-97.744	287.213	690	
162	N217	-97.744	287.213	345	
163	N218	-401.497	352.857	345	
164	N219	-401.497	352.857	690	
165	N226	-1311.498	357.751	690	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
166	N227	-1311.498	357.751	345	
167	N228	-1008.374	388.125	690	
168	N229	-1008.374	388.125	345	
169	N220	-97.744	287.213	1035	
170	N221	-97.744	287.213	1380	
171	N222	-401.497	352.857	1035	
172	N223	-401.497	352.857	1380	
173	N224	-1311.498	357.751	1035	
174	N225	-1311.498	357.751	1380	
175	N230	-1008.374	388.125	1380	
176	N231	-1008.374	388.125	1035	
177	N234	-527.815	380.155	1380	
178	N235	-527.815	380.155	1728	
179	N236	-645.108	405.503	1380	
180	N237	-686.007	414.341	1380	
181	N238	-754.289	413.586	0	
182	N239	-754.289	413.586	1035	
183	N240	-754.289	413.586	1380	
184	N241	-754.289	413.586	1728	
185	N242	-754.289	413.586	345	
186	N243	-754.289	413.586	690	
187	N248	-645.108	405.503	1035	
188	N267	-645.108	405.503	690	
189	N268	-645.108	405.503	0	
190	N269	-645.108	405.503	345	
191	N192	-1411	347.78	317	
192	N214	0	266.09	317	
193	N232	-1411	347.78	634	
194	N233	0	266.09	634	
195	N244	-705.25	418.5	634	
196	N245	-705.25	418.5	317	
197	N246	-97.744	287.213	1728	
198	N247	-401.497	352.857	1728	
199	N249	-97.744	287.213	0	
200	N250	-400.749	352.695	0	
201	N251	-400.749	352.695	345	
202	N252	-1008.374	388.125	0	
203	N253	-1311.498	357.751	0	
204	N254	-1311.498	357.751	1728	
205	N255	-1008.374	388.125	1728	

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A500 Gr.C RND	29000	11154	0.3	0.65	0.527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
9	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1
11	Cable	29000	11154	0.3	0.65	0	36	1.5	58	1.2

Cold Formed Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Fu [ksi]
1	A653 SS Gr33	29500	11346	0.3	0.65	0.49	33	45
2	A653 SS Gr50/1	29500	11346	0.3	0.65	0.49	50	65

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Column	CXCOLUMNS	Column	None	A992	Typical	37.125	360.334	924.211	16.556
2	Ridge	W10X26	Beam	Wide Flange	A992	Typical	7.61	14.1	144	0.402
3	Brace	1.5"BAR	HBrace	BAR	Cable	Typical	1.767	0.249	0.249	0.497
4	RBX BEAM	RBXBEAM_HRA	Beam	None	A992	Typical	40.188	216.722	8174.565	6.54
5	BEAM	W12X35	Beam	Wide Flange	A992	Typical	10.3	24.5	285	0.741

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Purlin	12ZS3.25X105	Beam	ZS Default	A653 SS Gr50/1	Typical	2.09	4.67	43.7	0.008

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M52	N71	N92		Column	Column	None	A992	Typical
2	M56	N79	N139		RBX BEAM	Beam	None	A992	Typical
3	M113	N81	N79		Column	Column	None	A992	Typical
4	M114	N92	N139		RBX BEAM	Beam	None	A992	Typical
5	M55	N145	N165		RBX BEAM	Beam	None	A992	Typical
6	M66	N219	N217		Brace	HBrace	BAR	Cable	Typical
7	M67	N139	N142		Ridge	Beam	Wide Flange	A992	Typical
8	M72	N142	N165		Ridge	Beam	Wide Flange	A992	Typical
9	M73	N78	N142		RBX BEAM	Beam	None	A992	Typical
10	M80	N61	N145		Column	Column	None	A992	Typical
11	M81	N219	N142		Brace	HBrace	BAR	Cable	Typical
12	M111	N140	N216		Brace	HBrace	BAR	Cable	Typical
13	M118	N216	N218		Brace	HBrace	BAR	Cable	Typical
14	M123	N63	N144		Column	Column	None	A992	Typical
15	M124	N144	N165		RBX BEAM	Beam	None	A992	Typical
16	M125	N78	N145		BEAM	Beam	Wide Flange	A992	Typical
17	M126	N96	N78		Column	Column	None	A992	Typical
18	M129	N140	N142		RBX BEAM	Beam	None	A992	Typical
19	M132	N165	N218		Brace	HBrace	BAR	Cable	Typical
20	M134	N169	N140		Column	Column	None	A992	Typical
21	M135	N217	N144		Brace	HBrace	BAR	Cable	Typical
22	M138	N140	N144		BEAM	Beam	Wide Flange	A992	Typical
23	M139	N140	N92		BEAM	Beam	Wide Flange	A992	Typical
24	M140	N79	N78		BEAM	Beam	Wide Flange	A992	Typical
25	M50	N144	N93		BEAM	Beam	Wide Flange	A992	Typical
26	M54	N145	N94		BEAM	Beam	Wide Flange	A992	Typical
27	M58	N165	N111		Ridge	Beam	Wide Flange	A992	Typical
28	M60	N94	N111		RBX BEAM	Beam	None	A992	Typical
29	M64	N62	N94		Column	Column	None	A992	Typical
30	M65	N64	N93		Column	Column	None	A992	Typical
31	M68	N93	N111		RBX BEAM	Beam	None	A992	Typical
32	M69	N93	N80		BEAM	Beam	Wide Flange	A992	Typical
33	M71	N94	N82		BEAM	Beam	Wide Flange	A992	Typical
34	M76	N111	N85		Ridge	Beam	Wide Flange	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
35	M77	N82	N85		RBX BEAM	Beam	None	A992	Typical
36	M78	N69	N82		Column	Column	None	A992	Typical
37	M79	N74	N80		Column	Column	None	A992	Typical
38	M82	N80	N85		RBX BEAM	Beam	None	A992	Typical
39	M83	N80	N88		BEAM	Beam	Wide Flange	A992	Typical
40	M84	N82	N89		BEAM	Beam	Wide Flange	A992	Typical
41	M85	N85	N98		Ridge	Beam	Wide Flange	A992	Typical
42	M86	N89	N98		RBX BEAM	Beam	None	A992	Typical
43	M87	N86	N89		Column	Column	None	A992	Typical
44	M88	N87	N88		Column	Column	None	A992	Typical
45	M89	N88	N98		RBX BEAM	Beam	None	A992	Typical
46	M57	N57	N58	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
47	M47	N227	N145		Brace	HBrace	BAR	Cable	Typical
48	M48	N78	N226		Brace	HBrace	BAR	Cable	Typical
49	M49	N226	N229		Brace	HBrace	BAR	Cable	Typical
50	M51	N165	N229		Brace	HBrace	BAR	Cable	Typical
51	M53	N228	N142		Brace	HBrace	BAR	Cable	Typical
52	M59	N228	N227		Brace	HBrace	BAR	Cable	Typical
53	M61	N220	N80		Brace	HBrace	BAR	Cable	Typical
54	M62	N93	N221		Brace	HBrace	BAR	Cable	Typical
55	M63	N221	N222		Brace	HBrace	BAR	Cable	Typical
56	M70	N85	N222		Brace	HBrace	BAR	Cable	Typical
57	M74	N223	N111		Brace	HBrace	BAR	Cable	Typical
58	M75	N223	N220		Brace	HBrace	BAR	Cable	Typical
59	M90	N224	N82		Brace	HBrace	BAR	Cable	Typical
60	M91	N94	N225		Brace	HBrace	BAR	Cable	Typical
61	M92	N230	N224		Brace	HBrace	BAR	Cable	Typical
62	M93	N230	N111		Brace	HBrace	BAR	Cable	Typical
63	M94	N225	N231		Brace	HBrace	BAR	Cable	Typical
64	M95	N85	N231		Brace	HBrace	BAR	Cable	Typical
65	M96	N107	N59	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
66	M97	N119	N65	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
67	M98	N130	N66	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
68	M99	N146	N68	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
69	M100	N157	N70	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
70	M101	N170	N72	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
71	M102	N181	N73	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
72	M103	N234	N235	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
73	M104	N203	N95	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
74	M105	N236	N103	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
75	M106	N237	N104	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
76	M107	N60	N56	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
77	M108	N108	N106	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
78	M109	N120	N118	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
79	M110	N131	N129	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
80	M112	N147	N143	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
81	M115	N158	N156	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
82	M116	N171	N168	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
83	M117	N182	N180	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
84	M119	N193	N191	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
85	M120	N204	N202	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
86	M121	N241	N240	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
87	M122	N48	N210	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
88	M127	N213	N237	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
89	M128	N56	N54	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
90	M130	N106	N91	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
91	M131	N191	N189	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
92	M133	N117	N119	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
93	M136	N248	N236	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
94	M137	N128	N130	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
95	M141	N155	N157	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
96	M142	N179	N181	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
97	M143	N55	N57	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
98	M144	N97	N107	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
99	M145	N141	N146	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
100	M146	N167	N170	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
101	M147	N190	N234	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
102	M148	N201	N203	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
103	M149	N129	N127	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
104	M150	N180	N178	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
105	M151	N168	N166	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
106	M152	N118	N116	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
107	M153	N143	N138	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
108	M154	N156	N154	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
109	M155	N202	N200	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
110	M156	N240	N239	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
111	M157	N210	N209	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
112	M158	N127	N123	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
113	M159	N176	N179	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
114	M160	N166	N161	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
115	M161	N189	N185	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
116	M162	N152	N155	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
117	M163	N209	N207	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
118	M164	N52	N55	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
119	M165	N84	N97	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
120	M166	N114	N117	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
121	M167	N125	N128	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
122	M168	N136	N141	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
123	M169	N163	N167	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
124	M170	N187	N190	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
125	M171	N198	N201	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
126	M172	N211	N213	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
127	M173	N267	N248	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
128	M174	N239	N243	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
129	M175	N200	N196	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
130	M176	N178	N174	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
131	M177	N154	N150	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
132	M178	N138	N134	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
133	M179	N116	N112	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
134	M180	N91	N77	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
135	M181	N54	N50	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
136	M182	N123	N124	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
137	M183	N177	N176	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
138	M184	N161	N162	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
139	M185	N185	N186	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
140	M186	N153	N152	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
141	M187	N207	N208	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
142	M188	N53	N52	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
143	M189	N90	N84	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
144	M190	N115	N114	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
145	M191	N126	N125	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
146	M192	N137	N136	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
147	M193	N164	N163	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
148	M194	N188	N187	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
149	M195	N199	N198	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
150	M196	N212	N211	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
151	M197	N269	N267	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
152	M198	N243	N242	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
153	M199	N196	N197	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
154	M200	N174	N175	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
155	M201	N150	N151	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
156	M202	N134	N135	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
157	M203	N112	N113	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
158	M204	N77	N83	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
159	M205	N50	N51	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
160	M206	N124	N122	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
161	M207	N183	N177	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
162	M208	N162	N160	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
163	M209	N186	N184	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
164	M210	N159	N153	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
165	M211	N208	N206	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
166	M212	N67	N53	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
167	M213	N109	N90	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
168	M214	N121	N115	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
169	M215	N132	N126	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
170	M216	N148	N137	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
171	M217	N172	N164	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
172	M218	N194	N188	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
173	M219	N205	N199	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
174	M220	N215	N212	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
175	M221	N268	N269	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
176	M222	N242	N238	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
177	M223	N197	N195	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
178	M224	N175	N173	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
179	M225	N151	N149	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
180	M226	N135	N133	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
181	M227	N113	N110	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
182	M228	N83	N75	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
183	M229	N51	N49	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
184	M230	N80	N64		Brace	HBrace	BAR	Cable	Typical
185	M231	N93	N74		Brace	HBrace	BAR	Cable	Typical
186	M232	N63	N140		Brace	HBrace	BAR	Cable	Typical
187	M233	N169	N144		Brace	HBrace	BAR	Cable	Typical
188	M234	N61	N78		Brace	HBrace	BAR	Cable	Typical
189	M235	N145	N96		Brace	HBrace	BAR	Cable	Typical
190	M236	N82	N62		Brace	HBrace	BAR	Cable	Typical
191	M237	N94	N69		Brace	HBrace	BAR	Cable	Typical
192	M238	N220	N221	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
193	M239	N222	N223	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
194	M240	N221	N246	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
195	M241	N223	N247	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
196	M242	N217	N216	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
197	M243	N218	N219	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
198	M244	N228	N229	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
199	M245	N226	N227	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
200	M246	N249	N217	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
201	M247	N250	N251	349	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
202	M248	N229	N252	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
203	M249	N227	N253	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
204	M250	N225	N224	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
205	M251	N254	N225	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
206	M252	N230	N231	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical
207	M253	N255	N230	354	Purlin	Beam	ZS Default	A653 SS Gr50/1	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
1	M52	Column	266.09		N/A	N/A	Lateral
2	M56	RBX BEAM	709.284	60	N/A	N/A	Lateral
3	M113	Column	263.78		N/A	N/A	Lateral
4	M114	RBX BEAM	721.531	60	N/A	N/A	Lateral
5	M55	RBX BEAM	709.284	60	N/A	N/A	Lateral
6	M66	Brace	464.327		N/A	N/A	Lateral
7	M67	Ridge	345		N/A	N/A	Lateral
8	M72	Ridge	345		N/A	N/A	Lateral
9	M73	RBX BEAM	709.284	60	N/A	N/A	Lateral
10	M80	Column	263.78		N/A	N/A	Lateral
11	M81	Brace	464.327		N/A	N/A	Lateral
12	M111	Brace	359.201		N/A	N/A	Lateral
13	M118	Brace	464.327		N/A	N/A	Lateral
14	M123	Column	266.09		N/A	N/A	Lateral
15	M124	RBX BEAM	721.531	60	N/A	N/A	Lateral
16	M125	BEAM	345		N/A	N/A	Lateral
17	M126	Column	263.78		N/A	N/A	Lateral
18	M129	RBX BEAM	721.531	60	N/A	N/A	Lateral
19	M132	Brace	464.327		N/A	N/A	Lateral
20	M134	Column	266.09		N/A	N/A	Lateral
21	M135	Brace	359.201		N/A	N/A	Lateral
22	M138	BEAM	345		N/A	N/A	Lateral
23	M139	BEAM	345		N/A	N/A	Lateral
24	M140	BEAM	345		N/A	N/A	Lateral
25	M50	BEAM	345	Lbyy	N/A	N/A	Lateral
26	M54	BEAM	345	Lbyy	N/A	N/A	Lateral
27	M58	Ridge	345	Lbyy	N/A	N/A	Lateral
28	M60	RBX BEAM	709.284	60	N/A	N/A	Lateral
29	M64	Column	263.78		N/A	N/A	Lateral
30	M65	Column	266.09		N/A	N/A	Lateral
31	M68	RBX BEAM	721.531	60	N/A	N/A	Lateral
32	M69	BEAM	345	Lbyy	N/A	N/A	Lateral
33	M71	BEAM	345	Lbyy	N/A	N/A	Lateral
34	M76	Ridge	345	Lbyy	N/A	N/A	Lateral
35	M77	RBX BEAM	709.284	60	N/A	N/A	Lateral
36	M78	Column	263.78		N/A	N/A	Lateral
37	M79	Column	266.09		N/A	N/A	Lateral
38	M82	RBX BEAM	721.531	60	N/A	N/A	Lateral
39	M83	BEAM	348	Lbyy	N/A	N/A	Lateral
40	M84	BEAM	348	Lbyy	N/A	N/A	Lateral
41	M85	Ridge	348	Lbyy	N/A	N/A	Lateral
42	M86	RBX BEAM	709.284	60	N/A	N/A	Lateral
43	M87	Column	263.78		N/A	N/A	Lateral
44	M88	Column	266.09		N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
45	M89	RBX BEAM	721.531	60	N/A	N/A	Lateral
46	M47	Brace	359.201		N/A	N/A	Lateral
47	M48	Brace	359.201		N/A	N/A	Lateral
48	M49	Brace	460.252		N/A	N/A	Lateral
49	M51	Brace	460.252		N/A	N/A	Lateral
50	M53	Brace	460.252		N/A	N/A	Lateral
51	M59	Brace	460.252		N/A	N/A	Lateral
52	M61	Brace	359.201		N/A	N/A	Lateral
53	M62	Brace	359.201		N/A	N/A	Lateral
54	M63	Brace	464.327		N/A	N/A	Lateral
55	M70	Brace	464.327		N/A	N/A	Lateral
56	M74	Brace	464.327		N/A	N/A	Lateral
57	M75	Brace	464.327		N/A	N/A	Lateral
58	M90	Brace	359.201		N/A	N/A	Lateral
59	M91	Brace	359.201		N/A	N/A	Lateral
60	M92	Brace	460.252		N/A	N/A	Lateral
61	M93	Brace	460.252		N/A	N/A	Lateral
62	M94	Brace	460.252		N/A	N/A	Lateral
63	M95	Brace	460.252		N/A	N/A	Lateral
64	M230	Brace	435.694	Lbyy	N/A	N/A	Lateral
65	M231	Brace	435.694	Lbyy	N/A	N/A	Lateral
66	M232	Brace	435.694	Lbyy	N/A	N/A	Lateral
67	M233	Brace	435.694	Lbyy	N/A	N/A	Lateral
68	M234	Brace	434.287	Lbyy	N/A	N/A	Lateral
69	M235	Brace	434.287	Lbyy	N/A	N/A	Lateral
70	M236	Brace	434.287	Lbyy	N/A	N/A	Lateral
71	M237	Brace	434.287	Lbyy	N/A	N/A	Lateral

Cold Formed Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lcomp top [in]	Function
1	M57	Purlin	348	12	Lbyy	Gravity
2	M96	Purlin	348	12	Lbyy	Gravity
3	M97	Purlin	348	12	Lbyy	Gravity
4	M98	Purlin	348	12	Lbyy	Gravity
5	M99	Purlin	348	12	Lbyy	Gravity
6	M100	Purlin	348	12	Lbyy	Gravity
7	M101	Purlin	348	12	Lbyy	Gravity
8	M102	Purlin	348	12	Lbyy	Gravity
9	M103	Purlin	348	12	Lbyy	Gravity
10	M104	Purlin	348	12	Lbyy	Gravity
11	M105	Purlin	348	12	Lbyy	Gravity
12	M106	Purlin	348	12	Lbyy	Gravity
13	M107	Purlin	348	12	Lbyy	Gravity
14	M108	Purlin	348	12	Lbyy	Gravity
15	M109	Purlin	348	12	Lbyy	Gravity
16	M110	Purlin	348	12	Lbyy	Gravity
17	M112	Purlin	348	12	Lbyy	Gravity
18	M115	Purlin	348	12	Lbyy	Gravity
19	M116	Purlin	348	12	Lbyy	Gravity
20	M117	Purlin	348	12	Lbyy	Gravity
21	M119	Purlin	348	12	Lbyy	Gravity
22	M120	Purlin	348	12	Lbyy	Gravity
23	M121	Purlin	348	12	Lbyy	Gravity
24	M122	Purlin	348	12	Lbyy	Gravity
25	M127	Purlin	345	12	Lbyy	Gravity

Cold Formed Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lcomp top [in]	Function
26	M128	Purlin	345	12	Lbyy	Gravity
27	M130	Purlin	345	12	Lbyy	Gravity
28	M131	Purlin	345	12	Lbyy	Gravity
29	M133	Purlin	345	12	Lbyy	Gravity
30	M136	Purlin	345	12	Lbyy	Gravity
31	M137	Purlin	345	12	Lbyy	Gravity
32	M141	Purlin	345	12	Lbyy	Gravity
33	M142	Purlin	345	12	Lbyy	Gravity
34	M143	Purlin	345	12	Lbyy	Gravity
35	M144	Purlin	345	12	Lbyy	Gravity
36	M145	Purlin	345	12	Lbyy	Gravity
37	M146	Purlin	345	12	Lbyy	Gravity
38	M147	Purlin	345	12	Lbyy	Gravity
39	M148	Purlin	345	12	Lbyy	Gravity
40	M149	Purlin	345	12	Lbyy	Gravity
41	M150	Purlin	345	12	Lbyy	Gravity
42	M151	Purlin	345	12	Lbyy	Gravity
43	M152	Purlin	345	12	Lbyy	Gravity
44	M153	Purlin	345	12	Lbyy	Gravity
45	M154	Purlin	345	12	Lbyy	Gravity
46	M155	Purlin	345	12	Lbyy	Gravity
47	M156	Purlin	345	12	Lbyy	Gravity
48	M157	Purlin	345	12	Lbyy	Gravity
49	M158	Purlin	345	12	Lbyy	Gravity
50	M159	Purlin	345	12	Lbyy	Gravity
51	M160	Purlin	345	12	Lbyy	Gravity
52	M161	Purlin	345	12	Lbyy	Gravity
53	M162	Purlin	345	12	Lbyy	Gravity
54	M163	Purlin	345	12	Lbyy	Gravity
55	M164	Purlin	345	12	Lbyy	Gravity
56	M165	Purlin	345	12	Lbyy	Gravity
57	M166	Purlin	345	12	Lbyy	Gravity
58	M167	Purlin	345	12	Lbyy	Gravity
59	M168	Purlin	345	12	Lbyy	Gravity
60	M169	Purlin	345	12	Lbyy	Gravity
61	M170	Purlin	345	12	Lbyy	Gravity
62	M171	Purlin	345	12	Lbyy	Gravity
63	M172	Purlin	345	12	Lbyy	Gravity
64	M173	Purlin	345	12	Lbyy	Gravity
65	M174	Purlin	345	12	Lbyy	Gravity
66	M175	Purlin	345	12	Lbyy	Gravity
67	M176	Purlin	345	12	Lbyy	Gravity
68	M177	Purlin	345	12	Lbyy	Gravity
69	M178	Purlin	345	12	Lbyy	Gravity
70	M179	Purlin	345	12	Lbyy	Gravity
71	M180	Purlin	345	12	Lbyy	Gravity
72	M181	Purlin	345	12	Lbyy	Gravity
73	M182	Purlin	345	12	Lbyy	Gravity
74	M183	Purlin	345	12	Lbyy	Gravity
75	M184	Purlin	345	12	Lbyy	Gravity
76	M185	Purlin	345	12	Lbyy	Gravity
77	M186	Purlin	345	12	Lbyy	Gravity
78	M187	Purlin	345	12	Lbyy	Gravity
79	M188	Purlin	345	12	Lbyy	Gravity
80	M189	Purlin	345	12	Lbyy	Gravity

Cold Formed Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lcomp top [in]	Function
81	M190	Purlin	345	12	Lbyy	Gravity
82	M191	Purlin	345	12	Lbyy	Gravity
83	M192	Purlin	345	12	Lbyy	Gravity
84	M193	Purlin	345	12	Lbyy	Gravity
85	M194	Purlin	345	12	Lbyy	Gravity
86	M195	Purlin	345	12	Lbyy	Gravity
87	M196	Purlin	345	12	Lbyy	Gravity
88	M197	Purlin	345	12	Lbyy	Gravity
89	M198	Purlin	345	12	Lbyy	Gravity
90	M199	Purlin	345	12	Lbyy	Gravity
91	M200	Purlin	345	12	Lbyy	Gravity
92	M201	Purlin	345	12	Lbyy	Gravity
93	M202	Purlin	345	12	Lbyy	Gravity
94	M203	Purlin	345	12	Lbyy	Gravity
95	M204	Purlin	345	12	Lbyy	Gravity
96	M205	Purlin	345	12	Lbyy	Gravity
97	M206	Purlin	345	12	Lbyy	Gravity
98	M207	Purlin	345	12	Lbyy	Gravity
99	M208	Purlin	345	12	Lbyy	Gravity
100	M209	Purlin	345	12	Lbyy	Gravity
101	M210	Purlin	345	12	Lbyy	Gravity
102	M211	Purlin	345	12	Lbyy	Gravity
103	M212	Purlin	345	12	Lbyy	Gravity
104	M213	Purlin	345	12	Lbyy	Gravity
105	M214	Purlin	345	12	Lbyy	Gravity
106	M215	Purlin	345	12	Lbyy	Gravity
107	M216	Purlin	345	12	Lbyy	Gravity
108	M217	Purlin	345	12	Lbyy	Gravity
109	M218	Purlin	345	12	Lbyy	Gravity
110	M219	Purlin	345	12	Lbyy	Gravity
111	M220	Purlin	345	12	Lbyy	Gravity
112	M221	Purlin	345	12	Lbyy	Gravity
113	M222	Purlin	345	12	Lbyy	Gravity
114	M223	Purlin	345	12	Lbyy	Gravity
115	M224	Purlin	345	12	Lbyy	Gravity
116	M225	Purlin	345	12	Lbyy	Gravity
117	M226	Purlin	345	12	Lbyy	Gravity
118	M227	Purlin	345	12	Lbyy	Gravity
119	M228	Purlin	345	12	Lbyy	Gravity
120	M229	Purlin	345	12	Lbyy	Gravity
121	M238	Purlin	345	12	Lbyy	Gravity
122	M239	Purlin	345	12	Lbyy	Gravity
123	M240	Purlin	348	12	Lbyy	Gravity
124	M241	Purlin	348	12	Lbyy	Gravity
125	M242	Purlin	345	12	Lbyy	Gravity
126	M243	Purlin	345	12	Lbyy	Gravity
127	M244	Purlin	345	12	Lbyy	Gravity
128	M245	Purlin	345	12	Lbyy	Gravity
129	M246	Purlin	345	12	Lbyy	Gravity
130	M247	Purlin	345	12	Lbyy	Gravity
131	M248	Purlin	345	12	Lbyy	Gravity
132	M249	Purlin	345	12	Lbyy	Gravity
133	M250	Purlin	345	12	Lbyy	Gravity
134	M251	Purlin	348	12	Lbyy	Gravity
135	M252	Purlin	345	12	Lbyy	Gravity

Cold Formed Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lcomp top [in]	Function
136	M253	Purlin	348	12	Lbyy	Gravity

Member Distributed Loads (BLC 2 : ELX)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M52	X	0.06	0.06	0	%100
2	M113	X	0.06	0.06	0	%100
3	M78	X	0.06	0.06	0	%100
4	M64	X	0.06	0.06	0	%100
5	M126	X	0.06	0.06	0	%100
6	M79	X	0.06	0.06	0	%100
7	M80	X	0.06	0.06	0	%100
8	M123	X	0.06	0.06	0	%100
9	M134	X	0.06	0.06	0	%100
10	M65	X	0.06	0.06	0	%100
11	M88	X	0.06	0.06	0	%100
12	M87	X	0.06	0.06	0	%100
13	M72	X	0.012	0.012	0	%100
14	M85	X	0.012	0.012	0	%100
15	M67	X	0.012	0.012	0	%100
16	M58	X	0.012	0.012	0	%100
17	M76	X	0.012	0.012	0	%100
18	M139	X	0.019	0.019	0	%100
19	M125	X	0.019	0.019	0	%100
20	M50	X	0.019	0.019	0	%100
21	M138	X	0.019	0.019	0	%100
22	M140	X	0.019	0.019	0	%100
23	M54	X	0.019	0.019	0	%100
24	M69	X	0.019	0.019	0	%100
25	M71	X	0.019	0.019	0	%100
26	M83	X	0.019	0.019	0	%100
27	M84	X	0.019	0.019	0	%100
28	M229	X	0.004	0.004	0	%100
29	M227	X	0.004	0.004	0	%100
30	M225	X	0.004	0.004	0	%100
31	M223	X	0.004	0.004	0	%100
32	M221	X	0.004	0.004	0	%100
33	M220	X	0.004	0.004	0	%100
34	M216	X	0.004	0.004	0	%100
35	M215	X	0.004	0.004	0	%100
36	M214	X	0.004	0.004	0	%100
37	M213	X	0.004	0.004	0	%100
38	M212	X	0.004	0.004	0	%100
39	M211	X	0.004	0.004	0	%100
40	M210	X	0.004	0.004	0	%100
41	M208	X	0.004	0.004	0	%100
42	M207	X	0.004	0.004	0	%100
43	M206	X	0.004	0.004	0	%100
44	M205	X	0.004	0.004	0	%100
45	M204	X	0.004	0.004	0	%100
46	M203	X	0.004	0.004	0	%100
47	M201	X	0.004	0.004	0	%100
48	M200	X	0.004	0.004	0	%100
49	M198	X	0.004	0.004	0	%100
50	M196	X	0.004	0.004	0	%100
51	M195	X	0.004	0.004	0	%100

Member Distributed Loads (BLC 2 : ELX) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
52	M194	X	0.004	0.004	0	%100
53	M199	X	0.004	0.004	0	%100
54	M193	X	0.004	0.004	0	%100
55	M191	X	0.004	0.004	0	%100
56	M190	X	0.004	0.004	0	%100
57	M189	X	0.004	0.004	0	%100
58	M188	X	0.004	0.004	0	%100
59	M187	X	0.004	0.004	0	%100
60	M186	X	0.004	0.004	0	%100
61	M228	X	0.004	0.004	0	%100
62	M185	X	0.004	0.004	0	%100
63	M184	X	0.004	0.004	0	%100
64	M183	X	0.004	0.004	0	%100
65	M182	X	0.004	0.004	0	%100
66	M197	X	0.004	0.004	0	%100
67	M181	X	0.004	0.004	0	%100
68	M180	X	0.004	0.004	0	%100
69	M179	X	0.004	0.004	0	%100
70	M178	X	0.004	0.004	0	%100
71	M176	X	0.004	0.004	0	%100
72	M173	X	0.004	0.004	0	%100
73	M177	X	0.004	0.004	0	%100
74	M172	X	0.004	0.004	0	%100
75	M171	X	0.004	0.004	0	%100
76	M218	X	0.004	0.004	0	%100
77	M170	X	0.004	0.004	0	%100
78	M169	X	0.004	0.004	0	%100
79	M168	X	0.004	0.004	0	%100
80	M167	X	0.004	0.004	0	%100
81	M163	X	0.004	0.004	0	%100
82	M162	X	0.004	0.004	0	%100
83	M161	X	0.004	0.004	0	%100
84	M160	X	0.004	0.004	0	%100
85	M159	X	0.004	0.004	0	%100
86	M158	X	0.004	0.004	0	%100
87	M157	X	0.004	0.004	0	%100
88	M156	X	0.004	0.004	0	%100
89	M164	X	0.004	0.004	0	%100
90	M155	X	0.004	0.004	0	%100
91	M154	X	0.004	0.004	0	%100
92	M174	X	0.004	0.004	0	%100
93	M153	X	0.004	0.004	0	%100
94	M152	X	0.004	0.004	0	%100
95	M151	X	0.004	0.004	0	%100
96	M150	X	0.004	0.004	0	%100
97	M149	X	0.004	0.004	0	%100
98	M165	X	0.004	0.004	0	%100
99	M175	X	0.004	0.004	0	%100
100	M146	X	0.004	0.004	0	%100
101	M144	X	0.004	0.004	0	%100
102	M143	X	0.004	0.004	0	%100
103	M142	X	0.004	0.004	0	%100
104	M141	X	0.004	0.004	0	%100
105	M137	X	0.004	0.004	0	%100
106	M131	X	0.004	0.004	0	%100

Member Distributed Loads (BLC 2 : ELX) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
107	M130	X	0.004	0.004	0	%100
108	M128	X	0.004	0.004	0	%100
109	M127	X	0.004	0.004	0	%100
110	M122	X	0.004	0.004	0	%100
111	M121	X	0.004	0.004	0	%100
112	M120	X	0.004	0.004	0	%100
113	M119	X	0.004	0.004	0	%100
114	M117	X	0.004	0.004	0	%100
115	M217	X	0.004	0.004	0	%100
116	M115	X	0.004	0.004	0	%100
117	M112	X	0.004	0.004	0	%100
118	M110	X	0.004	0.004	0	%100
119	M109	X	0.004	0.004	0	%100
120	M108	X	0.004	0.004	0	%100
121	M107	X	0.004	0.004	0	%100
122	M116	X	0.004	0.004	0	%100
123	M105	X	0.004	0.004	0	%100
124	M104	X	0.004	0.004	0	%100
125	M103	X	0.004	0.004	0	%100
126	M148	X	0.004	0.004	0	%100
127	M102	X	0.004	0.004	0	%100
128	M101	X	0.004	0.004	0	%100
129	M100	X	0.004	0.004	0	%100
130	M99	X	0.004	0.004	0	%100
131	M98	X	0.004	0.004	0	%100
132	M97	X	0.004	0.004	0	%100
133	M209	X	0.004	0.004	0	%100
134	M96	X	0.004	0.004	0	%100
135	M136	X	0.004	0.004	0	%100
136	M219	X	0.004	0.004	0	%100
137	M224	X	0.004	0.004	0	%100
138	M226	X	0.004	0.004	0	%100
139	M222	X	0.004	0.004	0	%100
140	M57	X	0.004	0.004	0	%100
141	M133	X	0.004	0.004	0	%100
142	M147	X	0.004	0.004	0	%100
143	M166	X	0.004	0.004	0	%100
144	M202	X	0.004	0.004	0	%100
145	M145	X	0.004	0.004	0	%100
146	M192	X	0.004	0.004	0	%100
147	M106	X	0.004	0.004	0	%100
148	M89	X	0.068	0.068	0	%100
149	M86	X	0.068	0.068	0	%100
150	M82	X	0.068	0.068	0	%100
151	M77	X	0.068	0.068	0	%100
152	M129	X	0.068	0.068	0	%100
153	M60	X	0.068	0.068	0	%100
154	M124	X	0.068	0.068	0	%100
155	M73	X	0.068	0.068	0	%100
156	M68	X	0.068	0.068	0	%100
157	M55	X	0.068	0.068	0	%100
158	M114	X	0.068	0.068	0	%100
159	M56	X	0.068	0.068	0	%100

Member Distributed Loads (BLC 3 : ELZ)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M52	Z	0.06	0.06	0	%100
2	M113	Z	0.06	0.06	0	%100
3	M78	Z	0.06	0.06	0	%100
4	M64	Z	0.06	0.06	0	%100
5	M126	Z	0.06	0.06	0	%100
6	M79	Z	0.06	0.06	0	%100
7	M80	Z	0.06	0.06	0	%100
8	M123	Z	0.06	0.06	0	%100
9	M134	Z	0.06	0.06	0	%100
10	M65	Z	0.06	0.06	0	%100
11	M88	Z	0.06	0.06	0	%100
12	M87	Z	0.06	0.06	0	%100
13	M72	Z	0.012	0.012	0	%100
14	M85	Z	0.012	0.012	0	%100
15	M67	Z	0.012	0.012	0	%100
16	M58	Z	0.012	0.012	0	%100
17	M76	Z	0.012	0.012	0	%100
18	M139	Z	0.019	0.019	0	%100
19	M125	Z	0.019	0.019	0	%100
20	M50	Z	0.019	0.019	0	%100
21	M138	Z	0.019	0.019	0	%100
22	M140	Z	0.019	0.019	0	%100
23	M54	Z	0.019	0.019	0	%100
24	M69	Z	0.019	0.019	0	%100
25	M71	Z	0.019	0.019	0	%100
26	M83	Z	0.019	0.019	0	%100
27	M84	Z	0.019	0.019	0	%100
28	M229	Z	0.004	0.004	0	%100
29	M227	Z	0.004	0.004	0	%100
30	M225	Z	0.004	0.004	0	%100
31	M223	Z	0.004	0.004	0	%100
32	M221	Z	0.004	0.004	0	%100
33	M220	Z	0.004	0.004	0	%100
34	M216	Z	0.004	0.004	0	%100
35	M215	Z	0.004	0.004	0	%100
36	M214	Z	0.004	0.004	0	%100
37	M213	Z	0.004	0.004	0	%100
38	M212	Z	0.004	0.004	0	%100
39	M211	Z	0.004	0.004	0	%100
40	M210	Z	0.004	0.004	0	%100
41	M208	Z	0.004	0.004	0	%100
42	M207	Z	0.004	0.004	0	%100
43	M206	Z	0.004	0.004	0	%100
44	M205	Z	0.004	0.004	0	%100
45	M204	Z	0.004	0.004	0	%100
46	M203	Z	0.004	0.004	0	%100
47	M201	Z	0.004	0.004	0	%100
48	M200	Z	0.004	0.004	0	%100
49	M198	Z	0.004	0.004	0	%100
50	M196	Z	0.004	0.004	0	%100
51	M195	Z	0.004	0.004	0	%100
52	M194	Z	0.004	0.004	0	%100
53	M199	Z	0.004	0.004	0	%100
54	M193	Z	0.004	0.004	0	%100
55	M191	Z	0.004	0.004	0	%100

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
56	M190	Z	0.004	0.004	0	%100
57	M189	Z	0.004	0.004	0	%100
58	M188	Z	0.004	0.004	0	%100
59	M187	Z	0.004	0.004	0	%100
60	M186	Z	0.004	0.004	0	%100
61	M228	Z	0.004	0.004	0	%100
62	M185	Z	0.004	0.004	0	%100
63	M184	Z	0.004	0.004	0	%100
64	M183	Z	0.004	0.004	0	%100
65	M182	Z	0.004	0.004	0	%100
66	M197	Z	0.004	0.004	0	%100
67	M181	Z	0.004	0.004	0	%100
68	M180	Z	0.004	0.004	0	%100
69	M179	Z	0.004	0.004	0	%100
70	M178	Z	0.004	0.004	0	%100
71	M176	Z	0.004	0.004	0	%100
72	M173	Z	0.004	0.004	0	%100
73	M177	Z	0.004	0.004	0	%100
74	M172	Z	0.004	0.004	0	%100
75	M171	Z	0.004	0.004	0	%100
76	M218	Z	0.004	0.004	0	%100
77	M170	Z	0.004	0.004	0	%100
78	M169	Z	0.004	0.004	0	%100
79	M168	Z	0.004	0.004	0	%100
80	M167	Z	0.004	0.004	0	%100
81	M163	Z	0.004	0.004	0	%100
82	M162	Z	0.004	0.004	0	%100
83	M161	Z	0.004	0.004	0	%100
84	M160	Z	0.004	0.004	0	%100
85	M159	Z	0.004	0.004	0	%100
86	M158	Z	0.004	0.004	0	%100
87	M157	Z	0.004	0.004	0	%100
88	M156	Z	0.004	0.004	0	%100
89	M164	Z	0.004	0.004	0	%100
90	M155	Z	0.004	0.004	0	%100
91	M154	Z	0.004	0.004	0	%100
92	M174	Z	0.004	0.004	0	%100
93	M153	Z	0.004	0.004	0	%100
94	M152	Z	0.004	0.004	0	%100
95	M151	Z	0.004	0.004	0	%100
96	M150	Z	0.004	0.004	0	%100
97	M149	Z	0.004	0.004	0	%100
98	M165	Z	0.004	0.004	0	%100
99	M175	Z	0.004	0.004	0	%100
100	M146	Z	0.004	0.004	0	%100
101	M144	Z	0.004	0.004	0	%100
102	M143	Z	0.004	0.004	0	%100
103	M142	Z	0.004	0.004	0	%100
104	M141	Z	0.004	0.004	0	%100
105	M137	Z	0.004	0.004	0	%100
106	M131	Z	0.004	0.004	0	%100
107	M130	Z	0.004	0.004	0	%100
108	M128	Z	0.004	0.004	0	%100
109	M127	Z	0.004	0.004	0	%100
110	M122	Z	0.004	0.004	0	%100

Member Distributed Loads (BLC 3 : ELZ) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
111	M121	Z	0.004	0.004	0	%100
112	M120	Z	0.004	0.004	0	%100
113	M119	Z	0.004	0.004	0	%100
114	M117	Z	0.004	0.004	0	%100
115	M217	Z	0.004	0.004	0	%100
116	M115	Z	0.004	0.004	0	%100
117	M112	Z	0.004	0.004	0	%100
118	M110	Z	0.004	0.004	0	%100
119	M109	Z	0.004	0.004	0	%100
120	M108	Z	0.004	0.004	0	%100
121	M107	Z	0.004	0.004	0	%100
122	M116	Z	0.004	0.004	0	%100
123	M105	Z	0.004	0.004	0	%100
124	M104	Z	0.004	0.004	0	%100
125	M103	Z	0.004	0.004	0	%100
126	M148	Z	0.004	0.004	0	%100
127	M102	Z	0.004	0.004	0	%100
128	M101	Z	0.004	0.004	0	%100
129	M100	Z	0.004	0.004	0	%100
130	M99	Z	0.004	0.004	0	%100
131	M98	Z	0.004	0.004	0	%100
132	M97	Z	0.004	0.004	0	%100
133	M209	Z	0.004	0.004	0	%100
134	M96	Z	0.004	0.004	0	%100
135	M136	Z	0.004	0.004	0	%100
136	M219	Z	0.004	0.004	0	%100
137	M224	Z	0.004	0.004	0	%100
138	M226	Z	0.004	0.004	0	%100
139	M222	Z	0.004	0.004	0	%100
140	M57	Z	0.004	0.004	0	%100
141	M133	Z	0.004	0.004	0	%100
142	M147	Z	0.004	0.004	0	%100
143	M166	Z	0.004	0.004	0	%100
144	M202	Z	0.004	0.004	0	%100
145	M145	Z	0.004	0.004	0	%100
146	M192	Z	0.004	0.004	0	%100
147	M106	Z	0.004	0.004	0	%100
148	M89	Z	0.068	0.068	0	%100
149	M86	Z	0.068	0.068	0	%100
150	M82	Z	0.068	0.068	0	%100
151	M77	Z	0.068	0.068	0	%100
152	M129	Z	0.068	0.068	0	%100
153	M60	Z	0.068	0.068	0	%100
154	M124	Z	0.068	0.068	0	%100
155	M73	Z	0.068	0.068	0	%100
156	M68	Z	0.068	0.068	0	%100
157	M55	Z	0.068	0.068	0	%100
158	M114	Z	0.068	0.068	0	%100
159	M56	Z	0.068	0.068	0	%100

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M67	Y	-0.016	-0.017	0	24.643
2	M67	Y	-0.017	-0.02	24.643	49.286
3	M67	Y	-0.02	-0.02	49.286	73.929

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
4	M67	Y	-0.02	-0.018	73.929	98.571
5	M67	Y	-0.018	-0.018	98.571	123.214
6	M67	Y	-0.018	-0.018	123.214	147.857
7	M67	Y	-0.018	-0.018	147.857	172.5
8	M67	Y	-0.018	-0.018	172.5	197.143
9	M67	Y	-0.018	-0.018	197.143	221.786
10	M67	Y	-0.018	-0.018	221.786	246.429
11	M67	Y	-0.018	-0.02	246.429	271.071
12	M67	Y	-0.02	-0.02	271.071	295.714
13	M67	Y	-0.02	-0.017	295.714	320.357
14	M67	Y	-0.017	-0.016	320.357	345
15	M72	Y	-0.016	-0.017	0	24.643
16	M72	Y	-0.017	-0.02	24.643	49.286
17	M72	Y	-0.02	-0.02	49.286	73.929
18	M72	Y	-0.02	-0.018	73.929	98.571
19	M72	Y	-0.018	-0.018	98.571	123.214
20	M72	Y	-0.018	-0.018	123.214	147.857
21	M72	Y	-0.018	-0.018	147.857	172.5
22	M72	Y	-0.018	-0.018	172.5	197.143
23	M72	Y	-0.018	-0.018	197.143	221.786
24	M72	Y	-0.018	-0.018	221.786	246.429
25	M72	Y	-0.018	-0.02	246.429	271.071
26	M72	Y	-0.02	-0.02	271.071	295.714
27	M72	Y	-0.02	-0.017	295.714	320.357
28	M72	Y	-0.017	-0.016	320.357	345
29	M138	Y	-0.029	-0.029	1.226e-13	345
30	M139	Y	-0.029	-0.029	1.705e-13	345
31	M50	Y	-0.029	-0.029	2.043e-14	345
32	M58	Y	-0.016	-0.017	0	24.643
33	M58	Y	-0.017	-0.02	24.643	49.286
34	M58	Y	-0.02	-0.02	49.286	73.929
35	M58	Y	-0.02	-0.018	73.929	98.571
36	M58	Y	-0.018	-0.018	98.571	123.214
37	M58	Y	-0.018	-0.018	123.214	147.857
38	M58	Y	-0.018	-0.018	147.857	172.5
39	M58	Y	-0.018	-0.018	172.5	197.143
40	M58	Y	-0.018	-0.018	197.143	221.786
41	M58	Y	-0.018	-0.018	221.786	246.429
42	M58	Y	-0.018	-0.02	246.429	271.071
43	M58	Y	-0.02	-0.02	271.071	295.714
44	M58	Y	-0.02	-0.017	295.714	320.357
45	M58	Y	-0.017	-0.016	320.357	345
46	M69	Y	-0.029	-0.029	2.043e-14	345
47	M76	Y	-0.016	-0.017	0	24.643
48	M76	Y	-0.017	-0.02	24.643	49.286
49	M76	Y	-0.02	-0.02	49.286	73.929
50	M76	Y	-0.02	-0.018	73.929	98.571
51	M76	Y	-0.018	-0.018	98.571	123.214
52	M76	Y	-0.018	-0.018	123.214	147.857
53	M76	Y	-0.018	-0.018	147.857	172.5
54	M76	Y	-0.018	-0.018	172.5	197.143
55	M76	Y	-0.018	-0.018	197.143	221.786
56	M76	Y	-0.018	-0.018	221.786	246.429
57	M76	Y	-0.018	-0.02	246.429	271.071
58	M76	Y	-0.02	-0.02	271.071	295.714

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
59	M76	Y	-0.02	-0.017	295.714	320.357
60	M76	Y	-0.017	-0.016	320.357	345
61	M83	Y	-0.029	-0.029	2.336e-13	348
62	M85	Y	-0.016	-0.017	0	24.857
63	M85	Y	-0.017	-0.019	24.857	49.714
64	M85	Y	-0.019	-0.022	49.714	74.571
65	M85	Y	-0.022	-0.02	74.571	99.429
66	M85	Y	-0.02	-0.017	99.429	124.286
67	M85	Y	-0.017	-0.017	124.286	149.143
68	M85	Y	-0.017	-0.017	149.143	174
69	M85	Y	-0.017	-0.017	174	198.857
70	M85	Y	-0.017	-0.017	198.857	223.714
71	M85	Y	-0.017	-0.02	223.714	248.571
72	M85	Y	-0.02	-0.022	248.571	273.429
73	M85	Y	-0.022	-0.019	273.429	298.286
74	M85	Y	-0.019	-0.017	298.286	323.143
75	M85	Y	-0.017	-0.016	323.143	348
76	M57	Y	-0.048	-0.048	0	24.857
77	M57	Y	-0.048	-0.048	24.857	49.714
78	M57	Y	-0.048	-0.048	49.714	74.571
79	M57	Y	-0.048	-0.048	74.571	99.429
80	M57	Y	-0.048	-0.048	99.429	124.286
81	M57	Y	-0.048	-0.049	124.286	149.143
82	M57	Y	-0.049	-0.051	149.143	174
83	M57	Y	-0.051	-0.051	174	198.857
84	M57	Y	-0.051	-0.049	198.857	223.714
85	M57	Y	-0.049	-0.048	223.714	248.571
86	M57	Y	-0.048	-0.048	248.571	273.429
87	M57	Y	-0.048	-0.048	273.429	298.286
88	M57	Y	-0.048	-0.048	298.286	323.143
89	M57	Y	-0.048	-0.048	323.143	348
90	M96	Y	-0.034	-0.036	0	24.857
91	M96	Y	-0.036	-0.036	24.857	49.714
92	M96	Y	-0.036	-0.041	49.714	74.571
93	M96	Y	-0.041	-0.043	74.571	99.429
94	M96	Y	-0.043	-0.039	99.429	124.286
95	M96	Y	-0.039	-0.037	124.286	149.143
96	M96	Y	-0.037	-0.035	149.143	174
97	M96	Y	-0.035	-0.035	174	198.857
98	M96	Y	-0.035	-0.039	198.857	223.714
99	M96	Y	-0.039	-0.043	223.714	248.571
100	M96	Y	-0.043	-0.041	248.571	273.429
101	M96	Y	-0.041	-0.036	273.429	298.286
102	M96	Y	-0.036	-0.036	298.286	323.143
103	M96	Y	-0.036	-0.034	323.143	348
104	M97	Y	-0.057	-0.057	0	24.857
105	M97	Y	-0.057	-0.057	24.857	49.714
106	M97	Y	-0.057	-0.057	49.714	74.571
107	M97	Y	-0.057	-0.057	74.571	99.429
108	M97	Y	-0.057	-0.057	99.429	124.286
109	M97	Y	-0.057	-0.058	124.286	149.143
110	M97	Y	-0.058	-0.062	149.143	174
111	M97	Y	-0.062	-0.062	174	198.857
112	M97	Y	-0.062	-0.058	198.857	223.714
113	M97	Y	-0.058	-0.057	223.714	248.571

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
114	M97	Y	-0.057	-0.057	248.571	273.429
115	M97	Y	-0.057	-0.057	273.429	298.286
116	M97	Y	-0.057	-0.057	298.286	323.143
117	M97	Y	-0.057	-0.057	323.143	348
118	M98	Y	-0.058	-0.058	4.565e-13	348
119	M99	Y	-0.057	-0.057	4.539e-13	348
120	M100	Y	-0.05	-0.053	0	24.857
121	M100	Y	-0.053	-0.054	24.857	49.714
122	M100	Y	-0.054	-0.053	49.714	74.571
123	M100	Y	-0.053	-0.053	74.571	99.429
124	M100	Y	-0.053	-0.053	99.429	124.286
125	M100	Y	-0.053	-0.054	124.286	149.143
126	M100	Y	-0.054	-0.057	149.143	174
127	M100	Y	-0.057	-0.057	174	198.857
128	M100	Y	-0.057	-0.054	198.857	223.714
129	M100	Y	-0.054	-0.053	223.714	248.571
130	M100	Y	-0.053	-0.053	248.571	273.429
131	M100	Y	-0.053	-0.054	273.429	298.286
132	M100	Y	-0.054	-0.053	298.286	323.143
133	M100	Y	-0.053	-0.05	323.143	348
134	M101	Y	-0.032	-0.031	0	24.857
135	M101	Y	-0.031	-0.031	24.857	49.714
136	M101	Y	-0.031	-0.035	49.714	74.571
137	M101	Y	-0.035	-0.037	74.571	99.429
138	M101	Y	-0.037	-0.034	99.429	124.286
139	M101	Y	-0.034	-0.032	124.286	149.143
140	M101	Y	-0.032	-0.03	149.143	174
141	M101	Y	-0.03	-0.03	174	198.857
142	M101	Y	-0.03	-0.034	198.857	223.714
143	M101	Y	-0.034	-0.037	223.714	248.571
144	M101	Y	-0.037	-0.035	248.571	273.429
145	M101	Y	-0.035	-0.031	273.429	298.286
146	M101	Y	-0.031	-0.031	298.286	323.143
147	M101	Y	-0.031	-0.031	323.143	348
148	M102	Y	-0.056	-0.057	0	24.857
149	M102	Y	-0.057	-0.058	24.857	49.714
150	M102	Y	-0.058	-0.057	49.714	74.571
151	M102	Y	-0.057	-0.057	74.571	99.429
152	M102	Y	-0.057	-0.057	99.429	124.286
153	M102	Y	-0.057	-0.058	124.286	149.143
154	M102	Y	-0.058	-0.062	149.143	174
155	M102	Y	-0.062	-0.062	174	198.857
156	M102	Y	-0.062	-0.058	198.857	223.714
157	M102	Y	-0.058	-0.057	223.714	248.571
158	M102	Y	-0.057	-0.057	248.571	273.429
159	M102	Y	-0.057	-0.057	273.429	298.286
160	M102	Y	-0.057	-0.057	298.286	323.143
161	M102	Y	-0.057	-0.056	323.143	348
162	M103	Y	-0.058	-0.058	2.38e-13	348
163	M104	Y	-0.058	-0.058	1.818e-12	348
164	M105	Y	-0.049	-0.049	0	24.857
165	M105	Y	-0.049	-0.048	24.857	49.714
166	M105	Y	-0.048	-0.049	49.714	74.571
167	M105	Y	-0.049	-0.049	74.571	99.429
168	M105	Y	-0.049	-0.049	99.429	124.286

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
169	M105	Y	-0.049	-0.052	124.286	149.143
170	M105	Y	-0.052	-0.052	149.143	174
171	M105	Y	-0.052	-0.049	174	198.857
172	M105	Y	-0.049	-0.049	198.857	223.714
173	M105	Y	-0.049	-0.049	223.714	248.571
174	M105	Y	-0.049	-0.048	248.571	273.429
175	M105	Y	-0.048	-0.048	273.429	298.286
176	M105	Y	-0.048	-0.049	298.286	323.143
177	M105	Y	-0.049	-0.049	323.143	348
178	M106	Y	-0.026	-0.027	0	24.857
179	M106	Y	-0.027	-0.028	24.857	49.714
180	M106	Y	-0.028	-0.033	49.714	74.571
181	M106	Y	-0.033	-0.033	74.571	99.429
182	M106	Y	-0.033	-0.028	99.429	124.286
183	M106	Y	-0.028	-0.028	124.286	149.143
184	M106	Y	-0.028	-0.028	149.143	174
185	M106	Y	-0.028	-0.028	174	198.857
186	M106	Y	-0.028	-0.028	198.857	223.714
187	M106	Y	-0.028	-0.033	223.714	248.571
188	M106	Y	-0.033	-0.033	248.571	273.429
189	M106	Y	-0.033	-0.028	273.429	298.286
190	M106	Y	-0.028	-0.027	298.286	323.143
191	M106	Y	-0.027	-0.026	323.143	348
192	M127	Y	-0.027	-0.029	0	24.643
193	M127	Y	-0.029	-0.03	24.643	49.286
194	M127	Y	-0.03	-0.03	49.286	73.929
195	M127	Y	-0.03	-0.03	73.929	98.571
196	M127	Y	-0.03	-0.03	98.571	123.214
197	M127	Y	-0.03	-0.03	123.214	147.857
198	M127	Y	-0.03	-0.03	147.857	172.5
199	M127	Y	-0.03	-0.03	172.5	197.143
200	M127	Y	-0.03	-0.03	197.143	221.786
201	M127	Y	-0.03	-0.03	221.786	246.429
202	M127	Y	-0.03	-0.03	246.429	271.071
203	M127	Y	-0.03	-0.03	271.071	295.714
204	M127	Y	-0.03	-0.029	295.714	320.357
205	M127	Y	-0.029	-0.027	320.357	345
206	M133	Y	-0.058	-0.058	0	24.643
207	M133	Y	-0.058	-0.058	24.643	49.286
208	M133	Y	-0.058	-0.058	49.286	73.929
209	M133	Y	-0.058	-0.058	73.929	98.571
210	M133	Y	-0.058	-0.058	98.571	123.214
211	M133	Y	-0.058	-0.057	123.214	147.857
212	M133	Y	-0.057	-0.056	147.857	172.5
213	M133	Y	-0.056	-0.057	172.5	197.143
214	M133	Y	-0.057	-0.058	197.143	221.786
215	M133	Y	-0.058	-0.058	221.786	246.429
216	M133	Y	-0.058	-0.058	246.429	271.071
217	M133	Y	-0.058	-0.058	271.071	295.714
218	M133	Y	-0.058	-0.058	295.714	320.357
219	M133	Y	-0.058	-0.058	320.357	345
220	M136	Y	-0.049	-0.049	0	24.643
221	M136	Y	-0.049	-0.049	24.643	49.286
222	M136	Y	-0.049	-0.049	49.286	73.929
223	M136	Y	-0.049	-0.049	73.929	98.571

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
224	M136	Y	-0.049	-0.049	98.571	123.214
225	M136	Y	-0.049	-0.049	123.214	147.857
226	M136	Y	-0.049	-0.049	147.857	172.5
227	M136	Y	-0.049	-0.049	172.5	197.143
228	M136	Y	-0.049	-0.049	197.143	221.786
229	M136	Y	-0.049	-0.049	221.786	246.429
230	M136	Y	-0.049	-0.049	246.429	271.071
231	M136	Y	-0.049	-0.049	271.071	295.714
232	M136	Y	-0.049	-0.049	295.714	320.357
233	M136	Y	-0.049	-0.049	320.357	345
234	M137	Y	-0.058	-0.058	2.274e-13	345
235	M141	Y	-0.05	-0.054	0	24.643
236	M141	Y	-0.054	-0.054	24.643	49.286
237	M141	Y	-0.054	-0.053	49.286	73.929
238	M141	Y	-0.053	-0.053	73.929	98.571
239	M141	Y	-0.053	-0.053	98.571	123.214
240	M141	Y	-0.053	-0.053	123.214	147.857
241	M141	Y	-0.053	-0.053	147.857	172.5
242	M141	Y	-0.053	-0.053	172.5	197.143
243	M141	Y	-0.053	-0.053	197.143	221.786
244	M141	Y	-0.053	-0.053	221.786	246.429
245	M141	Y	-0.053	-0.053	246.429	271.071
246	M141	Y	-0.053	-0.054	271.071	295.714
247	M141	Y	-0.054	-0.054	295.714	320.357
248	M141	Y	-0.054	-0.05	320.357	345
249	M142	Y	-0.057	-0.057	0	24.643
250	M142	Y	-0.057	-0.057	24.643	49.286
251	M142	Y	-0.057	-0.057	49.286	73.929
252	M142	Y	-0.057	-0.058	73.929	98.571
253	M142	Y	-0.058	-0.058	98.571	123.214
254	M142	Y	-0.058	-0.058	123.214	147.857
255	M142	Y	-0.058	-0.058	147.857	172.5
256	M142	Y	-0.058	-0.058	172.5	197.143
257	M142	Y	-0.058	-0.058	197.143	221.786
258	M142	Y	-0.058	-0.058	221.786	246.429
259	M142	Y	-0.058	-0.057	246.429	271.071
260	M142	Y	-0.057	-0.057	271.071	295.714
261	M142	Y	-0.057	-0.057	295.714	320.357
262	M142	Y	-0.057	-0.057	320.357	345
263	M143	Y	-0.048	-0.048	0	24.643
264	M143	Y	-0.048	-0.048	24.643	49.286
265	M143	Y	-0.048	-0.048	49.286	73.929
266	M143	Y	-0.048	-0.048	73.929	98.571
267	M143	Y	-0.048	-0.048	98.571	123.214
268	M143	Y	-0.048	-0.048	123.214	147.857
269	M143	Y	-0.048	-0.048	147.857	172.5
270	M143	Y	-0.048	-0.048	172.5	197.143
271	M143	Y	-0.048	-0.048	197.143	221.786
272	M143	Y	-0.048	-0.048	221.786	246.429
273	M143	Y	-0.048	-0.048	246.429	271.071
274	M143	Y	-0.048	-0.048	271.071	295.714
275	M143	Y	-0.048	-0.048	295.714	320.357
276	M143	Y	-0.048	-0.048	320.357	345
277	M144	Y	-0.036	-0.038	0	24.643
278	M144	Y	-0.038	-0.038	24.643	49.286

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
279	M144	Y	-0.038	-0.038	49.286	73.929
280	M144	Y	-0.038	-0.038	73.929	98.571
281	M144	Y	-0.038	-0.037	98.571	123.214
282	M144	Y	-0.037	-0.039	123.214	147.857
283	M144	Y	-0.039	-0.043	147.857	172.5
284	M144	Y	-0.043	-0.039	172.5	197.143
285	M144	Y	-0.039	-0.037	197.143	221.786
286	M144	Y	-0.037	-0.038	221.786	246.429
287	M144	Y	-0.038	-0.038	246.429	271.071
288	M144	Y	-0.038	-0.038	271.071	295.714
289	M144	Y	-0.038	-0.038	295.714	320.357
290	M144	Y	-0.038	-0.036	320.357	345
291	M145	Y	-0.057	-0.057	5.684e-13	345
292	M146	Y	-0.029	-0.031	0	24.643
293	M146	Y	-0.031	-0.035	24.643	49.286
294	M146	Y	-0.035	-0.036	49.286	73.929
295	M146	Y	-0.036	-0.033	73.929	98.571
296	M146	Y	-0.033	-0.033	98.571	123.214
297	M146	Y	-0.033	-0.033	123.214	147.857
298	M146	Y	-0.033	-0.033	147.857	172.5
299	M146	Y	-0.033	-0.033	172.5	197.143
300	M146	Y	-0.033	-0.033	197.143	221.786
301	M146	Y	-0.033	-0.033	221.786	246.429
302	M146	Y	-0.033	-0.036	246.429	271.071
303	M146	Y	-0.036	-0.035	271.071	295.714
304	M146	Y	-0.035	-0.031	295.714	320.357
305	M146	Y	-0.031	-0.029	320.357	345
306	M147	Y	-0.058	-0.058	2.141e-12	345
307	M148	Y	-0.058	-0.058	7.878e-13	345
308	M159	Y	-0.057	-0.057	0	24.643
309	M159	Y	-0.057	-0.057	24.643	49.286
310	M159	Y	-0.057	-0.057	49.286	73.929
311	M159	Y	-0.057	-0.058	73.929	98.571
312	M159	Y	-0.058	-0.058	98.571	123.214
313	M159	Y	-0.058	-0.058	123.214	147.857
314	M159	Y	-0.058	-0.058	147.857	172.5
315	M159	Y	-0.058	-0.058	172.5	197.143
316	M159	Y	-0.058	-0.058	197.143	221.786
317	M159	Y	-0.058	-0.058	221.786	246.429
318	M159	Y	-0.058	-0.057	246.429	271.071
319	M159	Y	-0.057	-0.057	271.071	295.714
320	M159	Y	-0.057	-0.057	295.714	320.357
321	M159	Y	-0.057	-0.057	320.357	345
322	M162	Y	-0.058	-0.054	0	24.643
323	M162	Y	-0.054	-0.055	24.643	49.286
324	M162	Y	-0.055	-0.057	49.286	73.929
325	M162	Y	-0.057	-0.057	73.929	98.571
326	M162	Y	-0.057	-0.057	98.571	123.214
327	M162	Y	-0.057	-0.057	123.214	147.857
328	M162	Y	-0.057	-0.057	147.857	172.5
329	M162	Y	-0.057	-0.057	172.5	197.143
330	M162	Y	-0.057	-0.057	197.143	221.786
331	M162	Y	-0.057	-0.057	221.786	246.429
332	M162	Y	-0.057	-0.057	246.429	271.071
333	M162	Y	-0.057	-0.055	271.071	295.714

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
334	M162	Y	-0.055	-0.055	295.714	320.357
335	M162	Y	-0.055	-0.058	320.357	345
336	M164	Y	-0.058	-0.058	0	24.643
337	M164	Y	-0.058	-0.058	24.643	49.286
338	M164	Y	-0.058	-0.058	49.286	73.929
339	M164	Y	-0.058	-0.058	73.929	98.571
340	M164	Y	-0.058	-0.058	98.571	123.214
341	M164	Y	-0.058	-0.057	123.214	147.857
342	M164	Y	-0.057	-0.056	147.857	172.5
343	M164	Y	-0.056	-0.057	172.5	197.143
344	M164	Y	-0.057	-0.058	197.143	221.786
345	M164	Y	-0.058	-0.058	221.786	246.429
346	M164	Y	-0.058	-0.058	246.429	271.071
347	M164	Y	-0.058	-0.058	271.071	295.714
348	M164	Y	-0.058	-0.058	295.714	320.357
349	M164	Y	-0.058	-0.058	320.357	345
350	M165	Y	-0.055	-0.056	0	24.643
351	M165	Y	-0.056	-0.057	24.643	49.286
352	M165	Y	-0.057	-0.058	49.286	73.929
353	M165	Y	-0.058	-0.057	73.929	98.571
354	M165	Y	-0.057	-0.055	98.571	123.214
355	M165	Y	-0.055	-0.059	123.214	147.857
356	M165	Y	-0.059	-0.066	147.857	172.5
357	M165	Y	-0.066	-0.059	172.5	197.143
358	M165	Y	-0.059	-0.055	197.143	221.786
359	M165	Y	-0.055	-0.057	221.786	246.429
360	M165	Y	-0.057	-0.058	246.429	271.071
361	M165	Y	-0.058	-0.057	271.071	295.714
362	M165	Y	-0.057	-0.056	295.714	320.357
363	M165	Y	-0.056	-0.055	320.357	345
364	M166	Y	-0.058	-0.058	0	24.643
365	M166	Y	-0.058	-0.058	24.643	49.286
366	M166	Y	-0.058	-0.058	49.286	73.929
367	M166	Y	-0.058	-0.058	73.929	98.571
368	M166	Y	-0.058	-0.058	98.571	123.214
369	M166	Y	-0.058	-0.057	123.214	147.857
370	M166	Y	-0.057	-0.056	147.857	172.5
371	M166	Y	-0.056	-0.057	172.5	197.143
372	M166	Y	-0.057	-0.058	197.143	221.786
373	M166	Y	-0.058	-0.058	221.786	246.429
374	M166	Y	-0.058	-0.058	246.429	271.071
375	M166	Y	-0.058	-0.058	271.071	295.714
376	M166	Y	-0.058	-0.058	295.714	320.357
377	M166	Y	-0.058	-0.058	320.357	345
378	M167	Y	-0.058	-0.058	4.059e-13	345
379	M168	Y	-0.057	-0.057	3.935e-13	345
380	M169	Y	-0.058	-0.057	0	24.643
381	M169	Y	-0.057	-0.061	24.643	49.286
382	M169	Y	-0.061	-0.062	49.286	73.929
383	M169	Y	-0.062	-0.058	73.929	98.571
384	M169	Y	-0.058	-0.057	98.571	123.214
385	M169	Y	-0.057	-0.057	123.214	147.857
386	M169	Y	-0.057	-0.057	147.857	172.5
387	M169	Y	-0.057	-0.057	172.5	197.143
388	M169	Y	-0.057	-0.057	197.143	221.786

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
389	M169	Y	-0.057	-0.058	221.786	246.429
390	M169	Y	-0.058	-0.062	246.429	271.071
391	M169	Y	-0.062	-0.061	271.071	295.714
392	M169	Y	-0.061	-0.057	295.714	320.357
393	M169	Y	-0.057	-0.058	320.357	345
394	M170	Y	-0.058	-0.058	1.139e-12	345
395	M171	Y	-0.058	-0.058	1.166e-12	345
396	M172	Y	-0.027	-0.029	0	24.643
397	M172	Y	-0.029	-0.03	24.643	49.286
398	M172	Y	-0.03	-0.03	49.286	73.929
399	M172	Y	-0.03	-0.03	73.929	98.571
400	M172	Y	-0.03	-0.03	98.571	123.214
401	M172	Y	-0.03	-0.03	123.214	147.857
402	M172	Y	-0.03	-0.03	147.857	172.5
403	M172	Y	-0.03	-0.03	172.5	197.143
404	M172	Y	-0.03	-0.03	197.143	221.786
405	M172	Y	-0.03	-0.03	221.786	246.429
406	M172	Y	-0.03	-0.03	246.429	271.071
407	M172	Y	-0.03	-0.03	271.071	295.714
408	M172	Y	-0.03	-0.029	295.714	320.357
409	M172	Y	-0.029	-0.027	320.357	345
410	M173	Y	-0.049	-0.049	0	24.643
411	M173	Y	-0.049	-0.049	24.643	49.286
412	M173	Y	-0.049	-0.049	49.286	73.929
413	M173	Y	-0.049	-0.049	73.929	98.571
414	M173	Y	-0.049	-0.049	98.571	123.214
415	M173	Y	-0.049	-0.049	123.214	147.857
416	M173	Y	-0.049	-0.049	147.857	172.5
417	M173	Y	-0.049	-0.049	172.5	197.143
418	M173	Y	-0.049	-0.049	197.143	221.786
419	M173	Y	-0.049	-0.049	221.786	246.429
420	M173	Y	-0.049	-0.049	246.429	271.071
421	M173	Y	-0.049	-0.049	271.071	295.714
422	M173	Y	-0.049	-0.049	295.714	320.357
423	M173	Y	-0.049	-0.049	320.357	345
424	M183	Y	-0.059	-0.061	0	24.643
425	M183	Y	-0.061	-0.06	24.643	49.286
426	M183	Y	-0.06	-0.058	49.286	73.929
427	M183	Y	-0.058	-0.057	73.929	98.571
428	M183	Y	-0.057	-0.057	98.571	123.214
429	M183	Y	-0.057	-0.058	123.214	147.857
430	M183	Y	-0.058	-0.058	147.857	172.5
431	M183	Y	-0.058	-0.058	172.5	197.143
432	M183	Y	-0.058	-0.058	197.143	221.786
433	M183	Y	-0.058	-0.058	221.786	246.429
434	M183	Y	-0.058	-0.058	246.429	271.071
435	M183	Y	-0.058	-0.058	271.071	295.714
436	M183	Y	-0.058	-0.058	295.714	320.357
437	M183	Y	-0.058	-0.057	320.357	345
438	M186	Y	-0.04	-0.054	0	24.643
439	M186	Y	-0.054	-0.06	24.643	49.286
440	M186	Y	-0.06	-0.053	49.286	73.929
441	M186	Y	-0.053	-0.052	73.929	98.571
442	M186	Y	-0.052	-0.053	98.571	123.214
443	M186	Y	-0.053	-0.049	123.214	147.857

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
444	M186	Y	-0.049	-0.049	147.857	172.5
445	M186	Y	-0.049	-0.054	172.5	197.143
446	M186	Y	-0.054	-0.061	197.143	221.786
447	M186	Y	-0.061	-0.059	221.786	246.429
448	M186	Y	-0.059	-0.051	246.429	271.071
449	M186	Y	-0.051	-0.052	271.071	295.714
450	M186	Y	-0.052	-0.051	295.714	320.357
451	M186	Y	-0.051	-0.048	320.357	345
452	M188	Y	-0.048	-0.048	0	24.643
453	M188	Y	-0.048	-0.048	24.643	49.286
454	M188	Y	-0.048	-0.048	49.286	73.929
455	M188	Y	-0.048	-0.048	73.929	98.571
456	M188	Y	-0.048	-0.048	98.571	123.214
457	M188	Y	-0.048	-0.048	123.214	147.857
458	M188	Y	-0.048	-0.048	147.857	172.5
459	M188	Y	-0.048	-0.048	172.5	197.143
460	M188	Y	-0.048	-0.048	197.143	221.786
461	M188	Y	-0.048	-0.048	221.786	246.429
462	M188	Y	-0.048	-0.048	246.429	271.071
463	M188	Y	-0.048	-0.048	271.071	295.714
464	M188	Y	-0.048	-0.048	295.714	320.357
465	M188	Y	-0.048	-0.048	320.357	345
466	M189	Y	-0.036	-0.038	0	24.643
467	M189	Y	-0.038	-0.038	24.643	49.286
468	M189	Y	-0.038	-0.038	49.286	73.929
469	M189	Y	-0.038	-0.038	73.929	98.571
470	M189	Y	-0.038	-0.037	98.571	123.214
471	M189	Y	-0.037	-0.039	123.214	147.857
472	M189	Y	-0.039	-0.043	147.857	172.5
473	M189	Y	-0.043	-0.039	172.5	197.143
474	M189	Y	-0.039	-0.037	197.143	221.786
475	M189	Y	-0.037	-0.038	221.786	246.429
476	M189	Y	-0.038	-0.038	246.429	271.071
477	M189	Y	-0.038	-0.038	271.071	295.714
478	M189	Y	-0.038	-0.038	295.714	320.357
479	M189	Y	-0.038	-0.036	320.357	345
480	M190	Y	-0.058	-0.058	0	24.643
481	M190	Y	-0.058	-0.058	24.643	49.286
482	M190	Y	-0.058	-0.058	49.286	73.929
483	M190	Y	-0.058	-0.058	73.929	98.571
484	M190	Y	-0.058	-0.058	98.571	123.214
485	M190	Y	-0.058	-0.057	123.214	147.857
486	M190	Y	-0.057	-0.056	147.857	172.5
487	M190	Y	-0.056	-0.057	172.5	197.143
488	M190	Y	-0.057	-0.058	197.143	221.786
489	M190	Y	-0.058	-0.058	221.786	246.429
490	M190	Y	-0.058	-0.058	246.429	271.071
491	M190	Y	-0.058	-0.058	271.071	295.714
492	M190	Y	-0.058	-0.058	295.714	320.357
493	M190	Y	-0.058	-0.058	320.357	345
494	M191	Y	-0.058	-0.058	1.785e-13	345
495	M192	Y	-0.058	-0.057	0	24.643
496	M192	Y	-0.057	-0.057	24.643	49.286
497	M192	Y	-0.057	-0.06	49.286	73.929
498	M192	Y	-0.06	-0.059	73.929	98.571

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
499	M192	Y	-0.059	-0.057	98.571	123.214
500	M192	Y	-0.057	-0.059	123.214	147.857
501	M192	Y	-0.059	-0.06	147.857	172.5
502	M192	Y	-0.06	-0.058	172.5	197.143
503	M192	Y	-0.058	-0.057	197.143	221.786
504	M192	Y	-0.057	-0.057	221.786	246.429
505	M192	Y	-0.057	-0.055	246.429	271.071
506	M192	Y	-0.055	-0.055	271.071	295.714
507	M192	Y	-0.055	-0.059	295.714	320.357
508	M192	Y	-0.059	-0.064	320.357	345
509	M193	Y	-0.03	-0.034	0	24.643
510	M193	Y	-0.034	-0.035	24.643	49.286
511	M193	Y	-0.035	-0.032	49.286	73.929
512	M193	Y	-0.032	-0.033	73.929	98.571
513	M193	Y	-0.033	-0.033	98.571	123.214
514	M193	Y	-0.033	-0.033	123.214	147.857
515	M193	Y	-0.033	-0.033	147.857	172.5
516	M193	Y	-0.033	-0.033	172.5	197.143
517	M193	Y	-0.033	-0.033	197.143	221.786
518	M193	Y	-0.033	-0.033	221.786	246.429
519	M193	Y	-0.033	-0.033	246.429	271.071
520	M193	Y	-0.033	-0.032	271.071	295.714
521	M193	Y	-0.032	-0.033	295.714	320.357
522	M193	Y	-0.033	-0.034	320.357	345
523	M194	Y	-0.054	-0.056	0	24.643
524	M194	Y	-0.056	-0.057	24.643	49.286
525	M194	Y	-0.057	-0.058	49.286	73.929
526	M194	Y	-0.058	-0.058	73.929	98.571
527	M194	Y	-0.058	-0.058	98.571	123.214
528	M194	Y	-0.058	-0.058	123.214	147.857
529	M194	Y	-0.058	-0.058	147.857	172.5
530	M194	Y	-0.058	-0.058	172.5	197.143
531	M194	Y	-0.058	-0.058	197.143	221.786
532	M194	Y	-0.058	-0.058	221.786	246.429
533	M194	Y	-0.058	-0.058	246.429	271.071
534	M194	Y	-0.058	-0.058	271.071	295.714
535	M194	Y	-0.058	-0.058	295.714	320.357
536	M194	Y	-0.058	-0.058	320.357	345
537	M195	Y	-0.058	-0.058	3.331e-13	345
538	M196	Y	-0.027	-0.029	0	24.643
539	M196	Y	-0.029	-0.03	24.643	49.286
540	M196	Y	-0.03	-0.03	49.286	73.929
541	M196	Y	-0.03	-0.03	73.929	98.571
542	M196	Y	-0.03	-0.03	98.571	123.214
543	M196	Y	-0.03	-0.03	123.214	147.857
544	M196	Y	-0.03	-0.03	147.857	172.5
545	M196	Y	-0.03	-0.03	172.5	197.143
546	M196	Y	-0.03	-0.03	197.143	221.786
547	M196	Y	-0.03	-0.03	221.786	246.429
548	M196	Y	-0.03	-0.03	246.429	271.071
549	M196	Y	-0.03	-0.03	271.071	295.714
550	M196	Y	-0.03	-0.029	295.714	320.357
551	M196	Y	-0.029	-0.027	320.357	345
552	M197	Y	-0.049	-0.049	0	24.643
553	M197	Y	-0.049	-0.049	24.643	49.286

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
554	M197	Y	-0.049	-0.049	49.286	73.929
555	M197	Y	-0.049	-0.049	73.929	98.571
556	M197	Y	-0.049	-0.049	98.571	123.214
557	M197	Y	-0.049	-0.049	123.214	147.857
558	M197	Y	-0.049	-0.049	147.857	172.5
559	M197	Y	-0.049	-0.049	172.5	197.143
560	M197	Y	-0.049	-0.049	197.143	221.786
561	M197	Y	-0.049	-0.049	221.786	246.429
562	M197	Y	-0.049	-0.049	246.429	271.071
563	M197	Y	-0.049	-0.049	271.071	295.714
564	M197	Y	-0.049	-0.049	295.714	320.357
565	M197	Y	-0.049	-0.049	320.357	345
566	M207	Y	-0.053	-0.057	0	24.643
567	M207	Y	-0.057	-0.058	24.643	49.286
568	M207	Y	-0.058	-0.058	49.286	73.929
569	M207	Y	-0.058	-0.058	73.929	98.571
570	M207	Y	-0.058	-0.058	98.571	123.214
571	M207	Y	-0.058	-0.058	123.214	147.857
572	M207	Y	-0.058	-0.058	147.857	172.5
573	M207	Y	-0.058	-0.058	172.5	197.143
574	M207	Y	-0.058	-0.058	197.143	221.786
575	M207	Y	-0.058	-0.058	221.786	246.429
576	M207	Y	-0.058	-0.058	246.429	271.071
577	M207	Y	-0.058	-0.062	271.071	295.714
578	M207	Y	-0.062	-0.06	295.714	320.357
579	M207	Y	-0.06	-0.051	320.357	345
580	M210	Y	-0.047	-0.051	0	24.643
581	M210	Y	-0.051	-0.052	24.643	49.286
582	M210	Y	-0.052	-0.051	49.286	73.929
583	M210	Y	-0.051	-0.056	73.929	98.571
584	M210	Y	-0.056	-0.061	98.571	123.214
585	M210	Y	-0.061	-0.056	123.214	147.857
586	M210	Y	-0.056	-0.049	147.857	172.5
587	M210	Y	-0.049	-0.047	172.5	197.143
588	M210	Y	-0.047	-0.051	197.143	221.786
589	M210	Y	-0.051	-0.055	221.786	246.429
590	M210	Y	-0.055	-0.055	246.429	271.071
591	M210	Y	-0.055	-0.058	271.071	295.714
592	M210	Y	-0.058	-0.054	295.714	320.357
593	M210	Y	-0.054	-0.04	320.357	345
594	M212	Y	-0.048	-0.048	0	24.643
595	M212	Y	-0.048	-0.048	24.643	49.286
596	M212	Y	-0.048	-0.048	49.286	73.929
597	M212	Y	-0.048	-0.048	73.929	98.571
598	M212	Y	-0.048	-0.048	98.571	123.214
599	M212	Y	-0.048	-0.048	123.214	147.857
600	M212	Y	-0.048	-0.048	147.857	172.5
601	M212	Y	-0.048	-0.048	172.5	197.143
602	M212	Y	-0.048	-0.048	197.143	221.786
603	M212	Y	-0.048	-0.048	221.786	246.429
604	M212	Y	-0.048	-0.048	246.429	271.071
605	M212	Y	-0.048	-0.048	271.071	295.714
606	M212	Y	-0.048	-0.048	295.714	320.357
607	M212	Y	-0.048	-0.048	320.357	345
608	M213	Y	-0.036	-0.038	0	24.643

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
609	M213	Y	-0.038	-0.038	24.643	49.286
610	M213	Y	-0.038	-0.038	49.286	73.929
611	M213	Y	-0.038	-0.038	73.929	98.571
612	M213	Y	-0.038	-0.037	98.571	123.214
613	M213	Y	-0.037	-0.039	123.214	147.857
614	M213	Y	-0.039	-0.043	147.857	172.5
615	M213	Y	-0.043	-0.039	172.5	197.143
616	M213	Y	-0.039	-0.037	197.143	221.786
617	M213	Y	-0.037	-0.038	221.786	246.429
618	M213	Y	-0.038	-0.038	246.429	271.071
619	M213	Y	-0.038	-0.038	271.071	295.714
620	M213	Y	-0.038	-0.038	295.714	320.357
621	M213	Y	-0.038	-0.036	320.357	345
622	M214	Y	-0.058	-0.058	0	24.643
623	M214	Y	-0.058	-0.058	24.643	49.286
624	M214	Y	-0.058	-0.058	49.286	73.929
625	M214	Y	-0.058	-0.058	73.929	98.571
626	M214	Y	-0.058	-0.058	98.571	123.214
627	M214	Y	-0.058	-0.057	123.214	147.857
628	M214	Y	-0.057	-0.056	147.857	172.5
629	M214	Y	-0.056	-0.057	172.5	197.143
630	M214	Y	-0.057	-0.058	197.143	221.786
631	M214	Y	-0.058	-0.058	221.786	246.429
632	M214	Y	-0.058	-0.058	246.429	271.071
633	M214	Y	-0.058	-0.058	271.071	295.714
634	M214	Y	-0.058	-0.058	295.714	320.357
635	M214	Y	-0.058	-0.058	320.357	345
636	M215	Y	-0.058	-0.058	1.075e-13	345
637	M216	Y	-0.064	-0.059	0	24.643
638	M216	Y	-0.059	-0.055	24.643	49.286
639	M216	Y	-0.055	-0.055	49.286	73.929
640	M216	Y	-0.055	-0.057	73.929	98.571
641	M216	Y	-0.057	-0.057	98.571	123.214
642	M216	Y	-0.057	-0.058	123.214	147.857
643	M216	Y	-0.058	-0.061	147.857	172.5
644	M216	Y	-0.061	-0.061	172.5	197.143
645	M216	Y	-0.061	-0.058	197.143	221.786
646	M216	Y	-0.058	-0.057	221.786	246.429
647	M216	Y	-0.057	-0.057	246.429	271.071
648	M216	Y	-0.057	-0.057	271.071	295.714
649	M216	Y	-0.057	-0.057	295.714	320.357
650	M216	Y	-0.057	-0.058	320.357	345
651	M217	Y	-0.035	-0.037	0	24.643
652	M217	Y	-0.037	-0.035	24.643	49.286
653	M217	Y	-0.035	-0.033	49.286	73.929
654	M217	Y	-0.033	-0.033	73.929	98.571
655	M217	Y	-0.033	-0.033	98.571	123.214
656	M217	Y	-0.033	-0.033	123.214	147.857
657	M217	Y	-0.033	-0.033	147.857	172.5
658	M217	Y	-0.033	-0.033	172.5	197.143
659	M217	Y	-0.033	-0.033	197.143	221.786
660	M217	Y	-0.033	-0.033	221.786	246.429
661	M217	Y	-0.033	-0.032	246.429	271.071
662	M217	Y	-0.032	-0.034	271.071	295.714
663	M217	Y	-0.034	-0.035	295.714	320.357

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
664	M217	Y	-0.035	-0.034	320.357	345
665	M218	Y	-0.058	-0.058	0	24.643
666	M218	Y	-0.058	-0.058	24.643	49.286
667	M218	Y	-0.058	-0.058	49.286	73.929
668	M218	Y	-0.058	-0.058	73.929	98.571
669	M218	Y	-0.058	-0.058	98.571	123.214
670	M218	Y	-0.058	-0.058	123.214	147.857
671	M218	Y	-0.058	-0.058	147.857	172.5
672	M218	Y	-0.058	-0.058	172.5	197.143
673	M218	Y	-0.058	-0.058	197.143	221.786
674	M218	Y	-0.058	-0.058	221.786	246.429
675	M218	Y	-0.058	-0.058	246.429	271.071
676	M218	Y	-0.058	-0.057	271.071	295.714
677	M218	Y	-0.057	-0.056	295.714	320.357
678	M218	Y	-0.056	-0.054	320.357	345
679	M219	Y	-0.058	-0.058	1.972e-13	345
680	M220	Y	-0.027	-0.029	0	24.643
681	M220	Y	-0.029	-0.03	24.643	49.286
682	M220	Y	-0.03	-0.03	49.286	73.929
683	M220	Y	-0.03	-0.03	73.929	98.571
684	M220	Y	-0.03	-0.03	98.571	123.214
685	M220	Y	-0.03	-0.03	123.214	147.857
686	M220	Y	-0.03	-0.03	147.857	172.5
687	M220	Y	-0.03	-0.03	172.5	197.143
688	M220	Y	-0.03	-0.03	197.143	221.786
689	M220	Y	-0.03	-0.03	221.786	246.429
690	M220	Y	-0.03	-0.03	246.429	271.071
691	M220	Y	-0.03	-0.03	271.071	295.714
692	M220	Y	-0.03	-0.029	295.714	320.357
693	M220	Y	-0.029	-0.027	320.357	345
694	M221	Y	-0.049	-0.049	0	24.643
695	M221	Y	-0.049	-0.049	24.643	49.286
696	M221	Y	-0.049	-0.049	49.286	73.929
697	M221	Y	-0.049	-0.049	73.929	98.571
698	M221	Y	-0.049	-0.049	98.571	123.214
699	M221	Y	-0.049	-0.049	123.214	147.857
700	M221	Y	-0.049	-0.049	147.857	172.5
701	M221	Y	-0.049	-0.049	172.5	197.143
702	M221	Y	-0.049	-0.049	197.143	221.786
703	M221	Y	-0.049	-0.049	221.786	246.429
704	M221	Y	-0.049	-0.049	246.429	271.071
705	M221	Y	-0.049	-0.049	271.071	295.714
706	M221	Y	-0.049	-0.049	295.714	320.357
707	M221	Y	-0.049	-0.049	320.357	345
708	M238	Y	-0.027	-0.028	0	24.643
709	M238	Y	-0.028	-0.029	24.643	49.286
710	M238	Y	-0.029	-0.029	49.286	73.929
711	M238	Y	-0.029	-0.029	73.929	98.571
712	M238	Y	-0.029	-0.029	98.571	123.214
713	M238	Y	-0.029	-0.029	123.214	147.857
714	M238	Y	-0.029	-0.029	147.857	172.5
715	M238	Y	-0.029	-0.029	172.5	197.143
716	M238	Y	-0.029	-0.029	197.143	221.786
717	M238	Y	-0.029	-0.029	221.786	246.429
718	M238	Y	-0.029	-0.029	246.429	271.071

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
719	M238	Y	-0.029	-0.029	271.071	295.714
720	M238	Y	-0.029	-0.028	295.714	320.357
721	M238	Y	-0.028	-0.027	320.357	345
722	M239	Y	-0.032	-0.028	0	24.643
723	M239	Y	-0.028	-0.027	24.643	49.286
724	M239	Y	-0.027	-0.029	49.286	73.929
725	M239	Y	-0.029	-0.029	73.929	98.571
726	M239	Y	-0.029	-0.029	98.571	123.214
727	M239	Y	-0.029	-0.029	123.214	147.857
728	M239	Y	-0.029	-0.029	147.857	172.5
729	M239	Y	-0.029	-0.029	172.5	197.143
730	M239	Y	-0.029	-0.029	197.143	221.786
731	M239	Y	-0.029	-0.029	221.786	246.429
732	M239	Y	-0.029	-0.028	246.429	271.071
733	M239	Y	-0.028	-0.027	271.071	295.714
734	M239	Y	-0.027	-0.028	295.714	320.357
735	M239	Y	-0.028	-0.032	320.357	345
736	M240	Y	-0.025	-0.027	0	24.857
737	M240	Y	-0.027	-0.027	24.857	49.714
738	M240	Y	-0.027	-0.032	49.714	74.571
739	M240	Y	-0.032	-0.032	74.571	99.429
740	M240	Y	-0.032	-0.027	99.429	124.286
741	M240	Y	-0.027	-0.027	124.286	149.143
742	M240	Y	-0.027	-0.027	149.143	174
743	M240	Y	-0.027	-0.027	174	198.857
744	M240	Y	-0.027	-0.027	198.857	223.714
745	M240	Y	-0.027	-0.032	223.714	248.571
746	M240	Y	-0.032	-0.032	248.571	273.429
747	M240	Y	-0.032	-0.027	273.429	298.286
748	M240	Y	-0.027	-0.027	298.286	323.143
749	M240	Y	-0.027	-0.025	323.143	348
750	M241	Y	-0.03	-0.026	0	24.857
751	M241	Y	-0.026	-0.026	24.857	49.714
752	M241	Y	-0.026	-0.031	49.714	74.571
753	M241	Y	-0.031	-0.031	74.571	99.429
754	M241	Y	-0.031	-0.027	99.429	124.286
755	M241	Y	-0.027	-0.027	124.286	149.143
756	M241	Y	-0.027	-0.027	149.143	174
757	M241	Y	-0.027	-0.027	174	198.857
758	M241	Y	-0.027	-0.027	198.857	223.714
759	M241	Y	-0.027	-0.031	223.714	248.571
760	M241	Y	-0.031	-0.031	248.571	273.429
761	M241	Y	-0.031	-0.026	273.429	298.286
762	M241	Y	-0.026	-0.026	298.286	323.143
763	M241	Y	-0.026	-0.03	323.143	348
764	M242	Y	-0.027	-0.028	0	24.643
765	M242	Y	-0.028	-0.029	24.643	49.286
766	M242	Y	-0.029	-0.029	49.286	73.929
767	M242	Y	-0.029	-0.029	73.929	98.571
768	M242	Y	-0.029	-0.029	98.571	123.214
769	M242	Y	-0.029	-0.029	123.214	147.857
770	M242	Y	-0.029	-0.029	147.857	172.5
771	M242	Y	-0.029	-0.029	172.5	197.143
772	M242	Y	-0.029	-0.029	197.143	221.786
773	M242	Y	-0.029	-0.029	221.786	246.429

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
774	M242	Y	-0.029	-0.029	246.429	271.071
775	M242	Y	-0.029	-0.029	271.071	295.714
776	M242	Y	-0.029	-0.028	295.714	320.357
777	M242	Y	-0.028	-0.027	320.357	345
778	M243	Y	-0.025	-0.028	0	24.643
779	M243	Y	-0.028	-0.027	24.643	49.286
780	M243	Y	-0.027	-0.025	49.286	73.929
781	M243	Y	-0.025	-0.027	73.929	98.571
782	M243	Y	-0.027	-0.029	98.571	123.214
783	M243	Y	-0.029	-0.029	123.214	147.857
784	M243	Y	-0.029	-0.028	147.857	172.5
785	M243	Y	-0.028	-0.033	172.5	197.143
786	M243	Y	-0.033	-0.033	197.143	221.786
787	M243	Y	-0.033	-0.028	221.786	246.429
788	M243	Y	-0.028	-0.028	246.429	271.071
789	M243	Y	-0.028	-0.026	271.071	295.714
790	M243	Y	-0.026	-0.027	295.714	320.357
791	M243	Y	-0.027	-0.031	320.357	345
792	M246	Y	-0.027	-0.028	0	24.643
793	M246	Y	-0.028	-0.029	24.643	49.286
794	M246	Y	-0.029	-0.029	49.286	73.929
795	M246	Y	-0.029	-0.029	73.929	98.571
796	M246	Y	-0.029	-0.029	98.571	123.214
797	M246	Y	-0.029	-0.029	123.214	147.857
798	M246	Y	-0.029	-0.029	147.857	172.5
799	M246	Y	-0.029	-0.029	172.5	197.143
800	M246	Y	-0.029	-0.029	197.143	221.786
801	M246	Y	-0.029	-0.029	221.786	246.429
802	M246	Y	-0.029	-0.029	246.429	271.071
803	M246	Y	-0.029	-0.029	271.071	295.714
804	M246	Y	-0.029	-0.028	295.714	320.357
805	M246	Y	-0.028	-0.027	320.357	345
806	M247	Y	-0.033	-0.028	0	24.643
807	M247	Y	-0.028	-0.027	24.643	49.286
808	M247	Y	-0.027	-0.027	49.286	73.929
809	M247	Y	-0.027	-0.027	73.929	98.571
810	M247	Y	-0.027	-0.027	98.571	123.214
811	M247	Y	-0.027	-0.03	123.214	147.857
812	M247	Y	-0.03	-0.033	147.857	172.5
813	M247	Y	-0.033	-0.03	172.5	197.143
814	M247	Y	-0.03	-0.027	197.143	221.786
815	M247	Y	-0.027	-0.028	221.786	246.429
816	M247	Y	-0.028	-0.026	246.429	271.071
817	M247	Y	-0.026	-0.025	271.071	295.714
818	M247	Y	-0.025	-0.027	295.714	320.357
819	M247	Y	-0.027	-0.026	320.357	345
820	M125	Y	-0.029	-0.029	3.118e-13	345
821	M140	Y	-0.029	-0.029	3.029e-13	345
822	M54	Y	-0.029	-0.029	5.977e-13	345
823	M71	Y	-0.029	-0.029	1.82e-12	345
824	M84	Y	-0.029	-0.029	2.256e-13	348
825	M107	Y	-0.048	-0.048	0	24.857
826	M107	Y	-0.048	-0.048	24.857	49.714
827	M107	Y	-0.048	-0.048	49.714	74.571
828	M107	Y	-0.048	-0.048	74.571	99.429

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
829	M107	Y	-0.048	-0.048	99.429	124.286
830	M107	Y	-0.048	-0.049	124.286	149.143
831	M107	Y	-0.049	-0.051	149.143	174
832	M107	Y	-0.051	-0.051	174	198.857
833	M107	Y	-0.051	-0.049	198.857	223.714
834	M107	Y	-0.049	-0.048	223.714	248.571
835	M107	Y	-0.048	-0.048	248.571	273.429
836	M107	Y	-0.048	-0.048	273.429	298.286
837	M107	Y	-0.048	-0.048	298.286	323.143
838	M107	Y	-0.048	-0.048	323.143	348
839	M108	Y	-0.034	-0.036	0	24.857
840	M108	Y	-0.036	-0.036	24.857	49.714
841	M108	Y	-0.036	-0.041	49.714	74.571
842	M108	Y	-0.041	-0.043	74.571	99.429
843	M108	Y	-0.043	-0.039	99.429	124.286
844	M108	Y	-0.039	-0.037	124.286	149.143
845	M108	Y	-0.037	-0.036	149.143	174
846	M108	Y	-0.036	-0.033	174	198.857
847	M108	Y	-0.033	-0.036	198.857	223.714
848	M108	Y	-0.036	-0.046	223.714	248.571
849	M108	Y	-0.046	-0.042	248.571	273.429
850	M108	Y	-0.042	-0.036	273.429	298.286
851	M108	Y	-0.036	-0.036	298.286	323.143
852	M108	Y	-0.036	-0.034	323.143	348
853	M109	Y	-0.057	-0.057	0	24.857
854	M109	Y	-0.057	-0.057	24.857	49.714
855	M109	Y	-0.057	-0.057	49.714	74.571
856	M109	Y	-0.057	-0.057	74.571	99.429
857	M109	Y	-0.057	-0.058	99.429	124.286
858	M109	Y	-0.058	-0.06	124.286	149.143
859	M109	Y	-0.06	-0.06	149.143	174
860	M109	Y	-0.06	-0.06	174	198.857
861	M109	Y	-0.06	-0.057	198.857	223.714
862	M109	Y	-0.057	-0.057	223.714	248.571
863	M109	Y	-0.057	-0.059	248.571	273.429
864	M109	Y	-0.059	-0.057	273.429	298.286
865	M109	Y	-0.057	-0.057	298.286	323.143
866	M109	Y	-0.057	-0.057	323.143	348
867	M110	Y	-0.057	-0.057	6.652e-13	348
868	M112	Y	-0.057	-0.057	1.151e-12	348
869	M115	Y	-0.051	-0.05	0	24.857
870	M115	Y	-0.05	-0.05	24.857	49.714
871	M115	Y	-0.05	-0.05	49.714	74.571
872	M115	Y	-0.05	-0.05	74.571	99.429
873	M115	Y	-0.05	-0.052	99.429	124.286
874	M115	Y	-0.052	-0.052	124.286	149.143
875	M115	Y	-0.052	-0.052	149.143	174
876	M115	Y	-0.052	-0.052	174	198.857
877	M115	Y	-0.052	-0.05	198.857	223.714
878	M115	Y	-0.05	-0.05	223.714	248.571
879	M115	Y	-0.05	-0.05	248.571	273.429
880	M115	Y	-0.05	-0.05	273.429	298.286
881	M115	Y	-0.05	-0.05	298.286	323.143
882	M115	Y	-0.05	-0.051	323.143	348
883	M116	Y	-0.029	-0.035	0	24.857

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
884	M116	Y	-0.035	-0.039	24.857	49.714
885	M116	Y	-0.039	-0.037	49.714	74.571
886	M116	Y	-0.037	-0.035	74.571	99.429
887	M116	Y	-0.035	-0.036	99.429	124.286
888	M116	Y	-0.036	-0.035	124.286	149.143
889	M116	Y	-0.035	-0.032	149.143	174
890	M116	Y	-0.032	-0.032	174	198.857
891	M116	Y	-0.032	-0.038	198.857	223.714
892	M116	Y	-0.038	-0.036	223.714	248.571
893	M116	Y	-0.036	-0.036	248.571	273.429
894	M116	Y	-0.036	-0.04	273.429	298.286
895	M116	Y	-0.04	-0.035	298.286	323.143
896	M116	Y	-0.035	-0.029	323.143	348
897	M117	Y	-0.059	-0.058	0	24.857
898	M117	Y	-0.058	-0.057	24.857	49.714
899	M117	Y	-0.057	-0.057	49.714	74.571
900	M117	Y	-0.057	-0.057	74.571	99.429
901	M117	Y	-0.057	-0.058	99.429	124.286
902	M117	Y	-0.058	-0.06	124.286	149.143
903	M117	Y	-0.06	-0.06	149.143	174
904	M117	Y	-0.06	-0.06	174	198.857
905	M117	Y	-0.06	-0.057	198.857	223.714
906	M117	Y	-0.057	-0.057	223.714	248.571
907	M117	Y	-0.057	-0.06	248.571	273.429
908	M117	Y	-0.06	-0.057	273.429	298.286
909	M117	Y	-0.057	-0.058	298.286	323.143
910	M117	Y	-0.058	-0.059	323.143	348
911	M119	Y	-0.057	-0.057	1.62e-12	348
912	M120	Y	-0.057	-0.057	1.592e-12	348
913	M121	Y	-0.043	-0.043	0	24.857
914	M121	Y	-0.043	-0.043	24.857	49.714
915	M121	Y	-0.043	-0.043	49.714	74.571
916	M121	Y	-0.043	-0.043	74.571	99.429
917	M121	Y	-0.043	-0.043	99.429	124.286
918	M121	Y	-0.043	-0.047	124.286	149.143
919	M121	Y	-0.047	-0.047	149.143	174
920	M121	Y	-0.047	-0.043	174	198.857
921	M121	Y	-0.043	-0.043	198.857	223.714
922	M121	Y	-0.043	-0.043	223.714	248.571
923	M121	Y	-0.043	-0.043	248.571	273.429
924	M121	Y	-0.043	-0.043	273.429	298.286
925	M121	Y	-0.043	-0.043	298.286	323.143
926	M121	Y	-0.043	-0.043	323.143	348
927	M122	Y	-0.02	-0.022	0	24.857
928	M122	Y	-0.022	-0.025	24.857	49.714
929	M122	Y	-0.025	-0.025	49.714	74.571
930	M122	Y	-0.025	-0.026	74.571	99.429
931	M122	Y	-0.026	-0.026	99.429	124.286
932	M122	Y	-0.026	-0.019	124.286	149.143
933	M122	Y	-0.019	-0.019	149.143	174
934	M122	Y	-0.019	-0.022	174	198.857
935	M122	Y	-0.022	-0.026	198.857	223.714
936	M122	Y	-0.026	-0.026	223.714	248.571
937	M122	Y	-0.026	-0.025	248.571	273.429
938	M122	Y	-0.025	-0.025	273.429	298.286

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
939	M122	Y	-0.025	-0.022	298.286	323.143
940	M122	Y	-0.022	-0.02	323.143	348
941	M128	Y	-0.048	-0.048	0	24.643
942	M128	Y	-0.048	-0.048	24.643	49.286
943	M128	Y	-0.048	-0.048	49.286	73.929
944	M128	Y	-0.048	-0.048	73.929	98.571
945	M128	Y	-0.048	-0.048	98.571	123.214
946	M128	Y	-0.048	-0.048	123.214	147.857
947	M128	Y	-0.048	-0.048	147.857	172.5
948	M128	Y	-0.048	-0.048	172.5	197.143
949	M128	Y	-0.048	-0.048	197.143	221.786
950	M128	Y	-0.048	-0.048	221.786	246.429
951	M128	Y	-0.048	-0.048	246.429	271.071
952	M128	Y	-0.048	-0.048	271.071	295.714
953	M128	Y	-0.048	-0.048	295.714	320.357
954	M128	Y	-0.048	-0.048	320.357	345
955	M130	Y	-0.036	-0.038	0	24.643
956	M130	Y	-0.038	-0.038	24.643	49.286
957	M130	Y	-0.038	-0.038	49.286	73.929
958	M130	Y	-0.038	-0.038	73.929	98.571
959	M130	Y	-0.038	-0.037	98.571	123.214
960	M130	Y	-0.037	-0.039	123.214	147.857
961	M130	Y	-0.039	-0.043	147.857	172.5
962	M130	Y	-0.043	-0.039	172.5	197.143
963	M130	Y	-0.039	-0.037	197.143	221.786
964	M130	Y	-0.037	-0.038	221.786	246.429
965	M130	Y	-0.038	-0.038	246.429	271.071
966	M130	Y	-0.038	-0.038	271.071	295.714
967	M130	Y	-0.038	-0.038	295.714	320.357
968	M130	Y	-0.038	-0.036	320.357	345
969	M131	Y	-0.057	-0.057	3.324e-12	345
970	M149	Y	-0.057	-0.057	2.728e-12	345
971	M150	Y	-0.059	-0.058	0	24.643
972	M150	Y	-0.058	-0.057	24.643	49.286
973	M150	Y	-0.057	-0.057	49.286	73.929
974	M150	Y	-0.057	-0.057	73.929	98.571
975	M150	Y	-0.057	-0.058	98.571	123.214
976	M150	Y	-0.058	-0.06	123.214	147.857
977	M150	Y	-0.06	-0.06	147.857	172.5
978	M150	Y	-0.06	-0.06	172.5	197.143
979	M150	Y	-0.06	-0.057	197.143	221.786
980	M150	Y	-0.057	-0.057	221.786	246.429
981	M150	Y	-0.057	-0.059	246.429	271.071
982	M150	Y	-0.059	-0.057	271.071	295.714
983	M150	Y	-0.057	-0.058	295.714	320.357
984	M150	Y	-0.058	-0.059	320.357	345
985	M151	Y	-0.028	-0.035	0	24.643
986	M151	Y	-0.035	-0.039	24.643	49.286
987	M151	Y	-0.039	-0.037	49.286	73.929
988	M151	Y	-0.037	-0.035	73.929	98.571
989	M151	Y	-0.035	-0.036	98.571	123.214
990	M151	Y	-0.036	-0.035	123.214	147.857
991	M151	Y	-0.035	-0.032	147.857	172.5
992	M151	Y	-0.032	-0.032	172.5	197.143
993	M151	Y	-0.032	-0.038	197.143	221.786

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
994	M151	Y	-0.038	-0.038	221.786	246.429
995	M151	Y	-0.038	-0.036	246.429	271.071
996	M151	Y	-0.036	-0.038	271.071	295.714
997	M151	Y	-0.038	-0.035	295.714	320.357
998	M151	Y	-0.035	-0.029	320.357	345
999	M152	Y	-0.058	-0.058	0	24.643
1000	M152	Y	-0.058	-0.058	24.643	49.286
1001	M152	Y	-0.058	-0.058	49.286	73.929
1002	M152	Y	-0.058	-0.058	73.929	98.571
1003	M152	Y	-0.058	-0.058	98.571	123.214
1004	M152	Y	-0.058	-0.057	123.214	147.857
1005	M152	Y	-0.057	-0.056	147.857	172.5
1006	M152	Y	-0.056	-0.057	172.5	197.143
1007	M152	Y	-0.057	-0.058	197.143	221.786
1008	M152	Y	-0.058	-0.058	221.786	246.429
1009	M152	Y	-0.058	-0.058	246.429	271.071
1010	M152	Y	-0.058	-0.058	271.071	295.714
1011	M152	Y	-0.058	-0.058	295.714	320.357
1012	M152	Y	-0.058	-0.058	320.357	345
1013	M153	Y	-0.057	-0.057	7.887e-13	345
1014	M154	Y	-0.051	-0.05	0	24.643
1015	M154	Y	-0.05	-0.05	24.643	49.286
1016	M154	Y	-0.05	-0.05	49.286	73.929
1017	M154	Y	-0.05	-0.05	73.929	98.571
1018	M154	Y	-0.05	-0.052	98.571	123.214
1019	M154	Y	-0.052	-0.054	123.214	147.857
1020	M154	Y	-0.054	-0.05	147.857	172.5
1021	M154	Y	-0.05	-0.048	172.5	197.143
1022	M154	Y	-0.048	-0.052	197.143	221.786
1023	M154	Y	-0.052	-0.052	221.786	246.429
1024	M154	Y	-0.052	-0.05	246.429	271.071
1025	M154	Y	-0.05	-0.05	271.071	295.714
1026	M154	Y	-0.05	-0.05	295.714	320.357
1027	M154	Y	-0.05	-0.051	320.357	345
1028	M155	Y	-0.057	-0.057	6.839e-13	345
1029	M156	Y	-0.043	-0.043	0	24.643
1030	M156	Y	-0.043	-0.043	24.643	49.286
1031	M156	Y	-0.043	-0.043	49.286	73.929
1032	M156	Y	-0.043	-0.043	73.929	98.571
1033	M156	Y	-0.043	-0.043	98.571	123.214
1034	M156	Y	-0.043	-0.043	123.214	147.857
1035	M156	Y	-0.043	-0.047	147.857	172.5
1036	M156	Y	-0.047	-0.047	172.5	197.143
1037	M156	Y	-0.047	-0.043	197.143	221.786
1038	M156	Y	-0.043	-0.043	221.786	246.429
1039	M156	Y	-0.043	-0.043	246.429	271.071
1040	M156	Y	-0.043	-0.043	271.071	295.714
1041	M156	Y	-0.043	-0.043	295.714	320.357
1042	M156	Y	-0.043	-0.043	320.357	345
1043	M157	Y	-0.02	-0.022	0	24.643
1044	M157	Y	-0.022	-0.025	24.643	49.286
1045	M157	Y	-0.025	-0.025	49.286	73.929
1046	M157	Y	-0.025	-0.026	73.929	98.571
1047	M157	Y	-0.026	-0.026	98.571	123.214
1048	M157	Y	-0.026	-0.022	123.214	147.857

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1049	M157	Y	-0.022	-0.019	147.857	172.5
1050	M157	Y	-0.019	-0.019	172.5	197.143
1051	M157	Y	-0.019	-0.026	197.143	221.786
1052	M157	Y	-0.026	-0.026	221.786	246.429
1053	M157	Y	-0.026	-0.025	246.429	271.071
1054	M157	Y	-0.025	-0.025	271.071	295.714
1055	M157	Y	-0.025	-0.022	295.714	320.357
1056	M157	Y	-0.022	-0.02	320.357	345
1057	M158	Y	-0.057	-0.057	0	345
1058	M160	Y	-0.036	-0.053	0	24.643
1059	M160	Y	-0.053	-0.062	24.643	49.286
1060	M160	Y	-0.062	-0.06	49.286	73.929
1061	M160	Y	-0.06	-0.058	73.929	98.571
1062	M160	Y	-0.058	-0.058	98.571	123.214
1063	M160	Y	-0.058	-0.055	123.214	147.857
1064	M160	Y	-0.055	-0.054	147.857	172.5
1065	M160	Y	-0.054	-0.055	172.5	197.143
1066	M160	Y	-0.055	-0.058	197.143	221.786
1067	M160	Y	-0.058	-0.058	221.786	246.429
1068	M160	Y	-0.058	-0.059	246.429	271.071
1069	M160	Y	-0.059	-0.062	271.071	295.714
1070	M160	Y	-0.062	-0.053	295.714	320.357
1071	M160	Y	-0.053	-0.036	320.357	345
1072	M161	Y	-0.057	-0.057	0	345
1073	M163	Y	-0.02	-0.022	0	24.643
1074	M163	Y	-0.022	-0.025	24.643	49.286
1075	M163	Y	-0.025	-0.025	49.286	73.929
1076	M163	Y	-0.025	-0.026	73.929	98.571
1077	M163	Y	-0.026	-0.026	98.571	123.214
1078	M163	Y	-0.026	-0.022	123.214	147.857
1079	M163	Y	-0.022	-0.019	147.857	172.5
1080	M163	Y	-0.019	-0.019	172.5	197.143
1081	M163	Y	-0.019	-0.026	197.143	221.786
1082	M163	Y	-0.026	-0.026	221.786	246.429
1083	M163	Y	-0.026	-0.025	246.429	271.071
1084	M163	Y	-0.025	-0.025	271.071	295.714
1085	M163	Y	-0.025	-0.022	295.714	320.357
1086	M163	Y	-0.022	-0.02	320.357	345
1087	M174	Y	-0.043	-0.043	0	24.643
1088	M174	Y	-0.043	-0.043	24.643	49.286
1089	M174	Y	-0.043	-0.043	49.286	73.929
1090	M174	Y	-0.043	-0.043	73.929	98.571
1091	M174	Y	-0.043	-0.043	98.571	123.214
1092	M174	Y	-0.043	-0.043	123.214	147.857
1093	M174	Y	-0.043	-0.047	147.857	172.5
1094	M174	Y	-0.047	-0.047	172.5	197.143
1095	M174	Y	-0.047	-0.043	197.143	221.786
1096	M174	Y	-0.043	-0.043	221.786	246.429
1097	M174	Y	-0.043	-0.043	246.429	271.071
1098	M174	Y	-0.043	-0.043	271.071	295.714
1099	M174	Y	-0.043	-0.043	295.714	320.357
1100	M174	Y	-0.043	-0.043	320.357	345
1101	M175	Y	-0.057	-0.057	2.833e-13	345
1102	M176	Y	-0.059	-0.058	0	24.643
1103	M176	Y	-0.058	-0.057	24.643	49.286

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1104	M176	Y	-0.057	-0.058	49.286	73.929
1105	M176	Y	-0.058	-0.061	73.929	98.571
1106	M176	Y	-0.061	-0.058	98.571	123.214
1107	M176	Y	-0.058	-0.054	123.214	147.857
1108	M176	Y	-0.054	-0.058	147.857	172.5
1109	M176	Y	-0.058	-0.059	172.5	197.143
1110	M176	Y	-0.059	-0.057	197.143	221.786
1111	M176	Y	-0.057	-0.06	221.786	246.429
1112	M176	Y	-0.06	-0.06	246.429	271.071
1113	M176	Y	-0.06	-0.057	271.071	295.714
1114	M176	Y	-0.057	-0.058	295.714	320.357
1115	M176	Y	-0.058	-0.059	320.357	345
1116	M177	Y	-0.06	-0.059	0	24.643
1117	M177	Y	-0.059	-0.057	24.643	49.286
1118	M177	Y	-0.057	-0.059	49.286	73.929
1119	M177	Y	-0.059	-0.057	73.929	98.571
1120	M177	Y	-0.057	-0.057	98.571	123.214
1121	M177	Y	-0.057	-0.06	123.214	147.857
1122	M177	Y	-0.06	-0.06	147.857	172.5
1123	M177	Y	-0.06	-0.06	172.5	197.143
1124	M177	Y	-0.06	-0.058	197.143	221.786
1125	M177	Y	-0.058	-0.057	221.786	246.429
1126	M177	Y	-0.057	-0.057	246.429	271.071
1127	M177	Y	-0.057	-0.058	271.071	295.714
1128	M177	Y	-0.058	-0.059	295.714	320.357
1129	M177	Y	-0.059	-0.06	320.357	345
1130	M178	Y	-0.057	-0.057	2.16e-12	345
1131	M179	Y	-0.058	-0.058	0	24.643
1132	M179	Y	-0.058	-0.058	24.643	49.286
1133	M179	Y	-0.058	-0.058	49.286	73.929
1134	M179	Y	-0.058	-0.058	73.929	98.571
1135	M179	Y	-0.058	-0.058	98.571	123.214
1136	M179	Y	-0.058	-0.057	123.214	147.857
1137	M179	Y	-0.057	-0.056	147.857	172.5
1138	M179	Y	-0.056	-0.057	172.5	197.143
1139	M179	Y	-0.057	-0.058	197.143	221.786
1140	M179	Y	-0.058	-0.058	221.786	246.429
1141	M179	Y	-0.058	-0.058	246.429	271.071
1142	M179	Y	-0.058	-0.058	271.071	295.714
1143	M179	Y	-0.058	-0.058	295.714	320.357
1144	M179	Y	-0.058	-0.058	320.357	345
1145	M180	Y	-0.055	-0.056	0	24.643
1146	M180	Y	-0.056	-0.057	24.643	49.286
1147	M180	Y	-0.057	-0.058	49.286	73.929
1148	M180	Y	-0.058	-0.057	73.929	98.571
1149	M180	Y	-0.057	-0.056	98.571	123.214
1150	M180	Y	-0.056	-0.059	123.214	147.857
1151	M180	Y	-0.059	-0.062	147.857	172.5
1152	M180	Y	-0.062	-0.059	172.5	197.143
1153	M180	Y	-0.059	-0.056	197.143	221.786
1154	M180	Y	-0.056	-0.057	221.786	246.429
1155	M180	Y	-0.057	-0.058	246.429	271.071
1156	M180	Y	-0.058	-0.057	271.071	295.714
1157	M180	Y	-0.057	-0.056	295.714	320.357
1158	M180	Y	-0.056	-0.055	320.357	345

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1159	M181	Y	-0.058	-0.058	0	24.643
1160	M181	Y	-0.058	-0.058	24.643	49.286
1161	M181	Y	-0.058	-0.058	49.286	73.929
1162	M181	Y	-0.058	-0.058	73.929	98.571
1163	M181	Y	-0.058	-0.058	98.571	123.214
1164	M181	Y	-0.058	-0.058	123.214	147.857
1165	M181	Y	-0.058	-0.058	147.857	172.5
1166	M181	Y	-0.058	-0.058	172.5	197.143
1167	M181	Y	-0.058	-0.058	197.143	221.786
1168	M181	Y	-0.058	-0.058	221.786	246.429
1169	M181	Y	-0.058	-0.058	246.429	271.071
1170	M181	Y	-0.058	-0.058	271.071	295.714
1171	M181	Y	-0.058	-0.058	295.714	320.357
1172	M181	Y	-0.058	-0.058	320.357	345
1173	M182	Y	-0.057	-0.057	0	345
1174	M184	Y	-0.029	-0.035	0	24.643
1175	M184	Y	-0.035	-0.039	24.643	49.286
1176	M184	Y	-0.039	-0.038	49.286	73.929
1177	M184	Y	-0.038	-0.034	73.929	98.571
1178	M184	Y	-0.034	-0.034	98.571	123.214
1179	M184	Y	-0.034	-0.037	123.214	147.857
1180	M184	Y	-0.037	-0.036	147.857	172.5
1181	M184	Y	-0.036	-0.034	172.5	197.143
1182	M184	Y	-0.034	-0.036	197.143	221.786
1183	M184	Y	-0.036	-0.037	221.786	246.429
1184	M184	Y	-0.037	-0.036	246.429	271.071
1185	M184	Y	-0.036	-0.038	271.071	295.714
1186	M184	Y	-0.038	-0.035	295.714	320.357
1187	M184	Y	-0.035	-0.029	320.357	345
1188	M185	Y	-0.057	-0.057	1.677e-12	345
1189	M187	Y	-0.02	-0.022	0	24.643
1190	M187	Y	-0.022	-0.025	24.643	49.286
1191	M187	Y	-0.025	-0.025	49.286	73.929
1192	M187	Y	-0.025	-0.026	73.929	98.571
1193	M187	Y	-0.026	-0.026	98.571	123.214
1194	M187	Y	-0.026	-0.022	123.214	147.857
1195	M187	Y	-0.022	-0.019	147.857	172.5
1196	M187	Y	-0.019	-0.019	172.5	197.143
1197	M187	Y	-0.019	-0.026	197.143	221.786
1198	M187	Y	-0.026	-0.026	221.786	246.429
1199	M187	Y	-0.026	-0.025	246.429	271.071
1200	M187	Y	-0.025	-0.025	271.071	295.714
1201	M187	Y	-0.025	-0.022	295.714	320.357
1202	M187	Y	-0.022	-0.02	320.357	345
1203	M198	Y	-0.043	-0.043	0	24.643
1204	M198	Y	-0.043	-0.043	24.643	49.286
1205	M198	Y	-0.043	-0.043	49.286	73.929
1206	M198	Y	-0.043	-0.043	73.929	98.571
1207	M198	Y	-0.043	-0.043	98.571	123.214
1208	M198	Y	-0.043	-0.043	123.214	147.857
1209	M198	Y	-0.043	-0.047	147.857	172.5
1210	M198	Y	-0.047	-0.047	172.5	197.143
1211	M198	Y	-0.047	-0.043	197.143	221.786
1212	M198	Y	-0.043	-0.043	221.786	246.429
1213	M198	Y	-0.043	-0.043	246.429	271.071

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1214	M198	Y	-0.043	-0.043	271.071	295.714
1215	M198	Y	-0.043	-0.043	295.714	320.357
1216	M198	Y	-0.043	-0.043	320.357	345
1217	M199	Y	-0.057	-0.057	2.842e-14	345
1218	M200	Y	-0.059	-0.058	0	24.643
1219	M200	Y	-0.058	-0.057	24.643	49.286
1220	M200	Y	-0.057	-0.058	49.286	73.929
1221	M200	Y	-0.058	-0.061	73.929	98.571
1222	M200	Y	-0.061	-0.058	98.571	123.214
1223	M200	Y	-0.058	-0.054	123.214	147.857
1224	M200	Y	-0.054	-0.058	147.857	172.5
1225	M200	Y	-0.058	-0.059	172.5	197.143
1226	M200	Y	-0.059	-0.057	197.143	221.786
1227	M200	Y	-0.057	-0.06	221.786	246.429
1228	M200	Y	-0.06	-0.06	246.429	271.071
1229	M200	Y	-0.06	-0.057	271.071	295.714
1230	M200	Y	-0.057	-0.058	295.714	320.357
1231	M200	Y	-0.058	-0.059	320.357	345
1232	M201	Y	-0.051	-0.05	0	24.643
1233	M201	Y	-0.05	-0.05	24.643	49.286
1234	M201	Y	-0.05	-0.05	49.286	73.929
1235	M201	Y	-0.05	-0.05	73.929	98.571
1236	M201	Y	-0.05	-0.05	98.571	123.214
1237	M201	Y	-0.05	-0.052	123.214	147.857
1238	M201	Y	-0.052	-0.052	147.857	172.5
1239	M201	Y	-0.052	-0.052	172.5	197.143
1240	M201	Y	-0.052	-0.052	197.143	221.786
1241	M201	Y	-0.052	-0.05	221.786	246.429
1242	M201	Y	-0.05	-0.05	246.429	271.071
1243	M201	Y	-0.05	-0.05	271.071	295.714
1244	M201	Y	-0.05	-0.05	295.714	320.357
1245	M201	Y	-0.05	-0.051	320.357	345
1246	M202	Y	-0.057	-0.057	1.025e-12	345
1247	M203	Y	-0.058	-0.058	0	24.643
1248	M203	Y	-0.058	-0.058	24.643	49.286
1249	M203	Y	-0.058	-0.058	49.286	73.929
1250	M203	Y	-0.058	-0.058	73.929	98.571
1251	M203	Y	-0.058	-0.058	98.571	123.214
1252	M203	Y	-0.058	-0.057	123.214	147.857
1253	M203	Y	-0.057	-0.056	147.857	172.5
1254	M203	Y	-0.056	-0.057	172.5	197.143
1255	M203	Y	-0.057	-0.058	197.143	221.786
1256	M203	Y	-0.058	-0.058	221.786	246.429
1257	M203	Y	-0.058	-0.058	246.429	271.071
1258	M203	Y	-0.058	-0.058	271.071	295.714
1259	M203	Y	-0.058	-0.058	295.714	320.357
1260	M203	Y	-0.058	-0.058	320.357	345
1261	M204	Y	-0.036	-0.038	0	24.643
1262	M204	Y	-0.038	-0.038	24.643	49.286
1263	M204	Y	-0.038	-0.039	49.286	73.929
1264	M204	Y	-0.039	-0.038	73.929	98.571
1265	M204	Y	-0.038	-0.037	98.571	123.214
1266	M204	Y	-0.037	-0.039	123.214	147.857
1267	M204	Y	-0.039	-0.043	147.857	172.5
1268	M204	Y	-0.043	-0.039	172.5	197.143

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1269	M204	Y	-0.039	-0.037	197.143	221.786
1270	M204	Y	-0.037	-0.038	221.786	246.429
1271	M204	Y	-0.038	-0.038	246.429	271.071
1272	M204	Y	-0.038	-0.038	271.071	295.714
1273	M204	Y	-0.038	-0.038	295.714	320.357
1274	M204	Y	-0.038	-0.036	320.357	345
1275	M205	Y	-0.048	-0.048	0	24.643
1276	M205	Y	-0.048	-0.048	24.643	49.286
1277	M205	Y	-0.048	-0.048	49.286	73.929
1278	M205	Y	-0.048	-0.048	73.929	98.571
1279	M205	Y	-0.048	-0.048	98.571	123.214
1280	M205	Y	-0.048	-0.048	123.214	147.857
1281	M205	Y	-0.048	-0.048	147.857	172.5
1282	M205	Y	-0.048	-0.048	172.5	197.143
1283	M205	Y	-0.048	-0.048	197.143	221.786
1284	M205	Y	-0.048	-0.048	221.786	246.429
1285	M205	Y	-0.048	-0.048	246.429	271.071
1286	M205	Y	-0.048	-0.048	271.071	295.714
1287	M205	Y	-0.048	-0.048	295.714	320.357
1288	M205	Y	-0.048	-0.048	320.357	345
1289	M206	Y	-0.057	-0.057	5.96e-13	345
1290	M208	Y	-0.029	-0.035	0	24.643
1291	M208	Y	-0.035	-0.039	24.643	49.286
1292	M208	Y	-0.039	-0.038	49.286	73.929
1293	M208	Y	-0.038	-0.034	73.929	98.571
1294	M208	Y	-0.034	-0.034	98.571	123.214
1295	M208	Y	-0.034	-0.037	123.214	147.857
1296	M208	Y	-0.037	-0.036	147.857	172.5
1297	M208	Y	-0.036	-0.034	172.5	197.143
1298	M208	Y	-0.034	-0.036	197.143	221.786
1299	M208	Y	-0.036	-0.037	221.786	246.429
1300	M208	Y	-0.037	-0.036	246.429	271.071
1301	M208	Y	-0.036	-0.038	271.071	295.714
1302	M208	Y	-0.038	-0.035	295.714	320.357
1303	M208	Y	-0.035	-0.029	320.357	345
1304	M209	Y	-0.057	-0.057	0	345
1305	M211	Y	-0.02	-0.022	0	24.643
1306	M211	Y	-0.022	-0.025	24.643	49.286
1307	M211	Y	-0.025	-0.025	49.286	73.929
1308	M211	Y	-0.025	-0.026	73.929	98.571
1309	M211	Y	-0.026	-0.026	98.571	123.214
1310	M211	Y	-0.026	-0.022	123.214	147.857
1311	M211	Y	-0.022	-0.019	147.857	172.5
1312	M211	Y	-0.019	-0.019	172.5	197.143
1313	M211	Y	-0.019	-0.026	197.143	221.786
1314	M211	Y	-0.026	-0.026	221.786	246.429
1315	M211	Y	-0.026	-0.025	246.429	271.071
1316	M211	Y	-0.025	-0.025	271.071	295.714
1317	M211	Y	-0.025	-0.022	295.714	320.357
1318	M211	Y	-0.022	-0.02	320.357	345
1319	M222	Y	-0.043	-0.043	0	24.643
1320	M222	Y	-0.043	-0.043	24.643	49.286
1321	M222	Y	-0.043	-0.043	49.286	73.929
1322	M222	Y	-0.043	-0.043	73.929	98.571
1323	M222	Y	-0.043	-0.043	98.571	123.214

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1324	M222	Y	-0.043	-0.043	123.214	147.857
1325	M222	Y	-0.043	-0.047	147.857	172.5
1326	M222	Y	-0.047	-0.047	172.5	197.143
1327	M222	Y	-0.047	-0.043	197.143	221.786
1328	M222	Y	-0.043	-0.043	221.786	246.429
1329	M222	Y	-0.043	-0.043	246.429	271.071
1330	M222	Y	-0.043	-0.043	271.071	295.714
1331	M222	Y	-0.043	-0.043	295.714	320.357
1332	M222	Y	-0.043	-0.043	320.357	345
1333	M223	Y	-0.057	-0.057	0	345
1334	M224	Y	-0.059	-0.058	0	24.643
1335	M224	Y	-0.058	-0.057	24.643	49.286
1336	M224	Y	-0.057	-0.058	49.286	73.929
1337	M224	Y	-0.058	-0.061	73.929	98.571
1338	M224	Y	-0.061	-0.058	98.571	123.214
1339	M224	Y	-0.058	-0.054	123.214	147.857
1340	M224	Y	-0.054	-0.058	147.857	172.5
1341	M224	Y	-0.058	-0.059	172.5	197.143
1342	M224	Y	-0.059	-0.057	197.143	221.786
1343	M224	Y	-0.057	-0.06	221.786	246.429
1344	M224	Y	-0.06	-0.06	246.429	271.071
1345	M224	Y	-0.06	-0.057	271.071	295.714
1346	M224	Y	-0.057	-0.058	295.714	320.357
1347	M224	Y	-0.058	-0.059	320.357	345
1348	M225	Y	-0.051	-0.05	0	24.643
1349	M225	Y	-0.05	-0.05	24.643	49.286
1350	M225	Y	-0.05	-0.05	49.286	73.929
1351	M225	Y	-0.05	-0.05	73.929	98.571
1352	M225	Y	-0.05	-0.05	98.571	123.214
1353	M225	Y	-0.05	-0.052	123.214	147.857
1354	M225	Y	-0.052	-0.052	147.857	172.5
1355	M225	Y	-0.052	-0.052	172.5	197.143
1356	M225	Y	-0.052	-0.052	197.143	221.786
1357	M225	Y	-0.052	-0.05	221.786	246.429
1358	M225	Y	-0.05	-0.05	246.429	271.071
1359	M225	Y	-0.05	-0.05	271.071	295.714
1360	M225	Y	-0.05	-0.05	295.714	320.357
1361	M225	Y	-0.05	-0.051	320.357	345
1362	M226	Y	-0.057	-0.057	0	345
1363	M227	Y	-0.058	-0.058	0	24.643
1364	M227	Y	-0.058	-0.058	24.643	49.286
1365	M227	Y	-0.058	-0.058	49.286	73.929
1366	M227	Y	-0.058	-0.058	73.929	98.571
1367	M227	Y	-0.058	-0.058	98.571	123.214
1368	M227	Y	-0.058	-0.057	123.214	147.857
1369	M227	Y	-0.057	-0.056	147.857	172.5
1370	M227	Y	-0.056	-0.057	172.5	197.143
1371	M227	Y	-0.057	-0.058	197.143	221.786
1372	M227	Y	-0.058	-0.058	221.786	246.429
1373	M227	Y	-0.058	-0.058	246.429	271.071
1374	M227	Y	-0.058	-0.058	271.071	295.714
1375	M227	Y	-0.058	-0.058	295.714	320.357
1376	M227	Y	-0.058	-0.058	320.357	345
1377	M228	Y	-0.036	-0.038	0	24.643
1378	M228	Y	-0.038	-0.038	24.643	49.286

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1379	M228	Y	-0.038	-0.039	49.286	73.929
1380	M228	Y	-0.039	-0.038	73.929	98.571
1381	M228	Y	-0.038	-0.037	98.571	123.214
1382	M228	Y	-0.037	-0.039	123.214	147.857
1383	M228	Y	-0.039	-0.043	147.857	172.5
1384	M228	Y	-0.043	-0.039	172.5	197.143
1385	M228	Y	-0.039	-0.037	197.143	221.786
1386	M228	Y	-0.037	-0.038	221.786	246.429
1387	M228	Y	-0.038	-0.038	246.429	271.071
1388	M228	Y	-0.038	-0.038	271.071	295.714
1389	M228	Y	-0.038	-0.038	295.714	320.357
1390	M228	Y	-0.038	-0.036	320.357	345
1391	M229	Y	-0.048	-0.048	0	24.643
1392	M229	Y	-0.048	-0.048	24.643	49.286
1393	M229	Y	-0.048	-0.048	49.286	73.929
1394	M229	Y	-0.048	-0.048	73.929	98.571
1395	M229	Y	-0.048	-0.048	98.571	123.214
1396	M229	Y	-0.048	-0.048	123.214	147.857
1397	M229	Y	-0.048	-0.048	147.857	172.5
1398	M229	Y	-0.048	-0.048	172.5	197.143
1399	M229	Y	-0.048	-0.048	197.143	221.786
1400	M229	Y	-0.048	-0.048	221.786	246.429
1401	M229	Y	-0.048	-0.048	246.429	271.071
1402	M229	Y	-0.048	-0.048	271.071	295.714
1403	M229	Y	-0.048	-0.048	295.714	320.357
1404	M229	Y	-0.048	-0.048	320.357	345
1405	M244	Y	-0.022	-0.029	0	24.643
1406	M244	Y	-0.029	-0.03	24.643	49.286
1407	M244	Y	-0.03	-0.028	49.286	73.929
1408	M244	Y	-0.028	-0.031	73.929	98.571
1409	M244	Y	-0.031	-0.031	98.571	123.214
1410	M244	Y	-0.031	-0.027	123.214	147.857
1411	M244	Y	-0.027	-0.025	147.857	172.5
1412	M244	Y	-0.025	-0.025	172.5	197.143
1413	M244	Y	-0.025	-0.03	197.143	221.786
1414	M244	Y	-0.03	-0.031	221.786	246.429
1415	M244	Y	-0.031	-0.028	246.429	271.071
1416	M244	Y	-0.028	-0.03	271.071	295.714
1417	M244	Y	-0.03	-0.029	295.714	320.357
1418	M244	Y	-0.029	-0.022	320.357	345
1419	M245	Y	-0.027	-0.028	0	24.643
1420	M245	Y	-0.028	-0.029	24.643	49.286
1421	M245	Y	-0.029	-0.029	49.286	73.929
1422	M245	Y	-0.029	-0.029	73.929	98.571
1423	M245	Y	-0.029	-0.029	98.571	123.214
1424	M245	Y	-0.029	-0.029	123.214	147.857
1425	M245	Y	-0.029	-0.029	147.857	172.5
1426	M245	Y	-0.029	-0.029	172.5	197.143
1427	M245	Y	-0.029	-0.029	197.143	221.786
1428	M245	Y	-0.029	-0.029	221.786	246.429
1429	M245	Y	-0.029	-0.029	246.429	271.071
1430	M245	Y	-0.029	-0.029	271.071	295.714
1431	M245	Y	-0.029	-0.028	295.714	320.357
1432	M245	Y	-0.028	-0.027	320.357	345
1433	M248	Y	-0.022	-0.029	0	24.643

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1434	M248	Y	-0.029	-0.03	24.643	49.286
1435	M248	Y	-0.03	-0.028	49.286	73.929
1436	M248	Y	-0.028	-0.031	73.929	98.571
1437	M248	Y	-0.031	-0.031	98.571	123.214
1438	M248	Y	-0.031	-0.027	123.214	147.857
1439	M248	Y	-0.027	-0.025	147.857	172.5
1440	M248	Y	-0.025	-0.025	172.5	197.143
1441	M248	Y	-0.025	-0.03	197.143	221.786
1442	M248	Y	-0.03	-0.031	221.786	246.429
1443	M248	Y	-0.031	-0.028	246.429	271.071
1444	M248	Y	-0.028	-0.03	271.071	295.714
1445	M248	Y	-0.03	-0.029	295.714	320.357
1446	M248	Y	-0.029	-0.022	320.357	345
1447	M249	Y	-0.027	-0.028	0	24.643
1448	M249	Y	-0.028	-0.029	24.643	49.286
1449	M249	Y	-0.029	-0.029	49.286	73.929
1450	M249	Y	-0.029	-0.029	73.929	98.571
1451	M249	Y	-0.029	-0.029	98.571	123.214
1452	M249	Y	-0.029	-0.029	123.214	147.857
1453	M249	Y	-0.029	-0.029	147.857	172.5
1454	M249	Y	-0.029	-0.029	172.5	197.143
1455	M249	Y	-0.029	-0.029	197.143	221.786
1456	M249	Y	-0.029	-0.029	221.786	246.429
1457	M249	Y	-0.029	-0.029	246.429	271.071
1458	M249	Y	-0.029	-0.029	271.071	295.714
1459	M249	Y	-0.029	-0.028	295.714	320.357
1460	M249	Y	-0.028	-0.027	320.357	345
1461	M250	Y	-0.027	-0.028	0	24.643
1462	M250	Y	-0.028	-0.029	24.643	49.286
1463	M250	Y	-0.029	-0.029	49.286	73.929
1464	M250	Y	-0.029	-0.029	73.929	98.571
1465	M250	Y	-0.029	-0.029	98.571	123.214
1466	M250	Y	-0.029	-0.029	123.214	147.857
1467	M250	Y	-0.029	-0.029	147.857	172.5
1468	M250	Y	-0.029	-0.029	172.5	197.143
1469	M250	Y	-0.029	-0.029	197.143	221.786
1470	M250	Y	-0.029	-0.029	221.786	246.429
1471	M250	Y	-0.029	-0.029	246.429	271.071
1472	M250	Y	-0.029	-0.029	271.071	295.714
1473	M250	Y	-0.029	-0.028	295.714	320.357
1474	M250	Y	-0.028	-0.027	320.357	345
1475	M251	Y	-0.025	-0.027	0	24.857
1476	M251	Y	-0.027	-0.027	24.857	49.714
1477	M251	Y	-0.027	-0.032	49.714	74.571
1478	M251	Y	-0.032	-0.032	74.571	99.429
1479	M251	Y	-0.032	-0.027	99.429	124.286
1480	M251	Y	-0.027	-0.027	124.286	149.143
1481	M251	Y	-0.027	-0.027	149.143	174
1482	M251	Y	-0.027	-0.027	174	198.857
1483	M251	Y	-0.027	-0.027	198.857	223.714
1484	M251	Y	-0.027	-0.032	223.714	248.571
1485	M251	Y	-0.032	-0.032	248.571	273.429
1486	M251	Y	-0.032	-0.027	273.429	298.286
1487	M251	Y	-0.027	-0.027	298.286	323.143
1488	M251	Y	-0.027	-0.025	323.143	348

Member Distributed Loads (BLC 8 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1489	M252	Y	-0.022	-0.029	0	24.643
1490	M252	Y	-0.029	-0.03	24.643	49.286
1491	M252	Y	-0.03	-0.028	49.286	73.929
1492	M252	Y	-0.028	-0.031	73.929	98.571
1493	M252	Y	-0.031	-0.03	98.571	123.214
1494	M252	Y	-0.03	-0.025	123.214	147.857
1495	M252	Y	-0.025	-0.028	147.857	172.5
1496	M252	Y	-0.028	-0.03	172.5	197.143
1497	M252	Y	-0.03	-0.026	197.143	221.786
1498	M252	Y	-0.026	-0.028	221.786	246.429
1499	M252	Y	-0.028	-0.03	246.429	271.071
1500	M252	Y	-0.03	-0.03	271.071	295.714
1501	M252	Y	-0.03	-0.029	295.714	320.357
1502	M252	Y	-0.029	-0.022	320.357	345
1503	M253	Y	-0.022	-0.029	0	24.857
1504	M253	Y	-0.029	-0.03	24.857	49.714
1505	M253	Y	-0.03	-0.028	49.714	74.571
1506	M253	Y	-0.028	-0.031	74.571	99.429
1507	M253	Y	-0.031	-0.03	99.429	124.286
1508	M253	Y	-0.03	-0.025	124.286	149.143
1509	M253	Y	-0.025	-0.025	149.143	174
1510	M253	Y	-0.025	-0.027	174	198.857
1511	M253	Y	-0.027	-0.031	198.857	223.714
1512	M253	Y	-0.031	-0.031	223.714	248.571
1513	M253	Y	-0.031	-0.028	248.571	273.429
1514	M253	Y	-0.028	-0.03	273.429	298.286
1515	M253	Y	-0.03	-0.029	298.286	323.143
1516	M253	Y	-0.029	-0.022	323.143	348

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M211	X	-0.001	-0.001	221.786	246.429
2	M211	Y	0.011	0.011	221.786	246.429
3	M211	X	-0.001	-0.001	246.429	271.071
4	M211	Y	0.011	0.011	246.429	271.071
5	M211	X	-0.001	-0.001	271.071	295.714
6	M211	Y	0.011	0.011	271.071	295.714
7	M211	X	-0.001	-0.0009359	295.714	320.357
8	M211	Y	0.011	0.009	295.714	320.357
9	M211	X	-0.0009359	-0.0008559	320.357	345
10	M211	Y	0.009	0.009	320.357	345
11	M222	X	-0.002	-0.002	0	24.643
12	M222	Y	0.019	0.019	0	24.643
13	M222	X	-0.002	-0.002	24.643	49.286
14	M222	Y	0.019	0.019	24.643	49.286
15	M222	X	-0.002	-0.002	49.286	73.929
16	M222	Y	0.019	0.019	49.286	73.929
17	M222	X	-0.002	-0.002	73.929	98.571
18	M222	Y	0.019	0.019	73.929	98.571
19	M222	X	-0.002	-0.002	98.571	123.214
20	M222	Y	0.019	0.019	98.571	123.214
21	M222	X	-0.002	-0.002	123.214	147.857
22	M222	Y	0.019	0.019	123.214	147.857
23	M222	X	-0.002	-0.002	147.857	172.5
24	M222	Y	0.019	0.02	147.857	172.5

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
25	M222	X	-0.002	-0.002	172.5	197.143
26	M222	Y	0.02	0.02	172.5	197.143
27	M222	X	-0.002	-0.002	197.143	221.786
28	M222	Y	0.02	0.019	197.143	221.786
29	M222	X	-0.002	-0.002	221.786	246.429
30	M222	Y	0.019	0.019	221.786	246.429
31	M222	X	-0.002	-0.002	246.429	271.071
32	M222	Y	0.019	0.019	246.429	271.071
33	M222	X	-0.002	-0.002	271.071	295.714
34	M222	Y	0.019	0.019	271.071	295.714
35	M222	X	-0.002	-0.002	295.714	320.357
36	M222	Y	0.019	0.019	295.714	320.357
37	M222	X	-0.002	-0.002	320.357	345
38	M222	Y	0.019	0.019	320.357	345
39	M223	X	-0.002	-0.002	0	345
40	M223	Y	0.025	0.025	0	345
41	M224	X	-0.003	-0.003	0	24.643
42	M224	Y	0.025	0.025	0	24.643
43	M224	X	-0.003	-0.002	24.643	49.286
44	M224	Y	0.025	0.025	24.643	49.286
45	M224	X	-0.002	-0.003	49.286	73.929
46	M224	Y	0.025	0.025	49.286	73.929
47	M224	X	-0.003	-0.003	73.929	98.571
48	M224	Y	0.025	0.026	73.929	98.571
49	M224	X	-0.003	-0.003	98.571	123.214
50	M224	Y	0.026	0.025	98.571	123.214
51	M224	X	-0.003	-0.002	123.214	147.857
52	M224	Y	0.025	0.024	123.214	147.857
53	M224	X	-0.002	-0.003	147.857	172.5
54	M224	Y	0.024	0.025	147.857	172.5
55	M224	X	-0.003	-0.003	172.5	197.143
56	M224	Y	0.025	0.026	172.5	197.143
57	M224	X	-0.003	-0.002	197.143	221.786
58	M224	Y	0.026	0.025	197.143	221.786
59	M224	X	-0.002	-0.003	221.786	246.429
60	M224	Y	0.025	0.026	221.786	246.429
61	M224	X	-0.003	-0.003	246.429	271.071
62	M224	Y	0.026	0.026	246.429	271.071
63	M224	X	-0.003	-0.002	271.071	295.714
64	M224	Y	0.026	0.025	271.071	295.714
65	M224	X	-0.002	-0.002	295.714	320.357
66	M224	Y	0.025	0.025	295.714	320.357
67	M224	X	-0.002	-0.003	320.357	345
68	M224	Y	0.025	0.025	320.357	345
69	M225	X	-0.002	-0.002	0	24.643
70	M225	Y	0.022	0.022	0	24.643
71	M225	X	-0.002	-0.002	24.643	49.286
72	M225	Y	0.022	0.022	24.643	49.286
73	M225	X	-0.002	-0.002	49.286	73.929
74	M225	Y	0.022	0.022	49.286	73.929
75	M225	X	-0.002	-0.002	73.929	98.571
76	M225	Y	0.022	0.022	73.929	98.571
77	M225	X	-0.002	-0.002	98.571	123.214
78	M225	Y	0.022	0.022	98.571	123.214
79	M225	X	-0.002	-0.002	123.214	147.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
80	M225	Y	0.022	0.023	123.214	147.857
81	M225	X	-0.002	-0.002	147.857	172.5
82	M225	Y	0.023	0.023	147.857	172.5
83	M225	X	-0.002	-0.002	172.5	197.143
84	M225	Y	0.023	0.023	172.5	197.143
85	M225	X	-0.002	-0.002	197.143	221.786
86	M225	Y	0.023	0.022	197.143	221.786
87	M225	X	-0.002	-0.002	221.786	246.429
88	M225	Y	0.022	0.022	221.786	246.429
89	M225	X	-0.002	-0.002	246.429	271.071
90	M225	Y	0.022	0.022	246.429	271.071
91	M225	X	-0.002	-0.002	271.071	295.714
92	M225	Y	0.022	0.022	271.071	295.714
93	M225	X	-0.002	-0.002	295.714	320.357
94	M225	Y	0.022	0.022	295.714	320.357
95	M225	X	-0.002	-0.002	320.357	345
96	M225	Y	0.022	0.022	320.357	345
97	M226	X	-0.002	-0.002	0	345
98	M226	Y	0.025	0.025	0	345
99	M227	X	-0.003	-0.002	0	24.643
100	M227	Y	0.025	0.025	0	24.643
101	M227	X	-0.002	-0.002	24.643	49.286
102	M227	Y	0.025	0.025	24.643	49.286
103	M227	X	-0.002	-0.002	49.286	73.929
104	M227	Y	0.025	0.025	49.286	73.929
105	M227	X	-0.002	-0.002	73.929	98.571
106	M227	Y	0.025	0.025	73.929	98.571
107	M227	X	-0.002	-0.003	98.571	123.214
108	M227	Y	0.025	0.025	98.571	123.214
109	M227	X	-0.003	-0.002	123.214	147.857
110	M227	Y	0.025	0.025	123.214	147.857
111	M227	X	-0.002	-0.002	147.857	172.5
112	M227	Y	0.025	0.024	147.857	172.5
113	M227	X	-0.002	-0.002	172.5	197.143
114	M227	Y	0.024	0.025	172.5	197.143
115	M227	X	-0.002	-0.003	197.143	221.786
116	M227	Y	0.025	0.025	197.143	221.786
117	M227	X	-0.003	-0.002	221.786	246.429
118	M227	Y	0.025	0.025	221.786	246.429
119	M227	X	-0.002	-0.002	246.429	271.071
120	M227	Y	0.025	0.025	246.429	271.071
121	M227	X	-0.002	-0.002	271.071	295.714
122	M227	Y	0.025	0.025	271.071	295.714
123	M227	X	-0.002	-0.002	295.714	320.357
124	M227	Y	0.025	0.025	295.714	320.357
125	M227	X	-0.002	-0.003	320.357	345
126	M227	Y	0.025	0.025	320.357	345
127	M228	X	-0.002	-0.002	0	24.643
128	M228	Y	0.016	0.016	0	24.643
129	M228	X	-0.002	-0.002	24.643	49.286
130	M228	Y	0.016	0.017	24.643	49.286
131	M228	X	-0.002	-0.002	49.286	73.929
132	M228	Y	0.017	0.017	49.286	73.929
133	M228	X	-0.002	-0.002	73.929	98.571
134	M228	Y	0.017	0.017	73.929	98.571

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
135	M228	X	-0.002	-0.002	98.571	123.214
136	M228	Y	0.017	0.016	98.571	123.214
137	M228	X	-0.002	-0.002	123.214	147.857
138	M228	Y	0.016	0.017	123.214	147.857
139	M228	X	-0.002	-0.002	147.857	172.5
140	M228	Y	0.017	0.018	147.857	172.5
141	M228	X	-0.002	-0.002	172.5	197.143
142	M228	Y	0.018	0.017	172.5	197.143
143	M228	X	-0.002	-0.002	197.143	221.786
144	M228	Y	0.017	0.016	197.143	221.786
145	M228	X	-0.002	-0.002	221.786	246.429
146	M228	Y	0.016	0.017	221.786	246.429
147	M228	X	-0.002	-0.002	246.429	271.071
148	M228	Y	0.017	0.017	246.429	271.071
149	M228	X	-0.002	-0.002	271.071	295.714
150	M228	Y	0.017	0.017	271.071	295.714
151	M228	X	-0.002	-0.002	295.714	320.357
152	M228	Y	0.017	0.016	295.714	320.357
153	M228	X	-0.002	-0.002	320.357	345
154	M228	Y	0.016	0.016	320.357	345
155	M229	X	-0.002	-0.002	0	24.643
156	M229	Y	0.021	0.021	0	24.643
157	M229	X	-0.002	-0.002	24.643	49.286
158	M229	Y	0.021	0.021	24.643	49.286
159	M229	X	-0.002	-0.002	49.286	73.929
160	M229	Y	0.021	0.021	49.286	73.929
161	M229	X	-0.002	-0.002	73.929	98.571
162	M229	Y	0.021	0.021	73.929	98.571
163	M229	X	-0.002	-0.002	98.571	123.214
164	M229	Y	0.021	0.021	98.571	123.214
165	M229	X	-0.002	-0.002	123.214	147.857
166	M229	Y	0.021	0.021	123.214	147.857
167	M229	X	-0.002	-0.002	147.857	172.5
168	M229	Y	0.021	0.021	147.857	172.5
169	M229	X	-0.002	-0.002	172.5	197.143
170	M229	Y	0.021	0.021	172.5	197.143
171	M229	X	-0.002	-0.002	197.143	221.786
172	M229	Y	0.021	0.021	197.143	221.786
173	M229	X	-0.002	-0.002	221.786	246.429
174	M229	Y	0.021	0.021	221.786	246.429
175	M229	X	-0.002	-0.002	246.429	271.071
176	M229	Y	0.021	0.021	246.429	271.071
177	M229	X	-0.002	-0.002	271.071	295.714
178	M229	Y	0.021	0.021	271.071	295.714
179	M229	X	-0.002	-0.002	295.714	320.357
180	M229	Y	0.021	0.021	295.714	320.357
181	M229	X	-0.002	-0.002	320.357	345
182	M229	Y	0.021	0.021	320.357	345
183	M244	X	-0.0009645	-0.001	0	24.643
184	M244	Y	0.01	0.013	0	24.643
185	M244	X	-0.001	-0.001	24.643	49.286
186	M244	Y	0.013	0.013	24.643	49.286
187	M244	X	-0.001	-0.001	49.286	73.929
188	M244	Y	0.013	0.012	49.286	73.929
189	M244	X	-0.001	-0.001	73.929	98.571

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
190	M244	Y	0.012	0.013	73.929	98.571
191	M244	X	-0.001	-0.001	98.571	123.214
192	M244	Y	0.013	0.013	98.571	123.214
193	M244	X	-0.001	-0.001	123.214	147.857
194	M244	Y	0.013	0.012	123.214	147.857
195	M244	X	-0.001	-0.001	147.857	172.5
196	M244	Y	0.012	0.011	147.857	172.5
197	M244	X	-0.001	-0.001	172.5	197.143
198	M244	Y	0.011	0.011	172.5	197.143
199	M244	X	-0.001	-0.001	197.143	221.786
200	M244	Y	0.011	0.013	197.143	221.786
201	M244	X	-0.001	-0.001	221.786	246.429
202	M244	Y	0.013	0.013	221.786	246.429
203	M244	X	-0.001	-0.001	246.429	271.071
204	M244	Y	0.013	0.012	246.429	271.071
205	M244	X	-0.001	-0.001	271.071	295.714
206	M244	Y	0.012	0.013	271.071	295.714
207	M244	X	-0.001	-0.001	295.714	320.357
208	M244	Y	0.013	0.013	295.714	320.357
209	M244	X	-0.001	-0.0009645	320.357	345
210	M244	Y	0.013	0.01	320.357	345
211	M245	X	-0.001	-0.001	0	24.643
212	M245	Y	0.012	0.012	0	24.643
213	M245	X	-0.001	-0.001	24.643	49.286
214	M245	Y	0.012	0.012	24.643	49.286
215	M245	X	-0.001	-0.001	49.286	73.929
216	M245	Y	0.012	0.013	49.286	73.929
217	M245	X	-0.001	-0.001	73.929	98.571
218	M245	Y	0.013	0.013	73.929	98.571
219	M245	X	-0.001	-0.001	98.571	123.214
220	M245	Y	0.013	0.013	98.571	123.214
221	M245	X	-0.001	-0.001	123.214	147.857
222	M245	Y	0.013	0.013	123.214	147.857
223	M245	X	-0.001	-0.001	147.857	172.5
224	M245	Y	0.013	0.013	147.857	172.5
225	M245	X	-0.001	-0.001	172.5	197.143
226	M245	Y	0.013	0.013	172.5	197.143
227	M245	X	-0.001	-0.001	197.143	221.786
228	M245	Y	0.013	0.013	197.143	221.786
229	M245	X	-0.001	-0.001	221.786	246.429
230	M245	Y	0.013	0.013	221.786	246.429
231	M245	X	-0.001	-0.001	246.429	271.071
232	M245	Y	0.013	0.013	246.429	271.071
233	M245	X	-0.001	-0.001	271.071	295.714
234	M245	Y	0.013	0.012	271.071	295.714
235	M245	X	-0.001	-0.001	295.714	320.357
236	M245	Y	0.012	0.012	295.714	320.357
237	M245	X	-0.001	-0.001	320.357	345
238	M245	Y	0.012	0.012	320.357	345
239	M248	X	-0.0009645	-0.001	0	24.643
240	M248	Y	0.01	0.013	0	24.643
241	M248	X	-0.001	-0.001	24.643	49.286
242	M248	Y	0.013	0.013	24.643	49.286
243	M248	X	-0.001	-0.001	49.286	73.929
244	M248	Y	0.013	0.012	49.286	73.929

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
245	M248	X	-0.001	-0.001	73.929	98.571
246	M248	Y	0.012	0.013	73.929	98.571
247	M248	X	-0.001	-0.001	98.571	123.214
248	M248	Y	0.013	0.013	98.571	123.214
249	M248	X	-0.001	-0.001	123.214	147.857
250	M248	Y	0.013	0.012	123.214	147.857
251	M248	X	-0.001	-0.001	147.857	172.5
252	M248	Y	0.012	0.011	147.857	172.5
253	M248	X	-0.001	-0.001	172.5	197.143
254	M248	Y	0.011	0.011	172.5	197.143
255	M248	X	-0.001	-0.001	197.143	221.786
256	M248	Y	0.011	0.013	197.143	221.786
257	M248	X	-0.001	-0.001	221.786	246.429
258	M248	Y	0.013	0.013	221.786	246.429
259	M248	X	-0.001	-0.001	246.429	271.071
260	M248	Y	0.013	0.012	246.429	271.071
261	M248	X	-0.001	-0.001	271.071	295.714
262	M248	Y	0.012	0.013	271.071	295.714
263	M248	X	-0.001	-0.001	295.714	320.357
264	M248	Y	0.013	0.013	295.714	320.357
265	M248	X	-0.001	-0.0009645	320.357	345
266	M248	Y	0.013	0.01	320.357	345
267	M249	X	-0.001	-0.001	0	24.643
268	M249	Y	0.012	0.012	0	24.643
269	M249	X	-0.001	-0.001	24.643	49.286
270	M249	Y	0.012	0.012	24.643	49.286
271	M249	X	-0.001	-0.001	49.286	73.929
272	M249	Y	0.012	0.013	49.286	73.929
273	M249	X	-0.001	-0.001	73.929	98.571
274	M249	Y	0.013	0.013	73.929	98.571
275	M249	X	-0.001	-0.001	98.571	123.214
276	M249	Y	0.013	0.013	98.571	123.214
277	M249	X	-0.001	-0.001	123.214	147.857
278	M249	Y	0.013	0.013	123.214	147.857
279	M249	X	-0.001	-0.001	147.857	172.5
280	M249	Y	0.013	0.013	147.857	172.5
281	M249	X	-0.001	-0.001	172.5	197.143
282	M249	Y	0.013	0.013	172.5	197.143
283	M249	X	-0.001	-0.001	197.143	221.786
284	M249	Y	0.013	0.013	197.143	221.786
285	M249	X	-0.001	-0.001	221.786	246.429
286	M249	Y	0.013	0.013	221.786	246.429
287	M249	X	-0.001	-0.001	246.429	271.071
288	M249	Y	0.013	0.013	246.429	271.071
289	M249	X	-0.001	-0.001	271.071	295.714
290	M249	Y	0.013	0.012	271.071	295.714
291	M249	X	-0.001	-0.001	295.714	320.357
292	M249	Y	0.012	0.012	295.714	320.357
293	M249	X	-0.001	-0.001	320.357	345
294	M249	Y	0.012	0.012	320.357	345
295	M250	X	-0.001	-0.001	0	24.643
296	M250	Y	0.012	0.012	0	24.643
297	M250	X	-0.001	-0.001	24.643	49.286
298	M250	Y	0.012	0.012	24.643	49.286
299	M250	X	-0.001	-0.001	49.286	73.929

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
300	M250	Y	0.012	0.013	49.286	73.929
301	M250	X	-0.001	-0.001	73.929	98.571
302	M250	Y	0.013	0.013	73.929	98.571
303	M250	X	-0.001	-0.001	98.571	123.214
304	M250	Y	0.013	0.013	98.571	123.214
305	M250	X	-0.001	-0.001	123.214	147.857
306	M250	Y	0.013	0.013	123.214	147.857
307	M250	X	-0.001	-0.001	147.857	172.5
308	M250	Y	0.013	0.013	147.857	172.5
309	M250	X	-0.001	-0.001	172.5	197.143
310	M250	Y	0.013	0.013	172.5	197.143
311	M250	X	-0.001	-0.001	197.143	221.786
312	M250	Y	0.013	0.013	197.143	221.786
313	M250	X	-0.001	-0.001	221.786	246.429
314	M250	Y	0.013	0.013	221.786	246.429
315	M250	X	-0.001	-0.001	246.429	271.071
316	M250	Y	0.013	0.013	246.429	271.071
317	M250	X	-0.001	-0.001	271.071	295.714
318	M250	Y	0.013	0.012	271.071	295.714
319	M250	X	-0.001	-0.001	295.714	320.357
320	M250	Y	0.012	0.012	295.714	320.357
321	M250	X	-0.001	-0.001	320.357	345
322	M250	Y	0.012	0.012	320.357	345
323	M251	X	-0.001	-0.001	0	24.857
324	M251	Y	0.011	0.012	0	24.857
325	M251	X	-0.001	-0.001	24.857	49.714
326	M251	Y	0.012	0.012	24.857	49.714
327	M251	X	-0.001	-0.001	49.714	74.571
328	M251	Y	0.012	0.014	49.714	74.571
329	M251	X	-0.001	-0.001	74.571	99.429
330	M251	Y	0.014	0.014	74.571	99.429
331	M251	X	-0.001	-0.001	99.429	124.286
332	M251	Y	0.014	0.012	99.429	124.286
333	M251	X	-0.001	-0.001	124.286	149.143
334	M251	Y	0.012	0.012	124.286	149.143
335	M251	X	-0.001	-0.001	149.143	174
336	M251	Y	0.012	0.012	149.143	174
337	M251	X	-0.001	-0.001	174	198.857
338	M251	Y	0.012	0.012	174	198.857
339	M251	X	-0.001	-0.001	198.857	223.714
340	M251	Y	0.012	0.012	198.857	223.714
341	M251	X	-0.001	-0.001	223.714	248.571
342	M251	Y	0.012	0.014	223.714	248.571
343	M251	X	-0.001	-0.001	248.571	273.429
344	M251	Y	0.014	0.014	248.571	273.429
345	M251	X	-0.001	-0.001	273.429	298.286
346	M251	Y	0.014	0.012	273.429	298.286
347	M251	X	-0.001	-0.001	298.286	323.143
348	M251	Y	0.012	0.012	298.286	323.143
349	M251	X	-0.001	-0.001	323.143	348
350	M251	Y	0.012	0.011	323.143	348
351	M252	X	-0.0009645	-0.001	0	24.643
352	M252	Y	0.01	0.013	0	24.643
353	M252	X	-0.001	-0.001	24.643	49.286
354	M252	Y	0.013	0.013	24.643	49.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
355	M252	X	-0.001	-0.001	49.286	73.929
356	M252	Y	0.013	0.012	49.286	73.929
357	M252	X	-0.001	-0.001	73.929	98.571
358	M252	Y	0.012	0.013	73.929	98.571
359	M252	X	-0.001	-0.001	98.571	123.214
360	M252	Y	0.013	0.013	98.571	123.214
361	M252	X	-0.001	-0.001	123.214	147.857
362	M252	Y	0.013	0.011	123.214	147.857
363	M252	X	-0.001	-0.001	147.857	172.5
364	M252	Y	0.011	0.012	147.857	172.5
365	M252	X	-0.001	-0.001	172.5	197.143
366	M252	Y	0.012	0.013	172.5	197.143
367	M252	X	-0.001	-0.001	197.143	221.786
368	M252	Y	0.013	0.011	197.143	221.786
369	M252	X	-0.001	-0.001	221.786	246.429
370	M252	Y	0.011	0.012	221.786	246.429
371	M252	X	-0.001	-0.001	246.429	271.071
372	M252	Y	0.012	0.013	246.429	271.071
373	M252	X	-0.001	-0.001	271.071	295.714
374	M252	Y	0.013	0.013	271.071	295.714
375	M252	X	-0.001	-0.001	295.714	320.357
376	M252	Y	0.013	0.013	295.714	320.357
377	M252	X	-0.001	-0.0009651	320.357	345
378	M252	Y	0.013	0.01	320.357	345
379	M253	X	-0.0009659	-0.001	0	24.857
380	M253	Y	0.01	0.013	0	24.857
381	M253	X	-0.001	-0.001	24.857	49.714
382	M253	Y	0.013	0.013	24.857	49.714
383	M253	X	-0.001	-0.001	49.714	74.571
384	M253	Y	0.013	0.012	49.714	74.571
385	M253	X	-0.001	-0.001	74.571	99.429
386	M253	Y	0.012	0.013	74.571	99.429
387	M253	X	-0.001	-0.001	99.429	124.286
388	M253	Y	0.013	0.013	99.429	124.286
389	M253	X	-0.001	-0.001	124.286	149.143
390	M253	Y	0.013	0.011	124.286	149.143
391	M253	X	-0.001	-0.001	149.143	174
392	M253	Y	0.011	0.011	149.143	174
393	M253	X	-0.001	-0.001	174	198.857
394	M253	Y	0.011	0.012	174	198.857
395	M253	X	-0.001	-0.001	198.857	223.714
396	M253	Y	0.012	0.013	198.857	223.714
397	M253	X	-0.001	-0.001	223.714	248.571
398	M253	Y	0.013	0.013	223.714	248.571
399	M253	X	-0.001	-0.001	248.571	273.429
400	M253	Y	0.013	0.012	248.571	273.429
401	M253	X	-0.001	-0.001	273.429	298.286
402	M253	Y	0.012	0.013	273.429	298.286
403	M253	X	-0.001	-0.001	298.286	323.143
404	M253	Y	0.013	0.013	298.286	323.143
405	M253	X	-0.001	-0.0009654	323.143	348
406	M253	Y	0.013	0.01	323.143	348
407	M52	X	-0.018	-0.018	0	266.09
408	M113	X	-0.018	-0.018	0	182.09
409	M80	X	-0.018	-0.018	0	182.09

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
410	M123	X	-0.018	-0.018	0	266.09
411	M126	X	-0.018	-0.018	0	182.09
412	M134	X	-0.018	-0.018	0	266.09
413	M138	X	-0.018	-0.018	0	345
414	M139	X	-0.018	-0.018	0	345
415	M50	X	-0.018	-0.018	0	345
416	M64	X	-0.018	-0.018	0	182.09
417	M65	X	-0.018	-0.018	0	266.09
418	M69	X	-0.018	-0.018	0	345
419	M78	X	-0.018	-0.018	0	182.09
420	M79	X	-0.018	-0.018	0	266.09
421	M83	X	-0.018	-0.018	0	348
422	M87	X	-0.018	-0.018	0	182.09
423	M88	X	-0.018	-0.018	0	266.09
424	M67	X	-0.003	-0.003	0	24.643
425	M67	Y	-0.009	-0.009	0	24.643
426	M67	X	-0.003	-0.003	24.643	49.286
427	M67	Y	-0.009	-0.009	24.643	49.286
428	M67	X	-0.003	-0.003	49.286	73.929
429	M67	Y	-0.009	-0.009	49.286	73.929
430	M67	X	-0.003	-0.003	73.929	98.571
431	M67	Y	-0.009	-0.01	73.929	98.571
432	M67	X	-0.003	-0.003	98.571	123.214
433	M67	Y	-0.01	-0.01	98.571	123.214
434	M67	X	-0.003	-0.003	123.214	147.857
435	M67	Y	-0.01	-0.01	123.214	147.857
436	M67	X	-0.003	-0.003	147.857	172.5
437	M67	Y	-0.01	-0.01	147.857	172.5
438	M67	X	-0.003	-0.003	172.5	197.143
439	M67	Y	-0.01	-0.01	172.5	197.143
440	M67	X	-0.003	-0.003	197.143	221.786
441	M67	Y	-0.01	-0.01	197.143	221.786
442	M67	X	-0.003	-0.003	221.786	246.429
443	M67	Y	-0.01	-0.01	221.786	246.429
444	M67	X	-0.003	-0.003	246.429	271.071
445	M67	Y	-0.01	-0.009	246.429	271.071
446	M67	X	-0.003	-0.003	271.071	295.714
447	M67	Y	-0.009	-0.009	271.071	295.714
448	M67	X	-0.003	-0.003	295.714	320.357
449	M67	Y	-0.009	-0.009	295.714	320.357
450	M67	X	-0.003	-0.003	320.357	345
451	M67	Y	-0.009	-0.009	320.357	345
452	M72	X	-0.003	-0.003	0	24.643
453	M72	Y	-0.009	-0.009	0	24.643
454	M72	X	-0.003	-0.003	24.643	49.286
455	M72	Y	-0.009	-0.009	24.643	49.286
456	M72	X	-0.003	-0.003	49.286	73.929
457	M72	Y	-0.009	-0.009	49.286	73.929
458	M72	X	-0.003	-0.003	73.929	98.571
459	M72	Y	-0.009	-0.01	73.929	98.571
460	M72	X	-0.003	-0.003	98.571	123.214
461	M72	Y	-0.01	-0.01	98.571	123.214
462	M72	X	-0.003	-0.003	123.214	147.857
463	M72	Y	-0.01	-0.01	123.214	147.857
464	M72	X	-0.003	-0.003	147.857	172.5

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
465	M72	Y	-0.01	-0.01	147.857	172.5
466	M72	X	-0.003	-0.003	172.5	197.143
467	M72	Y	-0.01	-0.01	172.5	197.143
468	M72	X	-0.003	-0.003	197.143	221.786
469	M72	Y	-0.01	-0.01	197.143	221.786
470	M72	X	-0.003	-0.003	221.786	246.429
471	M72	Y	-0.01	-0.01	221.786	246.429
472	M72	X	-0.003	-0.003	246.429	271.071
473	M72	Y	-0.01	-0.009	246.429	271.071
474	M72	X	-0.003	-0.003	271.071	295.714
475	M72	Y	-0.009	-0.009	271.071	295.714
476	M72	X	-0.003	-0.003	295.714	320.357
477	M72	Y	-0.009	-0.009	295.714	320.357
478	M72	X	-0.003	-0.003	320.357	345
479	M72	Y	-0.009	-0.009	320.357	345
480	M138	X	-0.009	-0.009	1.226e-13	345
481	M138	Y	-0.04	-0.04	1.226e-13	345
482	M139	X	-0.009	-0.009	1.705e-13	345
483	M139	Y	-0.04	-0.04	1.705e-13	345
484	M50	X	-0.009	-0.009	2.043e-14	345
485	M50	Y	-0.04	-0.04	2.043e-14	345
486	M58	X	-0.003	-0.003	0	24.643
487	M58	Y	-0.009	-0.009	0	24.643
488	M58	X	-0.003	-0.003	24.643	49.286
489	M58	Y	-0.009	-0.009	24.643	49.286
490	M58	X	-0.003	-0.003	49.286	73.929
491	M58	Y	-0.009	-0.009	49.286	73.929
492	M58	X	-0.003	-0.003	73.929	98.571
493	M58	Y	-0.009	-0.01	73.929	98.571
494	M58	X	-0.003	-0.003	98.571	123.214
495	M58	Y	-0.01	-0.01	98.571	123.214
496	M58	X	-0.003	-0.003	123.214	147.857
497	M58	Y	-0.01	-0.01	123.214	147.857
498	M58	X	-0.003	-0.003	147.857	172.5
499	M58	Y	-0.01	-0.01	147.857	172.5
500	M58	X	-0.003	-0.003	172.5	197.143
501	M58	Y	-0.01	-0.01	172.5	197.143
502	M58	X	-0.003	-0.003	197.143	221.786
503	M58	Y	-0.01	-0.01	197.143	221.786
504	M58	X	-0.003	-0.003	221.786	246.429
505	M58	Y	-0.01	-0.01	221.786	246.429
506	M58	X	-0.003	-0.003	246.429	271.071
507	M58	Y	-0.01	-0.009	246.429	271.071
508	M58	X	-0.003	-0.003	271.071	295.714
509	M58	Y	-0.009	-0.009	271.071	295.714
510	M58	X	-0.003	-0.003	295.714	320.357
511	M58	Y	-0.009	-0.009	295.714	320.357
512	M58	X	-0.003	-0.003	320.357	345
513	M58	Y	-0.009	-0.009	320.357	345
514	M69	X	-0.009	-0.009	2.043e-14	345
515	M69	Y	-0.04	-0.04	2.043e-14	345
516	M76	X	-0.003	-0.003	0	24.643
517	M76	Y	-0.009	-0.009	0	24.643
518	M76	X	-0.003	-0.003	24.643	49.286
519	M76	Y	-0.009	-0.009	24.643	49.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
520	M76	X	-0.003	-0.003	49.286	73.929
521	M76	Y	-0.009	-0.009	49.286	73.929
522	M76	X	-0.003	-0.003	73.929	98.571
523	M76	Y	-0.009	-0.01	73.929	98.571
524	M76	X	-0.003	-0.003	98.571	123.214
525	M76	Y	-0.01	-0.01	98.571	123.214
526	M76	X	-0.003	-0.003	123.214	147.857
527	M76	Y	-0.01	-0.01	123.214	147.857
528	M76	X	-0.003	-0.003	147.857	172.5
529	M76	Y	-0.01	-0.01	147.857	172.5
530	M76	X	-0.003	-0.003	172.5	197.143
531	M76	Y	-0.01	-0.01	172.5	197.143
532	M76	X	-0.003	-0.003	197.143	221.786
533	M76	Y	-0.01	-0.01	197.143	221.786
534	M76	X	-0.003	-0.003	221.786	246.429
535	M76	Y	-0.01	-0.01	221.786	246.429
536	M76	X	-0.003	-0.003	246.429	271.071
537	M76	Y	-0.01	-0.009	246.429	271.071
538	M76	X	-0.003	-0.003	271.071	295.714
539	M76	Y	-0.009	-0.009	271.071	295.714
540	M76	X	-0.003	-0.003	295.714	320.357
541	M76	Y	-0.009	-0.009	295.714	320.357
542	M76	X	-0.003	-0.003	320.357	345
543	M76	Y	-0.009	-0.009	320.357	345
544	M83	X	-0.009	-0.009	2.336e-13	348
545	M83	Y	-0.04	-0.04	2.336e-13	348
546	M85	X	-0.003	-0.003	0	24.857
547	M85	Y	-0.008	-0.009	0	24.857
548	M85	X	-0.003	-0.003	24.857	49.714
549	M85	Y	-0.009	-0.008	24.857	49.714
550	M85	X	-0.003	-0.004	49.714	74.571
551	M85	Y	-0.008	-0.011	49.714	74.571
552	M85	X	-0.004	-0.004	74.571	99.429
553	M85	Y	-0.011	-0.012	74.571	99.429
554	M85	X	-0.004	-0.003	99.429	124.286
555	M85	Y	-0.012	-0.009	99.429	124.286
556	M85	X	-0.003	-0.003	124.286	149.143
557	M85	Y	-0.009	-0.009	124.286	149.143
558	M85	X	-0.003	-0.003	149.143	174
559	M85	Y	-0.009	-0.009	149.143	174
560	M85	X	-0.003	-0.003	174	198.857
561	M85	Y	-0.009	-0.009	174	198.857
562	M85	X	-0.003	-0.003	198.857	223.714
563	M85	Y	-0.009	-0.009	198.857	223.714
564	M85	X	-0.003	-0.004	223.714	248.571
565	M85	Y	-0.009	-0.012	223.714	248.571
566	M85	X	-0.004	-0.004	248.571	273.429
567	M85	Y	-0.012	-0.011	248.571	273.429
568	M85	X	-0.004	-0.003	273.429	298.286
569	M85	Y	-0.011	-0.008	273.429	298.286
570	M85	X	-0.003	-0.003	298.286	323.143
571	M85	Y	-0.008	-0.009	298.286	323.143
572	M85	X	-0.003	-0.003	323.143	348
573	M85	Y	-0.009	-0.008	323.143	348
574	M57	X	-0.015	-0.014	0	24.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
575	M57	Y	-0.067	-0.067	0	24.857
576	M57	X	-0.014	-0.014	24.857	49.714
577	M57	Y	-0.067	-0.067	24.857	49.714
578	M57	X	-0.014	-0.014	49.714	74.571
579	M57	Y	-0.067	-0.067	49.714	74.571
580	M57	X	-0.014	-0.014	74.571	99.429
581	M57	Y	-0.067	-0.067	74.571	99.429
582	M57	X	-0.014	-0.014	99.429	124.286
583	M57	Y	-0.067	-0.067	99.429	124.286
584	M57	X	-0.014	-0.015	124.286	149.143
585	M57	Y	-0.067	-0.068	124.286	149.143
586	M57	X	-0.015	-0.016	149.143	174
587	M57	Y	-0.068	-0.072	149.143	174
588	M57	X	-0.016	-0.016	174	198.857
589	M57	Y	-0.072	-0.072	174	198.857
590	M57	X	-0.016	-0.015	198.857	223.714
591	M57	Y	-0.072	-0.068	198.857	223.714
592	M57	X	-0.015	-0.014	223.714	248.571
593	M57	Y	-0.068	-0.067	223.714	248.571
594	M57	X	-0.014	-0.014	248.571	273.429
595	M57	Y	-0.067	-0.067	248.571	273.429
596	M57	X	-0.014	-0.014	273.429	298.286
597	M57	Y	-0.067	-0.067	273.429	298.286
598	M57	X	-0.014	-0.014	298.286	323.143
599	M57	Y	-0.067	-0.067	298.286	323.143
600	M57	X	-0.014	-0.015	323.143	348
601	M57	Y	-0.067	-0.067	323.143	348
602	M96	X	-0.01	-0.011	0	24.857
603	M96	Y	-0.048	-0.05	0	24.857
604	M96	X	-0.011	-0.011	24.857	49.714
605	M96	Y	-0.05	-0.051	24.857	49.714
606	M96	X	-0.011	-0.012	49.714	74.571
607	M96	Y	-0.051	-0.057	49.714	74.571
608	M96	X	-0.012	-0.013	74.571	99.429
609	M96	Y	-0.057	-0.061	74.571	99.429
610	M96	X	-0.013	-0.012	99.429	124.286
611	M96	Y	-0.061	-0.054	99.429	124.286
612	M96	X	-0.012	-0.011	124.286	149.143
613	M96	Y	-0.054	-0.052	124.286	149.143
614	M96	X	-0.011	-0.011	149.143	174
615	M96	Y	-0.052	-0.049	149.143	174
616	M96	X	-0.011	-0.011	174	198.857
617	M96	Y	-0.049	-0.049	174	198.857
618	M96	X	-0.011	-0.012	198.857	223.714
619	M96	Y	-0.049	-0.055	198.857	223.714
620	M96	X	-0.012	-0.013	223.714	248.571
621	M96	Y	-0.055	-0.06	223.714	248.571
622	M96	X	-0.013	-0.012	248.571	273.429
623	M96	Y	-0.06	-0.057	248.571	273.429
624	M96	X	-0.012	-0.011	273.429	298.286
625	M96	Y	-0.057	-0.051	273.429	298.286
626	M96	X	-0.011	-0.011	298.286	323.143
627	M96	Y	-0.051	-0.05	298.286	323.143
628	M96	X	-0.011	-0.01	323.143	348
629	M96	Y	-0.05	-0.048	323.143	348

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
630	M97	X	-0.017	-0.017	0	24.857
631	M97	Y	-0.08	-0.08	0	24.857
632	M97	X	-0.017	-0.017	24.857	49.714
633	M97	Y	-0.08	-0.08	24.857	49.714
634	M97	X	-0.017	-0.017	49.714	74.571
635	M97	Y	-0.08	-0.08	49.714	74.571
636	M97	X	-0.017	-0.017	74.571	99.429
637	M97	Y	-0.08	-0.08	74.571	99.429
638	M97	X	-0.017	-0.017	99.429	124.286
639	M97	Y	-0.08	-0.08	99.429	124.286
640	M97	X	-0.017	-0.018	124.286	149.143
641	M97	Y	-0.08	-0.082	124.286	149.143
642	M97	X	-0.018	-0.019	149.143	174
643	M97	Y	-0.082	-0.086	149.143	174
644	M97	X	-0.019	-0.019	174	198.857
645	M97	Y	-0.086	-0.086	174	198.857
646	M97	X	-0.019	-0.018	198.857	223.714
647	M97	Y	-0.086	-0.081	198.857	223.714
648	M97	X	-0.018	-0.017	223.714	248.571
649	M97	Y	-0.081	-0.08	223.714	248.571
650	M97	X	-0.017	-0.017	248.571	273.429
651	M97	Y	-0.08	-0.08	248.571	273.429
652	M97	X	-0.017	-0.017	273.429	298.286
653	M97	Y	-0.08	-0.08	273.429	298.286
654	M97	X	-0.017	-0.017	298.286	323.143
655	M97	Y	-0.08	-0.08	298.286	323.143
656	M97	X	-0.017	-0.017	323.143	348
657	M97	Y	-0.08	-0.08	323.143	348
658	M98	X	-0.017	-0.017	4.565e-13	348
659	M98	Y	-0.081	-0.081	4.565e-13	348
660	M99	X	-0.017	-0.017	4.539e-13	348
661	M99	Y	-0.081	-0.081	4.539e-13	348
662	M100	X	-0.015	-0.016	0	24.857
663	M100	Y	-0.069	-0.074	0	24.857
664	M100	X	-0.016	-0.016	24.857	49.714
665	M100	Y	-0.074	-0.076	24.857	49.714
666	M100	X	-0.016	-0.016	49.714	74.571
667	M100	Y	-0.076	-0.074	49.714	74.571
668	M100	X	-0.016	-0.016	74.571	99.429
669	M100	Y	-0.074	-0.074	74.571	99.429
670	M100	X	-0.016	-0.016	99.429	124.286
671	M100	Y	-0.074	-0.074	99.429	124.286
672	M100	X	-0.016	-0.016	124.286	149.143
673	M100	Y	-0.074	-0.076	124.286	149.143
674	M100	X	-0.016	-0.017	149.143	174
675	M100	Y	-0.076	-0.081	149.143	174
676	M100	X	-0.017	-0.017	174	198.857
677	M100	Y	-0.081	-0.081	174	198.857
678	M100	X	-0.017	-0.016	198.857	223.714
679	M100	Y	-0.081	-0.076	198.857	223.714
680	M100	X	-0.016	-0.016	223.714	248.571
681	M100	Y	-0.076	-0.074	223.714	248.571
682	M100	X	-0.016	-0.016	248.571	273.429
683	M100	Y	-0.074	-0.074	248.571	273.429
684	M100	X	-0.016	-0.016	273.429	298.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
685	M100	Y	-0.074	-0.076	273.429	298.286
686	M100	X	-0.016	-0.016	298.286	323.143
687	M100	Y	-0.076	-0.074	298.286	323.143
688	M100	X	-0.016	-0.015	323.143	348
689	M100	Y	-0.074	-0.069	323.143	348
690	M101	X	-0.01	-0.009	0	24.857
691	M101	Y	-0.044	-0.043	0	24.857
692	M101	X	-0.009	-0.009	24.857	49.714
693	M101	Y	-0.043	-0.043	24.857	49.714
694	M101	X	-0.009	-0.01	49.714	74.571
695	M101	Y	-0.043	-0.048	49.714	74.571
696	M101	X	-0.01	-0.011	74.571	99.429
697	M101	Y	-0.048	-0.052	74.571	99.429
698	M101	X	-0.011	-0.01	99.429	124.286
699	M101	Y	-0.052	-0.047	99.429	124.286
700	M101	X	-0.01	-0.01	124.286	149.143
701	M101	Y	-0.047	-0.045	124.286	149.143
702	M101	X	-0.01	-0.009	149.143	174
703	M101	Y	-0.045	-0.042	149.143	174
704	M101	X	-0.009	-0.009	174	198.857
705	M101	Y	-0.042	-0.042	174	198.857
706	M101	X	-0.009	-0.01	198.857	223.714
707	M101	Y	-0.042	-0.048	198.857	223.714
708	M101	X	-0.01	-0.011	223.714	248.571
709	M101	Y	-0.048	-0.052	223.714	248.571
710	M101	X	-0.011	-0.011	248.571	273.429
711	M101	Y	-0.052	-0.049	248.571	273.429
712	M101	X	-0.011	-0.009	273.429	298.286
713	M101	Y	-0.049	-0.043	273.429	298.286
714	M101	X	-0.009	-0.009	298.286	323.143
715	M101	Y	-0.043	-0.043	298.286	323.143
716	M101	X	-0.009	-0.01	323.143	348
717	M101	Y	-0.043	-0.044	323.143	348
718	M102	X	-0.017	-0.017	0	24.857
719	M102	Y	-0.079	-0.08	0	24.857
720	M102	X	-0.017	-0.017	24.857	49.714
721	M102	Y	-0.08	-0.081	24.857	49.714
722	M102	X	-0.017	-0.017	49.714	74.571
723	M102	Y	-0.081	-0.08	49.714	74.571
724	M102	X	-0.017	-0.017	74.571	99.429
725	M102	Y	-0.08	-0.08	74.571	99.429
726	M102	X	-0.017	-0.017	99.429	124.286
727	M102	Y	-0.08	-0.08	99.429	124.286
728	M102	X	-0.017	-0.018	124.286	149.143
729	M102	Y	-0.08	-0.082	124.286	149.143
730	M102	X	-0.018	-0.019	149.143	174
731	M102	Y	-0.082	-0.086	149.143	174
732	M102	X	-0.019	-0.019	174	198.857
733	M102	Y	-0.086	-0.086	174	198.857
734	M102	X	-0.019	-0.018	198.857	223.714
735	M102	Y	-0.086	-0.082	198.857	223.714
736	M102	X	-0.018	-0.017	223.714	248.571
737	M102	Y	-0.082	-0.08	223.714	248.571
738	M102	X	-0.017	-0.017	248.571	273.429
739	M102	Y	-0.08	-0.08	248.571	273.429

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
740	M102	X	-0.017	-0.017	273.429	298.286
741	M102	Y	-0.08	-0.081	273.429	298.286
742	M102	X	-0.017	-0.017	298.286	323.143
743	M102	Y	-0.081	-0.08	298.286	323.143
744	M102	X	-0.017	-0.017	323.143	348
745	M102	Y	-0.08	-0.079	323.143	348
746	M103	X	-0.017	-0.017	2.38e-13	348
747	M103	Y	-0.081	-0.081	2.38e-13	348
748	M104	X	-0.017	-0.017	1.818e-12	348
749	M104	Y	-0.081	-0.081	1.818e-12	348
750	M105	X	-0.015	-0.015	0	24.857
751	M105	Y	-0.068	-0.068	0	24.857
752	M105	X	-0.015	-0.015	24.857	49.714
753	M105	Y	-0.068	-0.068	24.857	49.714
754	M105	X	-0.015	-0.015	49.714	74.571
755	M105	Y	-0.068	-0.068	49.714	74.571
756	M105	X	-0.015	-0.015	74.571	99.429
757	M105	Y	-0.068	-0.068	74.571	99.429
758	M105	X	-0.015	-0.015	99.429	124.286
759	M105	Y	-0.068	-0.069	99.429	124.286
760	M105	X	-0.015	-0.016	124.286	149.143
761	M105	Y	-0.069	-0.073	124.286	149.143
762	M105	X	-0.016	-0.016	149.143	174
763	M105	Y	-0.073	-0.073	149.143	174
764	M105	X	-0.016	-0.015	174	198.857
765	M105	Y	-0.073	-0.069	174	198.857
766	M105	X	-0.015	-0.015	198.857	223.714
767	M105	Y	-0.069	-0.068	198.857	223.714
768	M105	X	-0.015	-0.015	223.714	248.571
769	M105	Y	-0.068	-0.068	223.714	248.571
770	M105	X	-0.015	-0.015	248.571	273.429
771	M105	Y	-0.068	-0.068	248.571	273.429
772	M105	X	-0.015	-0.015	273.429	298.286
773	M105	Y	-0.068	-0.068	273.429	298.286
774	M105	X	-0.015	-0.015	298.286	323.143
775	M105	Y	-0.068	-0.068	298.286	323.143
776	M105	X	-0.015	-0.015	323.143	348
777	M105	Y	-0.068	-0.068	323.143	348
778	M106	X	-0.008	-0.008	0	24.857
779	M106	Y	-0.036	-0.038	0	24.857
780	M106	X	-0.008	-0.008	24.857	49.714
781	M106	Y	-0.038	-0.039	24.857	49.714
782	M106	X	-0.008	-0.01	49.714	74.571
783	M106	Y	-0.039	-0.046	49.714	74.571
784	M106	X	-0.01	-0.01	74.571	99.429
785	M106	Y	-0.046	-0.046	74.571	99.429
786	M106	X	-0.01	-0.008	99.429	124.286
787	M106	Y	-0.046	-0.039	99.429	124.286
788	M106	X	-0.008	-0.009	124.286	149.143
789	M106	Y	-0.039	-0.04	124.286	149.143
790	M106	X	-0.009	-0.009	149.143	174
791	M106	Y	-0.04	-0.039	149.143	174
792	M106	X	-0.009	-0.008	174	198.857
793	M106	Y	-0.039	-0.039	174	198.857
794	M106	X	-0.008	-0.009	198.857	223.714

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
795	M106	Y	-0.039	-0.039	198.857	223.714
796	M106	X	-0.009	-0.01	223.714	248.571
797	M106	Y	-0.039	-0.046	223.714	248.571
798	M106	X	-0.01	-0.01	248.571	273.429
799	M106	Y	-0.046	-0.046	248.571	273.429
800	M106	X	-0.01	-0.008	273.429	298.286
801	M106	Y	-0.046	-0.039	273.429	298.286
802	M106	X	-0.008	-0.008	298.286	323.143
803	M106	Y	-0.039	-0.038	298.286	323.143
804	M106	X	-0.008	-0.008	323.143	348
805	M106	Y	-0.038	-0.036	323.143	348
806	M127	X	-0.008	-0.009	0	24.643
807	M127	Y	-0.039	-0.04	0	24.643
808	M127	X	-0.009	-0.009	24.643	49.286
809	M127	Y	-0.04	-0.042	24.643	49.286
810	M127	X	-0.009	-0.009	49.286	73.929
811	M127	Y	-0.042	-0.042	49.286	73.929
812	M127	X	-0.009	-0.009	73.929	98.571
813	M127	Y	-0.042	-0.042	73.929	98.571
814	M127	X	-0.009	-0.009	98.571	123.214
815	M127	Y	-0.042	-0.042	98.571	123.214
816	M127	X	-0.009	-0.009	123.214	147.857
817	M127	Y	-0.042	-0.042	123.214	147.857
818	M127	X	-0.009	-0.009	147.857	172.5
819	M127	Y	-0.042	-0.042	147.857	172.5
820	M127	X	-0.009	-0.009	172.5	197.143
821	M127	Y	-0.042	-0.042	172.5	197.143
822	M127	X	-0.009	-0.009	197.143	221.786
823	M127	Y	-0.042	-0.042	197.143	221.786
824	M127	X	-0.009	-0.009	221.786	246.429
825	M127	Y	-0.042	-0.042	221.786	246.429
826	M127	X	-0.009	-0.009	246.429	271.071
827	M127	Y	-0.042	-0.042	246.429	271.071
828	M127	X	-0.009	-0.009	271.071	295.714
829	M127	Y	-0.042	-0.042	271.071	295.714
830	M127	X	-0.009	-0.009	295.714	320.357
831	M127	Y	-0.042	-0.04	295.714	320.357
832	M127	X	-0.009	-0.008	320.357	345
833	M127	Y	-0.04	-0.039	320.357	345
834	M133	X	-0.018	-0.017	0	24.643
835	M133	Y	-0.081	-0.081	0	24.643
836	M133	X	-0.017	-0.017	24.643	49.286
837	M133	Y	-0.081	-0.081	24.643	49.286
838	M133	X	-0.017	-0.017	49.286	73.929
839	M133	Y	-0.081	-0.081	49.286	73.929
840	M133	X	-0.017	-0.017	73.929	98.571
841	M133	Y	-0.081	-0.081	73.929	98.571
842	M133	X	-0.017	-0.017	98.571	123.214
843	M133	Y	-0.081	-0.081	98.571	123.214
844	M133	X	-0.017	-0.017	123.214	147.857
845	M133	Y	-0.081	-0.08	123.214	147.857
846	M133	X	-0.017	-0.017	147.857	172.5
847	M133	Y	-0.08	-0.079	147.857	172.5
848	M133	X	-0.017	-0.017	172.5	197.143
849	M133	Y	-0.079	-0.08	172.5	197.143

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
850	M133	X	-0.017	-0.017	197.143	221.786
851	M133	Y	-0.08	-0.081	197.143	221.786
852	M133	X	-0.017	-0.017	221.786	246.429
853	M133	Y	-0.081	-0.081	221.786	246.429
854	M133	X	-0.017	-0.017	246.429	271.071
855	M133	Y	-0.081	-0.081	246.429	271.071
856	M133	X	-0.017	-0.017	271.071	295.714
857	M133	Y	-0.081	-0.081	271.071	295.714
858	M133	X	-0.017	-0.017	295.714	320.357
859	M133	Y	-0.081	-0.081	295.714	320.357
860	M133	X	-0.017	-0.018	320.357	345
861	M133	Y	-0.081	-0.081	320.357	345
862	M136	X	-0.015	-0.015	0	24.643
863	M136	Y	-0.069	-0.069	0	24.643
864	M136	X	-0.015	-0.015	24.643	49.286
865	M136	Y	-0.069	-0.068	24.643	49.286
866	M136	X	-0.015	-0.015	49.286	73.929
867	M136	Y	-0.068	-0.068	49.286	73.929
868	M136	X	-0.015	-0.015	73.929	98.571
869	M136	Y	-0.068	-0.068	73.929	98.571
870	M136	X	-0.015	-0.015	98.571	123.214
871	M136	Y	-0.068	-0.068	98.571	123.214
872	M136	X	-0.015	-0.015	123.214	147.857
873	M136	Y	-0.068	-0.068	123.214	147.857
874	M136	X	-0.015	-0.015	147.857	172.5
875	M136	Y	-0.068	-0.068	147.857	172.5
876	M136	X	-0.015	-0.015	172.5	197.143
877	M136	Y	-0.068	-0.068	172.5	197.143
878	M136	X	-0.015	-0.015	197.143	221.786
879	M136	Y	-0.068	-0.068	197.143	221.786
880	M136	X	-0.015	-0.015	221.786	246.429
881	M136	Y	-0.068	-0.068	221.786	246.429
882	M136	X	-0.015	-0.015	246.429	271.071
883	M136	Y	-0.068	-0.068	246.429	271.071
884	M136	X	-0.015	-0.015	271.071	295.714
885	M136	Y	-0.068	-0.068	271.071	295.714
886	M136	X	-0.015	-0.015	295.714	320.357
887	M136	Y	-0.068	-0.069	295.714	320.357
888	M136	X	-0.015	-0.015	320.357	345
889	M136	Y	-0.069	-0.069	320.357	345
890	M137	X	-0.017	-0.017	2.274e-13	345
891	M137	Y	-0.081	-0.081	2.274e-13	345
892	M141	X	-0.015	-0.016	0	24.643
893	M141	Y	-0.07	-0.075	0	24.643
894	M141	X	-0.016	-0.016	24.643	49.286
895	M141	Y	-0.075	-0.076	24.643	49.286
896	M141	X	-0.016	-0.016	49.286	73.929
897	M141	Y	-0.076	-0.075	49.286	73.929
898	M141	X	-0.016	-0.016	73.929	98.571
899	M141	Y	-0.075	-0.075	73.929	98.571
900	M141	X	-0.016	-0.016	98.571	123.214
901	M141	Y	-0.075	-0.075	98.571	123.214
902	M141	X	-0.016	-0.016	123.214	147.857
903	M141	Y	-0.075	-0.075	123.214	147.857
904	M141	X	-0.016	-0.016	147.857	172.5

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
905	M141	Y	-0.075	-0.075	147.857	172.5
906	M141	X	-0.016	-0.016	172.5	197.143
907	M141	Y	-0.075	-0.075	172.5	197.143
908	M141	X	-0.016	-0.016	197.143	221.786
909	M141	Y	-0.075	-0.075	197.143	221.786
910	M141	X	-0.016	-0.016	221.786	246.429
911	M141	Y	-0.075	-0.075	221.786	246.429
912	M141	X	-0.016	-0.016	246.429	271.071
913	M141	Y	-0.075	-0.075	246.429	271.071
914	M141	X	-0.016	-0.016	271.071	295.714
915	M141	Y	-0.075	-0.076	271.071	295.714
916	M141	X	-0.016	-0.016	295.714	320.357
917	M141	Y	-0.076	-0.075	295.714	320.357
918	M141	X	-0.016	-0.015	320.357	345
919	M141	Y	-0.075	-0.07	320.357	345
920	M142	X	-0.017	-0.017	0	24.643
921	M142	Y	-0.08	-0.08	0	24.643
922	M142	X	-0.017	-0.017	24.643	49.286
923	M142	Y	-0.08	-0.08	24.643	49.286
924	M142	X	-0.017	-0.017	49.286	73.929
925	M142	Y	-0.08	-0.08	49.286	73.929
926	M142	X	-0.017	-0.017	73.929	98.571
927	M142	Y	-0.08	-0.081	73.929	98.571
928	M142	X	-0.017	-0.017	98.571	123.214
929	M142	Y	-0.081	-0.081	98.571	123.214
930	M142	X	-0.017	-0.017	123.214	147.857
931	M142	Y	-0.081	-0.081	123.214	147.857
932	M142	X	-0.017	-0.017	147.857	172.5
933	M142	Y	-0.081	-0.081	147.857	172.5
934	M142	X	-0.017	-0.017	172.5	197.143
935	M142	Y	-0.081	-0.081	172.5	197.143
936	M142	X	-0.017	-0.017	197.143	221.786
937	M142	Y	-0.081	-0.081	197.143	221.786
938	M142	X	-0.017	-0.017	221.786	246.429
939	M142	Y	-0.081	-0.081	221.786	246.429
940	M142	X	-0.017	-0.017	246.429	271.071
941	M142	Y	-0.081	-0.08	246.429	271.071
942	M142	X	-0.017	-0.017	271.071	295.714
943	M142	Y	-0.08	-0.08	271.071	295.714
944	M142	X	-0.017	-0.017	295.714	320.357
945	M142	Y	-0.08	-0.08	295.714	320.357
946	M142	X	-0.017	-0.017	320.357	345
947	M142	Y	-0.08	-0.08	320.357	345
948	M143	X	-0.015	-0.015	0	24.643
949	M143	Y	-0.068	-0.067	0	24.643
950	M143	X	-0.015	-0.015	24.643	49.286
951	M143	Y	-0.067	-0.067	24.643	49.286
952	M143	X	-0.015	-0.015	49.286	73.929
953	M143	Y	-0.067	-0.067	49.286	73.929
954	M143	X	-0.015	-0.015	73.929	98.571
955	M143	Y	-0.067	-0.067	73.929	98.571
956	M143	X	-0.015	-0.015	98.571	123.214
957	M143	Y	-0.067	-0.067	98.571	123.214
958	M143	X	-0.015	-0.015	123.214	147.857
959	M143	Y	-0.067	-0.067	123.214	147.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
960	M143	X	-0.015	-0.015	147.857	172.5
961	M143	Y	-0.067	-0.067	147.857	172.5
962	M143	X	-0.015	-0.015	172.5	197.143
963	M143	Y	-0.067	-0.067	172.5	197.143
964	M143	X	-0.015	-0.015	197.143	221.786
965	M143	Y	-0.067	-0.067	197.143	221.786
966	M143	X	-0.015	-0.015	221.786	246.429
967	M143	Y	-0.067	-0.067	221.786	246.429
968	M143	X	-0.015	-0.015	246.429	271.071
969	M143	Y	-0.067	-0.067	246.429	271.071
970	M143	X	-0.015	-0.015	271.071	295.714
971	M143	Y	-0.067	-0.067	271.071	295.714
972	M143	X	-0.015	-0.015	295.714	320.357
973	M143	Y	-0.067	-0.067	295.714	320.357
974	M143	X	-0.015	-0.015	320.357	345
975	M143	Y	-0.067	-0.068	320.357	345
976	M144	X	-0.011	-0.011	0	24.643
977	M144	Y	-0.051	-0.053	0	24.643
978	M144	X	-0.011	-0.012	24.643	49.286
979	M144	Y	-0.053	-0.054	24.643	49.286
980	M144	X	-0.012	-0.012	49.286	73.929
981	M144	Y	-0.054	-0.054	49.286	73.929
982	M144	X	-0.012	-0.012	73.929	98.571
983	M144	Y	-0.054	-0.054	73.929	98.571
984	M144	X	-0.012	-0.011	98.571	123.214
985	M144	Y	-0.054	-0.052	98.571	123.214
986	M144	X	-0.011	-0.012	123.214	147.857
987	M144	Y	-0.052	-0.055	123.214	147.857
988	M144	X	-0.012	-0.013	147.857	172.5
989	M144	Y	-0.055	-0.06	147.857	172.5
990	M144	X	-0.013	-0.012	172.5	197.143
991	M144	Y	-0.06	-0.055	172.5	197.143
992	M144	X	-0.012	-0.011	197.143	221.786
993	M144	Y	-0.055	-0.052	197.143	221.786
994	M144	X	-0.011	-0.012	221.786	246.429
995	M144	Y	-0.052	-0.054	221.786	246.429
996	M144	X	-0.012	-0.012	246.429	271.071
997	M144	Y	-0.054	-0.054	246.429	271.071
998	M144	X	-0.012	-0.012	271.071	295.714
999	M144	Y	-0.054	-0.054	271.071	295.714
1000	M144	X	-0.012	-0.011	295.714	320.357
1001	M144	Y	-0.054	-0.053	295.714	320.357
1002	M144	X	-0.011	-0.011	320.357	345
1003	M144	Y	-0.053	-0.051	320.357	345
1004	M145	X	-0.017	-0.017	5.684e-13	345
1005	M145	Y	-0.081	-0.081	5.684e-13	345
1006	M146	X	-0.009	-0.009	0	24.643
1007	M146	Y	-0.041	-0.044	0	24.643
1008	M146	X	-0.009	-0.011	24.643	49.286
1009	M146	Y	-0.044	-0.049	24.643	49.286
1010	M146	X	-0.011	-0.011	49.286	73.929
1011	M146	Y	-0.049	-0.05	49.286	73.929
1012	M146	X	-0.011	-0.01	73.929	98.571
1013	M146	Y	-0.05	-0.047	73.929	98.571
1014	M146	X	-0.01	-0.01	98.571	123.214

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1015	M146	Y	-0.047	-0.047	98.571	123.214
1016	M146	X	-0.01	-0.01	123.214	147.857
1017	M146	Y	-0.047	-0.047	123.214	147.857
1018	M146	X	-0.01	-0.01	147.857	172.5
1019	M146	Y	-0.047	-0.047	147.857	172.5
1020	M146	X	-0.01	-0.01	172.5	197.143
1021	M146	Y	-0.047	-0.047	172.5	197.143
1022	M146	X	-0.01	-0.01	197.143	221.786
1023	M146	Y	-0.047	-0.047	197.143	221.786
1024	M146	X	-0.01	-0.01	221.786	246.429
1025	M146	Y	-0.047	-0.047	221.786	246.429
1026	M146	X	-0.01	-0.011	246.429	271.071
1027	M146	Y	-0.047	-0.05	246.429	271.071
1028	M146	X	-0.011	-0.011	271.071	295.714
1029	M146	Y	-0.05	-0.049	271.071	295.714
1030	M146	X	-0.011	-0.009	295.714	320.357
1031	M146	Y	-0.049	-0.044	295.714	320.357
1032	M146	X	-0.009	-0.009	320.357	345
1033	M146	Y	-0.044	-0.041	320.357	345
1034	M147	X	-0.017	-0.017	2.141e-12	345
1035	M147	Y	-0.081	-0.081	2.141e-12	345
1036	M148	X	-0.017	-0.017	7.878e-13	345
1037	M148	Y	-0.081	-0.081	7.878e-13	345
1038	M159	X	-0.017	-0.017	0	24.643
1039	M159	Y	-0.08	-0.08	0	24.643
1040	M159	X	-0.017	-0.017	24.643	49.286
1041	M159	Y	-0.08	-0.08	24.643	49.286
1042	M159	X	-0.017	-0.017	49.286	73.929
1043	M159	Y	-0.08	-0.08	49.286	73.929
1044	M159	X	-0.017	-0.017	73.929	98.571
1045	M159	Y	-0.08	-0.081	73.929	98.571
1046	M159	X	-0.017	-0.017	98.571	123.214
1047	M159	Y	-0.081	-0.081	98.571	123.214
1048	M159	X	-0.017	-0.017	123.214	147.857
1049	M159	Y	-0.081	-0.081	123.214	147.857
1050	M159	X	-0.017	-0.017	147.857	172.5
1051	M159	Y	-0.081	-0.081	147.857	172.5
1052	M159	X	-0.017	-0.017	172.5	197.143
1053	M159	Y	-0.081	-0.081	172.5	197.143
1054	M159	X	-0.017	-0.017	197.143	221.786
1055	M159	Y	-0.081	-0.081	197.143	221.786
1056	M159	X	-0.017	-0.017	221.786	246.429
1057	M159	Y	-0.081	-0.081	221.786	246.429
1058	M159	X	-0.017	-0.017	246.429	271.071
1059	M159	Y	-0.081	-0.08	246.429	271.071
1060	M159	X	-0.017	-0.017	271.071	295.714
1061	M159	Y	-0.08	-0.08	271.071	295.714
1062	M159	X	-0.017	-0.017	295.714	320.357
1063	M159	Y	-0.08	-0.08	295.714	320.357
1064	M159	X	-0.017	-0.017	320.357	345
1065	M159	Y	-0.08	-0.08	320.357	345
1066	M162	X	-0.017	-0.016	0	24.643
1067	M162	Y	-0.081	-0.076	0	24.643
1068	M162	X	-0.016	-0.017	24.643	49.286
1069	M162	Y	-0.076	-0.077	24.643	49.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1070	M162	X	-0.017	-0.017	49.286	73.929
1071	M162	Y	-0.077	-0.08	49.286	73.929
1072	M162	X	-0.017	-0.017	73.929	98.571
1073	M162	Y	-0.08	-0.08	73.929	98.571
1074	M162	X	-0.017	-0.017	98.571	123.214
1075	M162	Y	-0.08	-0.08	98.571	123.214
1076	M162	X	-0.017	-0.017	123.214	147.857
1077	M162	Y	-0.08	-0.08	123.214	147.857
1078	M162	X	-0.017	-0.017	147.857	172.5
1079	M162	Y	-0.08	-0.08	147.857	172.5
1080	M162	X	-0.017	-0.017	172.5	197.143
1081	M162	Y	-0.08	-0.08	172.5	197.143
1082	M162	X	-0.017	-0.017	197.143	221.786
1083	M162	Y	-0.08	-0.08	197.143	221.786
1084	M162	X	-0.017	-0.017	221.786	246.429
1085	M162	Y	-0.08	-0.081	221.786	246.429
1086	M162	X	-0.017	-0.017	246.429	271.071
1087	M162	Y	-0.081	-0.08	246.429	271.071
1088	M162	X	-0.017	-0.017	271.071	295.714
1089	M162	Y	-0.08	-0.077	271.071	295.714
1090	M162	X	-0.017	-0.017	295.714	320.357
1091	M162	Y	-0.077	-0.076	295.714	320.357
1092	M162	X	-0.017	-0.018	320.357	345
1093	M162	Y	-0.076	-0.081	320.357	345
1094	M164	X	-0.018	-0.017	0	24.643
1095	M164	Y	-0.081	-0.081	0	24.643
1096	M164	X	-0.017	-0.017	24.643	49.286
1097	M164	Y	-0.081	-0.081	24.643	49.286
1098	M164	X	-0.017	-0.017	49.286	73.929
1099	M164	Y	-0.081	-0.081	49.286	73.929
1100	M164	X	-0.017	-0.017	73.929	98.571
1101	M164	Y	-0.081	-0.081	73.929	98.571
1102	M164	X	-0.017	-0.017	98.571	123.214
1103	M164	Y	-0.081	-0.081	98.571	123.214
1104	M164	X	-0.017	-0.017	123.214	147.857
1105	M164	Y	-0.081	-0.08	123.214	147.857
1106	M164	X	-0.017	-0.017	147.857	172.5
1107	M164	Y	-0.08	-0.079	147.857	172.5
1108	M164	X	-0.017	-0.017	172.5	197.143
1109	M164	Y	-0.079	-0.08	172.5	197.143
1110	M164	X	-0.017	-0.017	197.143	221.786
1111	M164	Y	-0.08	-0.081	197.143	221.786
1112	M164	X	-0.017	-0.017	221.786	246.429
1113	M164	Y	-0.081	-0.081	221.786	246.429
1114	M164	X	-0.017	-0.017	246.429	271.071
1115	M164	Y	-0.081	-0.081	246.429	271.071
1116	M164	X	-0.017	-0.017	271.071	295.714
1117	M164	Y	-0.081	-0.081	271.071	295.714
1118	M164	X	-0.017	-0.017	295.714	320.357
1119	M164	Y	-0.081	-0.081	295.714	320.357
1120	M164	X	-0.017	-0.018	320.357	345
1121	M164	Y	-0.081	-0.081	320.357	345
1122	M165	X	-0.017	-0.017	0	24.643
1123	M165	Y	-0.077	-0.079	0	24.643
1124	M165	X	-0.017	-0.017	24.643	49.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1125	M165	Y	-0.079	-0.081	24.643	49.286
1126	M165	X	-0.017	-0.017	49.286	73.929
1127	M165	Y	-0.081	-0.081	49.286	73.929
1128	M165	X	-0.017	-0.017	73.929	98.571
1129	M165	Y	-0.081	-0.08	73.929	98.571
1130	M165	X	-0.017	-0.017	98.571	123.214
1131	M165	Y	-0.08	-0.077	98.571	123.214
1132	M165	X	-0.017	-0.018	123.214	147.857
1133	M165	Y	-0.077	-0.083	123.214	147.857
1134	M165	X	-0.018	-0.02	147.857	172.5
1135	M165	Y	-0.083	-0.092	147.857	172.5
1136	M165	X	-0.02	-0.018	172.5	197.143
1137	M165	Y	-0.092	-0.083	172.5	197.143
1138	M165	X	-0.018	-0.017	197.143	221.786
1139	M165	Y	-0.083	-0.077	197.143	221.786
1140	M165	X	-0.017	-0.017	221.786	246.429
1141	M165	Y	-0.077	-0.08	221.786	246.429
1142	M165	X	-0.017	-0.017	246.429	271.071
1143	M165	Y	-0.08	-0.081	246.429	271.071
1144	M165	X	-0.017	-0.017	271.071	295.714
1145	M165	Y	-0.081	-0.081	271.071	295.714
1146	M165	X	-0.017	-0.017	295.714	320.357
1147	M165	Y	-0.081	-0.079	295.714	320.357
1148	M165	X	-0.017	-0.017	320.357	345
1149	M165	Y	-0.079	-0.077	320.357	345
1150	M166	X	-0.018	-0.017	0	24.643
1151	M166	Y	-0.081	-0.081	0	24.643
1152	M166	X	-0.017	-0.017	24.643	49.286
1153	M166	Y	-0.081	-0.081	24.643	49.286
1154	M166	X	-0.017	-0.017	49.286	73.929
1155	M166	Y	-0.081	-0.081	49.286	73.929
1156	M166	X	-0.017	-0.017	73.929	98.571
1157	M166	Y	-0.081	-0.081	73.929	98.571
1158	M166	X	-0.017	-0.018	98.571	123.214
1159	M166	Y	-0.081	-0.081	98.571	123.214
1160	M166	X	-0.018	-0.017	123.214	147.857
1161	M166	Y	-0.081	-0.08	123.214	147.857
1162	M166	X	-0.017	-0.017	147.857	172.5
1163	M166	Y	-0.08	-0.079	147.857	172.5
1164	M166	X	-0.017	-0.017	172.5	197.143
1165	M166	Y	-0.079	-0.08	172.5	197.143
1166	M166	X	-0.017	-0.017	197.143	221.786
1167	M166	Y	-0.08	-0.081	197.143	221.786
1168	M166	X	-0.017	-0.017	221.786	246.429
1169	M166	Y	-0.081	-0.081	221.786	246.429
1170	M166	X	-0.017	-0.017	246.429	271.071
1171	M166	Y	-0.081	-0.081	246.429	271.071
1172	M166	X	-0.017	-0.017	271.071	295.714
1173	M166	Y	-0.081	-0.081	271.071	295.714
1174	M166	X	-0.017	-0.017	295.714	320.357
1175	M166	Y	-0.081	-0.081	295.714	320.357
1176	M166	X	-0.017	-0.018	320.357	345
1177	M166	Y	-0.081	-0.081	320.357	345
1178	M167	X	-0.017	-0.017	4.059e-13	345
1179	M167	Y	-0.081	-0.081	4.059e-13	345

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1180	M168	X	-0.017	-0.017	3.935e-13	345
1181	M168	Y	-0.081	-0.081	3.935e-13	345
1182	M169	X	-0.017	-0.017	0	24.643
1183	M169	Y	-0.081	-0.08	0	24.643
1184	M169	X	-0.017	-0.018	24.643	49.286
1185	M169	Y	-0.08	-0.085	24.643	49.286
1186	M169	X	-0.018	-0.019	49.286	73.929
1187	M169	Y	-0.085	-0.087	49.286	73.929
1188	M169	X	-0.019	-0.018	73.929	98.571
1189	M169	Y	-0.087	-0.081	73.929	98.571
1190	M169	X	-0.018	-0.017	98.571	123.214
1191	M169	Y	-0.081	-0.081	98.571	123.214
1192	M169	X	-0.017	-0.017	123.214	147.857
1193	M169	Y	-0.081	-0.081	123.214	147.857
1194	M169	X	-0.017	-0.017	147.857	172.5
1195	M169	Y	-0.081	-0.081	147.857	172.5
1196	M169	X	-0.017	-0.017	172.5	197.143
1197	M169	Y	-0.081	-0.081	172.5	197.143
1198	M169	X	-0.017	-0.017	197.143	221.786
1199	M169	Y	-0.081	-0.081	197.143	221.786
1200	M169	X	-0.017	-0.018	221.786	246.429
1201	M169	Y	-0.081	-0.081	221.786	246.429
1202	M169	X	-0.018	-0.019	246.429	271.071
1203	M169	Y	-0.081	-0.087	246.429	271.071
1204	M169	X	-0.019	-0.018	271.071	295.714
1205	M169	Y	-0.087	-0.085	271.071	295.714
1206	M169	X	-0.018	-0.017	295.714	320.357
1207	M169	Y	-0.085	-0.08	295.714	320.357
1208	M169	X	-0.017	-0.018	320.357	345
1209	M169	Y	-0.08	-0.081	320.357	345
1210	M170	X	-0.017	-0.017	1.139e-12	345
1211	M170	Y	-0.081	-0.081	1.139e-12	345
1212	M171	X	-0.017	-0.017	1.166e-12	345
1213	M171	Y	-0.081	-0.081	1.166e-12	345
1214	M172	X	-0.008	-0.009	0	24.643
1215	M172	Y	-0.039	-0.04	0	24.643
1216	M172	X	-0.009	-0.009	24.643	49.286
1217	M172	Y	-0.04	-0.042	24.643	49.286
1218	M172	X	-0.009	-0.009	49.286	73.929
1219	M172	Y	-0.042	-0.042	49.286	73.929
1220	M172	X	-0.009	-0.009	73.929	98.571
1221	M172	Y	-0.042	-0.042	73.929	98.571
1222	M172	X	-0.009	-0.009	98.571	123.214
1223	M172	Y	-0.042	-0.042	98.571	123.214
1224	M172	X	-0.009	-0.009	123.214	147.857
1225	M172	Y	-0.042	-0.042	123.214	147.857
1226	M172	X	-0.009	-0.009	147.857	172.5
1227	M172	Y	-0.042	-0.042	147.857	172.5
1228	M172	X	-0.009	-0.009	172.5	197.143
1229	M172	Y	-0.042	-0.042	172.5	197.143
1230	M172	X	-0.009	-0.009	197.143	221.786
1231	M172	Y	-0.042	-0.042	197.143	221.786
1232	M172	X	-0.009	-0.009	221.786	246.429
1233	M172	Y	-0.042	-0.042	221.786	246.429
1234	M172	X	-0.009	-0.009	246.429	271.071

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1235	M172	Y	-0.042	-0.042	246.429	271.071
1236	M172	X	-0.009	-0.009	271.071	295.714
1237	M172	Y	-0.042	-0.042	271.071	295.714
1238	M172	X	-0.009	-0.009	295.714	320.357
1239	M172	Y	-0.042	-0.04	295.714	320.357
1240	M172	X	-0.009	-0.008	320.357	345
1241	M172	Y	-0.04	-0.039	320.357	345
1242	M173	X	-0.015	-0.015	0	24.643
1243	M173	Y	-0.069	-0.069	0	24.643
1244	M173	X	-0.015	-0.015	24.643	49.286
1245	M173	Y	-0.069	-0.068	24.643	49.286
1246	M173	X	-0.015	-0.015	49.286	73.929
1247	M173	Y	-0.068	-0.068	49.286	73.929
1248	M173	X	-0.015	-0.015	73.929	98.571
1249	M173	Y	-0.068	-0.068	73.929	98.571
1250	M173	X	-0.015	-0.015	98.571	123.214
1251	M173	Y	-0.068	-0.068	98.571	123.214
1252	M173	X	-0.015	-0.015	123.214	147.857
1253	M173	Y	-0.068	-0.068	123.214	147.857
1254	M173	X	-0.015	-0.015	147.857	172.5
1255	M173	Y	-0.068	-0.068	147.857	172.5
1256	M173	X	-0.015	-0.015	172.5	197.143
1257	M173	Y	-0.068	-0.068	172.5	197.143
1258	M173	X	-0.015	-0.015	197.143	221.786
1259	M173	Y	-0.068	-0.068	197.143	221.786
1260	M173	X	-0.015	-0.015	221.786	246.429
1261	M173	Y	-0.068	-0.068	221.786	246.429
1262	M173	X	-0.015	-0.015	246.429	271.071
1263	M173	Y	-0.068	-0.068	246.429	271.071
1264	M173	X	-0.015	-0.015	271.071	295.714
1265	M173	Y	-0.068	-0.068	271.071	295.714
1266	M173	X	-0.015	-0.015	295.714	320.357
1267	M173	Y	-0.068	-0.069	295.714	320.357
1268	M173	X	-0.015	-0.015	320.357	345
1269	M173	Y	-0.069	-0.069	320.357	345
1270	M183	X	-0.018	-0.018	0	24.643
1271	M183	Y	-0.083	-0.085	0	24.643
1272	M183	X	-0.018	-0.018	24.643	49.286
1273	M183	Y	-0.085	-0.084	24.643	49.286
1274	M183	X	-0.018	-0.017	49.286	73.929
1275	M183	Y	-0.084	-0.081	49.286	73.929
1276	M183	X	-0.017	-0.017	73.929	98.571
1277	M183	Y	-0.081	-0.081	73.929	98.571
1278	M183	X	-0.017	-0.017	98.571	123.214
1279	M183	Y	-0.081	-0.081	98.571	123.214
1280	M183	X	-0.017	-0.017	123.214	147.857
1281	M183	Y	-0.081	-0.081	123.214	147.857
1282	M183	X	-0.017	-0.017	147.857	172.5
1283	M183	Y	-0.081	-0.081	147.857	172.5
1284	M183	X	-0.017	-0.017	172.5	197.143
1285	M183	Y	-0.081	-0.081	172.5	197.143
1286	M183	X	-0.017	-0.017	197.143	221.786
1287	M183	Y	-0.081	-0.081	197.143	221.786
1288	M183	X	-0.017	-0.017	221.786	246.429
1289	M183	Y	-0.081	-0.081	221.786	246.429

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1290	M183	X	-0.017	-0.017	246.429	271.071
1291	M183	Y	-0.081	-0.081	246.429	271.071
1292	M183	X	-0.017	-0.018	271.071	295.714
1293	M183	Y	-0.081	-0.081	271.071	295.714
1294	M183	X	-0.018	-0.018	295.714	320.357
1295	M183	Y	-0.081	-0.081	295.714	320.357
1296	M183	X	-0.018	-0.017	320.357	345
1297	M183	Y	-0.081	-0.08	320.357	345
1298	M186	X	-0.012	-0.016	0	24.643
1299	M186	Y	-0.056	-0.076	0	24.643
1300	M186	X	-0.016	-0.018	24.643	49.286
1301	M186	Y	-0.076	-0.084	24.643	49.286
1302	M186	X	-0.018	-0.016	49.286	73.929
1303	M186	Y	-0.084	-0.075	49.286	73.929
1304	M186	X	-0.016	-0.016	73.929	98.571
1305	M186	Y	-0.075	-0.073	73.929	98.571
1306	M186	X	-0.016	-0.016	98.571	123.214
1307	M186	Y	-0.073	-0.075	98.571	123.214
1308	M186	X	-0.016	-0.015	123.214	147.857
1309	M186	Y	-0.075	-0.068	123.214	147.857
1310	M186	X	-0.015	-0.015	147.857	172.5
1311	M186	Y	-0.068	-0.069	147.857	172.5
1312	M186	X	-0.015	-0.016	172.5	197.143
1313	M186	Y	-0.069	-0.075	172.5	197.143
1314	M186	X	-0.016	-0.018	197.143	221.786
1315	M186	Y	-0.075	-0.086	197.143	221.786
1316	M186	X	-0.018	-0.018	221.786	246.429
1317	M186	Y	-0.086	-0.083	221.786	246.429
1318	M186	X	-0.018	-0.016	246.429	271.071
1319	M186	Y	-0.083	-0.072	246.429	271.071
1320	M186	X	-0.016	-0.016	271.071	295.714
1321	M186	Y	-0.072	-0.073	271.071	295.714
1322	M186	X	-0.016	-0.015	295.714	320.357
1323	M186	Y	-0.073	-0.071	295.714	320.357
1324	M186	X	-0.015	-0.014	320.357	345
1325	M186	Y	-0.071	-0.067	320.357	345
1326	M188	X	-0.015	-0.015	0	24.643
1327	M188	Y	-0.068	-0.067	0	24.643
1328	M188	X	-0.015	-0.015	24.643	49.286
1329	M188	Y	-0.067	-0.067	24.643	49.286
1330	M188	X	-0.015	-0.015	49.286	73.929
1331	M188	Y	-0.067	-0.067	49.286	73.929
1332	M188	X	-0.015	-0.015	73.929	98.571
1333	M188	Y	-0.067	-0.067	73.929	98.571
1334	M188	X	-0.015	-0.015	98.571	123.214
1335	M188	Y	-0.067	-0.067	98.571	123.214
1336	M188	X	-0.015	-0.015	123.214	147.857
1337	M188	Y	-0.067	-0.067	123.214	147.857
1338	M188	X	-0.015	-0.015	147.857	172.5
1339	M188	Y	-0.067	-0.067	147.857	172.5
1340	M188	X	-0.015	-0.015	172.5	197.143
1341	M188	Y	-0.067	-0.067	172.5	197.143
1342	M188	X	-0.015	-0.015	197.143	221.786
1343	M188	Y	-0.067	-0.067	197.143	221.786
1344	M188	X	-0.015	-0.015	221.786	246.429

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1345	M188	Y	-0.067	-0.067	221.786	246.429
1346	M188	X	-0.015	-0.015	246.429	271.071
1347	M188	Y	-0.067	-0.067	246.429	271.071
1348	M188	X	-0.015	-0.015	271.071	295.714
1349	M188	Y	-0.067	-0.067	271.071	295.714
1350	M188	X	-0.015	-0.015	295.714	320.357
1351	M188	Y	-0.067	-0.067	295.714	320.357
1352	M188	X	-0.015	-0.015	320.357	345
1353	M188	Y	-0.067	-0.068	320.357	345
1354	M189	X	-0.011	-0.011	0	24.643
1355	M189	Y	-0.051	-0.053	0	24.643
1356	M189	X	-0.011	-0.012	24.643	49.286
1357	M189	Y	-0.053	-0.054	24.643	49.286
1358	M189	X	-0.012	-0.012	49.286	73.929
1359	M189	Y	-0.054	-0.054	49.286	73.929
1360	M189	X	-0.012	-0.012	73.929	98.571
1361	M189	Y	-0.054	-0.054	73.929	98.571
1362	M189	X	-0.012	-0.011	98.571	123.214
1363	M189	Y	-0.054	-0.052	98.571	123.214
1364	M189	X	-0.011	-0.012	123.214	147.857
1365	M189	Y	-0.052	-0.055	123.214	147.857
1366	M189	X	-0.012	-0.013	147.857	172.5
1367	M189	Y	-0.055	-0.06	147.857	172.5
1368	M189	X	-0.013	-0.012	172.5	197.143
1369	M189	Y	-0.06	-0.055	172.5	197.143
1370	M189	X	-0.012	-0.011	197.143	221.786
1371	M189	Y	-0.055	-0.052	197.143	221.786
1372	M189	X	-0.011	-0.012	221.786	246.429
1373	M189	Y	-0.052	-0.054	221.786	246.429
1374	M189	X	-0.012	-0.012	246.429	271.071
1375	M189	Y	-0.054	-0.054	246.429	271.071
1376	M189	X	-0.012	-0.012	271.071	295.714
1377	M189	Y	-0.054	-0.054	271.071	295.714
1378	M189	X	-0.012	-0.011	295.714	320.357
1379	M189	Y	-0.054	-0.053	295.714	320.357
1380	M189	X	-0.011	-0.011	320.357	345
1381	M189	Y	-0.053	-0.051	320.357	345
1382	M190	X	-0.018	-0.017	0	24.643
1383	M190	Y	-0.081	-0.081	0	24.643
1384	M190	X	-0.017	-0.017	24.643	49.286
1385	M190	Y	-0.081	-0.081	24.643	49.286
1386	M190	X	-0.017	-0.017	49.286	73.929
1387	M190	Y	-0.081	-0.081	49.286	73.929
1388	M190	X	-0.017	-0.017	73.929	98.571
1389	M190	Y	-0.081	-0.081	73.929	98.571
1390	M190	X	-0.017	-0.018	98.571	123.214
1391	M190	Y	-0.081	-0.081	98.571	123.214
1392	M190	X	-0.018	-0.017	123.214	147.857
1393	M190	Y	-0.081	-0.08	123.214	147.857
1394	M190	X	-0.017	-0.017	147.857	172.5
1395	M190	Y	-0.08	-0.079	147.857	172.5
1396	M190	X	-0.017	-0.017	172.5	197.143
1397	M190	Y	-0.079	-0.08	172.5	197.143
1398	M190	X	-0.017	-0.017	197.143	221.786
1399	M190	Y	-0.08	-0.081	197.143	221.786

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1400	M190	X	-0.017	-0.017	221.786	246.429
1401	M190	Y	-0.081	-0.081	221.786	246.429
1402	M190	X	-0.017	-0.017	246.429	271.071
1403	M190	Y	-0.081	-0.081	246.429	271.071
1404	M190	X	-0.017	-0.017	271.071	295.714
1405	M190	Y	-0.081	-0.081	271.071	295.714
1406	M190	X	-0.017	-0.017	295.714	320.357
1407	M190	Y	-0.081	-0.081	295.714	320.357
1408	M190	X	-0.017	-0.018	320.357	345
1409	M190	Y	-0.081	-0.081	320.357	345
1410	M191	X	-0.017	-0.017	1.785e-13	345
1411	M191	Y	-0.081	-0.081	1.785e-13	345
1412	M192	X	-0.018	-0.017	0	24.643
1413	M192	Y	-0.081	-0.08	0	24.643
1414	M192	X	-0.017	-0.017	24.643	49.286
1415	M192	Y	-0.08	-0.08	24.643	49.286
1416	M192	X	-0.017	-0.018	49.286	73.929
1417	M192	Y	-0.08	-0.084	49.286	73.929
1418	M192	X	-0.018	-0.018	73.929	98.571
1419	M192	Y	-0.084	-0.083	73.929	98.571
1420	M192	X	-0.018	-0.017	98.571	123.214
1421	M192	Y	-0.083	-0.08	98.571	123.214
1422	M192	X	-0.017	-0.018	123.214	147.857
1423	M192	Y	-0.08	-0.083	123.214	147.857
1424	M192	X	-0.018	-0.018	147.857	172.5
1425	M192	Y	-0.083	-0.084	147.857	172.5
1426	M192	X	-0.018	-0.018	172.5	197.143
1427	M192	Y	-0.084	-0.081	172.5	197.143
1428	M192	X	-0.018	-0.017	197.143	221.786
1429	M192	Y	-0.081	-0.08	197.143	221.786
1430	M192	X	-0.017	-0.017	221.786	246.429
1431	M192	Y	-0.08	-0.079	221.786	246.429
1432	M192	X	-0.017	-0.017	246.429	271.071
1433	M192	Y	-0.079	-0.077	246.429	271.071
1434	M192	X	-0.017	-0.017	271.071	295.714
1435	M192	Y	-0.077	-0.077	271.071	295.714
1436	M192	X	-0.017	-0.018	295.714	320.357
1437	M192	Y	-0.077	-0.083	295.714	320.357
1438	M192	X	-0.018	-0.019	320.357	345
1439	M192	Y	-0.083	-0.089	320.357	345
1440	M193	X	-0.009	-0.01	0	24.643
1441	M193	Y	-0.042	-0.048	0	24.643
1442	M193	X	-0.01	-0.01	24.643	49.286
1443	M193	Y	-0.048	-0.048	24.643	49.286
1444	M193	X	-0.01	-0.01	49.286	73.929
1445	M193	Y	-0.048	-0.046	49.286	73.929
1446	M193	X	-0.01	-0.01	73.929	98.571
1447	M193	Y	-0.046	-0.046	73.929	98.571
1448	M193	X	-0.01	-0.01	98.571	123.214
1449	M193	Y	-0.046	-0.046	98.571	123.214
1450	M193	X	-0.01	-0.01	123.214	147.857
1451	M193	Y	-0.046	-0.046	123.214	147.857
1452	M193	X	-0.01	-0.01	147.857	172.5
1453	M193	Y	-0.046	-0.046	147.857	172.5
1454	M193	X	-0.01	-0.01	172.5	197.143

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1455	M193	Y	-0.046	-0.046	172.5	197.143
1456	M193	X	-0.01	-0.01	197.143	221.786
1457	M193	Y	-0.046	-0.046	197.143	221.786
1458	M193	X	-0.01	-0.01	221.786	246.429
1459	M193	Y	-0.046	-0.046	221.786	246.429
1460	M193	X	-0.01	-0.01	246.429	271.071
1461	M193	Y	-0.046	-0.046	246.429	271.071
1462	M193	X	-0.01	-0.01	271.071	295.714
1463	M193	Y	-0.046	-0.046	271.071	295.714
1464	M193	X	-0.01	-0.01	295.714	320.357
1465	M193	Y	-0.046	-0.046	295.714	320.357
1466	M193	X	-0.01	-0.01	320.357	345
1467	M193	Y	-0.046	-0.047	320.357	345
1468	M194	X	-0.016	-0.017	0	24.643
1469	M194	Y	-0.076	-0.078	0	24.643
1470	M194	X	-0.017	-0.017	24.643	49.286
1471	M194	Y	-0.078	-0.08	24.643	49.286
1472	M194	X	-0.017	-0.017	49.286	73.929
1473	M194	Y	-0.08	-0.081	49.286	73.929
1474	M194	X	-0.017	-0.017	73.929	98.571
1475	M194	Y	-0.081	-0.081	73.929	98.571
1476	M194	X	-0.017	-0.017	98.571	123.214
1477	M194	Y	-0.081	-0.081	98.571	123.214
1478	M194	X	-0.017	-0.017	123.214	147.857
1479	M194	Y	-0.081	-0.081	123.214	147.857
1480	M194	X	-0.017	-0.017	147.857	172.5
1481	M194	Y	-0.081	-0.081	147.857	172.5
1482	M194	X	-0.017	-0.017	172.5	197.143
1483	M194	Y	-0.081	-0.081	172.5	197.143
1484	M194	X	-0.017	-0.017	197.143	221.786
1485	M194	Y	-0.081	-0.081	197.143	221.786
1486	M194	X	-0.017	-0.017	221.786	246.429
1487	M194	Y	-0.081	-0.081	221.786	246.429
1488	M194	X	-0.017	-0.017	246.429	271.071
1489	M194	Y	-0.081	-0.081	246.429	271.071
1490	M194	X	-0.017	-0.017	271.071	295.714
1491	M194	Y	-0.081	-0.081	271.071	295.714
1492	M194	X	-0.017	-0.017	295.714	320.357
1493	M194	Y	-0.081	-0.081	295.714	320.357
1494	M194	X	-0.017	-0.017	320.357	345
1495	M194	Y	-0.081	-0.081	320.357	345
1496	M195	X	-0.017	-0.017	3.331e-13	345
1497	M195	Y	-0.081	-0.081	3.331e-13	345
1498	M196	X	-0.008	-0.009	0	24.643
1499	M196	Y	-0.039	-0.04	0	24.643
1500	M196	X	-0.009	-0.009	24.643	49.286
1501	M196	Y	-0.04	-0.042	24.643	49.286
1502	M196	X	-0.009	-0.009	49.286	73.929
1503	M196	Y	-0.042	-0.042	49.286	73.929
1504	M196	X	-0.009	-0.009	73.929	98.571
1505	M196	Y	-0.042	-0.042	73.929	98.571
1506	M196	X	-0.009	-0.009	98.571	123.214
1507	M196	Y	-0.042	-0.042	98.571	123.214
1508	M196	X	-0.009	-0.009	123.214	147.857
1509	M196	Y	-0.042	-0.042	123.214	147.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1510	M196	X	-0.009	-0.009	147.857	172.5
1511	M196	Y	-0.042	-0.042	147.857	172.5
1512	M196	X	-0.009	-0.009	172.5	197.143
1513	M196	Y	-0.042	-0.042	172.5	197.143
1514	M196	X	-0.009	-0.009	197.143	221.786
1515	M196	Y	-0.042	-0.042	197.143	221.786
1516	M196	X	-0.009	-0.009	221.786	246.429
1517	M196	Y	-0.042	-0.042	221.786	246.429
1518	M196	X	-0.009	-0.009	246.429	271.071
1519	M196	Y	-0.042	-0.042	246.429	271.071
1520	M196	X	-0.009	-0.009	271.071	295.714
1521	M196	Y	-0.042	-0.042	271.071	295.714
1522	M196	X	-0.009	-0.009	295.714	320.357
1523	M196	Y	-0.042	-0.04	295.714	320.357
1524	M196	X	-0.009	-0.008	320.357	345
1525	M196	Y	-0.04	-0.039	320.357	345
1526	M197	X	-0.015	-0.015	0	24.643
1527	M197	Y	-0.069	-0.069	0	24.643
1528	M197	X	-0.015	-0.015	24.643	49.286
1529	M197	Y	-0.069	-0.068	24.643	49.286
1530	M197	X	-0.015	-0.015	49.286	73.929
1531	M197	Y	-0.068	-0.068	49.286	73.929
1532	M197	X	-0.015	-0.015	73.929	98.571
1533	M197	Y	-0.068	-0.068	73.929	98.571
1534	M197	X	-0.015	-0.015	98.571	123.214
1535	M197	Y	-0.068	-0.068	98.571	123.214
1536	M197	X	-0.015	-0.015	123.214	147.857
1537	M197	Y	-0.068	-0.068	123.214	147.857
1538	M197	X	-0.015	-0.015	147.857	172.5
1539	M197	Y	-0.068	-0.068	147.857	172.5
1540	M197	X	-0.015	-0.015	172.5	197.143
1541	M197	Y	-0.068	-0.068	172.5	197.143
1542	M197	X	-0.015	-0.015	197.143	221.786
1543	M197	Y	-0.068	-0.068	197.143	221.786
1544	M197	X	-0.015	-0.015	221.786	246.429
1545	M197	Y	-0.068	-0.068	221.786	246.429
1546	M197	X	-0.015	-0.015	246.429	271.071
1547	M197	Y	-0.068	-0.068	246.429	271.071
1548	M197	X	-0.015	-0.015	271.071	295.714
1549	M197	Y	-0.068	-0.068	271.071	295.714
1550	M197	X	-0.015	-0.015	295.714	320.357
1551	M197	Y	-0.068	-0.069	295.714	320.357
1552	M197	X	-0.015	-0.015	320.357	345
1553	M197	Y	-0.069	-0.069	320.357	345
1554	M207	X	-0.016	-0.017	0	24.643
1555	M207	Y	-0.075	-0.08	0	24.643
1556	M207	X	-0.017	-0.018	24.643	49.286
1557	M207	Y	-0.08	-0.082	24.643	49.286
1558	M207	X	-0.018	-0.017	49.286	73.929
1559	M207	Y	-0.082	-0.081	49.286	73.929
1560	M207	X	-0.017	-0.017	73.929	98.571
1561	M207	Y	-0.081	-0.081	73.929	98.571
1562	M207	X	-0.017	-0.017	98.571	123.214
1563	M207	Y	-0.081	-0.081	98.571	123.214
1564	M207	X	-0.017	-0.017	123.214	147.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1565	M207	Y	-0.081	-0.081	123.214	147.857
1566	M207	X	-0.017	-0.017	147.857	172.5
1567	M207	Y	-0.081	-0.081	147.857	172.5
1568	M207	X	-0.017	-0.017	172.5	197.143
1569	M207	Y	-0.081	-0.081	172.5	197.143
1570	M207	X	-0.017	-0.017	197.143	221.786
1571	M207	Y	-0.081	-0.081	197.143	221.786
1572	M207	X	-0.017	-0.017	221.786	246.429
1573	M207	Y	-0.081	-0.081	221.786	246.429
1574	M207	X	-0.017	-0.018	246.429	271.071
1575	M207	Y	-0.081	-0.081	246.429	271.071
1576	M207	X	-0.018	-0.019	271.071	295.714
1577	M207	Y	-0.081	-0.086	271.071	295.714
1578	M207	X	-0.019	-0.018	295.714	320.357
1579	M207	Y	-0.086	-0.085	295.714	320.357
1580	M207	X	-0.018	-0.016	320.357	345
1581	M207	Y	-0.085	-0.072	320.357	345
1582	M210	X	-0.014	-0.015	0	24.643
1583	M210	Y	-0.066	-0.071	0	24.643
1584	M210	X	-0.015	-0.016	24.643	49.286
1585	M210	Y	-0.071	-0.073	24.643	49.286
1586	M210	X	-0.016	-0.015	49.286	73.929
1587	M210	Y	-0.073	-0.071	49.286	73.929
1588	M210	X	-0.015	-0.017	73.929	98.571
1589	M210	Y	-0.071	-0.078	73.929	98.571
1590	M210	X	-0.017	-0.018	98.571	123.214
1591	M210	Y	-0.078	-0.085	98.571	123.214
1592	M210	X	-0.018	-0.017	123.214	147.857
1593	M210	Y	-0.085	-0.079	123.214	147.857
1594	M210	X	-0.017	-0.015	147.857	172.5
1595	M210	Y	-0.079	-0.069	147.857	172.5
1596	M210	X	-0.015	-0.014	172.5	197.143
1597	M210	Y	-0.069	-0.065	172.5	197.143
1598	M210	X	-0.014	-0.015	197.143	221.786
1599	M210	Y	-0.065	-0.072	197.143	221.786
1600	M210	X	-0.015	-0.017	221.786	246.429
1601	M210	Y	-0.072	-0.077	221.786	246.429
1602	M210	X	-0.017	-0.017	246.429	271.071
1603	M210	Y	-0.077	-0.077	246.429	271.071
1604	M210	X	-0.017	-0.018	271.071	295.714
1605	M210	Y	-0.077	-0.082	271.071	295.714
1606	M210	X	-0.018	-0.016	295.714	320.357
1607	M210	Y	-0.082	-0.076	295.714	320.357
1608	M210	X	-0.016	-0.012	320.357	345
1609	M210	Y	-0.076	-0.056	320.357	345
1610	M212	X	-0.015	-0.015	0	24.643
1611	M212	Y	-0.068	-0.067	0	24.643
1612	M212	X	-0.015	-0.015	24.643	49.286
1613	M212	Y	-0.067	-0.067	24.643	49.286
1614	M212	X	-0.015	-0.015	49.286	73.929
1615	M212	Y	-0.067	-0.067	49.286	73.929
1616	M212	X	-0.015	-0.015	73.929	98.571
1617	M212	Y	-0.067	-0.067	73.929	98.571
1618	M212	X	-0.015	-0.015	98.571	123.214
1619	M212	Y	-0.067	-0.067	98.571	123.214

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1620	M212	X	-0.015	-0.015	123.214	147.857
1621	M212	Y	-0.067	-0.067	123.214	147.857
1622	M212	X	-0.015	-0.015	147.857	172.5
1623	M212	Y	-0.067	-0.067	147.857	172.5
1624	M212	X	-0.015	-0.015	172.5	197.143
1625	M212	Y	-0.067	-0.067	172.5	197.143
1626	M212	X	-0.015	-0.015	197.143	221.786
1627	M212	Y	-0.067	-0.067	197.143	221.786
1628	M212	X	-0.015	-0.015	221.786	246.429
1629	M212	Y	-0.067	-0.067	221.786	246.429
1630	M212	X	-0.015	-0.015	246.429	271.071
1631	M212	Y	-0.067	-0.067	246.429	271.071
1632	M212	X	-0.015	-0.015	271.071	295.714
1633	M212	Y	-0.067	-0.067	271.071	295.714
1634	M212	X	-0.015	-0.015	295.714	320.357
1635	M212	Y	-0.067	-0.067	295.714	320.357
1636	M212	X	-0.015	-0.015	320.357	345
1637	M212	Y	-0.067	-0.068	320.357	345
1638	M213	X	-0.011	-0.011	0	24.643
1639	M213	Y	-0.051	-0.053	0	24.643
1640	M213	X	-0.011	-0.012	24.643	49.286
1641	M213	Y	-0.053	-0.054	24.643	49.286
1642	M213	X	-0.012	-0.012	49.286	73.929
1643	M213	Y	-0.054	-0.054	49.286	73.929
1644	M213	X	-0.012	-0.012	73.929	98.571
1645	M213	Y	-0.054	-0.054	73.929	98.571
1646	M213	X	-0.012	-0.011	98.571	123.214
1647	M213	Y	-0.054	-0.052	98.571	123.214
1648	M213	X	-0.011	-0.012	123.214	147.857
1649	M213	Y	-0.052	-0.055	123.214	147.857
1650	M213	X	-0.012	-0.013	147.857	172.5
1651	M213	Y	-0.055	-0.06	147.857	172.5
1652	M213	X	-0.013	-0.012	172.5	197.143
1653	M213	Y	-0.06	-0.055	172.5	197.143
1654	M213	X	-0.012	-0.011	197.143	221.786
1655	M213	Y	-0.055	-0.052	197.143	221.786
1656	M213	X	-0.011	-0.012	221.786	246.429
1657	M213	Y	-0.052	-0.054	221.786	246.429
1658	M213	X	-0.012	-0.012	246.429	271.071
1659	M213	Y	-0.054	-0.054	246.429	271.071
1660	M213	X	-0.012	-0.012	271.071	295.714
1661	M213	Y	-0.054	-0.054	271.071	295.714
1662	M213	X	-0.012	-0.011	295.714	320.357
1663	M213	Y	-0.054	-0.053	295.714	320.357
1664	M213	X	-0.011	-0.011	320.357	345
1665	M213	Y	-0.053	-0.051	320.357	345
1666	M214	X	-0.018	-0.017	0	24.643
1667	M214	Y	-0.081	-0.081	0	24.643
1668	M214	X	-0.017	-0.017	24.643	49.286
1669	M214	Y	-0.081	-0.081	24.643	49.286
1670	M214	X	-0.017	-0.017	49.286	73.929
1671	M214	Y	-0.081	-0.081	49.286	73.929
1672	M214	X	-0.017	-0.017	73.929	98.571
1673	M214	Y	-0.081	-0.081	73.929	98.571
1674	M214	X	-0.017	-0.018	98.571	123.214

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1675	M214	Y	-0.081	-0.081	98.571	123.214
1676	M214	X	-0.018	-0.017	123.214	147.857
1677	M214	Y	-0.081	-0.08	123.214	147.857
1678	M214	X	-0.017	-0.017	147.857	172.5
1679	M214	Y	-0.08	-0.079	147.857	172.5
1680	M214	X	-0.017	-0.017	172.5	197.143
1681	M214	Y	-0.079	-0.08	172.5	197.143
1682	M214	X	-0.017	-0.017	197.143	221.786
1683	M214	Y	-0.08	-0.081	197.143	221.786
1684	M214	X	-0.017	-0.017	221.786	246.429
1685	M214	Y	-0.081	-0.081	221.786	246.429
1686	M214	X	-0.017	-0.017	246.429	271.071
1687	M214	Y	-0.081	-0.081	246.429	271.071
1688	M214	X	-0.017	-0.017	271.071	295.714
1689	M214	Y	-0.081	-0.081	271.071	295.714
1690	M214	X	-0.017	-0.017	295.714	320.357
1691	M214	Y	-0.081	-0.081	295.714	320.357
1692	M214	X	-0.017	-0.018	320.357	345
1693	M214	Y	-0.081	-0.081	320.357	345
1694	M215	X	-0.017	-0.017	1.075e-13	345
1695	M215	Y	-0.081	-0.081	1.075e-13	345
1696	M216	X	-0.019	-0.018	0	24.643
1697	M216	Y	-0.09	-0.083	0	24.643
1698	M216	X	-0.018	-0.017	24.643	49.286
1699	M216	Y	-0.083	-0.077	24.643	49.286
1700	M216	X	-0.017	-0.017	49.286	73.929
1701	M216	Y	-0.077	-0.077	49.286	73.929
1702	M216	X	-0.017	-0.017	73.929	98.571
1703	M216	Y	-0.077	-0.079	73.929	98.571
1704	M216	X	-0.017	-0.017	98.571	123.214
1705	M216	Y	-0.079	-0.08	98.571	123.214
1706	M216	X	-0.017	-0.018	123.214	147.857
1707	M216	Y	-0.08	-0.081	123.214	147.857
1708	M216	X	-0.018	-0.019	147.857	172.5
1709	M216	Y	-0.081	-0.086	147.857	172.5
1710	M216	X	-0.019	-0.019	172.5	197.143
1711	M216	Y	-0.086	-0.086	172.5	197.143
1712	M216	X	-0.019	-0.018	197.143	221.786
1713	M216	Y	-0.086	-0.081	197.143	221.786
1714	M216	X	-0.018	-0.017	221.786	246.429
1715	M216	Y	-0.081	-0.08	221.786	246.429
1716	M216	X	-0.017	-0.017	246.429	271.071
1717	M216	Y	-0.08	-0.08	246.429	271.071
1718	M216	X	-0.017	-0.017	271.071	295.714
1719	M216	Y	-0.08	-0.08	271.071	295.714
1720	M216	X	-0.017	-0.017	295.714	320.357
1721	M216	Y	-0.08	-0.08	295.714	320.357
1722	M216	X	-0.017	-0.018	320.357	345
1723	M216	Y	-0.08	-0.081	320.357	345
1724	M217	X	-0.011	-0.011	0	24.643
1725	M217	Y	-0.049	-0.051	0	24.643
1726	M217	X	-0.011	-0.011	24.643	49.286
1727	M217	Y	-0.051	-0.049	24.643	49.286
1728	M217	X	-0.011	-0.01	49.286	73.929
1729	M217	Y	-0.049	-0.046	49.286	73.929

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1730	M217	X	-0.01	-0.01	73.929	98.571
1731	M217	Y	-0.046	-0.046	73.929	98.571
1732	M217	X	-0.01	-0.01	98.571	123.214
1733	M217	Y	-0.046	-0.047	98.571	123.214
1734	M217	X	-0.01	-0.01	123.214	147.857
1735	M217	Y	-0.047	-0.047	123.214	147.857
1736	M217	X	-0.01	-0.01	147.857	172.5
1737	M217	Y	-0.047	-0.047	147.857	172.5
1738	M217	X	-0.01	-0.01	172.5	197.143
1739	M217	Y	-0.047	-0.047	172.5	197.143
1740	M217	X	-0.01	-0.01	197.143	221.786
1741	M217	Y	-0.047	-0.046	197.143	221.786
1742	M217	X	-0.01	-0.01	221.786	246.429
1743	M217	Y	-0.046	-0.046	221.786	246.429
1744	M217	X	-0.01	-0.01	246.429	271.071
1745	M217	Y	-0.046	-0.045	246.429	271.071
1746	M217	X	-0.01	-0.01	271.071	295.714
1747	M217	Y	-0.045	-0.047	271.071	295.714
1748	M217	X	-0.01	-0.011	295.714	320.357
1749	M217	Y	-0.047	-0.049	295.714	320.357
1750	M217	X	-0.011	-0.01	320.357	345
1751	M217	Y	-0.049	-0.048	320.357	345
1752	M218	X	-0.017	-0.017	0	24.643
1753	M218	Y	-0.081	-0.081	0	24.643
1754	M218	X	-0.017	-0.017	24.643	49.286
1755	M218	Y	-0.081	-0.081	24.643	49.286
1756	M218	X	-0.017	-0.017	49.286	73.929
1757	M218	Y	-0.081	-0.081	49.286	73.929
1758	M218	X	-0.017	-0.017	73.929	98.571
1759	M218	Y	-0.081	-0.081	73.929	98.571
1760	M218	X	-0.017	-0.017	98.571	123.214
1761	M218	Y	-0.081	-0.081	98.571	123.214
1762	M218	X	-0.017	-0.017	123.214	147.857
1763	M218	Y	-0.081	-0.081	123.214	147.857
1764	M218	X	-0.017	-0.017	147.857	172.5
1765	M218	Y	-0.081	-0.081	147.857	172.5
1766	M218	X	-0.017	-0.017	172.5	197.143
1767	M218	Y	-0.081	-0.081	172.5	197.143
1768	M218	X	-0.017	-0.017	197.143	221.786
1769	M218	Y	-0.081	-0.081	197.143	221.786
1770	M218	X	-0.017	-0.017	221.786	246.429
1771	M218	Y	-0.081	-0.081	221.786	246.429
1772	M218	X	-0.017	-0.017	246.429	271.071
1773	M218	Y	-0.081	-0.081	246.429	271.071
1774	M218	X	-0.017	-0.017	271.071	295.714
1775	M218	Y	-0.081	-0.08	271.071	295.714
1776	M218	X	-0.017	-0.017	295.714	320.357
1777	M218	Y	-0.08	-0.078	295.714	320.357
1778	M218	X	-0.017	-0.016	320.357	345
1779	M218	Y	-0.078	-0.076	320.357	345
1780	M219	X	-0.017	-0.017	1.972e-13	345
1781	M219	Y	-0.081	-0.081	1.972e-13	345
1782	M220	X	-0.008	-0.009	0	24.643
1783	M220	Y	-0.039	-0.04	0	24.643
1784	M220	X	-0.009	-0.009	24.643	49.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1785	M220	Y	-0.04	-0.042	24.643	49.286
1786	M220	X	-0.009	-0.009	49.286	73.929
1787	M220	Y	-0.042	-0.042	49.286	73.929
1788	M220	X	-0.009	-0.009	73.929	98.571
1789	M220	Y	-0.042	-0.042	73.929	98.571
1790	M220	X	-0.009	-0.009	98.571	123.214
1791	M220	Y	-0.042	-0.042	98.571	123.214
1792	M220	X	-0.009	-0.009	123.214	147.857
1793	M220	Y	-0.042	-0.042	123.214	147.857
1794	M220	X	-0.009	-0.009	147.857	172.5
1795	M220	Y	-0.042	-0.042	147.857	172.5
1796	M220	X	-0.009	-0.009	172.5	197.143
1797	M220	Y	-0.042	-0.042	172.5	197.143
1798	M220	X	-0.009	-0.009	197.143	221.786
1799	M220	Y	-0.042	-0.042	197.143	221.786
1800	M220	X	-0.009	-0.009	221.786	246.429
1801	M220	Y	-0.042	-0.042	221.786	246.429
1802	M220	X	-0.009	-0.009	246.429	271.071
1803	M220	Y	-0.042	-0.042	246.429	271.071
1804	M220	X	-0.009	-0.009	271.071	295.714
1805	M220	Y	-0.042	-0.042	271.071	295.714
1806	M220	X	-0.009	-0.009	295.714	320.357
1807	M220	Y	-0.042	-0.04	295.714	320.357
1808	M220	X	-0.009	-0.008	320.357	345
1809	M220	Y	-0.04	-0.039	320.357	345
1810	M221	X	-0.015	-0.015	0	24.643
1811	M221	Y	-0.069	-0.069	0	24.643
1812	M221	X	-0.015	-0.015	24.643	49.286
1813	M221	Y	-0.069	-0.068	24.643	49.286
1814	M221	X	-0.015	-0.015	49.286	73.929
1815	M221	Y	-0.068	-0.068	49.286	73.929
1816	M221	X	-0.015	-0.015	73.929	98.571
1817	M221	Y	-0.068	-0.068	73.929	98.571
1818	M221	X	-0.015	-0.015	98.571	123.214
1819	M221	Y	-0.068	-0.068	98.571	123.214
1820	M221	X	-0.015	-0.015	123.214	147.857
1821	M221	Y	-0.068	-0.068	123.214	147.857
1822	M221	X	-0.015	-0.015	147.857	172.5
1823	M221	Y	-0.068	-0.068	147.857	172.5
1824	M221	X	-0.015	-0.015	172.5	197.143
1825	M221	Y	-0.068	-0.068	172.5	197.143
1826	M221	X	-0.015	-0.015	197.143	221.786
1827	M221	Y	-0.068	-0.068	197.143	221.786
1828	M221	X	-0.015	-0.015	221.786	246.429
1829	M221	Y	-0.068	-0.068	221.786	246.429
1830	M221	X	-0.015	-0.015	246.429	271.071
1831	M221	Y	-0.068	-0.068	246.429	271.071
1832	M221	X	-0.015	-0.015	271.071	295.714
1833	M221	Y	-0.068	-0.068	271.071	295.714
1834	M221	X	-0.015	-0.015	295.714	320.357
1835	M221	Y	-0.068	-0.069	295.714	320.357
1836	M221	X	-0.015	-0.015	320.357	345
1837	M221	Y	-0.069	-0.069	320.357	345
1838	M238	X	-0.008	-0.009	0	24.643
1839	M238	Y	-0.038	-0.04	0	24.643

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1840	M238	X	-0.009	-0.009	24.643	49.286
1841	M238	Y	-0.04	-0.041	24.643	49.286
1842	M238	X	-0.009	-0.009	49.286	73.929
1843	M238	Y	-0.041	-0.041	49.286	73.929
1844	M238	X	-0.009	-0.009	73.929	98.571
1845	M238	Y	-0.041	-0.041	73.929	98.571
1846	M238	X	-0.009	-0.009	98.571	123.214
1847	M238	Y	-0.041	-0.041	98.571	123.214
1848	M238	X	-0.009	-0.009	123.214	147.857
1849	M238	Y	-0.041	-0.041	123.214	147.857
1850	M238	X	-0.009	-0.009	147.857	172.5
1851	M238	Y	-0.041	-0.041	147.857	172.5
1852	M238	X	-0.009	-0.009	172.5	197.143
1853	M238	Y	-0.041	-0.041	172.5	197.143
1854	M238	X	-0.009	-0.009	197.143	221.786
1855	M238	Y	-0.041	-0.041	197.143	221.786
1856	M238	X	-0.009	-0.009	221.786	246.429
1857	M238	Y	-0.041	-0.041	221.786	246.429
1858	M238	X	-0.009	-0.009	246.429	271.071
1859	M238	Y	-0.041	-0.041	246.429	271.071
1860	M238	X	-0.009	-0.009	271.071	295.714
1861	M238	Y	-0.041	-0.041	271.071	295.714
1862	M238	X	-0.009	-0.009	295.714	320.357
1863	M238	Y	-0.041	-0.04	295.714	320.357
1864	M238	X	-0.009	-0.008	320.357	345
1865	M238	Y	-0.04	-0.038	320.357	345
1866	M239	X	-0.01	-0.009	0	24.643
1867	M239	Y	-0.045	-0.04	0	24.643
1868	M239	X	-0.009	-0.008	24.643	49.286
1869	M239	Y	-0.04	-0.038	24.643	49.286
1870	M239	X	-0.008	-0.009	49.286	73.929
1871	M239	Y	-0.038	-0.04	49.286	73.929
1872	M239	X	-0.009	-0.009	73.929	98.571
1873	M239	Y	-0.04	-0.04	73.929	98.571
1874	M239	X	-0.009	-0.009	98.571	123.214
1875	M239	Y	-0.04	-0.04	98.571	123.214
1876	M239	X	-0.009	-0.009	123.214	147.857
1877	M239	Y	-0.04	-0.04	123.214	147.857
1878	M239	X	-0.009	-0.009	147.857	172.5
1879	M239	Y	-0.04	-0.04	147.857	172.5
1880	M239	X	-0.009	-0.009	172.5	197.143
1881	M239	Y	-0.04	-0.04	172.5	197.143
1882	M239	X	-0.009	-0.009	197.143	221.786
1883	M239	Y	-0.04	-0.04	197.143	221.786
1884	M239	X	-0.009	-0.009	221.786	246.429
1885	M239	Y	-0.04	-0.04	221.786	246.429
1886	M239	X	-0.009	-0.009	246.429	271.071
1887	M239	Y	-0.04	-0.04	246.429	271.071
1888	M239	X	-0.009	-0.008	271.071	295.714
1889	M239	Y	-0.04	-0.038	271.071	295.714
1890	M239	X	-0.008	-0.009	295.714	320.357
1891	M239	Y	-0.038	-0.04	295.714	320.357
1892	M239	X	-0.009	-0.01	320.357	345
1893	M239	Y	-0.04	-0.045	320.357	345
1894	M240	X	-0.008	-0.008	0	24.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1895	M240	Y	-0.036	-0.037	0	24.857
1896	M240	X	-0.008	-0.008	24.857	49.714
1897	M240	Y	-0.037	-0.038	24.857	49.714
1898	M240	X	-0.008	-0.01	49.714	74.571
1899	M240	Y	-0.038	-0.045	49.714	74.571
1900	M240	X	-0.01	-0.01	74.571	99.429
1901	M240	Y	-0.045	-0.045	74.571	99.429
1902	M240	X	-0.01	-0.008	99.429	124.286
1903	M240	Y	-0.045	-0.038	99.429	124.286
1904	M240	X	-0.008	-0.008	124.286	149.143
1905	M240	Y	-0.038	-0.038	124.286	149.143
1906	M240	X	-0.008	-0.008	149.143	174
1907	M240	Y	-0.038	-0.038	149.143	174
1908	M240	X	-0.008	-0.008	174	198.857
1909	M240	Y	-0.038	-0.038	174	198.857
1910	M240	X	-0.008	-0.008	198.857	223.714
1911	M240	Y	-0.038	-0.038	198.857	223.714
1912	M240	X	-0.008	-0.01	223.714	248.571
1913	M240	Y	-0.038	-0.045	223.714	248.571
1914	M240	X	-0.01	-0.01	248.571	273.429
1915	M240	Y	-0.045	-0.045	248.571	273.429
1916	M240	X	-0.01	-0.008	273.429	298.286
1917	M240	Y	-0.045	-0.038	273.429	298.286
1918	M240	X	-0.008	-0.008	298.286	323.143
1919	M240	Y	-0.038	-0.037	298.286	323.143
1920	M240	X	-0.008	-0.008	323.143	348
1921	M240	Y	-0.037	-0.036	323.143	348
1922	M241	X	-0.009	-0.008	0	24.857
1923	M241	Y	-0.042	-0.037	0	24.857
1924	M241	X	-0.008	-0.008	24.857	49.714
1925	M241	Y	-0.037	-0.036	24.857	49.714
1926	M241	X	-0.008	-0.009	49.714	74.571
1927	M241	Y	-0.036	-0.043	49.714	74.571
1928	M241	X	-0.009	-0.009	74.571	99.429
1929	M241	Y	-0.043	-0.044	74.571	99.429
1930	M241	X	-0.009	-0.008	99.429	124.286
1931	M241	Y	-0.044	-0.038	99.429	124.286
1932	M241	X	-0.008	-0.008	124.286	149.143
1933	M241	Y	-0.038	-0.038	124.286	149.143
1934	M241	X	-0.008	-0.008	149.143	174
1935	M241	Y	-0.038	-0.038	149.143	174
1936	M241	X	-0.008	-0.008	174	198.857
1937	M241	Y	-0.038	-0.038	174	198.857
1938	M241	X	-0.008	-0.008	198.857	223.714
1939	M241	Y	-0.038	-0.038	198.857	223.714
1940	M241	X	-0.008	-0.009	223.714	248.571
1941	M241	Y	-0.038	-0.044	223.714	248.571
1942	M241	X	-0.009	-0.009	248.571	273.429
1943	M241	Y	-0.044	-0.044	248.571	273.429
1944	M241	X	-0.009	-0.008	273.429	298.286
1945	M241	Y	-0.044	-0.036	273.429	298.286
1946	M241	X	-0.008	-0.008	298.286	323.143
1947	M241	Y	-0.036	-0.037	298.286	323.143
1948	M241	X	-0.008	-0.009	323.143	348
1949	M241	Y	-0.037	-0.042	323.143	348

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1950	M242	X	-0.008	-0.009	0	24.643
1951	M242	Y	-0.038	-0.04	0	24.643
1952	M242	X	-0.009	-0.009	24.643	49.286
1953	M242	Y	-0.04	-0.041	24.643	49.286
1954	M242	X	-0.009	-0.009	49.286	73.929
1955	M242	Y	-0.041	-0.041	49.286	73.929
1956	M242	X	-0.009	-0.009	73.929	98.571
1957	M242	Y	-0.041	-0.041	73.929	98.571
1958	M242	X	-0.009	-0.009	98.571	123.214
1959	M242	Y	-0.041	-0.041	98.571	123.214
1960	M242	X	-0.009	-0.009	123.214	147.857
1961	M242	Y	-0.041	-0.041	123.214	147.857
1962	M242	X	-0.009	-0.009	147.857	172.5
1963	M242	Y	-0.041	-0.041	147.857	172.5
1964	M242	X	-0.009	-0.009	172.5	197.143
1965	M242	Y	-0.041	-0.041	172.5	197.143
1966	M242	X	-0.009	-0.009	197.143	221.786
1967	M242	Y	-0.041	-0.041	197.143	221.786
1968	M242	X	-0.009	-0.009	221.786	246.429
1969	M242	Y	-0.041	-0.041	221.786	246.429
1970	M242	X	-0.009	-0.009	246.429	271.071
1971	M242	Y	-0.041	-0.041	246.429	271.071
1972	M242	X	-0.009	-0.009	271.071	295.714
1973	M242	Y	-0.041	-0.041	271.071	295.714
1974	M242	X	-0.009	-0.009	295.714	320.357
1975	M242	Y	-0.041	-0.04	295.714	320.357
1976	M242	X	-0.009	-0.008	320.357	345
1977	M242	Y	-0.04	-0.038	320.357	345
1978	M243	X	-0.008	-0.008	0	24.643
1979	M243	Y	-0.035	-0.039	0	24.643
1980	M243	X	-0.008	-0.008	24.643	49.286
1981	M243	Y	-0.039	-0.037	24.643	49.286
1982	M243	X	-0.008	-0.008	49.286	73.929
1983	M243	Y	-0.037	-0.036	49.286	73.929
1984	M243	X	-0.008	-0.008	73.929	98.571
1985	M243	Y	-0.036	-0.038	73.929	98.571
1986	M243	X	-0.008	-0.009	98.571	123.214
1987	M243	Y	-0.038	-0.04	98.571	123.214
1988	M243	X	-0.009	-0.009	123.214	147.857
1989	M243	Y	-0.04	-0.04	123.214	147.857
1990	M243	X	-0.009	-0.008	147.857	172.5
1991	M243	Y	-0.04	-0.039	147.857	172.5
1992	M243	X	-0.008	-0.01	172.5	197.143
1993	M243	Y	-0.039	-0.047	172.5	197.143
1994	M243	X	-0.01	-0.01	197.143	221.786
1995	M243	Y	-0.047	-0.047	197.143	221.786
1996	M243	X	-0.01	-0.008	221.786	246.429
1997	M243	Y	-0.047	-0.039	221.786	246.429
1998	M243	X	-0.008	-0.008	246.429	271.071
1999	M243	Y	-0.039	-0.039	246.429	271.071
2000	M243	X	-0.008	-0.008	271.071	295.714
2001	M243	Y	-0.039	-0.037	271.071	295.714
2002	M243	X	-0.008	-0.008	295.714	320.357
2003	M243	Y	-0.037	-0.038	295.714	320.357
2004	M243	X	-0.008	-0.009	320.357	345

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2005	M243	Y	-0.038	-0.043	320.357	345
2006	M246	X	-0.008	-0.009	0	24.643
2007	M246	Y	-0.038	-0.04	0	24.643
2008	M246	X	-0.009	-0.009	24.643	49.286
2009	M246	Y	-0.04	-0.041	24.643	49.286
2010	M246	X	-0.009	-0.009	49.286	73.929
2011	M246	Y	-0.041	-0.041	49.286	73.929
2012	M246	X	-0.009	-0.009	73.929	98.571
2013	M246	Y	-0.041	-0.041	73.929	98.571
2014	M246	X	-0.009	-0.009	98.571	123.214
2015	M246	Y	-0.041	-0.041	98.571	123.214
2016	M246	X	-0.009	-0.009	123.214	147.857
2017	M246	Y	-0.041	-0.041	123.214	147.857
2018	M246	X	-0.009	-0.009	147.857	172.5
2019	M246	Y	-0.041	-0.041	147.857	172.5
2020	M246	X	-0.009	-0.009	172.5	197.143
2021	M246	Y	-0.041	-0.041	172.5	197.143
2022	M246	X	-0.009	-0.009	197.143	221.786
2023	M246	Y	-0.041	-0.041	197.143	221.786
2024	M246	X	-0.009	-0.009	221.786	246.429
2025	M246	Y	-0.041	-0.041	221.786	246.429
2026	M246	X	-0.009	-0.009	246.429	271.071
2027	M246	Y	-0.041	-0.041	246.429	271.071
2028	M246	X	-0.009	-0.009	271.071	295.714
2029	M246	Y	-0.041	-0.041	271.071	295.714
2030	M246	X	-0.009	-0.009	295.714	320.357
2031	M246	Y	-0.041	-0.04	295.714	320.357
2032	M246	X	-0.009	-0.008	320.357	345
2033	M246	Y	-0.04	-0.038	320.357	345
2034	M247	X	-0.01	-0.009	0	24.643
2035	M247	Y	-0.046	-0.04	0	24.643
2036	M247	X	-0.009	-0.008	24.643	49.286
2037	M247	Y	-0.04	-0.038	24.643	49.286
2038	M247	X	-0.008	-0.008	49.286	73.929
2039	M247	Y	-0.038	-0.039	49.286	73.929
2040	M247	X	-0.008	-0.008	73.929	98.571
2041	M247	Y	-0.039	-0.039	73.929	98.571
2042	M247	X	-0.008	-0.008	98.571	123.214
2043	M247	Y	-0.039	-0.039	98.571	123.214
2044	M247	X	-0.008	-0.009	123.214	147.857
2045	M247	Y	-0.039	-0.043	123.214	147.857
2046	M247	X	-0.009	-0.01	147.857	172.5
2047	M247	Y	-0.043	-0.047	147.857	172.5
2048	M247	X	-0.01	-0.009	172.5	197.143
2049	M247	Y	-0.047	-0.043	172.5	197.143
2050	M247	X	-0.009	-0.008	197.143	221.786
2051	M247	Y	-0.043	-0.038	197.143	221.786
2052	M247	X	-0.008	-0.009	221.786	246.429
2053	M247	Y	-0.038	-0.04	221.786	246.429
2054	M247	X	-0.009	-0.008	246.429	271.071
2055	M247	Y	-0.04	-0.037	246.429	271.071
2056	M247	X	-0.008	-0.008	271.071	295.714
2057	M247	Y	-0.037	-0.035	271.071	295.714
2058	M247	X	-0.008	-0.008	295.714	320.357
2059	M247	Y	-0.035	-0.037	295.714	320.357

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2060	M247	X	-0.008	-0.008	320.357	345
2061	M247	Y	-0.037	-0.036	320.357	345
2062	M125	X	-0.001	-0.001	3.118e-13	345
2063	M125	Y	0.012	0.012	3.118e-13	345
2064	M140	X	-0.001	-0.001	3.029e-13	345
2065	M140	Y	0.012	0.012	3.029e-13	345
2066	M54	X	-0.001	-0.001	5.977e-13	345
2067	M54	Y	0.012	0.012	5.977e-13	345
2068	M71	X	-0.001	-0.001	1.82e-12	345
2069	M71	Y	0.012	0.012	1.82e-12	345
2070	M84	X	-0.001	-0.001	2.256e-13	348
2071	M84	Y	0.012	0.012	2.256e-13	348
2072	M107	X	-0.002	-0.002	0	24.857
2073	M107	Y	0.021	0.021	0	24.857
2074	M107	X	-0.002	-0.002	24.857	49.714
2075	M107	Y	0.021	0.021	24.857	49.714
2076	M107	X	-0.002	-0.002	49.714	74.571
2077	M107	Y	0.021	0.021	49.714	74.571
2078	M107	X	-0.002	-0.002	74.571	99.429
2079	M107	Y	0.021	0.021	74.571	99.429
2080	M107	X	-0.002	-0.002	99.429	124.286
2081	M107	Y	0.021	0.021	99.429	124.286
2082	M107	X	-0.002	-0.002	124.286	149.143
2083	M107	Y	0.021	0.021	124.286	149.143
2084	M107	X	-0.002	-0.002	149.143	174
2085	M107	Y	0.021	0.022	149.143	174
2086	M107	X	-0.002	-0.002	174	198.857
2087	M107	Y	0.022	0.022	174	198.857
2088	M107	X	-0.002	-0.002	198.857	223.714
2089	M107	Y	0.022	0.021	198.857	223.714
2090	M107	X	-0.002	-0.002	223.714	248.571
2091	M107	Y	0.021	0.021	223.714	248.571
2092	M107	X	-0.002	-0.002	248.571	273.429
2093	M107	Y	0.021	0.021	248.571	273.429
2094	M107	X	-0.002	-0.002	273.429	298.286
2095	M107	Y	0.021	0.021	273.429	298.286
2096	M107	X	-0.002	-0.002	298.286	323.143
2097	M107	Y	0.021	0.021	298.286	323.143
2098	M107	X	-0.002	-0.002	323.143	348
2099	M107	Y	0.021	0.021	323.143	348
2100	M108	X	-0.001	-0.002	0	24.857
2101	M108	Y	0.015	0.015	0	24.857
2102	M108	X	-0.002	-0.002	24.857	49.714
2103	M108	Y	0.015	0.016	24.857	49.714
2104	M108	X	-0.002	-0.002	49.714	74.571
2105	M108	Y	0.016	0.018	49.714	74.571
2106	M108	X	-0.002	-0.002	74.571	99.429
2107	M108	Y	0.018	0.019	74.571	99.429
2108	M108	X	-0.002	-0.002	99.429	124.286
2109	M108	Y	0.019	0.017	99.429	124.286
2110	M108	X	-0.002	-0.002	124.286	149.143
2111	M108	Y	0.017	0.016	124.286	149.143
2112	M108	X	-0.002	-0.002	149.143	174
2113	M108	Y	0.016	0.016	149.143	174
2114	M108	X	-0.002	-0.001	174	198.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2115	M108	Y	0.016	0.014	174	198.857
2116	M108	X	-0.001	-0.002	198.857	223.714
2117	M108	Y	0.014	0.016	198.857	223.714
2118	M108	X	-0.002	-0.002	223.714	248.571
2119	M108	Y	0.016	0.02	223.714	248.571
2120	M108	X	-0.002	-0.002	248.571	273.429
2121	M108	Y	0.02	0.018	248.571	273.429
2122	M108	X	-0.002	-0.002	273.429	298.286
2123	M108	Y	0.018	0.016	273.429	298.286
2124	M108	X	-0.002	-0.002	298.286	323.143
2125	M108	Y	0.016	0.015	298.286	323.143
2126	M108	X	-0.002	-0.001	323.143	348
2127	M108	Y	0.015	0.015	323.143	348
2128	M109	X	-0.002	-0.002	0	24.857
2129	M109	Y	0.025	0.025	0	24.857
2130	M109	X	-0.002	-0.002	24.857	49.714
2131	M109	Y	0.025	0.025	24.857	49.714
2132	M109	X	-0.002	-0.002	49.714	74.571
2133	M109	Y	0.025	0.025	49.714	74.571
2134	M109	X	-0.002	-0.002	74.571	99.429
2135	M109	Y	0.025	0.025	74.571	99.429
2136	M109	X	-0.002	-0.003	99.429	124.286
2137	M109	Y	0.025	0.025	99.429	124.286
2138	M109	X	-0.003	-0.003	124.286	149.143
2139	M109	Y	0.025	0.026	124.286	149.143
2140	M109	X	-0.003	-0.003	149.143	174
2141	M109	Y	0.026	0.026	149.143	174
2142	M109	X	-0.003	-0.003	174	198.857
2143	M109	Y	0.026	0.026	174	198.857
2144	M109	X	-0.003	-0.002	198.857	223.714
2145	M109	Y	0.026	0.025	198.857	223.714
2146	M109	X	-0.002	-0.002	223.714	248.571
2147	M109	Y	0.025	0.025	223.714	248.571
2148	M109	X	-0.002	-0.003	248.571	273.429
2149	M109	Y	0.025	0.026	248.571	273.429
2150	M109	X	-0.003	-0.002	273.429	298.286
2151	M109	Y	0.026	0.025	273.429	298.286
2152	M109	X	-0.002	-0.002	298.286	323.143
2153	M109	Y	0.025	0.025	298.286	323.143
2154	M109	X	-0.002	-0.002	323.143	348
2155	M109	Y	0.025	0.025	323.143	348
2156	M110	X	-0.002	-0.002	6.652e-13	348
2157	M110	Y	0.025	0.025	6.652e-13	348
2158	M112	X	-0.002	-0.002	1.151e-12	348
2159	M112	Y	0.025	0.025	1.151e-12	348
2160	M115	X	-0.002	-0.002	0	24.857
2161	M115	Y	0.022	0.022	0	24.857
2162	M115	X	-0.002	-0.002	24.857	49.714
2163	M115	Y	0.022	0.022	24.857	49.714
2164	M115	X	-0.002	-0.002	49.714	74.571
2165	M115	Y	0.022	0.022	49.714	74.571
2166	M115	X	-0.002	-0.002	74.571	99.429
2167	M115	Y	0.022	0.022	74.571	99.429
2168	M115	X	-0.002	-0.002	99.429	124.286
2169	M115	Y	0.022	0.022	99.429	124.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2170	M115	X	-0.002	-0.002	124.286	149.143
2171	M115	Y	0.022	0.023	124.286	149.143
2172	M115	X	-0.002	-0.002	149.143	174
2173	M115	Y	0.023	0.023	149.143	174
2174	M115	X	-0.002	-0.002	174	198.857
2175	M115	Y	0.023	0.023	174	198.857
2176	M115	X	-0.002	-0.002	198.857	223.714
2177	M115	Y	0.023	0.022	198.857	223.714
2178	M115	X	-0.002	-0.002	223.714	248.571
2179	M115	Y	0.022	0.022	223.714	248.571
2180	M115	X	-0.002	-0.002	248.571	273.429
2181	M115	Y	0.022	0.022	248.571	273.429
2182	M115	X	-0.002	-0.002	273.429	298.286
2183	M115	Y	0.022	0.022	273.429	298.286
2184	M115	X	-0.002	-0.002	298.286	323.143
2185	M115	Y	0.022	0.022	298.286	323.143
2186	M115	X	-0.002	-0.002	323.143	348
2187	M115	Y	0.022	0.022	323.143	348
2188	M116	X	-0.001	-0.002	0	24.857
2189	M116	Y	0.012	0.015	0	24.857
2190	M116	X	-0.002	-0.002	24.857	49.714
2191	M116	Y	0.015	0.017	24.857	49.714
2192	M116	X	-0.002	-0.002	49.714	74.571
2193	M116	Y	0.017	0.016	49.714	74.571
2194	M116	X	-0.002	-0.002	74.571	99.429
2195	M116	Y	0.016	0.015	74.571	99.429
2196	M116	X	-0.002	-0.002	99.429	124.286
2197	M116	Y	0.015	0.016	99.429	124.286
2198	M116	X	-0.002	-0.002	124.286	149.143
2199	M116	Y	0.016	0.015	124.286	149.143
2200	M116	X	-0.002	-0.001	149.143	174
2201	M116	Y	0.015	0.014	149.143	174
2202	M116	X	-0.001	-0.001	174	198.857
2203	M116	Y	0.014	0.014	174	198.857
2204	M116	X	-0.001	-0.002	198.857	223.714
2205	M116	Y	0.014	0.017	198.857	223.714
2206	M116	X	-0.002	-0.002	223.714	248.571
2207	M116	Y	0.017	0.016	223.714	248.571
2208	M116	X	-0.002	-0.002	248.571	273.429
2209	M116	Y	0.016	0.016	248.571	273.429
2210	M116	X	-0.002	-0.002	273.429	298.286
2211	M116	Y	0.016	0.017	273.429	298.286
2212	M116	X	-0.002	-0.002	298.286	323.143
2213	M116	Y	0.017	0.015	298.286	323.143
2214	M116	X	-0.002	-0.001	323.143	348
2215	M116	Y	0.015	0.012	323.143	348
2216	M117	X	-0.003	-0.003	0	24.857
2217	M117	Y	0.025	0.025	0	24.857
2218	M117	X	-0.003	-0.002	24.857	49.714
2219	M117	Y	0.025	0.025	24.857	49.714
2220	M117	X	-0.002	-0.002	49.714	74.571
2221	M117	Y	0.025	0.025	49.714	74.571
2222	M117	X	-0.002	-0.002	74.571	99.429
2223	M117	Y	0.025	0.025	74.571	99.429
2224	M117	X	-0.002	-0.003	99.429	124.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2225	M117	Y	0.025	0.025	99.429	124.286
2226	M117	X	-0.003	-0.003	124.286	149.143
2227	M117	Y	0.025	0.026	124.286	149.143
2228	M117	X	-0.003	-0.003	149.143	174
2229	M117	Y	0.026	0.026	149.143	174
2230	M117	X	-0.003	-0.003	174	198.857
2231	M117	Y	0.026	0.026	174	198.857
2232	M117	X	-0.003	-0.002	198.857	223.714
2233	M117	Y	0.026	0.025	198.857	223.714
2234	M117	X	-0.002	-0.002	223.714	248.571
2235	M117	Y	0.025	0.025	223.714	248.571
2236	M117	X	-0.002	-0.003	248.571	273.429
2237	M117	Y	0.025	0.026	248.571	273.429
2238	M117	X	-0.003	-0.002	273.429	298.286
2239	M117	Y	0.026	0.025	273.429	298.286
2240	M117	X	-0.002	-0.003	298.286	323.143
2241	M117	Y	0.025	0.025	298.286	323.143
2242	M117	X	-0.003	-0.003	323.143	348
2243	M117	Y	0.025	0.025	323.143	348
2244	M119	X	-0.002	-0.002	1.62e-12	348
2245	M119	Y	0.025	0.025	1.62e-12	348
2246	M120	X	-0.002	-0.002	1.592e-12	348
2247	M120	Y	0.025	0.025	1.592e-12	348
2248	M121	X	-0.002	-0.002	0	24.857
2249	M121	Y	0.019	0.019	0	24.857
2250	M121	X	-0.002	-0.002	24.857	49.714
2251	M121	Y	0.019	0.019	24.857	49.714
2252	M121	X	-0.002	-0.002	49.714	74.571
2253	M121	Y	0.019	0.019	49.714	74.571
2254	M121	X	-0.002	-0.002	74.571	99.429
2255	M121	Y	0.019	0.019	74.571	99.429
2256	M121	X	-0.002	-0.002	99.429	124.286
2257	M121	Y	0.019	0.019	99.429	124.286
2258	M121	X	-0.002	-0.002	124.286	149.143
2259	M121	Y	0.019	0.02	124.286	149.143
2260	M121	X	-0.002	-0.002	149.143	174
2261	M121	Y	0.02	0.02	149.143	174
2262	M121	X	-0.002	-0.002	174	198.857
2263	M121	Y	0.02	0.019	174	198.857
2264	M121	X	-0.002	-0.002	198.857	223.714
2265	M121	Y	0.019	0.019	198.857	223.714
2266	M121	X	-0.002	-0.002	223.714	248.571
2267	M121	Y	0.019	0.019	223.714	248.571
2268	M121	X	-0.002	-0.002	248.571	273.429
2269	M121	Y	0.019	0.019	248.571	273.429
2270	M121	X	-0.002	-0.002	273.429	298.286
2271	M121	Y	0.019	0.019	273.429	298.286
2272	M121	X	-0.002	-0.002	298.286	323.143
2273	M121	Y	0.019	0.019	298.286	323.143
2274	M121	X	-0.002	-0.002	323.143	348
2275	M121	Y	0.019	0.019	323.143	348
2276	M122	X	-0.0008566	-0.0009362	0	24.857
2277	M122	Y	0.009	0.009	0	24.857
2278	M122	X	-0.0009362	-0.001	24.857	49.714
2279	M122	Y	0.009	0.011	24.857	49.714

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2280	M122	X	-0.001	-0.001	49.714	74.571
2281	M122	Y	0.011	0.011	49.714	74.571
2282	M122	X	-0.001	-0.001	74.571	99.429
2283	M122	Y	0.011	0.011	74.571	99.429
2284	M122	X	-0.001	-0.001	99.429	124.286
2285	M122	Y	0.011	0.011	99.429	124.286
2286	M122	X	-0.001	-0.0008282	124.286	149.143
2287	M122	Y	0.011	0.008	124.286	149.143
2288	M122	X	-0.0008282	-0.0008281	149.143	174
2289	M122	Y	0.008	0.008	149.143	174
2290	M122	X	-0.0008281	-0.0009569	174	198.857
2291	M122	Y	0.008	0.01	174	198.857
2292	M122	X	-0.0009569	-0.001	198.857	223.714
2293	M122	Y	0.01	0.011	198.857	223.714
2294	M122	X	-0.001	-0.001	223.714	248.571
2295	M122	Y	0.011	0.011	223.714	248.571
2296	M122	X	-0.001	-0.001	248.571	273.429
2297	M122	Y	0.011	0.011	248.571	273.429
2298	M122	X	-0.001	-0.001	273.429	298.286
2299	M122	Y	0.011	0.011	273.429	298.286
2300	M122	X	-0.001	-0.0009362	298.286	323.143
2301	M122	Y	0.011	0.009	298.286	323.143
2302	M122	X	-0.0009362	-0.0008566	323.143	348
2303	M122	Y	0.009	0.009	323.143	348
2304	M128	X	-0.002	-0.002	0	24.643
2305	M128	Y	0.021	0.021	0	24.643
2306	M128	X	-0.002	-0.002	24.643	49.286
2307	M128	Y	0.021	0.021	24.643	49.286
2308	M128	X	-0.002	-0.002	49.286	73.929
2309	M128	Y	0.021	0.021	49.286	73.929
2310	M128	X	-0.002	-0.002	73.929	98.571
2311	M128	Y	0.021	0.021	73.929	98.571
2312	M128	X	-0.002	-0.002	98.571	123.214
2313	M128	Y	0.021	0.021	98.571	123.214
2314	M128	X	-0.002	-0.002	123.214	147.857
2315	M128	Y	0.021	0.021	123.214	147.857
2316	M128	X	-0.002	-0.002	147.857	172.5
2317	M128	Y	0.021	0.021	147.857	172.5
2318	M128	X	-0.002	-0.002	172.5	197.143
2319	M128	Y	0.021	0.021	172.5	197.143
2320	M128	X	-0.002	-0.002	197.143	221.786
2321	M128	Y	0.021	0.021	197.143	221.786
2322	M128	X	-0.002	-0.002	221.786	246.429
2323	M128	Y	0.021	0.021	221.786	246.429
2324	M128	X	-0.002	-0.002	246.429	271.071
2325	M128	Y	0.021	0.021	246.429	271.071
2326	M128	X	-0.002	-0.002	271.071	295.714
2327	M128	Y	0.021	0.021	271.071	295.714
2328	M128	X	-0.002	-0.002	295.714	320.357
2329	M128	Y	0.021	0.021	295.714	320.357
2330	M128	X	-0.002	-0.002	320.357	345
2331	M128	Y	0.021	0.021	320.357	345
2332	M130	X	-0.002	-0.002	0	24.643
2333	M130	Y	0.016	0.016	0	24.643
2334	M130	X	-0.002	-0.002	24.643	49.286

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2335	M130	Y	0.016	0.017	24.643	49.286
2336	M130	X	-0.002	-0.002	49.286	73.929
2337	M130	Y	0.017	0.017	49.286	73.929
2338	M130	X	-0.002	-0.002	73.929	98.571
2339	M130	Y	0.017	0.017	73.929	98.571
2340	M130	X	-0.002	-0.002	98.571	123.214
2341	M130	Y	0.017	0.016	98.571	123.214
2342	M130	X	-0.002	-0.002	123.214	147.857
2343	M130	Y	0.016	0.017	123.214	147.857
2344	M130	X	-0.002	-0.002	147.857	172.5
2345	M130	Y	0.017	0.018	147.857	172.5
2346	M130	X	-0.002	-0.002	172.5	197.143
2347	M130	Y	0.018	0.017	172.5	197.143
2348	M130	X	-0.002	-0.002	197.143	221.786
2349	M130	Y	0.017	0.016	197.143	221.786
2350	M130	X	-0.002	-0.002	221.786	246.429
2351	M130	Y	0.016	0.017	221.786	246.429
2352	M130	X	-0.002	-0.002	246.429	271.071
2353	M130	Y	0.017	0.017	246.429	271.071
2354	M130	X	-0.002	-0.002	271.071	295.714
2355	M130	Y	0.017	0.017	271.071	295.714
2356	M130	X	-0.002	-0.002	295.714	320.357
2357	M130	Y	0.017	0.016	295.714	320.357
2358	M130	X	-0.002	-0.002	320.357	345
2359	M130	Y	0.016	0.016	320.357	345
2360	M131	X	-0.002	-0.002	3.324e-12	345
2361	M131	Y	0.025	0.025	3.324e-12	345
2362	M149	X	-0.002	-0.002	2.728e-12	345
2363	M149	Y	0.025	0.025	2.728e-12	345
2364	M150	X	-0.003	-0.003	0	24.643
2365	M150	Y	0.025	0.025	0	24.643
2366	M150	X	-0.003	-0.002	24.643	49.286
2367	M150	Y	0.025	0.025	24.643	49.286
2368	M150	X	-0.002	-0.002	49.286	73.929
2369	M150	Y	0.025	0.025	49.286	73.929
2370	M150	X	-0.002	-0.002	73.929	98.571
2371	M150	Y	0.025	0.025	73.929	98.571
2372	M150	X	-0.002	-0.003	98.571	123.214
2373	M150	Y	0.025	0.025	98.571	123.214
2374	M150	X	-0.003	-0.003	123.214	147.857
2375	M150	Y	0.025	0.026	123.214	147.857
2376	M150	X	-0.003	-0.003	147.857	172.5
2377	M150	Y	0.026	0.026	147.857	172.5
2378	M150	X	-0.003	-0.003	172.5	197.143
2379	M150	Y	0.026	0.026	172.5	197.143
2380	M150	X	-0.003	-0.002	197.143	221.786
2381	M150	Y	0.026	0.025	197.143	221.786
2382	M150	X	-0.002	-0.002	221.786	246.429
2383	M150	Y	0.025	0.025	221.786	246.429
2384	M150	X	-0.002	-0.003	246.429	271.071
2385	M150	Y	0.025	0.026	246.429	271.071
2386	M150	X	-0.003	-0.002	271.071	295.714
2387	M150	Y	0.026	0.025	271.071	295.714
2388	M150	X	-0.002	-0.002	295.714	320.357
2389	M150	Y	0.025	0.025	295.714	320.357

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2390	M150	X	-0.002	-0.003	320.357	345
2391	M150	Y	0.025	0.025	320.357	345
2392	M151	X	-0.001	-0.002	0	24.643
2393	M151	Y	0.012	0.015	0	24.643
2394	M151	X	-0.002	-0.002	24.643	49.286
2395	M151	Y	0.015	0.017	24.643	49.286
2396	M151	X	-0.002	-0.002	49.286	73.929
2397	M151	Y	0.017	0.016	49.286	73.929
2398	M151	X	-0.002	-0.002	73.929	98.571
2399	M151	Y	0.016	0.015	73.929	98.571
2400	M151	X	-0.002	-0.002	98.571	123.214
2401	M151	Y	0.015	0.016	98.571	123.214
2402	M151	X	-0.002	-0.002	123.214	147.857
2403	M151	Y	0.016	0.015	123.214	147.857
2404	M151	X	-0.002	-0.001	147.857	172.5
2405	M151	Y	0.015	0.014	147.857	172.5
2406	M151	X	-0.001	-0.001	172.5	197.143
2407	M151	Y	0.014	0.014	172.5	197.143
2408	M151	X	-0.001	-0.002	197.143	221.786
2409	M151	Y	0.014	0.017	197.143	221.786
2410	M151	X	-0.002	-0.002	221.786	246.429
2411	M151	Y	0.017	0.016	221.786	246.429
2412	M151	X	-0.002	-0.002	246.429	271.071
2413	M151	Y	0.016	0.016	246.429	271.071
2414	M151	X	-0.002	-0.002	271.071	295.714
2415	M151	Y	0.016	0.017	271.071	295.714
2416	M151	X	-0.002	-0.002	295.714	320.357
2417	M151	Y	0.017	0.015	295.714	320.357
2418	M151	X	-0.002	-0.001	320.357	345
2419	M151	Y	0.015	0.012	320.357	345
2420	M152	X	-0.003	-0.002	0	24.643
2421	M152	Y	0.025	0.025	0	24.643
2422	M152	X	-0.002	-0.002	24.643	49.286
2423	M152	Y	0.025	0.025	24.643	49.286
2424	M152	X	-0.002	-0.002	49.286	73.929
2425	M152	Y	0.025	0.025	49.286	73.929
2426	M152	X	-0.002	-0.002	73.929	98.571
2427	M152	Y	0.025	0.025	73.929	98.571
2428	M152	X	-0.002	-0.003	98.571	123.214
2429	M152	Y	0.025	0.025	98.571	123.214
2430	M152	X	-0.003	-0.002	123.214	147.857
2431	M152	Y	0.025	0.025	123.214	147.857
2432	M152	X	-0.002	-0.002	147.857	172.5
2433	M152	Y	0.025	0.024	147.857	172.5
2434	M152	X	-0.002	-0.002	172.5	197.143
2435	M152	Y	0.024	0.025	172.5	197.143
2436	M152	X	-0.002	-0.003	197.143	221.786
2437	M152	Y	0.025	0.025	197.143	221.786
2438	M152	X	-0.003	-0.002	221.786	246.429
2439	M152	Y	0.025	0.025	221.786	246.429
2440	M152	X	-0.002	-0.002	246.429	271.071
2441	M152	Y	0.025	0.025	246.429	271.071
2442	M152	X	-0.002	-0.002	271.071	295.714
2443	M152	Y	0.025	0.025	271.071	295.714
2444	M152	X	-0.002	-0.002	295.714	320.357

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2445	M152	Y	0.025	0.025	295.714	320.357
2446	M152	X	-0.002	-0.003	320.357	345
2447	M152	Y	0.025	0.025	320.357	345
2448	M153	X	-0.002	-0.002	7.887e-13	345
2449	M153	Y	0.025	0.025	7.887e-13	345
2450	M154	X	-0.002	-0.002	0	24.643
2451	M154	Y	0.022	0.022	0	24.643
2452	M154	X	-0.002	-0.002	24.643	49.286
2453	M154	Y	0.022	0.022	24.643	49.286
2454	M154	X	-0.002	-0.002	49.286	73.929
2455	M154	Y	0.022	0.022	49.286	73.929
2456	M154	X	-0.002	-0.002	73.929	98.571
2457	M154	Y	0.022	0.022	73.929	98.571
2458	M154	X	-0.002	-0.002	98.571	123.214
2459	M154	Y	0.022	0.022	98.571	123.214
2460	M154	X	-0.002	-0.002	123.214	147.857
2461	M154	Y	0.022	0.023	123.214	147.857
2462	M154	X	-0.002	-0.002	147.857	172.5
2463	M154	Y	0.023	0.022	147.857	172.5
2464	M154	X	-0.002	-0.002	172.5	197.143
2465	M154	Y	0.022	0.021	172.5	197.143
2466	M154	X	-0.002	-0.002	197.143	221.786
2467	M154	Y	0.021	0.023	197.143	221.786
2468	M154	X	-0.002	-0.002	221.786	246.429
2469	M154	Y	0.023	0.022	221.786	246.429
2470	M154	X	-0.002	-0.002	246.429	271.071
2471	M154	Y	0.022	0.022	246.429	271.071
2472	M154	X	-0.002	-0.002	271.071	295.714
2473	M154	Y	0.022	0.022	271.071	295.714
2474	M154	X	-0.002	-0.002	295.714	320.357
2475	M154	Y	0.022	0.022	295.714	320.357
2476	M154	X	-0.002	-0.002	320.357	345
2477	M154	Y	0.022	0.022	320.357	345
2478	M155	X	-0.002	-0.002	6.839e-13	345
2479	M155	Y	0.025	0.025	6.839e-13	345
2480	M156	X	-0.002	-0.002	0	24.643
2481	M156	Y	0.019	0.019	0	24.643
2482	M156	X	-0.002	-0.002	24.643	49.286
2483	M156	Y	0.019	0.019	24.643	49.286
2484	M156	X	-0.002	-0.002	49.286	73.929
2485	M156	Y	0.019	0.019	49.286	73.929
2486	M156	X	-0.002	-0.002	73.929	98.571
2487	M156	Y	0.019	0.019	73.929	98.571
2488	M156	X	-0.002	-0.002	98.571	123.214
2489	M156	Y	0.019	0.019	98.571	123.214
2490	M156	X	-0.002	-0.002	123.214	147.857
2491	M156	Y	0.019	0.019	123.214	147.857
2492	M156	X	-0.002	-0.002	147.857	172.5
2493	M156	Y	0.019	0.02	147.857	172.5
2494	M156	X	-0.002	-0.002	172.5	197.143
2495	M156	Y	0.02	0.02	172.5	197.143
2496	M156	X	-0.002	-0.002	197.143	221.786
2497	M156	Y	0.02	0.019	197.143	221.786
2498	M156	X	-0.002	-0.002	221.786	246.429
2499	M156	Y	0.019	0.019	221.786	246.429

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2500	M156	X	-0.002	-0.002	246.429	271.071
2501	M156	Y	0.019	0.019	246.429	271.071
2502	M156	X	-0.002	-0.002	271.071	295.714
2503	M156	Y	0.019	0.019	271.071	295.714
2504	M156	X	-0.002	-0.002	295.714	320.357
2505	M156	Y	0.019	0.019	295.714	320.357
2506	M156	X	-0.002	-0.002	320.357	345
2507	M156	Y	0.019	0.019	320.357	345
2508	M157	X	-0.0008559	-0.0009359	0	24.643
2509	M157	Y	0.009	0.009	0	24.643
2510	M157	X	-0.0009359	-0.001	24.643	49.286
2511	M157	Y	0.009	0.011	24.643	49.286
2512	M157	X	-0.001	-0.001	49.286	73.929
2513	M157	Y	0.011	0.011	49.286	73.929
2514	M157	X	-0.001	-0.001	73.929	98.571
2515	M157	Y	0.011	0.011	73.929	98.571
2516	M157	X	-0.001	-0.001	98.571	123.214
2517	M157	Y	0.011	0.011	98.571	123.214
2518	M157	X	-0.001	-0.0009571	123.214	147.857
2519	M157	Y	0.011	0.01	123.214	147.857
2520	M157	X	-0.0009571	-0.0008283	147.857	172.5
2521	M157	Y	0.01	0.008	147.857	172.5
2522	M157	X	-0.0008283	-0.0008282	172.5	197.143
2523	M157	Y	0.008	0.008	172.5	197.143
2524	M157	X	-0.0008282	-0.001	197.143	221.786
2525	M157	Y	0.008	0.011	197.143	221.786
2526	M157	X	-0.001	-0.001	221.786	246.429
2527	M157	Y	0.011	0.011	221.786	246.429
2528	M157	X	-0.001	-0.001	246.429	271.071
2529	M157	Y	0.011	0.011	246.429	271.071
2530	M157	X	-0.001	-0.001	271.071	295.714
2531	M157	Y	0.011	0.011	271.071	295.714
2532	M157	X	-0.001	-0.0009359	295.714	320.357
2533	M157	Y	0.011	0.009	295.714	320.357
2534	M157	X	-0.0009359	-0.0008559	320.357	345
2535	M157	Y	0.009	0.009	320.357	345
2536	M158	X	-0.002	-0.002	0	345
2537	M158	Y	0.025	0.025	0	345
2538	M160	X	-0.002	-0.002	0	24.643
2539	M160	Y	0.016	0.023	0	24.643
2540	M160	X	-0.002	-0.003	24.643	49.286
2541	M160	Y	0.023	0.027	24.643	49.286
2542	M160	X	-0.003	-0.003	49.286	73.929
2543	M160	Y	0.027	0.026	49.286	73.929
2544	M160	X	-0.003	-0.003	73.929	98.571
2545	M160	Y	0.026	0.025	73.929	98.571
2546	M160	X	-0.003	-0.003	98.571	123.214
2547	M160	Y	0.025	0.025	98.571	123.214
2548	M160	X	-0.003	-0.002	123.214	147.857
2549	M160	Y	0.025	0.024	123.214	147.857
2550	M160	X	-0.002	-0.002	147.857	172.5
2551	M160	Y	0.024	0.023	147.857	172.5
2552	M160	X	-0.002	-0.002	172.5	197.143
2553	M160	Y	0.023	0.024	172.5	197.143
2554	M160	X	-0.002	-0.003	197.143	221.786

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2555	M160	Y	0.024	0.025	197.143	221.786
2556	M160	X	-0.003	-0.002	221.786	246.429
2557	M160	Y	0.025	0.025	221.786	246.429
2558	M160	X	-0.002	-0.003	246.429	271.071
2559	M160	Y	0.025	0.026	246.429	271.071
2560	M160	X	-0.003	-0.003	271.071	295.714
2561	M160	Y	0.026	0.027	271.071	295.714
2562	M160	X	-0.003	-0.002	295.714	320.357
2563	M160	Y	0.027	0.023	295.714	320.357
2564	M160	X	-0.002	-0.002	320.357	345
2565	M160	Y	0.023	0.016	320.357	345
2566	M161	X	-0.002	-0.002	0	345
2567	M161	Y	0.025	0.025	0	345
2568	M163	X	-0.0008559	-0.0009359	0	24.643
2569	M163	Y	0.009	0.009	0	24.643
2570	M163	X	-0.0009359	-0.001	24.643	49.286
2571	M163	Y	0.009	0.011	24.643	49.286
2572	M163	X	-0.001	-0.001	49.286	73.929
2573	M163	Y	0.011	0.011	49.286	73.929
2574	M163	X	-0.001	-0.001	73.929	98.571
2575	M163	Y	0.011	0.011	73.929	98.571
2576	M163	X	-0.001	-0.001	98.571	123.214
2577	M163	Y	0.011	0.011	98.571	123.214
2578	M163	X	-0.001	-0.0009571	123.214	147.857
2579	M163	Y	0.011	0.01	123.214	147.857
2580	M163	X	-0.0009571	-0.0008283	147.857	172.5
2581	M163	Y	0.01	0.008	147.857	172.5
2582	M163	X	-0.0008283	-0.0008282	172.5	197.143
2583	M163	Y	0.008	0.008	172.5	197.143
2584	M163	X	-0.0008282	-0.001	197.143	221.786
2585	M163	Y	0.008	0.011	197.143	221.786
2586	M163	X	-0.001	-0.001	221.786	246.429
2587	M163	Y	0.011	0.011	221.786	246.429
2588	M163	X	-0.001	-0.001	246.429	271.071
2589	M163	Y	0.011	0.011	246.429	271.071
2590	M163	X	-0.001	-0.001	271.071	295.714
2591	M163	Y	0.011	0.011	271.071	295.714
2592	M163	X	-0.001	-0.0009359	295.714	320.357
2593	M163	Y	0.011	0.009	295.714	320.357
2594	M163	X	-0.0009359	-0.0008559	320.357	345
2595	M163	Y	0.009	0.009	320.357	345
2596	M174	X	-0.002	-0.002	0	24.643
2597	M174	Y	0.019	0.019	0	24.643
2598	M174	X	-0.002	-0.002	24.643	49.286
2599	M174	Y	0.019	0.019	24.643	49.286
2600	M174	X	-0.002	-0.002	49.286	73.929
2601	M174	Y	0.019	0.019	49.286	73.929
2602	M174	X	-0.002	-0.002	73.929	98.571
2603	M174	Y	0.019	0.019	73.929	98.571
2604	M174	X	-0.002	-0.002	98.571	123.214
2605	M174	Y	0.019	0.019	98.571	123.214
2606	M174	X	-0.002	-0.002	123.214	147.857
2607	M174	Y	0.019	0.019	123.214	147.857
2608	M174	X	-0.002	-0.002	147.857	172.5
2609	M174	Y	0.019	0.02	147.857	172.5

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2610	M174	X	-0.002	-0.002	172.5	197.143
2611	M174	Y	0.02	0.02	172.5	197.143
2612	M174	X	-0.002	-0.002	197.143	221.786
2613	M174	Y	0.02	0.019	197.143	221.786
2614	M174	X	-0.002	-0.002	221.786	246.429
2615	M174	Y	0.019	0.019	221.786	246.429
2616	M174	X	-0.002	-0.002	246.429	271.071
2617	M174	Y	0.019	0.019	246.429	271.071
2618	M174	X	-0.002	-0.002	271.071	295.714
2619	M174	Y	0.019	0.019	271.071	295.714
2620	M174	X	-0.002	-0.002	295.714	320.357
2621	M174	Y	0.019	0.019	295.714	320.357
2622	M174	X	-0.002	-0.002	320.357	345
2623	M174	Y	0.019	0.019	320.357	345
2624	M175	X	-0.002	-0.002	2.833e-13	345
2625	M175	Y	0.025	0.025	2.833e-13	345
2626	M176	X	-0.003	-0.003	0	24.643
2627	M176	Y	0.025	0.025	0	24.643
2628	M176	X	-0.003	-0.002	24.643	49.286
2629	M176	Y	0.025	0.025	24.643	49.286
2630	M176	X	-0.002	-0.003	49.286	73.929
2631	M176	Y	0.025	0.025	49.286	73.929
2632	M176	X	-0.003	-0.003	73.929	98.571
2633	M176	Y	0.025	0.026	73.929	98.571
2634	M176	X	-0.003	-0.003	98.571	123.214
2635	M176	Y	0.026	0.025	98.571	123.214
2636	M176	X	-0.003	-0.002	123.214	147.857
2637	M176	Y	0.025	0.024	123.214	147.857
2638	M176	X	-0.002	-0.003	147.857	172.5
2639	M176	Y	0.024	0.025	147.857	172.5
2640	M176	X	-0.003	-0.003	172.5	197.143
2641	M176	Y	0.025	0.026	172.5	197.143
2642	M176	X	-0.003	-0.002	197.143	221.786
2643	M176	Y	0.026	0.025	197.143	221.786
2644	M176	X	-0.002	-0.003	221.786	246.429
2645	M176	Y	0.025	0.026	221.786	246.429
2646	M176	X	-0.003	-0.003	246.429	271.071
2647	M176	Y	0.026	0.026	246.429	271.071
2648	M176	X	-0.003	-0.002	271.071	295.714
2649	M176	Y	0.026	0.025	271.071	295.714
2650	M176	X	-0.002	-0.002	295.714	320.357
2651	M176	Y	0.025	0.025	295.714	320.357
2652	M176	X	-0.002	-0.003	320.357	345
2653	M176	Y	0.025	0.025	320.357	345
2654	M177	X	-0.003	-0.003	0	24.643
2655	M177	Y	0.026	0.025	0	24.643
2656	M177	X	-0.003	-0.002	24.643	49.286
2657	M177	Y	0.025	0.025	24.643	49.286
2658	M177	X	-0.002	-0.003	49.286	73.929
2659	M177	Y	0.025	0.026	49.286	73.929
2660	M177	X	-0.003	-0.002	73.929	98.571
2661	M177	Y	0.026	0.025	73.929	98.571
2662	M177	X	-0.002	-0.002	98.571	123.214
2663	M177	Y	0.025	0.025	98.571	123.214
2664	M177	X	-0.002	-0.003	123.214	147.857

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2665	M177	Y	0.025	0.026	123.214	147.857
2666	M177	X	-0.003	-0.003	147.857	172.5
2667	M177	Y	0.026	0.026	147.857	172.5
2668	M177	X	-0.003	-0.003	172.5	197.143
2669	M177	Y	0.026	0.026	172.5	197.143
2670	M177	X	-0.003	-0.003	197.143	221.786
2671	M177	Y	0.026	0.025	197.143	221.786
2672	M177	X	-0.003	-0.002	221.786	246.429
2673	M177	Y	0.025	0.025	221.786	246.429
2674	M177	X	-0.002	-0.002	246.429	271.071
2675	M177	Y	0.025	0.025	246.429	271.071
2676	M177	X	-0.002	-0.002	271.071	295.714
2677	M177	Y	0.025	0.025	271.071	295.714
2678	M177	X	-0.002	-0.003	295.714	320.357
2679	M177	Y	0.025	0.025	295.714	320.357
2680	M177	X	-0.003	-0.003	320.357	345
2681	M177	Y	0.025	0.026	320.357	345
2682	M178	X	-0.002	-0.002	2.16e-12	345
2683	M178	Y	0.025	0.025	2.16e-12	345
2684	M179	X	-0.003	-0.002	0	24.643
2685	M179	Y	0.025	0.025	0	24.643
2686	M179	X	-0.002	-0.002	24.643	49.286
2687	M179	Y	0.025	0.025	24.643	49.286
2688	M179	X	-0.002	-0.002	49.286	73.929
2689	M179	Y	0.025	0.025	49.286	73.929
2690	M179	X	-0.002	-0.002	73.929	98.571
2691	M179	Y	0.025	0.025	73.929	98.571
2692	M179	X	-0.002	-0.003	98.571	123.214
2693	M179	Y	0.025	0.025	98.571	123.214
2694	M179	X	-0.003	-0.002	123.214	147.857
2695	M179	Y	0.025	0.025	123.214	147.857
2696	M179	X	-0.002	-0.002	147.857	172.5
2697	M179	Y	0.025	0.024	147.857	172.5
2698	M179	X	-0.002	-0.002	172.5	197.143
2699	M179	Y	0.024	0.025	172.5	197.143
2700	M179	X	-0.002	-0.003	197.143	221.786
2701	M179	Y	0.025	0.025	197.143	221.786
2702	M179	X	-0.003	-0.002	221.786	246.429
2703	M179	Y	0.025	0.025	221.786	246.429
2704	M179	X	-0.002	-0.002	246.429	271.071
2705	M179	Y	0.025	0.025	246.429	271.071
2706	M179	X	-0.002	-0.002	271.071	295.714
2707	M179	Y	0.025	0.025	271.071	295.714
2708	M179	X	-0.002	-0.002	295.714	320.357
2709	M179	Y	0.025	0.025	295.714	320.357
2710	M179	X	-0.002	-0.003	320.357	345
2711	M179	Y	0.025	0.025	320.357	345
2712	M180	X	-0.002	-0.002	0	24.643
2713	M180	Y	0.024	0.024	0	24.643
2714	M180	X	-0.002	-0.002	24.643	49.286
2715	M180	Y	0.024	0.025	24.643	49.286
2716	M180	X	-0.002	-0.003	49.286	73.929
2717	M180	Y	0.025	0.025	49.286	73.929
2718	M180	X	-0.003	-0.002	73.929	98.571
2719	M180	Y	0.025	0.025	73.929	98.571

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2720	M180	X	-0.002	-0.002	98.571	123.214
2721	M180	Y	0.025	0.024	98.571	123.214
2722	M180	X	-0.002	-0.003	123.214	147.857
2723	M180	Y	0.024	0.025	123.214	147.857
2724	M180	X	-0.003	-0.003	147.857	172.5
2725	M180	Y	0.025	0.027	147.857	172.5
2726	M180	X	-0.003	-0.003	172.5	197.143
2727	M180	Y	0.027	0.025	172.5	197.143
2728	M180	X	-0.003	-0.002	197.143	221.786
2729	M180	Y	0.025	0.024	197.143	221.786
2730	M180	X	-0.002	-0.002	221.786	246.429
2731	M180	Y	0.024	0.025	221.786	246.429
2732	M180	X	-0.002	-0.003	246.429	271.071
2733	M180	Y	0.025	0.025	246.429	271.071
2734	M180	X	-0.003	-0.002	271.071	295.714
2735	M180	Y	0.025	0.025	271.071	295.714
2736	M180	X	-0.002	-0.002	295.714	320.357
2737	M180	Y	0.025	0.024	295.714	320.357
2738	M180	X	-0.002	-0.002	320.357	345
2739	M180	Y	0.024	0.024	320.357	345
2740	M181	X	-0.003	-0.002	0	24.643
2741	M181	Y	0.025	0.025	0	24.643
2742	M181	X	-0.002	-0.002	24.643	49.286
2743	M181	Y	0.025	0.025	24.643	49.286
2744	M181	X	-0.002	-0.002	49.286	73.929
2745	M181	Y	0.025	0.025	49.286	73.929
2746	M181	X	-0.002	-0.002	73.929	98.571
2747	M181	Y	0.025	0.025	73.929	98.571
2748	M181	X	-0.002	-0.002	98.571	123.214
2749	M181	Y	0.025	0.025	98.571	123.214
2750	M181	X	-0.002	-0.002	123.214	147.857
2751	M181	Y	0.025	0.025	123.214	147.857
2752	M181	X	-0.002	-0.002	147.857	172.5
2753	M181	Y	0.025	0.025	147.857	172.5
2754	M181	X	-0.002	-0.002	172.5	197.143
2755	M181	Y	0.025	0.025	172.5	197.143
2756	M181	X	-0.002	-0.002	197.143	221.786
2757	M181	Y	0.025	0.025	197.143	221.786
2758	M181	X	-0.002	-0.002	221.786	246.429
2759	M181	Y	0.025	0.025	221.786	246.429
2760	M181	X	-0.002	-0.002	246.429	271.071
2761	M181	Y	0.025	0.025	246.429	271.071
2762	M181	X	-0.002	-0.002	271.071	295.714
2763	M181	Y	0.025	0.025	271.071	295.714
2764	M181	X	-0.002	-0.002	295.714	320.357
2765	M181	Y	0.025	0.025	295.714	320.357
2766	M181	X	-0.002	-0.003	320.357	345
2767	M181	Y	0.025	0.025	320.357	345
2768	M182	X	-0.002	-0.002	0	345
2769	M182	Y	0.025	0.025	0	345
2770	M184	X	-0.001	-0.002	0	24.643
2771	M184	Y	0.012	0.015	0	24.643
2772	M184	X	-0.002	-0.002	24.643	49.286
2773	M184	Y	0.015	0.017	24.643	49.286
2774	M184	X	-0.002	-0.002	49.286	73.929

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2775	M184	Y	0.017	0.017	49.286	73.929
2776	M184	X	-0.002	-0.001	73.929	98.571
2777	M184	Y	0.017	0.015	73.929	98.571
2778	M184	X	-0.001	-0.001	98.571	123.214
2779	M184	Y	0.015	0.015	98.571	123.214
2780	M184	X	-0.001	-0.002	123.214	147.857
2781	M184	Y	0.015	0.016	123.214	147.857
2782	M184	X	-0.002	-0.002	147.857	172.5
2783	M184	Y	0.016	0.016	147.857	172.5
2784	M184	X	-0.002	-0.001	172.5	197.143
2785	M184	Y	0.016	0.015	172.5	197.143
2786	M184	X	-0.001	-0.002	197.143	221.786
2787	M184	Y	0.015	0.016	197.143	221.786
2788	M184	X	-0.002	-0.002	221.786	246.429
2789	M184	Y	0.016	0.016	221.786	246.429
2790	M184	X	-0.002	-0.002	246.429	271.071
2791	M184	Y	0.016	0.015	246.429	271.071
2792	M184	X	-0.002	-0.002	271.071	295.714
2793	M184	Y	0.015	0.016	271.071	295.714
2794	M184	X	-0.002	-0.002	295.714	320.357
2795	M184	Y	0.016	0.015	295.714	320.357
2796	M184	X	-0.002	-0.001	320.357	345
2797	M184	Y	0.015	0.012	320.357	345
2798	M185	X	-0.002	-0.002	1.677e-12	345
2799	M185	Y	0.025	0.025	1.677e-12	345
2800	M187	X	-0.0008559	-0.0009359	0	24.643
2801	M187	Y	0.009	0.009	0	24.643
2802	M187	X	-0.0009359	-0.001	24.643	49.286
2803	M187	Y	0.009	0.011	24.643	49.286
2804	M187	X	-0.001	-0.001	49.286	73.929
2805	M187	Y	0.011	0.011	49.286	73.929
2806	M187	X	-0.001	-0.001	73.929	98.571
2807	M187	Y	0.011	0.011	73.929	98.571
2808	M187	X	-0.001	-0.001	98.571	123.214
2809	M187	Y	0.011	0.011	98.571	123.214
2810	M187	X	-0.001	-0.0009571	123.214	147.857
2811	M187	Y	0.011	0.01	123.214	147.857
2812	M187	X	-0.0009571	-0.0008283	147.857	172.5
2813	M187	Y	0.01	0.008	147.857	172.5
2814	M187	X	-0.0008283	-0.0008282	172.5	197.143
2815	M187	Y	0.008	0.008	172.5	197.143
2816	M187	X	-0.0008282	-0.001	197.143	221.786
2817	M187	Y	0.008	0.011	197.143	221.786
2818	M187	X	-0.001	-0.001	221.786	246.429
2819	M187	Y	0.011	0.011	221.786	246.429
2820	M187	X	-0.001	-0.001	246.429	271.071
2821	M187	Y	0.011	0.011	246.429	271.071
2822	M187	X	-0.001	-0.001	271.071	295.714
2823	M187	Y	0.011	0.011	271.071	295.714
2824	M187	X	-0.001	-0.0009359	295.714	320.357
2825	M187	Y	0.011	0.009	295.714	320.357
2826	M187	X	-0.0009359	-0.0008559	320.357	345
2827	M187	Y	0.009	0.009	320.357	345
2828	M198	X	-0.002	-0.002	0	24.643
2829	M198	Y	0.019	0.019	0	24.643

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2830	M198	X	-0.002	-0.002	24.643	49.286
2831	M198	Y	0.019	0.019	24.643	49.286
2832	M198	X	-0.002	-0.002	49.286	73.929
2833	M198	Y	0.019	0.019	49.286	73.929
2834	M198	X	-0.002	-0.002	73.929	98.571
2835	M198	Y	0.019	0.019	73.929	98.571
2836	M198	X	-0.002	-0.002	98.571	123.214
2837	M198	Y	0.019	0.019	98.571	123.214
2838	M198	X	-0.002	-0.002	123.214	147.857
2839	M198	Y	0.019	0.019	123.214	147.857
2840	M198	X	-0.002	-0.002	147.857	172.5
2841	M198	Y	0.019	0.02	147.857	172.5
2842	M198	X	-0.002	-0.002	172.5	197.143
2843	M198	Y	0.02	0.02	172.5	197.143
2844	M198	X	-0.002	-0.002	197.143	221.786
2845	M198	Y	0.02	0.019	197.143	221.786
2846	M198	X	-0.002	-0.002	221.786	246.429
2847	M198	Y	0.019	0.019	221.786	246.429
2848	M198	X	-0.002	-0.002	246.429	271.071
2849	M198	Y	0.019	0.019	246.429	271.071
2850	M198	X	-0.002	-0.002	271.071	295.714
2851	M198	Y	0.019	0.019	271.071	295.714
2852	M198	X	-0.002	-0.002	295.714	320.357
2853	M198	Y	0.019	0.019	295.714	320.357
2854	M198	X	-0.002	-0.002	320.357	345
2855	M198	Y	0.019	0.019	320.357	345
2856	M199	X	-0.002	-0.002	2.842e-14	345
2857	M199	Y	0.025	0.025	2.842e-14	345
2858	M200	X	-0.003	-0.003	0	24.643
2859	M200	Y	0.025	0.025	0	24.643
2860	M200	X	-0.003	-0.002	24.643	49.286
2861	M200	Y	0.025	0.025	24.643	49.286
2862	M200	X	-0.002	-0.003	49.286	73.929
2863	M200	Y	0.025	0.025	49.286	73.929
2864	M200	X	-0.003	-0.003	73.929	98.571
2865	M200	Y	0.025	0.026	73.929	98.571
2866	M200	X	-0.003	-0.003	98.571	123.214
2867	M200	Y	0.026	0.025	98.571	123.214
2868	M200	X	-0.003	-0.002	123.214	147.857
2869	M200	Y	0.025	0.024	123.214	147.857
2870	M200	X	-0.002	-0.003	147.857	172.5
2871	M200	Y	0.024	0.025	147.857	172.5
2872	M200	X	-0.003	-0.003	172.5	197.143
2873	M200	Y	0.025	0.026	172.5	197.143
2874	M200	X	-0.003	-0.002	197.143	221.786
2875	M200	Y	0.026	0.025	197.143	221.786
2876	M200	X	-0.002	-0.003	221.786	246.429
2877	M200	Y	0.025	0.026	221.786	246.429
2878	M200	X	-0.003	-0.003	246.429	271.071
2879	M200	Y	0.026	0.026	246.429	271.071
2880	M200	X	-0.003	-0.002	271.071	295.714
2881	M200	Y	0.026	0.025	271.071	295.714
2882	M200	X	-0.002	-0.002	295.714	320.357
2883	M200	Y	0.025	0.025	295.714	320.357
2884	M200	X	-0.002	-0.003	320.357	345

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2885	M200	Y	0.025	0.025	320.357	345
2886	M201	X	-0.002	-0.002	0	24.643
2887	M201	Y	0.022	0.022	0	24.643
2888	M201	X	-0.002	-0.002	24.643	49.286
2889	M201	Y	0.022	0.022	24.643	49.286
2890	M201	X	-0.002	-0.002	49.286	73.929
2891	M201	Y	0.022	0.022	49.286	73.929
2892	M201	X	-0.002	-0.002	73.929	98.571
2893	M201	Y	0.022	0.022	73.929	98.571
2894	M201	X	-0.002	-0.002	98.571	123.214
2895	M201	Y	0.022	0.022	98.571	123.214
2896	M201	X	-0.002	-0.002	123.214	147.857
2897	M201	Y	0.022	0.023	123.214	147.857
2898	M201	X	-0.002	-0.002	147.857	172.5
2899	M201	Y	0.023	0.023	147.857	172.5
2900	M201	X	-0.002	-0.002	172.5	197.143
2901	M201	Y	0.023	0.023	172.5	197.143
2902	M201	X	-0.002	-0.002	197.143	221.786
2903	M201	Y	0.023	0.022	197.143	221.786
2904	M201	X	-0.002	-0.002	221.786	246.429
2905	M201	Y	0.022	0.022	221.786	246.429
2906	M201	X	-0.002	-0.002	246.429	271.071
2907	M201	Y	0.022	0.022	246.429	271.071
2908	M201	X	-0.002	-0.002	271.071	295.714
2909	M201	Y	0.022	0.022	271.071	295.714
2910	M201	X	-0.002	-0.002	295.714	320.357
2911	M201	Y	0.022	0.022	295.714	320.357
2912	M201	X	-0.002	-0.002	320.357	345
2913	M201	Y	0.022	0.022	320.357	345
2914	M202	X	-0.002	-0.002	1.025e-12	345
2915	M202	Y	0.025	0.025	1.025e-12	345
2916	M203	X	-0.003	-0.002	0	24.643
2917	M203	Y	0.025	0.025	0	24.643
2918	M203	X	-0.002	-0.002	24.643	49.286
2919	M203	Y	0.025	0.025	24.643	49.286
2920	M203	X	-0.002	-0.002	49.286	73.929
2921	M203	Y	0.025	0.025	49.286	73.929
2922	M203	X	-0.002	-0.002	73.929	98.571
2923	M203	Y	0.025	0.025	73.929	98.571
2924	M203	X	-0.002	-0.003	98.571	123.214
2925	M203	Y	0.025	0.025	98.571	123.214
2926	M203	X	-0.003	-0.002	123.214	147.857
2927	M203	Y	0.025	0.025	123.214	147.857
2928	M203	X	-0.002	-0.002	147.857	172.5
2929	M203	Y	0.025	0.024	147.857	172.5
2930	M203	X	-0.002	-0.002	172.5	197.143
2931	M203	Y	0.024	0.025	172.5	197.143
2932	M203	X	-0.002	-0.003	197.143	221.786
2933	M203	Y	0.025	0.025	197.143	221.786
2934	M203	X	-0.003	-0.002	221.786	246.429
2935	M203	Y	0.025	0.025	221.786	246.429
2936	M203	X	-0.002	-0.002	246.429	271.071
2937	M203	Y	0.025	0.025	246.429	271.071
2938	M203	X	-0.002	-0.002	271.071	295.714
2939	M203	Y	0.025	0.025	271.071	295.714

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2940	M203	X	-0.002	-0.002	295.714	320.357
2941	M203	Y	0.025	0.025	295.714	320.357
2942	M203	X	-0.002	-0.003	320.357	345
2943	M203	Y	0.025	0.025	320.357	345
2944	M204	X	-0.002	-0.002	0	24.643
2945	M204	Y	0.016	0.016	0	24.643
2946	M204	X	-0.002	-0.002	24.643	49.286
2947	M204	Y	0.016	0.017	24.643	49.286
2948	M204	X	-0.002	-0.002	49.286	73.929
2949	M204	Y	0.017	0.017	49.286	73.929
2950	M204	X	-0.002	-0.002	73.929	98.571
2951	M204	Y	0.017	0.017	73.929	98.571
2952	M204	X	-0.002	-0.002	98.571	123.214
2953	M204	Y	0.017	0.016	98.571	123.214
2954	M204	X	-0.002	-0.002	123.214	147.857
2955	M204	Y	0.016	0.017	123.214	147.857
2956	M204	X	-0.002	-0.002	147.857	172.5
2957	M204	Y	0.017	0.018	147.857	172.5
2958	M204	X	-0.002	-0.002	172.5	197.143
2959	M204	Y	0.018	0.017	172.5	197.143
2960	M204	X	-0.002	-0.002	197.143	221.786
2961	M204	Y	0.017	0.016	197.143	221.786
2962	M204	X	-0.002	-0.002	221.786	246.429
2963	M204	Y	0.016	0.017	221.786	246.429
2964	M204	X	-0.002	-0.002	246.429	271.071
2965	M204	Y	0.017	0.017	246.429	271.071
2966	M204	X	-0.002	-0.002	271.071	295.714
2967	M204	Y	0.017	0.017	271.071	295.714
2968	M204	X	-0.002	-0.002	295.714	320.357
2969	M204	Y	0.017	0.016	295.714	320.357
2970	M204	X	-0.002	-0.002	320.357	345
2971	M204	Y	0.016	0.016	320.357	345
2972	M205	X	-0.002	-0.002	0	24.643
2973	M205	Y	0.021	0.021	0	24.643
2974	M205	X	-0.002	-0.002	24.643	49.286
2975	M205	Y	0.021	0.021	24.643	49.286
2976	M205	X	-0.002	-0.002	49.286	73.929
2977	M205	Y	0.021	0.021	49.286	73.929
2978	M205	X	-0.002	-0.002	73.929	98.571
2979	M205	Y	0.021	0.021	73.929	98.571
2980	M205	X	-0.002	-0.002	98.571	123.214
2981	M205	Y	0.021	0.021	98.571	123.214
2982	M205	X	-0.002	-0.002	123.214	147.857
2983	M205	Y	0.021	0.021	123.214	147.857
2984	M205	X	-0.002	-0.002	147.857	172.5
2985	M205	Y	0.021	0.021	147.857	172.5
2986	M205	X	-0.002	-0.002	172.5	197.143
2987	M205	Y	0.021	0.021	172.5	197.143
2988	M205	X	-0.002	-0.002	197.143	221.786
2989	M205	Y	0.021	0.021	197.143	221.786
2990	M205	X	-0.002	-0.002	221.786	246.429
2991	M205	Y	0.021	0.021	221.786	246.429
2992	M205	X	-0.002	-0.002	246.429	271.071
2993	M205	Y	0.021	0.021	246.429	271.071
2994	M205	X	-0.002	-0.002	271.071	295.714

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2995	M205	Y	0.021	0.021	271.071	295.714
2996	M205	X	-0.002	-0.002	295.714	320.357
2997	M205	Y	0.021	0.021	295.714	320.357
2998	M205	X	-0.002	-0.002	320.357	345
2999	M205	Y	0.021	0.021	320.357	345
3000	M206	X	-0.002	-0.002	5.96e-13	345
3001	M206	Y	0.025	0.025	5.96e-13	345
3002	M208	X	-0.001	-0.002	0	24.643
3003	M208	Y	0.012	0.015	0	24.643
3004	M208	X	-0.002	-0.002	24.643	49.286
3005	M208	Y	0.015	0.017	24.643	49.286
3006	M208	X	-0.002	-0.002	49.286	73.929
3007	M208	Y	0.017	0.017	49.286	73.929
3008	M208	X	-0.002	-0.001	73.929	98.571
3009	M208	Y	0.017	0.015	73.929	98.571
3010	M208	X	-0.001	-0.001	98.571	123.214
3011	M208	Y	0.015	0.015	98.571	123.214
3012	M208	X	-0.001	-0.002	123.214	147.857
3013	M208	Y	0.015	0.016	123.214	147.857
3014	M208	X	-0.002	-0.002	147.857	172.5
3015	M208	Y	0.016	0.016	147.857	172.5
3016	M208	X	-0.002	-0.001	172.5	197.143
3017	M208	Y	0.016	0.015	172.5	197.143
3018	M208	X	-0.001	-0.002	197.143	221.786
3019	M208	Y	0.015	0.016	197.143	221.786
3020	M208	X	-0.002	-0.002	221.786	246.429
3021	M208	Y	0.016	0.016	221.786	246.429
3022	M208	X	-0.002	-0.002	246.429	271.071
3023	M208	Y	0.016	0.015	246.429	271.071
3024	M208	X	-0.002	-0.002	271.071	295.714
3025	M208	Y	0.015	0.016	271.071	295.714
3026	M208	X	-0.002	-0.002	295.714	320.357
3027	M208	Y	0.016	0.015	295.714	320.357
3028	M208	X	-0.002	-0.001	320.357	345
3029	M208	Y	0.015	0.012	320.357	345
3030	M209	X	-0.002	-0.002	0	345
3031	M209	Y	0.025	0.025	0	345
3032	M211	X	-0.0008559	-0.0009359	0	24.643
3033	M211	Y	0.009	0.009	0	24.643
3034	M211	X	-0.0009359	-0.001	24.643	49.286
3035	M211	Y	0.009	0.011	24.643	49.286
3036	M211	X	-0.001	-0.001	49.286	73.929
3037	M211	Y	0.011	0.011	49.286	73.929
3038	M211	X	-0.001	-0.001	73.929	98.571
3039	M211	Y	0.011	0.011	73.929	98.571
3040	M211	X	-0.001	-0.001	98.571	123.214
3041	M211	Y	0.011	0.011	98.571	123.214
3042	M211	X	-0.001	-0.0009571	123.214	147.857
3043	M211	Y	0.011	0.01	123.214	147.857
3044	M211	X	-0.0009571	-0.0008283	147.857	172.5
3045	M211	Y	0.01	0.008	147.857	172.5
3046	M211	X	-0.0008283	-0.0008282	172.5	197.143
3047	M211	Y	0.008	0.008	172.5	197.143
3048	M211	X	-0.0008282	-0.001	197.143	221.786
3049	M211	Y	0.008	0.011	197.143	221.786

Member Distributed Loads (BLC 9 : BLC 4 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M52	Z	0.029	0.029	0	266.09
2	M113	Z	0.029	0.029	0	263.78
3	M80	Z	0.029	0.029	0	263.78
4	M123	Z	0.029	0.029	0	266.09
5	M126	Z	0.029	0.029	0	263.78
6	M134	Z	0.029	0.029	0	266.09
7	M64	Z	0.029	0.029	0	263.78
8	M65	Z	0.029	0.029	0	266.09
9	M78	Z	0.029	0.029	0	263.78
10	M79	Z	0.029	0.029	0	266.09
11	M87	Z	0.029	0.029	0	263.78
12	M88	Z	0.029	0.029	0	266.09
13	M56	Z	0.046	0.046	0	709.284
14	M114	Z	0.046	0.046	0	721.531
15	M55	Z	0.046	0.046	0	709.284
16	M73	Z	0.046	0.046	0	709.284
17	M124	Z	0.046	0.046	0	721.531
18	M129	Z	0.046	0.046	0	721.531
19	M60	Z	0.046	0.046	0	709.284
20	M68	Z	0.046	0.046	0	721.531
21	M77	Z	0.046	0.046	0	709.284
22	M82	Z	0.046	0.046	0	721.531
23	M86	Z	0.046	0.046	0	709.284
24	M89	Z	0.046	0.046	0	721.531
25	M67	Z	0.016	0.017	0	26.538
26	M67	Z	0.017	0.022	26.538	53.077
27	M67	Z	0.022	0.022	53.077	79.615
28	M67	Z	0.022	0.018	79.615	106.154
29	M67	Z	0.018	0.018	106.154	132.692
30	M67	Z	0.018	0.018	132.692	159.231
31	M67	Z	0.018	0.018	159.231	185.769
32	M67	Z	0.018	0.022	185.769	212.308
33	M67	Z	0.022	0.022	212.308	238.846
34	M67	Z	0.022	0.018	238.846	265.385
35	M67	Z	0.018	0.017	265.385	291.923
36	M67	Z	0.017	0.008	291.923	318.462
37	M67	Z	0.023	0.014	318.462	345
38	M139	Z	0.03	0.03	28	345
39	M207	Z	0.055	0.059	0	24.643
40	M207	Z	0.059	0.06	24.643	49.286
41	M207	Z	0.06	0.059	49.286	73.929
42	M207	Z	0.059	0.059	73.929	98.571
43	M207	Z	0.059	0.059	98.571	123.214
44	M207	Z	0.059	0.059	123.214	147.857
45	M207	Z	0.059	0.059	147.857	172.5
46	M207	Z	0.059	0.059	172.5	197.143
47	M207	Z	0.059	0.059	197.143	221.786
48	M207	Z	0.059	0.059	221.786	246.429
49	M207	Z	0.059	0.06	246.429	271.071
50	M207	Z	0.06	0.059	271.071	295.714
51	M207	Z	0.059	0.028	295.714	320.357
52	M207	Z	0.028	7.058e-5	320.357	345
53	M210	Z	0.051	0.055	0	24.643
54	M210	Z	0.055	0.056	24.643	49.286
55	M210	Z	0.056	0.055	49.286	73.929

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
56	M210	Z	0.055	0.054	73.929	98.571
57	M210	Z	0.054	0.054	98.571	123.214
58	M210	Z	0.054	0.054	123.214	147.857
59	M210	Z	0.054	0.054	147.857	172.5
60	M210	Z	0.054	0.054	172.5	197.143
61	M210	Z	0.054	0.054	197.143	221.786
62	M210	Z	0.054	0.055	221.786	246.429
63	M210	Z	0.055	0.056	246.429	271.071
64	M210	Z	0.056	0.055	271.071	295.714
65	M210	Z	0.055	0.027	295.714	320.357
66	M210	Z	0.027	6.813e-5	320.357	345
67	M212	Z	0.05	0.05	0	24.643
68	M212	Z	0.05	0.05	24.643	49.286
69	M212	Z	0.05	0.05	49.286	73.929
70	M212	Z	0.05	0.05	73.929	98.571
71	M212	Z	0.05	0.05	98.571	123.214
72	M212	Z	0.05	0.05	123.214	147.857
73	M212	Z	0.05	0.05	147.857	172.5
74	M212	Z	0.05	0.05	172.5	197.143
75	M212	Z	0.05	0.05	197.143	221.786
76	M212	Z	0.05	0.05	221.786	246.429
77	M212	Z	0.05	0.05	246.429	271.071
78	M212	Z	0.05	0.05	271.071	295.714
79	M212	Z	0.05	0.025	295.714	320.357
80	M212	Z	0.025	-2.679e-6	320.357	345
81	M213	Z	0.038	0.039	0	24.643
82	M213	Z	0.039	0.04	24.643	49.286
83	M213	Z	0.04	0.039	49.286	73.929
84	M213	Z	0.039	0.038	73.929	98.571
85	M213	Z	0.038	0.038	98.571	123.214
86	M213	Z	0.038	0.045	123.214	147.857
87	M213	Z	0.045	0.045	147.857	172.5
88	M213	Z	0.045	0.038	172.5	197.143
89	M213	Z	0.038	0.038	197.143	221.786
90	M213	Z	0.038	0.039	221.786	246.429
91	M213	Z	0.039	0.04	246.429	271.071
92	M213	Z	0.04	0.039	271.071	295.714
93	M213	Z	0.039	0.019	295.714	320.357
94	M213	Z	0.019	2.253e-5	320.357	345
95	M214	Z	0.06	0.06	0	24.643
96	M214	Z	0.06	0.059	24.643	49.286
97	M214	Z	0.059	0.059	49.286	73.929
98	M214	Z	0.059	0.06	73.929	98.571
99	M214	Z	0.06	0.059	98.571	123.214
100	M214	Z	0.059	0.058	123.214	147.857
101	M214	Z	0.058	0.058	147.857	172.5
102	M214	Z	0.058	0.059	172.5	197.143
103	M214	Z	0.059	0.06	197.143	221.786
104	M214	Z	0.06	0.059	221.786	246.429
105	M214	Z	0.059	0.059	246.429	271.071
106	M214	Z	0.059	0.06	271.071	295.714
107	M214	Z	0.06	0.03	295.714	320.357
108	M214	Z	0.03	-2.953e-6	320.357	345
109	M215	Z	0.06	0.06	8.349e-14	317
110	M216	Z	0.06	0.06	9.237e-14	317

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
111	M217	Z	0.048	0.037	0	24.643
112	M217	Z	0.037	0.032	24.643	49.286
113	M217	Z	0.032	0.033	49.286	73.929
114	M217	Z	0.033	0.034	73.929	98.571
115	M217	Z	0.034	0.034	98.571	123.214
116	M217	Z	0.034	0.034	123.214	147.857
117	M217	Z	0.034	0.034	147.857	172.5
118	M217	Z	0.034	0.034	172.5	197.143
119	M217	Z	0.034	0.034	197.143	221.786
120	M217	Z	0.034	0.033	221.786	246.429
121	M217	Z	0.033	0.039	246.429	271.071
122	M217	Z	0.039	0.037	271.071	295.714
123	M217	Z	0.037	0.015	295.714	320.357
124	M217	Z	0.015	-0.0001901	320.357	345
125	M218	Z	0.06	0.06	1.048e-13	317
126	M219	Z	0.06	0.06	2.114e-13	317
127	M220	Z	0.028	0.03	0	24.643
128	M220	Z	0.03	0.031	24.643	49.286
129	M220	Z	0.031	0.031	49.286	73.929
130	M220	Z	0.031	0.031	73.929	98.571
131	M220	Z	0.031	0.031	98.571	123.214
132	M220	Z	0.031	0.031	123.214	147.857
133	M220	Z	0.031	0.031	147.857	172.5
134	M220	Z	0.031	0.031	172.5	197.143
135	M220	Z	0.031	0.031	197.143	221.786
136	M220	Z	0.031	0.031	221.786	246.429
137	M220	Z	0.031	0.031	246.429	271.071
138	M220	Z	0.031	0.03	271.071	295.714
139	M220	Z	0.03	0.015	295.714	320.357
140	M220	Z	0.015	2.582e-5	320.357	345
141	M221	Z	0.051	0.05	0	24.643
142	M221	Z	0.05	0.05	24.643	49.286
143	M221	Z	0.05	0.05	49.286	73.929
144	M221	Z	0.05	0.05	73.929	98.571
145	M221	Z	0.05	0.05	98.571	123.214
146	M221	Z	0.05	0.05	123.214	147.857
147	M221	Z	0.05	0.05	147.857	172.5
148	M221	Z	0.05	0.05	172.5	197.143
149	M221	Z	0.05	0.05	197.143	221.786
150	M221	Z	0.05	0.05	221.786	246.429
151	M221	Z	0.05	0.05	246.429	271.071
152	M221	Z	0.05	0.05	271.071	295.714
153	M221	Z	0.05	0.025	295.714	320.357
154	M221	Z	0.025	-3.163e-6	320.357	345
155	M246	Z	0.028	0.029	0	24.643
156	M246	Z	0.029	0.03	24.643	49.286
157	M246	Z	0.03	0.03	49.286	73.929
158	M246	Z	0.03	0.03	73.929	98.571
159	M246	Z	0.03	0.03	98.571	123.214
160	M246	Z	0.03	0.03	123.214	147.857
161	M246	Z	0.03	0.03	147.857	172.5
162	M246	Z	0.03	0.03	172.5	197.143
163	M246	Z	0.03	0.03	197.143	221.786
164	M246	Z	0.03	0.03	221.786	246.429
165	M246	Z	0.03	0.03	246.429	271.071

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
166	M246	Z	0.03	0.029	271.071	295.714
167	M246	Z	0.029	0.014	295.714	320.357
168	M246	Z	0.014	2.154e-5	320.357	345
169	M247	Z	0.035	0.03	0	24.643
170	M247	Z	0.03	0.028	24.643	49.286
171	M247	Z	0.028	0.029	49.286	73.929
172	M247	Z	0.029	0.029	73.929	98.571
173	M247	Z	0.029	0.029	98.571	123.214
174	M247	Z	0.029	0.029	123.214	147.857
175	M247	Z	0.029	0.029	147.857	172.5
176	M247	Z	0.029	0.029	172.5	197.143
177	M247	Z	0.029	0.029	197.143	221.786
178	M247	Z	0.029	0.029	221.786	246.429
179	M247	Z	0.029	0.031	246.429	271.071
180	M247	Z	0.031	0.03	271.071	295.714
181	M247	Z	0.03	0.014	295.714	320.357
182	M247	Z	0.014	-8.752e-5	320.357	345
183	M140	Z	0.03	0.03	2.78e-13	317
184	M206	Z	0.06	0.06	28	345
185	M208	Z	4.407e-5	0.014	0	24.643
186	M208	Z	0.014	0.031	24.643	49.286
187	M208	Z	0.031	0.037	49.286	73.929
188	M208	Z	0.037	0.04	73.929	98.571
189	M208	Z	0.04	0.04	98.571	123.214
190	M208	Z	0.04	0.037	123.214	147.857
191	M208	Z	0.037	0.035	147.857	172.5
192	M208	Z	0.035	0.035	172.5	197.143
193	M208	Z	0.035	0.039	197.143	221.786
194	M208	Z	0.039	0.037	221.786	246.429
195	M208	Z	0.037	0.035	246.429	271.071
196	M208	Z	0.035	0.039	271.071	295.714
197	M208	Z	0.039	0.038	295.714	320.357
198	M208	Z	0.038	0.035	320.357	345
199	M209	Z	0.06	0.06	28	345
200	M211	Z	3.476e-5	0.011	0	24.643
201	M211	Z	0.011	0.024	24.643	49.286
202	M211	Z	0.024	0.025	49.286	73.929
203	M211	Z	0.025	0.025	73.929	98.571
204	M211	Z	0.025	0.025	98.571	123.214
205	M211	Z	0.025	0.025	123.214	147.857
206	M211	Z	0.025	0.025	147.857	172.5
207	M211	Z	0.025	0.025	172.5	197.143
208	M211	Z	0.025	0.025	197.143	221.786
209	M211	Z	0.025	0.025	221.786	246.429
210	M211	Z	0.025	0.025	246.429	271.071
211	M211	Z	0.025	0.025	271.071	295.714
212	M211	Z	0.025	0.024	295.714	320.357
213	M211	Z	0.024	0.022	320.357	345
214	M222	Z	-5.196e-7	0.022	0	24.643
215	M222	Z	0.022	0.045	24.643	49.286
216	M222	Z	0.045	0.045	49.286	73.929
217	M222	Z	0.045	0.045	73.929	98.571
218	M222	Z	0.045	0.045	98.571	123.214
219	M222	Z	0.045	0.045	123.214	147.857
220	M222	Z	0.045	0.045	147.857	172.5

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
221	M222	Z	0.045	0.045	172.5	197.143
222	M222	Z	0.045	0.045	197.143	221.786
223	M222	Z	0.045	0.045	221.786	246.429
224	M222	Z	0.045	0.045	246.429	271.071
225	M222	Z	0.045	0.045	271.071	295.714
226	M222	Z	0.045	0.045	295.714	320.357
227	M222	Z	0.045	0.045	320.357	345
228	M223	Z	0.06	0.06	28	345
229	M224	Z	-1.571e-5	0.03	0	24.643
230	M224	Z	0.03	0.06	24.643	49.286
231	M224	Z	0.06	0.059	49.286	73.929
232	M224	Z	0.059	0.059	73.929	98.571
233	M224	Z	0.059	0.06	98.571	123.214
234	M224	Z	0.06	0.062	123.214	147.857
235	M224	Z	0.062	0.062	147.857	172.5
236	M224	Z	0.062	0.062	172.5	197.143
237	M224	Z	0.062	0.059	197.143	221.786
238	M224	Z	0.059	0.059	221.786	246.429
239	M224	Z	0.059	0.061	246.429	271.071
240	M224	Z	0.061	0.059	271.071	295.714
241	M224	Z	0.059	0.06	295.714	320.357
242	M224	Z	0.06	0.06	320.357	345
243	M225	Z	-1.078e-5	0.026	0	24.643
244	M225	Z	0.026	0.052	24.643	49.286
245	M225	Z	0.052	0.051	49.286	73.929
246	M225	Z	0.051	0.052	73.929	98.571
247	M225	Z	0.052	0.053	98.571	123.214
248	M225	Z	0.053	0.056	123.214	147.857
249	M225	Z	0.056	0.056	147.857	172.5
250	M225	Z	0.056	0.053	172.5	197.143
251	M225	Z	0.053	0.052	197.143	221.786
252	M225	Z	0.052	0.052	221.786	246.429
253	M225	Z	0.052	0.052	246.429	271.071
254	M225	Z	0.052	0.051	271.071	295.714
255	M225	Z	0.051	0.052	295.714	320.357
256	M225	Z	0.052	0.052	320.357	345
257	M226	Z	0.06	0.06	28	345
258	M227	Z	-3.169e-6	0.03	0	24.643
259	M227	Z	0.03	0.06	24.643	49.286
260	M227	Z	0.06	0.059	49.286	73.929
261	M227	Z	0.059	0.059	73.929	98.571
262	M227	Z	0.059	0.059	98.571	123.214
263	M227	Z	0.059	0.059	123.214	147.857
264	M227	Z	0.059	0.059	147.857	172.5
265	M227	Z	0.059	0.059	172.5	197.143
266	M227	Z	0.059	0.059	197.143	221.786
267	M227	Z	0.059	0.059	221.786	246.429
268	M227	Z	0.059	0.059	246.429	271.071
269	M227	Z	0.059	0.059	271.071	295.714
270	M227	Z	0.059	0.06	295.714	320.357
271	M227	Z	0.06	0.06	320.357	345
272	M228	Z	2.295e-5	0.019	0	24.643
273	M228	Z	0.019	0.039	24.643	49.286
274	M228	Z	0.039	0.04	49.286	73.929
275	M228	Z	0.04	0.04	73.929	98.571

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
276	M228	Z	0.04	0.04	98.571	123.214
277	M228	Z	0.04	0.04	123.214	147.857
278	M228	Z	0.04	0.04	147.857	172.5
279	M228	Z	0.04	0.04	172.5	197.143
280	M228	Z	0.04	0.04	197.143	221.786
281	M228	Z	0.04	0.04	221.786	246.429
282	M228	Z	0.04	0.04	246.429	271.071
283	M228	Z	0.04	0.04	271.071	295.714
284	M228	Z	0.04	0.039	295.714	320.357
285	M228	Z	0.039	0.038	320.357	345
286	M229	Z	-2.742e-6	0.025	0	24.643
287	M229	Z	0.025	0.05	24.643	49.286
288	M229	Z	0.05	0.05	49.286	73.929
289	M229	Z	0.05	0.05	73.929	98.571
290	M229	Z	0.05	0.05	98.571	123.214
291	M229	Z	0.05	0.05	123.214	147.857
292	M229	Z	0.05	0.05	147.857	172.5
293	M229	Z	0.05	0.05	172.5	197.143
294	M229	Z	0.05	0.05	197.143	221.786
295	M229	Z	0.05	0.05	221.786	246.429
296	M229	Z	0.05	0.05	246.429	271.071
297	M229	Z	0.05	0.05	271.071	295.714
298	M229	Z	0.05	0.05	295.714	320.357
299	M229	Z	0.05	0.05	320.357	345
300	M248	Z	0.0001237	0.011	0	24.643
301	M248	Z	0.011	0.025	24.643	49.286
302	M248	Z	0.025	0.03	49.286	73.929
303	M248	Z	0.03	0.031	73.929	98.571
304	M248	Z	0.031	0.031	98.571	123.214
305	M248	Z	0.031	0.029	123.214	147.857
306	M248	Z	0.029	0.026	147.857	172.5
307	M248	Z	0.026	0.029	172.5	197.143
308	M248	Z	0.029	0.029	197.143	221.786
309	M248	Z	0.029	0.029	221.786	246.429
310	M248	Z	0.029	0.032	246.429	271.071
311	M248	Z	0.032	0.034	271.071	295.714
312	M248	Z	0.034	0.03	295.714	320.357
313	M248	Z	0.03	0.023	320.357	345
314	M249	Z	2.147e-5	0.014	0	24.643
315	M249	Z	0.014	0.029	24.643	49.286
316	M249	Z	0.029	0.03	49.286	73.929
317	M249	Z	0.03	0.03	73.929	98.571
318	M249	Z	0.03	0.03	98.571	123.214
319	M249	Z	0.03	0.03	123.214	147.857
320	M249	Z	0.03	0.03	147.857	172.5
321	M249	Z	0.03	0.03	172.5	197.143
322	M249	Z	0.03	0.03	197.143	221.786
323	M249	Z	0.03	0.03	221.786	246.429
324	M249	Z	0.03	0.03	246.429	271.071
325	M249	Z	0.03	0.03	271.071	295.714
326	M249	Z	0.03	0.029	295.714	320.357
327	M249	Z	0.029	0.028	320.357	345
328	M72	Z	0.012	0.013	0	25.875
329	M72	Z	0.013	0.015	25.875	51.75
330	M72	Z	0.015	0.017	51.75	77.625

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
331	M72	Z	0.017	0.015	77.625	103.5
332	M72	Z	0.015	0.014	103.5	129.375
333	M72	Z	0.014	0.014	129.375	155.25
334	M72	Z	0.014	0.014	155.25	181.125
335	M72	Z	0.014	0.014	181.125	207
336	M72	Z	0.014	0.014	207	232.875
337	M72	Z	0.014	0.016	232.875	258.75
338	M72	Z	0.016	0.01	258.75	284.625
339	M72	Z	0.01	1.826e-5	284.625	310.5
340	M125	Z	0.022	0.022	2.878e-13	289
341	M140	Z	0.022	0.022	317	345
342	M182	Z	0.045	0.045	56	345
343	M184	Z	3.951e-5	0.016	34.5	60.375
344	M184	Z	0.016	0.027	60.375	86.25
345	M184	Z	0.027	0.028	86.25	112.125
346	M184	Z	0.028	0.03	112.125	138
347	M184	Z	0.03	0.027	138	163.875
348	M184	Z	0.027	0.027	163.875	189.75
349	M184	Z	0.027	0.029	189.75	215.625
350	M184	Z	0.029	0.029	215.625	241.5
351	M184	Z	0.029	0.026	241.5	267.375
352	M184	Z	0.026	0.025	267.375	293.25
353	M184	Z	0.025	0.028	293.25	319.125
354	M184	Z	0.028	0.03	319.125	345
355	M185	Z	0.045	0.045	56	345
356	M187	Z	2.888e-5	0.012	34.5	60.375
357	M187	Z	0.012	0.021	60.375	86.25
358	M187	Z	0.021	0.017	86.25	112.125
359	M187	Z	0.017	0.017	112.125	138
360	M187	Z	0.017	0.017	138	163.875
361	M187	Z	0.017	0.017	163.875	189.75
362	M187	Z	0.017	0.017	189.75	215.625
363	M187	Z	0.017	0.017	215.625	241.5
364	M187	Z	0.017	0.022	241.5	267.375
365	M187	Z	0.022	0.022	267.375	293.25
366	M187	Z	0.022	0.017	293.25	319.125
367	M187	Z	0.017	0.015	319.125	345
368	M198	Z	-3.916e-7	0.024	34.5	60.375
369	M198	Z	0.024	0.04	60.375	86.25
370	M198	Z	0.04	0.032	86.25	112.125
371	M198	Z	0.032	0.032	112.125	138
372	M198	Z	0.032	0.032	138	163.875
373	M198	Z	0.032	0.032	163.875	189.75
374	M198	Z	0.032	0.032	189.75	215.625
375	M198	Z	0.032	0.04	215.625	241.5
376	M198	Z	0.04	0.04	241.5	267.375
377	M198	Z	0.04	0.032	267.375	293.25
378	M198	Z	0.032	0.032	293.25	319.125
379	M198	Z	0.032	0.032	319.125	345
380	M199	Z	0.045	0.045	56	345
381	M200	Z	0.0001256	0.032	34.5	60.375
382	M200	Z	0.032	0.053	60.375	86.25
383	M200	Z	0.053	0.042	86.25	112.125
384	M200	Z	0.042	0.042	112.125	138
385	M200	Z	0.042	0.043	138	163.875

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
386	M200	Z	0.043	0.044	163.875	189.75
387	M200	Z	0.044	0.044	189.75	215.625
388	M200	Z	0.044	0.048	215.625	241.5
389	M200	Z	0.048	0.049	241.5	267.375
390	M200	Z	0.049	0.048	267.375	293.25
391	M200	Z	0.048	0.045	293.25	319.125
392	M200	Z	0.045	0.039	319.125	345
393	M201	Z	-4.738e-6	0.027	34.5	60.375
394	M201	Z	0.027	0.046	60.375	86.25
395	M201	Z	0.046	0.036	86.25	112.125
396	M201	Z	0.036	0.037	112.125	138
397	M201	Z	0.037	0.038	138	163.875
398	M201	Z	0.038	0.04	163.875	189.75
399	M201	Z	0.04	0.039	189.75	215.625
400	M201	Z	0.039	0.045	215.625	241.5
401	M201	Z	0.045	0.045	241.5	267.375
402	M201	Z	0.045	0.037	267.375	293.25
403	M201	Z	0.037	0.037	293.25	319.125
404	M201	Z	0.037	0.037	319.125	345
405	M202	Z	0.045	0.045	56	345
406	M203	Z	-2.414e-6	0.032	34.5	60.375
407	M203	Z	0.032	0.053	60.375	86.25
408	M203	Z	0.053	0.042	86.25	112.125
409	M203	Z	0.042	0.042	112.125	138
410	M203	Z	0.042	0.043	138	163.875
411	M203	Z	0.043	0.041	163.875	189.75
412	M203	Z	0.041	0.041	189.75	215.625
413	M203	Z	0.041	0.053	215.625	241.5
414	M203	Z	0.053	0.052	241.5	267.375
415	M203	Z	0.052	0.042	267.375	293.25
416	M203	Z	0.042	0.042	293.25	319.125
417	M203	Z	0.042	0.042	319.125	345
418	M204	Z	1.88e-5	0.02	34.5	60.375
419	M204	Z	0.02	0.034	60.375	86.25
420	M204	Z	0.034	0.028	86.25	112.125
421	M204	Z	0.028	0.028	112.125	138
422	M204	Z	0.028	0.028	138	163.875
423	M204	Z	0.028	0.032	163.875	189.75
424	M204	Z	0.032	0.03	189.75	215.625
425	M204	Z	0.03	0.033	215.625	241.5
426	M204	Z	0.033	0.035	241.5	267.375
427	M204	Z	0.035	0.028	267.375	293.25
428	M204	Z	0.028	0.027	293.25	319.125
429	M204	Z	0.027	0.027	319.125	345
430	M205	Z	-2.313e-6	0.026	34.5	60.375
431	M205	Z	0.026	0.044	60.375	86.25
432	M205	Z	0.044	0.035	86.25	112.125
433	M205	Z	0.035	0.035	112.125	138
434	M205	Z	0.035	0.035	138	163.875
435	M205	Z	0.035	0.035	163.875	189.75
436	M205	Z	0.035	0.035	189.75	215.625
437	M205	Z	0.035	0.044	215.625	241.5
438	M205	Z	0.044	0.044	241.5	267.375
439	M205	Z	0.044	0.035	267.375	293.25
440	M205	Z	0.035	0.035	293.25	319.125

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
441	M205	Z	0.035	0.035	319.125	345
442	M206	Z	0.045	0.045	4.361e-13	28
443	M208	Z	0.02	0.025	0	6.9
444	M208	Z	0.025	0.022	6.9	13.8
445	M208	Z	0.022	0.028	13.8	20.7
446	M208	Z	0.028	0.02	20.7	27.6
447	M208	Z	0.02	0.0002388	27.6	34.5
448	M209	Z	0.045	0.045	6.128e-14	28
449	M211	Z	0.018	0.018	0	28
450	M222	Z	0.034	0.034	0	28
451	M223	Z	0.045	0.045	0	28
452	M224	Z	0.047	0.047	2.576e-13	28
453	M225	Z	0.042	0.042	0.0006587	27.998
454	M226	Z	0.045	0.045	0	28
455	M227	Z	0.045	0.045	4.29e-13	28
456	M228	Z	0.03	0.03	8.527e-14	28
457	M229	Z	0.038	0.038	1.483e-13	28
458	M244	Z	0.0001166	0.013	34.5	60.375
459	M244	Z	0.013	0.022	60.375	86.25
460	M244	Z	0.022	0.022	86.25	112.125
461	M244	Z	0.022	0.024	112.125	138
462	M244	Z	0.024	0.023	138	163.875
463	M244	Z	0.023	0.019	163.875	189.75
464	M244	Z	0.019	0.022	189.75	215.625
465	M244	Z	0.022	0.024	215.625	241.5
466	M244	Z	0.024	0.021	241.5	267.375
467	M244	Z	0.021	0.022	267.375	293.25
468	M244	Z	0.022	0.023	293.25	319.125
469	M244	Z	0.023	0.021	319.125	345
470	M245	Z	1.786e-5	0.015	34.5	60.375
471	M245	Z	0.015	0.026	60.375	86.25
472	M245	Z	0.026	0.021	86.25	112.125
473	M245	Z	0.021	0.021	112.125	138
474	M245	Z	0.021	0.021	138	163.875
475	M245	Z	0.021	0.021	163.875	189.75
476	M245	Z	0.021	0.021	189.75	215.625
477	M245	Z	0.021	0.026	215.625	241.5
478	M245	Z	0.026	0.026	241.5	267.375
479	M245	Z	0.026	0.021	267.375	293.25
480	M245	Z	0.021	0.021	293.25	319.125
481	M245	Z	0.021	0.02	319.125	345
482	M248	Z	0.032	0.017	0	6.9
483	M248	Z	0.017	0.013	6.9	13.8
484	M248	Z	0.013	0.021	13.8	20.7
485	M248	Z	0.021	0.012	20.7	27.6
486	M248	Z	0.012	-0.0007418	27.6	34.5
487	M249	Z	0.022	0.022	0	28
488	M138	Z	0.022	0.022	1.146e-13	289
489	M139	Z	0.022	0.022	0	28
490	M183	Z	0.044	0.045	0	25.875
491	M183	Z	0.045	0.043	25.875	51.75
492	M183	Z	0.043	0.052	51.75	77.625
493	M183	Z	0.052	0.052	77.625	103.5
494	M183	Z	0.052	0.042	103.5	129.375
495	M183	Z	0.042	0.042	129.375	155.25

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
496	M183	Z	0.042	0.042	155.25	181.125
497	M183	Z	0.042	0.042	181.125	207
498	M183	Z	0.042	0.042	207	232.875
499	M183	Z	0.042	0.053	232.875	258.75
500	M183	Z	0.053	0.031	258.75	284.625
501	M183	Z	0.031	5.125e-6	284.625	310.5
502	M186	Z	0.03	0.042	0	25.875
503	M186	Z	0.042	0.05	25.875	51.75
504	M186	Z	0.05	0.045	51.75	77.625
505	M186	Z	0.045	0.039	77.625	103.5
506	M186	Z	0.039	0.039	103.5	129.375
507	M186	Z	0.039	0.039	129.375	155.25
508	M186	Z	0.039	0.039	155.25	181.125
509	M186	Z	0.039	0.039	181.125	207
510	M186	Z	0.039	0.044	207	232.875
511	M186	Z	0.044	0.048	232.875	258.75
512	M186	Z	0.048	0.025	258.75	284.625
513	M186	Z	0.025	0.0002629	284.625	310.5
514	M188	Z	0.035	0.035	0	25.875
515	M188	Z	0.035	0.035	25.875	51.75
516	M188	Z	0.035	0.044	51.75	77.625
517	M188	Z	0.044	0.044	77.625	103.5
518	M188	Z	0.044	0.035	103.5	129.375
519	M188	Z	0.035	0.035	129.375	155.25
520	M188	Z	0.035	0.035	155.25	181.125
521	M188	Z	0.035	0.035	181.125	207
522	M188	Z	0.035	0.035	207	232.875
523	M188	Z	0.035	0.044	232.875	258.75
524	M188	Z	0.044	0.026	258.75	284.625
525	M188	Z	0.026	-2.313e-6	284.625	310.5
526	M189	Z	0.027	0.027	0	25.875
527	M189	Z	0.027	0.028	25.875	51.75
528	M189	Z	0.028	0.035	51.75	77.625
529	M189	Z	0.035	0.033	77.625	103.5
530	M189	Z	0.033	0.03	103.5	129.375
531	M189	Z	0.03	0.032	129.375	155.25
532	M189	Z	0.032	0.028	155.25	181.125
533	M189	Z	0.028	0.028	181.125	207
534	M189	Z	0.028	0.028	207	232.875
535	M189	Z	0.028	0.034	232.875	258.75
536	M189	Z	0.034	0.02	258.75	284.625
537	M189	Z	0.02	1.881e-5	284.625	310.5
538	M190	Z	0.042	0.042	0	25.875
539	M190	Z	0.042	0.042	25.875	51.75
540	M190	Z	0.042	0.052	51.75	77.625
541	M190	Z	0.052	0.053	77.625	103.5
542	M190	Z	0.053	0.041	103.5	129.375
543	M190	Z	0.041	0.041	129.375	155.25
544	M190	Z	0.041	0.043	155.25	181.125
545	M190	Z	0.043	0.042	181.125	207
546	M190	Z	0.042	0.042	207	232.875
547	M190	Z	0.042	0.053	232.875	258.75
548	M190	Z	0.053	0.032	258.75	284.625
549	M190	Z	0.032	-2.415e-6	284.625	310.5
550	M191	Z	0.045	0.045	1.652e-13	289

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
551	M192	Z	0.043	0.042	0	25.875
552	M192	Z	0.042	0.044	25.875	51.75
553	M192	Z	0.044	0.052	51.75	77.625
554	M192	Z	0.052	0.051	77.625	103.5
555	M192	Z	0.051	0.042	103.5	129.375
556	M192	Z	0.042	0.042	129.375	155.25
557	M192	Z	0.042	0.042	155.25	181.125
558	M192	Z	0.042	0.042	181.125	207
559	M192	Z	0.042	0.048	207	232.875
560	M192	Z	0.048	0.053	232.875	258.75
561	M192	Z	0.053	0.027	258.75	284.625
562	M192	Z	0.027	-6.963e-6	284.625	310.5
563	M193	Z	0.025	0.025	0	25.875
564	M193	Z	0.025	0.023	25.875	51.75
565	M193	Z	0.023	0.029	51.75	77.625
566	M193	Z	0.029	0.03	77.625	103.5
567	M193	Z	0.03	0.024	103.5	129.375
568	M193	Z	0.024	0.024	129.375	155.25
569	M193	Z	0.024	0.024	155.25	181.125
570	M193	Z	0.024	0.024	181.125	207
571	M193	Z	0.024	0.026	207	232.875
572	M193	Z	0.026	0.027	232.875	258.75
573	M193	Z	0.027	0.016	258.75	284.625
574	M193	Z	0.016	0.0002153	284.625	310.5
575	M194	Z	0.039	0.041	0	25.875
576	M194	Z	0.041	0.042	25.875	51.75
577	M194	Z	0.042	0.052	51.75	77.625
578	M194	Z	0.052	0.052	77.625	103.5
579	M194	Z	0.052	0.042	103.5	129.375
580	M194	Z	0.042	0.042	129.375	155.25
581	M194	Z	0.042	0.042	155.25	181.125
582	M194	Z	0.042	0.042	181.125	207
583	M194	Z	0.042	0.042	207	232.875
584	M194	Z	0.042	0.052	232.875	258.75
585	M194	Z	0.052	0.031	258.75	284.625
586	M194	Z	0.031	2.509e-5	284.625	310.5
587	M195	Z	0.045	0.045	5.675e-13	289
588	M196	Z	0.02	0.021	0	25.875
589	M196	Z	0.021	0.022	25.875	51.75
590	M196	Z	0.022	0.027	51.75	77.625
591	M196	Z	0.027	0.027	77.625	103.5
592	M196	Z	0.027	0.022	103.5	129.375
593	M196	Z	0.022	0.022	129.375	155.25
594	M196	Z	0.022	0.022	155.25	181.125
595	M196	Z	0.022	0.022	181.125	207
596	M196	Z	0.022	0.022	207	232.875
597	M196	Z	0.022	0.026	232.875	258.75
598	M196	Z	0.026	0.016	258.75	284.625
599	M196	Z	0.016	2.115e-5	284.625	310.5
600	M197	Z	0.036	0.036	0	25.875
601	M197	Z	0.036	0.036	25.875	51.75
602	M197	Z	0.036	0.044	51.75	77.625
603	M197	Z	0.044	0.044	77.625	103.5
604	M197	Z	0.044	0.036	103.5	129.375
605	M197	Z	0.036	0.036	129.375	155.25

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
606	M197	Z	0.036	0.036	155.25	181.125
607	M197	Z	0.036	0.036	181.125	207
608	M197	Z	0.036	0.036	207	232.875
609	M197	Z	0.036	0.045	232.875	258.75
610	M197	Z	0.045	0.027	258.75	284.625
611	M197	Z	0.027	-2.636e-6	284.625	310.5
612	M207	Z	-0.002	0.016	310.5	317.4
613	M207	Z	0.016	0.051	317.4	324.3
614	M207	Z	0.051	0.043	324.3	331.2
615	M207	Z	0.043	0.039	331.2	338.1
616	M207	Z	0.039	0.081	338.1	345
617	M210	Z	0.001	0.039	310.5	317.4
618	M210	Z	0.039	0.044	317.4	324.3
619	M210	Z	0.044	0.033	324.3	331.2
620	M210	Z	0.033	0.042	331.2	338.1
621	M210	Z	0.042	0.018	338.1	345
622	M212	Z	0.038	0.038	317	345
623	M213	Z	0.03	0.03	317	345
624	M214	Z	0.045	0.045	317	345
625	M215	Z	0.045	0.045	317	345
626	M216	Z	0.046	0.046	317	345
627	M217	Z	-4.516e-5	0.013	310.5	317.4
628	M217	Z	0.013	0.027	317.4	324.3
629	M217	Z	0.027	0.026	324.3	331.2
630	M217	Z	0.026	0.025	331.2	338.1
631	M217	Z	0.025	0.026	338.1	345
632	M218	Z	0.06	0.013	310.5	345
633	M219	Z	0.045	0.045	317	345
634	M220	Z	0.023	0.023	317	345
635	M221	Z	0.039	0.039	317	345
636	M242	Z	0.02	0.021	0	25.875
637	M242	Z	0.021	0.021	25.875	51.75
638	M242	Z	0.021	0.026	51.75	77.625
639	M242	Z	0.026	0.026	77.625	103.5
640	M242	Z	0.026	0.021	103.5	129.375
641	M242	Z	0.021	0.021	129.375	155.25
642	M242	Z	0.021	0.021	155.25	181.125
643	M242	Z	0.021	0.021	181.125	207
644	M242	Z	0.021	0.021	207	232.875
645	M242	Z	0.021	0.026	232.875	258.75
646	M242	Z	0.026	0.015	258.75	284.625
647	M242	Z	0.015	1.786e-5	284.625	310.5
648	M243	Z	0.023	0.021	0	25.875
649	M243	Z	0.021	0.022	25.875	51.75
650	M243	Z	0.022	0.023	51.75	77.625
651	M243	Z	0.023	0.021	77.625	103.5
652	M243	Z	0.021	0.021	103.5	129.375
653	M243	Z	0.021	0.021	129.375	155.25
654	M243	Z	0.021	0.021	155.25	181.125
655	M243	Z	0.021	0.021	181.125	207
656	M243	Z	0.021	0.026	207	232.875
657	M243	Z	0.026	0.025	232.875	258.75
658	M243	Z	0.025	0.011	258.75	284.625
659	M243	Z	0.011	0.0001332	284.625	310.5
660	M246	Z	0.022	0.022	317	345

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
661	M247	Z	-0.000202	0.011	310.5	317.4
662	M247	Z	0.011	0.021	317.4	324.3
663	M247	Z	0.021	0.02	324.3	331.2
664	M247	Z	0.02	0.021	331.2	338.1
665	M247	Z	0.021	0.025	338.1	345
666	M72	Z	0.004	0.004	288.791	345
667	M138	Z	0.011	0.011	289	345
668	M50	Z	0.011	0.011	2.842e-13	345
669	M58	Z	0.006	0.007	0	24.643
670	M58	Z	0.007	0.008	24.643	49.286
671	M58	Z	0.008	0.008	49.286	73.929
672	M58	Z	0.008	0.007	73.929	98.571
673	M58	Z	0.007	0.007	98.571	123.214
674	M58	Z	0.007	0.007	123.214	147.857
675	M58	Z	0.007	0.007	147.857	172.5
676	M58	Z	0.007	0.007	172.5	197.143
677	M58	Z	0.007	0.007	197.143	221.786
678	M58	Z	0.007	0.007	221.786	246.429
679	M58	Z	0.007	0.008	246.429	271.071
680	M58	Z	0.008	0.008	271.071	295.714
681	M58	Z	0.008	0.007	295.714	320.357
682	M58	Z	0.007	0.006	320.357	345
683	M69	Z	0.011	0.011	2.558e-13	345
684	M76	Z	0.006	0.007	0	24.643
685	M76	Z	0.007	0.008	24.643	49.286
686	M76	Z	0.008	0.008	49.286	73.929
687	M76	Z	0.008	0.007	73.929	98.571
688	M76	Z	0.007	0.007	98.571	123.214
689	M76	Z	0.007	0.007	123.214	147.857
690	M76	Z	0.007	0.007	147.857	172.5
691	M76	Z	0.007	0.007	172.5	197.143
692	M76	Z	0.007	0.007	197.143	221.786
693	M76	Z	0.007	0.007	221.786	246.429
694	M76	Z	0.007	0.008	246.429	271.071
695	M76	Z	0.008	0.008	271.071	295.714
696	M76	Z	0.008	0.007	295.714	320.357
697	M76	Z	0.007	0.006	320.357	345
698	M83	Z	0.011	0.011	0	348
699	M85	Z	0.006	0.007	0	24.857
700	M85	Z	0.007	0.008	24.857	49.714
701	M85	Z	0.008	0.008	49.714	74.571
702	M85	Z	0.008	0.008	74.571	99.429
703	M85	Z	0.008	0.007	99.429	124.286
704	M85	Z	0.007	0.007	124.286	149.143
705	M85	Z	0.007	0.007	149.143	174
706	M85	Z	0.007	0.007	174	198.857
707	M85	Z	0.007	0.007	198.857	223.714
708	M85	Z	0.007	0.008	223.714	248.571
709	M85	Z	0.008	0.008	248.571	273.429
710	M85	Z	0.008	0.008	273.429	298.286
711	M85	Z	0.008	0.007	298.286	323.143
712	M85	Z	0.007	0.006	323.143	348
713	M57	Z	0.019	0.019	0	24.857
714	M57	Z	0.019	0.019	24.857	49.714
715	M57	Z	0.019	0.019	49.714	74.571

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
716	M57	Z	0.019	0.019	74.571	99.429
717	M57	Z	0.019	0.019	99.429	124.286
718	M57	Z	0.019	0.019	124.286	149.143
719	M57	Z	0.019	0.02	149.143	174
720	M57	Z	0.02	0.02	174	198.857
721	M57	Z	0.02	0.019	198.857	223.714
722	M57	Z	0.019	0.019	223.714	248.571
723	M57	Z	0.019	0.019	248.571	273.429
724	M57	Z	0.019	0.019	273.429	298.286
725	M57	Z	0.019	0.019	298.286	323.143
726	M57	Z	0.019	0.019	323.143	348
727	M96	Z	0.013	0.014	0	24.857
728	M96	Z	0.014	0.014	24.857	49.714
729	M96	Z	0.014	0.016	49.714	74.571
730	M96	Z	0.016	0.018	74.571	99.429
731	M96	Z	0.018	0.014	99.429	124.286
732	M96	Z	0.014	0.013	124.286	149.143
733	M96	Z	0.013	0.014	149.143	174
734	M96	Z	0.014	0.014	174	198.857
735	M96	Z	0.014	0.015	198.857	223.714
736	M96	Z	0.015	0.017	223.714	248.571
737	M96	Z	0.017	0.016	248.571	273.429
738	M96	Z	0.016	0.014	273.429	298.286
739	M96	Z	0.014	0.014	298.286	323.143
740	M96	Z	0.014	0.013	323.143	348
741	M97	Z	0.022	0.022	0	24.857
742	M97	Z	0.022	0.022	24.857	49.714
743	M97	Z	0.022	0.023	49.714	74.571
744	M97	Z	0.023	0.022	74.571	99.429
745	M97	Z	0.022	0.022	99.429	124.286
746	M97	Z	0.022	0.023	124.286	149.143
747	M97	Z	0.023	0.023	149.143	174
748	M97	Z	0.023	0.023	174	198.857
749	M97	Z	0.023	0.023	198.857	223.714
750	M97	Z	0.023	0.022	223.714	248.571
751	M97	Z	0.022	0.022	248.571	273.429
752	M97	Z	0.022	0.022	273.429	298.286
753	M97	Z	0.022	0.022	298.286	323.143
754	M97	Z	0.022	0.022	323.143	348
755	M98	Z	0.023	0.023	6.759e-13	348
756	M99	Z	0.022	0.022	6.803e-13	348
757	M100	Z	0.019	0.021	0	24.857
758	M100	Z	0.021	0.021	24.857	49.714
759	M100	Z	0.021	0.021	49.714	74.571
760	M100	Z	0.021	0.021	74.571	99.429
761	M100	Z	0.021	0.021	99.429	124.286
762	M100	Z	0.021	0.021	124.286	149.143
763	M100	Z	0.021	0.022	149.143	174
764	M100	Z	0.022	0.022	174	198.857
765	M100	Z	0.022	0.021	198.857	223.714
766	M100	Z	0.021	0.021	223.714	248.571
767	M100	Z	0.021	0.021	248.571	273.429
768	M100	Z	0.021	0.021	273.429	298.286
769	M100	Z	0.021	0.021	298.286	323.143
770	M100	Z	0.021	0.019	323.143	348

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
771	M101	Z	0.012	0.012	0	24.857
772	M101	Z	0.012	0.012	24.857	49.714
773	M101	Z	0.012	0.014	49.714	74.571
774	M101	Z	0.014	0.016	74.571	99.429
775	M101	Z	0.016	0.012	99.429	124.286
776	M101	Z	0.012	0.011	124.286	149.143
777	M101	Z	0.011	0.012	149.143	174
778	M101	Z	0.012	0.012	174	198.857
779	M101	Z	0.012	0.013	198.857	223.714
780	M101	Z	0.013	0.014	223.714	248.571
781	M101	Z	0.014	0.014	248.571	273.429
782	M101	Z	0.014	0.012	273.429	298.286
783	M101	Z	0.012	0.012	298.286	323.143
784	M101	Z	0.012	0.012	323.143	348
785	M102	Z	0.022	0.022	0	24.857
786	M102	Z	0.022	0.022	24.857	49.714
787	M102	Z	0.022	0.023	49.714	74.571
788	M102	Z	0.023	0.022	74.571	99.429
789	M102	Z	0.022	0.022	99.429	124.286
790	M102	Z	0.022	0.023	124.286	149.143
791	M102	Z	0.023	0.023	149.143	174
792	M102	Z	0.023	0.023	174	198.857
793	M102	Z	0.023	0.023	198.857	223.714
794	M102	Z	0.023	0.022	223.714	248.571
795	M102	Z	0.022	0.022	248.571	273.429
796	M102	Z	0.022	0.022	273.429	298.286
797	M102	Z	0.022	0.022	298.286	323.143
798	M102	Z	0.022	0.022	323.143	348
799	M103	Z	0.023	0.023	9.086e-13	348
800	M104	Z	0.023	0.023	1.137e-12	348
801	M105	Z	0.019	0.019	0	24.857
802	M105	Z	0.019	0.019	24.857	49.714
803	M105	Z	0.019	0.019	49.714	74.571
804	M105	Z	0.019	0.019	74.571	99.429
805	M105	Z	0.019	0.019	99.429	124.286
806	M105	Z	0.019	0.02	124.286	149.143
807	M105	Z	0.02	0.02	149.143	174
808	M105	Z	0.02	0.019	174	198.857
809	M105	Z	0.019	0.019	198.857	223.714
810	M105	Z	0.019	0.019	223.714	248.571
811	M105	Z	0.019	0.019	248.571	273.429
812	M105	Z	0.019	0.019	273.429	298.286
813	M105	Z	0.019	0.019	298.286	323.143
814	M105	Z	0.019	0.019	323.143	348
815	M106	Z	0.01	0.011	0	24.857
816	M106	Z	0.011	0.011	24.857	49.714
817	M106	Z	0.011	0.013	49.714	74.571
818	M106	Z	0.013	0.013	74.571	99.429
819	M106	Z	0.013	0.011	99.429	124.286
820	M106	Z	0.011	0.011	124.286	149.143
821	M106	Z	0.011	0.011	149.143	174
822	M106	Z	0.011	0.011	174	198.857
823	M106	Z	0.011	0.011	198.857	223.714
824	M106	Z	0.011	0.013	223.714	248.571
825	M106	Z	0.013	0.013	248.571	273.429

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
826	M106	Z	0.013	0.011	273.429	298.286
827	M106	Z	0.011	0.011	298.286	323.143
828	M106	Z	0.011	0.01	323.143	348
829	M127	Z	0.011	0.011	0	24.643
830	M127	Z	0.011	0.012	24.643	49.286
831	M127	Z	0.012	0.012	49.286	73.929
832	M127	Z	0.012	0.012	73.929	98.571
833	M127	Z	0.012	0.012	98.571	123.214
834	M127	Z	0.012	0.012	123.214	147.857
835	M127	Z	0.012	0.012	147.857	172.5
836	M127	Z	0.012	0.012	172.5	197.143
837	M127	Z	0.012	0.012	197.143	221.786
838	M127	Z	0.012	0.012	221.786	246.429
839	M127	Z	0.012	0.012	246.429	271.071
840	M127	Z	0.012	0.012	271.071	295.714
841	M127	Z	0.012	0.011	295.714	320.357
842	M127	Z	0.011	0.011	320.357	345
843	M133	Z	0.023	0.023	0	24.643
844	M133	Z	0.023	0.023	24.643	49.286
845	M133	Z	0.023	0.023	49.286	73.929
846	M133	Z	0.023	0.023	73.929	98.571
847	M133	Z	0.023	0.023	98.571	123.214
848	M133	Z	0.023	0.022	123.214	147.857
849	M133	Z	0.022	0.022	147.857	172.5
850	M133	Z	0.022	0.022	172.5	197.143
851	M133	Z	0.022	0.023	197.143	221.786
852	M133	Z	0.023	0.023	221.786	246.429
853	M133	Z	0.023	0.023	246.429	271.071
854	M133	Z	0.023	0.023	271.071	295.714
855	M133	Z	0.023	0.023	295.714	320.357
856	M133	Z	0.023	0.023	320.357	345
857	M136	Z	0.019	0.019	0	24.643
858	M136	Z	0.019	0.019	24.643	49.286
859	M136	Z	0.019	0.019	49.286	73.929
860	M136	Z	0.019	0.019	73.929	98.571
861	M136	Z	0.019	0.019	98.571	123.214
862	M136	Z	0.019	0.019	123.214	147.857
863	M136	Z	0.019	0.019	147.857	172.5
864	M136	Z	0.019	0.019	172.5	197.143
865	M136	Z	0.019	0.019	197.143	221.786
866	M136	Z	0.019	0.019	221.786	246.429
867	M136	Z	0.019	0.019	246.429	271.071
868	M136	Z	0.019	0.019	271.071	295.714
869	M136	Z	0.019	0.019	295.714	320.357
870	M136	Z	0.019	0.019	320.357	345
871	M137	Z	0.023	0.023	0	345
872	M141	Z	0.02	0.021	0	24.643
873	M141	Z	0.021	0.021	24.643	49.286
874	M141	Z	0.021	0.021	49.286	73.929
875	M141	Z	0.021	0.021	73.929	98.571
876	M141	Z	0.021	0.021	98.571	123.214
877	M141	Z	0.021	0.021	123.214	147.857
878	M141	Z	0.021	0.021	147.857	172.5
879	M141	Z	0.021	0.021	172.5	197.143
880	M141	Z	0.021	0.021	197.143	221.786

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
881	M141	Z	0.021	0.021	221.786	246.429
882	M141	Z	0.021	0.021	246.429	271.071
883	M141	Z	0.021	0.021	271.071	295.714
884	M141	Z	0.021	0.021	295.714	320.357
885	M141	Z	0.021	0.02	320.357	345
886	M142	Z	0.022	0.022	0	24.643
887	M142	Z	0.022	0.022	24.643	49.286
888	M142	Z	0.022	0.022	49.286	73.929
889	M142	Z	0.022	0.023	73.929	98.571
890	M142	Z	0.023	0.023	98.571	123.214
891	M142	Z	0.023	0.023	123.214	147.857
892	M142	Z	0.023	0.023	147.857	172.5
893	M142	Z	0.023	0.023	172.5	197.143
894	M142	Z	0.023	0.023	197.143	221.786
895	M142	Z	0.023	0.023	221.786	246.429
896	M142	Z	0.023	0.022	246.429	271.071
897	M142	Z	0.022	0.022	271.071	295.714
898	M142	Z	0.022	0.022	295.714	320.357
899	M142	Z	0.022	0.022	320.357	345
900	M143	Z	0.019	0.019	0	24.643
901	M143	Z	0.019	0.019	24.643	49.286
902	M143	Z	0.019	0.019	49.286	73.929
903	M143	Z	0.019	0.019	73.929	98.571
904	M143	Z	0.019	0.019	98.571	123.214
905	M143	Z	0.019	0.019	123.214	147.857
906	M143	Z	0.019	0.019	147.857	172.5
907	M143	Z	0.019	0.019	172.5	197.143
908	M143	Z	0.019	0.019	197.143	221.786
909	M143	Z	0.019	0.019	221.786	246.429
910	M143	Z	0.019	0.019	246.429	271.071
911	M143	Z	0.019	0.019	271.071	295.714
912	M143	Z	0.019	0.019	295.714	320.357
913	M143	Z	0.019	0.019	320.357	345
914	M144	Z	0.014	0.015	0	24.643
915	M144	Z	0.015	0.015	24.643	49.286
916	M144	Z	0.015	0.015	49.286	73.929
917	M144	Z	0.015	0.015	73.929	98.571
918	M144	Z	0.015	0.014	98.571	123.214
919	M144	Z	0.014	0.015	123.214	147.857
920	M144	Z	0.015	0.017	147.857	172.5
921	M144	Z	0.017	0.015	172.5	197.143
922	M144	Z	0.015	0.014	197.143	221.786
923	M144	Z	0.014	0.015	221.786	246.429
924	M144	Z	0.015	0.015	246.429	271.071
925	M144	Z	0.015	0.015	271.071	295.714
926	M144	Z	0.015	0.015	295.714	320.357
927	M144	Z	0.015	0.014	320.357	345
928	M145	Z	0.022	0.022	0	345
929	M146	Z	0.011	0.012	0	24.643
930	M146	Z	0.012	0.014	24.643	49.286
931	M146	Z	0.014	0.014	49.286	73.929
932	M146	Z	0.014	0.013	73.929	98.571
933	M146	Z	0.013	0.013	98.571	123.214
934	M146	Z	0.013	0.013	123.214	147.857
935	M146	Z	0.013	0.013	147.857	172.5

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
936	M146	Z	0.013	0.013	172.5	197.143
937	M146	Z	0.013	0.013	197.143	221.786
938	M146	Z	0.013	0.013	221.786	246.429
939	M146	Z	0.013	0.014	246.429	271.071
940	M146	Z	0.014	0.014	271.071	295.714
941	M146	Z	0.014	0.012	295.714	320.357
942	M146	Z	0.012	0.011	320.357	345
943	M147	Z	0.023	0.023	4.547e-13	345
944	M148	Z	0.023	0.023	4.45e-13	345
945	M159	Z	0.022	0.022	0	24.643
946	M159	Z	0.022	0.022	24.643	49.286
947	M159	Z	0.022	0.022	49.286	73.929
948	M159	Z	0.022	0.023	73.929	98.571
949	M159	Z	0.023	0.023	98.571	123.214
950	M159	Z	0.023	0.023	123.214	147.857
951	M159	Z	0.023	0.023	147.857	172.5
952	M159	Z	0.023	0.023	172.5	197.143
953	M159	Z	0.023	0.023	197.143	221.786
954	M159	Z	0.023	0.023	221.786	246.429
955	M159	Z	0.023	0.022	246.429	271.071
956	M159	Z	0.022	0.022	271.071	295.714
957	M159	Z	0.022	0.022	295.714	320.357
958	M159	Z	0.022	0.022	320.357	345
959	M162	Z	0.023	0.021	0	24.643
960	M162	Z	0.021	0.021	24.643	49.286
961	M162	Z	0.021	0.022	49.286	73.929
962	M162	Z	0.022	0.022	73.929	98.571
963	M162	Z	0.022	0.022	98.571	123.214
964	M162	Z	0.022	0.022	123.214	147.857
965	M162	Z	0.022	0.022	147.857	172.5
966	M162	Z	0.022	0.022	172.5	197.143
967	M162	Z	0.022	0.022	197.143	221.786
968	M162	Z	0.022	0.022	221.786	246.429
969	M162	Z	0.022	0.022	246.429	271.071
970	M162	Z	0.022	0.021	271.071	295.714
971	M162	Z	0.021	0.021	295.714	320.357
972	M162	Z	0.021	0.023	320.357	345
973	M164	Z	0.023	0.023	0	24.643
974	M164	Z	0.023	0.023	24.643	49.286
975	M164	Z	0.023	0.023	49.286	73.929
976	M164	Z	0.023	0.023	73.929	98.571
977	M164	Z	0.023	0.023	98.571	123.214
978	M164	Z	0.023	0.022	123.214	147.857
979	M164	Z	0.022	0.022	147.857	172.5
980	M164	Z	0.022	0.022	172.5	197.143
981	M164	Z	0.022	0.023	197.143	221.786
982	M164	Z	0.023	0.023	221.786	246.429
983	M164	Z	0.023	0.023	246.429	271.071
984	M164	Z	0.023	0.023	271.071	295.714
985	M164	Z	0.023	0.023	295.714	320.357
986	M164	Z	0.023	0.023	320.357	345
987	M165	Z	0.021	0.022	0	24.643
988	M165	Z	0.022	0.022	24.643	49.286
989	M165	Z	0.022	0.023	49.286	73.929
990	M165	Z	0.023	0.022	73.929	98.571

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
991	M165	Z	0.022	0.021	98.571	123.214
992	M165	Z	0.021	0.023	123.214	147.857
993	M165	Z	0.023	0.026	147.857	172.5
994	M165	Z	0.026	0.023	172.5	197.143
995	M165	Z	0.023	0.021	197.143	221.786
996	M165	Z	0.021	0.022	221.786	246.429
997	M165	Z	0.022	0.023	246.429	271.071
998	M165	Z	0.023	0.022	271.071	295.714
999	M165	Z	0.022	0.022	295.714	320.357
1000	M165	Z	0.022	0.021	320.357	345
1001	M166	Z	0.023	0.023	0	24.643
1002	M166	Z	0.023	0.023	24.643	49.286
1003	M166	Z	0.023	0.023	49.286	73.929
1004	M166	Z	0.023	0.023	73.929	98.571
1005	M166	Z	0.023	0.023	98.571	123.214
1006	M166	Z	0.023	0.022	123.214	147.857
1007	M166	Z	0.022	0.022	147.857	172.5
1008	M166	Z	0.022	0.022	172.5	197.143
1009	M166	Z	0.022	0.023	197.143	221.786
1010	M166	Z	0.023	0.023	221.786	246.429
1011	M166	Z	0.023	0.023	246.429	271.071
1012	M166	Z	0.023	0.023	271.071	295.714
1013	M166	Z	0.023	0.023	295.714	320.357
1014	M166	Z	0.023	0.023	320.357	345
1015	M167	Z	0.023	0.023	4.414e-13	345
1016	M168	Z	0.022	0.022	4.547e-13	345
1017	M169	Z	0.023	0.022	0	24.643
1018	M169	Z	0.022	0.024	24.643	49.286
1019	M169	Z	0.024	0.024	49.286	73.929
1020	M169	Z	0.024	0.023	73.929	98.571
1021	M169	Z	0.023	0.022	98.571	123.214
1022	M169	Z	0.022	0.022	123.214	147.857
1023	M169	Z	0.022	0.022	147.857	172.5
1024	M169	Z	0.022	0.022	172.5	197.143
1025	M169	Z	0.022	0.022	197.143	221.786
1026	M169	Z	0.022	0.023	221.786	246.429
1027	M169	Z	0.023	0.024	246.429	271.071
1028	M169	Z	0.024	0.024	271.071	295.714
1029	M169	Z	0.024	0.022	295.714	320.357
1030	M169	Z	0.022	0.023	320.357	345
1031	M170	Z	0.023	0.023	7.39e-13	345
1032	M171	Z	0.023	0.023	4.654e-13	345
1033	M172	Z	0.011	0.011	0	24.643
1034	M172	Z	0.011	0.012	24.643	49.286
1035	M172	Z	0.012	0.012	49.286	73.929
1036	M172	Z	0.012	0.012	73.929	98.571
1037	M172	Z	0.012	0.012	98.571	123.214
1038	M172	Z	0.012	0.012	123.214	147.857
1039	M172	Z	0.012	0.012	147.857	172.5
1040	M172	Z	0.012	0.012	172.5	197.143
1041	M172	Z	0.012	0.012	197.143	221.786
1042	M172	Z	0.012	0.012	221.786	246.429
1043	M172	Z	0.012	0.012	246.429	271.071
1044	M172	Z	0.012	0.012	271.071	295.714
1045	M172	Z	0.012	0.011	295.714	320.357

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1046	M172	Z	0.011	0.011	320.357	345
1047	M173	Z	0.019	0.019	0	24.643
1048	M173	Z	0.019	0.019	24.643	49.286
1049	M173	Z	0.019	0.019	49.286	73.929
1050	M173	Z	0.019	0.019	73.929	98.571
1051	M173	Z	0.019	0.019	98.571	123.214
1052	M173	Z	0.019	0.019	123.214	147.857
1053	M173	Z	0.019	0.019	147.857	172.5
1054	M173	Z	0.019	0.019	172.5	197.143
1055	M173	Z	0.019	0.019	197.143	221.786
1056	M173	Z	0.019	0.019	221.786	246.429
1057	M173	Z	0.019	0.019	246.429	271.071
1058	M173	Z	0.019	0.019	271.071	295.714
1059	M173	Z	0.019	0.019	295.714	320.357
1060	M173	Z	0.019	0.019	320.357	345
1061	M183	Z	0.023	0.023	289.002	345
1062	M186	Z	0.0001135	0.017	276	293.25
1063	M186	Z	0.017	0.026	293.25	310.5
1064	M186	Z	0.026	0.017	310.5	327.75
1065	M186	Z	0.017	0.015	327.75	345
1066	M188	Z	0.019	0.019	288.997	345
1067	M189	Z	0.0004352	0.006	276	289.8
1068	M189	Z	0.006	0.017	289.8	303.6
1069	M189	Z	0.017	0.021	303.6	317.4
1070	M189	Z	0.021	0.017	317.4	331.2
1071	M189	Z	0.017	0.008	331.2	345
1072	M190	Z	0.013	0.012	276	299
1073	M190	Z	0.012	0.018	299	322
1074	M190	Z	0.018	0.032	322	345
1075	M191	Z	0.023	0.023	289	345
1076	M192	Z	0.022	0.022	289	345
1077	M193	Z	0.0001844	0.006	276	289.8
1078	M193	Z	0.006	0.013	289.8	303.6
1079	M193	Z	0.013	0.015	303.6	317.4
1080	M193	Z	0.015	0.013	317.4	331.2
1081	M193	Z	0.013	0.01	331.2	345
1082	M194	Z	0.023	0.023	289	345
1083	M195	Z	0.023	0.023	289	345
1084	M196	Z	2.643e-5	0.009	276	293.25
1085	M196	Z	0.009	0.014	293.25	310.5
1086	M196	Z	0.014	0.009	310.5	327.75
1087	M196	Z	0.009	0.009	327.75	345
1088	M197	Z	0.019	0.019	288.997	345
1089	M238	Z	0.011	0.011	0	24.643
1090	M238	Z	0.011	0.011	24.643	49.286
1091	M238	Z	0.011	0.011	49.286	73.929
1092	M238	Z	0.011	0.011	73.929	98.571
1093	M238	Z	0.011	0.011	98.571	123.214
1094	M238	Z	0.011	0.011	123.214	147.857
1095	M238	Z	0.011	0.011	147.857	172.5
1096	M238	Z	0.011	0.011	172.5	197.143
1097	M238	Z	0.011	0.011	197.143	221.786
1098	M238	Z	0.011	0.011	221.786	246.429
1099	M238	Z	0.011	0.011	246.429	271.071
1100	M238	Z	0.011	0.011	271.071	295.714

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1101	M238	Z	0.011	0.011	295.714	320.357
1102	M238	Z	0.011	0.011	320.357	345
1103	M239	Z	0.013	0.011	0	24.643
1104	M239	Z	0.011	0.011	24.643	49.286
1105	M239	Z	0.011	0.011	49.286	73.929
1106	M239	Z	0.011	0.011	73.929	98.571
1107	M239	Z	0.011	0.011	98.571	123.214
1108	M239	Z	0.011	0.011	123.214	147.857
1109	M239	Z	0.011	0.011	147.857	172.5
1110	M239	Z	0.011	0.011	172.5	197.143
1111	M239	Z	0.011	0.011	197.143	221.786
1112	M239	Z	0.011	0.011	221.786	246.429
1113	M239	Z	0.011	0.011	246.429	271.071
1114	M239	Z	0.011	0.011	271.071	295.714
1115	M239	Z	0.011	0.011	295.714	320.357
1116	M239	Z	0.011	0.013	320.357	345
1117	M240	Z	0.01	0.01	0	24.857
1118	M240	Z	0.01	0.011	24.857	49.714
1119	M240	Z	0.011	0.012	49.714	74.571
1120	M240	Z	0.012	0.012	74.571	99.429
1121	M240	Z	0.012	0.011	99.429	124.286
1122	M240	Z	0.011	0.011	124.286	149.143
1123	M240	Z	0.011	0.011	149.143	174
1124	M240	Z	0.011	0.011	174	198.857
1125	M240	Z	0.011	0.011	198.857	223.714
1126	M240	Z	0.011	0.012	223.714	248.571
1127	M240	Z	0.012	0.012	248.571	273.429
1128	M240	Z	0.012	0.011	273.429	298.286
1129	M240	Z	0.011	0.01	298.286	323.143
1130	M240	Z	0.01	0.01	323.143	348
1131	M241	Z	0.012	0.01	0	24.857
1132	M241	Z	0.01	0.01	24.857	49.714
1133	M241	Z	0.01	0.012	49.714	74.571
1134	M241	Z	0.012	0.012	74.571	99.429
1135	M241	Z	0.012	0.011	99.429	124.286
1136	M241	Z	0.011	0.011	124.286	149.143
1137	M241	Z	0.011	0.011	149.143	174
1138	M241	Z	0.011	0.011	174	198.857
1139	M241	Z	0.011	0.011	198.857	223.714
1140	M241	Z	0.011	0.012	223.714	248.571
1141	M241	Z	0.012	0.012	248.571	273.429
1142	M241	Z	0.012	0.01	273.429	298.286
1143	M241	Z	0.01	0.01	298.286	323.143
1144	M241	Z	0.01	0.012	323.143	348
1145	M242	Z	2.223e-5	0.009	276	293.25
1146	M242	Z	0.009	0.014	293.25	310.5
1147	M242	Z	0.014	0.009	310.5	327.75
1148	M242	Z	0.009	0.009	327.75	345
1149	M243	Z	0.0001233	0.006	276	289.8
1150	M243	Z	0.006	0.012	289.8	303.6
1151	M243	Z	0.012	0.012	303.6	317.4
1152	M243	Z	0.012	0.012	317.4	331.2
1153	M243	Z	0.012	0.009	331.2	345
1154	M72	Z	0.0003612	0.003	276	299
1155	M72	Z	0.003	0.004	299	322

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1156	M72	Z	0.004	0.002	322	345
1157	M125	Z	0.011	0.011	289	345
1158	M54	Z	0.011	0.011	5.96e-13	345
1159	M71	Z	0.011	0.011	1.819e-12	345
1160	M84	Z	0.011	0.011	2.256e-13	348
1161	M107	Z	0.019	0.019	0	24.857
1162	M107	Z	0.019	0.019	24.857	49.714
1163	M107	Z	0.019	0.019	49.714	74.571
1164	M107	Z	0.019	0.019	74.571	99.429
1165	M107	Z	0.019	0.019	99.429	124.286
1166	M107	Z	0.019	0.019	124.286	149.143
1167	M107	Z	0.019	0.02	149.143	174
1168	M107	Z	0.02	0.02	174	198.857
1169	M107	Z	0.02	0.019	198.857	223.714
1170	M107	Z	0.019	0.019	223.714	248.571
1171	M107	Z	0.019	0.019	248.571	273.429
1172	M107	Z	0.019	0.019	273.429	298.286
1173	M107	Z	0.019	0.019	298.286	323.143
1174	M107	Z	0.019	0.019	323.143	348
1175	M108	Z	0.013	0.014	0	24.857
1176	M108	Z	0.014	0.014	24.857	49.714
1177	M108	Z	0.014	0.016	49.714	74.571
1178	M108	Z	0.016	0.017	74.571	99.429
1179	M108	Z	0.017	0.015	99.429	124.286
1180	M108	Z	0.015	0.014	124.286	149.143
1181	M108	Z	0.014	0.014	149.143	174
1182	M108	Z	0.014	0.013	174	198.857
1183	M108	Z	0.013	0.014	198.857	223.714
1184	M108	Z	0.014	0.018	223.714	248.571
1185	M108	Z	0.018	0.016	248.571	273.429
1186	M108	Z	0.016	0.014	273.429	298.286
1187	M108	Z	0.014	0.014	298.286	323.143
1188	M108	Z	0.014	0.013	323.143	348
1189	M109	Z	0.022	0.022	0	24.857
1190	M109	Z	0.022	0.022	24.857	49.714
1191	M109	Z	0.022	0.022	49.714	74.571
1192	M109	Z	0.022	0.022	74.571	99.429
1193	M109	Z	0.022	0.023	99.429	124.286
1194	M109	Z	0.023	0.023	124.286	149.143
1195	M109	Z	0.023	0.023	149.143	174
1196	M109	Z	0.023	0.023	174	198.857
1197	M109	Z	0.023	0.022	198.857	223.714
1198	M109	Z	0.022	0.022	223.714	248.571
1199	M109	Z	0.022	0.023	248.571	273.429
1200	M109	Z	0.023	0.022	273.429	298.286
1201	M109	Z	0.022	0.022	298.286	323.143
1202	M109	Z	0.022	0.022	323.143	348
1203	M110	Z	0.022	0.022	6.652e-13	348
1204	M112	Z	0.022	0.022	1.151e-12	348
1205	M115	Z	0.02	0.02	0	24.857
1206	M115	Z	0.02	0.019	24.857	49.714
1207	M115	Z	0.019	0.02	49.714	74.571
1208	M115	Z	0.02	0.02	74.571	99.429
1209	M115	Z	0.02	0.02	99.429	124.286
1210	M115	Z	0.02	0.02	124.286	149.143

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1211	M115	Z	0.02	0.02	149.143	174
1212	M115	Z	0.02	0.02	174	198.857
1213	M115	Z	0.02	0.02	198.857	223.714
1214	M115	Z	0.02	0.02	223.714	248.571
1215	M115	Z	0.02	0.02	248.571	273.429
1216	M115	Z	0.02	0.019	273.429	298.286
1217	M115	Z	0.019	0.02	298.286	323.143
1218	M115	Z	0.02	0.02	323.143	348
1219	M116	Z	0.011	0.014	0	24.857
1220	M116	Z	0.014	0.015	24.857	49.714
1221	M116	Z	0.015	0.015	49.714	74.571
1222	M116	Z	0.015	0.014	74.571	99.429
1223	M116	Z	0.014	0.014	99.429	124.286
1224	M116	Z	0.014	0.014	124.286	149.143
1225	M116	Z	0.014	0.013	149.143	174
1226	M116	Z	0.013	0.013	174	198.857
1227	M116	Z	0.013	0.015	198.857	223.714
1228	M116	Z	0.015	0.014	223.714	248.571
1229	M116	Z	0.014	0.014	248.571	273.429
1230	M116	Z	0.014	0.016	273.429	298.286
1231	M116	Z	0.016	0.014	298.286	323.143
1232	M116	Z	0.014	0.011	323.143	348
1233	M117	Z	0.023	0.023	0	24.857
1234	M117	Z	0.023	0.022	24.857	49.714
1235	M117	Z	0.022	0.022	49.714	74.571
1236	M117	Z	0.022	0.022	74.571	99.429
1237	M117	Z	0.022	0.023	99.429	124.286
1238	M117	Z	0.023	0.023	124.286	149.143
1239	M117	Z	0.023	0.023	149.143	174
1240	M117	Z	0.023	0.024	174	198.857
1241	M117	Z	0.024	0.022	198.857	223.714
1242	M117	Z	0.022	0.022	223.714	248.571
1243	M117	Z	0.022	0.023	248.571	273.429
1244	M117	Z	0.023	0.022	273.429	298.286
1245	M117	Z	0.022	0.023	298.286	323.143
1246	M117	Z	0.023	0.023	323.143	348
1247	M119	Z	0.022	0.022	1.62e-12	348
1248	M120	Z	0.022	0.022	1.601e-12	348
1249	M121	Z	0.017	0.017	0	24.857
1250	M121	Z	0.017	0.017	24.857	49.714
1251	M121	Z	0.017	0.017	49.714	74.571
1252	M121	Z	0.017	0.017	74.571	99.429
1253	M121	Z	0.017	0.017	99.429	124.286
1254	M121	Z	0.017	0.018	124.286	149.143
1255	M121	Z	0.018	0.018	149.143	174
1256	M121	Z	0.018	0.017	174	198.857
1257	M121	Z	0.017	0.017	198.857	223.714
1258	M121	Z	0.017	0.017	223.714	248.571
1259	M121	Z	0.017	0.017	248.571	273.429
1260	M121	Z	0.017	0.017	273.429	298.286
1261	M121	Z	0.017	0.017	298.286	323.143
1262	M121	Z	0.017	0.017	323.143	348
1263	M122	Z	0.008	0.008	0	24.857
1264	M122	Z	0.008	0.01	24.857	49.714
1265	M122	Z	0.01	0.01	49.714	74.571

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1266	M122	Z	0.01	0.01	74.571	99.429
1267	M122	Z	0.01	0.01	99.429	124.286
1268	M122	Z	0.01	0.007	124.286	149.143
1269	M122	Z	0.007	0.007	149.143	174
1270	M122	Z	0.007	0.009	174	198.857
1271	M122	Z	0.009	0.01	198.857	223.714
1272	M122	Z	0.01	0.01	223.714	248.571
1273	M122	Z	0.01	0.01	248.571	273.429
1274	M122	Z	0.01	0.01	273.429	298.286
1275	M122	Z	0.01	0.008	298.286	323.143
1276	M122	Z	0.008	0.008	323.143	348
1277	M128	Z	0.019	0.019	0	24.643
1278	M128	Z	0.019	0.019	24.643	49.286
1279	M128	Z	0.019	0.019	49.286	73.929
1280	M128	Z	0.019	0.019	73.929	98.571
1281	M128	Z	0.019	0.019	98.571	123.214
1282	M128	Z	0.019	0.019	123.214	147.857
1283	M128	Z	0.019	0.019	147.857	172.5
1284	M128	Z	0.019	0.019	172.5	197.143
1285	M128	Z	0.019	0.019	197.143	221.786
1286	M128	Z	0.019	0.019	221.786	246.429
1287	M128	Z	0.019	0.019	246.429	271.071
1288	M128	Z	0.019	0.019	271.071	295.714
1289	M128	Z	0.019	0.019	295.714	320.357
1290	M128	Z	0.019	0.019	320.357	345
1291	M130	Z	0.014	0.015	0	24.643
1292	M130	Z	0.015	0.015	24.643	49.286
1293	M130	Z	0.015	0.015	49.286	73.929
1294	M130	Z	0.015	0.015	73.929	98.571
1295	M130	Z	0.015	0.014	98.571	123.214
1296	M130	Z	0.014	0.015	123.214	147.857
1297	M130	Z	0.015	0.017	147.857	172.5
1298	M130	Z	0.017	0.015	172.5	197.143
1299	M130	Z	0.015	0.014	197.143	221.786
1300	M130	Z	0.014	0.015	221.786	246.429
1301	M130	Z	0.015	0.015	246.429	271.071
1302	M130	Z	0.015	0.015	271.071	295.714
1303	M130	Z	0.015	0.015	295.714	320.357
1304	M130	Z	0.015	0.014	320.357	345
1305	M131	Z	0.022	0.022	3.306e-12	345
1306	M149	Z	0.022	0.022	2.728e-12	345
1307	M150	Z	0.023	0.023	0	24.643
1308	M150	Z	0.023	0.022	24.643	49.286
1309	M150	Z	0.022	0.022	49.286	73.929
1310	M150	Z	0.022	0.022	73.929	98.571
1311	M150	Z	0.022	0.023	98.571	123.214
1312	M150	Z	0.023	0.023	123.214	147.857
1313	M150	Z	0.023	0.023	147.857	172.5
1314	M150	Z	0.023	0.024	172.5	197.143
1315	M150	Z	0.024	0.022	197.143	221.786
1316	M150	Z	0.022	0.022	221.786	246.429
1317	M150	Z	0.022	0.023	246.429	271.071
1318	M150	Z	0.023	0.022	271.071	295.714
1319	M150	Z	0.022	0.023	295.714	320.357
1320	M150	Z	0.023	0.023	320.357	345

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1321	M151	Z	0.011	0.014	0	24.643
1322	M151	Z	0.014	0.015	24.643	49.286
1323	M151	Z	0.015	0.015	49.286	73.929
1324	M151	Z	0.015	0.014	73.929	98.571
1325	M151	Z	0.014	0.014	98.571	123.214
1326	M151	Z	0.014	0.014	123.214	147.857
1327	M151	Z	0.014	0.013	147.857	172.5
1328	M151	Z	0.013	0.013	172.5	197.143
1329	M151	Z	0.013	0.015	197.143	221.786
1330	M151	Z	0.015	0.015	221.786	246.429
1331	M151	Z	0.015	0.014	246.429	271.071
1332	M151	Z	0.014	0.015	271.071	295.714
1333	M151	Z	0.015	0.014	295.714	320.357
1334	M151	Z	0.014	0.011	320.357	345
1335	M152	Z	0.023	0.023	0	24.643
1336	M152	Z	0.023	0.023	24.643	49.286
1337	M152	Z	0.023	0.023	49.286	73.929
1338	M152	Z	0.023	0.023	73.929	98.571
1339	M152	Z	0.023	0.023	98.571	123.214
1340	M152	Z	0.023	0.022	123.214	147.857
1341	M152	Z	0.022	0.022	147.857	172.5
1342	M152	Z	0.022	0.022	172.5	197.143
1343	M152	Z	0.022	0.023	197.143	221.786
1344	M152	Z	0.023	0.023	221.786	246.429
1345	M152	Z	0.023	0.023	246.429	271.071
1346	M152	Z	0.023	0.023	271.071	295.714
1347	M152	Z	0.023	0.023	295.714	320.357
1348	M152	Z	0.023	0.023	320.357	345
1349	M153	Z	0.022	0.022	8.029e-13	345
1350	M154	Z	0.02	0.02	0	24.643
1351	M154	Z	0.02	0.019	24.643	49.286
1352	M154	Z	0.019	0.02	49.286	73.929
1353	M154	Z	0.02	0.02	73.929	98.571
1354	M154	Z	0.02	0.02	98.571	123.214
1355	M154	Z	0.02	0.021	123.214	147.857
1356	M154	Z	0.021	0.02	147.857	172.5
1357	M154	Z	0.02	0.019	172.5	197.143
1358	M154	Z	0.019	0.02	197.143	221.786
1359	M154	Z	0.02	0.02	221.786	246.429
1360	M154	Z	0.02	0.019	246.429	271.071
1361	M154	Z	0.019	0.019	271.071	295.714
1362	M154	Z	0.019	0.02	295.714	320.357
1363	M154	Z	0.02	0.02	320.357	345
1364	M155	Z	0.022	0.022	6.839e-13	345
1365	M156	Z	0.017	0.017	0	24.643
1366	M156	Z	0.017	0.017	24.643	49.286
1367	M156	Z	0.017	0.017	49.286	73.929
1368	M156	Z	0.017	0.017	73.929	98.571
1369	M156	Z	0.017	0.017	98.571	123.214
1370	M156	Z	0.017	0.017	123.214	147.857
1371	M156	Z	0.017	0.018	147.857	172.5
1372	M156	Z	0.018	0.018	172.5	197.143
1373	M156	Z	0.018	0.017	197.143	221.786
1374	M156	Z	0.017	0.017	221.786	246.429
1375	M156	Z	0.017	0.017	246.429	271.071

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1376	M156	Z	0.017	0.017	271.071	295.714
1377	M156	Z	0.017	0.017	295.714	320.357
1378	M156	Z	0.017	0.017	320.357	345
1379	M157	Z	0.008	0.008	0	24.643
1380	M157	Z	0.008	0.01	24.643	49.286
1381	M157	Z	0.01	0.01	49.286	73.929
1382	M157	Z	0.01	0.01	73.929	98.571
1383	M157	Z	0.01	0.01	98.571	123.214
1384	M157	Z	0.01	0.009	123.214	147.857
1385	M157	Z	0.009	0.007	147.857	172.5
1386	M157	Z	0.007	0.007	172.5	197.143
1387	M157	Z	0.007	0.01	197.143	221.786
1388	M157	Z	0.01	0.01	221.786	246.429
1389	M157	Z	0.01	0.01	246.429	271.071
1390	M157	Z	0.01	0.01	271.071	295.714
1391	M157	Z	0.01	0.008	295.714	320.357
1392	M157	Z	0.008	0.008	320.357	345
1393	M158	Z	0.022	0.022	0	345
1394	M160	Z	0.014	0.021	0	24.643
1395	M160	Z	0.021	0.024	24.643	49.286
1396	M160	Z	0.024	0.023	49.286	73.929
1397	M160	Z	0.023	0.023	73.929	98.571
1398	M160	Z	0.023	0.023	98.571	123.214
1399	M160	Z	0.023	0.022	123.214	147.857
1400	M160	Z	0.022	0.021	147.857	172.5
1401	M160	Z	0.021	0.022	172.5	197.143
1402	M160	Z	0.022	0.023	197.143	221.786
1403	M160	Z	0.023	0.023	221.786	246.429
1404	M160	Z	0.023	0.023	246.429	271.071
1405	M160	Z	0.023	0.024	271.071	295.714
1406	M160	Z	0.024	0.021	295.714	320.357
1407	M160	Z	0.021	0.014	320.357	345
1408	M161	Z	0.022	0.022	0	345
1409	M163	Z	0.008	0.008	0	24.643
1410	M163	Z	0.008	0.01	24.643	49.286
1411	M163	Z	0.01	0.01	49.286	73.929
1412	M163	Z	0.01	0.01	73.929	98.571
1413	M163	Z	0.01	0.01	98.571	123.214
1414	M163	Z	0.01	0.009	123.214	147.857
1415	M163	Z	0.009	0.007	147.857	172.5
1416	M163	Z	0.007	0.007	172.5	197.143
1417	M163	Z	0.007	0.01	197.143	221.786
1418	M163	Z	0.01	0.01	221.786	246.429
1419	M163	Z	0.01	0.01	246.429	271.071
1420	M163	Z	0.01	0.01	271.071	295.714
1421	M163	Z	0.01	0.008	295.714	320.357
1422	M163	Z	0.008	0.008	320.357	345
1423	M174	Z	0.017	0.017	0	24.643
1424	M174	Z	0.017	0.017	24.643	49.286
1425	M174	Z	0.017	0.017	49.286	73.929
1426	M174	Z	0.017	0.017	73.929	98.571
1427	M174	Z	0.017	0.017	98.571	123.214
1428	M174	Z	0.017	0.017	123.214	147.857
1429	M174	Z	0.017	0.018	147.857	172.5
1430	M174	Z	0.018	0.018	172.5	197.143

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1431	M174	Z	0.018	0.017	197.143	221.786
1432	M174	Z	0.017	0.017	221.786	246.429
1433	M174	Z	0.017	0.017	246.429	271.071
1434	M174	Z	0.017	0.017	271.071	295.714
1435	M174	Z	0.017	0.017	295.714	320.357
1436	M174	Z	0.017	0.017	320.357	345
1437	M175	Z	0.022	0.022	2.833e-13	345
1438	M176	Z	0.023	0.023	0	24.643
1439	M176	Z	0.023	0.022	24.643	49.286
1440	M176	Z	0.022	0.023	49.286	73.929
1441	M176	Z	0.023	0.024	73.929	98.571
1442	M176	Z	0.024	0.023	98.571	123.214
1443	M176	Z	0.023	0.021	123.214	147.857
1444	M176	Z	0.021	0.023	147.857	172.5
1445	M176	Z	0.023	0.023	172.5	197.143
1446	M176	Z	0.023	0.022	197.143	221.786
1447	M176	Z	0.022	0.023	221.786	246.429
1448	M176	Z	0.023	0.023	246.429	271.071
1449	M176	Z	0.023	0.022	271.071	295.714
1450	M176	Z	0.022	0.023	295.714	320.357
1451	M176	Z	0.023	0.023	320.357	345
1452	M177	Z	0.024	0.023	0	24.643
1453	M177	Z	0.023	0.022	24.643	49.286
1454	M177	Z	0.022	0.023	49.286	73.929
1455	M177	Z	0.023	0.022	73.929	98.571
1456	M177	Z	0.022	0.022	98.571	123.214
1457	M177	Z	0.022	0.024	123.214	147.857
1458	M177	Z	0.024	0.023	147.857	172.5
1459	M177	Z	0.023	0.023	172.5	197.143
1460	M177	Z	0.023	0.023	197.143	221.786
1461	M177	Z	0.023	0.022	221.786	246.429
1462	M177	Z	0.022	0.022	246.429	271.071
1463	M177	Z	0.022	0.023	271.071	295.714
1464	M177	Z	0.023	0.023	295.714	320.357
1465	M177	Z	0.023	0.024	320.357	345
1466	M178	Z	0.022	0.022	2.16e-12	345
1467	M179	Z	0.023	0.023	0	24.643
1468	M179	Z	0.023	0.023	24.643	49.286
1469	M179	Z	0.023	0.023	49.286	73.929
1470	M179	Z	0.023	0.023	73.929	98.571
1471	M179	Z	0.023	0.023	98.571	123.214
1472	M179	Z	0.023	0.022	123.214	147.857
1473	M179	Z	0.022	0.022	147.857	172.5
1474	M179	Z	0.022	0.022	172.5	197.143
1475	M179	Z	0.022	0.023	197.143	221.786
1476	M179	Z	0.023	0.023	221.786	246.429
1477	M179	Z	0.023	0.023	246.429	271.071
1478	M179	Z	0.023	0.023	271.071	295.714
1479	M179	Z	0.023	0.023	295.714	320.357
1480	M179	Z	0.023	0.023	320.357	345
1481	M180	Z	0.021	0.022	0	24.643
1482	M180	Z	0.022	0.022	24.643	49.286
1483	M180	Z	0.022	0.023	49.286	73.929
1484	M180	Z	0.023	0.023	73.929	98.571
1485	M180	Z	0.023	0.022	98.571	123.214

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1486	M180	Z	0.022	0.023	123.214	147.857
1487	M180	Z	0.023	0.024	147.857	172.5
1488	M180	Z	0.024	0.023	172.5	197.143
1489	M180	Z	0.023	0.022	197.143	221.786
1490	M180	Z	0.022	0.022	221.786	246.429
1491	M180	Z	0.022	0.023	246.429	271.071
1492	M180	Z	0.023	0.022	271.071	295.714
1493	M180	Z	0.022	0.022	295.714	320.357
1494	M180	Z	0.022	0.021	320.357	345
1495	M181	Z	0.023	0.023	0	24.643
1496	M181	Z	0.023	0.023	24.643	49.286
1497	M181	Z	0.023	0.023	49.286	73.929
1498	M181	Z	0.023	0.023	73.929	98.571
1499	M181	Z	0.023	0.023	98.571	123.214
1500	M181	Z	0.023	0.023	123.214	147.857
1501	M181	Z	0.023	0.023	147.857	172.5
1502	M181	Z	0.023	0.023	172.5	197.143
1503	M181	Z	0.023	0.023	197.143	221.786
1504	M181	Z	0.023	0.023	221.786	246.429
1505	M181	Z	0.023	0.023	246.429	271.071
1506	M181	Z	0.023	0.023	271.071	295.714
1507	M181	Z	0.023	0.023	295.714	320.357
1508	M181	Z	0.023	0.023	320.357	345
1509	M182	Z	0.022	0.022	1.705e-13	56
1510	M184	Z	0.012	0.013	0	13.8
1511	M184	Z	0.013	0.013	13.8	27.6
1512	M184	Z	0.013	0.014	27.6	41.4
1513	M184	Z	0.014	0.007	41.4	55.2
1514	M184	Z	0.007	5.124e-5	55.2	69
1515	M185	Z	0.022	0.022	1.818e-12	56
1516	M187	Z	0.008	0.01	0	13.8
1517	M187	Z	0.01	0.008	13.8	27.6
1518	M187	Z	0.008	0.008	27.6	41.4
1519	M187	Z	0.008	0.005	41.4	55.2
1520	M187	Z	0.005	0.0001066	55.2	69
1521	M198	Z	0.011	0.016	0	17.25
1522	M198	Z	0.016	0.022	17.25	34.5
1523	M198	Z	0.022	0.013	34.5	51.75
1524	M198	Z	0.013	0.000287	51.75	69
1525	M199	Z	0.022	0.022	0	56
1526	M200	Z	0.024	0.024	9.878e-5	56.046
1527	M201	Z	0.018	0.021	0	13.8
1528	M201	Z	0.021	0.022	13.8	27.6
1529	M201	Z	0.022	0.021	27.6	41.4
1530	M201	Z	0.021	0.01	41.4	55.2
1531	M201	Z	0.01	0.000129	55.2	69
1532	M202	Z	0.022	0.022	6.253e-13	56
1533	M203	Z	0.032	0.018	0	23
1534	M203	Z	0.018	0.012	23	46
1535	M203	Z	0.012	0.013	46	69
1536	M204	Z	0.008	0.017	0	13.8
1537	M204	Z	0.017	0.021	13.8	27.6
1538	M204	Z	0.021	0.017	27.6	41.4
1539	M204	Z	0.017	0.006	41.4	55.2
1540	M204	Z	0.006	0.0004352	55.2	69

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1541	M205	Z	0.019	0.019	2.3e-13	56.003
1542	M244	Z	0.012	0.011	0	13.8
1543	M244	Z	0.011	0.009	13.8	27.6
1544	M244	Z	0.009	0.01	27.6	41.4
1545	M244	Z	0.01	0.006	41.4	55.2
1546	M244	Z	0.006	-4.013e-5	55.2	69
1547	M245	Z	0.009	0.009	0	17.25
1548	M245	Z	0.009	0.014	17.25	34.5
1549	M245	Z	0.014	0.009	34.5	51.75
1550	M245	Z	0.009	2.223e-5	51.75	69
1551	M250	Z	0.011	0.011	0	24.643
1552	M250	Z	0.011	0.011	24.643	49.286
1553	M250	Z	0.011	0.011	49.286	73.929
1554	M250	Z	0.011	0.011	73.929	98.571
1555	M250	Z	0.011	0.011	98.571	123.214
1556	M250	Z	0.011	0.011	123.214	147.857
1557	M250	Z	0.011	0.011	147.857	172.5
1558	M250	Z	0.011	0.011	172.5	197.143
1559	M250	Z	0.011	0.011	197.143	221.786
1560	M250	Z	0.011	0.011	221.786	246.429
1561	M250	Z	0.011	0.011	246.429	271.071
1562	M250	Z	0.011	0.011	271.071	295.714
1563	M250	Z	0.011	0.011	295.714	320.357
1564	M250	Z	0.011	0.011	320.357	345
1565	M251	Z	0.01	0.01	0	24.857
1566	M251	Z	0.01	0.011	24.857	49.714
1567	M251	Z	0.011	0.012	49.714	74.571
1568	M251	Z	0.012	0.012	74.571	99.429
1569	M251	Z	0.012	0.011	99.429	124.286
1570	M251	Z	0.011	0.011	124.286	149.143
1571	M251	Z	0.011	0.011	149.143	174
1572	M251	Z	0.011	0.011	174	198.857
1573	M251	Z	0.011	0.011	198.857	223.714
1574	M251	Z	0.011	0.012	223.714	248.571
1575	M251	Z	0.012	0.012	248.571	273.429
1576	M251	Z	0.012	0.011	273.429	298.286
1577	M251	Z	0.011	0.01	298.286	323.143
1578	M251	Z	0.01	0.01	323.143	348
1579	M252	Z	0.009	0.011	0	24.643
1580	M252	Z	0.011	0.012	24.643	49.286
1581	M252	Z	0.012	0.011	49.286	73.929
1582	M252	Z	0.011	0.012	73.929	98.571
1583	M252	Z	0.012	0.012	98.571	123.214
1584	M252	Z	0.012	0.01	123.214	147.857
1585	M252	Z	0.01	0.011	147.857	172.5
1586	M252	Z	0.011	0.012	172.5	197.143
1587	M252	Z	0.012	0.01	197.143	221.786
1588	M252	Z	0.01	0.011	221.786	246.429
1589	M252	Z	0.011	0.012	246.429	271.071
1590	M252	Z	0.012	0.012	271.071	295.714
1591	M252	Z	0.012	0.011	295.714	320.357
1592	M252	Z	0.011	0.009	320.357	345
1593	M253	Z	0.009	0.011	0	24.857
1594	M253	Z	0.011	0.012	24.857	49.714
1595	M253	Z	0.012	0.011	49.714	74.571

Member Distributed Loads (BLC 10 : BLC 5 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1596	M253	Z	0.011	0.012	74.571	99.429
1597	M253	Z	0.012	0.012	99.429	124.286
1598	M253	Z	0.012	0.01	124.286	149.143
1599	M253	Z	0.01	0.01	149.143	174
1600	M253	Z	0.01	0.011	174	198.857
1601	M253	Z	0.011	0.012	198.857	223.714
1602	M253	Z	0.012	0.012	223.714	248.571
1603	M253	Z	0.012	0.011	248.571	273.429
1604	M253	Z	0.011	0.012	273.429	298.286
1605	M253	Z	0.012	0.011	298.286	323.143
1606	M253	Z	0.011	0.009	323.143	348

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M67	Y	-0.017	-0.018	0	24.643
2	M67	Y	-0.018	-0.021	24.643	49.286
3	M67	Y	-0.021	-0.021	49.286	73.929
4	M67	Y	-0.021	-0.019	73.929	98.571
5	M67	Y	-0.019	-0.019	98.571	123.214
6	M67	Y	-0.019	-0.019	123.214	147.857
7	M67	Y	-0.019	-0.019	147.857	172.5
8	M67	Y	-0.019	-0.019	172.5	197.143
9	M67	Y	-0.019	-0.019	197.143	221.786
10	M67	Y	-0.019	-0.019	221.786	246.429
11	M67	Y	-0.019	-0.021	246.429	271.071
12	M67	Y	-0.021	-0.021	271.071	295.714
13	M67	Y	-0.021	-0.018	295.714	320.357
14	M67	Y	-0.018	-0.017	320.357	345
15	M72	Y	-0.017	-0.018	0	24.643
16	M72	Y	-0.018	-0.021	24.643	49.286
17	M72	Y	-0.021	-0.021	49.286	73.929
18	M72	Y	-0.021	-0.019	73.929	98.571
19	M72	Y	-0.019	-0.019	98.571	123.214
20	M72	Y	-0.019	-0.019	123.214	147.857
21	M72	Y	-0.019	-0.019	147.857	172.5
22	M72	Y	-0.019	-0.019	172.5	197.143
23	M72	Y	-0.019	-0.019	197.143	221.786
24	M72	Y	-0.019	-0.019	221.786	246.429
25	M72	Y	-0.019	-0.021	246.429	271.071
26	M72	Y	-0.021	-0.021	271.071	295.714
27	M72	Y	-0.021	-0.018	295.714	320.357
28	M72	Y	-0.018	-0.017	320.357	345
29	M138	Y	-0.03	-0.03	1.226e-13	345
30	M139	Y	-0.03	-0.03	1.705e-13	345
31	M50	Y	-0.03	-0.03	2.043e-14	345
32	M58	Y	-0.017	-0.018	0	24.643
33	M58	Y	-0.018	-0.021	24.643	49.286
34	M58	Y	-0.021	-0.021	49.286	73.929
35	M58	Y	-0.021	-0.019	73.929	98.571
36	M58	Y	-0.019	-0.019	98.571	123.214
37	M58	Y	-0.019	-0.019	123.214	147.857
38	M58	Y	-0.019	-0.019	147.857	172.5
39	M58	Y	-0.019	-0.019	172.5	197.143
40	M58	Y	-0.019	-0.019	197.143	221.786
41	M58	Y	-0.019	-0.019	221.786	246.429

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
42	M58	Y	-0.019	-0.021	246.429	271.071
43	M58	Y	-0.021	-0.021	271.071	295.714
44	M58	Y	-0.021	-0.018	295.714	320.357
45	M58	Y	-0.018	-0.017	320.357	345
46	M69	Y	-0.03	-0.03	2.043e-14	345
47	M76	Y	-0.017	-0.018	0	24.643
48	M76	Y	-0.018	-0.021	24.643	49.286
49	M76	Y	-0.021	-0.021	49.286	73.929
50	M76	Y	-0.021	-0.019	73.929	98.571
51	M76	Y	-0.019	-0.019	98.571	123.214
52	M76	Y	-0.019	-0.019	123.214	147.857
53	M76	Y	-0.019	-0.019	147.857	172.5
54	M76	Y	-0.019	-0.019	172.5	197.143
55	M76	Y	-0.019	-0.019	197.143	221.786
56	M76	Y	-0.019	-0.019	221.786	246.429
57	M76	Y	-0.019	-0.021	246.429	271.071
58	M76	Y	-0.021	-0.021	271.071	295.714
59	M76	Y	-0.021	-0.018	295.714	320.357
60	M76	Y	-0.018	-0.017	320.357	345
61	M83	Y	-0.03	-0.03	2.336e-13	348
62	M85	Y	-0.016	-0.017	0	24.857
63	M85	Y	-0.017	-0.02	24.857	49.714
64	M85	Y	-0.02	-0.023	49.714	74.571
65	M85	Y	-0.023	-0.02	74.571	99.429
66	M85	Y	-0.02	-0.018	99.429	124.286
67	M85	Y	-0.018	-0.018	124.286	149.143
68	M85	Y	-0.018	-0.018	149.143	174
69	M85	Y	-0.018	-0.018	174	198.857
70	M85	Y	-0.018	-0.018	198.857	223.714
71	M85	Y	-0.018	-0.02	223.714	248.571
72	M85	Y	-0.02	-0.023	248.571	273.429
73	M85	Y	-0.023	-0.02	273.429	298.286
74	M85	Y	-0.02	-0.017	298.286	323.143
75	M85	Y	-0.017	-0.016	323.143	348
76	M57	Y	-0.05	-0.05	0	24.857
77	M57	Y	-0.05	-0.05	24.857	49.714
78	M57	Y	-0.05	-0.05	49.714	74.571
79	M57	Y	-0.05	-0.05	74.571	99.429
80	M57	Y	-0.05	-0.05	99.429	124.286
81	M57	Y	-0.05	-0.051	124.286	149.143
82	M57	Y	-0.051	-0.053	149.143	174
83	M57	Y	-0.053	-0.053	174	198.857
84	M57	Y	-0.053	-0.051	198.857	223.714
85	M57	Y	-0.051	-0.05	223.714	248.571
86	M57	Y	-0.05	-0.05	248.571	273.429
87	M57	Y	-0.05	-0.05	273.429	298.286
88	M57	Y	-0.05	-0.05	298.286	323.143
89	M57	Y	-0.05	-0.05	323.143	348
90	M96	Y	-0.036	-0.037	0	24.857
91	M96	Y	-0.037	-0.038	24.857	49.714
92	M96	Y	-0.038	-0.043	49.714	74.571
93	M96	Y	-0.043	-0.045	74.571	99.429
94	M96	Y	-0.045	-0.04	99.429	124.286
95	M96	Y	-0.04	-0.039	124.286	149.143
96	M96	Y	-0.039	-0.036	149.143	174

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
97	M96	Y	-0.036	-0.036	174	198.857
98	M96	Y	-0.036	-0.041	198.857	223.714
99	M96	Y	-0.041	-0.045	223.714	248.571
100	M96	Y	-0.045	-0.043	248.571	273.429
101	M96	Y	-0.043	-0.038	273.429	298.286
102	M96	Y	-0.038	-0.037	298.286	323.143
103	M96	Y	-0.037	-0.036	323.143	348
104	M97	Y	-0.06	-0.06	0	24.857
105	M97	Y	-0.06	-0.06	24.857	49.714
106	M97	Y	-0.06	-0.06	49.714	74.571
107	M97	Y	-0.06	-0.06	74.571	99.429
108	M97	Y	-0.06	-0.06	99.429	124.286
109	M97	Y	-0.06	-0.061	124.286	149.143
110	M97	Y	-0.061	-0.064	149.143	174
111	M97	Y	-0.064	-0.064	174	198.857
112	M97	Y	-0.064	-0.061	198.857	223.714
113	M97	Y	-0.061	-0.06	223.714	248.571
114	M97	Y	-0.06	-0.06	248.571	273.429
115	M97	Y	-0.06	-0.06	273.429	298.286
116	M97	Y	-0.06	-0.06	298.286	323.143
117	M97	Y	-0.06	-0.06	323.143	348
118	M98	Y	-0.06	-0.06	4.565e-13	348
119	M99	Y	-0.06	-0.06	4.539e-13	348
120	M100	Y	-0.052	-0.055	0	24.857
121	M100	Y	-0.055	-0.056	24.857	49.714
122	M100	Y	-0.056	-0.055	49.714	74.571
123	M100	Y	-0.055	-0.055	74.571	99.429
124	M100	Y	-0.055	-0.055	99.429	124.286
125	M100	Y	-0.055	-0.056	124.286	149.143
126	M100	Y	-0.056	-0.06	149.143	174
127	M100	Y	-0.06	-0.06	174	198.857
128	M100	Y	-0.06	-0.056	198.857	223.714
129	M100	Y	-0.056	-0.055	223.714	248.571
130	M100	Y	-0.055	-0.055	248.571	273.429
131	M100	Y	-0.055	-0.056	273.429	298.286
132	M100	Y	-0.056	-0.055	298.286	323.143
133	M100	Y	-0.055	-0.052	323.143	348
134	M101	Y	-0.033	-0.032	0	24.857
135	M101	Y	-0.032	-0.032	24.857	49.714
136	M101	Y	-0.032	-0.036	49.714	74.571
137	M101	Y	-0.036	-0.039	74.571	99.429
138	M101	Y	-0.039	-0.035	99.429	124.286
139	M101	Y	-0.035	-0.034	124.286	149.143
140	M101	Y	-0.034	-0.031	149.143	174
141	M101	Y	-0.031	-0.031	174	198.857
142	M101	Y	-0.031	-0.036	198.857	223.714
143	M101	Y	-0.036	-0.039	223.714	248.571
144	M101	Y	-0.039	-0.036	248.571	273.429
145	M101	Y	-0.036	-0.032	273.429	298.286
146	M101	Y	-0.032	-0.032	298.286	323.143
147	M101	Y	-0.032	-0.033	323.143	348
148	M102	Y	-0.059	-0.06	0	24.857
149	M102	Y	-0.06	-0.06	24.857	49.714
150	M102	Y	-0.06	-0.06	49.714	74.571
151	M102	Y	-0.06	-0.06	74.571	99.429

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
152	M102	Y	-0.06	-0.06	99.429	124.286
153	M102	Y	-0.06	-0.061	124.286	149.143
154	M102	Y	-0.061	-0.064	149.143	174
155	M102	Y	-0.064	-0.064	174	198.857
156	M102	Y	-0.064	-0.061	198.857	223.714
157	M102	Y	-0.061	-0.06	223.714	248.571
158	M102	Y	-0.06	-0.06	248.571	273.429
159	M102	Y	-0.06	-0.06	273.429	298.286
160	M102	Y	-0.06	-0.06	298.286	323.143
161	M102	Y	-0.06	-0.059	323.143	348
162	M103	Y	-0.06	-0.06	2.38e-13	348
163	M104	Y	-0.06	-0.06	1.818e-12	348
164	M105	Y	-0.051	-0.051	0	24.857
165	M105	Y	-0.051	-0.051	24.857	49.714
166	M105	Y	-0.051	-0.051	49.714	74.571
167	M105	Y	-0.051	-0.051	74.571	99.429
168	M105	Y	-0.051	-0.052	99.429	124.286
169	M105	Y	-0.052	-0.055	124.286	149.143
170	M105	Y	-0.055	-0.055	149.143	174
171	M105	Y	-0.055	-0.052	174	198.857
172	M105	Y	-0.052	-0.051	198.857	223.714
173	M105	Y	-0.051	-0.051	223.714	248.571
174	M105	Y	-0.051	-0.051	248.571	273.429
175	M105	Y	-0.051	-0.051	273.429	298.286
176	M105	Y	-0.051	-0.051	298.286	323.143
177	M105	Y	-0.051	-0.051	323.143	348
178	M106	Y	-0.027	-0.028	0	24.857
179	M106	Y	-0.028	-0.029	24.857	49.714
180	M106	Y	-0.029	-0.034	49.714	74.571
181	M106	Y	-0.034	-0.034	74.571	99.429
182	M106	Y	-0.034	-0.029	99.429	124.286
183	M106	Y	-0.029	-0.029	124.286	149.143
184	M106	Y	-0.029	-0.029	149.143	174
185	M106	Y	-0.029	-0.029	174	198.857
186	M106	Y	-0.029	-0.029	198.857	223.714
187	M106	Y	-0.029	-0.034	223.714	248.571
188	M106	Y	-0.034	-0.034	248.571	273.429
189	M106	Y	-0.034	-0.029	273.429	298.286
190	M106	Y	-0.029	-0.028	298.286	323.143
191	M106	Y	-0.028	-0.027	323.143	348
192	M127	Y	-0.029	-0.03	0	24.643
193	M127	Y	-0.03	-0.031	24.643	49.286
194	M127	Y	-0.031	-0.031	49.286	73.929
195	M127	Y	-0.031	-0.031	73.929	98.571
196	M127	Y	-0.031	-0.031	98.571	123.214
197	M127	Y	-0.031	-0.031	123.214	147.857
198	M127	Y	-0.031	-0.031	147.857	172.5
199	M127	Y	-0.031	-0.031	172.5	197.143
200	M127	Y	-0.031	-0.031	197.143	221.786
201	M127	Y	-0.031	-0.031	221.786	246.429
202	M127	Y	-0.031	-0.031	246.429	271.071
203	M127	Y	-0.031	-0.031	271.071	295.714
204	M127	Y	-0.031	-0.03	295.714	320.357
205	M127	Y	-0.03	-0.029	320.357	345
206	M133	Y	-0.06	-0.06	0	24.643

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
207	M133	Y	-0.06	-0.06	24.643	49.286
208	M133	Y	-0.06	-0.06	49.286	73.929
209	M133	Y	-0.06	-0.06	73.929	98.571
210	M133	Y	-0.06	-0.06	98.571	123.214
211	M133	Y	-0.06	-0.06	123.214	147.857
212	M133	Y	-0.06	-0.059	147.857	172.5
213	M133	Y	-0.059	-0.06	172.5	197.143
214	M133	Y	-0.06	-0.06	197.143	221.786
215	M133	Y	-0.06	-0.06	221.786	246.429
216	M133	Y	-0.06	-0.06	246.429	271.071
217	M133	Y	-0.06	-0.06	271.071	295.714
218	M133	Y	-0.06	-0.06	295.714	320.357
219	M133	Y	-0.06	-0.06	320.357	345
220	M136	Y	-0.051	-0.051	0	24.643
221	M136	Y	-0.051	-0.051	24.643	49.286
222	M136	Y	-0.051	-0.051	49.286	73.929
223	M136	Y	-0.051	-0.051	73.929	98.571
224	M136	Y	-0.051	-0.051	98.571	123.214
225	M136	Y	-0.051	-0.051	123.214	147.857
226	M136	Y	-0.051	-0.051	147.857	172.5
227	M136	Y	-0.051	-0.051	172.5	197.143
228	M136	Y	-0.051	-0.051	197.143	221.786
229	M136	Y	-0.051	-0.051	221.786	246.429
230	M136	Y	-0.051	-0.051	246.429	271.071
231	M136	Y	-0.051	-0.051	271.071	295.714
232	M136	Y	-0.051	-0.051	295.714	320.357
233	M136	Y	-0.051	-0.051	320.357	345
234	M137	Y	-0.06	-0.06	2.274e-13	345
235	M141	Y	-0.052	-0.056	0	24.643
236	M141	Y	-0.056	-0.057	24.643	49.286
237	M141	Y	-0.057	-0.056	49.286	73.929
238	M141	Y	-0.056	-0.056	73.929	98.571
239	M141	Y	-0.056	-0.056	98.571	123.214
240	M141	Y	-0.056	-0.056	123.214	147.857
241	M141	Y	-0.056	-0.056	147.857	172.5
242	M141	Y	-0.056	-0.056	172.5	197.143
243	M141	Y	-0.056	-0.056	197.143	221.786
244	M141	Y	-0.056	-0.056	221.786	246.429
245	M141	Y	-0.056	-0.056	246.429	271.071
246	M141	Y	-0.056	-0.057	271.071	295.714
247	M141	Y	-0.057	-0.056	295.714	320.357
248	M141	Y	-0.056	-0.052	320.357	345
249	M142	Y	-0.06	-0.06	0	24.643
250	M142	Y	-0.06	-0.06	24.643	49.286
251	M142	Y	-0.06	-0.06	49.286	73.929
252	M142	Y	-0.06	-0.06	73.929	98.571
253	M142	Y	-0.06	-0.06	98.571	123.214
254	M142	Y	-0.06	-0.06	123.214	147.857
255	M142	Y	-0.06	-0.06	147.857	172.5
256	M142	Y	-0.06	-0.06	172.5	197.143
257	M142	Y	-0.06	-0.06	197.143	221.786
258	M142	Y	-0.06	-0.06	221.786	246.429
259	M142	Y	-0.06	-0.06	246.429	271.071
260	M142	Y	-0.06	-0.06	271.071	295.714
261	M142	Y	-0.06	-0.06	295.714	320.357

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
262	M142	Y	-0.06	-0.059	320.357	345
263	M143	Y	-0.05	-0.05	0	24.643
264	M143	Y	-0.05	-0.05	24.643	49.286
265	M143	Y	-0.05	-0.05	49.286	73.929
266	M143	Y	-0.05	-0.05	73.929	98.571
267	M143	Y	-0.05	-0.05	98.571	123.214
268	M143	Y	-0.05	-0.05	123.214	147.857
269	M143	Y	-0.05	-0.05	147.857	172.5
270	M143	Y	-0.05	-0.05	172.5	197.143
271	M143	Y	-0.05	-0.05	197.143	221.786
272	M143	Y	-0.05	-0.05	221.786	246.429
273	M143	Y	-0.05	-0.05	246.429	271.071
274	M143	Y	-0.05	-0.05	271.071	295.714
275	M143	Y	-0.05	-0.05	295.714	320.357
276	M143	Y	-0.05	-0.05	320.357	345
277	M144	Y	-0.038	-0.039	0	24.643
278	M144	Y	-0.039	-0.04	24.643	49.286
279	M144	Y	-0.04	-0.04	49.286	73.929
280	M144	Y	-0.04	-0.04	73.929	98.571
281	M144	Y	-0.04	-0.039	98.571	123.214
282	M144	Y	-0.039	-0.041	123.214	147.857
283	M144	Y	-0.041	-0.044	147.857	172.5
284	M144	Y	-0.044	-0.041	172.5	197.143
285	M144	Y	-0.041	-0.039	197.143	221.786
286	M144	Y	-0.039	-0.04	221.786	246.429
287	M144	Y	-0.04	-0.04	246.429	271.071
288	M144	Y	-0.04	-0.04	271.071	295.714
289	M144	Y	-0.04	-0.039	295.714	320.357
290	M144	Y	-0.039	-0.038	320.357	345
291	M145	Y	-0.06	-0.06	5.684e-13	345
292	M146	Y	-0.031	-0.033	0	24.643
293	M146	Y	-0.033	-0.036	24.643	49.286
294	M146	Y	-0.036	-0.037	49.286	73.929
295	M146	Y	-0.037	-0.035	73.929	98.571
296	M146	Y	-0.035	-0.035	98.571	123.214
297	M146	Y	-0.035	-0.035	123.214	147.857
298	M146	Y	-0.035	-0.035	147.857	172.5
299	M146	Y	-0.035	-0.035	172.5	197.143
300	M146	Y	-0.035	-0.035	197.143	221.786
301	M146	Y	-0.035	-0.035	221.786	246.429
302	M146	Y	-0.035	-0.037	246.429	271.071
303	M146	Y	-0.037	-0.036	271.071	295.714
304	M146	Y	-0.036	-0.033	295.714	320.357
305	M146	Y	-0.033	-0.031	320.357	345
306	M147	Y	-0.06	-0.06	2.141e-12	345
307	M148	Y	-0.06	-0.06	7.878e-13	345
308	M159	Y	-0.06	-0.06	0	24.643
309	M159	Y	-0.06	-0.06	24.643	49.286
310	M159	Y	-0.06	-0.06	49.286	73.929
311	M159	Y	-0.06	-0.06	73.929	98.571
312	M159	Y	-0.06	-0.06	98.571	123.214
313	M159	Y	-0.06	-0.06	123.214	147.857
314	M159	Y	-0.06	-0.06	147.857	172.5
315	M159	Y	-0.06	-0.06	172.5	197.143
316	M159	Y	-0.06	-0.06	197.143	221.786

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
317	M159	Y	-0.06	-0.06	221.786	246.429
318	M159	Y	-0.06	-0.06	246.429	271.071
319	M159	Y	-0.06	-0.06	271.071	295.714
320	M159	Y	-0.06	-0.06	295.714	320.357
321	M159	Y	-0.06	-0.059	320.357	345
322	M162	Y	-0.06	-0.057	0	24.643
323	M162	Y	-0.057	-0.057	24.643	49.286
324	M162	Y	-0.057	-0.059	49.286	73.929
325	M162	Y	-0.059	-0.06	73.929	98.571
326	M162	Y	-0.06	-0.06	98.571	123.214
327	M162	Y	-0.06	-0.06	123.214	147.857
328	M162	Y	-0.06	-0.06	147.857	172.5
329	M162	Y	-0.06	-0.06	172.5	197.143
330	M162	Y	-0.06	-0.06	197.143	221.786
331	M162	Y	-0.06	-0.06	221.786	246.429
332	M162	Y	-0.06	-0.06	246.429	271.071
333	M162	Y	-0.06	-0.057	271.071	295.714
334	M162	Y	-0.057	-0.057	295.714	320.357
335	M162	Y	-0.057	-0.06	320.357	345
336	M164	Y	-0.06	-0.06	0	24.643
337	M164	Y	-0.06	-0.06	24.643	49.286
338	M164	Y	-0.06	-0.06	49.286	73.929
339	M164	Y	-0.06	-0.06	73.929	98.571
340	M164	Y	-0.06	-0.06	98.571	123.214
341	M164	Y	-0.06	-0.06	123.214	147.857
342	M164	Y	-0.06	-0.059	147.857	172.5
343	M164	Y	-0.059	-0.06	172.5	197.143
344	M164	Y	-0.06	-0.06	197.143	221.786
345	M164	Y	-0.06	-0.06	221.786	246.429
346	M164	Y	-0.06	-0.06	246.429	271.071
347	M164	Y	-0.06	-0.06	271.071	295.714
348	M164	Y	-0.06	-0.06	295.714	320.357
349	M164	Y	-0.06	-0.06	320.357	345
350	M165	Y	-0.057	-0.059	0	24.643
351	M165	Y	-0.059	-0.06	24.643	49.286
352	M165	Y	-0.06	-0.06	49.286	73.929
353	M165	Y	-0.06	-0.06	73.929	98.571
354	M165	Y	-0.06	-0.057	98.571	123.214
355	M165	Y	-0.057	-0.062	123.214	147.857
356	M165	Y	-0.062	-0.069	147.857	172.5
357	M165	Y	-0.069	-0.062	172.5	197.143
358	M165	Y	-0.062	-0.057	197.143	221.786
359	M165	Y	-0.057	-0.06	221.786	246.429
360	M165	Y	-0.06	-0.06	246.429	271.071
361	M165	Y	-0.06	-0.06	271.071	295.714
362	M165	Y	-0.06	-0.059	295.714	320.357
363	M165	Y	-0.059	-0.057	320.357	345
364	M166	Y	-0.06	-0.06	0	24.643
365	M166	Y	-0.06	-0.06	24.643	49.286
366	M166	Y	-0.06	-0.06	49.286	73.929
367	M166	Y	-0.06	-0.06	73.929	98.571
368	M166	Y	-0.06	-0.06	98.571	123.214
369	M166	Y	-0.06	-0.06	123.214	147.857
370	M166	Y	-0.06	-0.059	147.857	172.5
371	M166	Y	-0.059	-0.06	172.5	197.143

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
372	M166	Y	-0.06	-0.06	197.143	221.786
373	M166	Y	-0.06	-0.06	221.786	246.429
374	M166	Y	-0.06	-0.06	246.429	271.071
375	M166	Y	-0.06	-0.06	271.071	295.714
376	M166	Y	-0.06	-0.06	295.714	320.357
377	M166	Y	-0.06	-0.06	320.357	345
378	M167	Y	-0.06	-0.06	4.059e-13	345
379	M168	Y	-0.06	-0.06	3.935e-13	345
380	M169	Y	-0.06	-0.059	0	24.643
381	M169	Y	-0.059	-0.064	24.643	49.286
382	M169	Y	-0.064	-0.065	49.286	73.929
383	M169	Y	-0.065	-0.06	73.929	98.571
384	M169	Y	-0.06	-0.06	98.571	123.214
385	M169	Y	-0.06	-0.06	123.214	147.857
386	M169	Y	-0.06	-0.06	147.857	172.5
387	M169	Y	-0.06	-0.06	172.5	197.143
388	M169	Y	-0.06	-0.06	197.143	221.786
389	M169	Y	-0.06	-0.06	221.786	246.429
390	M169	Y	-0.06	-0.065	246.429	271.071
391	M169	Y	-0.065	-0.063	271.071	295.714
392	M169	Y	-0.063	-0.059	295.714	320.357
393	M169	Y	-0.059	-0.06	320.357	345
394	M170	Y	-0.06	-0.06	1.139e-12	345
395	M171	Y	-0.06	-0.06	1.166e-12	345
396	M172	Y	-0.029	-0.03	0	24.643
397	M172	Y	-0.03	-0.031	24.643	49.286
398	M172	Y	-0.031	-0.031	49.286	73.929
399	M172	Y	-0.031	-0.031	73.929	98.571
400	M172	Y	-0.031	-0.031	98.571	123.214
401	M172	Y	-0.031	-0.031	123.214	147.857
402	M172	Y	-0.031	-0.031	147.857	172.5
403	M172	Y	-0.031	-0.031	172.5	197.143
404	M172	Y	-0.031	-0.031	197.143	221.786
405	M172	Y	-0.031	-0.031	221.786	246.429
406	M172	Y	-0.031	-0.031	246.429	271.071
407	M172	Y	-0.031	-0.031	271.071	295.714
408	M172	Y	-0.031	-0.03	295.714	320.357
409	M172	Y	-0.03	-0.029	320.357	345
410	M173	Y	-0.051	-0.051	0	24.643
411	M173	Y	-0.051	-0.051	24.643	49.286
412	M173	Y	-0.051	-0.051	49.286	73.929
413	M173	Y	-0.051	-0.051	73.929	98.571
414	M173	Y	-0.051	-0.051	98.571	123.214
415	M173	Y	-0.051	-0.051	123.214	147.857
416	M173	Y	-0.051	-0.051	147.857	172.5
417	M173	Y	-0.051	-0.051	172.5	197.143
418	M173	Y	-0.051	-0.051	197.143	221.786
419	M173	Y	-0.051	-0.051	221.786	246.429
420	M173	Y	-0.051	-0.051	246.429	271.071
421	M173	Y	-0.051	-0.051	271.071	295.714
422	M173	Y	-0.051	-0.051	295.714	320.357
423	M173	Y	-0.051	-0.051	320.357	345
424	M183	Y	-0.062	-0.064	0	24.643
425	M183	Y	-0.064	-0.062	24.643	49.286
426	M183	Y	-0.062	-0.06	49.286	73.929

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
427	M183	Y	-0.06	-0.06	73.929	98.571
428	M183	Y	-0.06	-0.06	98.571	123.214
429	M183	Y	-0.06	-0.06	123.214	147.857
430	M183	Y	-0.06	-0.06	147.857	172.5
431	M183	Y	-0.06	-0.06	172.5	197.143
432	M183	Y	-0.06	-0.06	197.143	221.786
433	M183	Y	-0.06	-0.06	221.786	246.429
434	M183	Y	-0.06	-0.06	246.429	271.071
435	M183	Y	-0.06	-0.061	271.071	295.714
436	M183	Y	-0.061	-0.06	295.714	320.357
437	M183	Y	-0.06	-0.059	320.357	345
438	M186	Y	-0.042	-0.057	0	24.643
439	M186	Y	-0.057	-0.063	24.643	49.286
440	M186	Y	-0.063	-0.056	49.286	73.929
441	M186	Y	-0.056	-0.054	73.929	98.571
442	M186	Y	-0.054	-0.056	98.571	123.214
443	M186	Y	-0.056	-0.051	123.214	147.857
444	M186	Y	-0.051	-0.051	147.857	172.5
445	M186	Y	-0.051	-0.056	172.5	197.143
446	M186	Y	-0.056	-0.064	197.143	221.786
447	M186	Y	-0.064	-0.062	221.786	246.429
448	M186	Y	-0.062	-0.053	246.429	271.071
449	M186	Y	-0.053	-0.054	271.071	295.714
450	M186	Y	-0.054	-0.053	295.714	320.357
451	M186	Y	-0.053	-0.05	320.357	345
452	M188	Y	-0.05	-0.05	0	24.643
453	M188	Y	-0.05	-0.05	24.643	49.286
454	M188	Y	-0.05	-0.05	49.286	73.929
455	M188	Y	-0.05	-0.05	73.929	98.571
456	M188	Y	-0.05	-0.05	98.571	123.214
457	M188	Y	-0.05	-0.05	123.214	147.857
458	M188	Y	-0.05	-0.05	147.857	172.5
459	M188	Y	-0.05	-0.05	172.5	197.143
460	M188	Y	-0.05	-0.05	197.143	221.786
461	M188	Y	-0.05	-0.05	221.786	246.429
462	M188	Y	-0.05	-0.05	246.429	271.071
463	M188	Y	-0.05	-0.05	271.071	295.714
464	M188	Y	-0.05	-0.05	295.714	320.357
465	M188	Y	-0.05	-0.05	320.357	345
466	M189	Y	-0.038	-0.039	0	24.643
467	M189	Y	-0.039	-0.04	24.643	49.286
468	M189	Y	-0.04	-0.04	49.286	73.929
469	M189	Y	-0.04	-0.04	73.929	98.571
470	M189	Y	-0.04	-0.039	98.571	123.214
471	M189	Y	-0.039	-0.041	123.214	147.857
472	M189	Y	-0.041	-0.044	147.857	172.5
473	M189	Y	-0.044	-0.041	172.5	197.143
474	M189	Y	-0.041	-0.039	197.143	221.786
475	M189	Y	-0.039	-0.04	221.786	246.429
476	M189	Y	-0.04	-0.04	246.429	271.071
477	M189	Y	-0.04	-0.04	271.071	295.714
478	M189	Y	-0.04	-0.039	295.714	320.357
479	M189	Y	-0.039	-0.038	320.357	345
480	M190	Y	-0.06	-0.06	0	24.643
481	M190	Y	-0.06	-0.06	24.643	49.286

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
482	M190	Y	-0.06	-0.06	49.286	73.929
483	M190	Y	-0.06	-0.06	73.929	98.571
484	M190	Y	-0.06	-0.06	98.571	123.214
485	M190	Y	-0.06	-0.06	123.214	147.857
486	M190	Y	-0.06	-0.059	147.857	172.5
487	M190	Y	-0.059	-0.06	172.5	197.143
488	M190	Y	-0.06	-0.06	197.143	221.786
489	M190	Y	-0.06	-0.06	221.786	246.429
490	M190	Y	-0.06	-0.06	246.429	271.071
491	M190	Y	-0.06	-0.06	271.071	295.714
492	M190	Y	-0.06	-0.06	295.714	320.357
493	M190	Y	-0.06	-0.06	320.357	345
494	M191	Y	-0.06	-0.06	1.785e-13	345
495	M192	Y	-0.06	-0.06	0	24.643
496	M192	Y	-0.06	-0.06	24.643	49.286
497	M192	Y	-0.06	-0.062	49.286	73.929
498	M192	Y	-0.062	-0.062	73.929	98.571
499	M192	Y	-0.062	-0.06	98.571	123.214
500	M192	Y	-0.06	-0.062	123.214	147.857
501	M192	Y	-0.062	-0.062	147.857	172.5
502	M192	Y	-0.062	-0.06	172.5	197.143
503	M192	Y	-0.06	-0.06	197.143	221.786
504	M192	Y	-0.06	-0.059	221.786	246.429
505	M192	Y	-0.059	-0.057	246.429	271.071
506	M192	Y	-0.057	-0.058	271.071	295.714
507	M192	Y	-0.058	-0.062	295.714	320.357
508	M192	Y	-0.062	-0.067	320.357	345
509	M193	Y	-0.031	-0.036	0	24.643
510	M193	Y	-0.036	-0.036	24.643	49.286
511	M193	Y	-0.036	-0.034	49.286	73.929
512	M193	Y	-0.034	-0.034	73.929	98.571
513	M193	Y	-0.034	-0.034	98.571	123.214
514	M193	Y	-0.034	-0.034	123.214	147.857
515	M193	Y	-0.034	-0.034	147.857	172.5
516	M193	Y	-0.034	-0.034	172.5	197.143
517	M193	Y	-0.034	-0.034	197.143	221.786
518	M193	Y	-0.034	-0.034	221.786	246.429
519	M193	Y	-0.034	-0.034	246.429	271.071
520	M193	Y	-0.034	-0.034	271.071	295.714
521	M193	Y	-0.034	-0.034	295.714	320.357
522	M193	Y	-0.034	-0.035	320.357	345
523	M194	Y	-0.056	-0.058	0	24.643
524	M194	Y	-0.058	-0.06	24.643	49.286
525	M194	Y	-0.06	-0.06	49.286	73.929
526	M194	Y	-0.06	-0.06	73.929	98.571
527	M194	Y	-0.06	-0.06	98.571	123.214
528	M194	Y	-0.06	-0.06	123.214	147.857
529	M194	Y	-0.06	-0.06	147.857	172.5
530	M194	Y	-0.06	-0.06	172.5	197.143
531	M194	Y	-0.06	-0.06	197.143	221.786
532	M194	Y	-0.06	-0.06	221.786	246.429
533	M194	Y	-0.06	-0.06	246.429	271.071
534	M194	Y	-0.06	-0.06	271.071	295.714
535	M194	Y	-0.06	-0.06	295.714	320.357
536	M194	Y	-0.06	-0.06	320.357	345

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
537	M195	Y	-0.06	-0.06	3.331e-13	345
538	M196	Y	-0.029	-0.03	0	24.643
539	M196	Y	-0.03	-0.031	24.643	49.286
540	M196	Y	-0.031	-0.031	49.286	73.929
541	M196	Y	-0.031	-0.031	73.929	98.571
542	M196	Y	-0.031	-0.031	98.571	123.214
543	M196	Y	-0.031	-0.031	123.214	147.857
544	M196	Y	-0.031	-0.031	147.857	172.5
545	M196	Y	-0.031	-0.031	172.5	197.143
546	M196	Y	-0.031	-0.031	197.143	221.786
547	M196	Y	-0.031	-0.031	221.786	246.429
548	M196	Y	-0.031	-0.031	246.429	271.071
549	M196	Y	-0.031	-0.031	271.071	295.714
550	M196	Y	-0.031	-0.03	295.714	320.357
551	M196	Y	-0.03	-0.029	320.357	345
552	M197	Y	-0.051	-0.051	0	24.643
553	M197	Y	-0.051	-0.051	24.643	49.286
554	M197	Y	-0.051	-0.051	49.286	73.929
555	M197	Y	-0.051	-0.051	73.929	98.571
556	M197	Y	-0.051	-0.051	98.571	123.214
557	M197	Y	-0.051	-0.051	123.214	147.857
558	M197	Y	-0.051	-0.051	147.857	172.5
559	M197	Y	-0.051	-0.051	172.5	197.143
560	M197	Y	-0.051	-0.051	197.143	221.786
561	M197	Y	-0.051	-0.051	221.786	246.429
562	M197	Y	-0.051	-0.051	246.429	271.071
563	M197	Y	-0.051	-0.051	271.071	295.714
564	M197	Y	-0.051	-0.051	295.714	320.357
565	M197	Y	-0.051	-0.051	320.357	345
566	M207	Y	-0.056	-0.06	0	24.643
567	M207	Y	-0.06	-0.061	24.643	49.286
568	M207	Y	-0.061	-0.06	49.286	73.929
569	M207	Y	-0.06	-0.06	73.929	98.571
570	M207	Y	-0.06	-0.06	98.571	123.214
571	M207	Y	-0.06	-0.06	123.214	147.857
572	M207	Y	-0.06	-0.06	147.857	172.5
573	M207	Y	-0.06	-0.06	172.5	197.143
574	M207	Y	-0.06	-0.06	197.143	221.786
575	M207	Y	-0.06	-0.06	221.786	246.429
576	M207	Y	-0.06	-0.061	246.429	271.071
577	M207	Y	-0.061	-0.064	271.071	295.714
578	M207	Y	-0.064	-0.063	295.714	320.357
579	M207	Y	-0.063	-0.053	320.357	345
580	M210	Y	-0.049	-0.053	0	24.643
581	M210	Y	-0.053	-0.054	24.643	49.286
582	M210	Y	-0.054	-0.053	49.286	73.929
583	M210	Y	-0.053	-0.058	73.929	98.571
584	M210	Y	-0.058	-0.063	98.571	123.214
585	M210	Y	-0.063	-0.059	123.214	147.857
586	M210	Y	-0.059	-0.051	147.857	172.5
587	M210	Y	-0.051	-0.049	172.5	197.143
588	M210	Y	-0.049	-0.053	197.143	221.786
589	M210	Y	-0.053	-0.057	221.786	246.429
590	M210	Y	-0.057	-0.058	246.429	271.071
591	M210	Y	-0.058	-0.061	271.071	295.714

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
592	M210	Y	-0.061	-0.057	295.714	320.357
593	M210	Y	-0.057	-0.041	320.357	345
594	M212	Y	-0.05	-0.05	0	24.643
595	M212	Y	-0.05	-0.05	24.643	49.286
596	M212	Y	-0.05	-0.05	49.286	73.929
597	M212	Y	-0.05	-0.05	73.929	98.571
598	M212	Y	-0.05	-0.05	98.571	123.214
599	M212	Y	-0.05	-0.05	123.214	147.857
600	M212	Y	-0.05	-0.05	147.857	172.5
601	M212	Y	-0.05	-0.05	172.5	197.143
602	M212	Y	-0.05	-0.05	197.143	221.786
603	M212	Y	-0.05	-0.05	221.786	246.429
604	M212	Y	-0.05	-0.05	246.429	271.071
605	M212	Y	-0.05	-0.05	271.071	295.714
606	M212	Y	-0.05	-0.05	295.714	320.357
607	M212	Y	-0.05	-0.05	320.357	345
608	M213	Y	-0.038	-0.039	0	24.643
609	M213	Y	-0.039	-0.04	24.643	49.286
610	M213	Y	-0.04	-0.04	49.286	73.929
611	M213	Y	-0.04	-0.04	73.929	98.571
612	M213	Y	-0.04	-0.039	98.571	123.214
613	M213	Y	-0.039	-0.041	123.214	147.857
614	M213	Y	-0.041	-0.044	147.857	172.5
615	M213	Y	-0.044	-0.041	172.5	197.143
616	M213	Y	-0.041	-0.039	197.143	221.786
617	M213	Y	-0.039	-0.04	221.786	246.429
618	M213	Y	-0.04	-0.04	246.429	271.071
619	M213	Y	-0.04	-0.04	271.071	295.714
620	M213	Y	-0.04	-0.039	295.714	320.357
621	M213	Y	-0.039	-0.038	320.357	345
622	M214	Y	-0.06	-0.06	0	24.643
623	M214	Y	-0.06	-0.06	24.643	49.286
624	M214	Y	-0.06	-0.06	49.286	73.929
625	M214	Y	-0.06	-0.06	73.929	98.571
626	M214	Y	-0.06	-0.06	98.571	123.214
627	M214	Y	-0.06	-0.06	123.214	147.857
628	M214	Y	-0.06	-0.059	147.857	172.5
629	M214	Y	-0.059	-0.06	172.5	197.143
630	M214	Y	-0.06	-0.06	197.143	221.786
631	M214	Y	-0.06	-0.06	221.786	246.429
632	M214	Y	-0.06	-0.06	246.429	271.071
633	M214	Y	-0.06	-0.06	271.071	295.714
634	M214	Y	-0.06	-0.06	295.714	320.357
635	M214	Y	-0.06	-0.06	320.357	345
636	M215	Y	-0.06	-0.06	1.075e-13	345
637	M216	Y	-0.067	-0.062	0	24.643
638	M216	Y	-0.062	-0.058	24.643	49.286
639	M216	Y	-0.058	-0.057	49.286	73.929
640	M216	Y	-0.057	-0.059	73.929	98.571
641	M216	Y	-0.059	-0.06	98.571	123.214
642	M216	Y	-0.06	-0.061	123.214	147.857
643	M216	Y	-0.061	-0.064	147.857	172.5
644	M216	Y	-0.064	-0.064	172.5	197.143
645	M216	Y	-0.064	-0.061	197.143	221.786
646	M216	Y	-0.061	-0.06	221.786	246.429

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
647	M216	Y	-0.06	-0.06	246.429	271.071
648	M216	Y	-0.06	-0.06	271.071	295.714
649	M216	Y	-0.06	-0.06	295.714	320.357
650	M216	Y	-0.06	-0.06	320.357	345
651	M217	Y	-0.036	-0.038	0	24.643
652	M217	Y	-0.038	-0.036	24.643	49.286
653	M217	Y	-0.036	-0.034	49.286	73.929
654	M217	Y	-0.034	-0.034	73.929	98.571
655	M217	Y	-0.034	-0.035	98.571	123.214
656	M217	Y	-0.035	-0.035	123.214	147.857
657	M217	Y	-0.035	-0.035	147.857	172.5
658	M217	Y	-0.035	-0.035	172.5	197.143
659	M217	Y	-0.035	-0.035	197.143	221.786
660	M217	Y	-0.035	-0.034	221.786	246.429
661	M217	Y	-0.034	-0.034	246.429	271.071
662	M217	Y	-0.034	-0.035	271.071	295.714
663	M217	Y	-0.035	-0.036	295.714	320.357
664	M217	Y	-0.036	-0.036	320.357	345
665	M218	Y	-0.06	-0.06	0	24.643
666	M218	Y	-0.06	-0.06	24.643	49.286
667	M218	Y	-0.06	-0.06	49.286	73.929
668	M218	Y	-0.06	-0.06	73.929	98.571
669	M218	Y	-0.06	-0.06	98.571	123.214
670	M218	Y	-0.06	-0.06	123.214	147.857
671	M218	Y	-0.06	-0.06	147.857	172.5
672	M218	Y	-0.06	-0.06	172.5	197.143
673	M218	Y	-0.06	-0.06	197.143	221.786
674	M218	Y	-0.06	-0.06	221.786	246.429
675	M218	Y	-0.06	-0.06	246.429	271.071
676	M218	Y	-0.06	-0.059	271.071	295.714
677	M218	Y	-0.059	-0.058	295.714	320.357
678	M218	Y	-0.058	-0.056	320.357	345
679	M219	Y	-0.06	-0.06	1.972e-13	345
680	M220	Y	-0.029	-0.03	0	24.643
681	M220	Y	-0.03	-0.031	24.643	49.286
682	M220	Y	-0.031	-0.031	49.286	73.929
683	M220	Y	-0.031	-0.031	73.929	98.571
684	M220	Y	-0.031	-0.031	98.571	123.214
685	M220	Y	-0.031	-0.031	123.214	147.857
686	M220	Y	-0.031	-0.031	147.857	172.5
687	M220	Y	-0.031	-0.031	172.5	197.143
688	M220	Y	-0.031	-0.031	197.143	221.786
689	M220	Y	-0.031	-0.031	221.786	246.429
690	M220	Y	-0.031	-0.031	246.429	271.071
691	M220	Y	-0.031	-0.031	271.071	295.714
692	M220	Y	-0.031	-0.03	295.714	320.357
693	M220	Y	-0.03	-0.029	320.357	345
694	M221	Y	-0.051	-0.051	0	24.643
695	M221	Y	-0.051	-0.051	24.643	49.286
696	M221	Y	-0.051	-0.051	49.286	73.929
697	M221	Y	-0.051	-0.051	73.929	98.571
698	M221	Y	-0.051	-0.051	98.571	123.214
699	M221	Y	-0.051	-0.051	123.214	147.857
700	M221	Y	-0.051	-0.051	147.857	172.5
701	M221	Y	-0.051	-0.051	172.5	197.143

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
702	M221	Y	-0.051	-0.051	197.143	221.786
703	M221	Y	-0.051	-0.051	221.786	246.429
704	M221	Y	-0.051	-0.051	246.429	271.071
705	M221	Y	-0.051	-0.051	271.071	295.714
706	M221	Y	-0.051	-0.051	295.714	320.357
707	M221	Y	-0.051	-0.051	320.357	345
708	M238	Y	-0.028	-0.029	0	24.643
709	M238	Y	-0.029	-0.03	24.643	49.286
710	M238	Y	-0.03	-0.03	49.286	73.929
711	M238	Y	-0.03	-0.03	73.929	98.571
712	M238	Y	-0.03	-0.03	98.571	123.214
713	M238	Y	-0.03	-0.03	123.214	147.857
714	M238	Y	-0.03	-0.03	147.857	172.5
715	M238	Y	-0.03	-0.03	172.5	197.143
716	M238	Y	-0.03	-0.03	197.143	221.786
717	M238	Y	-0.03	-0.03	221.786	246.429
718	M238	Y	-0.03	-0.03	246.429	271.071
719	M238	Y	-0.03	-0.03	271.071	295.714
720	M238	Y	-0.03	-0.029	295.714	320.357
721	M238	Y	-0.029	-0.028	320.357	345
722	M239	Y	-0.033	-0.03	0	24.643
723	M239	Y	-0.03	-0.029	24.643	49.286
724	M239	Y	-0.029	-0.03	49.286	73.929
725	M239	Y	-0.03	-0.03	73.929	98.571
726	M239	Y	-0.03	-0.03	98.571	123.214
727	M239	Y	-0.03	-0.03	123.214	147.857
728	M239	Y	-0.03	-0.03	147.857	172.5
729	M239	Y	-0.03	-0.03	172.5	197.143
730	M239	Y	-0.03	-0.03	197.143	221.786
731	M239	Y	-0.03	-0.03	221.786	246.429
732	M239	Y	-0.03	-0.03	246.429	271.071
733	M239	Y	-0.03	-0.029	271.071	295.714
734	M239	Y	-0.029	-0.03	295.714	320.357
735	M239	Y	-0.03	-0.033	320.357	345
736	M240	Y	-0.027	-0.028	0	24.857
737	M240	Y	-0.028	-0.028	24.857	49.714
738	M240	Y	-0.028	-0.033	49.714	74.571
739	M240	Y	-0.033	-0.033	74.571	99.429
740	M240	Y	-0.033	-0.029	99.429	124.286
741	M240	Y	-0.029	-0.028	124.286	149.143
742	M240	Y	-0.028	-0.029	149.143	174
743	M240	Y	-0.029	-0.029	174	198.857
744	M240	Y	-0.029	-0.028	198.857	223.714
745	M240	Y	-0.028	-0.033	223.714	248.571
746	M240	Y	-0.033	-0.033	248.571	273.429
747	M240	Y	-0.033	-0.028	273.429	298.286
748	M240	Y	-0.028	-0.028	298.286	323.143
749	M240	Y	-0.028	-0.027	323.143	348
750	M241	Y	-0.031	-0.028	0	24.857
751	M241	Y	-0.028	-0.027	24.857	49.714
752	M241	Y	-0.027	-0.032	49.714	74.571
753	M241	Y	-0.032	-0.033	74.571	99.429
754	M241	Y	-0.033	-0.028	99.429	124.286
755	M241	Y	-0.028	-0.028	124.286	149.143
756	M241	Y	-0.028	-0.029	149.143	174

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
757	M241	Y	-0.029	-0.029	174	198.857
758	M241	Y	-0.029	-0.028	198.857	223.714
759	M241	Y	-0.028	-0.033	223.714	248.571
760	M241	Y	-0.033	-0.032	248.571	273.429
761	M241	Y	-0.032	-0.027	273.429	298.286
762	M241	Y	-0.027	-0.028	298.286	323.143
763	M241	Y	-0.028	-0.031	323.143	348
764	M242	Y	-0.028	-0.029	0	24.643
765	M242	Y	-0.029	-0.03	24.643	49.286
766	M242	Y	-0.03	-0.03	49.286	73.929
767	M242	Y	-0.03	-0.03	73.929	98.571
768	M242	Y	-0.03	-0.03	98.571	123.214
769	M242	Y	-0.03	-0.03	123.214	147.857
770	M242	Y	-0.03	-0.03	147.857	172.5
771	M242	Y	-0.03	-0.03	172.5	197.143
772	M242	Y	-0.03	-0.03	197.143	221.786
773	M242	Y	-0.03	-0.03	221.786	246.429
774	M242	Y	-0.03	-0.03	246.429	271.071
775	M242	Y	-0.03	-0.03	271.071	295.714
776	M242	Y	-0.03	-0.029	295.714	320.357
777	M242	Y	-0.029	-0.028	320.357	345
778	M243	Y	-0.026	-0.029	0	24.643
779	M243	Y	-0.029	-0.028	24.643	49.286
780	M243	Y	-0.028	-0.027	49.286	73.929
781	M243	Y	-0.027	-0.028	73.929	98.571
782	M243	Y	-0.028	-0.03	98.571	123.214
783	M243	Y	-0.03	-0.03	123.214	147.857
784	M243	Y	-0.03	-0.029	147.857	172.5
785	M243	Y	-0.029	-0.035	172.5	197.143
786	M243	Y	-0.035	-0.035	197.143	221.786
787	M243	Y	-0.035	-0.029	221.786	246.429
788	M243	Y	-0.029	-0.029	246.429	271.071
789	M243	Y	-0.029	-0.028	271.071	295.714
790	M243	Y	-0.028	-0.028	295.714	320.357
791	M243	Y	-0.028	-0.032	320.357	345
792	M246	Y	-0.028	-0.029	0	24.643
793	M246	Y	-0.029	-0.03	24.643	49.286
794	M246	Y	-0.03	-0.03	49.286	73.929
795	M246	Y	-0.03	-0.03	73.929	98.571
796	M246	Y	-0.03	-0.03	98.571	123.214
797	M246	Y	-0.03	-0.03	123.214	147.857
798	M246	Y	-0.03	-0.03	147.857	172.5
799	M246	Y	-0.03	-0.03	172.5	197.143
800	M246	Y	-0.03	-0.03	197.143	221.786
801	M246	Y	-0.03	-0.03	221.786	246.429
802	M246	Y	-0.03	-0.03	246.429	271.071
803	M246	Y	-0.03	-0.03	271.071	295.714
804	M246	Y	-0.03	-0.029	295.714	320.357
805	M246	Y	-0.029	-0.028	320.357	345
806	M247	Y	-0.034	-0.03	0	24.643
807	M247	Y	-0.03	-0.028	24.643	49.286
808	M247	Y	-0.028	-0.029	49.286	73.929
809	M247	Y	-0.029	-0.029	73.929	98.571
810	M247	Y	-0.029	-0.029	98.571	123.214
811	M247	Y	-0.029	-0.032	123.214	147.857

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
812	M247	Y	-0.032	-0.035	147.857	172.5
813	M247	Y	-0.035	-0.032	172.5	197.143
814	M247	Y	-0.032	-0.029	197.143	221.786
815	M247	Y	-0.029	-0.03	221.786	246.429
816	M247	Y	-0.03	-0.027	246.429	271.071
817	M247	Y	-0.027	-0.026	271.071	295.714
818	M247	Y	-0.026	-0.028	295.714	320.357
819	M247	Y	-0.028	-0.027	320.357	345
820	M125	Y	-0.03	-0.03	3.118e-13	345
821	M140	Y	-0.03	-0.03	3.029e-13	345
822	M54	Y	-0.03	-0.03	5.977e-13	345
823	M71	Y	-0.03	-0.03	1.82e-12	345
824	M84	Y	-0.03	-0.03	2.256e-13	348
825	M107	Y	-0.05	-0.05	0	24.857
826	M107	Y	-0.05	-0.05	24.857	49.714
827	M107	Y	-0.05	-0.05	49.714	74.571
828	M107	Y	-0.05	-0.05	74.571	99.429
829	M107	Y	-0.05	-0.05	99.429	124.286
830	M107	Y	-0.05	-0.051	124.286	149.143
831	M107	Y	-0.051	-0.053	149.143	174
832	M107	Y	-0.053	-0.053	174	198.857
833	M107	Y	-0.053	-0.051	198.857	223.714
834	M107	Y	-0.051	-0.05	223.714	248.571
835	M107	Y	-0.05	-0.05	248.571	273.429
836	M107	Y	-0.05	-0.05	273.429	298.286
837	M107	Y	-0.05	-0.05	298.286	323.143
838	M107	Y	-0.05	-0.05	323.143	348
839	M108	Y	-0.036	-0.037	0	24.857
840	M108	Y	-0.037	-0.038	24.857	49.714
841	M108	Y	-0.038	-0.043	49.714	74.571
842	M108	Y	-0.043	-0.045	74.571	99.429
843	M108	Y	-0.045	-0.041	99.429	124.286
844	M108	Y	-0.041	-0.038	124.286	149.143
845	M108	Y	-0.038	-0.038	149.143	174
846	M108	Y	-0.038	-0.035	174	198.857
847	M108	Y	-0.035	-0.038	198.857	223.714
848	M108	Y	-0.038	-0.048	223.714	248.571
849	M108	Y	-0.048	-0.044	248.571	273.429
850	M108	Y	-0.044	-0.037	273.429	298.286
851	M108	Y	-0.037	-0.037	298.286	323.143
852	M108	Y	-0.037	-0.036	323.143	348
853	M109	Y	-0.06	-0.06	0	24.857
854	M109	Y	-0.06	-0.06	24.857	49.714
855	M109	Y	-0.06	-0.06	49.714	74.571
856	M109	Y	-0.06	-0.06	74.571	99.429
857	M109	Y	-0.06	-0.06	99.429	124.286
858	M109	Y	-0.06	-0.062	124.286	149.143
859	M109	Y	-0.062	-0.062	149.143	174
860	M109	Y	-0.062	-0.063	174	198.857
861	M109	Y	-0.063	-0.059	198.857	223.714
862	M109	Y	-0.059	-0.06	223.714	248.571
863	M109	Y	-0.06	-0.062	248.571	273.429
864	M109	Y	-0.062	-0.059	273.429	298.286
865	M109	Y	-0.059	-0.06	298.286	323.143
866	M109	Y	-0.06	-0.06	323.143	348

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
867	M110	Y	-0.06	-0.06	6.652e-13	348
868	M112	Y	-0.06	-0.06	1.151e-12	348
869	M115	Y	-0.053	-0.052	0	24.857
870	M115	Y	-0.052	-0.052	24.857	49.714
871	M115	Y	-0.052	-0.052	49.714	74.571
872	M115	Y	-0.052	-0.052	74.571	99.429
873	M115	Y	-0.052	-0.054	99.429	124.286
874	M115	Y	-0.054	-0.055	124.286	149.143
875	M115	Y	-0.055	-0.055	149.143	174
876	M115	Y	-0.055	-0.054	174	198.857
877	M115	Y	-0.054	-0.052	198.857	223.714
878	M115	Y	-0.052	-0.052	223.714	248.571
879	M115	Y	-0.052	-0.052	248.571	273.429
880	M115	Y	-0.052	-0.052	273.429	298.286
881	M115	Y	-0.052	-0.052	298.286	323.143
882	M115	Y	-0.052	-0.053	323.143	348
883	M116	Y	-0.03	-0.036	0	24.857
884	M116	Y	-0.036	-0.04	24.857	49.714
885	M116	Y	-0.04	-0.039	49.714	74.571
886	M116	Y	-0.039	-0.037	74.571	99.429
887	M116	Y	-0.037	-0.038	99.429	124.286
888	M116	Y	-0.038	-0.037	124.286	149.143
889	M116	Y	-0.037	-0.034	149.143	174
890	M116	Y	-0.034	-0.034	174	198.857
891	M116	Y	-0.034	-0.04	198.857	223.714
892	M116	Y	-0.04	-0.038	223.714	248.571
893	M116	Y	-0.038	-0.037	248.571	273.429
894	M116	Y	-0.037	-0.042	273.429	298.286
895	M116	Y	-0.042	-0.036	298.286	323.143
896	M116	Y	-0.036	-0.03	323.143	348
897	M117	Y	-0.061	-0.06	0	24.857
898	M117	Y	-0.06	-0.06	24.857	49.714
899	M117	Y	-0.06	-0.06	49.714	74.571
900	M117	Y	-0.06	-0.06	74.571	99.429
901	M117	Y	-0.06	-0.061	99.429	124.286
902	M117	Y	-0.061	-0.063	124.286	149.143
903	M117	Y	-0.063	-0.063	149.143	174
904	M117	Y	-0.063	-0.063	174	198.857
905	M117	Y	-0.063	-0.059	198.857	223.714
906	M117	Y	-0.059	-0.06	223.714	248.571
907	M117	Y	-0.06	-0.062	248.571	273.429
908	M117	Y	-0.062	-0.06	273.429	298.286
909	M117	Y	-0.06	-0.06	298.286	323.143
910	M117	Y	-0.06	-0.061	323.143	348
911	M119	Y	-0.06	-0.06	1.62e-12	348
912	M120	Y	-0.06	-0.06	1.592e-12	348
913	M121	Y	-0.045	-0.045	0	24.857
914	M121	Y	-0.045	-0.045	24.857	49.714
915	M121	Y	-0.045	-0.045	49.714	74.571
916	M121	Y	-0.045	-0.045	74.571	99.429
917	M121	Y	-0.045	-0.045	99.429	124.286
918	M121	Y	-0.045	-0.049	124.286	149.143
919	M121	Y	-0.049	-0.049	149.143	174
920	M121	Y	-0.049	-0.045	174	198.857
921	M121	Y	-0.045	-0.045	198.857	223.714

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
922	M121	Y	-0.045	-0.045	223.714	248.571
923	M121	Y	-0.045	-0.045	248.571	273.429
924	M121	Y	-0.045	-0.045	273.429	298.286
925	M121	Y	-0.045	-0.045	298.286	323.143
926	M121	Y	-0.045	-0.045	323.143	348
927	M122	Y	-0.021	-0.023	0	24.857
928	M122	Y	-0.023	-0.026	24.857	49.714
929	M122	Y	-0.026	-0.026	49.714	74.571
930	M122	Y	-0.026	-0.027	74.571	99.429
931	M122	Y	-0.027	-0.027	99.429	124.286
932	M122	Y	-0.027	-0.02	124.286	149.143
933	M122	Y	-0.02	-0.02	149.143	174
934	M122	Y	-0.02	-0.023	174	198.857
935	M122	Y	-0.023	-0.027	198.857	223.714
936	M122	Y	-0.027	-0.027	223.714	248.571
937	M122	Y	-0.027	-0.026	248.571	273.429
938	M122	Y	-0.026	-0.026	273.429	298.286
939	M122	Y	-0.026	-0.023	298.286	323.143
940	M122	Y	-0.023	-0.021	323.143	348
941	M128	Y	-0.05	-0.05	0	24.643
942	M128	Y	-0.05	-0.05	24.643	49.286
943	M128	Y	-0.05	-0.05	49.286	73.929
944	M128	Y	-0.05	-0.05	73.929	98.571
945	M128	Y	-0.05	-0.05	98.571	123.214
946	M128	Y	-0.05	-0.05	123.214	147.857
947	M128	Y	-0.05	-0.05	147.857	172.5
948	M128	Y	-0.05	-0.05	172.5	197.143
949	M128	Y	-0.05	-0.05	197.143	221.786
950	M128	Y	-0.05	-0.05	221.786	246.429
951	M128	Y	-0.05	-0.05	246.429	271.071
952	M128	Y	-0.05	-0.05	271.071	295.714
953	M128	Y	-0.05	-0.05	295.714	320.357
954	M128	Y	-0.05	-0.05	320.357	345
955	M130	Y	-0.038	-0.039	0	24.643
956	M130	Y	-0.039	-0.04	24.643	49.286
957	M130	Y	-0.04	-0.04	49.286	73.929
958	M130	Y	-0.04	-0.04	73.929	98.571
959	M130	Y	-0.04	-0.039	98.571	123.214
960	M130	Y	-0.039	-0.041	123.214	147.857
961	M130	Y	-0.041	-0.044	147.857	172.5
962	M130	Y	-0.044	-0.041	172.5	197.143
963	M130	Y	-0.041	-0.039	197.143	221.786
964	M130	Y	-0.039	-0.04	221.786	246.429
965	M130	Y	-0.04	-0.04	246.429	271.071
966	M130	Y	-0.04	-0.04	271.071	295.714
967	M130	Y	-0.04	-0.039	295.714	320.357
968	M130	Y	-0.039	-0.038	320.357	345
969	M131	Y	-0.06	-0.06	3.324e-12	345
970	M149	Y	-0.06	-0.06	2.728e-12	345
971	M150	Y	-0.061	-0.06	0	24.643
972	M150	Y	-0.06	-0.06	24.643	49.286
973	M150	Y	-0.06	-0.06	49.286	73.929
974	M150	Y	-0.06	-0.06	73.929	98.571
975	M150	Y	-0.06	-0.061	98.571	123.214
976	M150	Y	-0.061	-0.063	123.214	147.857

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
977	M150	Y	-0.063	-0.063	147.857	172.5
978	M150	Y	-0.063	-0.063	172.5	197.143
979	M150	Y	-0.063	-0.06	197.143	221.786
980	M150	Y	-0.06	-0.06	221.786	246.429
981	M150	Y	-0.06	-0.062	246.429	271.071
982	M150	Y	-0.062	-0.06	271.071	295.714
983	M150	Y	-0.06	-0.06	295.714	320.357
984	M150	Y	-0.06	-0.061	320.357	345
985	M151	Y	-0.03	-0.036	0	24.643
986	M151	Y	-0.036	-0.04	24.643	49.286
987	M151	Y	-0.04	-0.039	49.286	73.929
988	M151	Y	-0.039	-0.037	73.929	98.571
989	M151	Y	-0.037	-0.038	98.571	123.214
990	M151	Y	-0.038	-0.037	123.214	147.857
991	M151	Y	-0.037	-0.034	147.857	172.5
992	M151	Y	-0.034	-0.034	172.5	197.143
993	M151	Y	-0.034	-0.04	197.143	221.786
994	M151	Y	-0.04	-0.04	221.786	246.429
995	M151	Y	-0.04	-0.038	246.429	271.071
996	M151	Y	-0.038	-0.04	271.071	295.714
997	M151	Y	-0.04	-0.036	295.714	320.357
998	M151	Y	-0.036	-0.03	320.357	345
999	M152	Y	-0.06	-0.06	0	24.643
1000	M152	Y	-0.06	-0.06	24.643	49.286
1001	M152	Y	-0.06	-0.06	49.286	73.929
1002	M152	Y	-0.06	-0.06	73.929	98.571
1003	M152	Y	-0.06	-0.06	98.571	123.214
1004	M152	Y	-0.06	-0.06	123.214	147.857
1005	M152	Y	-0.06	-0.059	147.857	172.5
1006	M152	Y	-0.059	-0.06	172.5	197.143
1007	M152	Y	-0.06	-0.06	197.143	221.786
1008	M152	Y	-0.06	-0.06	221.786	246.429
1009	M152	Y	-0.06	-0.06	246.429	271.071
1010	M152	Y	-0.06	-0.06	271.071	295.714
1011	M152	Y	-0.06	-0.06	295.714	320.357
1012	M152	Y	-0.06	-0.06	320.357	345
1013	M153	Y	-0.06	-0.06	7.887e-13	345
1014	M154	Y	-0.053	-0.052	0	24.643
1015	M154	Y	-0.052	-0.052	24.643	49.286
1016	M154	Y	-0.052	-0.052	49.286	73.929
1017	M154	Y	-0.052	-0.052	73.929	98.571
1018	M154	Y	-0.052	-0.054	98.571	123.214
1019	M154	Y	-0.054	-0.056	123.214	147.857
1020	M154	Y	-0.056	-0.052	147.857	172.5
1021	M154	Y	-0.052	-0.051	172.5	197.143
1022	M154	Y	-0.051	-0.055	197.143	221.786
1023	M154	Y	-0.055	-0.054	221.786	246.429
1024	M154	Y	-0.054	-0.052	246.429	271.071
1025	M154	Y	-0.052	-0.052	271.071	295.714
1026	M154	Y	-0.052	-0.052	295.714	320.357
1027	M154	Y	-0.052	-0.053	320.357	345
1028	M155	Y	-0.06	-0.06	6.839e-13	345
1029	M156	Y	-0.045	-0.045	0	24.643
1030	M156	Y	-0.045	-0.045	24.643	49.286
1031	M156	Y	-0.045	-0.045	49.286	73.929

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1032	M156	Y	-0.045	-0.045	73.929	98.571
1033	M156	Y	-0.045	-0.045	98.571	123.214
1034	M156	Y	-0.045	-0.045	123.214	147.857
1035	M156	Y	-0.045	-0.049	147.857	172.5
1036	M156	Y	-0.049	-0.049	172.5	197.143
1037	M156	Y	-0.049	-0.045	197.143	221.786
1038	M156	Y	-0.045	-0.045	221.786	246.429
1039	M156	Y	-0.045	-0.045	246.429	271.071
1040	M156	Y	-0.045	-0.045	271.071	295.714
1041	M156	Y	-0.045	-0.045	295.714	320.357
1042	M156	Y	-0.045	-0.045	320.357	345
1043	M157	Y	-0.021	-0.023	0	24.643
1044	M157	Y	-0.023	-0.026	24.643	49.286
1045	M157	Y	-0.026	-0.026	49.286	73.929
1046	M157	Y	-0.026	-0.027	73.929	98.571
1047	M157	Y	-0.027	-0.027	98.571	123.214
1048	M157	Y	-0.027	-0.023	123.214	147.857
1049	M157	Y	-0.023	-0.02	147.857	172.5
1050	M157	Y	-0.02	-0.02	172.5	197.143
1051	M157	Y	-0.02	-0.027	197.143	221.786
1052	M157	Y	-0.027	-0.027	221.786	246.429
1053	M157	Y	-0.027	-0.026	246.429	271.071
1054	M157	Y	-0.026	-0.026	271.071	295.714
1055	M157	Y	-0.026	-0.023	295.714	320.357
1056	M157	Y	-0.023	-0.021	320.357	345
1057	M158	Y	-0.06	-0.06	0	345
1058	M160	Y	-0.037	-0.055	0	24.643
1059	M160	Y	-0.055	-0.065	24.643	49.286
1060	M160	Y	-0.065	-0.063	49.286	73.929
1061	M160	Y	-0.063	-0.061	73.929	98.571
1062	M160	Y	-0.061	-0.061	98.571	123.214
1063	M160	Y	-0.061	-0.057	123.214	147.857
1064	M160	Y	-0.057	-0.056	147.857	172.5
1065	M160	Y	-0.056	-0.057	172.5	197.143
1066	M160	Y	-0.057	-0.061	197.143	221.786
1067	M160	Y	-0.061	-0.06	221.786	246.429
1068	M160	Y	-0.06	-0.062	246.429	271.071
1069	M160	Y	-0.062	-0.065	271.071	295.714
1070	M160	Y	-0.065	-0.055	295.714	320.357
1071	M160	Y	-0.055	-0.037	320.357	345
1072	M161	Y	-0.06	-0.06	0	345
1073	M163	Y	-0.021	-0.023	0	24.643
1074	M163	Y	-0.023	-0.026	24.643	49.286
1075	M163	Y	-0.026	-0.026	49.286	73.929
1076	M163	Y	-0.026	-0.027	73.929	98.571
1077	M163	Y	-0.027	-0.027	98.571	123.214
1078	M163	Y	-0.027	-0.023	123.214	147.857
1079	M163	Y	-0.023	-0.02	147.857	172.5
1080	M163	Y	-0.02	-0.02	172.5	197.143
1081	M163	Y	-0.02	-0.027	197.143	221.786
1082	M163	Y	-0.027	-0.027	221.786	246.429
1083	M163	Y	-0.027	-0.026	246.429	271.071
1084	M163	Y	-0.026	-0.026	271.071	295.714
1085	M163	Y	-0.026	-0.023	295.714	320.357
1086	M163	Y	-0.023	-0.021	320.357	345

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1087	M174	Y	-0.045	-0.045	0	24.643
1088	M174	Y	-0.045	-0.045	24.643	49.286
1089	M174	Y	-0.045	-0.045	49.286	73.929
1090	M174	Y	-0.045	-0.045	73.929	98.571
1091	M174	Y	-0.045	-0.045	98.571	123.214
1092	M174	Y	-0.045	-0.045	123.214	147.857
1093	M174	Y	-0.045	-0.049	147.857	172.5
1094	M174	Y	-0.049	-0.049	172.5	197.143
1095	M174	Y	-0.049	-0.045	197.143	221.786
1096	M174	Y	-0.045	-0.045	221.786	246.429
1097	M174	Y	-0.045	-0.045	246.429	271.071
1098	M174	Y	-0.045	-0.045	271.071	295.714
1099	M174	Y	-0.045	-0.045	295.714	320.357
1100	M174	Y	-0.045	-0.045	320.357	345
1101	M175	Y	-0.06	-0.06	2.833e-13	345
1102	M176	Y	-0.061	-0.06	0	24.643
1103	M176	Y	-0.06	-0.06	24.643	49.286
1104	M176	Y	-0.06	-0.061	49.286	73.929
1105	M176	Y	-0.061	-0.064	73.929	98.571
1106	M176	Y	-0.064	-0.061	98.571	123.214
1107	M176	Y	-0.061	-0.057	123.214	147.857
1108	M176	Y	-0.057	-0.061	147.857	172.5
1109	M176	Y	-0.061	-0.062	172.5	197.143
1110	M176	Y	-0.062	-0.06	197.143	221.786
1111	M176	Y	-0.06	-0.062	221.786	246.429
1112	M176	Y	-0.062	-0.063	246.429	271.071
1113	M176	Y	-0.063	-0.06	271.071	295.714
1114	M176	Y	-0.06	-0.06	295.714	320.357
1115	M176	Y	-0.06	-0.061	320.357	345
1116	M177	Y	-0.063	-0.061	0	24.643
1117	M177	Y	-0.061	-0.06	24.643	49.286
1118	M177	Y	-0.06	-0.062	49.286	73.929
1119	M177	Y	-0.062	-0.06	73.929	98.571
1120	M177	Y	-0.06	-0.059	98.571	123.214
1121	M177	Y	-0.059	-0.063	123.214	147.857
1122	M177	Y	-0.063	-0.063	147.857	172.5
1123	M177	Y	-0.063	-0.062	172.5	197.143
1124	M177	Y	-0.062	-0.061	197.143	221.786
1125	M177	Y	-0.061	-0.06	221.786	246.429
1126	M177	Y	-0.06	-0.06	246.429	271.071
1127	M177	Y	-0.06	-0.06	271.071	295.714
1128	M177	Y	-0.06	-0.061	295.714	320.357
1129	M177	Y	-0.061	-0.063	320.357	345
1130	M178	Y	-0.06	-0.06	2.16e-12	345
1131	M179	Y	-0.06	-0.06	0	24.643
1132	M179	Y	-0.06	-0.06	24.643	49.286
1133	M179	Y	-0.06	-0.06	49.286	73.929
1134	M179	Y	-0.06	-0.06	73.929	98.571
1135	M179	Y	-0.06	-0.06	98.571	123.214
1136	M179	Y	-0.06	-0.06	123.214	147.857
1137	M179	Y	-0.06	-0.059	147.857	172.5
1138	M179	Y	-0.059	-0.06	172.5	197.143
1139	M179	Y	-0.06	-0.06	197.143	221.786
1140	M179	Y	-0.06	-0.06	221.786	246.429
1141	M179	Y	-0.06	-0.06	246.429	271.071

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1142	M179	Y	-0.06	-0.06	271.071	295.714
1143	M179	Y	-0.06	-0.06	295.714	320.357
1144	M179	Y	-0.06	-0.06	320.357	345
1145	M180	Y	-0.057	-0.059	0	24.643
1146	M180	Y	-0.059	-0.06	24.643	49.286
1147	M180	Y	-0.06	-0.06	49.286	73.929
1148	M180	Y	-0.06	-0.06	73.929	98.571
1149	M180	Y	-0.06	-0.059	98.571	123.214
1150	M180	Y	-0.059	-0.061	123.214	147.857
1151	M180	Y	-0.061	-0.065	147.857	172.5
1152	M180	Y	-0.065	-0.061	172.5	197.143
1153	M180	Y	-0.061	-0.059	197.143	221.786
1154	M180	Y	-0.059	-0.06	221.786	246.429
1155	M180	Y	-0.06	-0.06	246.429	271.071
1156	M180	Y	-0.06	-0.06	271.071	295.714
1157	M180	Y	-0.06	-0.059	295.714	320.357
1158	M180	Y	-0.059	-0.057	320.357	345
1159	M181	Y	-0.06	-0.06	0	24.643
1160	M181	Y	-0.06	-0.06	24.643	49.286
1161	M181	Y	-0.06	-0.06	49.286	73.929
1162	M181	Y	-0.06	-0.06	73.929	98.571
1163	M181	Y	-0.06	-0.06	98.571	123.214
1164	M181	Y	-0.06	-0.06	123.214	147.857
1165	M181	Y	-0.06	-0.06	147.857	172.5
1166	M181	Y	-0.06	-0.06	172.5	197.143
1167	M181	Y	-0.06	-0.06	197.143	221.786
1168	M181	Y	-0.06	-0.06	221.786	246.429
1169	M181	Y	-0.06	-0.06	246.429	271.071
1170	M181	Y	-0.06	-0.06	271.071	295.714
1171	M181	Y	-0.06	-0.06	295.714	320.357
1172	M181	Y	-0.06	-0.06	320.357	345
1173	M182	Y	-0.06	-0.06	0	345
1174	M184	Y	-0.03	-0.036	0	24.643
1175	M184	Y	-0.036	-0.04	24.643	49.286
1176	M184	Y	-0.04	-0.04	49.286	73.929
1177	M184	Y	-0.04	-0.036	73.929	98.571
1178	M184	Y	-0.036	-0.035	98.571	123.214
1179	M184	Y	-0.035	-0.039	123.214	147.857
1180	M184	Y	-0.039	-0.037	147.857	172.5
1181	M184	Y	-0.037	-0.035	172.5	197.143
1182	M184	Y	-0.035	-0.038	197.143	221.786
1183	M184	Y	-0.038	-0.038	221.786	246.429
1184	M184	Y	-0.038	-0.037	246.429	271.071
1185	M184	Y	-0.037	-0.04	271.071	295.714
1186	M184	Y	-0.04	-0.036	295.714	320.357
1187	M184	Y	-0.036	-0.03	320.357	345
1188	M185	Y	-0.06	-0.06	1.677e-12	345
1189	M187	Y	-0.021	-0.023	0	24.643
1190	M187	Y	-0.023	-0.026	24.643	49.286
1191	M187	Y	-0.026	-0.026	49.286	73.929
1192	M187	Y	-0.026	-0.027	73.929	98.571
1193	M187	Y	-0.027	-0.027	98.571	123.214
1194	M187	Y	-0.027	-0.023	123.214	147.857
1195	M187	Y	-0.023	-0.02	147.857	172.5
1196	M187	Y	-0.02	-0.02	172.5	197.143

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1197	M187	Y	-0.02	-0.027	197.143	221.786
1198	M187	Y	-0.027	-0.027	221.786	246.429
1199	M187	Y	-0.027	-0.026	246.429	271.071
1200	M187	Y	-0.026	-0.026	271.071	295.714
1201	M187	Y	-0.026	-0.023	295.714	320.357
1202	M187	Y	-0.023	-0.021	320.357	345
1203	M198	Y	-0.045	-0.045	0	24.643
1204	M198	Y	-0.045	-0.045	24.643	49.286
1205	M198	Y	-0.045	-0.045	49.286	73.929
1206	M198	Y	-0.045	-0.045	73.929	98.571
1207	M198	Y	-0.045	-0.045	98.571	123.214
1208	M198	Y	-0.045	-0.045	123.214	147.857
1209	M198	Y	-0.045	-0.049	147.857	172.5
1210	M198	Y	-0.049	-0.049	172.5	197.143
1211	M198	Y	-0.049	-0.045	197.143	221.786
1212	M198	Y	-0.045	-0.045	221.786	246.429
1213	M198	Y	-0.045	-0.045	246.429	271.071
1214	M198	Y	-0.045	-0.045	271.071	295.714
1215	M198	Y	-0.045	-0.045	295.714	320.357
1216	M198	Y	-0.045	-0.045	320.357	345
1217	M199	Y	-0.06	-0.06	2.842e-14	345
1218	M200	Y	-0.061	-0.06	0	24.643
1219	M200	Y	-0.06	-0.06	24.643	49.286
1220	M200	Y	-0.06	-0.061	49.286	73.929
1221	M200	Y	-0.061	-0.064	73.929	98.571
1222	M200	Y	-0.064	-0.061	98.571	123.214
1223	M200	Y	-0.061	-0.057	123.214	147.857
1224	M200	Y	-0.057	-0.061	147.857	172.5
1225	M200	Y	-0.061	-0.062	172.5	197.143
1226	M200	Y	-0.062	-0.06	197.143	221.786
1227	M200	Y	-0.06	-0.062	221.786	246.429
1228	M200	Y	-0.062	-0.063	246.429	271.071
1229	M200	Y	-0.063	-0.06	271.071	295.714
1230	M200	Y	-0.06	-0.06	295.714	320.357
1231	M200	Y	-0.06	-0.061	320.357	345
1232	M201	Y	-0.053	-0.052	0	24.643
1233	M201	Y	-0.052	-0.052	24.643	49.286
1234	M201	Y	-0.052	-0.052	49.286	73.929
1235	M201	Y	-0.052	-0.052	73.929	98.571
1236	M201	Y	-0.052	-0.052	98.571	123.214
1237	M201	Y	-0.052	-0.054	123.214	147.857
1238	M201	Y	-0.054	-0.055	147.857	172.5
1239	M201	Y	-0.055	-0.055	172.5	197.143
1240	M201	Y	-0.055	-0.054	197.143	221.786
1241	M201	Y	-0.054	-0.052	221.786	246.429
1242	M201	Y	-0.052	-0.052	246.429	271.071
1243	M201	Y	-0.052	-0.052	271.071	295.714
1244	M201	Y	-0.052	-0.052	295.714	320.357
1245	M201	Y	-0.052	-0.053	320.357	345
1246	M202	Y	-0.06	-0.06	1.025e-12	345
1247	M203	Y	-0.06	-0.06	0	24.643
1248	M203	Y	-0.06	-0.06	24.643	49.286
1249	M203	Y	-0.06	-0.06	49.286	73.929
1250	M203	Y	-0.06	-0.06	73.929	98.571
1251	M203	Y	-0.06	-0.06	98.571	123.214

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1252	M203	Y	-0.06	-0.06	123.214	147.857
1253	M203	Y	-0.06	-0.059	147.857	172.5
1254	M203	Y	-0.059	-0.06	172.5	197.143
1255	M203	Y	-0.06	-0.06	197.143	221.786
1256	M203	Y	-0.06	-0.06	221.786	246.429
1257	M203	Y	-0.06	-0.06	246.429	271.071
1258	M203	Y	-0.06	-0.06	271.071	295.714
1259	M203	Y	-0.06	-0.06	295.714	320.357
1260	M203	Y	-0.06	-0.06	320.357	345
1261	M204	Y	-0.038	-0.039	0	24.643
1262	M204	Y	-0.039	-0.04	24.643	49.286
1263	M204	Y	-0.04	-0.04	49.286	73.929
1264	M204	Y	-0.04	-0.04	73.929	98.571
1265	M204	Y	-0.04	-0.039	98.571	123.214
1266	M204	Y	-0.039	-0.041	123.214	147.857
1267	M204	Y	-0.041	-0.044	147.857	172.5
1268	M204	Y	-0.044	-0.041	172.5	197.143
1269	M204	Y	-0.041	-0.039	197.143	221.786
1270	M204	Y	-0.039	-0.04	221.786	246.429
1271	M204	Y	-0.04	-0.04	246.429	271.071
1272	M204	Y	-0.04	-0.04	271.071	295.714
1273	M204	Y	-0.04	-0.039	295.714	320.357
1274	M204	Y	-0.039	-0.038	320.357	345
1275	M205	Y	-0.05	-0.05	0	24.643
1276	M205	Y	-0.05	-0.05	24.643	49.286
1277	M205	Y	-0.05	-0.05	49.286	73.929
1278	M205	Y	-0.05	-0.05	73.929	98.571
1279	M205	Y	-0.05	-0.05	98.571	123.214
1280	M205	Y	-0.05	-0.05	123.214	147.857
1281	M205	Y	-0.05	-0.05	147.857	172.5
1282	M205	Y	-0.05	-0.05	172.5	197.143
1283	M205	Y	-0.05	-0.05	197.143	221.786
1284	M205	Y	-0.05	-0.05	221.786	246.429
1285	M205	Y	-0.05	-0.05	246.429	271.071
1286	M205	Y	-0.05	-0.05	271.071	295.714
1287	M205	Y	-0.05	-0.05	295.714	320.357
1288	M205	Y	-0.05	-0.05	320.357	345
1289	M206	Y	-0.06	-0.06	5.96e-13	345
1290	M208	Y	-0.03	-0.036	0	24.643
1291	M208	Y	-0.036	-0.04	24.643	49.286
1292	M208	Y	-0.04	-0.04	49.286	73.929
1293	M208	Y	-0.04	-0.036	73.929	98.571
1294	M208	Y	-0.036	-0.035	98.571	123.214
1295	M208	Y	-0.035	-0.039	123.214	147.857
1296	M208	Y	-0.039	-0.037	147.857	172.5
1297	M208	Y	-0.037	-0.035	172.5	197.143
1298	M208	Y	-0.035	-0.038	197.143	221.786
1299	M208	Y	-0.038	-0.038	221.786	246.429
1300	M208	Y	-0.038	-0.037	246.429	271.071
1301	M208	Y	-0.037	-0.04	271.071	295.714
1302	M208	Y	-0.04	-0.036	295.714	320.357
1303	M208	Y	-0.036	-0.03	320.357	345
1304	M209	Y	-0.06	-0.06	0	345
1305	M211	Y	-0.021	-0.023	0	24.643
1306	M211	Y	-0.023	-0.026	24.643	49.286

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1307	M211	Y	-0.026	-0.026	49.286	73.929
1308	M211	Y	-0.026	-0.027	73.929	98.571
1309	M211	Y	-0.027	-0.027	98.571	123.214
1310	M211	Y	-0.027	-0.023	123.214	147.857
1311	M211	Y	-0.023	-0.02	147.857	172.5
1312	M211	Y	-0.02	-0.02	172.5	197.143
1313	M211	Y	-0.02	-0.027	197.143	221.786
1314	M211	Y	-0.027	-0.027	221.786	246.429
1315	M211	Y	-0.027	-0.026	246.429	271.071
1316	M211	Y	-0.026	-0.026	271.071	295.714
1317	M211	Y	-0.026	-0.023	295.714	320.357
1318	M211	Y	-0.023	-0.021	320.357	345
1319	M222	Y	-0.045	-0.045	0	24.643
1320	M222	Y	-0.045	-0.045	24.643	49.286
1321	M222	Y	-0.045	-0.045	49.286	73.929
1322	M222	Y	-0.045	-0.045	73.929	98.571
1323	M222	Y	-0.045	-0.045	98.571	123.214
1324	M222	Y	-0.045	-0.045	123.214	147.857
1325	M222	Y	-0.045	-0.049	147.857	172.5
1326	M222	Y	-0.049	-0.049	172.5	197.143
1327	M222	Y	-0.049	-0.045	197.143	221.786
1328	M222	Y	-0.045	-0.045	221.786	246.429
1329	M222	Y	-0.045	-0.045	246.429	271.071
1330	M222	Y	-0.045	-0.045	271.071	295.714
1331	M222	Y	-0.045	-0.045	295.714	320.357
1332	M222	Y	-0.045	-0.045	320.357	345
1333	M223	Y	-0.06	-0.06	0	345
1334	M224	Y	-0.061	-0.06	0	24.643
1335	M224	Y	-0.06	-0.06	24.643	49.286
1336	M224	Y	-0.06	-0.061	49.286	73.929
1337	M224	Y	-0.061	-0.064	73.929	98.571
1338	M224	Y	-0.064	-0.061	98.571	123.214
1339	M224	Y	-0.061	-0.057	123.214	147.857
1340	M224	Y	-0.057	-0.061	147.857	172.5
1341	M224	Y	-0.061	-0.062	172.5	197.143
1342	M224	Y	-0.062	-0.06	197.143	221.786
1343	M224	Y	-0.06	-0.062	221.786	246.429
1344	M224	Y	-0.062	-0.063	246.429	271.071
1345	M224	Y	-0.063	-0.06	271.071	295.714
1346	M224	Y	-0.06	-0.06	295.714	320.357
1347	M224	Y	-0.06	-0.061	320.357	345
1348	M225	Y	-0.053	-0.052	0	24.643
1349	M225	Y	-0.052	-0.052	24.643	49.286
1350	M225	Y	-0.052	-0.052	49.286	73.929
1351	M225	Y	-0.052	-0.052	73.929	98.571
1352	M225	Y	-0.052	-0.052	98.571	123.214
1353	M225	Y	-0.052	-0.054	123.214	147.857
1354	M225	Y	-0.054	-0.055	147.857	172.5
1355	M225	Y	-0.055	-0.055	172.5	197.143
1356	M225	Y	-0.055	-0.054	197.143	221.786
1357	M225	Y	-0.054	-0.052	221.786	246.429
1358	M225	Y	-0.052	-0.052	246.429	271.071
1359	M225	Y	-0.052	-0.052	271.071	295.714
1360	M225	Y	-0.052	-0.052	295.714	320.357
1361	M225	Y	-0.052	-0.053	320.357	345

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1362	M226	Y	-0.06	-0.06	0	345
1363	M227	Y	-0.06	-0.06	0	24.643
1364	M227	Y	-0.06	-0.06	24.643	49.286
1365	M227	Y	-0.06	-0.06	49.286	73.929
1366	M227	Y	-0.06	-0.06	73.929	98.571
1367	M227	Y	-0.06	-0.06	98.571	123.214
1368	M227	Y	-0.06	-0.06	123.214	147.857
1369	M227	Y	-0.06	-0.059	147.857	172.5
1370	M227	Y	-0.059	-0.06	172.5	197.143
1371	M227	Y	-0.06	-0.06	197.143	221.786
1372	M227	Y	-0.06	-0.06	221.786	246.429
1373	M227	Y	-0.06	-0.06	246.429	271.071
1374	M227	Y	-0.06	-0.06	271.071	295.714
1375	M227	Y	-0.06	-0.06	295.714	320.357
1376	M227	Y	-0.06	-0.06	320.357	345
1377	M228	Y	-0.038	-0.039	0	24.643
1378	M228	Y	-0.039	-0.04	24.643	49.286
1379	M228	Y	-0.04	-0.04	49.286	73.929
1380	M228	Y	-0.04	-0.04	73.929	98.571
1381	M228	Y	-0.04	-0.039	98.571	123.214
1382	M228	Y	-0.039	-0.041	123.214	147.857
1383	M228	Y	-0.041	-0.044	147.857	172.5
1384	M228	Y	-0.044	-0.041	172.5	197.143
1385	M228	Y	-0.041	-0.039	197.143	221.786
1386	M228	Y	-0.039	-0.04	221.786	246.429
1387	M228	Y	-0.04	-0.04	246.429	271.071
1388	M228	Y	-0.04	-0.04	271.071	295.714
1389	M228	Y	-0.04	-0.039	295.714	320.357
1390	M228	Y	-0.039	-0.038	320.357	345
1391	M229	Y	-0.05	-0.05	0	24.643
1392	M229	Y	-0.05	-0.05	24.643	49.286
1393	M229	Y	-0.05	-0.05	49.286	73.929
1394	M229	Y	-0.05	-0.05	73.929	98.571
1395	M229	Y	-0.05	-0.05	98.571	123.214
1396	M229	Y	-0.05	-0.05	123.214	147.857
1397	M229	Y	-0.05	-0.05	147.857	172.5
1398	M229	Y	-0.05	-0.05	172.5	197.143
1399	M229	Y	-0.05	-0.05	197.143	221.786
1400	M229	Y	-0.05	-0.05	221.786	246.429
1401	M229	Y	-0.05	-0.05	246.429	271.071
1402	M229	Y	-0.05	-0.05	271.071	295.714
1403	M229	Y	-0.05	-0.05	295.714	320.357
1404	M229	Y	-0.05	-0.05	320.357	345
1405	M244	Y	-0.023	-0.03	0	24.643
1406	M244	Y	-0.03	-0.032	24.643	49.286
1407	M244	Y	-0.032	-0.029	49.286	73.929
1408	M244	Y	-0.029	-0.032	73.929	98.571
1409	M244	Y	-0.032	-0.032	98.571	123.214
1410	M244	Y	-0.032	-0.028	123.214	147.857
1411	M244	Y	-0.028	-0.026	147.857	172.5
1412	M244	Y	-0.026	-0.026	172.5	197.143
1413	M244	Y	-0.026	-0.031	197.143	221.786
1414	M244	Y	-0.031	-0.032	221.786	246.429
1415	M244	Y	-0.032	-0.029	246.429	271.071
1416	M244	Y	-0.029	-0.032	271.071	295.714

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1417	M244	Y	-0.032	-0.03	295.714	320.357
1418	M244	Y	-0.03	-0.023	320.357	345
1419	M245	Y	-0.028	-0.029	0	24.643
1420	M245	Y	-0.029	-0.03	24.643	49.286
1421	M245	Y	-0.03	-0.03	49.286	73.929
1422	M245	Y	-0.03	-0.03	73.929	98.571
1423	M245	Y	-0.03	-0.03	98.571	123.214
1424	M245	Y	-0.03	-0.03	123.214	147.857
1425	M245	Y	-0.03	-0.03	147.857	172.5
1426	M245	Y	-0.03	-0.03	172.5	197.143
1427	M245	Y	-0.03	-0.03	197.143	221.786
1428	M245	Y	-0.03	-0.03	221.786	246.429
1429	M245	Y	-0.03	-0.03	246.429	271.071
1430	M245	Y	-0.03	-0.03	271.071	295.714
1431	M245	Y	-0.03	-0.029	295.714	320.357
1432	M245	Y	-0.029	-0.028	320.357	345
1433	M248	Y	-0.023	-0.03	0	24.643
1434	M248	Y	-0.03	-0.032	24.643	49.286
1435	M248	Y	-0.032	-0.029	49.286	73.929
1436	M248	Y	-0.029	-0.032	73.929	98.571
1437	M248	Y	-0.032	-0.032	98.571	123.214
1438	M248	Y	-0.032	-0.028	123.214	147.857
1439	M248	Y	-0.028	-0.026	147.857	172.5
1440	M248	Y	-0.026	-0.026	172.5	197.143
1441	M248	Y	-0.026	-0.031	197.143	221.786
1442	M248	Y	-0.031	-0.032	221.786	246.429
1443	M248	Y	-0.032	-0.029	246.429	271.071
1444	M248	Y	-0.029	-0.032	271.071	295.714
1445	M248	Y	-0.032	-0.03	295.714	320.357
1446	M248	Y	-0.03	-0.023	320.357	345
1447	M249	Y	-0.028	-0.029	0	24.643
1448	M249	Y	-0.029	-0.03	24.643	49.286
1449	M249	Y	-0.03	-0.03	49.286	73.929
1450	M249	Y	-0.03	-0.03	73.929	98.571
1451	M249	Y	-0.03	-0.03	98.571	123.214
1452	M249	Y	-0.03	-0.03	123.214	147.857
1453	M249	Y	-0.03	-0.03	147.857	172.5
1454	M249	Y	-0.03	-0.03	172.5	197.143
1455	M249	Y	-0.03	-0.03	197.143	221.786
1456	M249	Y	-0.03	-0.03	221.786	246.429
1457	M249	Y	-0.03	-0.03	246.429	271.071
1458	M249	Y	-0.03	-0.03	271.071	295.714
1459	M249	Y	-0.03	-0.029	295.714	320.357
1460	M249	Y	-0.029	-0.028	320.357	345
1461	M250	Y	-0.028	-0.029	0	24.643
1462	M250	Y	-0.029	-0.03	24.643	49.286
1463	M250	Y	-0.03	-0.03	49.286	73.929
1464	M250	Y	-0.03	-0.03	73.929	98.571
1465	M250	Y	-0.03	-0.03	98.571	123.214
1466	M250	Y	-0.03	-0.03	123.214	147.857
1467	M250	Y	-0.03	-0.03	147.857	172.5
1468	M250	Y	-0.03	-0.03	172.5	197.143
1469	M250	Y	-0.03	-0.03	197.143	221.786
1470	M250	Y	-0.03	-0.03	221.786	246.429
1471	M250	Y	-0.03	-0.03	246.429	271.071

Member Distributed Loads (BLC 11 : BLC 6 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1472	M250	Y	-0.03	-0.03	271.071	295.714
1473	M250	Y	-0.03	-0.029	295.714	320.357
1474	M250	Y	-0.029	-0.028	320.357	345
1475	M251	Y	-0.027	-0.028	0	24.857
1476	M251	Y	-0.028	-0.028	24.857	49.714
1477	M251	Y	-0.028	-0.033	49.714	74.571
1478	M251	Y	-0.033	-0.033	74.571	99.429
1479	M251	Y	-0.033	-0.029	99.429	124.286
1480	M251	Y	-0.029	-0.028	124.286	149.143
1481	M251	Y	-0.028	-0.029	149.143	174
1482	M251	Y	-0.029	-0.029	174	198.857
1483	M251	Y	-0.029	-0.028	198.857	223.714
1484	M251	Y	-0.028	-0.033	223.714	248.571
1485	M251	Y	-0.033	-0.033	248.571	273.429
1486	M251	Y	-0.033	-0.028	273.429	298.286
1487	M251	Y	-0.028	-0.028	298.286	323.143
1488	M251	Y	-0.028	-0.027	323.143	348
1489	M252	Y	-0.023	-0.03	0	24.643
1490	M252	Y	-0.03	-0.032	24.643	49.286
1491	M252	Y	-0.032	-0.029	49.286	73.929
1492	M252	Y	-0.029	-0.032	73.929	98.571
1493	M252	Y	-0.032	-0.031	98.571	123.214
1494	M252	Y	-0.031	-0.026	123.214	147.857
1495	M252	Y	-0.026	-0.029	147.857	172.5
1496	M252	Y	-0.029	-0.032	172.5	197.143
1497	M252	Y	-0.032	-0.027	197.143	221.786
1498	M252	Y	-0.027	-0.029	221.786	246.429
1499	M252	Y	-0.029	-0.031	246.429	271.071
1500	M252	Y	-0.031	-0.031	271.071	295.714
1501	M252	Y	-0.031	-0.03	295.714	320.357
1502	M252	Y	-0.03	-0.023	320.357	345
1503	M253	Y	-0.023	-0.03	0	24.857
1504	M253	Y	-0.03	-0.032	24.857	49.714
1505	M253	Y	-0.032	-0.029	49.714	74.571
1506	M253	Y	-0.029	-0.032	74.571	99.429
1507	M253	Y	-0.032	-0.031	99.429	124.286
1508	M253	Y	-0.031	-0.026	124.286	149.143
1509	M253	Y	-0.026	-0.026	149.143	174
1510	M253	Y	-0.026	-0.028	174	198.857
1511	M253	Y	-0.028	-0.032	198.857	223.714
1512	M253	Y	-0.032	-0.032	223.714	248.571
1513	M253	Y	-0.032	-0.029	248.571	273.429
1514	M253	Y	-0.029	-0.032	273.429	298.286
1515	M253	Y	-0.032	-0.03	298.286	323.143
1516	M253	Y	-0.03	-0.023	323.143	348

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M189	X	-0.012	-0.013	24.643	49.286
2	M189	Y	-0.058	-0.059	24.643	49.286
3	M189	X	-0.013	-0.013	49.286	73.929
4	M189	Y	-0.059	-0.059	49.286	73.929
5	M189	X	-0.013	-0.013	73.929	98.571
6	M189	Y	-0.059	-0.058	73.929	98.571
7	M189	X	-0.013	-0.012	98.571	123.214

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
8	M189	Y	-0.058	-0.057	98.571	123.214
9	M189	X	-0.012	-0.013	123.214	147.857
10	M189	Y	-0.057	-0.06	123.214	147.857
11	M189	X	-0.013	-0.014	147.857	172.5
12	M189	Y	-0.06	-0.065	147.857	172.5
13	M189	X	-0.014	-0.013	172.5	197.143
14	M189	Y	-0.065	-0.06	172.5	197.143
15	M189	X	-0.013	-0.012	197.143	221.786
16	M189	Y	-0.06	-0.057	197.143	221.786
17	M189	X	-0.012	-0.013	221.786	246.429
18	M189	Y	-0.057	-0.058	221.786	246.429
19	M189	X	-0.013	-0.013	246.429	271.071
20	M189	Y	-0.058	-0.059	246.429	271.071
21	M189	X	-0.013	-0.013	271.071	295.714
22	M189	Y	-0.059	-0.059	271.071	295.714
23	M189	X	-0.013	-0.012	295.714	320.357
24	M189	Y	-0.059	-0.058	295.714	320.357
25	M189	X	-0.012	-0.012	320.357	345
26	M189	Y	-0.058	-0.056	320.357	345
27	M190	X	-0.019	-0.019	0	24.643
28	M190	Y	-0.088	-0.088	0	24.643
29	M190	X	-0.019	-0.019	24.643	49.286
30	M190	Y	-0.088	-0.088	24.643	49.286
31	M190	X	-0.019	-0.019	49.286	73.929
32	M190	Y	-0.088	-0.088	49.286	73.929
33	M190	X	-0.019	-0.019	73.929	98.571
34	M190	Y	-0.088	-0.088	73.929	98.571
35	M190	X	-0.019	-0.019	98.571	123.214
36	M190	Y	-0.088	-0.088	98.571	123.214
37	M190	X	-0.019	-0.019	123.214	147.857
38	M190	Y	-0.088	-0.087	123.214	147.857
39	M190	X	-0.019	-0.019	147.857	172.5
40	M190	Y	-0.087	-0.086	147.857	172.5
41	M190	X	-0.019	-0.019	172.5	197.143
42	M190	Y	-0.086	-0.087	172.5	197.143
43	M190	X	-0.019	-0.019	197.143	221.786
44	M190	Y	-0.087	-0.088	197.143	221.786
45	M190	X	-0.019	-0.019	221.786	246.429
46	M190	Y	-0.088	-0.088	221.786	246.429
47	M190	X	-0.019	-0.019	246.429	271.071
48	M190	Y	-0.088	-0.088	246.429	271.071
49	M190	X	-0.019	-0.019	271.071	295.714
50	M190	Y	-0.088	-0.088	271.071	295.714
51	M190	X	-0.019	-0.019	295.714	320.357
52	M190	Y	-0.088	-0.088	295.714	320.357
53	M190	X	-0.019	-0.019	320.357	345
54	M190	Y	-0.088	-0.088	320.357	345
55	M191	X	-0.019	-0.019	1.785e-13	345
56	M191	Y	-0.088	-0.088	1.785e-13	345
57	M192	X	-0.019	-0.019	0	24.643
58	M192	Y	-0.088	-0.088	0	24.643
59	M192	X	-0.019	-0.019	24.643	49.286
60	M192	Y	-0.088	-0.087	24.643	49.286
61	M192	X	-0.019	-0.02	49.286	73.929
62	M192	Y	-0.087	-0.091	49.286	73.929

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
63	M192	X	-0.02	-0.02	73.929	98.571
64	M192	Y	-0.091	-0.091	73.929	98.571
65	M192	X	-0.02	-0.019	98.571	123.214
66	M192	Y	-0.091	-0.088	98.571	123.214
67	M192	X	-0.019	-0.02	123.214	147.857
68	M192	Y	-0.088	-0.091	123.214	147.857
69	M192	X	-0.02	-0.02	147.857	172.5
70	M192	Y	-0.091	-0.091	147.857	172.5
71	M192	X	-0.02	-0.019	172.5	197.143
72	M192	Y	-0.091	-0.088	172.5	197.143
73	M192	X	-0.019	-0.019	197.143	221.786
74	M192	Y	-0.088	-0.087	197.143	221.786
75	M192	X	-0.019	-0.019	221.786	246.429
76	M192	Y	-0.087	-0.086	221.786	246.429
77	M192	X	-0.019	-0.018	246.429	271.071
78	M192	Y	-0.086	-0.084	246.429	271.071
79	M192	X	-0.018	-0.018	271.071	295.714
80	M192	Y	-0.084	-0.084	271.071	295.714
81	M192	X	-0.018	-0.02	295.714	320.357
82	M192	Y	-0.084	-0.09	295.714	320.357
83	M192	X	-0.02	-0.021	320.357	345
84	M192	Y	-0.09	-0.098	320.357	345
85	M193	X	-0.01	-0.011	0	24.643
86	M193	Y	-0.046	-0.053	0	24.643
87	M193	X	-0.011	-0.011	24.643	49.286
88	M193	Y	-0.053	-0.053	24.643	49.286
89	M193	X	-0.011	-0.011	49.286	73.929
90	M193	Y	-0.053	-0.05	49.286	73.929
91	M193	X	-0.011	-0.011	73.929	98.571
92	M193	Y	-0.05	-0.05	73.929	98.571
93	M193	X	-0.011	-0.011	98.571	123.214
94	M193	Y	-0.05	-0.05	98.571	123.214
95	M193	X	-0.011	-0.011	123.214	147.857
96	M193	Y	-0.05	-0.051	123.214	147.857
97	M193	X	-0.011	-0.011	147.857	172.5
98	M193	Y	-0.051	-0.051	147.857	172.5
99	M193	X	-0.011	-0.011	172.5	197.143
100	M193	Y	-0.051	-0.051	172.5	197.143
101	M193	X	-0.011	-0.011	197.143	221.786
102	M193	Y	-0.051	-0.051	197.143	221.786
103	M193	X	-0.011	-0.011	221.786	246.429
104	M193	Y	-0.051	-0.05	221.786	246.429
105	M193	X	-0.011	-0.011	246.429	271.071
106	M193	Y	-0.05	-0.05	246.429	271.071
107	M193	X	-0.011	-0.011	271.071	295.714
108	M193	Y	-0.05	-0.05	271.071	295.714
109	M193	X	-0.011	-0.011	295.714	320.357
110	M193	Y	-0.05	-0.05	295.714	320.357
111	M193	X	-0.011	-0.011	320.357	345
112	M193	Y	-0.05	-0.051	320.357	345
113	M194	X	-0.018	-0.018	0	24.643
114	M194	Y	-0.083	-0.085	0	24.643
115	M194	X	-0.018	-0.019	24.643	49.286
116	M194	Y	-0.085	-0.087	24.643	49.286
117	M194	X	-0.019	-0.019	49.286	73.929

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
118	M194	Y	-0.087	-0.088	49.286	73.929
119	M194	X	-0.019	-0.019	73.929	98.571
120	M194	Y	-0.088	-0.088	73.929	98.571
121	M194	X	-0.019	-0.019	98.571	123.214
122	M194	Y	-0.088	-0.088	98.571	123.214
123	M194	X	-0.019	-0.019	123.214	147.857
124	M194	Y	-0.088	-0.088	123.214	147.857
125	M194	X	-0.019	-0.019	147.857	172.5
126	M194	Y	-0.088	-0.088	147.857	172.5
127	M194	X	-0.019	-0.019	172.5	197.143
128	M194	Y	-0.088	-0.088	172.5	197.143
129	M194	X	-0.019	-0.019	197.143	221.786
130	M194	Y	-0.088	-0.088	197.143	221.786
131	M194	X	-0.019	-0.019	221.786	246.429
132	M194	Y	-0.088	-0.088	221.786	246.429
133	M194	X	-0.019	-0.019	246.429	271.071
134	M194	Y	-0.088	-0.088	246.429	271.071
135	M194	X	-0.019	-0.019	271.071	295.714
136	M194	Y	-0.088	-0.088	271.071	295.714
137	M194	X	-0.019	-0.019	295.714	320.357
138	M194	Y	-0.088	-0.088	295.714	320.357
139	M194	X	-0.019	-0.019	320.357	345
140	M194	Y	-0.088	-0.088	320.357	345
141	M195	X	-0.019	-0.019	3.331e-13	345
142	M195	Y	-0.088	-0.088	3.331e-13	345
143	M196	X	-0.009	-0.01	0	24.643
144	M196	Y	-0.042	-0.044	0	24.643
145	M196	X	-0.01	-0.01	24.643	49.286
146	M196	Y	-0.044	-0.045	24.643	49.286
147	M196	X	-0.01	-0.01	49.286	73.929
148	M196	Y	-0.045	-0.045	49.286	73.929
149	M196	X	-0.01	-0.01	73.929	98.571
150	M196	Y	-0.045	-0.045	73.929	98.571
151	M196	X	-0.01	-0.01	98.571	123.214
152	M196	Y	-0.045	-0.045	98.571	123.214
153	M196	X	-0.01	-0.01	123.214	147.857
154	M196	Y	-0.045	-0.045	123.214	147.857
155	M196	X	-0.01	-0.01	147.857	172.5
156	M196	Y	-0.045	-0.045	147.857	172.5
157	M196	X	-0.01	-0.01	172.5	197.143
158	M196	Y	-0.045	-0.045	172.5	197.143
159	M196	X	-0.01	-0.01	197.143	221.786
160	M196	Y	-0.045	-0.045	197.143	221.786
161	M196	X	-0.01	-0.01	221.786	246.429
162	M196	Y	-0.045	-0.045	221.786	246.429
163	M196	X	-0.01	-0.01	246.429	271.071
164	M196	Y	-0.045	-0.045	246.429	271.071
165	M196	X	-0.01	-0.01	271.071	295.714
166	M196	Y	-0.045	-0.045	271.071	295.714
167	M196	X	-0.01	-0.01	295.714	320.357
168	M196	Y	-0.045	-0.044	295.714	320.357
169	M196	X	-0.01	-0.009	320.357	345
170	M196	Y	-0.044	-0.042	320.357	345
171	M197	X	-0.016	-0.016	0	24.643
172	M197	Y	-0.075	-0.075	0	24.643

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
173	M197	X	-0.016	-0.016	24.643	49.286
174	M197	Y	-0.075	-0.075	24.643	49.286
175	M197	X	-0.016	-0.016	49.286	73.929
176	M197	Y	-0.075	-0.075	49.286	73.929
177	M197	X	-0.016	-0.016	73.929	98.571
178	M197	Y	-0.075	-0.075	73.929	98.571
179	M197	X	-0.016	-0.016	98.571	123.214
180	M197	Y	-0.075	-0.075	98.571	123.214
181	M197	X	-0.016	-0.016	123.214	147.857
182	M197	Y	-0.075	-0.075	123.214	147.857
183	M197	X	-0.016	-0.016	147.857	172.5
184	M197	Y	-0.075	-0.075	147.857	172.5
185	M197	X	-0.016	-0.016	172.5	197.143
186	M197	Y	-0.075	-0.075	172.5	197.143
187	M197	X	-0.016	-0.016	197.143	221.786
188	M197	Y	-0.075	-0.075	197.143	221.786
189	M197	X	-0.016	-0.016	221.786	246.429
190	M197	Y	-0.075	-0.075	221.786	246.429
191	M197	X	-0.016	-0.016	246.429	271.071
192	M197	Y	-0.075	-0.075	246.429	271.071
193	M197	X	-0.016	-0.016	271.071	295.714
194	M197	Y	-0.075	-0.075	271.071	295.714
195	M197	X	-0.016	-0.016	295.714	320.357
196	M197	Y	-0.075	-0.075	295.714	320.357
197	M197	X	-0.016	-0.016	320.357	345
198	M197	Y	-0.075	-0.075	320.357	345
199	M207	X	-0.018	-0.019	0	24.643
200	M207	Y	-0.081	-0.087	0	24.643
201	M207	X	-0.019	-0.019	24.643	49.286
202	M207	Y	-0.087	-0.089	24.643	49.286
203	M207	X	-0.019	-0.019	49.286	73.929
204	M207	Y	-0.089	-0.088	49.286	73.929
205	M207	X	-0.019	-0.019	73.929	98.571
206	M207	Y	-0.088	-0.088	73.929	98.571
207	M207	X	-0.019	-0.019	98.571	123.214
208	M207	Y	-0.088	-0.088	98.571	123.214
209	M207	X	-0.019	-0.019	123.214	147.857
210	M207	Y	-0.088	-0.088	123.214	147.857
211	M207	X	-0.019	-0.019	147.857	172.5
212	M207	Y	-0.088	-0.088	147.857	172.5
213	M207	X	-0.019	-0.019	172.5	197.143
214	M207	Y	-0.088	-0.088	172.5	197.143
215	M207	X	-0.019	-0.019	197.143	221.786
216	M207	Y	-0.088	-0.088	197.143	221.786
217	M207	X	-0.019	-0.019	221.786	246.429
218	M207	Y	-0.088	-0.088	221.786	246.429
219	M207	X	-0.019	-0.019	246.429	271.071
220	M207	Y	-0.088	-0.089	246.429	271.071
221	M207	X	-0.019	-0.02	271.071	295.714
222	M207	Y	-0.089	-0.094	271.071	295.714
223	M207	X	-0.02	-0.02	295.714	320.357
224	M207	Y	-0.094	-0.092	295.714	320.357
225	M207	X	-0.02	-0.017	320.357	345
226	M207	Y	-0.092	-0.078	320.357	345
227	M210	X	-0.016	-0.017	0	24.643

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
228	M210	Y	-0.072	-0.078	0	24.643
229	M210	X	-0.017	-0.017	24.643	49.286
230	M210	Y	-0.078	-0.079	24.643	49.286
231	M210	X	-0.017	-0.017	49.286	73.929
232	M210	Y	-0.079	-0.078	49.286	73.929
233	M210	X	-0.017	-0.018	73.929	98.571
234	M210	Y	-0.078	-0.085	73.929	98.571
235	M210	X	-0.018	-0.02	98.571	123.214
236	M210	Y	-0.085	-0.093	98.571	123.214
237	M210	X	-0.02	-0.019	123.214	147.857
238	M210	Y	-0.093	-0.086	123.214	147.857
239	M210	X	-0.019	-0.016	147.857	172.5
240	M210	Y	-0.086	-0.075	147.857	172.5
241	M210	X	-0.016	-0.015	172.5	197.143
242	M210	Y	-0.075	-0.071	172.5	197.143
243	M210	X	-0.015	-0.017	197.143	221.786
244	M210	Y	-0.071	-0.078	197.143	221.786
245	M210	X	-0.017	-0.018	221.786	246.429
246	M210	Y	-0.078	-0.084	221.786	246.429
247	M210	X	-0.018	-0.018	246.429	271.071
248	M210	Y	-0.084	-0.084	246.429	271.071
249	M210	X	-0.018	-0.019	271.071	295.714
250	M210	Y	-0.084	-0.089	271.071	295.714
251	M210	X	-0.019	-0.018	295.714	320.357
252	M210	Y	-0.089	-0.083	295.714	320.357
253	M210	X	-0.018	-0.013	320.357	345
254	M210	Y	-0.083	-0.061	320.357	345
255	M212	X	-0.016	-0.016	0	24.643
256	M212	Y	-0.074	-0.073	0	24.643
257	M212	X	-0.016	-0.016	24.643	49.286
258	M212	Y	-0.073	-0.073	24.643	49.286
259	M212	X	-0.016	-0.016	49.286	73.929
260	M212	Y	-0.073	-0.073	49.286	73.929
261	M212	X	-0.016	-0.016	73.929	98.571
262	M212	Y	-0.073	-0.073	73.929	98.571
263	M212	X	-0.016	-0.016	98.571	123.214
264	M212	Y	-0.073	-0.073	98.571	123.214
265	M212	X	-0.016	-0.016	123.214	147.857
266	M212	Y	-0.073	-0.073	123.214	147.857
267	M212	X	-0.016	-0.016	147.857	172.5
268	M212	Y	-0.073	-0.073	147.857	172.5
269	M212	X	-0.016	-0.016	172.5	197.143
270	M212	Y	-0.073	-0.073	172.5	197.143
271	M212	X	-0.016	-0.016	197.143	221.786
272	M212	Y	-0.073	-0.073	197.143	221.786
273	M212	X	-0.016	-0.016	221.786	246.429
274	M212	Y	-0.073	-0.073	221.786	246.429
275	M212	X	-0.016	-0.016	246.429	271.071
276	M212	Y	-0.073	-0.073	246.429	271.071
277	M212	X	-0.016	-0.016	271.071	295.714
278	M212	Y	-0.073	-0.073	271.071	295.714
279	M212	X	-0.016	-0.016	295.714	320.357
280	M212	Y	-0.073	-0.073	295.714	320.357
281	M212	X	-0.016	-0.016	320.357	345
282	M212	Y	-0.073	-0.074	320.357	345

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
283	M213	X	-0.012	-0.012	0	24.643
284	M213	Y	-0.056	-0.058	0	24.643
285	M213	X	-0.012	-0.013	24.643	49.286
286	M213	Y	-0.058	-0.059	24.643	49.286
287	M213	X	-0.013	-0.013	49.286	73.929
288	M213	Y	-0.059	-0.059	49.286	73.929
289	M213	X	-0.013	-0.013	73.929	98.571
290	M213	Y	-0.059	-0.058	73.929	98.571
291	M213	X	-0.013	-0.012	98.571	123.214
292	M213	Y	-0.058	-0.057	98.571	123.214
293	M213	X	-0.012	-0.013	123.214	147.857
294	M213	Y	-0.057	-0.06	123.214	147.857
295	M213	X	-0.013	-0.014	147.857	172.5
296	M213	Y	-0.06	-0.065	147.857	172.5
297	M213	X	-0.014	-0.013	172.5	197.143
298	M213	Y	-0.065	-0.06	172.5	197.143
299	M213	X	-0.013	-0.012	197.143	221.786
300	M213	Y	-0.06	-0.057	197.143	221.786
301	M213	X	-0.012	-0.013	221.786	246.429
302	M213	Y	-0.057	-0.058	221.786	246.429
303	M213	X	-0.013	-0.013	246.429	271.071
304	M213	Y	-0.058	-0.059	246.429	271.071
305	M213	X	-0.013	-0.013	271.071	295.714
306	M213	Y	-0.059	-0.059	271.071	295.714
307	M213	X	-0.013	-0.012	295.714	320.357
308	M213	Y	-0.059	-0.058	295.714	320.357
309	M213	X	-0.012	-0.012	320.357	345
310	M213	Y	-0.058	-0.056	320.357	345
311	M214	X	-0.019	-0.019	0	24.643
312	M214	Y	-0.088	-0.088	0	24.643
313	M214	X	-0.019	-0.019	24.643	49.286
314	M214	Y	-0.088	-0.088	24.643	49.286
315	M214	X	-0.019	-0.019	49.286	73.929
316	M214	Y	-0.088	-0.088	49.286	73.929
317	M214	X	-0.019	-0.019	73.929	98.571
318	M214	Y	-0.088	-0.088	73.929	98.571
319	M214	X	-0.019	-0.019	98.571	123.214
320	M214	Y	-0.088	-0.088	98.571	123.214
321	M214	X	-0.019	-0.019	123.214	147.857
322	M214	Y	-0.088	-0.087	123.214	147.857
323	M214	X	-0.019	-0.019	147.857	172.5
324	M214	Y	-0.087	-0.086	147.857	172.5
325	M214	X	-0.019	-0.019	172.5	197.143
326	M214	Y	-0.086	-0.087	172.5	197.143
327	M214	X	-0.019	-0.019	197.143	221.786
328	M214	Y	-0.087	-0.088	197.143	221.786
329	M214	X	-0.019	-0.019	221.786	246.429
330	M214	Y	-0.088	-0.088	221.786	246.429
331	M214	X	-0.019	-0.019	246.429	271.071
332	M214	Y	-0.088	-0.088	246.429	271.071
333	M214	X	-0.019	-0.019	271.071	295.714
334	M214	Y	-0.088	-0.088	271.071	295.714
335	M214	X	-0.019	-0.019	295.714	320.357
336	M214	Y	-0.088	-0.088	295.714	320.357
337	M214	X	-0.019	-0.019	320.357	345

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
338	M214	Y	-0.088	-0.088	320.357	345
339	M215	X	-0.019	-0.019	1.075e-13	345
340	M215	Y	-0.088	-0.088	1.075e-13	345
341	M216	X	-0.021	-0.02	0	24.643
342	M216	Y	-0.098	-0.09	0	24.643
343	M216	X	-0.02	-0.018	24.643	49.286
344	M216	Y	-0.09	-0.084	24.643	49.286
345	M216	X	-0.018	-0.018	49.286	73.929
346	M216	Y	-0.084	-0.084	49.286	73.929
347	M216	X	-0.018	-0.019	73.929	98.571
348	M216	Y	-0.084	-0.086	73.929	98.571
349	M216	X	-0.019	-0.019	98.571	123.214
350	M216	Y	-0.086	-0.087	98.571	123.214
351	M216	X	-0.019	-0.019	123.214	147.857
352	M216	Y	-0.087	-0.089	123.214	147.857
353	M216	X	-0.019	-0.02	147.857	172.5
354	M216	Y	-0.089	-0.094	147.857	172.5
355	M216	X	-0.02	-0.02	172.5	197.143
356	M216	Y	-0.094	-0.094	172.5	197.143
357	M216	X	-0.02	-0.019	197.143	221.786
358	M216	Y	-0.094	-0.089	197.143	221.786
359	M216	X	-0.019	-0.019	221.786	246.429
360	M216	Y	-0.089	-0.087	221.786	246.429
361	M216	X	-0.019	-0.019	246.429	271.071
362	M216	Y	-0.087	-0.087	246.429	271.071
363	M216	X	-0.019	-0.019	271.071	295.714
364	M216	Y	-0.087	-0.087	271.071	295.714
365	M216	X	-0.019	-0.019	295.714	320.357
366	M216	Y	-0.087	-0.088	295.714	320.357
367	M216	X	-0.019	-0.019	320.357	345
368	M216	Y	-0.088	-0.088	320.357	345
369	M217	X	-0.012	-0.012	0	24.643
370	M217	Y	-0.053	-0.056	0	24.643
371	M217	X	-0.012	-0.011	24.643	49.286
372	M217	Y	-0.056	-0.053	24.643	49.286
373	M217	X	-0.011	-0.011	49.286	73.929
374	M217	Y	-0.053	-0.05	49.286	73.929
375	M217	X	-0.011	-0.011	73.929	98.571
376	M217	Y	-0.05	-0.051	73.929	98.571
377	M217	X	-0.011	-0.011	98.571	123.214
378	M217	Y	-0.051	-0.051	98.571	123.214
379	M217	X	-0.011	-0.011	123.214	147.857
380	M217	Y	-0.051	-0.051	123.214	147.857
381	M217	X	-0.011	-0.011	147.857	172.5
382	M217	Y	-0.051	-0.051	147.857	172.5
383	M217	X	-0.011	-0.011	172.5	197.143
384	M217	Y	-0.051	-0.051	172.5	197.143
385	M217	X	-0.011	-0.011	197.143	221.786
386	M217	Y	-0.051	-0.051	197.143	221.786
387	M217	X	-0.011	-0.011	221.786	246.429
388	M217	Y	-0.051	-0.05	221.786	246.429
389	M217	X	-0.011	-0.011	246.429	271.071
390	M217	Y	-0.05	-0.049	246.429	271.071
391	M217	X	-0.011	-0.011	271.071	295.714
392	M217	Y	-0.049	-0.051	271.071	295.714

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
393	M217	X	-0.011	-0.012	295.714	320.357
394	M217	Y	-0.051	-0.053	295.714	320.357
395	M217	X	-0.012	-0.011	320.357	345
396	M217	Y	-0.053	-0.052	320.357	345
397	M218	X	-0.019	-0.019	0	24.643
398	M218	Y	-0.088	-0.088	0	24.643
399	M218	X	-0.019	-0.019	24.643	49.286
400	M218	Y	-0.088	-0.088	24.643	49.286
401	M218	X	-0.019	-0.019	49.286	73.929
402	M218	Y	-0.088	-0.088	49.286	73.929
403	M218	X	-0.019	-0.019	73.929	98.571
404	M218	Y	-0.088	-0.088	73.929	98.571
405	M218	X	-0.019	-0.019	98.571	123.214
406	M218	Y	-0.088	-0.088	98.571	123.214
407	M218	X	-0.019	-0.019	123.214	147.857
408	M218	Y	-0.088	-0.088	123.214	147.857
409	M218	X	-0.019	-0.019	147.857	172.5
410	M218	Y	-0.088	-0.088	147.857	172.5
411	M218	X	-0.019	-0.019	172.5	197.143
412	M218	Y	-0.088	-0.088	172.5	197.143
413	M218	X	-0.019	-0.019	197.143	221.786
414	M218	Y	-0.088	-0.088	197.143	221.786
415	M218	X	-0.019	-0.019	221.786	246.429
416	M218	Y	-0.088	-0.088	221.786	246.429
417	M218	X	-0.019	-0.019	246.429	271.071
418	M218	Y	-0.088	-0.088	246.429	271.071
419	M218	X	-0.019	-0.019	271.071	295.714
420	M218	Y	-0.088	-0.087	271.071	295.714
421	M218	X	-0.019	-0.018	295.714	320.357
422	M218	Y	-0.087	-0.085	295.714	320.357
423	M218	X	-0.018	-0.018	320.357	345
424	M218	Y	-0.085	-0.083	320.357	345
425	M219	X	-0.019	-0.019	1.972e-13	345
426	M219	Y	-0.088	-0.088	1.972e-13	345
427	M220	X	-0.009	-0.01	0	24.643
428	M220	Y	-0.042	-0.044	0	24.643
429	M220	X	-0.01	-0.01	24.643	49.286
430	M220	Y	-0.044	-0.045	24.643	49.286
431	M220	X	-0.01	-0.01	49.286	73.929
432	M220	Y	-0.045	-0.045	49.286	73.929
433	M220	X	-0.01	-0.01	73.929	98.571
434	M220	Y	-0.045	-0.045	73.929	98.571
435	M220	X	-0.01	-0.01	98.571	123.214
436	M220	Y	-0.045	-0.045	98.571	123.214
437	M220	X	-0.01	-0.01	123.214	147.857
438	M220	Y	-0.045	-0.045	123.214	147.857
439	M220	X	-0.01	-0.01	147.857	172.5
440	M220	Y	-0.045	-0.045	147.857	172.5
441	M220	X	-0.01	-0.01	172.5	197.143
442	M220	Y	-0.045	-0.045	172.5	197.143
443	M220	X	-0.01	-0.01	197.143	221.786
444	M220	Y	-0.045	-0.045	197.143	221.786
445	M220	X	-0.01	-0.01	221.786	246.429
446	M220	Y	-0.045	-0.045	221.786	246.429
447	M220	X	-0.01	-0.01	246.429	271.071

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
448	M220	Y	-0.045	-0.045	246.429	271.071
449	M220	X	-0.01	-0.01	271.071	295.714
450	M220	Y	-0.045	-0.045	271.071	295.714
451	M220	X	-0.01	-0.01	295.714	320.357
452	M220	Y	-0.045	-0.044	295.714	320.357
453	M220	X	-0.01	-0.009	320.357	345
454	M220	Y	-0.044	-0.042	320.357	345
455	M221	X	-0.016	-0.016	0	24.643
456	M221	Y	-0.075	-0.075	0	24.643
457	M221	X	-0.016	-0.016	24.643	49.286
458	M221	Y	-0.075	-0.075	24.643	49.286
459	M221	X	-0.016	-0.016	49.286	73.929
460	M221	Y	-0.075	-0.075	49.286	73.929
461	M221	X	-0.016	-0.016	73.929	98.571
462	M221	Y	-0.075	-0.075	73.929	98.571
463	M221	X	-0.016	-0.016	98.571	123.214
464	M221	Y	-0.075	-0.075	98.571	123.214
465	M221	X	-0.016	-0.016	123.214	147.857
466	M221	Y	-0.075	-0.075	123.214	147.857
467	M221	X	-0.016	-0.016	147.857	172.5
468	M221	Y	-0.075	-0.075	147.857	172.5
469	M221	X	-0.016	-0.016	172.5	197.143
470	M221	Y	-0.075	-0.075	172.5	197.143
471	M221	X	-0.016	-0.016	197.143	221.786
472	M221	Y	-0.075	-0.075	197.143	221.786
473	M221	X	-0.016	-0.016	221.786	246.429
474	M221	Y	-0.075	-0.075	221.786	246.429
475	M221	X	-0.016	-0.016	246.429	271.071
476	M221	Y	-0.075	-0.075	246.429	271.071
477	M221	X	-0.016	-0.016	271.071	295.714
478	M221	Y	-0.075	-0.075	271.071	295.714
479	M221	X	-0.016	-0.016	295.714	320.357
480	M221	Y	-0.075	-0.075	295.714	320.357
481	M221	X	-0.016	-0.016	320.357	345
482	M221	Y	-0.075	-0.075	320.357	345
483	M238	X	-0.009	-0.009	0	24.643
484	M238	Y	-0.041	-0.043	0	24.643
485	M238	X	-0.009	-0.01	24.643	49.286
486	M238	Y	-0.043	-0.044	24.643	49.286
487	M238	X	-0.01	-0.01	49.286	73.929
488	M238	Y	-0.044	-0.044	49.286	73.929
489	M238	X	-0.01	-0.01	73.929	98.571
490	M238	Y	-0.044	-0.044	73.929	98.571
491	M238	X	-0.01	-0.01	98.571	123.214
492	M238	Y	-0.044	-0.044	98.571	123.214
493	M238	X	-0.01	-0.01	123.214	147.857
494	M238	Y	-0.044	-0.044	123.214	147.857
495	M238	X	-0.01	-0.01	147.857	172.5
496	M238	Y	-0.044	-0.044	147.857	172.5
497	M238	X	-0.01	-0.01	172.5	197.143
498	M238	Y	-0.044	-0.044	172.5	197.143
499	M238	X	-0.01	-0.01	197.143	221.786
500	M238	Y	-0.044	-0.044	197.143	221.786
501	M238	X	-0.01	-0.01	221.786	246.429
502	M238	Y	-0.044	-0.044	221.786	246.429

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
503	M238	X	-0.01	-0.01	246.429	271.071
504	M238	Y	-0.044	-0.044	246.429	271.071
505	M238	X	-0.01	-0.01	271.071	295.714
506	M238	Y	-0.044	-0.044	271.071	295.714
507	M238	X	-0.01	-0.009	295.714	320.357
508	M238	Y	-0.044	-0.043	295.714	320.357
509	M238	X	-0.009	-0.009	320.357	345
510	M238	Y	-0.043	-0.041	320.357	345
511	M239	X	-0.011	-0.009	0	24.643
512	M239	Y	-0.049	-0.043	0	24.643
513	M239	X	-0.009	-0.009	24.643	49.286
514	M239	Y	-0.043	-0.042	24.643	49.286
515	M239	X	-0.009	-0.009	49.286	73.929
516	M239	Y	-0.042	-0.044	49.286	73.929
517	M239	X	-0.009	-0.009	73.929	98.571
518	M239	Y	-0.044	-0.044	73.929	98.571
519	M239	X	-0.009	-0.009	98.571	123.214
520	M239	Y	-0.044	-0.044	98.571	123.214
521	M239	X	-0.009	-0.009	123.214	147.857
522	M239	Y	-0.044	-0.044	123.214	147.857
523	M239	X	-0.009	-0.009	147.857	172.5
524	M239	Y	-0.044	-0.044	147.857	172.5
525	M239	X	-0.009	-0.009	172.5	197.143
526	M239	Y	-0.044	-0.044	172.5	197.143
527	M239	X	-0.009	-0.009	197.143	221.786
528	M239	Y	-0.044	-0.044	197.143	221.786
529	M239	X	-0.009	-0.009	221.786	246.429
530	M239	Y	-0.044	-0.044	221.786	246.429
531	M239	X	-0.009	-0.009	246.429	271.071
532	M239	Y	-0.044	-0.044	246.429	271.071
533	M239	X	-0.009	-0.009	271.071	295.714
534	M239	Y	-0.044	-0.042	271.071	295.714
535	M239	X	-0.009	-0.009	295.714	320.357
536	M239	Y	-0.042	-0.043	295.714	320.357
537	M239	X	-0.009	-0.011	320.357	345
538	M239	Y	-0.043	-0.049	320.357	345
539	M240	X	-0.008	-0.009	0	24.857
540	M240	Y	-0.039	-0.041	0	24.857
541	M240	X	-0.009	-0.009	24.857	49.714
542	M240	Y	-0.041	-0.042	24.857	49.714
543	M240	X	-0.009	-0.011	49.714	74.571
544	M240	Y	-0.042	-0.049	49.714	74.571
545	M240	X	-0.011	-0.011	74.571	99.429
546	M240	Y	-0.049	-0.049	74.571	99.429
547	M240	X	-0.011	-0.009	99.429	124.286
548	M240	Y	-0.049	-0.042	99.429	124.286
549	M240	X	-0.009	-0.009	124.286	149.143
550	M240	Y	-0.042	-0.041	124.286	149.143
551	M240	X	-0.009	-0.009	149.143	174
552	M240	Y	-0.041	-0.042	149.143	174
553	M240	X	-0.009	-0.009	174	198.857
554	M240	Y	-0.042	-0.042	174	198.857
555	M240	X	-0.009	-0.009	198.857	223.714
556	M240	Y	-0.042	-0.041	198.857	223.714
557	M240	X	-0.009	-0.011	223.714	248.571

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
558	M240	Y	-0.041	-0.049	223.714	248.571
559	M240	X	-0.011	-0.011	248.571	273.429
560	M240	Y	-0.049	-0.049	248.571	273.429
561	M240	X	-0.011	-0.009	273.429	298.286
562	M240	Y	-0.049	-0.042	273.429	298.286
563	M240	X	-0.009	-0.009	298.286	323.143
564	M240	Y	-0.042	-0.041	298.286	323.143
565	M240	X	-0.009	-0.008	323.143	348
566	M240	Y	-0.041	-0.039	323.143	348
567	M241	X	-0.01	-0.009	0	24.857
568	M241	Y	-0.046	-0.041	0	24.857
569	M241	X	-0.009	-0.009	24.857	49.714
570	M241	Y	-0.041	-0.039	24.857	49.714
571	M241	X	-0.009	-0.01	49.714	74.571
572	M241	Y	-0.039	-0.047	49.714	74.571
573	M241	X	-0.01	-0.01	74.571	99.429
574	M241	Y	-0.047	-0.048	74.571	99.429
575	M241	X	-0.01	-0.009	99.429	124.286
576	M241	Y	-0.048	-0.042	99.429	124.286
577	M241	X	-0.009	-0.009	124.286	149.143
578	M241	Y	-0.042	-0.041	124.286	149.143
579	M241	X	-0.009	-0.009	149.143	174
580	M241	Y	-0.041	-0.042	149.143	174
581	M241	X	-0.009	-0.009	174	198.857
582	M241	Y	-0.042	-0.042	174	198.857
583	M241	X	-0.009	-0.009	198.857	223.714
584	M241	Y	-0.042	-0.041	198.857	223.714
585	M241	X	-0.009	-0.01	223.714	248.571
586	M241	Y	-0.041	-0.048	223.714	248.571
587	M241	X	-0.01	-0.01	248.571	273.429
588	M241	Y	-0.048	-0.047	248.571	273.429
589	M241	X	-0.01	-0.009	273.429	298.286
590	M241	Y	-0.047	-0.039	273.429	298.286
591	M241	X	-0.009	-0.009	298.286	323.143
592	M241	Y	-0.039	-0.041	298.286	323.143
593	M241	X	-0.009	-0.01	323.143	348
594	M241	Y	-0.041	-0.046	323.143	348
595	M242	X	-0.009	-0.009	0	24.643
596	M242	Y	-0.041	-0.043	0	24.643
597	M242	X	-0.009	-0.01	24.643	49.286
598	M242	Y	-0.043	-0.044	24.643	49.286
599	M242	X	-0.01	-0.01	49.286	73.929
600	M242	Y	-0.044	-0.044	49.286	73.929
601	M242	X	-0.01	-0.01	73.929	98.571
602	M242	Y	-0.044	-0.044	73.929	98.571
603	M242	X	-0.01	-0.01	98.571	123.214
604	M242	Y	-0.044	-0.044	98.571	123.214
605	M242	X	-0.01	-0.01	123.214	147.857
606	M242	Y	-0.044	-0.044	123.214	147.857
607	M242	X	-0.01	-0.01	147.857	172.5
608	M242	Y	-0.044	-0.044	147.857	172.5
609	M242	X	-0.01	-0.01	172.5	197.143
610	M242	Y	-0.044	-0.044	172.5	197.143
611	M242	X	-0.01	-0.01	197.143	221.786
612	M242	Y	-0.044	-0.044	197.143	221.786

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
613	M242	X	-0.01	-0.01	221.786	246.429
614	M242	Y	-0.044	-0.044	221.786	246.429
615	M242	X	-0.01	-0.01	246.429	271.071
616	M242	Y	-0.044	-0.044	246.429	271.071
617	M242	X	-0.01	-0.01	271.071	295.714
618	M242	Y	-0.044	-0.044	271.071	295.714
619	M242	X	-0.01	-0.009	295.714	320.357
620	M242	Y	-0.044	-0.043	295.714	320.357
621	M242	X	-0.009	-0.009	320.357	345
622	M242	Y	-0.043	-0.041	320.357	345
623	M243	X	-0.008	-0.009	0	24.643
624	M243	Y	-0.038	-0.042	0	24.643
625	M243	X	-0.009	-0.009	24.643	49.286
626	M243	Y	-0.042	-0.041	24.643	49.286
627	M243	X	-0.009	-0.008	49.286	73.929
628	M243	Y	-0.041	-0.039	49.286	73.929
629	M243	X	-0.008	-0.009	73.929	98.571
630	M243	Y	-0.039	-0.041	73.929	98.571
631	M243	X	-0.009	-0.009	98.571	123.214
632	M243	Y	-0.041	-0.044	98.571	123.214
633	M243	X	-0.009	-0.009	123.214	147.857
634	M243	Y	-0.044	-0.044	123.214	147.857
635	M243	X	-0.009	-0.009	147.857	172.5
636	M243	Y	-0.044	-0.042	147.857	172.5
637	M243	X	-0.009	-0.011	172.5	197.143
638	M243	Y	-0.042	-0.051	172.5	197.143
639	M243	X	-0.011	-0.011	197.143	221.786
640	M243	Y	-0.051	-0.051	197.143	221.786
641	M243	X	-0.011	-0.009	221.786	246.429
642	M243	Y	-0.051	-0.042	221.786	246.429
643	M243	X	-0.009	-0.009	246.429	271.071
644	M243	Y	-0.042	-0.042	246.429	271.071
645	M243	X	-0.009	-0.009	271.071	295.714
646	M243	Y	-0.042	-0.04	271.071	295.714
647	M243	X	-0.009	-0.009	295.714	320.357
648	M243	Y	-0.04	-0.041	295.714	320.357
649	M243	X	-0.009	-0.01	320.357	345
650	M243	Y	-0.041	-0.047	320.357	345
651	M246	X	-0.009	-0.009	0	24.643
652	M246	Y	-0.041	-0.043	0	24.643
653	M246	X	-0.009	-0.01	24.643	49.286
654	M246	Y	-0.043	-0.044	24.643	49.286
655	M246	X	-0.01	-0.01	49.286	73.929
656	M246	Y	-0.044	-0.044	49.286	73.929
657	M246	X	-0.01	-0.01	73.929	98.571
658	M246	Y	-0.044	-0.044	73.929	98.571
659	M246	X	-0.01	-0.01	98.571	123.214
660	M246	Y	-0.044	-0.044	98.571	123.214
661	M246	X	-0.01	-0.01	123.214	147.857
662	M246	Y	-0.044	-0.044	123.214	147.857
663	M246	X	-0.01	-0.01	147.857	172.5
664	M246	Y	-0.044	-0.044	147.857	172.5
665	M246	X	-0.01	-0.01	172.5	197.143
666	M246	Y	-0.044	-0.044	172.5	197.143
667	M246	X	-0.01	-0.01	197.143	221.786

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
668	M246	Y	-0.044	-0.044	197.143	221.786
669	M246	X	-0.01	-0.01	221.786	246.429
670	M246	Y	-0.044	-0.044	221.786	246.429
671	M246	X	-0.01	-0.01	246.429	271.071
672	M246	Y	-0.044	-0.044	246.429	271.071
673	M246	X	-0.01	-0.01	271.071	295.714
674	M246	Y	-0.044	-0.044	271.071	295.714
675	M246	X	-0.01	-0.009	295.714	320.357
676	M246	Y	-0.044	-0.043	295.714	320.357
677	M246	X	-0.009	-0.009	320.357	345
678	M246	Y	-0.043	-0.041	320.357	345
679	M247	X	-0.011	-0.009	0	24.643
680	M247	Y	-0.051	-0.044	0	24.643
681	M247	X	-0.009	-0.009	24.643	49.286
682	M247	Y	-0.044	-0.041	24.643	49.286
683	M247	X	-0.009	-0.009	49.286	73.929
684	M247	Y	-0.041	-0.042	49.286	73.929
685	M247	X	-0.009	-0.009	73.929	98.571
686	M247	Y	-0.042	-0.042	73.929	98.571
687	M247	X	-0.009	-0.009	98.571	123.214
688	M247	Y	-0.042	-0.042	98.571	123.214
689	M247	X	-0.009	-0.01	123.214	147.857
690	M247	Y	-0.042	-0.046	123.214	147.857
691	M247	X	-0.01	-0.011	147.857	172.5
692	M247	Y	-0.046	-0.051	147.857	172.5
693	M247	X	-0.011	-0.01	172.5	197.143
694	M247	Y	-0.051	-0.046	172.5	197.143
695	M247	X	-0.01	-0.009	197.143	221.786
696	M247	Y	-0.046	-0.042	197.143	221.786
697	M247	X	-0.009	-0.009	221.786	246.429
698	M247	Y	-0.042	-0.043	221.786	246.429
699	M247	X	-0.009	-0.009	246.429	271.071
700	M247	Y	-0.043	-0.04	246.429	271.071
701	M247	X	-0.009	-0.008	271.071	295.714
702	M247	Y	-0.04	-0.038	271.071	295.714
703	M247	X	-0.008	-0.009	295.714	320.357
704	M247	Y	-0.038	-0.041	295.714	320.357
705	M247	X	-0.009	-0.008	320.357	345
706	M247	Y	-0.041	-0.039	320.357	345
707	M125	X	0.004	0.004	3.118e-13	345
708	M125	Y	-0.045	-0.045	3.118e-13	345
709	M140	X	0.004	0.004	3.029e-13	345
710	M140	Y	-0.045	-0.045	3.029e-13	345
711	M54	X	0.004	0.004	5.977e-13	345
712	M54	Y	-0.045	-0.045	5.977e-13	345
713	M71	X	0.004	0.004	1.82e-12	345
714	M71	Y	-0.045	-0.045	1.82e-12	345
715	M84	X	0.004	0.004	2.256e-13	348
716	M84	Y	-0.045	-0.045	2.256e-13	348
717	M107	X	0.007	0.007	0	24.857
718	M107	Y	-0.075	-0.074	0	24.857
719	M107	X	0.007	0.007	24.857	49.714
720	M107	Y	-0.074	-0.074	24.857	49.714
721	M107	X	0.007	0.007	49.714	74.571
722	M107	Y	-0.074	-0.074	49.714	74.571

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
723	M107	X	0.007	0.007	74.571	99.429
724	M107	Y	-0.074	-0.074	74.571	99.429
725	M107	X	0.007	0.007	99.429	124.286
726	M107	Y	-0.074	-0.074	99.429	124.286
727	M107	X	0.007	0.008	124.286	149.143
728	M107	Y	-0.074	-0.076	124.286	149.143
729	M107	X	0.008	0.008	149.143	174
730	M107	Y	-0.076	-0.08	149.143	174
731	M107	X	0.008	0.008	174	198.857
732	M107	Y	-0.08	-0.08	174	198.857
733	M107	X	0.008	0.008	198.857	223.714
734	M107	Y	-0.08	-0.076	198.857	223.714
735	M107	X	0.008	0.007	223.714	248.571
736	M107	Y	-0.076	-0.074	223.714	248.571
737	M107	X	0.007	0.007	248.571	273.429
738	M107	Y	-0.074	-0.074	248.571	273.429
739	M107	X	0.007	0.007	273.429	298.286
740	M107	Y	-0.074	-0.074	273.429	298.286
741	M107	X	0.007	0.007	298.286	323.143
742	M107	Y	-0.074	-0.074	298.286	323.143
743	M107	X	0.007	0.007	323.143	348
744	M107	Y	-0.074	-0.075	323.143	348
745	M108	X	0.005	0.006	0	24.857
746	M108	Y	-0.054	-0.055	0	24.857
747	M108	X	0.006	0.006	24.857	49.714
748	M108	Y	-0.055	-0.057	24.857	49.714
749	M108	X	0.006	0.006	49.714	74.571
750	M108	Y	-0.057	-0.064	49.714	74.571
751	M108	X	0.006	0.007	74.571	99.429
752	M108	Y	-0.064	-0.067	74.571	99.429
753	M108	X	0.007	0.006	99.429	124.286
754	M108	Y	-0.067	-0.061	99.429	124.286
755	M108	X	0.006	0.006	124.286	149.143
756	M108	Y	-0.061	-0.057	124.286	149.143
757	M108	X	0.006	0.006	149.143	174
758	M108	Y	-0.057	-0.057	149.143	174
759	M108	X	0.006	0.005	174	198.857
760	M108	Y	-0.057	-0.052	174	198.857
761	M108	X	0.005	0.006	198.857	223.714
762	M108	Y	-0.052	-0.057	198.857	223.714
763	M108	X	0.006	0.007	223.714	248.571
764	M108	Y	-0.057	-0.071	223.714	248.571
765	M108	X	0.007	0.007	248.571	273.429
766	M108	Y	-0.071	-0.065	248.571	273.429
767	M108	X	0.007	0.006	273.429	298.286
768	M108	Y	-0.065	-0.056	273.429	298.286
769	M108	X	0.006	0.006	298.286	323.143
770	M108	Y	-0.056	-0.055	298.286	323.143
771	M108	X	0.006	0.005	323.143	348
772	M108	Y	-0.055	-0.054	323.143	348
773	M109	X	0.009	0.009	0	24.857
774	M109	Y	-0.089	-0.089	0	24.857
775	M109	X	0.009	0.009	24.857	49.714
776	M109	Y	-0.089	-0.089	24.857	49.714
777	M109	X	0.009	0.009	49.714	74.571

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
778	M109	Y	-0.089	-0.089	49.714	74.571
779	M109	X	0.009	0.009	74.571	99.429
780	M109	Y	-0.089	-0.089	74.571	99.429
781	M109	X	0.009	0.009	99.429	124.286
782	M109	Y	-0.089	-0.09	99.429	124.286
783	M109	X	0.009	0.009	124.286	149.143
784	M109	Y	-0.09	-0.093	124.286	149.143
785	M109	X	0.009	0.009	149.143	174
786	M109	Y	-0.093	-0.093	149.143	174
787	M109	X	0.009	0.009	174	198.857
788	M109	Y	-0.093	-0.093	174	198.857
789	M109	X	0.009	0.009	198.857	223.714
790	M109	Y	-0.093	-0.089	198.857	223.714
791	M109	X	0.009	0.009	223.714	248.571
792	M109	Y	-0.089	-0.089	223.714	248.571
793	M109	X	0.009	0.009	248.571	273.429
794	M109	Y	-0.089	-0.092	248.571	273.429
795	M109	X	0.009	0.009	273.429	298.286
796	M109	Y	-0.092	-0.089	273.429	298.286
797	M109	X	0.009	0.009	298.286	323.143
798	M109	Y	-0.089	-0.089	298.286	323.143
799	M109	X	0.009	0.009	323.143	348
800	M109	Y	-0.089	-0.089	323.143	348
801	M110	X	0.009	0.009	6.652e-13	348
802	M110	Y	-0.09	-0.09	6.652e-13	348
803	M112	X	0.009	0.009	1.151e-12	348
804	M112	Y	-0.09	-0.09	1.151e-12	348
805	M115	X	0.008	0.008	0	24.857
806	M115	Y	-0.079	-0.078	0	24.857
807	M115	X	0.008	0.008	24.857	49.714
808	M115	Y	-0.078	-0.078	24.857	49.714
809	M115	X	0.008	0.008	49.714	74.571
810	M115	Y	-0.078	-0.078	49.714	74.571
811	M115	X	0.008	0.008	74.571	99.429
812	M115	Y	-0.078	-0.078	74.571	99.429
813	M115	X	0.008	0.008	99.429	124.286
814	M115	Y	-0.078	-0.081	99.429	124.286
815	M115	X	0.008	0.008	124.286	149.143
816	M115	Y	-0.081	-0.081	124.286	149.143
817	M115	X	0.008	0.008	149.143	174
818	M115	Y	-0.081	-0.081	149.143	174
819	M115	X	0.008	0.008	174	198.857
820	M115	Y	-0.081	-0.081	174	198.857
821	M115	X	0.008	0.008	198.857	223.714
822	M115	Y	-0.081	-0.078	198.857	223.714
823	M115	X	0.008	0.008	223.714	248.571
824	M115	Y	-0.078	-0.078	223.714	248.571
825	M115	X	0.008	0.008	248.571	273.429
826	M115	Y	-0.078	-0.078	248.571	273.429
827	M115	X	0.008	0.008	273.429	298.286
828	M115	Y	-0.078	-0.078	273.429	298.286
829	M115	X	0.008	0.008	298.286	323.143
830	M115	Y	-0.078	-0.078	298.286	323.143
831	M115	X	0.008	0.008	323.143	348
832	M115	Y	-0.078	-0.079	323.143	348

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
833	M116	X	0.004	0.005	0	24.857
834	M116	Y	-0.044	-0.054	0	24.857
835	M116	X	0.005	0.006	24.857	49.714
836	M116	Y	-0.054	-0.06	24.857	49.714
837	M116	X	0.006	0.006	49.714	74.571
838	M116	Y	-0.06	-0.058	49.714	74.571
839	M116	X	0.006	0.005	74.571	99.429
840	M116	Y	-0.058	-0.055	74.571	99.429
841	M116	X	0.005	0.006	99.429	124.286
842	M116	Y	-0.055	-0.056	99.429	124.286
843	M116	X	0.006	0.006	124.286	149.143
844	M116	Y	-0.056	-0.055	124.286	149.143
845	M116	X	0.006	0.005	149.143	174
846	M116	Y	-0.055	-0.05	149.143	174
847	M116	X	0.005	0.005	174	198.857
848	M116	Y	-0.05	-0.05	174	198.857
849	M116	X	0.005	0.006	198.857	223.714
850	M116	Y	-0.05	-0.06	198.857	223.714
851	M116	X	0.006	0.006	223.714	248.571
852	M116	Y	-0.06	-0.056	223.714	248.571
853	M116	X	0.006	0.006	248.571	273.429
854	M116	Y	-0.056	-0.056	248.571	273.429
855	M116	X	0.006	0.006	273.429	298.286
856	M116	Y	-0.056	-0.063	273.429	298.286
857	M116	X	0.006	0.005	298.286	323.143
858	M116	Y	-0.063	-0.054	298.286	323.143
859	M116	X	0.005	0.004	323.143	348
860	M116	Y	-0.054	-0.045	323.143	348
861	M117	X	0.009	0.009	0	24.857
862	M117	Y	-0.091	-0.09	0	24.857
863	M117	X	0.009	0.009	24.857	49.714
864	M117	Y	-0.09	-0.089	24.857	49.714
865	M117	X	0.009	0.009	49.714	74.571
866	M117	Y	-0.089	-0.089	49.714	74.571
867	M117	X	0.009	0.009	74.571	99.429
868	M117	Y	-0.089	-0.089	74.571	99.429
869	M117	X	0.009	0.009	99.429	124.286
870	M117	Y	-0.089	-0.09	99.429	124.286
871	M117	X	0.009	0.009	124.286	149.143
872	M117	Y	-0.09	-0.093	124.286	149.143
873	M117	X	0.009	0.009	149.143	174
874	M117	Y	-0.093	-0.093	149.143	174
875	M117	X	0.009	0.009	174	198.857
876	M117	Y	-0.093	-0.094	174	198.857
877	M117	X	0.009	0.009	198.857	223.714
878	M117	Y	-0.094	-0.089	198.857	223.714
879	M117	X	0.009	0.009	223.714	248.571
880	M117	Y	-0.089	-0.089	223.714	248.571
881	M117	X	0.009	0.009	248.571	273.429
882	M117	Y	-0.089	-0.093	248.571	273.429
883	M117	X	0.009	0.009	273.429	298.286
884	M117	Y	-0.093	-0.089	273.429	298.286
885	M117	X	0.009	0.009	298.286	323.143
886	M117	Y	-0.089	-0.09	298.286	323.143
887	M117	X	0.009	0.009	323.143	348

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
888	M117	Y	-0.09	-0.091	323.143	348
889	M119	X	0.009	0.009	1.62e-12	348
890	M119	Y	-0.09	-0.09	1.62e-12	348
891	M120	X	0.009	0.009	1.592e-12	348
892	M120	Y	-0.09	-0.09	1.592e-12	348
893	M121	X	0.007	0.007	0	24.857
894	M121	Y	-0.067	-0.067	0	24.857
895	M121	X	0.007	0.007	24.857	49.714
896	M121	Y	-0.067	-0.067	24.857	49.714
897	M121	X	0.007	0.007	49.714	74.571
898	M121	Y	-0.067	-0.067	49.714	74.571
899	M121	X	0.007	0.007	74.571	99.429
900	M121	Y	-0.067	-0.067	74.571	99.429
901	M121	X	0.007	0.007	99.429	124.286
902	M121	Y	-0.067	-0.067	99.429	124.286
903	M121	X	0.007	0.007	124.286	149.143
904	M121	Y	-0.067	-0.073	124.286	149.143
905	M121	X	0.007	0.007	149.143	174
906	M121	Y	-0.073	-0.073	149.143	174
907	M121	X	0.007	0.007	174	198.857
908	M121	Y	-0.073	-0.067	174	198.857
909	M121	X	0.007	0.007	198.857	223.714
910	M121	Y	-0.067	-0.067	198.857	223.714
911	M121	X	0.007	0.007	223.714	248.571
912	M121	Y	-0.067	-0.067	223.714	248.571
913	M121	X	0.007	0.007	248.571	273.429
914	M121	Y	-0.067	-0.067	248.571	273.429
915	M121	X	0.007	0.007	273.429	298.286
916	M121	Y	-0.067	-0.067	273.429	298.286
917	M121	X	0.007	0.007	298.286	323.143
918	M121	Y	-0.067	-0.067	298.286	323.143
919	M121	X	0.007	0.007	323.143	348
920	M121	Y	-0.067	-0.067	323.143	348
921	M122	X	0.003	0.003	0	24.857
922	M122	Y	-0.031	-0.034	0	24.857
923	M122	X	0.003	0.004	24.857	49.714
924	M122	Y	-0.034	-0.038	24.857	49.714
925	M122	X	0.004	0.004	49.714	74.571
926	M122	Y	-0.038	-0.038	49.714	74.571
927	M122	X	0.004	0.004	74.571	99.429
928	M122	Y	-0.038	-0.041	74.571	99.429
929	M122	X	0.004	0.004	99.429	124.286
930	M122	Y	-0.041	-0.04	99.429	124.286
931	M122	X	0.004	0.003	124.286	149.143
932	M122	Y	-0.04	-0.03	124.286	149.143
933	M122	X	0.003	0.003	149.143	174
934	M122	Y	-0.03	-0.03	149.143	174
935	M122	X	0.003	0.003	174	198.857
936	M122	Y	-0.03	-0.034	174	198.857
937	M122	X	0.003	0.004	198.857	223.714
938	M122	Y	-0.034	-0.041	198.857	223.714
939	M122	X	0.004	0.004	223.714	248.571
940	M122	Y	-0.041	-0.041	223.714	248.571
941	M122	X	0.004	0.004	248.571	273.429
942	M122	Y	-0.041	-0.038	248.571	273.429

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
943	M122	X	0.004	0.004	273.429	298.286
944	M122	Y	-0.038	-0.038	273.429	298.286
945	M122	X	0.004	0.003	298.286	323.143
946	M122	Y	-0.038	-0.034	298.286	323.143
947	M122	X	0.003	0.003	323.143	348
948	M122	Y	-0.034	-0.031	323.143	348
949	M128	X	0.008	0.007	0	24.643
950	M128	Y	-0.075	-0.075	0	24.643
951	M128	X	0.007	0.007	24.643	49.286
952	M128	Y	-0.075	-0.075	24.643	49.286
953	M128	X	0.007	0.007	49.286	73.929
954	M128	Y	-0.075	-0.075	49.286	73.929
955	M128	X	0.007	0.007	73.929	98.571
956	M128	Y	-0.075	-0.075	73.929	98.571
957	M128	X	0.007	0.007	98.571	123.214
958	M128	Y	-0.075	-0.075	98.571	123.214
959	M128	X	0.007	0.007	123.214	147.857
960	M128	Y	-0.075	-0.075	123.214	147.857
961	M128	X	0.007	0.007	147.857	172.5
962	M128	Y	-0.075	-0.075	147.857	172.5
963	M128	X	0.007	0.007	172.5	197.143
964	M128	Y	-0.075	-0.075	172.5	197.143
965	M128	X	0.007	0.007	197.143	221.786
966	M128	Y	-0.075	-0.075	197.143	221.786
967	M128	X	0.007	0.007	221.786	246.429
968	M128	Y	-0.075	-0.075	221.786	246.429
969	M128	X	0.007	0.007	246.429	271.071
970	M128	Y	-0.075	-0.075	246.429	271.071
971	M128	X	0.007	0.007	271.071	295.714
972	M128	Y	-0.075	-0.075	271.071	295.714
973	M128	X	0.007	0.007	295.714	320.357
974	M128	Y	-0.075	-0.075	295.714	320.357
975	M128	X	0.007	0.008	320.357	345
976	M128	Y	-0.075	-0.075	320.357	345
977	M130	X	0.006	0.006	0	24.643
978	M130	Y	-0.057	-0.059	0	24.643
979	M130	X	0.006	0.006	24.643	49.286
980	M130	Y	-0.059	-0.06	24.643	49.286
981	M130	X	0.006	0.006	49.286	73.929
982	M130	Y	-0.06	-0.06	49.286	73.929
983	M130	X	0.006	0.006	73.929	98.571
984	M130	Y	-0.06	-0.06	73.929	98.571
985	M130	X	0.006	0.006	98.571	123.214
986	M130	Y	-0.06	-0.058	98.571	123.214
987	M130	X	0.006	0.006	123.214	147.857
988	M130	Y	-0.058	-0.061	123.214	147.857
989	M130	X	0.006	0.007	147.857	172.5
990	M130	Y	-0.061	-0.066	147.857	172.5
991	M130	X	0.007	0.006	172.5	197.143
992	M130	Y	-0.066	-0.061	172.5	197.143
993	M130	X	0.006	0.006	197.143	221.786
994	M130	Y	-0.061	-0.058	197.143	221.786
995	M130	X	0.006	0.006	221.786	246.429
996	M130	Y	-0.058	-0.06	221.786	246.429
997	M130	X	0.006	0.006	246.429	271.071

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
998	M130	Y	-0.06	-0.06	246.429	271.071
999	M130	X	0.006	0.006	271.071	295.714
1000	M130	Y	-0.06	-0.06	271.071	295.714
1001	M130	X	0.006	0.006	295.714	320.357
1002	M130	Y	-0.06	-0.059	295.714	320.357
1003	M130	X	0.006	0.006	320.357	345
1004	M130	Y	-0.059	-0.057	320.357	345
1005	M131	X	0.009	0.009	3.324e-12	345
1006	M131	Y	-0.09	-0.09	3.324e-12	345
1007	M149	X	0.009	0.009	2.728e-12	345
1008	M149	Y	-0.09	-0.09	2.728e-12	345
1009	M150	X	0.009	0.009	0	24.643
1010	M150	Y	-0.091	-0.09	0	24.643
1011	M150	X	0.009	0.009	24.643	49.286
1012	M150	Y	-0.09	-0.089	24.643	49.286
1013	M150	X	0.009	0.009	49.286	73.929
1014	M150	Y	-0.089	-0.089	49.286	73.929
1015	M150	X	0.009	0.009	73.929	98.571
1016	M150	Y	-0.089	-0.089	73.929	98.571
1017	M150	X	0.009	0.009	98.571	123.214
1018	M150	Y	-0.089	-0.09	98.571	123.214
1019	M150	X	0.009	0.009	123.214	147.857
1020	M150	Y	-0.09	-0.093	123.214	147.857
1021	M150	X	0.009	0.009	147.857	172.5
1022	M150	Y	-0.093	-0.093	147.857	172.5
1023	M150	X	0.009	0.009	172.5	197.143
1024	M150	Y	-0.093	-0.094	172.5	197.143
1025	M150	X	0.009	0.009	197.143	221.786
1026	M150	Y	-0.094	-0.089	197.143	221.786
1027	M150	X	0.009	0.009	221.786	246.429
1028	M150	Y	-0.089	-0.089	221.786	246.429
1029	M150	X	0.009	0.009	246.429	271.071
1030	M150	Y	-0.089	-0.093	246.429	271.071
1031	M150	X	0.009	0.009	271.071	295.714
1032	M150	Y	-0.093	-0.089	271.071	295.714
1033	M150	X	0.009	0.009	295.714	320.357
1034	M150	Y	-0.089	-0.09	295.714	320.357
1035	M150	X	0.009	0.009	320.357	345
1036	M150	Y	-0.09	-0.091	320.357	345
1037	M151	X	0.004	0.005	0	24.643
1038	M151	Y	-0.044	-0.054	0	24.643
1039	M151	X	0.005	0.006	24.643	49.286
1040	M151	Y	-0.054	-0.06	24.643	49.286
1041	M151	X	0.006	0.006	49.286	73.929
1042	M151	Y	-0.06	-0.058	49.286	73.929
1043	M151	X	0.006	0.005	73.929	98.571
1044	M151	Y	-0.058	-0.055	73.929	98.571
1045	M151	X	0.005	0.006	98.571	123.214
1046	M151	Y	-0.055	-0.056	98.571	123.214
1047	M151	X	0.006	0.006	123.214	147.857
1048	M151	Y	-0.056	-0.055	123.214	147.857
1049	M151	X	0.006	0.005	147.857	172.5
1050	M151	Y	-0.055	-0.05	147.857	172.5
1051	M151	X	0.005	0.005	172.5	197.143
1052	M151	Y	-0.05	-0.05	172.5	197.143

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1053	M151	X	0.005	0.006	197.143	221.786
1054	M151	Y	-0.05	-0.06	197.143	221.786
1055	M151	X	0.006	0.006	221.786	246.429
1056	M151	Y	-0.06	-0.059	221.786	246.429
1057	M151	X	0.006	0.006	246.429	271.071
1058	M151	Y	-0.059	-0.056	246.429	271.071
1059	M151	X	0.006	0.006	271.071	295.714
1060	M151	Y	-0.056	-0.059	271.071	295.714
1061	M151	X	0.006	0.005	295.714	320.357
1062	M151	Y	-0.059	-0.054	295.714	320.357
1063	M151	X	0.005	0.004	320.357	345
1064	M151	Y	-0.054	-0.044	320.357	345
1065	M152	X	0.009	0.009	0	24.643
1066	M152	Y	-0.09	-0.09	0	24.643
1067	M152	X	0.009	0.009	24.643	49.286
1068	M152	Y	-0.09	-0.09	24.643	49.286
1069	M152	X	0.009	0.009	49.286	73.929
1070	M152	Y	-0.09	-0.09	49.286	73.929
1071	M152	X	0.009	0.009	73.929	98.571
1072	M152	Y	-0.09	-0.09	73.929	98.571
1073	M152	X	0.009	0.009	98.571	123.214
1074	M152	Y	-0.09	-0.09	98.571	123.214
1075	M152	X	0.009	0.009	123.214	147.857
1076	M152	Y	-0.09	-0.089	123.214	147.857
1077	M152	X	0.009	0.009	147.857	172.5
1078	M152	Y	-0.089	-0.088	147.857	172.5
1079	M152	X	0.009	0.009	172.5	197.143
1080	M152	Y	-0.088	-0.089	172.5	197.143
1081	M152	X	0.009	0.009	197.143	221.786
1082	M152	Y	-0.089	-0.09	197.143	221.786
1083	M152	X	0.009	0.009	221.786	246.429
1084	M152	Y	-0.09	-0.09	221.786	246.429
1085	M152	X	0.009	0.009	246.429	271.071
1086	M152	Y	-0.09	-0.09	246.429	271.071
1087	M152	X	0.009	0.009	271.071	295.714
1088	M152	Y	-0.09	-0.09	271.071	295.714
1089	M152	X	0.009	0.009	295.714	320.357
1090	M152	Y	-0.09	-0.09	295.714	320.357
1091	M152	X	0.009	0.009	320.357	345
1092	M152	Y	-0.09	-0.09	320.357	345
1093	M153	X	0.009	0.009	7.887e-13	345
1094	M153	Y	-0.09	-0.09	7.887e-13	345
1095	M154	X	0.008	0.008	0	24.643
1096	M154	Y	-0.079	-0.078	0	24.643
1097	M154	X	0.008	0.008	24.643	49.286
1098	M154	Y	-0.078	-0.078	24.643	49.286
1099	M154	X	0.008	0.008	49.286	73.929
1100	M154	Y	-0.078	-0.078	49.286	73.929
1101	M154	X	0.008	0.008	73.929	98.571
1102	M154	Y	-0.078	-0.078	73.929	98.571
1103	M154	X	0.008	0.008	98.571	123.214
1104	M154	Y	-0.078	-0.081	98.571	123.214
1105	M154	X	0.008	0.008	123.214	147.857
1106	M154	Y	-0.081	-0.084	123.214	147.857
1107	M154	X	0.008	0.008	147.857	172.5

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1108	M154	Y	-0.084	-0.078	147.857	172.5
1109	M154	X	0.008	0.008	172.5	197.143
1110	M154	Y	-0.078	-0.076	172.5	197.143
1111	M154	X	0.008	0.008	197.143	221.786
1112	M154	Y	-0.076	-0.081	197.143	221.786
1113	M154	X	0.008	0.008	221.786	246.429
1114	M154	Y	-0.081	-0.081	221.786	246.429
1115	M154	X	0.008	0.008	246.429	271.071
1116	M154	Y	-0.081	-0.078	246.429	271.071
1117	M154	X	0.008	0.008	271.071	295.714
1118	M154	Y	-0.078	-0.078	271.071	295.714
1119	M154	X	0.008	0.008	295.714	320.357
1120	M154	Y	-0.078	-0.078	295.714	320.357
1121	M154	X	0.008	0.008	320.357	345
1122	M154	Y	-0.078	-0.079	320.357	345
1123	M155	X	0.009	0.009	6.839e-13	345
1124	M155	Y	-0.09	-0.09	6.839e-13	345
1125	M156	X	0.007	0.007	0	24.643
1126	M156	Y	-0.067	-0.067	0	24.643
1127	M156	X	0.007	0.007	24.643	49.286
1128	M156	Y	-0.067	-0.067	24.643	49.286
1129	M156	X	0.007	0.007	49.286	73.929
1130	M156	Y	-0.067	-0.067	49.286	73.929
1131	M156	X	0.007	0.007	73.929	98.571
1132	M156	Y	-0.067	-0.067	73.929	98.571
1133	M156	X	0.007	0.007	98.571	123.214
1134	M156	Y	-0.067	-0.067	98.571	123.214
1135	M156	X	0.007	0.007	123.214	147.857
1136	M156	Y	-0.067	-0.067	123.214	147.857
1137	M156	X	0.007	0.007	147.857	172.5
1138	M156	Y	-0.067	-0.073	147.857	172.5
1139	M156	X	0.007	0.007	172.5	197.143
1140	M156	Y	-0.073	-0.073	172.5	197.143
1141	M156	X	0.007	0.007	197.143	221.786
1142	M156	Y	-0.073	-0.067	197.143	221.786
1143	M156	X	0.007	0.007	221.786	246.429
1144	M156	Y	-0.067	-0.067	221.786	246.429
1145	M156	X	0.007	0.007	246.429	271.071
1146	M156	Y	-0.067	-0.067	246.429	271.071
1147	M156	X	0.007	0.007	271.071	295.714
1148	M156	Y	-0.067	-0.067	271.071	295.714
1149	M156	X	0.007	0.007	295.714	320.357
1150	M156	Y	-0.067	-0.067	295.714	320.357
1151	M156	X	0.007	0.007	320.357	345
1152	M156	Y	-0.067	-0.067	320.357	345
1153	M157	X	0.003	0.003	0	24.643
1154	M157	Y	-0.031	-0.034	0	24.643
1155	M157	X	0.003	0.004	24.643	49.286
1156	M157	Y	-0.034	-0.038	24.643	49.286
1157	M157	X	0.004	0.004	49.286	73.929
1158	M157	Y	-0.038	-0.038	49.286	73.929
1159	M157	X	0.004	0.004	73.929	98.571
1160	M157	Y	-0.038	-0.041	73.929	98.571
1161	M157	X	0.004	0.004	98.571	123.214
1162	M157	Y	-0.041	-0.041	98.571	123.214

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1163	M157	X	0.004	0.003	123.214	147.857
1164	M157	Y	-0.041	-0.034	123.214	147.857
1165	M157	X	0.003	0.003	147.857	172.5
1166	M157	Y	-0.034	-0.03	147.857	172.5
1167	M157	X	0.003	0.003	172.5	197.143
1168	M157	Y	-0.03	-0.03	172.5	197.143
1169	M157	X	0.003	0.004	197.143	221.786
1170	M157	Y	-0.03	-0.04	197.143	221.786
1171	M157	X	0.004	0.004	221.786	246.429
1172	M157	Y	-0.04	-0.041	221.786	246.429
1173	M157	X	0.004	0.004	246.429	271.071
1174	M157	Y	-0.041	-0.038	246.429	271.071
1175	M157	X	0.004	0.004	271.071	295.714
1176	M157	Y	-0.038	-0.038	271.071	295.714
1177	M157	X	0.004	0.003	295.714	320.357
1178	M157	Y	-0.038	-0.034	295.714	320.357
1179	M157	X	0.003	0.003	320.357	345
1180	M157	Y	-0.034	-0.031	320.357	345
1181	M158	X	0.009	0.009	0	345
1182	M158	Y	-0.09	-0.09	0	345
1183	M160	X	0.006	0.008	0	24.643
1184	M160	Y	-0.056	-0.082	0	24.643
1185	M160	X	0.008	0.01	24.643	49.286
1186	M160	Y	-0.082	-0.097	24.643	49.286
1187	M160	X	0.01	0.009	49.286	73.929
1188	M160	Y	-0.097	-0.094	49.286	73.929
1189	M160	X	0.009	0.009	73.929	98.571
1190	M160	Y	-0.094	-0.091	73.929	98.571
1191	M160	X	0.009	0.009	98.571	123.214
1192	M160	Y	-0.091	-0.091	98.571	123.214
1193	M160	X	0.009	0.009	123.214	147.857
1194	M160	Y	-0.091	-0.086	123.214	147.857
1195	M160	X	0.009	0.008	147.857	172.5
1196	M160	Y	-0.086	-0.084	147.857	172.5
1197	M160	X	0.008	0.009	172.5	197.143
1198	M160	Y	-0.084	-0.086	172.5	197.143
1199	M160	X	0.009	0.009	197.143	221.786
1200	M160	Y	-0.086	-0.09	197.143	221.786
1201	M160	X	0.009	0.009	221.786	246.429
1202	M160	Y	-0.09	-0.09	221.786	246.429
1203	M160	X	0.009	0.009	246.429	271.071
1204	M160	Y	-0.09	-0.092	246.429	271.071
1205	M160	X	0.009	0.01	271.071	295.714
1206	M160	Y	-0.092	-0.097	271.071	295.714
1207	M160	X	0.01	0.008	295.714	320.357
1208	M160	Y	-0.097	-0.082	295.714	320.357
1209	M160	X	0.008	0.006	320.357	345
1210	M160	Y	-0.082	-0.056	320.357	345
1211	M161	X	0.009	0.009	0	345
1212	M161	Y	-0.09	-0.09	0	345
1213	M163	X	0.003	0.003	0	24.643
1214	M163	Y	-0.031	-0.034	0	24.643
1215	M163	X	0.003	0.004	24.643	49.286
1216	M163	Y	-0.034	-0.038	24.643	49.286
1217	M163	X	0.004	0.004	49.286	73.929

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1218	M163	Y	-0.038	-0.038	49.286	73.929
1219	M163	X	0.004	0.004	73.929	98.571
1220	M163	Y	-0.038	-0.041	73.929	98.571
1221	M163	X	0.004	0.004	98.571	123.214
1222	M163	Y	-0.041	-0.041	98.571	123.214
1223	M163	X	0.004	0.003	123.214	147.857
1224	M163	Y	-0.041	-0.034	123.214	147.857
1225	M163	X	0.003	0.003	147.857	172.5
1226	M163	Y	-0.034	-0.03	147.857	172.5
1227	M163	X	0.003	0.003	172.5	197.143
1228	M163	Y	-0.03	-0.03	172.5	197.143
1229	M163	X	0.003	0.004	197.143	221.786
1230	M163	Y	-0.03	-0.04	197.143	221.786
1231	M163	X	0.004	0.004	221.786	246.429
1232	M163	Y	-0.04	-0.041	221.786	246.429
1233	M163	X	0.004	0.004	246.429	271.071
1234	M163	Y	-0.041	-0.038	246.429	271.071
1235	M163	X	0.004	0.004	271.071	295.714
1236	M163	Y	-0.038	-0.038	271.071	295.714
1237	M163	X	0.004	0.003	295.714	320.357
1238	M163	Y	-0.038	-0.034	295.714	320.357
1239	M163	X	0.003	0.003	320.357	345
1240	M163	Y	-0.034	-0.031	320.357	345
1241	M174	X	0.007	0.007	0	24.643
1242	M174	Y	-0.067	-0.067	0	24.643
1243	M174	X	0.007	0.007	24.643	49.286
1244	M174	Y	-0.067	-0.067	24.643	49.286
1245	M174	X	0.007	0.007	49.286	73.929
1246	M174	Y	-0.067	-0.067	49.286	73.929
1247	M174	X	0.007	0.007	73.929	98.571
1248	M174	Y	-0.067	-0.067	73.929	98.571
1249	M174	X	0.007	0.007	98.571	123.214
1250	M174	Y	-0.067	-0.067	98.571	123.214
1251	M174	X	0.007	0.007	123.214	147.857
1252	M174	Y	-0.067	-0.067	123.214	147.857
1253	M174	X	0.007	0.007	147.857	172.5
1254	M174	Y	-0.067	-0.073	147.857	172.5
1255	M174	X	0.007	0.007	172.5	197.143
1256	M174	Y	-0.073	-0.073	172.5	197.143
1257	M174	X	0.007	0.007	197.143	221.786
1258	M174	Y	-0.073	-0.067	197.143	221.786
1259	M174	X	0.007	0.007	221.786	246.429
1260	M174	Y	-0.067	-0.067	221.786	246.429
1261	M174	X	0.007	0.007	246.429	271.071
1262	M174	Y	-0.067	-0.067	246.429	271.071
1263	M174	X	0.007	0.007	271.071	295.714
1264	M174	Y	-0.067	-0.067	271.071	295.714
1265	M174	X	0.007	0.007	295.714	320.357
1266	M174	Y	-0.067	-0.067	295.714	320.357
1267	M174	X	0.007	0.007	320.357	345
1268	M174	Y	-0.067	-0.067	320.357	345
1269	M175	X	0.009	0.009	2.833e-13	345
1270	M175	Y	-0.09	-0.09	2.833e-13	345
1271	M176	X	0.009	0.009	0	24.643
1272	M176	Y	-0.091	-0.09	0	24.643

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1273	M176	X	0.009	0.009	24.643	49.286
1274	M176	Y	-0.09	-0.089	24.643	49.286
1275	M176	X	0.009	0.009	49.286	73.929
1276	M176	Y	-0.089	-0.091	49.286	73.929
1277	M176	X	0.009	0.01	73.929	98.571
1278	M176	Y	-0.091	-0.095	73.929	98.571
1279	M176	X	0.01	0.009	98.571	123.214
1280	M176	Y	-0.095	-0.091	98.571	123.214
1281	M176	X	0.009	0.008	123.214	147.857
1282	M176	Y	-0.091	-0.085	123.214	147.857
1283	M176	X	0.008	0.009	147.857	172.5
1284	M176	Y	-0.085	-0.09	147.857	172.5
1285	M176	X	0.009	0.009	172.5	197.143
1286	M176	Y	-0.09	-0.092	172.5	197.143
1287	M176	X	0.009	0.009	197.143	221.786
1288	M176	Y	-0.092	-0.089	197.143	221.786
1289	M176	X	0.009	0.009	221.786	246.429
1290	M176	Y	-0.089	-0.093	221.786	246.429
1291	M176	X	0.009	0.009	246.429	271.071
1292	M176	Y	-0.093	-0.093	246.429	271.071
1293	M176	X	0.009	0.009	271.071	295.714
1294	M176	Y	-0.093	-0.089	271.071	295.714
1295	M176	X	0.009	0.009	295.714	320.357
1296	M176	Y	-0.089	-0.09	295.714	320.357
1297	M176	X	0.009	0.009	320.357	345
1298	M176	Y	-0.09	-0.091	320.357	345
1299	M177	X	0.009	0.009	0	24.643
1300	M177	Y	-0.094	-0.091	0	24.643
1301	M177	X	0.009	0.009	24.643	49.286
1302	M177	Y	-0.091	-0.089	24.643	49.286
1303	M177	X	0.009	0.009	49.286	73.929
1304	M177	Y	-0.089	-0.093	49.286	73.929
1305	M177	X	0.009	0.009	73.929	98.571
1306	M177	Y	-0.093	-0.089	73.929	98.571
1307	M177	X	0.009	0.009	98.571	123.214
1308	M177	Y	-0.089	-0.089	98.571	123.214
1309	M177	X	0.009	0.009	123.214	147.857
1310	M177	Y	-0.089	-0.094	123.214	147.857
1311	M177	X	0.009	0.009	147.857	172.5
1312	M177	Y	-0.094	-0.093	147.857	172.5
1313	M177	X	0.009	0.009	172.5	197.143
1314	M177	Y	-0.093	-0.093	172.5	197.143
1315	M177	X	0.009	0.009	197.143	221.786
1316	M177	Y	-0.093	-0.09	197.143	221.786
1317	M177	X	0.009	0.009	221.786	246.429
1318	M177	Y	-0.09	-0.089	221.786	246.429
1319	M177	X	0.009	0.009	246.429	271.071
1320	M177	Y	-0.089	-0.089	246.429	271.071
1321	M177	X	0.009	0.009	271.071	295.714
1322	M177	Y	-0.089	-0.09	271.071	295.714
1323	M177	X	0.009	0.009	295.714	320.357
1324	M177	Y	-0.09	-0.091	295.714	320.357
1325	M177	X	0.009	0.009	320.357	345
1326	M177	Y	-0.091	-0.094	320.357	345
1327	M178	X	0.009	0.009	2.16e-12	345

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1328	M178	Y	-0.09	-0.09	2.16e-12	345
1329	M179	X	0.009	0.009	0	24.643
1330	M179	Y	-0.09	-0.09	0	24.643
1331	M179	X	0.009	0.009	24.643	49.286
1332	M179	Y	-0.09	-0.09	24.643	49.286
1333	M179	X	0.009	0.009	49.286	73.929
1334	M179	Y	-0.09	-0.09	49.286	73.929
1335	M179	X	0.009	0.009	73.929	98.571
1336	M179	Y	-0.09	-0.09	73.929	98.571
1337	M179	X	0.009	0.009	98.571	123.214
1338	M179	Y	-0.09	-0.09	98.571	123.214
1339	M179	X	0.009	0.009	123.214	147.857
1340	M179	Y	-0.09	-0.089	123.214	147.857
1341	M179	X	0.009	0.009	147.857	172.5
1342	M179	Y	-0.089	-0.088	147.857	172.5
1343	M179	X	0.009	0.009	172.5	197.143
1344	M179	Y	-0.088	-0.089	172.5	197.143
1345	M179	X	0.009	0.009	197.143	221.786
1346	M179	Y	-0.089	-0.09	197.143	221.786
1347	M179	X	0.009	0.009	221.786	246.429
1348	M179	Y	-0.09	-0.09	221.786	246.429
1349	M179	X	0.009	0.009	246.429	271.071
1350	M179	Y	-0.09	-0.09	246.429	271.071
1351	M179	X	0.009	0.009	271.071	295.714
1352	M179	Y	-0.09	-0.09	271.071	295.714
1353	M179	X	0.009	0.009	295.714	320.357
1354	M179	Y	-0.09	-0.09	295.714	320.357
1355	M179	X	0.009	0.009	320.357	345
1356	M179	Y	-0.09	-0.09	320.357	345
1357	M180	X	0.009	0.009	0	24.643
1358	M180	Y	-0.085	-0.088	0	24.643
1359	M180	X	0.009	0.009	24.643	49.286
1360	M180	Y	-0.088	-0.09	24.643	49.286
1361	M180	X	0.009	0.009	49.286	73.929
1362	M180	Y	-0.09	-0.09	49.286	73.929
1363	M180	X	0.009	0.009	73.929	98.571
1364	M180	Y	-0.09	-0.09	73.929	98.571
1365	M180	X	0.009	0.009	98.571	123.214
1366	M180	Y	-0.09	-0.088	98.571	123.214
1367	M180	X	0.009	0.009	123.214	147.857
1368	M180	Y	-0.088	-0.091	123.214	147.857
1369	M180	X	0.009	0.01	147.857	172.5
1370	M180	Y	-0.091	-0.096	147.857	172.5
1371	M180	X	0.01	0.009	172.5	197.143
1372	M180	Y	-0.096	-0.091	172.5	197.143
1373	M180	X	0.009	0.009	197.143	221.786
1374	M180	Y	-0.091	-0.088	197.143	221.786
1375	M180	X	0.009	0.009	221.786	246.429
1376	M180	Y	-0.088	-0.09	221.786	246.429
1377	M180	X	0.009	0.009	246.429	271.071
1378	M180	Y	-0.09	-0.09	246.429	271.071
1379	M180	X	0.009	0.009	271.071	295.714
1380	M180	Y	-0.09	-0.09	271.071	295.714
1381	M180	X	0.009	0.009	295.714	320.357
1382	M180	Y	-0.09	-0.088	295.714	320.357

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1383	M180	X	0.009	0.009	320.357	345
1384	M180	Y	-0.088	-0.085	320.357	345
1385	M181	X	0.009	0.009	0	24.643
1386	M181	Y	-0.09	-0.09	0	24.643
1387	M181	X	0.009	0.009	24.643	49.286
1388	M181	Y	-0.09	-0.09	24.643	49.286
1389	M181	X	0.009	0.009	49.286	73.929
1390	M181	Y	-0.09	-0.09	49.286	73.929
1391	M181	X	0.009	0.009	73.929	98.571
1392	M181	Y	-0.09	-0.09	73.929	98.571
1393	M181	X	0.009	0.009	98.571	123.214
1394	M181	Y	-0.09	-0.09	98.571	123.214
1395	M181	X	0.009	0.009	123.214	147.857
1396	M181	Y	-0.09	-0.09	123.214	147.857
1397	M181	X	0.009	0.009	147.857	172.5
1398	M181	Y	-0.09	-0.09	147.857	172.5
1399	M181	X	0.009	0.009	172.5	197.143
1400	M181	Y	-0.09	-0.09	172.5	197.143
1401	M181	X	0.009	0.009	197.143	221.786
1402	M181	Y	-0.09	-0.09	197.143	221.786
1403	M181	X	0.009	0.009	221.786	246.429
1404	M181	Y	-0.09	-0.09	221.786	246.429
1405	M181	X	0.009	0.009	246.429	271.071
1406	M181	Y	-0.09	-0.09	246.429	271.071
1407	M181	X	0.009	0.009	271.071	295.714
1408	M181	Y	-0.09	-0.09	271.071	295.714
1409	M181	X	0.009	0.009	295.714	320.357
1410	M181	Y	-0.09	-0.09	295.714	320.357
1411	M181	X	0.009	0.009	320.357	345
1412	M181	Y	-0.09	-0.09	320.357	345
1413	M182	X	0.009	0.009	0	345
1414	M182	Y	-0.09	-0.09	0	345
1415	M184	X	0.004	0.005	0	24.643
1416	M184	Y	-0.044	-0.054	0	24.643
1417	M184	X	0.005	0.006	24.643	49.286
1418	M184	Y	-0.054	-0.06	24.643	49.286
1419	M184	X	0.006	0.006	49.286	73.929
1420	M184	Y	-0.06	-0.059	49.286	73.929
1421	M184	X	0.006	0.005	73.929	98.571
1422	M184	Y	-0.059	-0.053	73.929	98.571
1423	M184	X	0.005	0.005	98.571	123.214
1424	M184	Y	-0.053	-0.053	98.571	123.214
1425	M184	X	0.005	0.006	123.214	147.857
1426	M184	Y	-0.053	-0.057	123.214	147.857
1427	M184	X	0.006	0.006	147.857	172.5
1428	M184	Y	-0.057	-0.056	147.857	172.5
1429	M184	X	0.006	0.005	172.5	197.143
1430	M184	Y	-0.056	-0.052	172.5	197.143
1431	M184	X	0.005	0.006	197.143	221.786
1432	M184	Y	-0.052	-0.056	197.143	221.786
1433	M184	X	0.006	0.006	221.786	246.429
1434	M184	Y	-0.056	-0.057	221.786	246.429
1435	M184	X	0.006	0.006	246.429	271.071
1436	M184	Y	-0.057	-0.056	246.429	271.071
1437	M184	X	0.006	0.006	271.071	295.714

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1438	M184	Y	-0.056	-0.059	271.071	295.714
1439	M184	X	0.006	0.005	295.714	320.357
1440	M184	Y	-0.059	-0.054	295.714	320.357
1441	M184	X	0.005	0.004	320.357	345
1442	M184	Y	-0.054	-0.044	320.357	345
1443	M185	X	0.009	0.009	1.677e-12	345
1444	M185	Y	-0.09	-0.09	1.677e-12	345
1445	M187	X	0.003	0.003	0	24.643
1446	M187	Y	-0.031	-0.034	0	24.643
1447	M187	X	0.003	0.004	24.643	49.286
1448	M187	Y	-0.034	-0.038	24.643	49.286
1449	M187	X	0.004	0.004	49.286	73.929
1450	M187	Y	-0.038	-0.038	49.286	73.929
1451	M187	X	0.004	0.004	73.929	98.571
1452	M187	Y	-0.038	-0.041	73.929	98.571
1453	M187	X	0.004	0.004	98.571	123.214
1454	M187	Y	-0.041	-0.041	98.571	123.214
1455	M187	X	0.004	0.003	123.214	147.857
1456	M187	Y	-0.041	-0.034	123.214	147.857
1457	M187	X	0.003	0.003	147.857	172.5
1458	M187	Y	-0.034	-0.03	147.857	172.5
1459	M187	X	0.003	0.003	172.5	197.143
1460	M187	Y	-0.03	-0.03	172.5	197.143
1461	M187	X	0.003	0.004	197.143	221.786
1462	M187	Y	-0.03	-0.04	197.143	221.786
1463	M187	X	0.004	0.004	221.786	246.429
1464	M187	Y	-0.04	-0.041	221.786	246.429
1465	M187	X	0.004	0.004	246.429	271.071
1466	M187	Y	-0.041	-0.038	246.429	271.071
1467	M187	X	0.004	0.004	271.071	295.714
1468	M187	Y	-0.038	-0.038	271.071	295.714
1469	M187	X	0.004	0.003	295.714	320.357
1470	M187	Y	-0.038	-0.034	295.714	320.357
1471	M187	X	0.003	0.003	320.357	345
1472	M187	Y	-0.034	-0.031	320.357	345
1473	M198	X	0.007	0.007	0	24.643
1474	M198	Y	-0.067	-0.067	0	24.643
1475	M198	X	0.007	0.007	24.643	49.286
1476	M198	Y	-0.067	-0.067	24.643	49.286
1477	M198	X	0.007	0.007	49.286	73.929
1478	M198	Y	-0.067	-0.067	49.286	73.929
1479	M198	X	0.007	0.007	73.929	98.571
1480	M198	Y	-0.067	-0.067	73.929	98.571
1481	M198	X	0.007	0.007	98.571	123.214
1482	M198	Y	-0.067	-0.067	98.571	123.214
1483	M198	X	0.007	0.007	123.214	147.857
1484	M198	Y	-0.067	-0.067	123.214	147.857
1485	M198	X	0.007	0.007	147.857	172.5
1486	M198	Y	-0.067	-0.073	147.857	172.5
1487	M198	X	0.007	0.007	172.5	197.143
1488	M198	Y	-0.073	-0.073	172.5	197.143
1489	M198	X	0.007	0.007	197.143	221.786
1490	M198	Y	-0.073	-0.067	197.143	221.786
1491	M198	X	0.007	0.007	221.786	246.429
1492	M198	Y	-0.067	-0.067	221.786	246.429

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1493	M198	X	0.007	0.007	246.429	271.071
1494	M198	Y	-0.067	-0.067	246.429	271.071
1495	M198	X	0.007	0.007	271.071	295.714
1496	M198	Y	-0.067	-0.067	271.071	295.714
1497	M198	X	0.007	0.007	295.714	320.357
1498	M198	Y	-0.067	-0.067	295.714	320.357
1499	M198	X	0.007	0.007	320.357	345
1500	M198	Y	-0.067	-0.067	320.357	345
1501	M199	X	0.009	0.009	2.842e-14	345
1502	M199	Y	-0.09	-0.09	2.842e-14	345
1503	M200	X	0.009	0.009	0	24.643
1504	M200	Y	-0.091	-0.09	0	24.643
1505	M200	X	0.009	0.009	24.643	49.286
1506	M200	Y	-0.09	-0.089	24.643	49.286
1507	M200	X	0.009	0.009	49.286	73.929
1508	M200	Y	-0.089	-0.091	49.286	73.929
1509	M200	X	0.009	0.01	73.929	98.571
1510	M200	Y	-0.091	-0.095	73.929	98.571
1511	M200	X	0.01	0.009	98.571	123.214
1512	M200	Y	-0.095	-0.091	98.571	123.214
1513	M200	X	0.009	0.008	123.214	147.857
1514	M200	Y	-0.091	-0.085	123.214	147.857
1515	M200	X	0.008	0.009	147.857	172.5
1516	M200	Y	-0.085	-0.09	147.857	172.5
1517	M200	X	0.009	0.009	172.5	197.143
1518	M200	Y	-0.09	-0.092	172.5	197.143
1519	M200	X	0.009	0.009	197.143	221.786
1520	M200	Y	-0.092	-0.089	197.143	221.786
1521	M200	X	0.009	0.009	221.786	246.429
1522	M200	Y	-0.089	-0.093	221.786	246.429
1523	M200	X	0.009	0.009	246.429	271.071
1524	M200	Y	-0.093	-0.093	246.429	271.071
1525	M200	X	0.009	0.009	271.071	295.714
1526	M200	Y	-0.093	-0.089	271.071	295.714
1527	M200	X	0.009	0.009	295.714	320.357
1528	M200	Y	-0.089	-0.09	295.714	320.357
1529	M200	X	0.009	0.009	320.357	345
1530	M200	Y	-0.09	-0.091	320.357	345
1531	M201	X	0.008	0.008	0	24.643
1532	M201	Y	-0.079	-0.078	0	24.643
1533	M201	X	0.008	0.008	24.643	49.286
1534	M201	Y	-0.078	-0.078	24.643	49.286
1535	M201	X	0.008	0.008	49.286	73.929
1536	M201	Y	-0.078	-0.078	49.286	73.929
1537	M201	X	0.008	0.008	73.929	98.571
1538	M201	Y	-0.078	-0.078	73.929	98.571
1539	M201	X	0.008	0.008	98.571	123.214
1540	M201	Y	-0.078	-0.078	98.571	123.214
1541	M201	X	0.008	0.008	123.214	147.857
1542	M201	Y	-0.078	-0.081	123.214	147.857
1543	M201	X	0.008	0.008	147.857	172.5
1544	M201	Y	-0.081	-0.081	147.857	172.5
1545	M201	X	0.008	0.008	172.5	197.143
1546	M201	Y	-0.081	-0.081	172.5	197.143
1547	M201	X	0.008	0.008	197.143	221.786

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1548	M201	Y	-0.081	-0.081	197.143	221.786
1549	M201	X	0.008	0.008	221.786	246.429
1550	M201	Y	-0.081	-0.078	221.786	246.429
1551	M201	X	0.008	0.008	246.429	271.071
1552	M201	Y	-0.078	-0.078	246.429	271.071
1553	M201	X	0.008	0.008	271.071	295.714
1554	M201	Y	-0.078	-0.078	271.071	295.714
1555	M201	X	0.008	0.008	295.714	320.357
1556	M201	Y	-0.078	-0.078	295.714	320.357
1557	M201	X	0.008	0.008	320.357	345
1558	M201	Y	-0.078	-0.079	320.357	345
1559	M202	X	0.009	0.009	1.025e-12	345
1560	M202	Y	-0.09	-0.09	1.025e-12	345
1561	M203	X	0.009	0.009	0	24.643
1562	M203	Y	-0.09	-0.09	0	24.643
1563	M203	X	0.009	0.009	24.643	49.286
1564	M203	Y	-0.09	-0.09	24.643	49.286
1565	M203	X	0.009	0.009	49.286	73.929
1566	M203	Y	-0.09	-0.09	49.286	73.929
1567	M203	X	0.009	0.009	73.929	98.571
1568	M203	Y	-0.09	-0.09	73.929	98.571
1569	M203	X	0.009	0.009	98.571	123.214
1570	M203	Y	-0.09	-0.09	98.571	123.214
1571	M203	X	0.009	0.009	123.214	147.857
1572	M203	Y	-0.09	-0.089	123.214	147.857
1573	M203	X	0.009	0.009	147.857	172.5
1574	M203	Y	-0.089	-0.088	147.857	172.5
1575	M203	X	0.009	0.009	172.5	197.143
1576	M203	Y	-0.088	-0.089	172.5	197.143
1577	M203	X	0.009	0.009	197.143	221.786
1578	M203	Y	-0.089	-0.09	197.143	221.786
1579	M203	X	0.009	0.009	221.786	246.429
1580	M203	Y	-0.09	-0.09	221.786	246.429
1581	M203	X	0.009	0.009	246.429	271.071
1582	M203	Y	-0.09	-0.09	246.429	271.071
1583	M203	X	0.009	0.009	271.071	295.714
1584	M203	Y	-0.09	-0.09	271.071	295.714
1585	M203	X	0.009	0.009	295.714	320.357
1586	M203	Y	-0.09	-0.09	295.714	320.357
1587	M203	X	0.009	0.009	320.357	345
1588	M203	Y	-0.09	-0.09	320.357	345
1589	M204	X	0.006	0.006	0	24.643
1590	M204	Y	-0.057	-0.059	0	24.643
1591	M204	X	0.006	0.006	24.643	49.286
1592	M204	Y	-0.059	-0.06	24.643	49.286
1593	M204	X	0.006	0.006	49.286	73.929
1594	M204	Y	-0.06	-0.06	49.286	73.929
1595	M204	X	0.006	0.006	73.929	98.571
1596	M204	Y	-0.06	-0.06	73.929	98.571
1597	M204	X	0.006	0.006	98.571	123.214
1598	M204	Y	-0.06	-0.058	98.571	123.214
1599	M204	X	0.006	0.006	123.214	147.857
1600	M204	Y	-0.058	-0.061	123.214	147.857
1601	M204	X	0.006	0.007	147.857	172.5
1602	M204	Y	-0.061	-0.066	147.857	172.5

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1603	M204	X	0.007	0.006	172.5	197.143
1604	M204	Y	-0.066	-0.061	172.5	197.143
1605	M204	X	0.006	0.006	197.143	221.786
1606	M204	Y	-0.061	-0.058	197.143	221.786
1607	M204	X	0.006	0.006	221.786	246.429
1608	M204	Y	-0.058	-0.06	221.786	246.429
1609	M204	X	0.006	0.006	246.429	271.071
1610	M204	Y	-0.06	-0.06	246.429	271.071
1611	M204	X	0.006	0.006	271.071	295.714
1612	M204	Y	-0.06	-0.06	271.071	295.714
1613	M204	X	0.006	0.006	295.714	320.357
1614	M204	Y	-0.06	-0.059	295.714	320.357
1615	M204	X	0.006	0.006	320.357	345
1616	M204	Y	-0.059	-0.057	320.357	345
1617	M205	X	0.008	0.007	0	24.643
1618	M205	Y	-0.075	-0.075	0	24.643
1619	M205	X	0.007	0.007	24.643	49.286
1620	M205	Y	-0.075	-0.075	24.643	49.286
1621	M205	X	0.007	0.007	49.286	73.929
1622	M205	Y	-0.075	-0.075	49.286	73.929
1623	M205	X	0.007	0.007	73.929	98.571
1624	M205	Y	-0.075	-0.075	73.929	98.571
1625	M205	X	0.007	0.007	98.571	123.214
1626	M205	Y	-0.075	-0.075	98.571	123.214
1627	M205	X	0.007	0.007	123.214	147.857
1628	M205	Y	-0.075	-0.075	123.214	147.857
1629	M205	X	0.007	0.007	147.857	172.5
1630	M205	Y	-0.075	-0.075	147.857	172.5
1631	M205	X	0.007	0.007	172.5	197.143
1632	M205	Y	-0.075	-0.075	172.5	197.143
1633	M205	X	0.007	0.007	197.143	221.786
1634	M205	Y	-0.075	-0.075	197.143	221.786
1635	M205	X	0.007	0.007	221.786	246.429
1636	M205	Y	-0.075	-0.075	221.786	246.429
1637	M205	X	0.007	0.007	246.429	271.071
1638	M205	Y	-0.075	-0.075	246.429	271.071
1639	M205	X	0.007	0.007	271.071	295.714
1640	M205	Y	-0.075	-0.075	271.071	295.714
1641	M205	X	0.007	0.007	295.714	320.357
1642	M205	Y	-0.075	-0.075	295.714	320.357
1643	M205	X	0.007	0.008	320.357	345
1644	M205	Y	-0.075	-0.075	320.357	345
1645	M206	X	0.009	0.009	5.96e-13	345
1646	M206	Y	-0.09	-0.09	5.96e-13	345
1647	M208	X	0.004	0.005	0	24.643
1648	M208	Y	-0.044	-0.054	0	24.643
1649	M208	X	0.005	0.006	24.643	49.286
1650	M208	Y	-0.054	-0.06	24.643	49.286
1651	M208	X	0.006	0.006	49.286	73.929
1652	M208	Y	-0.06	-0.059	49.286	73.929
1653	M208	X	0.006	0.005	73.929	98.571
1654	M208	Y	-0.059	-0.053	73.929	98.571
1655	M208	X	0.005	0.005	98.571	123.214
1656	M208	Y	-0.053	-0.053	98.571	123.214
1657	M208	X	0.005	0.006	123.214	147.857

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1658	M208	Y	-0.053	-0.057	123.214	147.857
1659	M208	X	0.006	0.006	147.857	172.5
1660	M208	Y	-0.057	-0.056	147.857	172.5
1661	M208	X	0.006	0.005	172.5	197.143
1662	M208	Y	-0.056	-0.052	172.5	197.143
1663	M208	X	0.005	0.006	197.143	221.786
1664	M208	Y	-0.052	-0.056	197.143	221.786
1665	M208	X	0.006	0.006	221.786	246.429
1666	M208	Y	-0.056	-0.057	221.786	246.429
1667	M208	X	0.006	0.006	246.429	271.071
1668	M208	Y	-0.057	-0.056	246.429	271.071
1669	M208	X	0.006	0.006	271.071	295.714
1670	M208	Y	-0.056	-0.059	271.071	295.714
1671	M208	X	0.006	0.005	295.714	320.357
1672	M208	Y	-0.059	-0.054	295.714	320.357
1673	M208	X	0.005	0.004	320.357	345
1674	M208	Y	-0.054	-0.044	320.357	345
1675	M209	X	0.009	0.009	0	345
1676	M209	Y	-0.09	-0.09	0	345
1677	M211	X	0.003	0.003	0	24.643
1678	M211	Y	-0.031	-0.034	0	24.643
1679	M211	X	0.003	0.004	24.643	49.286
1680	M211	Y	-0.034	-0.038	24.643	49.286
1681	M211	X	0.004	0.004	49.286	73.929
1682	M211	Y	-0.038	-0.038	49.286	73.929
1683	M211	X	0.004	0.004	73.929	98.571
1684	M211	Y	-0.038	-0.041	73.929	98.571
1685	M211	X	0.004	0.004	98.571	123.214
1686	M211	Y	-0.041	-0.041	98.571	123.214
1687	M211	X	0.004	0.003	123.214	147.857
1688	M211	Y	-0.041	-0.034	123.214	147.857
1689	M211	X	0.003	0.003	147.857	172.5
1690	M211	Y	-0.034	-0.03	147.857	172.5
1691	M211	X	0.003	0.003	172.5	197.143
1692	M211	Y	-0.03	-0.03	172.5	197.143
1693	M211	X	0.003	0.004	197.143	221.786
1694	M211	Y	-0.03	-0.04	197.143	221.786
1695	M211	X	0.004	0.004	221.786	246.429
1696	M211	Y	-0.04	-0.041	221.786	246.429
1697	M211	X	0.004	0.004	246.429	271.071
1698	M211	Y	-0.041	-0.038	246.429	271.071
1699	M211	X	0.004	0.004	271.071	295.714
1700	M211	Y	-0.038	-0.038	271.071	295.714
1701	M211	X	0.004	0.003	295.714	320.357
1702	M211	Y	-0.038	-0.034	295.714	320.357
1703	M211	X	0.003	0.003	320.357	345
1704	M211	Y	-0.034	-0.031	320.357	345
1705	M222	X	0.007	0.007	0	24.643
1706	M222	Y	-0.067	-0.067	0	24.643
1707	M222	X	0.007	0.007	24.643	49.286
1708	M222	Y	-0.067	-0.067	24.643	49.286
1709	M222	X	0.007	0.007	49.286	73.929
1710	M222	Y	-0.067	-0.067	49.286	73.929
1711	M222	X	0.007	0.007	73.929	98.571
1712	M222	Y	-0.067	-0.067	73.929	98.571

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1713	M222	X	0.007	0.007	98.571	123.214
1714	M222	Y	-0.067	-0.067	98.571	123.214
1715	M222	X	0.007	0.007	123.214	147.857
1716	M222	Y	-0.067	-0.067	123.214	147.857
1717	M222	X	0.007	0.007	147.857	172.5
1718	M222	Y	-0.067	-0.073	147.857	172.5
1719	M222	X	0.007	0.007	172.5	197.143
1720	M222	Y	-0.073	-0.073	172.5	197.143
1721	M222	X	0.007	0.007	197.143	221.786
1722	M222	Y	-0.073	-0.067	197.143	221.786
1723	M222	X	0.007	0.007	221.786	246.429
1724	M222	Y	-0.067	-0.067	221.786	246.429
1725	M222	X	0.007	0.007	246.429	271.071
1726	M222	Y	-0.067	-0.067	246.429	271.071
1727	M222	X	0.007	0.007	271.071	295.714
1728	M222	Y	-0.067	-0.067	271.071	295.714
1729	M222	X	0.007	0.007	295.714	320.357
1730	M222	Y	-0.067	-0.067	295.714	320.357
1731	M222	X	0.007	0.007	320.357	345
1732	M222	Y	-0.067	-0.067	320.357	345
1733	M223	X	0.009	0.009	0	345
1734	M223	Y	-0.09	-0.09	0	345
1735	M224	X	0.009	0.009	0	24.643
1736	M224	Y	-0.091	-0.09	0	24.643
1737	M224	X	0.009	0.009	24.643	49.286
1738	M224	Y	-0.09	-0.089	24.643	49.286
1739	M224	X	0.009	0.009	49.286	73.929
1740	M224	Y	-0.089	-0.091	49.286	73.929
1741	M224	X	0.009	0.01	73.929	98.571
1742	M224	Y	-0.091	-0.095	73.929	98.571
1743	M224	X	0.01	0.009	98.571	123.214
1744	M224	Y	-0.095	-0.091	98.571	123.214
1745	M224	X	0.009	0.008	123.214	147.857
1746	M224	Y	-0.091	-0.085	123.214	147.857
1747	M224	X	0.008	0.009	147.857	172.5
1748	M224	Y	-0.085	-0.09	147.857	172.5
1749	M224	X	0.009	0.009	172.5	197.143
1750	M224	Y	-0.09	-0.092	172.5	197.143
1751	M224	X	0.009	0.009	197.143	221.786
1752	M224	Y	-0.092	-0.089	197.143	221.786
1753	M224	X	0.009	0.009	221.786	246.429
1754	M224	Y	-0.089	-0.093	221.786	246.429
1755	M224	X	0.009	0.009	246.429	271.071
1756	M224	Y	-0.093	-0.093	246.429	271.071
1757	M224	X	0.009	0.009	271.071	295.714
1758	M224	Y	-0.093	-0.089	271.071	295.714
1759	M224	X	0.009	0.009	295.714	320.357
1760	M224	Y	-0.089	-0.09	295.714	320.357
1761	M224	X	0.009	0.009	320.357	345
1762	M224	Y	-0.09	-0.091	320.357	345
1763	M225	X	0.008	0.008	0	24.643
1764	M225	Y	-0.079	-0.078	0	24.643
1765	M225	X	0.008	0.008	24.643	49.286
1766	M225	Y	-0.078	-0.078	24.643	49.286
1767	M225	X	0.008	0.008	49.286	73.929

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1768	M225	Y	-0.078	-0.078	49.286	73.929
1769	M225	X	0.008	0.008	73.929	98.571
1770	M225	Y	-0.078	-0.078	73.929	98.571
1771	M225	X	0.008	0.008	98.571	123.214
1772	M225	Y	-0.078	-0.078	98.571	123.214
1773	M225	X	0.008	0.008	123.214	147.857
1774	M225	Y	-0.078	-0.081	123.214	147.857
1775	M225	X	0.008	0.008	147.857	172.5
1776	M225	Y	-0.081	-0.081	147.857	172.5
1777	M225	X	0.008	0.008	172.5	197.143
1778	M225	Y	-0.081	-0.081	172.5	197.143
1779	M225	X	0.008	0.008	197.143	221.786
1780	M225	Y	-0.081	-0.081	197.143	221.786
1781	M225	X	0.008	0.008	221.786	246.429
1782	M225	Y	-0.081	-0.078	221.786	246.429
1783	M225	X	0.008	0.008	246.429	271.071
1784	M225	Y	-0.078	-0.078	246.429	271.071
1785	M225	X	0.008	0.008	271.071	295.714
1786	M225	Y	-0.078	-0.078	271.071	295.714
1787	M225	X	0.008	0.008	295.714	320.357
1788	M225	Y	-0.078	-0.078	295.714	320.357
1789	M225	X	0.008	0.008	320.357	345
1790	M225	Y	-0.078	-0.079	320.357	345
1791	M226	X	0.009	0.009	0	345
1792	M226	Y	-0.09	-0.09	0	345
1793	M227	X	0.009	0.009	0	24.643
1794	M227	Y	-0.09	-0.09	0	24.643
1795	M227	X	0.009	0.009	24.643	49.286
1796	M227	Y	-0.09	-0.09	24.643	49.286
1797	M227	X	0.009	0.009	49.286	73.929
1798	M227	Y	-0.09	-0.09	49.286	73.929
1799	M227	X	0.009	0.009	73.929	98.571
1800	M227	Y	-0.09	-0.09	73.929	98.571
1801	M227	X	0.009	0.009	98.571	123.214
1802	M227	Y	-0.09	-0.09	98.571	123.214
1803	M227	X	0.009	0.009	123.214	147.857
1804	M227	Y	-0.09	-0.089	123.214	147.857
1805	M227	X	0.009	0.009	147.857	172.5
1806	M227	Y	-0.089	-0.088	147.857	172.5
1807	M227	X	0.009	0.009	172.5	197.143
1808	M227	Y	-0.088	-0.089	172.5	197.143
1809	M227	X	0.009	0.009	197.143	221.786
1810	M227	Y	-0.089	-0.09	197.143	221.786
1811	M227	X	0.009	0.009	221.786	246.429
1812	M227	Y	-0.09	-0.09	221.786	246.429
1813	M227	X	0.009	0.009	246.429	271.071
1814	M227	Y	-0.09	-0.09	246.429	271.071
1815	M227	X	0.009	0.009	271.071	295.714
1816	M227	Y	-0.09	-0.09	271.071	295.714
1817	M227	X	0.009	0.009	295.714	320.357
1818	M227	Y	-0.09	-0.09	295.714	320.357
1819	M227	X	0.009	0.009	320.357	345
1820	M227	Y	-0.09	-0.09	320.357	345
1821	M228	X	0.006	0.006	0	24.643
1822	M228	Y	-0.057	-0.059	0	24.643

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1823	M228	X	0.006	0.006	24.643	49.286
1824	M228	Y	-0.059	-0.06	24.643	49.286
1825	M228	X	0.006	0.006	49.286	73.929
1826	M228	Y	-0.06	-0.06	49.286	73.929
1827	M228	X	0.006	0.006	73.929	98.571
1828	M228	Y	-0.06	-0.06	73.929	98.571
1829	M228	X	0.006	0.006	98.571	123.214
1830	M228	Y	-0.06	-0.058	98.571	123.214
1831	M228	X	0.006	0.006	123.214	147.857
1832	M228	Y	-0.058	-0.061	123.214	147.857
1833	M228	X	0.006	0.007	147.857	172.5
1834	M228	Y	-0.061	-0.066	147.857	172.5
1835	M228	X	0.007	0.006	172.5	197.143
1836	M228	Y	-0.066	-0.061	172.5	197.143
1837	M228	X	0.006	0.006	197.143	221.786
1838	M228	Y	-0.061	-0.058	197.143	221.786
1839	M228	X	0.006	0.006	221.786	246.429
1840	M228	Y	-0.058	-0.06	221.786	246.429
1841	M228	X	0.006	0.006	246.429	271.071
1842	M228	Y	-0.06	-0.06	246.429	271.071
1843	M228	X	0.006	0.006	271.071	295.714
1844	M228	Y	-0.06	-0.06	271.071	295.714
1845	M228	X	0.006	0.006	295.714	320.357
1846	M228	Y	-0.06	-0.059	295.714	320.357
1847	M228	X	0.006	0.006	320.357	345
1848	M228	Y	-0.059	-0.057	320.357	345
1849	M229	X	0.008	0.007	0	24.643
1850	M229	Y	-0.075	-0.075	0	24.643
1851	M229	X	0.007	0.007	24.643	49.286
1852	M229	Y	-0.075	-0.075	24.643	49.286
1853	M229	X	0.007	0.007	49.286	73.929
1854	M229	Y	-0.075	-0.075	49.286	73.929
1855	M229	X	0.007	0.007	73.929	98.571
1856	M229	Y	-0.075	-0.075	73.929	98.571
1857	M229	X	0.007	0.007	98.571	123.214
1858	M229	Y	-0.075	-0.075	98.571	123.214
1859	M229	X	0.007	0.007	123.214	147.857
1860	M229	Y	-0.075	-0.075	123.214	147.857
1861	M229	X	0.007	0.007	147.857	172.5
1862	M229	Y	-0.075	-0.075	147.857	172.5
1863	M229	X	0.007	0.007	172.5	197.143
1864	M229	Y	-0.075	-0.075	172.5	197.143
1865	M229	X	0.007	0.007	197.143	221.786
1866	M229	Y	-0.075	-0.075	197.143	221.786
1867	M229	X	0.007	0.007	221.786	246.429
1868	M229	Y	-0.075	-0.075	221.786	246.429
1869	M229	X	0.007	0.007	246.429	271.071
1870	M229	Y	-0.075	-0.075	246.429	271.071
1871	M229	X	0.007	0.007	271.071	295.714
1872	M229	Y	-0.075	-0.075	271.071	295.714
1873	M229	X	0.007	0.007	295.714	320.357
1874	M229	Y	-0.075	-0.075	295.714	320.357
1875	M229	X	0.007	0.008	320.357	345
1876	M229	Y	-0.075	-0.075	320.357	345
1877	M244	X	0.003	0.005	0	24.643

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1878	M244	Y	-0.035	-0.045	0	24.643
1879	M244	X	0.005	0.005	24.643	49.286
1880	M244	Y	-0.045	-0.047	24.643	49.286
1881	M244	X	0.005	0.004	49.286	73.929
1882	M244	Y	-0.047	-0.044	49.286	73.929
1883	M244	X	0.004	0.005	73.929	98.571
1884	M244	Y	-0.044	-0.048	73.929	98.571
1885	M244	X	0.005	0.005	98.571	123.214
1886	M244	Y	-0.048	-0.048	98.571	123.214
1887	M244	X	0.005	0.004	123.214	147.857
1888	M244	Y	-0.048	-0.042	123.214	147.857
1889	M244	X	0.004	0.004	147.857	172.5
1890	M244	Y	-0.042	-0.039	147.857	172.5
1891	M244	X	0.004	0.004	172.5	197.143
1892	M244	Y	-0.039	-0.039	172.5	197.143
1893	M244	X	0.004	0.005	197.143	221.786
1894	M244	Y	-0.039	-0.046	197.143	221.786
1895	M244	X	0.005	0.005	221.786	246.429
1896	M244	Y	-0.046	-0.048	221.786	246.429
1897	M244	X	0.005	0.004	246.429	271.071
1898	M244	Y	-0.048	-0.044	246.429	271.071
1899	M244	X	0.004	0.005	271.071	295.714
1900	M244	Y	-0.044	-0.047	271.071	295.714
1901	M244	X	0.005	0.005	295.714	320.357
1902	M244	Y	-0.047	-0.045	295.714	320.357
1903	M244	X	0.005	0.003	320.357	345
1904	M244	Y	-0.045	-0.035	320.357	345
1905	M245	X	0.004	0.004	0	24.643
1906	M245	Y	-0.042	-0.044	0	24.643
1907	M245	X	0.004	0.005	24.643	49.286
1908	M245	Y	-0.044	-0.045	24.643	49.286
1909	M245	X	0.005	0.005	49.286	73.929
1910	M245	Y	-0.045	-0.045	49.286	73.929
1911	M245	X	0.005	0.005	73.929	98.571
1912	M245	Y	-0.045	-0.045	73.929	98.571
1913	M245	X	0.005	0.005	98.571	123.214
1914	M245	Y	-0.045	-0.045	98.571	123.214
1915	M245	X	0.005	0.005	123.214	147.857
1916	M245	Y	-0.045	-0.045	123.214	147.857
1917	M245	X	0.005	0.005	147.857	172.5
1918	M245	Y	-0.045	-0.045	147.857	172.5
1919	M245	X	0.005	0.005	172.5	197.143
1920	M245	Y	-0.045	-0.045	172.5	197.143
1921	M245	X	0.005	0.005	197.143	221.786
1922	M245	Y	-0.045	-0.045	197.143	221.786
1923	M245	X	0.005	0.005	221.786	246.429
1924	M245	Y	-0.045	-0.045	221.786	246.429
1925	M245	X	0.005	0.005	246.429	271.071
1926	M245	Y	-0.045	-0.045	246.429	271.071
1927	M245	X	0.005	0.005	271.071	295.714
1928	M245	Y	-0.045	-0.045	271.071	295.714
1929	M245	X	0.005	0.004	295.714	320.357
1930	M245	Y	-0.045	-0.044	295.714	320.357
1931	M245	X	0.004	0.004	320.357	345
1932	M245	Y	-0.044	-0.042	320.357	345

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1933	M248	X	0.003	0.005	0	24.643
1934	M248	Y	-0.035	-0.045	0	24.643
1935	M248	X	0.005	0.005	24.643	49.286
1936	M248	Y	-0.045	-0.047	24.643	49.286
1937	M248	X	0.005	0.004	49.286	73.929
1938	M248	Y	-0.047	-0.044	49.286	73.929
1939	M248	X	0.004	0.005	73.929	98.571
1940	M248	Y	-0.044	-0.048	73.929	98.571
1941	M248	X	0.005	0.005	98.571	123.214
1942	M248	Y	-0.048	-0.048	98.571	123.214
1943	M248	X	0.005	0.004	123.214	147.857
1944	M248	Y	-0.048	-0.042	123.214	147.857
1945	M248	X	0.004	0.004	147.857	172.5
1946	M248	Y	-0.042	-0.039	147.857	172.5
1947	M248	X	0.004	0.004	172.5	197.143
1948	M248	Y	-0.039	-0.039	172.5	197.143
1949	M248	X	0.004	0.005	197.143	221.786
1950	M248	Y	-0.039	-0.046	197.143	221.786
1951	M248	X	0.005	0.005	221.786	246.429
1952	M248	Y	-0.046	-0.048	221.786	246.429
1953	M248	X	0.005	0.004	246.429	271.071
1954	M248	Y	-0.048	-0.044	246.429	271.071
1955	M248	X	0.004	0.005	271.071	295.714
1956	M248	Y	-0.044	-0.047	271.071	295.714
1957	M248	X	0.005	0.005	295.714	320.357
1958	M248	Y	-0.047	-0.045	295.714	320.357
1959	M248	X	0.005	0.003	320.357	345
1960	M248	Y	-0.045	-0.035	320.357	345
1961	M249	X	0.004	0.004	0	24.643
1962	M249	Y	-0.042	-0.044	0	24.643
1963	M249	X	0.004	0.005	24.643	49.286
1964	M249	Y	-0.044	-0.045	24.643	49.286
1965	M249	X	0.005	0.005	49.286	73.929
1966	M249	Y	-0.045	-0.045	49.286	73.929
1967	M249	X	0.005	0.005	73.929	98.571
1968	M249	Y	-0.045	-0.045	73.929	98.571
1969	M249	X	0.005	0.005	98.571	123.214
1970	M249	Y	-0.045	-0.045	98.571	123.214
1971	M249	X	0.005	0.005	123.214	147.857
1972	M249	Y	-0.045	-0.045	123.214	147.857
1973	M249	X	0.005	0.005	147.857	172.5
1974	M249	Y	-0.045	-0.045	147.857	172.5
1975	M249	X	0.005	0.005	172.5	197.143
1976	M249	Y	-0.045	-0.045	172.5	197.143
1977	M249	X	0.005	0.005	197.143	221.786
1978	M249	Y	-0.045	-0.045	197.143	221.786
1979	M249	X	0.005	0.005	221.786	246.429
1980	M249	Y	-0.045	-0.045	221.786	246.429
1981	M249	X	0.005	0.005	246.429	271.071
1982	M249	Y	-0.045	-0.045	246.429	271.071
1983	M249	X	0.005	0.005	271.071	295.714
1984	M249	Y	-0.045	-0.045	271.071	295.714
1985	M249	X	0.005	0.004	295.714	320.357
1986	M249	Y	-0.045	-0.044	295.714	320.357
1987	M249	X	0.004	0.004	320.357	345

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1988	M249	Y	-0.044	-0.042	320.357	345
1989	M250	X	0.004	0.004	0	24.643
1990	M250	Y	-0.042	-0.044	0	24.643
1991	M250	X	0.004	0.005	24.643	49.286
1992	M250	Y	-0.044	-0.045	24.643	49.286
1993	M250	X	0.005	0.005	49.286	73.929
1994	M250	Y	-0.045	-0.045	49.286	73.929
1995	M250	X	0.005	0.005	73.929	98.571
1996	M250	Y	-0.045	-0.045	73.929	98.571
1997	M250	X	0.005	0.005	98.571	123.214
1998	M250	Y	-0.045	-0.045	98.571	123.214
1999	M250	X	0.005	0.005	123.214	147.857
2000	M250	Y	-0.045	-0.045	123.214	147.857
2001	M250	X	0.005	0.005	147.857	172.5
2002	M250	Y	-0.045	-0.045	147.857	172.5
2003	M250	X	0.005	0.005	172.5	197.143
2004	M250	Y	-0.045	-0.045	172.5	197.143
2005	M250	X	0.005	0.005	197.143	221.786
2006	M250	Y	-0.045	-0.045	197.143	221.786
2007	M250	X	0.005	0.005	221.786	246.429
2008	M250	Y	-0.045	-0.045	221.786	246.429
2009	M250	X	0.005	0.005	246.429	271.071
2010	M250	Y	-0.045	-0.045	246.429	271.071
2011	M250	X	0.005	0.005	271.071	295.714
2012	M250	Y	-0.045	-0.045	271.071	295.714
2013	M250	X	0.005	0.004	295.714	320.357
2014	M250	Y	-0.045	-0.044	295.714	320.357
2015	M250	X	0.004	0.004	320.357	345
2016	M250	Y	-0.044	-0.042	320.357	345
2017	M251	X	0.004	0.004	0	24.857
2018	M251	Y	-0.04	-0.041	0	24.857
2019	M251	X	0.004	0.004	24.857	49.714
2020	M251	Y	-0.041	-0.042	24.857	49.714
2021	M251	X	0.004	0.005	49.714	74.571
2022	M251	Y	-0.042	-0.05	49.714	74.571
2023	M251	X	0.005	0.005	74.571	99.429
2024	M251	Y	-0.05	-0.05	74.571	99.429
2025	M251	X	0.005	0.004	99.429	124.286
2026	M251	Y	-0.05	-0.043	99.429	124.286
2027	M251	X	0.004	0.004	124.286	149.143
2028	M251	Y	-0.043	-0.042	124.286	149.143
2029	M251	X	0.004	0.004	149.143	174
2030	M251	Y	-0.042	-0.043	149.143	174
2031	M251	X	0.004	0.004	174	198.857
2032	M251	Y	-0.043	-0.043	174	198.857
2033	M251	X	0.004	0.004	198.857	223.714
2034	M251	Y	-0.043	-0.042	198.857	223.714
2035	M251	X	0.004	0.005	223.714	248.571
2036	M251	Y	-0.042	-0.05	223.714	248.571
2037	M251	X	0.005	0.005	248.571	273.429
2038	M251	Y	-0.05	-0.05	248.571	273.429
2039	M251	X	0.005	0.004	273.429	298.286
2040	M251	Y	-0.05	-0.042	273.429	298.286
2041	M251	X	0.004	0.004	298.286	323.143
2042	M251	Y	-0.042	-0.041	298.286	323.143

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2043	M251	X	0.004	0.004	323.143	348
2044	M251	Y	-0.041	-0.04	323.143	348
2045	M252	X	0.003	0.005	0	24.643
2046	M252	Y	-0.035	-0.045	0	24.643
2047	M252	X	0.005	0.005	24.643	49.286
2048	M252	Y	-0.045	-0.047	24.643	49.286
2049	M252	X	0.005	0.004	49.286	73.929
2050	M252	Y	-0.047	-0.044	49.286	73.929
2051	M252	X	0.004	0.005	73.929	98.571
2052	M252	Y	-0.044	-0.048	73.929	98.571
2053	M252	X	0.005	0.005	98.571	123.214
2054	M252	Y	-0.048	-0.046	98.571	123.214
2055	M252	X	0.005	0.004	123.214	147.857
2056	M252	Y	-0.046	-0.039	123.214	147.857
2057	M252	X	0.004	0.004	147.857	172.5
2058	M252	Y	-0.039	-0.044	147.857	172.5
2059	M252	X	0.004	0.005	172.5	197.143
2060	M252	Y	-0.044	-0.047	172.5	197.143
2061	M252	X	0.005	0.004	197.143	221.786
2062	M252	Y	-0.047	-0.041	197.143	221.786
2063	M252	X	0.004	0.004	221.786	246.429
2064	M252	Y	-0.041	-0.043	221.786	246.429
2065	M252	X	0.004	0.005	246.429	271.071
2066	M252	Y	-0.043	-0.046	246.429	271.071
2067	M252	X	0.005	0.005	271.071	295.714
2068	M252	Y	-0.046	-0.047	271.071	295.714
2069	M252	X	0.005	0.005	295.714	320.357
2070	M252	Y	-0.047	-0.045	295.714	320.357
2071	M252	X	0.005	0.003	320.357	345
2072	M252	Y	-0.045	-0.035	320.357	345
2073	M253	X	0.003	0.005	0	24.857
2074	M253	Y	-0.035	-0.045	0	24.857
2075	M253	X	0.005	0.005	24.857	49.714
2076	M253	Y	-0.045	-0.047	24.857	49.714
2077	M253	X	0.005	0.004	49.714	74.571
2078	M253	Y	-0.047	-0.044	49.714	74.571
2079	M253	X	0.004	0.005	74.571	99.429
2080	M253	Y	-0.044	-0.048	74.571	99.429
2081	M253	X	0.005	0.005	99.429	124.286
2082	M253	Y	-0.048	-0.046	99.429	124.286
2083	M253	X	0.005	0.004	124.286	149.143
2084	M253	Y	-0.046	-0.039	124.286	149.143
2085	M253	X	0.004	0.004	149.143	174
2086	M253	Y	-0.039	-0.039	149.143	174
2087	M253	X	0.004	0.004	174	198.857
2088	M253	Y	-0.039	-0.042	174	198.857
2089	M253	X	0.004	0.005	198.857	223.714
2090	M253	Y	-0.042	-0.048	198.857	223.714
2091	M253	X	0.005	0.005	223.714	248.571
2092	M253	Y	-0.048	-0.048	223.714	248.571
2093	M253	X	0.005	0.004	248.571	273.429
2094	M253	Y	-0.048	-0.044	248.571	273.429
2095	M253	X	0.004	0.005	273.429	298.286
2096	M253	Y	-0.044	-0.047	273.429	298.286
2097	M253	X	0.005	0.005	298.286	323.143

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2098	M253	Y	-0.047	-0.045	298.286	323.143
2099	M253	X	0.005	0.003	323.143	348
2100	M253	Y	-0.045	-0.035	323.143	348
2101	M52	X	-0.018	-0.018	0	266.09
2102	M113	X	-0.018	-0.018	0	182.09
2103	M80	X	-0.018	-0.018	0	182.09
2104	M123	X	-0.018	-0.018	0	266.09
2105	M126	X	-0.018	-0.018	0	182.09
2106	M134	X	-0.018	-0.018	0	266.09
2107	M138	X	-0.019	-0.019	0	345
2108	M139	X	-0.019	-0.019	0	345
2109	M50	X	-0.019	-0.019	0	345
2110	M64	X	-0.018	-0.018	0	182.09
2111	M65	X	-0.018	-0.018	0	266.09
2112	M69	X	-0.019	-0.019	0	345
2113	M78	X	-0.018	-0.018	0	182.09
2114	M79	X	-0.018	-0.018	0	266.09
2115	M83	X	-0.019	-0.019	0	348
2116	M87	X	-0.018	-0.018	0	182.09
2117	M88	X	-0.018	-0.018	0	266.09
2118	M67	X	-0.002	-0.002	0	24.643
2119	M67	Y	-0.025	-0.027	0	24.643
2120	M67	X	-0.002	-0.001	24.643	49.286
2121	M67	Y	-0.027	-0.031	24.643	49.286
2122	M67	X	-0.001	-0.001	49.286	73.929
2123	M67	Y	-0.031	-0.031	49.286	73.929
2124	M67	X	-0.001	-0.002	73.929	98.571
2125	M67	Y	-0.031	-0.028	73.929	98.571
2126	M67	X	-0.002	-0.002	98.571	123.214
2127	M67	Y	-0.028	-0.028	98.571	123.214
2128	M67	X	-0.002	-0.002	123.214	147.857
2129	M67	Y	-0.028	-0.028	123.214	147.857
2130	M67	X	-0.002	-0.002	147.857	172.5
2131	M67	Y	-0.028	-0.028	147.857	172.5
2132	M67	X	-0.002	-0.002	172.5	197.143
2133	M67	Y	-0.028	-0.028	172.5	197.143
2134	M67	X	-0.002	-0.002	197.143	221.786
2135	M67	Y	-0.028	-0.028	197.143	221.786
2136	M67	X	-0.002	-0.002	221.786	246.429
2137	M67	Y	-0.028	-0.028	221.786	246.429
2138	M67	X	-0.002	-0.001	246.429	271.071
2139	M67	Y	-0.028	-0.031	246.429	271.071
2140	M67	X	-0.001	-0.001	271.071	295.714
2141	M67	Y	-0.031	-0.031	271.071	295.714
2142	M67	X	-0.001	-0.002	295.714	320.357
2143	M67	Y	-0.031	-0.027	295.714	320.357
2144	M67	X	-0.002	-0.002	320.357	345
2145	M67	Y	-0.027	-0.025	320.357	345
2146	M72	X	-0.002	-0.002	0	24.643
2147	M72	Y	-0.025	-0.027	0	24.643
2148	M72	X	-0.002	-0.001	24.643	49.286
2149	M72	Y	-0.027	-0.031	24.643	49.286
2150	M72	X	-0.001	-0.001	49.286	73.929
2151	M72	Y	-0.031	-0.031	49.286	73.929
2152	M72	X	-0.001	-0.002	73.929	98.571

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2153	M72	Y	-0.031	-0.028	73.929	98.571
2154	M72	X	-0.002	-0.002	98.571	123.214
2155	M72	Y	-0.028	-0.028	98.571	123.214
2156	M72	X	-0.002	-0.002	123.214	147.857
2157	M72	Y	-0.028	-0.028	123.214	147.857
2158	M72	X	-0.002	-0.002	147.857	172.5
2159	M72	Y	-0.028	-0.028	147.857	172.5
2160	M72	X	-0.002	-0.002	172.5	197.143
2161	M72	Y	-0.028	-0.028	172.5	197.143
2162	M72	X	-0.002	-0.002	197.143	221.786
2163	M72	Y	-0.028	-0.028	197.143	221.786
2164	M72	X	-0.002	-0.002	221.786	246.429
2165	M72	Y	-0.028	-0.028	221.786	246.429
2166	M72	X	-0.002	-0.001	246.429	271.071
2167	M72	Y	-0.028	-0.031	246.429	271.071
2168	M72	X	-0.001	-0.001	271.071	295.714
2169	M72	Y	-0.031	-0.031	271.071	295.714
2170	M72	X	-0.001	-0.002	295.714	320.357
2171	M72	Y	-0.031	-0.027	295.714	320.357
2172	M72	X	-0.002	-0.002	320.357	345
2173	M72	Y	-0.027	-0.025	320.357	345
2174	M138	X	-0.01	-0.01	1.226e-13	345
2175	M138	Y	-0.044	-0.044	1.226e-13	345
2176	M139	X	-0.01	-0.01	1.705e-13	345
2177	M139	Y	-0.044	-0.044	1.705e-13	345
2178	M50	X	-0.01	-0.01	2.043e-14	345
2179	M50	Y	-0.044	-0.044	2.043e-14	345
2180	M58	X	-0.002	-0.002	0	24.643
2181	M58	Y	-0.025	-0.027	0	24.643
2182	M58	X	-0.002	-0.001	24.643	49.286
2183	M58	Y	-0.027	-0.031	24.643	49.286
2184	M58	X	-0.001	-0.001	49.286	73.929
2185	M58	Y	-0.031	-0.031	49.286	73.929
2186	M58	X	-0.001	-0.002	73.929	98.571
2187	M58	Y	-0.031	-0.028	73.929	98.571
2188	M58	X	-0.002	-0.002	98.571	123.214
2189	M58	Y	-0.028	-0.028	98.571	123.214
2190	M58	X	-0.002	-0.002	123.214	147.857
2191	M58	Y	-0.028	-0.028	123.214	147.857
2192	M58	X	-0.002	-0.002	147.857	172.5
2193	M58	Y	-0.028	-0.028	147.857	172.5
2194	M58	X	-0.002	-0.002	172.5	197.143
2195	M58	Y	-0.028	-0.028	172.5	197.143
2196	M58	X	-0.002	-0.002	197.143	221.786
2197	M58	Y	-0.028	-0.028	197.143	221.786
2198	M58	X	-0.002	-0.002	221.786	246.429
2199	M58	Y	-0.028	-0.028	221.786	246.429
2200	M58	X	-0.002	-0.001	246.429	271.071
2201	M58	Y	-0.028	-0.031	246.429	271.071
2202	M58	X	-0.001	-0.001	271.071	295.714
2203	M58	Y	-0.031	-0.031	271.071	295.714
2204	M58	X	-0.001	-0.002	295.714	320.357
2205	M58	Y	-0.031	-0.027	295.714	320.357
2206	M58	X	-0.002	-0.002	320.357	345
2207	M58	Y	-0.027	-0.025	320.357	345

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2208	M69	X	-0.01	-0.01	2.043e-14	345
2209	M69	Y	-0.044	-0.044	2.043e-14	345
2210	M76	X	-0.002	-0.002	0	24.643
2211	M76	Y	-0.025	-0.027	0	24.643
2212	M76	X	-0.002	-0.001	24.643	49.286
2213	M76	Y	-0.027	-0.031	24.643	49.286
2214	M76	X	-0.001	-0.001	49.286	73.929
2215	M76	Y	-0.031	-0.031	49.286	73.929
2216	M76	X	-0.001	-0.002	73.929	98.571
2217	M76	Y	-0.031	-0.028	73.929	98.571
2218	M76	X	-0.002	-0.002	98.571	123.214
2219	M76	Y	-0.028	-0.028	98.571	123.214
2220	M76	X	-0.002	-0.002	123.214	147.857
2221	M76	Y	-0.028	-0.028	123.214	147.857
2222	M76	X	-0.002	-0.002	147.857	172.5
2223	M76	Y	-0.028	-0.028	147.857	172.5
2224	M76	X	-0.002	-0.002	172.5	197.143
2225	M76	Y	-0.028	-0.028	172.5	197.143
2226	M76	X	-0.002	-0.002	197.143	221.786
2227	M76	Y	-0.028	-0.028	197.143	221.786
2228	M76	X	-0.002	-0.002	221.786	246.429
2229	M76	Y	-0.028	-0.028	221.786	246.429
2230	M76	X	-0.002	-0.001	246.429	271.071
2231	M76	Y	-0.028	-0.031	246.429	271.071
2232	M76	X	-0.001	-0.001	271.071	295.714
2233	M76	Y	-0.031	-0.031	271.071	295.714
2234	M76	X	-0.001	-0.002	295.714	320.357
2235	M76	Y	-0.031	-0.027	295.714	320.357
2236	M76	X	-0.002	-0.002	320.357	345
2237	M76	Y	-0.027	-0.025	320.357	345
2238	M83	X	-0.01	-0.01	2.336e-13	348
2239	M83	Y	-0.044	-0.044	2.336e-13	348
2240	M85	X	-0.002	-0.002	0	24.857
2241	M85	Y	-0.024	-0.026	0	24.857
2242	M85	X	-0.002	-0.001	24.857	49.714
2243	M85	Y	-0.026	-0.03	24.857	49.714
2244	M85	X	-0.001	-0.002	49.714	74.571
2245	M85	Y	-0.03	-0.033	49.714	74.571
2246	M85	X	-0.002	-0.002	74.571	99.429
2247	M85	Y	-0.033	-0.03	74.571	99.429
2248	M85	X	-0.002	-0.002	99.429	124.286
2249	M85	Y	-0.03	-0.027	99.429	124.286
2250	M85	X	-0.002	-0.002	124.286	149.143
2251	M85	Y	-0.027	-0.027	124.286	149.143
2252	M85	X	-0.002	-0.002	149.143	174
2253	M85	Y	-0.027	-0.027	149.143	174
2254	M85	X	-0.002	-0.002	174	198.857
2255	M85	Y	-0.027	-0.027	174	198.857
2256	M85	X	-0.002	-0.002	198.857	223.714
2257	M85	Y	-0.027	-0.027	198.857	223.714
2258	M85	X	-0.002	-0.002	223.714	248.571
2259	M85	Y	-0.027	-0.03	223.714	248.571
2260	M85	X	-0.002	-0.002	248.571	273.429
2261	M85	Y	-0.03	-0.033	248.571	273.429
2262	M85	X	-0.002	-0.001	273.429	298.286

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2263	M85	Y	-0.033	-0.03	273.429	298.286
2264	M85	X	-0.001	-0.002	298.286	323.143
2265	M85	Y	-0.03	-0.026	298.286	323.143
2266	M85	X	-0.002	-0.002	323.143	348
2267	M85	Y	-0.026	-0.024	323.143	348
2268	M57	X	-0.016	-0.016	0	24.857
2269	M57	Y	-0.073	-0.073	0	24.857
2270	M57	X	-0.016	-0.016	24.857	49.714
2271	M57	Y	-0.073	-0.073	24.857	49.714
2272	M57	X	-0.016	-0.016	49.714	74.571
2273	M57	Y	-0.073	-0.073	49.714	74.571
2274	M57	X	-0.016	-0.016	74.571	99.429
2275	M57	Y	-0.073	-0.073	74.571	99.429
2276	M57	X	-0.016	-0.016	99.429	124.286
2277	M57	Y	-0.073	-0.073	99.429	124.286
2278	M57	X	-0.016	-0.016	124.286	149.143
2279	M57	Y	-0.073	-0.074	124.286	149.143
2280	M57	X	-0.016	-0.017	149.143	174
2281	M57	Y	-0.074	-0.078	149.143	174
2282	M57	X	-0.017	-0.017	174	198.857
2283	M57	Y	-0.078	-0.078	174	198.857
2284	M57	X	-0.017	-0.016	198.857	223.714
2285	M57	Y	-0.078	-0.074	198.857	223.714
2286	M57	X	-0.016	-0.016	223.714	248.571
2287	M57	Y	-0.074	-0.073	223.714	248.571
2288	M57	X	-0.016	-0.016	248.571	273.429
2289	M57	Y	-0.073	-0.073	248.571	273.429
2290	M57	X	-0.016	-0.016	273.429	298.286
2291	M57	Y	-0.073	-0.073	273.429	298.286
2292	M57	X	-0.016	-0.016	298.286	323.143
2293	M57	Y	-0.073	-0.073	298.286	323.143
2294	M57	X	-0.016	-0.016	323.143	348
2295	M57	Y	-0.073	-0.073	323.143	348
2296	M96	X	-0.011	-0.012	0	24.857
2297	M96	Y	-0.053	-0.054	0	24.857
2298	M96	X	-0.012	-0.012	24.857	49.714
2299	M96	Y	-0.054	-0.056	24.857	49.714
2300	M96	X	-0.012	-0.014	49.714	74.571
2301	M96	Y	-0.056	-0.063	49.714	74.571
2302	M96	X	-0.014	-0.014	74.571	99.429
2303	M96	Y	-0.063	-0.066	74.571	99.429
2304	M96	X	-0.014	-0.013	99.429	124.286
2305	M96	Y	-0.066	-0.059	99.429	124.286
2306	M96	X	-0.013	-0.012	124.286	149.143
2307	M96	Y	-0.059	-0.057	124.286	149.143
2308	M96	X	-0.012	-0.012	149.143	174
2309	M96	Y	-0.057	-0.053	149.143	174
2310	M96	X	-0.012	-0.012	174	198.857
2311	M96	Y	-0.053	-0.053	174	198.857
2312	M96	X	-0.012	-0.013	198.857	223.714
2313	M96	Y	-0.053	-0.06	198.857	223.714
2314	M96	X	-0.013	-0.014	223.714	248.571
2315	M96	Y	-0.06	-0.066	223.714	248.571
2316	M96	X	-0.014	-0.014	248.571	273.429
2317	M96	Y	-0.066	-0.063	248.571	273.429

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2318	M96	X	-0.014	-0.012	273.429	298.286
2319	M96	Y	-0.063	-0.056	273.429	298.286
2320	M96	X	-0.012	-0.012	298.286	323.143
2321	M96	Y	-0.056	-0.054	298.286	323.143
2322	M96	X	-0.012	-0.011	323.143	348
2323	M96	Y	-0.054	-0.053	323.143	348
2324	M97	X	-0.019	-0.019	0	24.857
2325	M97	Y	-0.088	-0.087	0	24.857
2326	M97	X	-0.019	-0.019	24.857	49.714
2327	M97	Y	-0.087	-0.087	24.857	49.714
2328	M97	X	-0.019	-0.019	49.714	74.571
2329	M97	Y	-0.087	-0.087	49.714	74.571
2330	M97	X	-0.019	-0.019	74.571	99.429
2331	M97	Y	-0.087	-0.087	74.571	99.429
2332	M97	X	-0.019	-0.019	99.429	124.286
2333	M97	Y	-0.087	-0.088	99.429	124.286
2334	M97	X	-0.019	-0.019	124.286	149.143
2335	M97	Y	-0.088	-0.089	124.286	149.143
2336	M97	X	-0.019	-0.02	149.143	174
2337	M97	Y	-0.089	-0.094	149.143	174
2338	M97	X	-0.02	-0.02	174	198.857
2339	M97	Y	-0.094	-0.094	174	198.857
2340	M97	X	-0.02	-0.019	198.857	223.714
2341	M97	Y	-0.094	-0.089	198.857	223.714
2342	M97	X	-0.019	-0.019	223.714	248.571
2343	M97	Y	-0.089	-0.088	223.714	248.571
2344	M97	X	-0.019	-0.019	248.571	273.429
2345	M97	Y	-0.088	-0.087	248.571	273.429
2346	M97	X	-0.019	-0.019	273.429	298.286
2347	M97	Y	-0.087	-0.087	273.429	298.286
2348	M97	X	-0.019	-0.019	298.286	323.143
2349	M97	Y	-0.087	-0.087	298.286	323.143
2350	M97	X	-0.019	-0.019	323.143	348
2351	M97	Y	-0.087	-0.088	323.143	348
2352	M98	X	-0.019	-0.019	4.565e-13	348
2353	M98	Y	-0.088	-0.088	4.565e-13	348
2354	M99	X	-0.019	-0.019	4.539e-13	348
2355	M99	Y	-0.088	-0.088	4.539e-13	348
2356	M100	X	-0.016	-0.018	0	24.857
2357	M100	Y	-0.076	-0.081	0	24.857
2358	M100	X	-0.018	-0.018	24.857	49.714
2359	M100	Y	-0.081	-0.082	24.857	49.714
2360	M100	X	-0.018	-0.017	49.714	74.571
2361	M100	Y	-0.082	-0.081	49.714	74.571
2362	M100	X	-0.017	-0.017	74.571	99.429
2363	M100	Y	-0.081	-0.081	74.571	99.429
2364	M100	X	-0.017	-0.018	99.429	124.286
2365	M100	Y	-0.081	-0.081	99.429	124.286
2366	M100	X	-0.018	-0.018	124.286	149.143
2367	M100	Y	-0.081	-0.083	124.286	149.143
2368	M100	X	-0.018	-0.019	149.143	174
2369	M100	Y	-0.083	-0.088	149.143	174
2370	M100	X	-0.019	-0.019	174	198.857
2371	M100	Y	-0.088	-0.088	174	198.857
2372	M100	X	-0.019	-0.018	198.857	223.714

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2373	M100	Y	-0.088	-0.083	198.857	223.714
2374	M100	X	-0.018	-0.018	223.714	248.571
2375	M100	Y	-0.083	-0.081	223.714	248.571
2376	M100	X	-0.018	-0.017	248.571	273.429
2377	M100	Y	-0.081	-0.081	248.571	273.429
2378	M100	X	-0.017	-0.018	273.429	298.286
2379	M100	Y	-0.081	-0.082	273.429	298.286
2380	M100	X	-0.018	-0.018	298.286	323.143
2381	M100	Y	-0.082	-0.081	298.286	323.143
2382	M100	X	-0.018	-0.016	323.143	348
2383	M100	Y	-0.081	-0.076	323.143	348
2384	M101	X	-0.01	-0.01	0	24.857
2385	M101	Y	-0.049	-0.047	0	24.857
2386	M101	X	-0.01	-0.01	24.857	49.714
2387	M101	Y	-0.047	-0.047	24.857	49.714
2388	M101	X	-0.01	-0.011	49.714	74.571
2389	M101	Y	-0.047	-0.053	49.714	74.571
2390	M101	X	-0.011	-0.012	74.571	99.429
2391	M101	Y	-0.053	-0.057	74.571	99.429
2392	M101	X	-0.012	-0.011	99.429	124.286
2393	M101	Y	-0.057	-0.051	99.429	124.286
2394	M101	X	-0.011	-0.011	124.286	149.143
2395	M101	Y	-0.051	-0.049	124.286	149.143
2396	M101	X	-0.011	-0.01	149.143	174
2397	M101	Y	-0.049	-0.046	149.143	174
2398	M101	X	-0.01	-0.01	174	198.857
2399	M101	Y	-0.046	-0.046	174	198.857
2400	M101	X	-0.01	-0.011	198.857	223.714
2401	M101	Y	-0.046	-0.053	198.857	223.714
2402	M101	X	-0.011	-0.012	223.714	248.571
2403	M101	Y	-0.053	-0.057	223.714	248.571
2404	M101	X	-0.012	-0.012	248.571	273.429
2405	M101	Y	-0.057	-0.053	248.571	273.429
2406	M101	X	-0.012	-0.01	273.429	298.286
2407	M101	Y	-0.053	-0.047	273.429	298.286
2408	M101	X	-0.01	-0.01	298.286	323.143
2409	M101	Y	-0.047	-0.047	298.286	323.143
2410	M101	X	-0.01	-0.01	323.143	348
2411	M101	Y	-0.047	-0.048	323.143	348
2412	M102	X	-0.019	-0.019	0	24.857
2413	M102	Y	-0.086	-0.088	0	24.857
2414	M102	X	-0.019	-0.019	24.857	49.714
2415	M102	Y	-0.088	-0.088	24.857	49.714
2416	M102	X	-0.019	-0.019	49.714	74.571
2417	M102	Y	-0.088	-0.088	49.714	74.571
2418	M102	X	-0.019	-0.019	74.571	99.429
2419	M102	Y	-0.088	-0.087	74.571	99.429
2420	M102	X	-0.019	-0.019	99.429	124.286
2421	M102	Y	-0.087	-0.088	99.429	124.286
2422	M102	X	-0.019	-0.019	124.286	149.143
2423	M102	Y	-0.088	-0.089	124.286	149.143
2424	M102	X	-0.019	-0.02	149.143	174
2425	M102	Y	-0.089	-0.094	149.143	174
2426	M102	X	-0.02	-0.02	174	198.857
2427	M102	Y	-0.094	-0.094	174	198.857

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2428	M102	X	-0.02	-0.019	198.857	223.714
2429	M102	Y	-0.094	-0.089	198.857	223.714
2430	M102	X	-0.019	-0.019	223.714	248.571
2431	M102	Y	-0.089	-0.088	223.714	248.571
2432	M102	X	-0.019	-0.019	248.571	273.429
2433	M102	Y	-0.088	-0.088	248.571	273.429
2434	M102	X	-0.019	-0.019	273.429	298.286
2435	M102	Y	-0.088	-0.088	273.429	298.286
2436	M102	X	-0.019	-0.019	298.286	323.143
2437	M102	Y	-0.088	-0.087	298.286	323.143
2438	M102	X	-0.019	-0.019	323.143	348
2439	M102	Y	-0.087	-0.086	323.143	348
2440	M103	X	-0.019	-0.019	2.38e-13	348
2441	M103	Y	-0.088	-0.088	2.38e-13	348
2442	M104	X	-0.019	-0.019	1.818e-12	348
2443	M104	Y	-0.088	-0.088	1.818e-12	348
2444	M105	X	-0.016	-0.016	0	24.857
2445	M105	Y	-0.075	-0.074	0	24.857
2446	M105	X	-0.016	-0.016	24.857	49.714
2447	M105	Y	-0.074	-0.074	24.857	49.714
2448	M105	X	-0.016	-0.016	49.714	74.571
2449	M105	Y	-0.074	-0.074	49.714	74.571
2450	M105	X	-0.016	-0.016	74.571	99.429
2451	M105	Y	-0.074	-0.074	74.571	99.429
2452	M105	X	-0.016	-0.016	99.429	124.286
2453	M105	Y	-0.074	-0.076	99.429	124.286
2454	M105	X	-0.016	-0.017	124.286	149.143
2455	M105	Y	-0.076	-0.08	124.286	149.143
2456	M105	X	-0.017	-0.017	149.143	174
2457	M105	Y	-0.08	-0.08	149.143	174
2458	M105	X	-0.017	-0.016	174	198.857
2459	M105	Y	-0.08	-0.076	174	198.857
2460	M105	X	-0.016	-0.016	198.857	223.714
2461	M105	Y	-0.076	-0.074	198.857	223.714
2462	M105	X	-0.016	-0.016	223.714	248.571
2463	M105	Y	-0.074	-0.074	223.714	248.571
2464	M105	X	-0.016	-0.016	248.571	273.429
2465	M105	Y	-0.074	-0.074	248.571	273.429
2466	M105	X	-0.016	-0.016	273.429	298.286
2467	M105	Y	-0.074	-0.074	273.429	298.286
2468	M105	X	-0.016	-0.016	298.286	323.143
2469	M105	Y	-0.074	-0.074	298.286	323.143
2470	M105	X	-0.016	-0.016	323.143	348
2471	M105	Y	-0.074	-0.075	323.143	348
2472	M106	X	-0.009	-0.009	0	24.857
2473	M106	Y	-0.04	-0.042	0	24.857
2474	M106	X	-0.009	-0.009	24.857	49.714
2475	M106	Y	-0.042	-0.043	24.857	49.714
2476	M106	X	-0.009	-0.011	49.714	74.571
2477	M106	Y	-0.043	-0.05	49.714	74.571
2478	M106	X	-0.011	-0.011	74.571	99.429
2479	M106	Y	-0.05	-0.05	74.571	99.429
2480	M106	X	-0.011	-0.009	99.429	124.286
2481	M106	Y	-0.05	-0.043	99.429	124.286
2482	M106	X	-0.009	-0.009	124.286	149.143

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2483	M106	Y	-0.043	-0.043	124.286	149.143
2484	M106	X	-0.009	-0.009	149.143	174
2485	M106	Y	-0.043	-0.043	149.143	174
2486	M106	X	-0.009	-0.009	174	198.857
2487	M106	Y	-0.043	-0.042	174	198.857
2488	M106	X	-0.009	-0.009	198.857	223.714
2489	M106	Y	-0.042	-0.043	198.857	223.714
2490	M106	X	-0.009	-0.011	223.714	248.571
2491	M106	Y	-0.043	-0.05	223.714	248.571
2492	M106	X	-0.011	-0.011	248.571	273.429
2493	M106	Y	-0.05	-0.05	248.571	273.429
2494	M106	X	-0.011	-0.009	273.429	298.286
2495	M106	Y	-0.05	-0.043	273.429	298.286
2496	M106	X	-0.009	-0.009	298.286	323.143
2497	M106	Y	-0.043	-0.042	298.286	323.143
2498	M106	X	-0.009	-0.009	323.143	348
2499	M106	Y	-0.042	-0.04	323.143	348
2500	M127	X	-0.009	-0.01	0	24.643
2501	M127	Y	-0.042	-0.044	0	24.643
2502	M127	X	-0.01	-0.01	24.643	49.286
2503	M127	Y	-0.044	-0.045	24.643	49.286
2504	M127	X	-0.01	-0.01	49.286	73.929
2505	M127	Y	-0.045	-0.045	49.286	73.929
2506	M127	X	-0.01	-0.01	73.929	98.571
2507	M127	Y	-0.045	-0.045	73.929	98.571
2508	M127	X	-0.01	-0.01	98.571	123.214
2509	M127	Y	-0.045	-0.045	98.571	123.214
2510	M127	X	-0.01	-0.01	123.214	147.857
2511	M127	Y	-0.045	-0.045	123.214	147.857
2512	M127	X	-0.01	-0.01	147.857	172.5
2513	M127	Y	-0.045	-0.045	147.857	172.5
2514	M127	X	-0.01	-0.01	172.5	197.143
2515	M127	Y	-0.045	-0.045	172.5	197.143
2516	M127	X	-0.01	-0.01	197.143	221.786
2517	M127	Y	-0.045	-0.045	197.143	221.786
2518	M127	X	-0.01	-0.01	221.786	246.429
2519	M127	Y	-0.045	-0.045	221.786	246.429
2520	M127	X	-0.01	-0.01	246.429	271.071
2521	M127	Y	-0.045	-0.045	246.429	271.071
2522	M127	X	-0.01	-0.01	271.071	295.714
2523	M127	Y	-0.045	-0.045	271.071	295.714
2524	M127	X	-0.01	-0.01	295.714	320.357
2525	M127	Y	-0.045	-0.044	295.714	320.357
2526	M127	X	-0.01	-0.009	320.357	345
2527	M127	Y	-0.044	-0.042	320.357	345
2528	M133	X	-0.019	-0.019	0	24.643
2529	M133	Y	-0.088	-0.088	0	24.643
2530	M133	X	-0.019	-0.019	24.643	49.286
2531	M133	Y	-0.088	-0.088	24.643	49.286
2532	M133	X	-0.019	-0.019	49.286	73.929
2533	M133	Y	-0.088	-0.088	49.286	73.929
2534	M133	X	-0.019	-0.019	73.929	98.571
2535	M133	Y	-0.088	-0.088	73.929	98.571
2536	M133	X	-0.019	-0.019	98.571	123.214
2537	M133	Y	-0.088	-0.088	98.571	123.214

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2538	M133	X	-0.019	-0.019	123.214	147.857
2539	M133	Y	-0.088	-0.087	123.214	147.857
2540	M133	X	-0.019	-0.019	147.857	172.5
2541	M133	Y	-0.087	-0.086	147.857	172.5
2542	M133	X	-0.019	-0.019	172.5	197.143
2543	M133	Y	-0.086	-0.087	172.5	197.143
2544	M133	X	-0.019	-0.019	197.143	221.786
2545	M133	Y	-0.087	-0.088	197.143	221.786
2546	M133	X	-0.019	-0.019	221.786	246.429
2547	M133	Y	-0.088	-0.088	221.786	246.429
2548	M133	X	-0.019	-0.019	246.429	271.071
2549	M133	Y	-0.088	-0.088	246.429	271.071
2550	M133	X	-0.019	-0.019	271.071	295.714
2551	M133	Y	-0.088	-0.088	271.071	295.714
2552	M133	X	-0.019	-0.019	295.714	320.357
2553	M133	Y	-0.088	-0.088	295.714	320.357
2554	M133	X	-0.019	-0.019	320.357	345
2555	M133	Y	-0.088	-0.088	320.357	345
2556	M136	X	-0.016	-0.016	0	24.643
2557	M136	Y	-0.075	-0.075	0	24.643
2558	M136	X	-0.016	-0.016	24.643	49.286
2559	M136	Y	-0.075	-0.075	24.643	49.286
2560	M136	X	-0.016	-0.016	49.286	73.929
2561	M136	Y	-0.075	-0.075	49.286	73.929
2562	M136	X	-0.016	-0.016	73.929	98.571
2563	M136	Y	-0.075	-0.075	73.929	98.571
2564	M136	X	-0.016	-0.016	98.571	123.214
2565	M136	Y	-0.075	-0.075	98.571	123.214
2566	M136	X	-0.016	-0.016	123.214	147.857
2567	M136	Y	-0.075	-0.075	123.214	147.857
2568	M136	X	-0.016	-0.016	147.857	172.5
2569	M136	Y	-0.075	-0.075	147.857	172.5
2570	M136	X	-0.016	-0.016	172.5	197.143
2571	M136	Y	-0.075	-0.075	172.5	197.143
2572	M136	X	-0.016	-0.016	197.143	221.786
2573	M136	Y	-0.075	-0.075	197.143	221.786
2574	M136	X	-0.016	-0.016	221.786	246.429
2575	M136	Y	-0.075	-0.075	221.786	246.429
2576	M136	X	-0.016	-0.016	246.429	271.071
2577	M136	Y	-0.075	-0.075	246.429	271.071
2578	M136	X	-0.016	-0.016	271.071	295.714
2579	M136	Y	-0.075	-0.075	271.071	295.714
2580	M136	X	-0.016	-0.016	295.714	320.357
2581	M136	Y	-0.075	-0.075	295.714	320.357
2582	M136	X	-0.016	-0.016	320.357	345
2583	M136	Y	-0.075	-0.075	320.357	345
2584	M137	X	-0.019	-0.019	2.274e-13	345
2585	M137	Y	-0.088	-0.088	2.274e-13	345
2586	M141	X	-0.016	-0.018	0	24.643
2587	M141	Y	-0.076	-0.082	0	24.643
2588	M141	X	-0.018	-0.018	24.643	49.286
2589	M141	Y	-0.082	-0.083	24.643	49.286
2590	M141	X	-0.018	-0.018	49.286	73.929
2591	M141	Y	-0.083	-0.082	49.286	73.929
2592	M141	X	-0.018	-0.018	73.929	98.571

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2593	M141	Y	-0.082	-0.081	73.929	98.571
2594	M141	X	-0.018	-0.018	98.571	123.214
2595	M141	Y	-0.081	-0.081	98.571	123.214
2596	M141	X	-0.018	-0.018	123.214	147.857
2597	M141	Y	-0.081	-0.081	123.214	147.857
2598	M141	X	-0.018	-0.018	147.857	172.5
2599	M141	Y	-0.081	-0.081	147.857	172.5
2600	M141	X	-0.018	-0.018	172.5	197.143
2601	M141	Y	-0.081	-0.081	172.5	197.143
2602	M141	X	-0.018	-0.018	197.143	221.786
2603	M141	Y	-0.081	-0.081	197.143	221.786
2604	M141	X	-0.018	-0.018	221.786	246.429
2605	M141	Y	-0.081	-0.081	221.786	246.429
2606	M141	X	-0.018	-0.018	246.429	271.071
2607	M141	Y	-0.081	-0.082	246.429	271.071
2608	M141	X	-0.018	-0.018	271.071	295.714
2609	M141	Y	-0.082	-0.083	271.071	295.714
2610	M141	X	-0.018	-0.018	295.714	320.357
2611	M141	Y	-0.083	-0.082	295.714	320.357
2612	M141	X	-0.018	-0.017	320.357	345
2613	M141	Y	-0.082	-0.076	320.357	345
2614	M142	X	-0.019	-0.019	0	24.643
2615	M142	Y	-0.087	-0.088	0	24.643
2616	M142	X	-0.019	-0.019	24.643	49.286
2617	M142	Y	-0.088	-0.088	24.643	49.286
2618	M142	X	-0.019	-0.019	49.286	73.929
2619	M142	Y	-0.088	-0.088	49.286	73.929
2620	M142	X	-0.019	-0.019	73.929	98.571
2621	M142	Y	-0.088	-0.088	73.929	98.571
2622	M142	X	-0.019	-0.019	98.571	123.214
2623	M142	Y	-0.088	-0.088	98.571	123.214
2624	M142	X	-0.019	-0.019	123.214	147.857
2625	M142	Y	-0.088	-0.088	123.214	147.857
2626	M142	X	-0.019	-0.019	147.857	172.5
2627	M142	Y	-0.088	-0.088	147.857	172.5
2628	M142	X	-0.019	-0.019	172.5	197.143
2629	M142	Y	-0.088	-0.088	172.5	197.143
2630	M142	X	-0.019	-0.019	197.143	221.786
2631	M142	Y	-0.088	-0.088	197.143	221.786
2632	M142	X	-0.019	-0.019	221.786	246.429
2633	M142	Y	-0.088	-0.088	221.786	246.429
2634	M142	X	-0.019	-0.019	246.429	271.071
2635	M142	Y	-0.088	-0.088	246.429	271.071
2636	M142	X	-0.019	-0.019	271.071	295.714
2637	M142	Y	-0.088	-0.088	271.071	295.714
2638	M142	X	-0.019	-0.019	295.714	320.357
2639	M142	Y	-0.088	-0.088	295.714	320.357
2640	M142	X	-0.019	-0.019	320.357	345
2641	M142	Y	-0.088	-0.087	320.357	345
2642	M143	X	-0.016	-0.016	0	24.643
2643	M143	Y	-0.074	-0.073	0	24.643
2644	M143	X	-0.016	-0.016	24.643	49.286
2645	M143	Y	-0.073	-0.073	24.643	49.286
2646	M143	X	-0.016	-0.016	49.286	73.929
2647	M143	Y	-0.073	-0.073	49.286	73.929

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2648	M143	X	-0.016	-0.016	73.929	98.571
2649	M143	Y	-0.073	-0.073	73.929	98.571
2650	M143	X	-0.016	-0.016	98.571	123.214
2651	M143	Y	-0.073	-0.073	98.571	123.214
2652	M143	X	-0.016	-0.016	123.214	147.857
2653	M143	Y	-0.073	-0.073	123.214	147.857
2654	M143	X	-0.016	-0.016	147.857	172.5
2655	M143	Y	-0.073	-0.073	147.857	172.5
2656	M143	X	-0.016	-0.016	172.5	197.143
2657	M143	Y	-0.073	-0.073	172.5	197.143
2658	M143	X	-0.016	-0.016	197.143	221.786
2659	M143	Y	-0.073	-0.073	197.143	221.786
2660	M143	X	-0.016	-0.016	221.786	246.429
2661	M143	Y	-0.073	-0.073	221.786	246.429
2662	M143	X	-0.016	-0.016	246.429	271.071
2663	M143	Y	-0.073	-0.073	246.429	271.071
2664	M143	X	-0.016	-0.016	271.071	295.714
2665	M143	Y	-0.073	-0.073	271.071	295.714
2666	M143	X	-0.016	-0.016	295.714	320.357
2667	M143	Y	-0.073	-0.073	295.714	320.357
2668	M143	X	-0.016	-0.016	320.357	345
2669	M143	Y	-0.073	-0.074	320.357	345
2670	M144	X	-0.012	-0.012	0	24.643
2671	M144	Y	-0.056	-0.058	0	24.643
2672	M144	X	-0.012	-0.013	24.643	49.286
2673	M144	Y	-0.058	-0.059	24.643	49.286
2674	M144	X	-0.013	-0.013	49.286	73.929
2675	M144	Y	-0.059	-0.059	49.286	73.929
2676	M144	X	-0.013	-0.013	73.929	98.571
2677	M144	Y	-0.059	-0.059	73.929	98.571
2678	M144	X	-0.013	-0.012	98.571	123.214
2679	M144	Y	-0.059	-0.057	98.571	123.214
2680	M144	X	-0.012	-0.013	123.214	147.857
2681	M144	Y	-0.057	-0.06	123.214	147.857
2682	M144	X	-0.013	-0.014	147.857	172.5
2683	M144	Y	-0.06	-0.065	147.857	172.5
2684	M144	X	-0.014	-0.013	172.5	197.143
2685	M144	Y	-0.065	-0.06	172.5	197.143
2686	M144	X	-0.013	-0.012	197.143	221.786
2687	M144	Y	-0.06	-0.057	197.143	221.786
2688	M144	X	-0.012	-0.013	221.786	246.429
2689	M144	Y	-0.057	-0.058	221.786	246.429
2690	M144	X	-0.013	-0.013	246.429	271.071
2691	M144	Y	-0.058	-0.059	246.429	271.071
2692	M144	X	-0.013	-0.013	271.071	295.714
2693	M144	Y	-0.059	-0.059	271.071	295.714
2694	M144	X	-0.013	-0.012	295.714	320.357
2695	M144	Y	-0.059	-0.058	295.714	320.357
2696	M144	X	-0.012	-0.012	320.357	345
2697	M144	Y	-0.058	-0.056	320.357	345
2698	M145	X	-0.019	-0.019	5.684e-13	345
2699	M145	Y	-0.088	-0.088	5.684e-13	345
2700	M146	X	-0.01	-0.01	0	24.643
2701	M146	Y	-0.045	-0.048	0	24.643
2702	M146	X	-0.01	-0.012	24.643	49.286

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2703	M146	Y	-0.048	-0.053	24.643	49.286
2704	M146	X	-0.012	-0.012	49.286	73.929
2705	M146	Y	-0.053	-0.055	49.286	73.929
2706	M146	X	-0.012	-0.011	73.929	98.571
2707	M146	Y	-0.055	-0.051	73.929	98.571
2708	M146	X	-0.011	-0.011	98.571	123.214
2709	M146	Y	-0.051	-0.051	98.571	123.214
2710	M146	X	-0.011	-0.011	123.214	147.857
2711	M146	Y	-0.051	-0.051	123.214	147.857
2712	M146	X	-0.011	-0.011	147.857	172.5
2713	M146	Y	-0.051	-0.051	147.857	172.5
2714	M146	X	-0.011	-0.011	172.5	197.143
2715	M146	Y	-0.051	-0.051	172.5	197.143
2716	M146	X	-0.011	-0.011	197.143	221.786
2717	M146	Y	-0.051	-0.051	197.143	221.786
2718	M146	X	-0.011	-0.011	221.786	246.429
2719	M146	Y	-0.051	-0.051	221.786	246.429
2720	M146	X	-0.011	-0.012	246.429	271.071
2721	M146	Y	-0.051	-0.055	246.429	271.071
2722	M146	X	-0.012	-0.012	271.071	295.714
2723	M146	Y	-0.055	-0.053	271.071	295.714
2724	M146	X	-0.012	-0.01	295.714	320.357
2725	M146	Y	-0.053	-0.048	295.714	320.357
2726	M146	X	-0.01	-0.01	320.357	345
2727	M146	Y	-0.048	-0.045	320.357	345
2728	M147	X	-0.019	-0.019	2.141e-12	345
2729	M147	Y	-0.088	-0.088	2.141e-12	345
2730	M148	X	-0.019	-0.019	7.878e-13	345
2731	M148	Y	-0.088	-0.088	7.878e-13	345
2732	M159	X	-0.019	-0.019	0	24.643
2733	M159	Y	-0.087	-0.088	0	24.643
2734	M159	X	-0.019	-0.019	24.643	49.286
2735	M159	Y	-0.088	-0.088	24.643	49.286
2736	M159	X	-0.019	-0.019	49.286	73.929
2737	M159	Y	-0.088	-0.088	49.286	73.929
2738	M159	X	-0.019	-0.019	73.929	98.571
2739	M159	Y	-0.088	-0.088	73.929	98.571
2740	M159	X	-0.019	-0.019	98.571	123.214
2741	M159	Y	-0.088	-0.088	98.571	123.214
2742	M159	X	-0.019	-0.019	123.214	147.857
2743	M159	Y	-0.088	-0.088	123.214	147.857
2744	M159	X	-0.019	-0.019	147.857	172.5
2745	M159	Y	-0.088	-0.088	147.857	172.5
2746	M159	X	-0.019	-0.019	172.5	197.143
2747	M159	Y	-0.088	-0.088	172.5	197.143
2748	M159	X	-0.019	-0.019	197.143	221.786
2749	M159	Y	-0.088	-0.088	197.143	221.786
2750	M159	X	-0.019	-0.019	221.786	246.429
2751	M159	Y	-0.088	-0.088	221.786	246.429
2752	M159	X	-0.019	-0.019	246.429	271.071
2753	M159	Y	-0.088	-0.088	246.429	271.071
2754	M159	X	-0.019	-0.019	271.071	295.714
2755	M159	Y	-0.088	-0.088	271.071	295.714
2756	M159	X	-0.019	-0.019	295.714	320.357
2757	M159	Y	-0.088	-0.088	295.714	320.357

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2758	M159	X	-0.019	-0.019	320.357	345
2759	M159	Y	-0.088	-0.087	320.357	345
2760	M162	X	-0.019	-0.018	0	24.643
2761	M162	Y	-0.088	-0.083	0	24.643
2762	M162	X	-0.018	-0.018	24.643	49.286
2763	M162	Y	-0.083	-0.084	24.643	49.286
2764	M162	X	-0.018	-0.019	49.286	73.929
2765	M162	Y	-0.084	-0.087	49.286	73.929
2766	M162	X	-0.019	-0.019	73.929	98.571
2767	M162	Y	-0.087	-0.088	73.929	98.571
2768	M162	X	-0.019	-0.019	98.571	123.214
2769	M162	Y	-0.088	-0.088	98.571	123.214
2770	M162	X	-0.019	-0.019	123.214	147.857
2771	M162	Y	-0.088	-0.088	123.214	147.857
2772	M162	X	-0.019	-0.019	147.857	172.5
2773	M162	Y	-0.088	-0.088	147.857	172.5
2774	M162	X	-0.019	-0.019	172.5	197.143
2775	M162	Y	-0.088	-0.088	172.5	197.143
2776	M162	X	-0.019	-0.019	197.143	221.786
2777	M162	Y	-0.088	-0.088	197.143	221.786
2778	M162	X	-0.019	-0.019	221.786	246.429
2779	M162	Y	-0.088	-0.088	221.786	246.429
2780	M162	X	-0.019	-0.019	246.429	271.071
2781	M162	Y	-0.088	-0.087	246.429	271.071
2782	M162	X	-0.019	-0.018	271.071	295.714
2783	M162	Y	-0.087	-0.084	271.071	295.714
2784	M162	X	-0.018	-0.018	295.714	320.357
2785	M162	Y	-0.084	-0.083	295.714	320.357
2786	M162	X	-0.018	-0.019	320.357	345
2787	M162	Y	-0.083	-0.088	320.357	345
2788	M164	X	-0.019	-0.019	0	24.643
2789	M164	Y	-0.088	-0.088	0	24.643
2790	M164	X	-0.019	-0.019	24.643	49.286
2791	M164	Y	-0.088	-0.088	24.643	49.286
2792	M164	X	-0.019	-0.019	49.286	73.929
2793	M164	Y	-0.088	-0.088	49.286	73.929
2794	M164	X	-0.019	-0.019	73.929	98.571
2795	M164	Y	-0.088	-0.088	73.929	98.571
2796	M164	X	-0.019	-0.019	98.571	123.214
2797	M164	Y	-0.088	-0.088	98.571	123.214
2798	M164	X	-0.019	-0.019	123.214	147.857
2799	M164	Y	-0.088	-0.087	123.214	147.857
2800	M164	X	-0.019	-0.019	147.857	172.5
2801	M164	Y	-0.087	-0.086	147.857	172.5
2802	M164	X	-0.019	-0.019	172.5	197.143
2803	M164	Y	-0.086	-0.087	172.5	197.143
2804	M164	X	-0.019	-0.019	197.143	221.786
2805	M164	Y	-0.087	-0.088	197.143	221.786
2806	M164	X	-0.019	-0.019	221.786	246.429
2807	M164	Y	-0.088	-0.088	221.786	246.429
2808	M164	X	-0.019	-0.019	246.429	271.071
2809	M164	Y	-0.088	-0.088	246.429	271.071
2810	M164	X	-0.019	-0.019	271.071	295.714
2811	M164	Y	-0.088	-0.088	271.071	295.714
2812	M164	X	-0.019	-0.019	295.714	320.357

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2813	M164	Y	-0.088	-0.088	295.714	320.357
2814	M164	X	-0.019	-0.019	320.357	345
2815	M164	Y	-0.088	-0.088	320.357	345
2816	M165	X	-0.018	-0.019	0	24.643
2817	M165	Y	-0.084	-0.086	0	24.643
2818	M165	X	-0.019	-0.019	24.643	49.286
2819	M165	Y	-0.086	-0.088	24.643	49.286
2820	M165	X	-0.019	-0.019	49.286	73.929
2821	M165	Y	-0.088	-0.088	49.286	73.929
2822	M165	X	-0.019	-0.019	73.929	98.571
2823	M165	Y	-0.088	-0.087	73.929	98.571
2824	M165	X	-0.019	-0.018	98.571	123.214
2825	M165	Y	-0.087	-0.084	98.571	123.214
2826	M165	X	-0.018	-0.02	123.214	147.857
2827	M165	Y	-0.084	-0.091	123.214	147.857
2828	M165	X	-0.02	-0.022	147.857	172.5
2829	M165	Y	-0.091	-0.101	147.857	172.5
2830	M165	X	-0.022	-0.02	172.5	197.143
2831	M165	Y	-0.101	-0.091	172.5	197.143
2832	M165	X	-0.02	-0.018	197.143	221.786
2833	M165	Y	-0.091	-0.084	197.143	221.786
2834	M165	X	-0.018	-0.019	221.786	246.429
2835	M165	Y	-0.084	-0.087	221.786	246.429
2836	M165	X	-0.019	-0.019	246.429	271.071
2837	M165	Y	-0.087	-0.088	246.429	271.071
2838	M165	X	-0.019	-0.019	271.071	295.714
2839	M165	Y	-0.088	-0.088	271.071	295.714
2840	M165	X	-0.019	-0.019	295.714	320.357
2841	M165	Y	-0.088	-0.086	295.714	320.357
2842	M165	X	-0.019	-0.018	320.357	345
2843	M165	Y	-0.086	-0.084	320.357	345
2844	M166	X	-0.019	-0.019	0	24.643
2845	M166	Y	-0.088	-0.088	0	24.643
2846	M166	X	-0.019	-0.019	24.643	49.286
2847	M166	Y	-0.088	-0.088	24.643	49.286
2848	M166	X	-0.019	-0.019	49.286	73.929
2849	M166	Y	-0.088	-0.088	49.286	73.929
2850	M166	X	-0.019	-0.019	73.929	98.571
2851	M166	Y	-0.088	-0.088	73.929	98.571
2852	M166	X	-0.019	-0.019	98.571	123.214
2853	M166	Y	-0.088	-0.088	98.571	123.214
2854	M166	X	-0.019	-0.019	123.214	147.857
2855	M166	Y	-0.088	-0.087	123.214	147.857
2856	M166	X	-0.019	-0.019	147.857	172.5
2857	M166	Y	-0.087	-0.086	147.857	172.5
2858	M166	X	-0.019	-0.019	172.5	197.143
2859	M166	Y	-0.086	-0.087	172.5	197.143
2860	M166	X	-0.019	-0.019	197.143	221.786
2861	M166	Y	-0.087	-0.088	197.143	221.786
2862	M166	X	-0.019	-0.019	221.786	246.429
2863	M166	Y	-0.088	-0.088	221.786	246.429
2864	M166	X	-0.019	-0.019	246.429	271.071
2865	M166	Y	-0.088	-0.088	246.429	271.071
2866	M166	X	-0.019	-0.019	271.071	295.714
2867	M166	Y	-0.088	-0.088	271.071	295.714

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2868	M166	X	-0.019	-0.019	295.714	320.357
2869	M166	Y	-0.088	-0.088	295.714	320.357
2870	M166	X	-0.019	-0.019	320.357	345
2871	M166	Y	-0.088	-0.088	320.357	345
2872	M167	X	-0.019	-0.019	4.059e-13	345
2873	M167	Y	-0.088	-0.088	4.059e-13	345
2874	M168	X	-0.019	-0.019	3.935e-13	345
2875	M168	Y	-0.088	-0.088	3.935e-13	345
2876	M169	X	-0.019	-0.019	0	24.643
2877	M169	Y	-0.088	-0.087	0	24.643
2878	M169	X	-0.019	-0.02	24.643	49.286
2879	M169	Y	-0.087	-0.093	24.643	49.286
2880	M169	X	-0.02	-0.02	49.286	73.929
2881	M169	Y	-0.093	-0.095	49.286	73.929
2882	M169	X	-0.02	-0.019	73.929	98.571
2883	M169	Y	-0.095	-0.089	73.929	98.571
2884	M169	X	-0.019	-0.019	98.571	123.214
2885	M169	Y	-0.089	-0.088	98.571	123.214
2886	M169	X	-0.019	-0.019	123.214	147.857
2887	M169	Y	-0.088	-0.088	123.214	147.857
2888	M169	X	-0.019	-0.019	147.857	172.5
2889	M169	Y	-0.088	-0.088	147.857	172.5
2890	M169	X	-0.019	-0.019	172.5	197.143
2891	M169	Y	-0.088	-0.088	172.5	197.143
2892	M169	X	-0.019	-0.019	197.143	221.786
2893	M169	Y	-0.088	-0.088	197.143	221.786
2894	M169	X	-0.019	-0.019	221.786	246.429
2895	M169	Y	-0.088	-0.089	221.786	246.429
2896	M169	X	-0.019	-0.02	246.429	271.071
2897	M169	Y	-0.089	-0.095	246.429	271.071
2898	M169	X	-0.02	-0.02	271.071	295.714
2899	M169	Y	-0.095	-0.093	271.071	295.714
2900	M169	X	-0.02	-0.019	295.714	320.357
2901	M169	Y	-0.093	-0.087	295.714	320.357
2902	M169	X	-0.019	-0.019	320.357	345
2903	M169	Y	-0.087	-0.089	320.357	345
2904	M170	X	-0.019	-0.019	1.139e-12	345
2905	M170	Y	-0.088	-0.088	1.139e-12	345
2906	M171	X	-0.019	-0.019	1.166e-12	345
2907	M171	Y	-0.088	-0.088	1.166e-12	345
2908	M172	X	-0.009	-0.01	0	24.643
2909	M172	Y	-0.042	-0.044	0	24.643
2910	M172	X	-0.01	-0.01	24.643	49.286
2911	M172	Y	-0.044	-0.045	24.643	49.286
2912	M172	X	-0.01	-0.01	49.286	73.929
2913	M172	Y	-0.045	-0.045	49.286	73.929
2914	M172	X	-0.01	-0.01	73.929	98.571
2915	M172	Y	-0.045	-0.045	73.929	98.571
2916	M172	X	-0.01	-0.01	98.571	123.214
2917	M172	Y	-0.045	-0.045	98.571	123.214
2918	M172	X	-0.01	-0.01	123.214	147.857
2919	M172	Y	-0.045	-0.045	123.214	147.857
2920	M172	X	-0.01	-0.01	147.857	172.5
2921	M172	Y	-0.045	-0.045	147.857	172.5
2922	M172	X	-0.01	-0.01	172.5	197.143

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2923	M172	Y	-0.045	-0.045	172.5	197.143
2924	M172	X	-0.01	-0.01	197.143	221.786
2925	M172	Y	-0.045	-0.045	197.143	221.786
2926	M172	X	-0.01	-0.01	221.786	246.429
2927	M172	Y	-0.045	-0.045	221.786	246.429
2928	M172	X	-0.01	-0.01	246.429	271.071
2929	M172	Y	-0.045	-0.045	246.429	271.071
2930	M172	X	-0.01	-0.01	271.071	295.714
2931	M172	Y	-0.045	-0.045	271.071	295.714
2932	M172	X	-0.01	-0.01	295.714	320.357
2933	M172	Y	-0.045	-0.044	295.714	320.357
2934	M172	X	-0.01	-0.009	320.357	345
2935	M172	Y	-0.044	-0.042	320.357	345
2936	M173	X	-0.016	-0.016	0	24.643
2937	M173	Y	-0.075	-0.075	0	24.643
2938	M173	X	-0.016	-0.016	24.643	49.286
2939	M173	Y	-0.075	-0.075	24.643	49.286
2940	M173	X	-0.016	-0.016	49.286	73.929
2941	M173	Y	-0.075	-0.075	49.286	73.929
2942	M173	X	-0.016	-0.016	73.929	98.571
2943	M173	Y	-0.075	-0.075	73.929	98.571
2944	M173	X	-0.016	-0.016	98.571	123.214
2945	M173	Y	-0.075	-0.075	98.571	123.214
2946	M173	X	-0.016	-0.016	123.214	147.857
2947	M173	Y	-0.075	-0.075	123.214	147.857
2948	M173	X	-0.016	-0.016	147.857	172.5
2949	M173	Y	-0.075	-0.075	147.857	172.5
2950	M173	X	-0.016	-0.016	172.5	197.143
2951	M173	Y	-0.075	-0.075	172.5	197.143
2952	M173	X	-0.016	-0.016	197.143	221.786
2953	M173	Y	-0.075	-0.075	197.143	221.786
2954	M173	X	-0.016	-0.016	221.786	246.429
2955	M173	Y	-0.075	-0.075	221.786	246.429
2956	M173	X	-0.016	-0.016	246.429	271.071
2957	M173	Y	-0.075	-0.075	246.429	271.071
2958	M173	X	-0.016	-0.016	271.071	295.714
2959	M173	Y	-0.075	-0.075	271.071	295.714
2960	M173	X	-0.016	-0.016	295.714	320.357
2961	M173	Y	-0.075	-0.075	295.714	320.357
2962	M173	X	-0.016	-0.016	320.357	345
2963	M173	Y	-0.075	-0.075	320.357	345
2964	M183	X	-0.019	-0.02	0	24.643
2965	M183	Y	-0.09	-0.093	0	24.643
2966	M183	X	-0.02	-0.02	24.643	49.286
2967	M183	Y	-0.093	-0.091	24.643	49.286
2968	M183	X	-0.02	-0.019	49.286	73.929
2969	M183	Y	-0.091	-0.088	49.286	73.929
2970	M183	X	-0.019	-0.019	73.929	98.571
2971	M183	Y	-0.088	-0.088	73.929	98.571
2972	M183	X	-0.019	-0.019	98.571	123.214
2973	M183	Y	-0.088	-0.088	98.571	123.214
2974	M183	X	-0.019	-0.019	123.214	147.857
2975	M183	Y	-0.088	-0.088	123.214	147.857
2976	M183	X	-0.019	-0.019	147.857	172.5
2977	M183	Y	-0.088	-0.088	147.857	172.5

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
2978	M183	X	-0.019	-0.019	172.5	197.143
2979	M183	Y	-0.088	-0.088	172.5	197.143
2980	M183	X	-0.019	-0.019	197.143	221.786
2981	M183	Y	-0.088	-0.088	197.143	221.786
2982	M183	X	-0.019	-0.019	221.786	246.429
2983	M183	Y	-0.088	-0.088	221.786	246.429
2984	M183	X	-0.019	-0.019	246.429	271.071
2985	M183	Y	-0.088	-0.088	246.429	271.071
2986	M183	X	-0.019	-0.019	271.071	295.714
2987	M183	Y	-0.088	-0.089	271.071	295.714
2988	M183	X	-0.019	-0.019	295.714	320.357
2989	M183	Y	-0.089	-0.089	295.714	320.357
2990	M183	X	-0.019	-0.019	320.357	345
2991	M183	Y	-0.089	-0.087	320.357	345
2992	M186	X	-0.013	-0.018	0	24.643
2993	M186	Y	-0.061	-0.083	0	24.643
2994	M186	X	-0.018	-0.02	24.643	49.286
2995	M186	Y	-0.083	-0.092	24.643	49.286
2996	M186	X	-0.02	-0.018	49.286	73.929
2997	M186	Y	-0.092	-0.082	49.286	73.929
2998	M186	X	-0.018	-0.017	73.929	98.571
2999	M186	Y	-0.082	-0.079	73.929	98.571
3000	M186	X	-0.017	-0.018	98.571	123.214
3001	M186	Y	-0.079	-0.082	98.571	123.214
3002	M186	X	-0.018	-0.016	123.214	147.857
3003	M186	Y	-0.082	-0.075	123.214	147.857
3004	M186	X	-0.016	-0.016	147.857	172.5
3005	M186	Y	-0.075	-0.075	147.857	172.5
3006	M186	X	-0.016	-0.018	172.5	197.143
3007	M186	Y	-0.075	-0.082	172.5	197.143
3008	M186	X	-0.018	-0.02	197.143	221.786
3009	M186	Y	-0.082	-0.093	197.143	221.786
3010	M186	X	-0.02	-0.02	221.786	246.429
3011	M186	Y	-0.093	-0.09	221.786	246.429
3012	M186	X	-0.02	-0.017	246.429	271.071
3013	M186	Y	-0.09	-0.078	246.429	271.071
3014	M186	X	-0.017	-0.017	271.071	295.714
3015	M186	Y	-0.078	-0.08	271.071	295.714
3016	M186	X	-0.017	-0.017	295.714	320.357
3017	M186	Y	-0.08	-0.078	295.714	320.357
3018	M186	X	-0.017	-0.016	320.357	345
3019	M186	Y	-0.078	-0.073	320.357	345
3020	M188	X	-0.016	-0.016	0	24.643
3021	M188	Y	-0.074	-0.073	0	24.643
3022	M188	X	-0.016	-0.016	24.643	49.286
3023	M188	Y	-0.073	-0.073	24.643	49.286
3024	M188	X	-0.016	-0.016	49.286	73.929
3025	M188	Y	-0.073	-0.073	49.286	73.929
3026	M188	X	-0.016	-0.016	73.929	98.571
3027	M188	Y	-0.073	-0.073	73.929	98.571
3028	M188	X	-0.016	-0.016	98.571	123.214
3029	M188	Y	-0.073	-0.073	98.571	123.214
3030	M188	X	-0.016	-0.016	123.214	147.857
3031	M188	Y	-0.073	-0.073	123.214	147.857
3032	M188	X	-0.016	-0.016	147.857	172.5

Member Distributed Loads (BLC 12 : BLC 7 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/in]	End Magnitude [k/ft, F, ksf, k-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
3033	M188	Y	-0.073	-0.073	147.857	172.5
3034	M188	X	-0.016	-0.016	172.5	197.143
3035	M188	Y	-0.073	-0.073	172.5	197.143
3036	M188	X	-0.016	-0.016	197.143	221.786
3037	M188	Y	-0.073	-0.073	197.143	221.786
3038	M188	X	-0.016	-0.016	221.786	246.429
3039	M188	Y	-0.073	-0.073	221.786	246.429
3040	M188	X	-0.016	-0.016	246.429	271.071
3041	M188	Y	-0.073	-0.073	246.429	271.071
3042	M188	X	-0.016	-0.016	271.071	295.714
3043	M188	Y	-0.073	-0.073	271.071	295.714
3044	M188	X	-0.016	-0.016	295.714	320.357
3045	M188	Y	-0.073	-0.073	295.714	320.357
3046	M188	X	-0.016	-0.016	320.357	345
3047	M188	Y	-0.073	-0.074	320.357	345
3048	M189	X	-0.012	-0.012	0	24.643
3049	M189	Y	-0.056	-0.058	0	24.643

Member Area Loads (BLC 1 : DL)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N88	N98	N139	N92	Y	A-B	-0.011
2	N79	N139	N98	N89	Y	A-B	-0.011

Member Area Loads (BLC 4 : WLX)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N88	N98	N139	N92	Perp	A-B	0.017
2	N79	N139	N98	N89	Perp	A-B	-0.005
3	N87	N88	N92	N71	X	Open Structure	-0.018

Member Area Loads (BLC 5 : WLZ)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N71	N92	N79	N81	Z	Open Structure	0.018
2	N92	N139	N79		Z	Open Structure	0.018
3	N214	N245	N139	N92	Z	A-B	0.012
4	N79	N139	N245	N192	Z	A-B	0.012
5	N192	N245	N244	N232	Z	A-B	0.009
6	N214	N245	N244	N233	Z	A-B	0.009
7	N233	N244	N98	N88	Z	A-B	0.004
8	N232	N244	N98	N89	Z	A-B	0.004

Member Area Loads (BLC 6 : RLL)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N88	N98	N139	N92	Y	A-B	-0.012
2	N79	N139	N98	N89	Y	A-B	-0.012

Member Area Loads (BLC 7 : OL1)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	N88	N98	N139	N92	Perp	A-B	0.018
2	N79	N139	N98	N89	Perp	A-B	0.018

Member Area Loads (BLC 7 : OL1) (Continued)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
3	N87	N88	N92	N71	X	Open Structure	-0.018

Basic Load Cases

	BLC Description	Category	Y Gravity	Distributed	Area(Member)
1	DL	DL	-1		2
2	ELX	ELX		159	
3	ELZ	ELZ		159	
4	WLX	WLX			3
5	WLZ	WLZ			8
6	RLL	RLL			2
7	OL1	OL1			3
8	BLC 1 Transient Area Loads	None		1516	
9	BLC 4 Transient Area Loads	None		3049	
10	BLC 5 Transient Area Loads	None		1606	
11	BLC 6 Transient Area Loads	None		1516	
12	BLC 7 Transient Area Loads	None		3049	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	LRFD Gravity										
2	IBC 16-1	Yes	Y	DL	1.4						
3	IBC 16-2 (a)	Yes	Y	DL	1.2	LL	1.6	RLL	0.5		
4	IBC 16-2 (b)	Yes	Y	DL	1.2	LL	1.6				
5	IBC 16-3 (a)	Yes	Y	DL	1.2	RLL	1.6	LL	0.5		
6	IBC 16-3 (b)	Yes	Y	DL	1.2	LL	0.5				
7	LRFD Seismic										
8	IBC 16-5 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	1	LL	0.5
9	IBC 16-5 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	1	LL	0.5
10	IBC 16-5 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELX	-1	LL	0.5
11	IBC 16-5 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	Rho*ELZ	-1	LL	0.5
12	IBC 16-7 (a)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELX	1		
13	IBC 16-7 (b)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELZ	1		
14	IBC 16-7 (c)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELX	-1		
15	IBC 16-7 (d)	Yes	Y	DL	0.45	Sds*DL	-0.2	Rho*ELZ	-1		
16	LRFD Wind										
17	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	WLX	0.5		
18	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	WLZ	0.5		
19	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	WLX	-0.5		
20	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	WLZ	-0.5		
21	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	WLX	0.5				
22	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	WLZ	0.5				
23	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	WLX	-0.5				
24	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	WLZ	-0.5				
25	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	RLL	0.5
26	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	RLL	0.5
27	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	RLL	0.5
28	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	RLL	0.5
29	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5		
30	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	1	LL	0.5		
31	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	WLX	-1	LL	0.5		
32	IBC 16-4 (b) (b)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5		
33	IBC 16-6 (a)	Yes	Y	DL	0.45	WLX	1				
34	IBC 16-6 (b)	Yes	Y	DL	0.45	WLZ	-1				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
35	ASD										
36	Deflection 1	Yes	Y	DL	1						
37	Deflection 2	Yes	Y	LL	1						
38	Deflection 3	Yes	Y	DL	1	LL	1				
39	IBC 16-10 (a)	Yes	Y	DL	1	RLL	1				
40	IBC 16-11 (a)	Yes	Y	DL	1	LL	0.75	RLL	0.75		
41	IBC 16-12 (a) (a)	Yes	Y	DL	1	WLX	0.6				
42	IBC 16-12 (a) (b)	Yes	Y	DL	1	WLZ	0.6				
43	IBC 16-12 (a) (a)	Yes	Y	DL	1	WLX	-0.6				
44	IBC 16-12 (a) (b)	Yes	Y	DL	1	WLZ	-0.6				
45	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75	RLL	0.75
46	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	0.45	LL	0.75	RLL	0.75
47	IBC 16-13 (a) (a)	Yes	Y	DL	1	WLX	-0.45	LL	0.75	RLL	0.75
48	IBC 16-13 (a) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75	RLL	0.75
49	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	0.45	LL	0.75		
50	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	0.45	LL	0.75		
51	IBC 16-13 (b) (a)	Yes	Y	DL	1	WLX	-0.45	LL	0.75		
52	IBC 16-13 (b) (b)	Yes	Y	DL	1	WLZ	-0.45	LL	0.75		
53	IBC 16-15 (a)	Yes	Y	DL	0.3	WLX	0.6				
54	IBC 16-15 (b)	Yes	Y	DL	0.3	WLZ	0.6				
55	IBC 16-15 (a)	Yes	Y	DL	0.3	WLX	-0.6				
56	IBC 16-15 (b)	Yes	Y	DL	0.3	WLZ	-0.6				
57	IBC 16-14 (a)	Yes	Y	DL	1	ELX	0.525	LL	0.75		
58	IBC 16-14 (b)	Yes	Y	DL	1	ELZ	-0.525	LL	0.75		
59	IBC 16-16 (a)	Yes	Y	DL	0.3	ELX	0.7				
60	IBC 16-16 (b)	Yes	Y	DL	0.3	ELZ	-0.7				
61											
62											
63	LRFD Wind										
64	IBC 16-3 (b) (a)	Yes	Y	DL	1.2	RLL	1.6	OL1	0.5		
65	IBC 16-3 (b) (b)	Yes	Y	DL	1.2	RLL	1.6	OL1	-0.5		
66	IBC 16-3 (d) (a)	Yes	Y	DL	1.2	OL1	0.5				
67	IBC 16-3 (d) (b)	Yes	Y	DL	1.2	OL1	-0.5				
68	IBC 16-4 (a) (a)	Yes	Y	DL	1.2	OL1	1	LL	0.5	RLL	0.5
69	IBC 16-4 (a) (b)	Yes	Y	DL	1.2	OL1	-1	LL	0.5	RLL	0.5
70	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL1	1	LL	0.5		
71	IBC 16-4 (b) (a)	Yes	Y	DL	1.2	OL1	-1	LL	0.5		
72	IBC 16-6 (a)	Yes	Y	DL	0.45	OL1	1				
73	IBC 16-6 (b)	Yes	Y	DL	0.45	OL1	-1				
74	ASD										
75	IBC 16-12 (a) (a)	Yes	Y	DL	1	OL1	0.6				
76	IBC 16-12 (a) (a)	Yes	Y	DL	1	OL1	-0.6				
77	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL1	0.45	LL	0.75	RLL	0.75
78	IBC 16-13 (a) (a)	Yes	Y	DL	1	OL1	-0.45	LL	0.75	RLL	0.75
79	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL1	0.45	LL	0.75		
80	IBC 16-13 (b) (a)	Yes	Y	DL	1	OL1	-0.45	LL	0.75		
81	IBC 16-15 (a)	Yes	Y	DL	0.3	OL1	0.6				
82	IBC 16-15 (a)	Yes	Y	DL	0.3	OL1	-0.6				
83											
84	DL		Y	DL	1						
85	RLL		Y	RLL	1						
86	WLX		Y	WLX	1						
87	WLZ		Y	WLZ	1						
88	OL1		Y	OL1	1						
89	ELX		Y	ELX	1						

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
90	ELZ		Y	ELZ	1						

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	LRFD Gravity			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	IBC 16-1			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	IBC 16-2 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	IBC 16-2 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	IBC 16-3 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	IBC 16-3 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	LRFD Seismic			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	IBC 16-5 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	IBC 16-5 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	IBC 16-5 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	IBC 16-5 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	IBC 16-7 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	IBC 16-7 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	IBC 16-7 (c)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	IBC 16-7 (d)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	LRFD Wind			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	IBC 16-3 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	IBC 16-3 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
26	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
28	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
32	IBC 16-4 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
33	IBC 16-6 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
34	IBC 16-6 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
36	Deflection 1		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
37	Deflection 2		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
38	Deflection 3		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
39	IBC 16-10 (a)	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
40	IBC 16-11 (a)	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
41	IBC 16-12 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
42	IBC 16-12 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
43	IBC 16-12 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
44	IBC 16-12 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
45	IBC 16-13 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
46	IBC 16-13 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
47	IBC 16-13 (a) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
48	IBC 16-13 (a) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
49	IBC 16-13 (b) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
50	IBC 16-13 (b) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
51	IBC 16-13 (b) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
52	IBC 16-13 (b) (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
53	IBC 16-15 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
54	IBC 16-15 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
55	IBC 16-15 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
56	IBC 16-15 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
57	IBC 16-14 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
58	IBC 16-14 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
59	IBC 16-16 (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
60	IBC 16-16 (b)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
61		1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
62		1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
63	LRFD Wind	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
64	IBC 16-3 (b) (a)	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
65	IBC 16-3 (b) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
66	IBC 16-3 (d) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
67	IBC 16-3 (d) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
68	IBC 16-4 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
69	IBC 16-4 (a) (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
70	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
71	IBC 16-4 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
72	IBC 16-6 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
73	IBC 16-6 (b)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
74	ASD			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
75	IBC 16-12 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
76	IBC 16-12 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
77	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
78	IBC 16-13 (a) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
79	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
80	IBC 16-13 (b) (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
81	IBC 16-15 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
82	IBC 16-15 (a)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
83				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
84	DL			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
85	RLL			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
86	WLX			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
87	WLZ			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
88	OL1			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
89	ELX			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
90	ELZ			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
0	N71	max	3.492	73	52.945	64	0.917	11	0	82	0	82	0	82
1		min	-33.989	64	-4.871	73	-0.784	13	0	2	0	2	0	2
2	N81	max	35.359	64	48.883	64	0.926	11	0	82	0	82	0	82
3		min	-6.236	73	-5.257	73	-0.787	13	0	2	0	2	0	2
4	N61	max	64.06	64	87.171	18	36.344	28	0	82	0	82	0	82
5		min	-14.432	73	-17.15	34	-0.829	13	0	2	0	2	0	2
6	N63	max	9.73	73	94.467	18	36.399	28	0	82	0	82	0	82
7		min	-61.715	64	-16.738	34	-0.825	13	0	2	0	2	0	2
8	N96	max	64.72	64	87.093	20	0.816	15	0	82	0	82	0	82
9		min	-14.405	73	-15.091	73	-39.043	26	0	2	0	2	0	2
10	N169	max	9.679	73	94.368	20	0.812	15	0	82	0	82	0	82
11		min	-62.351	64	-14.796	73	-39.204	26	0	2	0	2	0	2
12	N62	max	65.012	64	87.469	20	0.829	15	0	82	0	82	0	82

Envelope Node Reactions (Continued)

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
13		min	-14.588	73	-15.203	73	-35.829	26	0	2	0	2	0	2
14	N64	max	9.886	73	94.813	20	0.824	15	0	82	0	82	0	82
15		min	-62.647	64	-14.965	73	-36.257	26	0	2	0	2	0	2
16	N69	max	64.164	64	86.471	18	38.648	28	0	82	0	82	0	82
17		min	-14.281	73	-18.072	34	-0.816	13	0	2	0	2	0	2
18	N74	max	9.552	73	93.831	18	38.969	28	0	82	0	82	0	82
19		min	-61.811	64	-17.804	34	-0.812	13	0	2	0	2	0	2
20	N86	max	35.903	64	49.418	64	0.787	15	0	82	0	82	0	82
21		min	-6.398	73	-5.41	73	-0.931	9	0	2	0	2	0	2
22	N87	max	3.622	73	53.536	64	0.784	15	0	82	0	82	0	82
23		min	-34.516	64	-5.026	73	-0.922	9	0	2	0	2	0	2
24	Totals:	max	85.568	14	920.784	64	155.539	28						
25		min	-85.568	8	-140.25	73	-155.539	26						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
0	M52	CXCOLUMNS	0.557	266.09	64	0.141	0	y	64	1086.961	2176.875	350.42	1465.719	1	H1-1b
1	M56	RBXBEAM_HRA	**2.384**	**96.049**	64	0.065	59.107	y	64	97.261	1758.926	209.973	214.654	1	H1-1a
2	M113	CXCOLUMNS	0.567	263.78	64	0.146	0	y	64	1100.09	2176.875	350.42	1469.983	1	H1-1b
3	M114	RBXBEAM_HRA	**2.433**	**97.707**	64	0.064	52.612	y	64	93.987	1758.926	209.973	205.925	1	H1-1a
4	M55	RBXBEAM_HRA	**4.337**	103.437	64	0.118	59.107	y	64	97.261	1755.117	209.935	206.273	1	H1-1a
5	M66	1.5"BAR	0.597	464.327	30	0.006	464.327		26	0.26	57.256	1.431	1.431	1	H1-1a*
6	M67	W10X26	0.283	172.5	64	0.018	345	y	64	26.762	342.45	28.125	36.168	1.134	H1-1b
7	M72	W10X26	0.591	176.094	26	0.018	345	y	64	26.762	342.45	28.125	36.125	1.133	H1-1a
8	M73	RBXBEAM_HRA	**4.383**	**0**	64	0.118	59.107	y	64	97.261	1808.438	210.476	352.333	1	H1-1a
9	M80	CXCOLUMNS	1.004	263.78	64	0.266	0	y	64	1100.09	2176.875	350.42	1469.983	1	H1-1b
10	M81	1.5"BAR	0.105	464.327	28	0.015	464.327		64	0.26	57.256	1.431	1.431	1	H1-1b*
11	M111	1.5"BAR	0.603	359.201	26	0.008	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
12	M118	1.5"BAR	0.628	464.327	28	0.008	464.327		28	0.26	57.256	1.431	1.431	1	H1-1a*
13	M123	CXCOLUMNS	0.985	266.09	64	0.256	0	y	64	1086.961	2176.875	350.42	1465.719	1	H1-1b
14	M124	RBXBEAM_HRA	**4.42**	105.223	64	0.116	52.612	y	64	93.987	1755.117	209.935	197.461	1	H1-1a
15	M125	W12X35	1.02	345	26	0.019	0	y	64	46.502	463.5	43.125	147.968	2.522	H1-1a
16	M126	CXCOLUMNS	1.016	263.78	64	0.269	0	y	64	1100.09	2176.875	350.42	1469.983	1	H1-1b
17	M129	RBXBEAM_HRA	**4.474**	**0**	64	0.116	52.612	y	64	93.987	1808.438	210.476	344.485	1	H1-1a
18	M132	1.5"BAR	0.067	464.327	30	0.016	464.327		64	0.26	57.256	1.431	1.431	1	H1-1b*
19	M134	CXCOLUMNS	0.998	266.09	64	0.259	0	y	64	1086.961	2176.875	350.42	1465.719	1	H1-1b
20	M135	1.5"BAR	0.641	359.201	28	0.009	359.201		20	0.435	57.256	1.431	1.431	1	H1-1a*
21	M138	W12X35	0.954	345	26	0.019	0	y	64	46.502	463.5	43.125	147.535	2.515	H1-1a
22	M139	W12X35	0.291	0	30	0.02	0	y	18	46.502	463.5	43.125	124.53	2.123	H1-1b
23	M140	W12X35	0.301	345	30	0.02	345	y	64	46.502	463.5	43.125	124.253	2.118	H1-1b
24	M50	W12X35	0.246	0	28	0.019	0	y	64	46.502	463.5	43.125	146.226	2.493	H1-1b
25	M54	W12X35	0.264	345	26	0.019	0	y	64	46.502	463.5	43.125	145.987	2.489	H1-1b
26	M58	W10X26	0.86	345	26	0.025	345	y	26	26.762	342.45	28.125	72.449	2.272	H1-1a
27	M60	RBXBEAM_HRA	**4.404**	103.437	64	0.118	59.107	y	64	97.261	1755.117	209.935	207.052	1	H1-1a
28	M64	CXCOLUMNS	1.018	263.78	64	0.27	0	y	64	1100.09	2176.875	350.42	1469.983	1	H1-1b
29	M65	CXCOLUMNS	1	266.09	64	0.26	0	y	64	1086.961	2176.875	350.42	1465.719	1	H1-1b
30	M68	RBXBEAM_HRA	**4.488**	105.223	64	0.116	52.612	y	64	93.987	1755.117	209.935	198.303	1	H1-1a
31	M69	W12X35	0.873	345	26	0.019	345	y	64	46.502	463.5	43.125	144.48	2.463	H1-1a
32	M71	W12X35	0.851	345	26	0.019	345	y	64	46.502	463.5	43.125	145.314	2.477	H1-1a
33	M76	W10X26	1.003	0	26	0.035	0	y	26	26.762	342.45	28.125	71.446	2.24	H1-1a
34	M77	RBXBEAM_HRA	**4.344**	**0**	64	0.12	59.107	y	64	97.261	1808.438	210.476	352.333	1	H1-1a
35	M78	CXCOLUMNS	1.008	263.78	64	0.267	0	y	64	1100.09	2176.875	350.42	1469.983	1	H1-1b
36	M79	CXCOLUMNS	0.99	266.09	64	0.257	0	y	64	1086.961	2176.875	350.42	1465.719	1	H1-1b
37	M82	RBXBEAM_HRA	**4.435**	**0**	64	0.118	52.612	y	64	93.987	1808.438	210.476	344.485	1	H1-1a
38	M83	W12X35	0.264	0	32	0.021	0	y	64	45.703	463.5	43.125	123.376	2.125	H1-1b

Company : <Licensed Company>
Designer : tony.arzate
Job Number :
Model Name : HHW Canopy

Checked By : _____

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
39	M84	W12X35	0.251	0	32	0.021	0	y	64	45.703	463.5	43.125	123.098	2.12	H1-1b
40	M85	W10X26	0.564	0	26	0.025	348	y	18	26.303	342.45	28.125	44.408	1.407	H1-1b
41	M86	RBXBEAM_HRA	**2.424**	**96.049**	64	0.074	59.107	y	64	97.261	1758.926	209.973	215.116	1	H1-1a
42	M87	CXCOLUMNS	0.576	263.78	64	0.149	0	y	64	1100.09	2176.875	350.42	1469.983	1	H1-1b
43	M88	CXCOLUMNS	0.566	266.09	64	0.143	0	y	64	1086.961	2176.875	350.42	1465.719	1	H1-1b
44	M89	RBXBEAM_HRA	**2.474**	**97.707**	64	0.073	52.612	y	64	93.987	1758.926	209.973	206.422	1	H1-1a
45	M47	1.5"BAR	0.692	359.201	28	0.009	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
46	M48	1.5"BAR	0.647	359.201	26	0.008	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
47	M49	1.5"BAR	0.654	460.252	28	0.008	460.252		28	0.265	57.256	1.431	1.431	1	H1-1a*
48	M51	1.5"BAR	0.058	460.252	13	0.016	460.252		64	0.265	57.256	1.431	1.431	1	H1-1b*
49	M53	1.5"BAR	0.074	460.252	11	0.015	460.252		64	0.265	57.256	1.431	1.431	1	H1-1b*
50	M59	1.5"BAR	0.621	460.252	30	0.006	460.252		26	0.265	57.256	1.431	1.431	1	H1-1a*
51	M61	1.5"BAR	0.541	359.201	28	0.009	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
52	M62	1.5"BAR	0.573	359.201	26	0.009	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
53	M63	1.5"BAR	0.584	464.327	32	0.005	464.327		19	0.26	57.256	1.431	1.431	1	H1-1a*
54	M70	1.5"BAR	0.221	464.327	26	0.011	464.327		64	0.26	57.256	1.431	1.431	1	H1-1a*
55	M74	1.5"BAR	0.199	464.327	28	0.012	464.327		64	0.26	57.256	1.431	1.431	1	H1-1b*
56	M75	1.5"BAR	0.624	464.327	26	0.005	464.327		19	0.26	57.256	1.431	1.431	1	H1-1a*
57	M90	1.5"BAR	0.478	359.201	28	0.009	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
58	M91	1.5"BAR	0.507	359.201	26	0.009	359.201		64	0.435	57.256	1.431	1.431	1	H1-1a*
59	M92	1.5"BAR	0.586	460.252	26	0.006	460.252		25	0.265	57.256	1.431	1.431	1	H1-1a*
60	M93	1.5"BAR	0.263	460.252	28	0.012	460.252		64	0.265	57.256	1.431	1.431	1	H1-1a*
61	M94	1.5"BAR	0.546	460.252	32	0.006	460.252		25	0.265	57.256	1.431	1.431	1	H1-1a*
62	M95	1.5"BAR	0.282	460.252	26	0.01	460.252		64	0.265	57.256	1.431	1.431	1	H1-1a*
63	M230	1.5"BAR	0.783	435.694	26	0.018	435.694		18	0.296	57.256	1.431	1.431	1	H1-1a*
64	M231	1.5"BAR	0.841	435.694	28	0.018	435.694		20	0.296	57.256	1.431	1.431	1	H1-1a*
65	M232	1.5"BAR	0.786	435.694	28	0.018	435.694		20	0.296	57.256	1.431	1.431	1	H1-1a*
66	M233	1.5"BAR	0.846	435.694	26	0.018	435.694		18	0.296	57.256	1.431	1.431	1	H1-1a*
67	M234	1.5"BAR	0.781	434.287	28	0.017	434.287		20	0.298	57.256	1.431	1.431	1	H1-1a*
68	M235	1.5"BAR	0.839	434.287	26	0.017	434.287		18	0.298	57.256	1.431	1.431	1	H1-1a*
69	M236	1.5"BAR	0.77	434.287	26	0.018	434.287		18	0.298	57.256	1.431	1.431	1	H1-1a*
70	M237	1.5"BAR	0.83	434.287	28	0.018	434.287		20	0.298	57.256	1.431	1.431	1	H1-1a*

Envelope AISI S100-16: LRFD Member Cold Formed Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pn[k]	phi*Tn[k]	phi*Mnyy[k-ft]	phi*Mnzz[k-ft]	phi*Vny[k]	phi*Vnz[k]	Cb	Eqn
0	M57	12ZS3.25X105	**3.882**	**174**	71	0.195	348	y	64	3.897	94.05	0.434	2.806	13.717	16.884	1	H1.2-1
1	M96	12ZS3.25X105	**3.1**	**174**	71	0.155	0	y	64	3.897	94.05	0.428	2.768	13.717	16.884	1	H1.2-1
2	M97	12ZS3.25X105	**4.639**	**174**	71	0.232	348	y	64	3.897	94.05	0.434	2.805	13.717	16.884	1	H1.2-1
3	M98	12ZS3.25X105	**4.579**	**174**	71	0.23	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
4	M99	12ZS3.25X105	**4.579**	**174**	71	0.23	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
5	M100	12ZS3.25X105	**4.318**	**174**	71	0.216	348	y	64	3.897	94.05	0.434	2.806	13.717	16.884	1	H1.2-1
6	M101	12ZS3.25X105	**2.683**	**174**	71	0.136	348	y	64	3.897	94.05	0.427	2.764	13.717	16.884	1	H1.2-1
7	M102	12ZS3.25X105	**4.646**	**174**	71	0.231	348	y	64	3.897	94.05	0.433	2.804	13.717	16.884	1	H1.2-1
8	M103	12ZS3.25X105	**4.579**	**174**	71	0.229	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
9	M104	12ZS3.25X105	**4.579**	**174**	71	0.229	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
10	M105	12ZS3.25X105	**3.953**	**174**	71	0.197	0	y	64	3.897	94.05	0.434	2.806	13.717	16.884	1	H1.2-1
11	M106	12ZS3.25X105	**2.409**	**174**	71	0.12	348	y	64	3.897	94.05	0.425	2.752	13.717	16.884	1	H1.2-1
12	M107	12ZS3.25X105	**2.475**	**174**	73	0.196	348	y	64	3.897	94.05	0.433	2.801	13.717	16.884	1	H1.2-1
13	M108	12ZS3.25X105	**1.944**	**174**	73	0.157	0	y	64	3.897	94.05	0.43	2.78	13.717	16.884	1	H1.2-1
14	M109	12ZS3.25X105	**2.969**	**174**	73	0.234	348	y	64	3.897	94.05	0.433	2.799	13.717	16.884	1	H1.2-1
15	M110	12ZS3.25X105	**2.932**	**174**	73	0.233	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
16	M112	12ZS3.25X105	**2.932**	**174**	73	0.233	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
17	M115	12ZS3.25X105	**2.591**	**174**	73	0.206	0	y	64	3.897	94.05	0.433	2.8	13.717	16.884	1	H1.2-1
18	M116	12ZS3.25X105	**1.797**	**174**	73	0.148	348	y	64	3.897	94.05	0.43	2.783	13.717	16.884	1	H1.2-1
19	M117	12ZS3.25X105	**2.98**	**174**	73	0.235	348	y	64	3.897	94.05	0.433	2.799	13.717	16.884	1	H1.2-1

Envelope AISI S100-16: LRFD Member Cold Formed Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pn[k]	phi*Tn[k]	phi*Mnyy[k-ft]	phi*Mnzz[k-ft]	phi*Vny[k]	phi*Vnz[k]	Cb	Eqn
20	M119	12ZS3.25X105	**2.932**	**174**	73	0.232	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
21	M120	12ZS3.25X105	**2.932**	**174**	73	0.231	348	y	64	3.897	94.05	0.432	2.794	13.717	16.884	1	H1.2-1
22	M121	12ZS3.25X105	**2.239**	**174**	73	0.178	0	y	64	3.897	94.05	0.433	2.802	13.717	16.884	1	H1.2-1
23	M122	12ZS3.25X105	**1.171**	177.625	73	0.099	348	y	64	3.897	94.05	0.428	2.771	13.717	16.884	1	H1.2-1
24	M127	12ZS3.25X105	**2.322**	**172.5**	71	0.12	0	y	64	3.965	94.05	0.439	2.84	13.717	16.884	1	H1.2-1
25	M128	12ZS3.25X105	**2.36**	**172.5**	73	0.192	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
26	M130	12ZS3.25X105	**1.9**	**172.5**	73	0.155	345	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
27	M131	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
28	M133	12ZS3.25X105	**4.422**	**172.5**	71	0.226	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
29	M136	12ZS3.25X105	**3.776**	**172.5**	71	0.193	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
30	M137	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
31	M141	12ZS3.25X105	**4.116**	**172.5**	71	0.21	345	y	64	3.965	94.05	0.438	2.836	13.717	16.884	1	H1.2-1
32	M142	12ZS3.25X105	**4.427**	**172.5**	71	0.225	0	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
33	M143	12ZS3.25X105	**3.709**	**172.5**	71	0.19	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
34	M144	12ZS3.25X105	**3.005**	**172.5**	71	0.154	0	y	64	3.965	94.05	0.441	2.853	13.717	16.884	1	H1.2-1
35	M145	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
36	M146	12ZS3.25X105	**2.633**	**172.5**	71	0.135	345	y	64	3.965	94.05	0.437	2.826	13.717	16.884	1	H1.2-1
37	M147	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
38	M148	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
39	M149	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
40	M150	12ZS3.25X105	**2.884**	**172.5**	73	0.231	345	y	64	3.965	94.05	0.439	2.842	13.717	16.884	1	H1.2-1
41	M151	12ZS3.25X105	**1.744**	**172.5**	73	0.144	345	y	64	3.965	94.05	0.437	2.826	13.717	16.884	1	H1.2-1
42	M152	12ZS3.25X105	**2.83**	**172.5**	73	0.228	0	y	64	3.965	94.05	0.438	2.836	13.717	16.884	1	H1.2-1
43	M153	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
44	M154	12ZS3.25X105	**2.504**	**172.5**	73	0.202	345	y	64	3.965	94.05	0.439	2.84	13.717	16.884	1	H1.2-1
45	M155	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
46	M156	12ZS3.25X105	**2.167**	**172.5**	73	0.176	345	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
47	M157	12ZS3.25X105	**1.133**	168.906	73	0.098	0	y	64	3.965	94.05	0.435	2.814	13.717	16.884	1	H1.2-1
48	M158	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
49	M159	12ZS3.25X105	**4.427**	**172.5**	71	0.225	0	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
50	M160	12ZS3.25X105	**2.817**	**172.5**	73	0.222	0	y	64	3.965	94.05	0.437	2.829	13.717	16.884	1	H1.2-1
51	M161	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
52	M162	12ZS3.25X105	**4.389**	**172.5**	71	0.222	345	y	64	3.965	94.05	0.439	2.842	13.717	16.884	1	H1.2-1
53	M163	12ZS3.25X105	**1.133**	168.906	73	0.098	0	y	64	3.965	94.05	0.435	2.814	13.717	16.884	1	H1.2-1
54	M164	12ZS3.25X105	**4.421**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
55	M165	12ZS3.25X105	**4.481**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.441	2.851	13.717	16.884	1	H1.2-1
56	M166	12ZS3.25X105	**4.422**	**172.5**	71	0.226	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
57	M167	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
58	M168	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
59	M169	12ZS3.25X105	**4.507**	**172.5**	71	0.23	0	y	64	3.965	94.05	0.437	2.829	13.717	16.884	1	H1.2-1
60	M170	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
61	M171	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
62	M172	12ZS3.25X105	**2.322**	**172.5**	71	0.12	0	y	64	3.965	94.05	0.439	2.84	13.717	16.884	1	H1.2-1
63	M173	12ZS3.25X105	**3.776**	**172.5**	71	0.193	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
64	M174	12ZS3.25X105	**2.167**	**172.5**	73	0.176	345	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
65	M175	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
66	M176	12ZS3.25X105	**2.872**	**172.5**	73	0.231	345	y	64	3.965	94.05	0.438	2.834	13.717	16.884	1	H1.2-1
67	M177	12ZS3.25X105	**2.888**	**172.5**	73	0.232	0	y	64	3.965	94.05	0.439	2.841	13.717	16.884	1	H1.2-1
68	M178	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
69	M179	12ZS3.25X105	**2.83**	**172.5**	73	0.228	0	y	64	3.965	94.05	0.438	2.836	13.717	16.884	1	H1.2-1
70	M180	12ZS3.25X105	**2.861**	**172.5**	73	0.228	0	y	64	3.965	94.05	0.439	2.842	13.717	16.884	1	H1.2-1
71	M181	12ZS3.25X105	**2.84**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
72	M182	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
73	M183	12ZS3.25X105	**4.452**	**172.5**	71	0.229	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
74	M184	12ZS3.25X105	**1.75**	**172.5**	73	0.144	0	y	64	3.965	94.05	0.438	2.834	13.717	16.884	1	H1.2-1

Envelope AISI S100-16: LRFD Member Cold Formed Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pn[k]	phi*Tn[k]	phi*Mnyy[k-ft]	phi*Mnzz[k-ft]	phi*Vny[k]	phi*Vnz[k]	Cb	Eqn
75	M185	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
76	M186	12ZS3.25X105	**4.134**	176.094	71	0.209	0	y	64	3.965	94.05	0.437	2.829	13.717	16.884	1	H1.2-1
77	M187	12ZS3.25X105	**1.133**	168.906	73	0.098	0	y	64	3.965	94.05	0.435	2.814	13.717	16.884	1	H1.2-1
78	M188	12ZS3.25X105	**3.709**	**172.5**	71	0.19	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
79	M189	12ZS3.25X105	**3.004**	**172.5**	71	0.154	345	y	64	3.965	94.05	0.441	2.852	13.717	16.884	1	H1.2-1
80	M190	12ZS3.25X105	**4.422**	**172.5**	71	0.226	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
81	M191	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
82	M192	12ZS3.25X105	**4.46**	**172.5**	71	0.228	0	y	64	3.965	94.05	0.439	2.842	13.717	16.884	1	H1.2-1
83	M193	12ZS3.25X105	**2.577**	**172.5**	71	0.134	0	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
84	M194	12ZS3.25X105	**4.428**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
85	M195	12ZS3.25X105	**4.432**	**172.5**	71	0.226	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
86	M196	12ZS3.25X105	**2.322**	**172.5**	71	0.12	0	y	64	3.965	94.05	0.439	2.84	13.717	16.884	1	H1.2-1
87	M197	12ZS3.25X105	**3.776**	**172.5**	71	0.193	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
88	M198	12ZS3.25X105	**2.167**	**172.5**	73	0.176	345	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
89	M199	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
90	M200	12ZS3.25X105	**2.872**	**172.5**	73	0.231	345	y	64	3.965	94.05	0.438	2.834	13.717	16.884	1	H1.2-1
91	M201	12ZS3.25X105	**2.508**	**172.5**	73	0.202	345	y	64	3.965	94.05	0.439	2.843	13.717	16.884	1	H1.2-1
92	M202	12ZS3.25X105	**2.837**	**172.5**	73	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
93	M203	12ZS3.25X105	**2.83**	**172.5**	73	0.228	0	y	64	3.965	94.05	0.438	2.836	13.717	16.884	1	H1.2-1
94	M204	12ZS3.25X105	**1.901**	**172.5**	73	0.155	0	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
95	M205	12ZS3.25X105	**2.36**	**172.5**	73	0.192	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
96	M206	12ZS3.25X105	**2.837**	**172.5**	73	0.231	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
97	M207	12ZS3.25X105	**4.463**	**172.5**	71	0.23	345	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
98	M208	12ZS3.25X105	**1.75**	**172.5**	73	0.146	0	y	64	3.965	94.05	0.438	2.834	13.717	16.884	1	H1.2-1
99	M209	12ZS3.25X105	**2.837**	**172.5**	73	0.23	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
100	M210	12ZS3.25X105	**4.112**	168.906	71	0.211	345	y	64	3.965	94.05	0.437	2.828	13.717	16.884	1	H1.2-1
101	M211	12ZS3.25X105	**1.133**	168.906	73	0.098	0	y	64	3.965	94.05	0.435	2.814	13.717	16.884	1	H1.2-1
102	M212	12ZS3.25X105	**3.709**	**172.5**	71	0.191	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
103	M213	12ZS3.25X105	**3.004**	**172.5**	71	0.156	345	y	64	3.965	94.05	0.441	2.852	13.717	16.884	1	H1.2-1
104	M214	12ZS3.25X105	**4.422**	**172.5**	71	0.228	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
105	M215	12ZS3.25X105	**4.432**	**172.5**	71	0.228	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
106	M216	12ZS3.25X105	**4.47**	**172.5**	71	0.23	0	y	64	3.965	94.05	0.44	2.85	13.717	16.884	1	H1.2-1
107	M217	12ZS3.25X105	**2.597**	**172.5**	71	0.139	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1	H1.2-1
108	M218	12ZS3.25X105	**4.428**	**172.5**	71	0.227	0	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
109	M219	12ZS3.25X105	**4.432**	**172.5**	71	0.227	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
110	M220	12ZS3.25X105	**2.322**	**172.5**	71	0.12	0	y	64	3.965	94.05	0.439	2.84	13.717	16.884	1	H1.2-1
111	M221	12ZS3.25X105	**3.776**	**172.5**	71	0.194	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
112	M222	12ZS3.25X105	**2.167**	**172.5**	73	0.176	345	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
113	M223	12ZS3.25X105	**2.837**	**172.5**	73	0.229	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
114	M224	12ZS3.25X105	**2.872**	**172.5**	73	0.233	345	y	64	3.965	94.05	0.438	2.834	13.717	16.884	1	H1.2-1
115	M225	12ZS3.25X105	**2.508**	**172.5**	73	0.205	345	y	64	3.965	94.05	0.439	2.843	13.717	16.884	1	H1.2-1
116	M226	12ZS3.25X105	**2.837**	**172.5**	73	0.231	345	y	64	3.965	94.05	0.439	2.838	13.717	16.884	1	H1.2-1
117	M227	12ZS3.25X105	**2.83**	**172.5**	73	0.23	0	y	64	3.965	94.05	0.438	2.836	13.717	16.884	1	H1.2-1
118	M228	12ZS3.25X105	**1.901**	**172.5**	73	0.157	0	y	64	3.965	94.05	0.44	2.845	13.717	16.884	1	H1.2-1
119	M229	12ZS3.25X105	**2.36**	**172.5**	73	0.193	345	y	64	3.965	94.05	0.439	2.837	13.717	16.884	1	H1.2-1
120	M238	12ZS3.25X105	**9.99+**	132.969	34	0.117	0	y	64	3.965	94.05	0.424	2.743	13.717	16.884	1.099	H1.2-1
121	M239	12ZS3.25X105	**8.495**	132.969	34	0.117	0	y	64	3.965	94.05	0.438	2.835	13.717	16.884	1.135	H1.2-1
122	M240	12ZS3.25X105	**2.536**	**174**	71	0.119	0	y	64	3.897	94.05	0.411	2.656	13.717	16.884	1.08	H1.2-1
123	M241	12ZS3.25X105	**2.509**	**43.5**	28	0.119	0	y	64	3.897	94.05	0.486	3.143	13.717	16.884	1.278	H1.2-1
124	M242	12ZS3.25X105	**9.99+**	**89.844**	34	0.117	0	y	64	3.965	94.05	0.423	2.739	13.717	16.884	1.097	H1.2-1
125	M243	12ZS3.25X105	**6.827**	208.438	30	0.117	345	y	64	3.965	94.05	0.598	3.871	13.717	16.884	1.55	H1.2-1
126	M244	12ZS3.25X105	**8.469**	**0**	30	0.117	0	y	64	3.965	94.05	0.542	3.508	13.717	16.884	1.405	H1.2-1
127	M245	12ZS3.25X105	**9.99+**	**0**	30	0.118	0	y	64	3.965	94.05	0.476	3.082	13.717	16.884	1.234	H1.2-1
128	M246	12ZS3.25X105	**2.445**	**172.5**	71	0.119	0	y	64	3.965	94.05	0.423	2.737	13.717	16.884	1.096	H1.2-1
129	M247	12ZS3.25X105	**2.219**	**172.5**	71	0.119	0	y	64	3.965	94.05	0.448	2.899	13.717	16.884	1.161	H1.2-1

Envelope AISI S100-16: LRFD Member Cold Formed Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pn[k]	phi*Tn[k]	phi*Mnyy[k-ft]	phi*Mnzz[k-ft]	phi*Vny[k]	phi*Vnz[k]	Cb	Eqn
130	M248	12ZS3.25X105	**4.039**	**0**	30	0.119	0	y	64	3.965	94.05	0.833	5.389	13.717	16.884	2.158	H1.2-1
131	M249	12ZS3.25X105	**1.991**	**0**	26	0.12	0	y	64	3.965	94.05	0.476	3.082	13.717	16.884	1.234	H1.2-1
132	M250	12ZS3.25X105	**9.99+**	**0**	30	0.118	0	y	64	3.965	94.05	0.509	3.295	13.717	16.884	1.32	H1.2-1
133	M251	12ZS3.25X105	**1.389**	**174**	73	0.12	0	y	64	3.897	94.05	0.432	2.797	13.717	16.884	1	H1.1-2
134	M252	12ZS3.25X105	**7.931**	**345**	34	0.117	0	y	64	3.965	94.05	0.442	2.861	13.717	16.884	1.146	H1.2-1
135	M253	12ZS3.25X105	**1.482**	**174**	73	0.12	348	y	64	3.897	94.05	0.429	2.773	13.717	16.884	1.128	H1.2-1

Project Title:
Engineer:
Project ID:
Project Descr:

Steel Beam

File: RA Canopy Calcs 2.ec6
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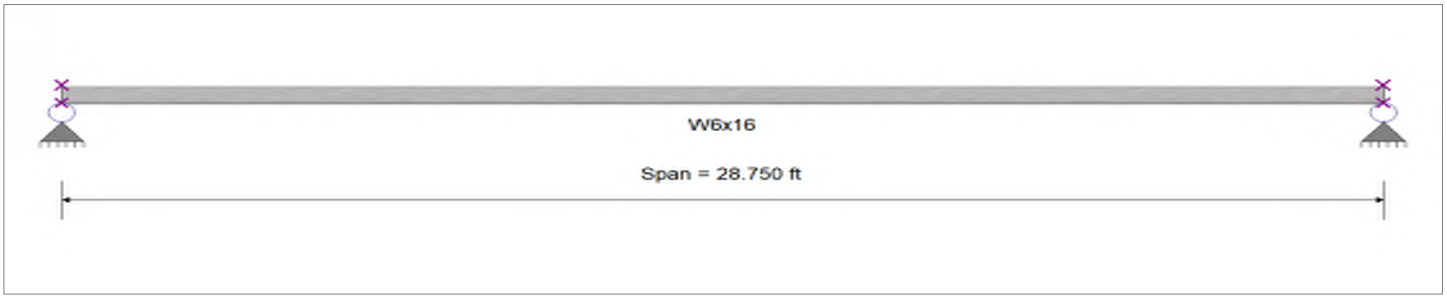
DESCRIPTION: PEMB Bracing Compression Strut

CODE REFERENCES

Calculations per AISC 360-16, IBC 2018, CBC 2019, ASCE 7-16
Load Combination Set : ASCE 7-16

Material Properties

Analysis Method :	Load Resistance Factor Design	Fy : Steel Yield :	50.0 ksi
Beam Bracing :	Completely Unbraced	E: Modulus :	29,000.0 ksi
Bending Axis :	Major Axis Bending		



Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight calculated and added to loading

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.165 : 1	Maximum Shear Stress Ratio =	0.007 : 1
Section used for this span	W6x16	Section used for this span	W6x16
Mu : Applied	2.334 k-ft	Vu : Applied	0.3247 k
Mn * Phi : Allowable	14.125 k-ft	Vn * Phi : Allowable	48.984 k
Load Combination	+1.40D	Load Combination	+1.40D
Location of maximum on span	14.375 ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1

Maximum Deflection

Max Downward Transient Deflection	0.000 in	Ratio =	0 <360
Max Upward Transient Deflection	0.000 in	Ratio =	0 <360
Max Downward Total Deflection	0.268 in	Ratio =	1289 >=180
Max Upward Total Deflection	0.000 in	Ratio =	0 <180

Maximum Forces & Stresses for Load Combinations

Load Combination / Segment Length	Span #	Max Stress Ratios M	Max Stress Ratios V	Summary of Moment Values max Mu +	max Mu -	Mu Max	Mnx	Phi*Mnx	Cb	Rm	Summary of Shear Values VuMax	Vnx	Phi*Vnx
+1.40D													
Dsgn. L = 28.75 ft	1	0.165	0.007	2.33		2.33	15.69	14.13	1.14	1.00	0.32	48.98	48.98
+1.20D													
Dsgn. L = 28.75 ft	1	0.142	0.006	2.00		2.00	15.69	14.13	1.14	1.00	0.28	48.98	48.98
+0.90D													
Dsgn. L = 28.75 ft	1	0.106	0.004	1.50		1.50	15.69	14.13	1.14	1.00	0.21	48.98	48.98

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
D Only	1	0.2677	14.457		0.0000	0.000

Vertical Reactions

Support notation : Far left is #1 Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	0.232	0.232
Overall MINimum	0.139	0.139
D Only	0.232	0.232
+0.60D	0.139	0.139

ACI318-19: Section 25.4.2.1 (Development of Deformed Bars in Tension)

Table 25.4.2.3 (Development of Deformed Bars in Tension)

$f_y := 60000\ psi$

$f'c := 4500\ psi$

$sqrt(f'c) := \sqrt{4500} \cdot 1\ psi = 67.082\ psi$

$Bar\# := 5$ Rebar Size

$d_b := \frac{Bar\# \cdot in}{8} = 0.625\ in$ Rebar Diameter

$c_{a1} := \left(12 + \frac{13}{16}\right) in = 12.813\ in$

$c_{a2} := \left(12 + \frac{13}{16}\right) in = 12.813\ in$

$0.5 \cdot c_{a1} = 6.406\ in$ $0.3 \cdot c_{a2} = 3.844\ in$

$c_a := min\left(0.5 \cdot c_{a1}, 0.3 \cdot c_{a2}\right) = 3.844\ in$

$\psi_t := 1.3$ More than 12 in. of fresh concrete placed below horizontal reinforcement

$\psi_e := 1$ Uncoated or zinc-coated (galvanized) reinforcement

$\psi_g := 1$ Grade 40 or Grade 60

$\lambda := 1$ Normal Weight Concrete

$l_d := \left(\frac{f_y \cdot \psi_t \cdot \psi_e \cdot \psi_g}{25 \cdot \lambda \cdot sqrt(f'c)}\right) \cdot \frac{d_b}{psi} = 29.069\ in$ Development Length > 12 in

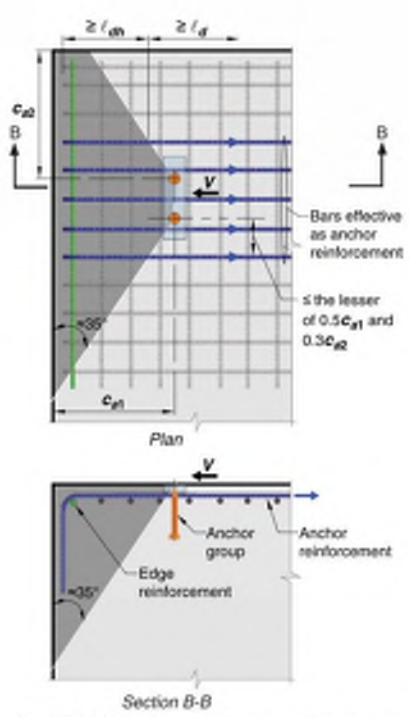


Fig. R17.5.2.1b(i)—Edge reinforcement and anchor reinforcement for shear.

$\psi_s := 0.8$ No.6 or smaller bar

$c_b := \frac{1.875\ in}{2} = 0.938\ in$

$l_d := \left(\frac{3}{40} \frac{f_y \cdot \psi_t \cdot \psi_e \cdot \psi_s \cdot \psi_g}{\lambda \cdot sqrt(f'c) \cdot \left(\frac{c_b}{d_b}\right)}\right) \cdot \frac{d_b}{psi} = 29.069\ in$

$\psi_e = 1$

$\psi_r := 1$

$\psi_o := 1$

$f_y := \frac{f_y}{psi} = 60000$ $d_b := \frac{d_b}{in} = 0.625$

$f'c := \frac{f'c}{psi} = 4500$

$\psi_c := \frac{f'c}{15000} + 0.6 = 0.9$

$l_{dh} := \left(\frac{f_y \cdot \psi_e \cdot \psi_r \cdot \psi_o \cdot \psi_c}{55 \cdot \lambda \cdot sqrt(f'c)}\right) \cdot {d_b}^{1.5} \cdot in = 7.232\ in$

Anchor Shear Reinforcing

$Bar\# = 5$ Rebar Size

$d_b = 7.5 \frac{1}{ft} \cdot in$ Rebar Diameter

$n := 5$ Total Rebar

$A_s := \pi \cdot \left(\frac{d_b}{2}\right)^2 \cdot n = 220.893 \frac{1}{ft^2} \cdot in^2$

$f_y = 60000 \frac{1}{psi} \cdot psi$

$\phi := 0.9$

$\phi T_n := \phi \cdot f_y \cdot A_s = 82.835 \frac{1}{lbf} \cdot kip$

USE FIVE (5) - #5 U-BARS

UNFACTORED REACTIONS

DEAD LOAD

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N71	max	-13.905	84	23.368	84	0.111	84
	min	-13.905	84	23.368	84	0.111	84
N81	max	13.901	84	21.511	84	0.115	84
	min	13.901	84	21.511	84	0.115	84
N61	max	22.317	84	32.702	84	0.004	84
	min	22.317	84	32.702	84	0.004	84
N63	max	-22.32	84	35.658	84	0.004	84
	min	-22.32	84	35.658	84	0.004	84
N96	max	22.569	84	33.115	84	-0.018	84
	min	22.569	84	33.115	84	-0.018	84
N169	max	-22.564	84	36.103	84	-0.019	84
	min	-22.564	84	36.103	84	-0.019	84
N62	max	22.639	84	32.952	84	-0.003	84
	min	22.639	84	32.952	84	-0.003	84
N64	max	-22.635	84	35.942	84	-0.004	84
	min	-22.635	84	35.942	84	-0.004	84
N69	max	22.432	84	33.051	84	0.021	84
	min	22.432	84	33.051	84	0.021	84
N74	max	-22.432	84	36.024	84	0.021	84
	min	-22.432	84	36.024	84	0.021	84
N86	max	14.039	84	21.657	84	-0.118	84
	min	14.039	84	21.657	84	-0.118	84
N87	max	-14.043	84	23.531	84	-0.115	84
	min	-14.043	84	23.531	84	-0.115	84

LIVE, ROOF LOAD

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N71	max	-7.621	85	10.757	85	0.051	85
	min	-7.621	85	10.757	85	0.051	85
N81	max	7.618	85	9.749	85	0.054	85
	min	7.618	85	9.749	85	0.054	85
N61	max	15.146	85	19.48	85	0.002	85
	min	15.146	85	19.48	85	0.002	85
N63	max	-15.147	85	21.478	85	0.002	85
	min	-15.147	85	21.478	85	0.002	85
N96	max	15.287	85	19.644	85	-0.008	85
	min	15.287	85	19.644	85	-0.008	85
N169	max	-15.282	85	21.658	85	-0.009	85
	min	-15.282	85	21.658	85	-0.009	85
N62	max	15.367	85	19.654	85	-0.001	85
	min	15.367	85	19.654	85	-0.001	85
N64	max	-15.364	85	21.673	85	-0.002	85
	min	-15.364	85	21.673	85	-0.002	85
N69	max	15.138	85	19.562	85	0.01	85
	min	15.138	85	19.562	85	0.01	85
N74	max	-15.138	85	21.56	85	0.01	85
	min	-15.138	85	21.56	85	0.01	85
N86	max	7.769	85	9.898	85	-0.056	85
	min	7.769	85	9.898	85	-0.056	85
N87	max	-7.771	85	10.925	85	-0.053	85
	min	-7.771	85	10.925	85	-0.053	85

WIND LOAD

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
	min	-9.767	88	-0.949	87	-0.734	87
N81	max	12.522	88	14.943	88	0.081	88
	min	-0.362	87	-0.974	87	-0.753	87
N61	max	24.551	88	33.598	87	0.003	88
	min	5.869	87	1.809	86	-0.792	87
N63	max	-3.186	86	34.748	87	0.004	86
	min	-19.848	88	17.59	86	-0.775	87
N96	max	24.758	88	30.028	88	0.002	86
	min	-6.311	87	-33.621	87	-38.841	87
N169	max	6.377	87	31.075	88	-0.008	86
	min	-20.045	88	-34.859	87	-39.033	87
N62	max	24.879	88	30.039	88	-0.003	88
	min	-6.124	87	-31.187	87	-35.626	87
N64	max	5.984	87	31.09	88	0.001	86
	min	-20.164	88	-32.464	87	-36.089	87
N69	max	24.543	88	31.158	87	0.015	88
	min	5.994	87	1.72	86	-0.777	87
N74	max	-3.165	86	32.407	87	0.017	88
	min	-19.836	88	17.684	86	-0.765	87
N86	max	12.757	88	15.169	88	0.026	86
	min	0.639	87	1.043	87	-0.68	87
N87	max	-0.619	87	15.616	88	-0.087	86
	min	-9.971	88	1.1	87	-0.673	87

SEISMIC LOAD

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC
N71	max	0.05	90	2.564	89	-0.009	89
	min	-6.188	89	-0.258	90	-0.812	90
N81	max	-0.059	90	-0.269	90	0.004	89
	min	-6.715	89	-2.561	89	-0.817	90
N61	max	2.686	90	16.97	90	0.014	89
	min	-7.772	89	-2.988	89	-0.837	90
N63	max	-2.634	90	17.495	90	0	89
	min	-7.159	89	3.016	89	-0.833	90
N96	max	-2.959	90	-3.031	89	-0.038	89
	min	-7.783	89	-17.101	90	-20.338	90
N169	max	2.911	90	3.001	89	0	89
	min	-7.146	89	-17.663	90	-20.457	90
N62	max	-2.676	90	-2.99	89	-0.012	89
	min	-7.778	89	-15.948	90	-19.04	90
N64	max	2.613	90	3.014	89	-0.001	89
	min	-7.158	89	-16.494	90	-19.209	90
N69	max	2.701	90	15.979	90	0.039	89
	min	-7.784	89	-3.033	89	-0.826	90
N74	max	-2.638	90	16.525	90	-0.001	89
	min	-7.148	89	3.002	89	-0.823	90
N86	max	0.24	90	0.373	90	-0.004	89
	min	-6.731	89	-2.568	89	-0.788	90
N87	max	-0.234	90	2.573	89	0.008	89
	min	-6.203	89	0.392	90	-0.787	90

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

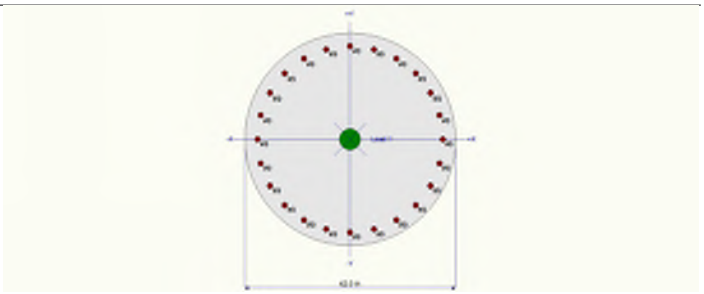
f'c : Concrete 28 day streng	=	4.50 ksi
E =	=	3,605.0 ksi
Density	=	150.0 pcf
β	=	0.8250
fy - Main Rebar	=	60.0 ksi
E - Main Rebar	=	29,000.0 ksi
Allow. Reinforcing Limits		*ASTM A615 Bars Used*
Min. Reinf.	=	0.50 %
Max. Reinf.	=	8.0 %

Overall Column Height = 21.750 ft
End Fixity Top Free, Bottom Fixed
Brace condition for deflection (buckling) along colur
X-X (width) axis :
Fully braced against buckling ABOUT Y-Y Axis
Y-Y (depth) axis :
Fully braced against buckling ABOUT Y-Y Axis

Column Cross Section

Column Dimensions : 42.0in Diameter, Column Edge to Rebar Edge Cover = 2.0in

Column Reinforcing : 24 - #9 bars



Applied Loads

Entered loads are factored per load combinations specified by user.

Column self weight included : 31,388.9 lbs * Dead Load Factor
AXIAL LOADS . . .
Max. Axial Load (Risa): Axial Load at 21.750 ft above base, D = 36.20, LR = 21.70, W = 34.80, E = 17.50 k
BENDING LOADS . . .
Max. Axial Load (Risa): Lat. Point Load at 20.50 ft creating My-y, D = 22.70, LR = 15.40, W = 39.10, E = 20.50 k

DESIGN SUMMARY

Load Combination +1.20D+0.50Lr+W
Location of max.above base 21.604 ft

Maximum Stress Ratio **0.810 : 1**
Ratio = (Pu^2+Mu^2)^.5 / (PhiPn^2+PhiMn^2)^.5

Pu =	126.757 k	φ * Pn =	151.516 k
Mu-x =	19.647 k-ft	φ* Mn-x =	34.018 k-ft
Mu-y =	-1,517.82 k-ft	φ* Mn-y =	1,887.52 k-ft
Mu Angle =	89.0 deg	φ =	0.90
Mu at Angle =	1,517.95 k-ft	φMn at Angle =	1,874.05 k-ft

Pn & Mn values located at Pu-Mu vector intersection with capacity curve

Column Capacities . .

Pnmax : Nominal Max. Compressive Axial Capac	6,647.52 k
Pnmin : Nominal Min. Tension Axial Capacity	k
φ Pn, max : Usable Compressive Axial Capacity	3,456.71 k
φ Pn, min : Usable Tension Axial Capacity	k

Maximum SERVICE Load Reactions .

Top along Y-Y	0.0 k	Bottom along Y-Y	51.845 k
Top along X-X	0.0 k	Bottom along X-X	0.0 k

Maximum SERVICE Load Deflections . .

Along Y-Y 0.0 in at 0.0 ft above base
for load combination :
Along X-X 0.5075 in at 21.750 ft above base
for load combination : +D+0.750Lr+0.450W

General Section Informatio β = 0.8250 θ = 0.80

ρ : % Reinforcing	1.732 %	Rebar % Ok
Reinforcing Area	24.0 in^2	
Concrete Area	1,385.44 in^2	

Governing Load Combination Results

Governing Factored Load Combination	Moment		Dist. from base ft	Axial Load k Pu	φ * Pn	Bending Analysis k-ft δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Utilization Ratio
	X-X	Y-Y											
+1.40D	M2,min	Actual	21.60	94.62	297.40	1.000	14.67	1.000	-651.49	89.000	651.66	2,007.04	**0.325**

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Governing Load Combination Results

Governing Factored Load Combination	Moment X-X	Moment Y-Y	Dist. from base ft	Axial Load k Pu	φ * Pn	Bending Analysis k-ft δx	δx * Mux	δy	δy * Muy	Alpha (deg)	δ Mu	φ Mn	Utilization Ratio
+1.20D+0.50Lr	M2,min	Actual	21.60	91.96	238.66	1.000	14.25	1.000	-716.27	89.000	716.41	1,954.11	**0.367**
+1.20D	M2,min	Actual	21.60	81.11	297.40	1.000	12.57	1.000	-558.42	89.000	558.56	2,007.04	**0.278**
+1.20D+1.60Lr	M2,min	Actual	21.60	115.83	209.56	1.000	17.95	1.000	-1,063.54	89.000	1,063.69	1,927.61	**0.552**
+1.20D+1.60Lr+0.50W	M2,min	Actual	21.60	133.23	180.77	1.000	20.65	1.000	-1,464.32	89.000	1,464.46	1,901.18	**0.770**
+1.20D+0.50W	M2,min	Actual	21.60	98.51	209.56	1.000	15.27	1.000	-959.20	89.000	959.32	1,927.61	**0.498**
+1.20D+0.50Lr+W	M2,min	Actual	21.60	126.76	151.52	1.000	19.65	1.000	-1,517.82	89.000	1,517.95	1,874.05	**0.810**
+1.20D+W	M2,min	Actual	21.60	115.91	151.52	1.000	17.97	1.000	-1,359.97	89.000	1,360.09	1,874.05	**0.726**
+1.436D+E	M2,min	Actual	21.60	114.58	209.56	1.000	17.76	1.000	-1,088.68	89.000	1,088.82	1,927.61	**0.565**
+0.90D+W	M2,min	Actual	21.60	95.63	151.52	1.000	14.82	1.000	-1,220.37	89.000	1,220.46	1,874.05	**0.651**
+0.6636D+E	M2,min	Actual	21.60	62.35	151.52	1.000	9.66	1.000	-729.06	89.000	729.12	1,874.05	**0.389**

Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction k @ Base	@ Top	Y-Y Axis Reaction k @ Base	@ Top	Axial Reaction @ Base	Mx - End Moments k-ft @ Base	@ Top	My - End Moments k-ft @ Base	@ Top
D Only	22.700				67.589			-465.350	
+D+Lr	38.100				89.289			-781.050	
+D+0.750Lr	34.250				83.864			-702.125	
+D+0.60W	46.160				88.469			-946.280	
+D+0.70E	37.050				79.839			-759.525	
+D+0.750Lr+0.450W	51.845				99.524			-1062.823	
+D+0.450W	40.295				83.249			-826.048	
+D+0.5250E	33.463				76.776			-685.981	
+0.60D+0.60W	37.080				61.433			-760.140	
+0.60D+0.70E	27.970				52.803			-573.385	
Lr Only	15.400				21.700			-315.700	
W Only	39.100				34.800			-801.550	
E Only	20.500				17.500			-420.250	

Maximum Moment Reactions

Note: Only non-zero reactions are listed.

Load Combination	Moment About X-X Axis @ Base		@ Top		Moment About Y-Y Axis @ Base		@ Top	
D Only				k-ft	-465.350	k-ft		k-ft
+D+Lr				k-ft	-781.050	k-ft		k-ft
+D+0.750Lr				k-ft	-702.125	k-ft		k-ft
+D+0.60W				k-ft	-946.280	k-ft		k-ft
+D+0.70E				k-ft	-759.525	k-ft		k-ft
+D+0.750Lr+0.450W				k-ft	-1,062.823	k-ft		k-ft
+D+0.450W				k-ft	-826.048	k-ft		k-ft
+D+0.5250E				k-ft	-685.981	k-ft		k-ft
+0.60D+0.60W				k-ft	-760.140	k-ft		k-ft
+0.60D+0.70E				k-ft	-573.385	k-ft		k-ft
Lr Only				k-ft	-315.700	k-ft		k-ft
W Only				k-ft	-801.550	k-ft		k-ft
E Only				k-ft	-420.250	k-ft		k-ft

Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection		Distance		Max. Y-Y Deflection		Distance	
D Only	-0.2222	in	21.750	ft	0.000	in	0.000	ft
+D+Lr	-0.3729	in	21.750	ft	0.000	in	0.000	ft
+D+0.750Lr	-0.3353	in	21.750	ft	0.000	in	0.000	ft
+D+0.60W	-0.4518	in	21.750	ft	0.000	in	0.000	ft
+D+0.70E	-0.3627	in	21.750	ft	0.000	in	0.000	ft
+D+0.750Lr+0.450W	-0.5075	in	21.750	ft	0.000	in	0.000	ft
+D+0.450W	-0.3944	in	21.750	ft	0.000	in	0.000	ft
+D+0.5250E	-0.3275	in	21.750	ft	0.000	in	0.000	ft
+0.60D+0.60W	-0.3630	in	21.750	ft	0.000	in	0.000	ft
+0.60D+0.70E	-0.2738	in	21.750	ft	0.000	in	0.000	ft
Lr Only	-0.1507	in	21.750	ft	0.000	in	0.000	ft

Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

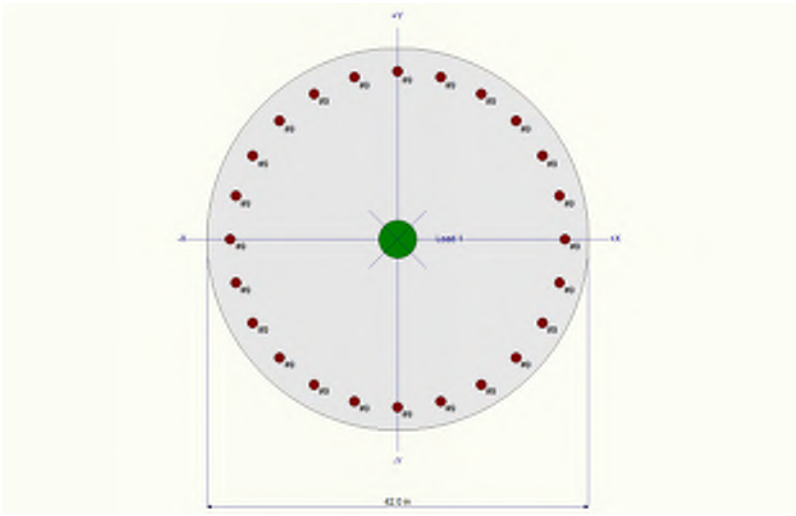
LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal

Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
W Only	-0.3827 in	21.750 ft	0.000 in	0.000 ft
E Only	-0.1987 in	21.604 ft	0.000 in	0.000 ft

Sketches







Interaction Diagrams

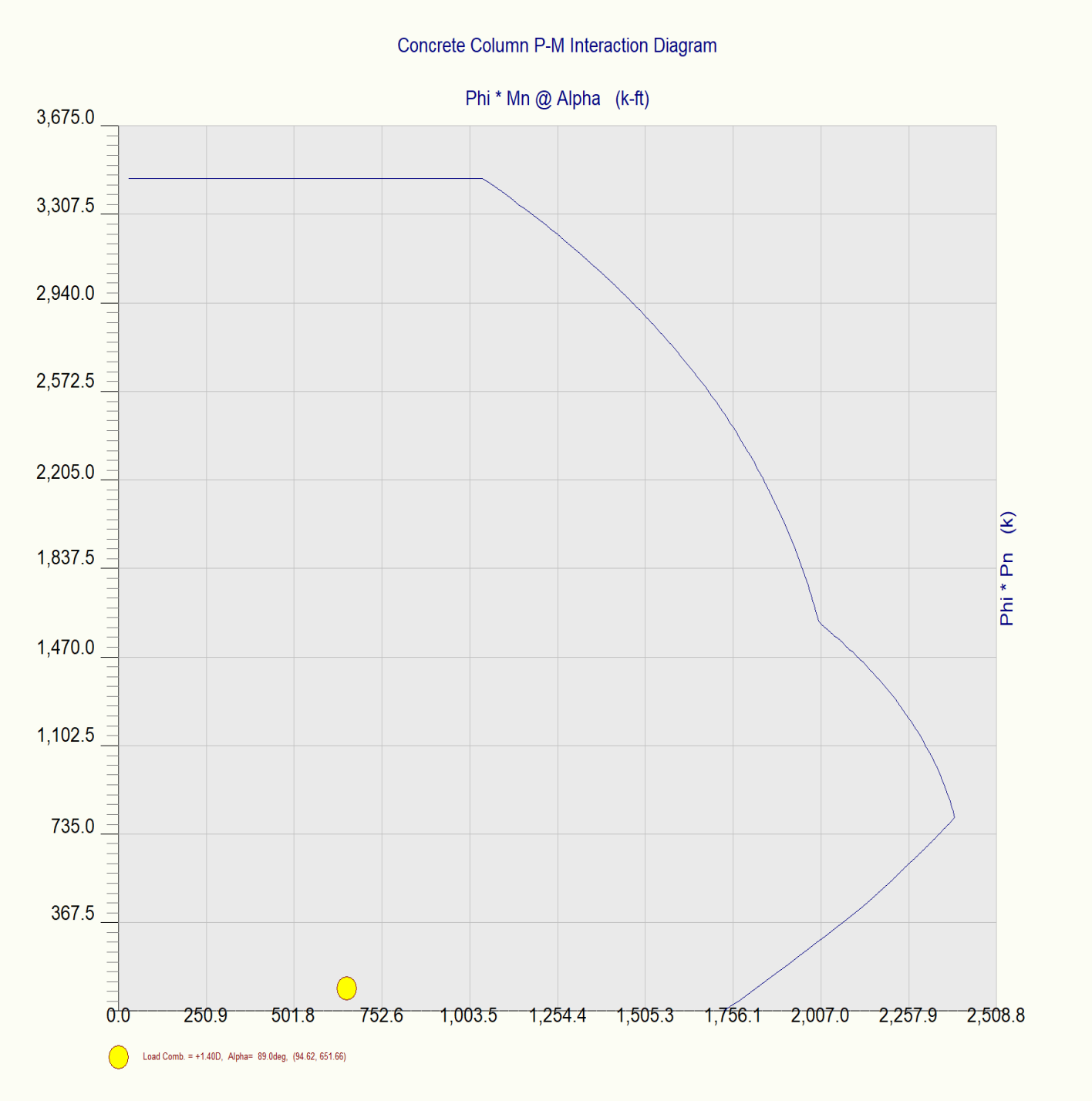
Project Title:
Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal



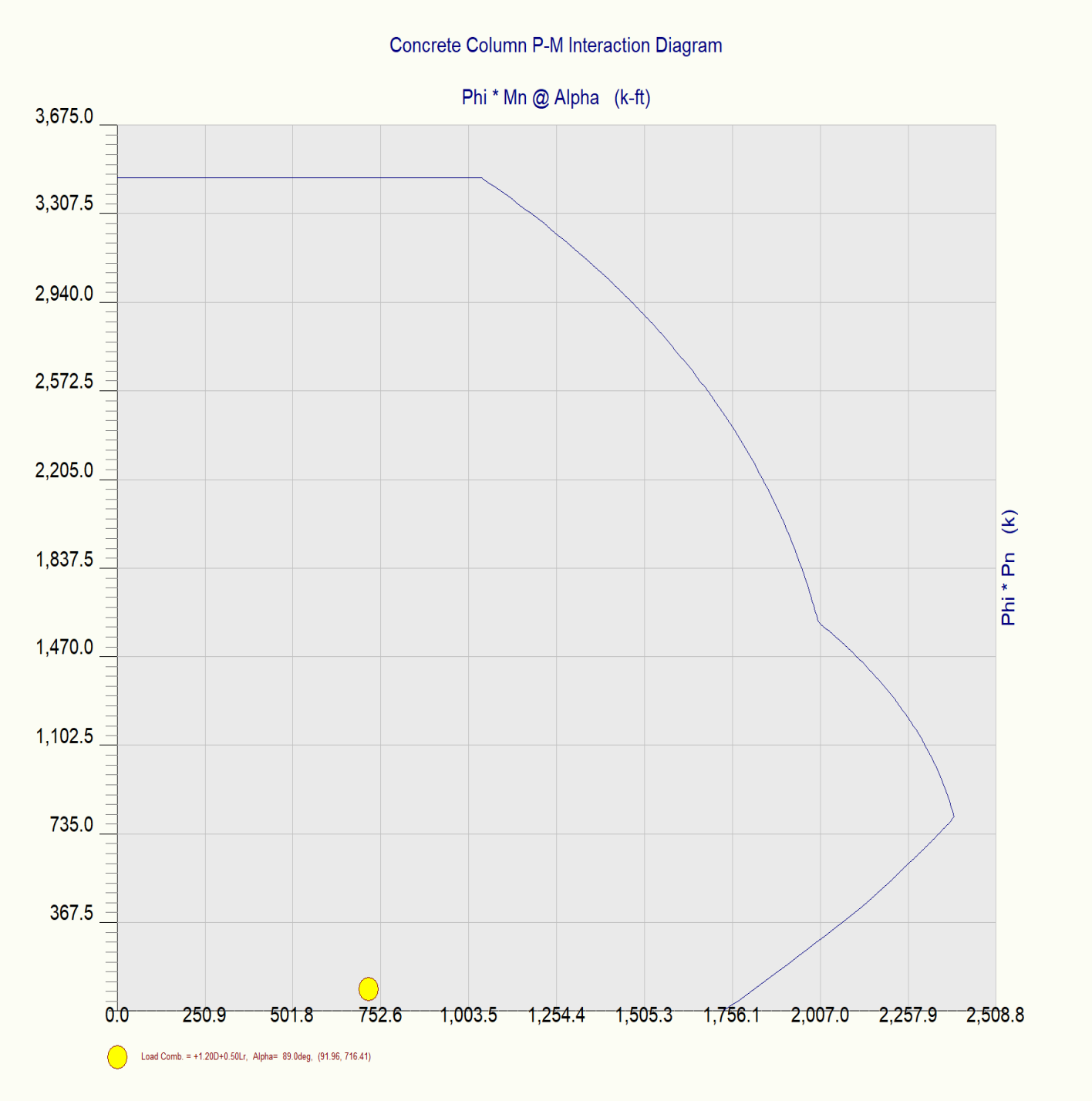
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Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal



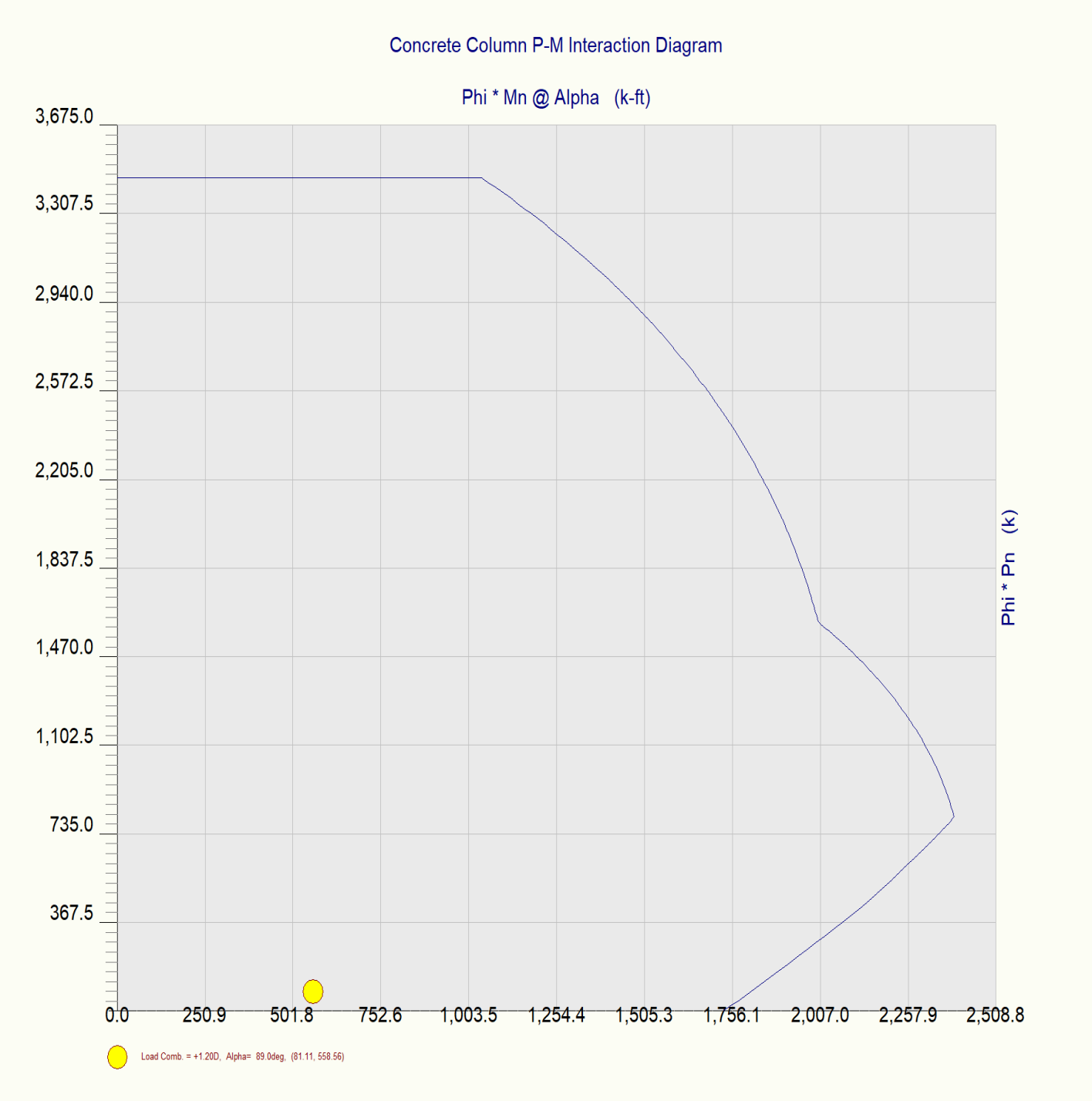
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Engineer:
Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

DESCRIPTION: 42" Dia. Concrete Pedestal



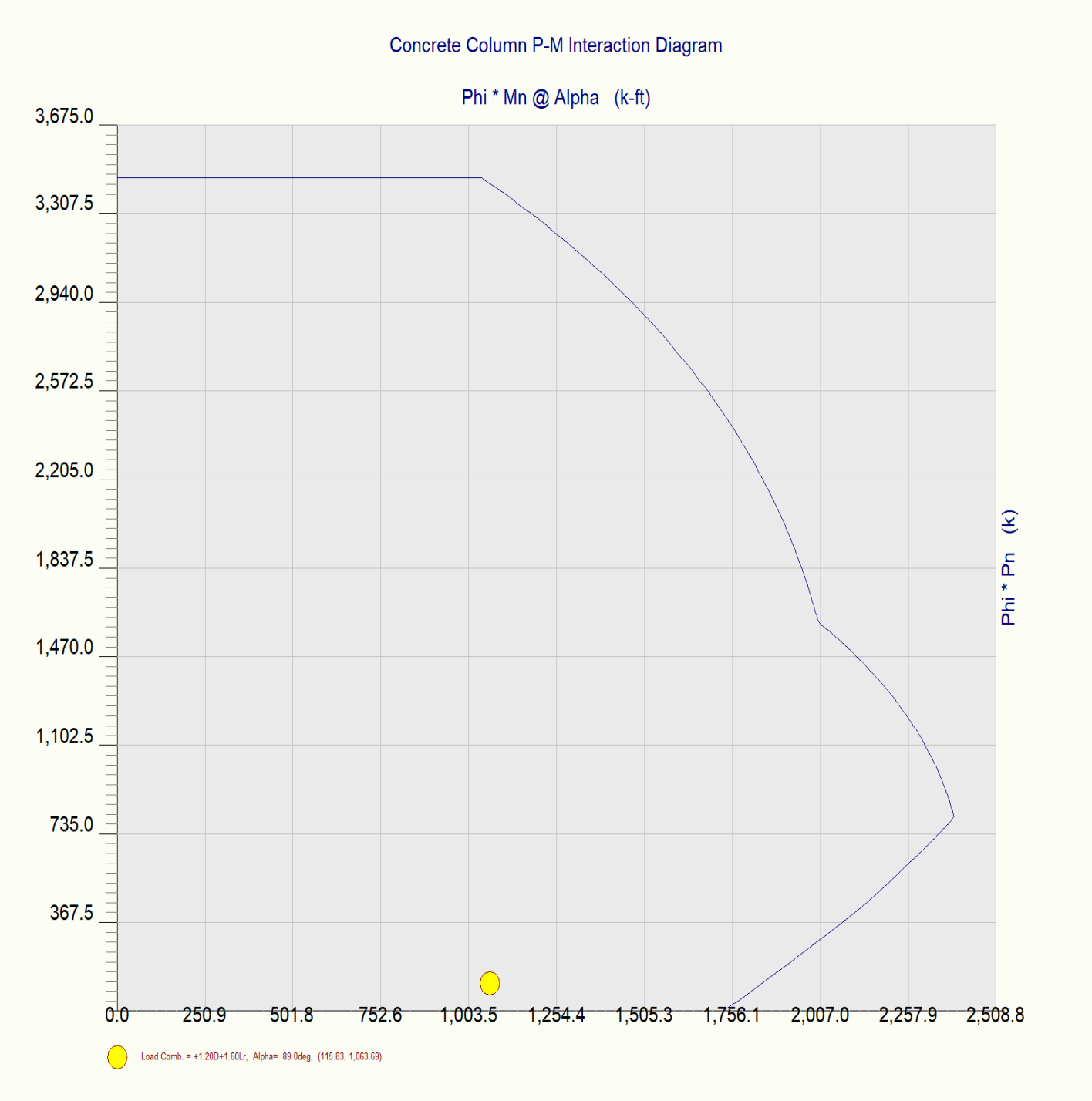
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Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

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DESCRIPTION: 42" Dia. Concrete Pedestal



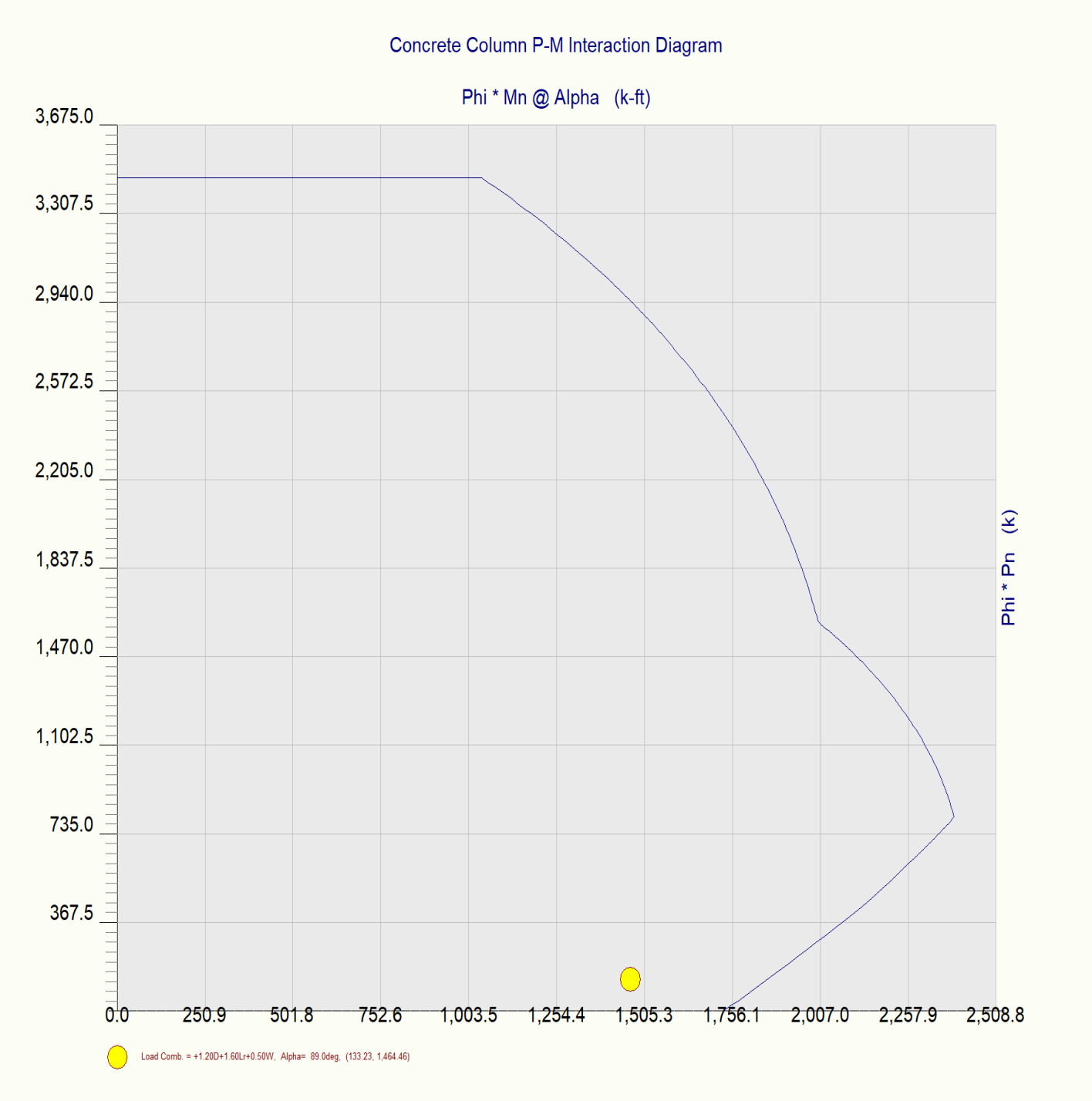
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Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

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DESCRIPTION: 42" Dia. Concrete Pedestal



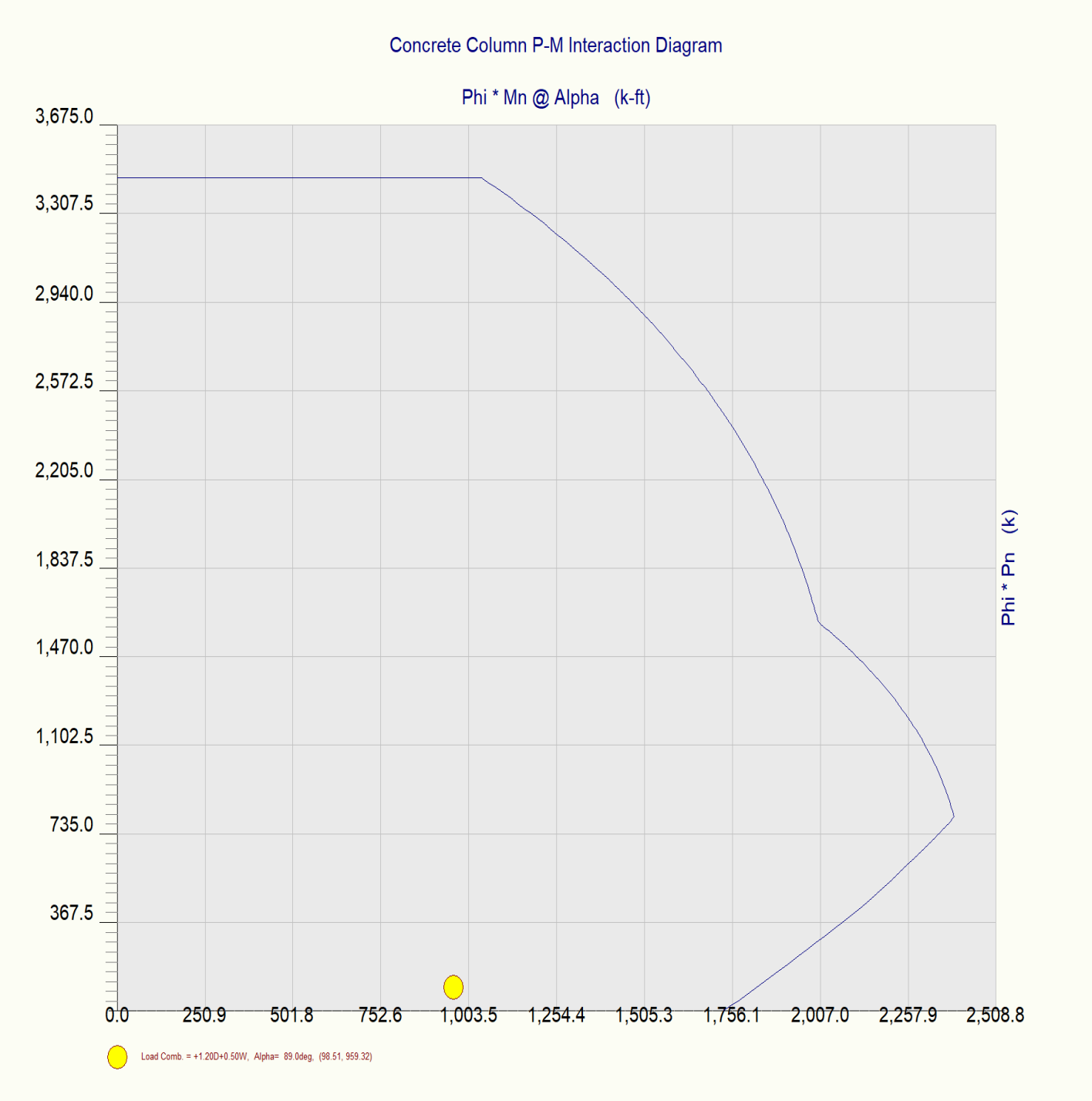
Project Title:
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Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

LIC# : KW-06017991, Build:20.24.02.03 TETRA TECH INC (c) ENERCALC INC 1983-2023

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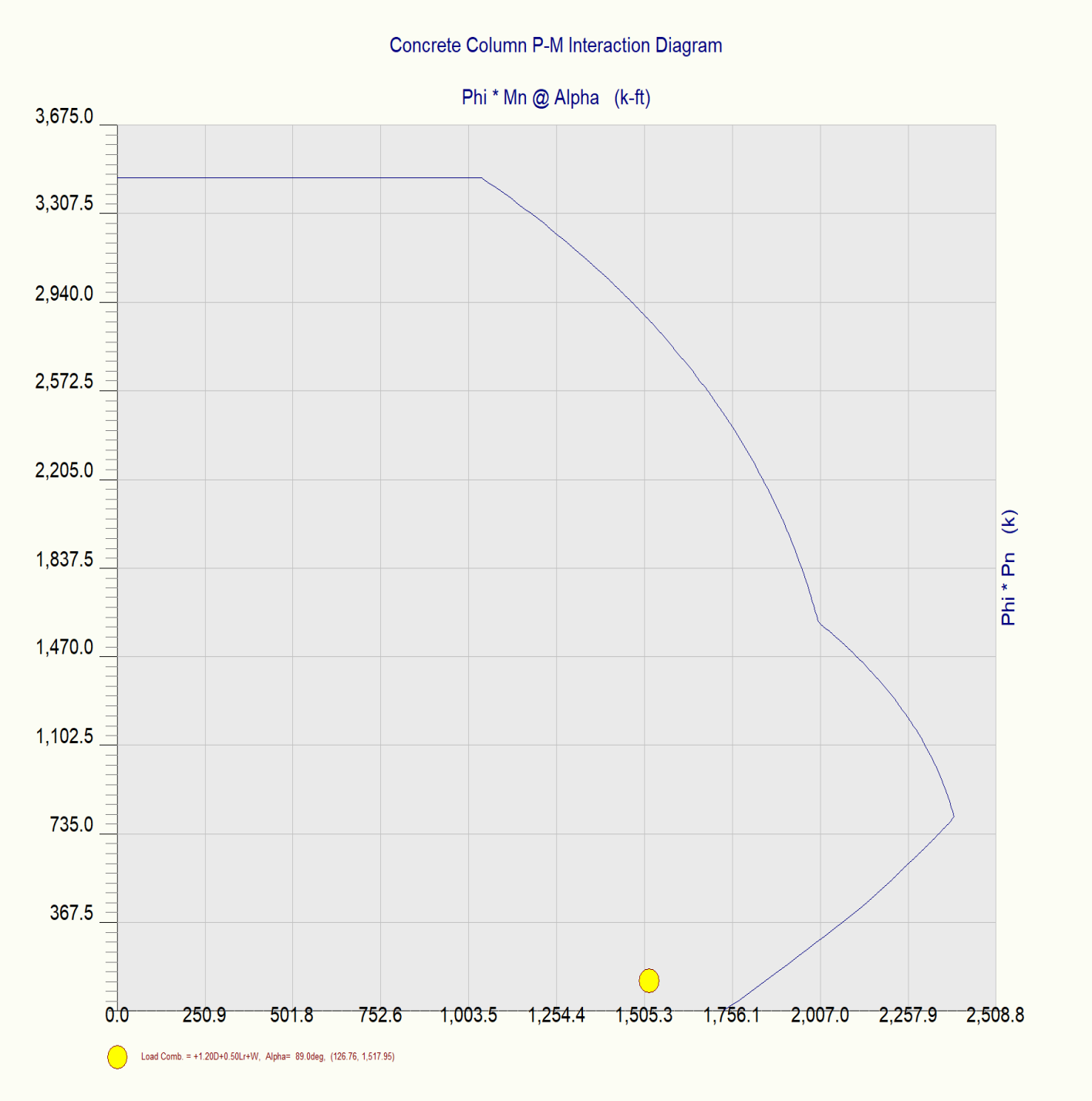
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Project ID:
Project Descr:

Concrete Column

Project File: RA Canopy Pedestal.ec6

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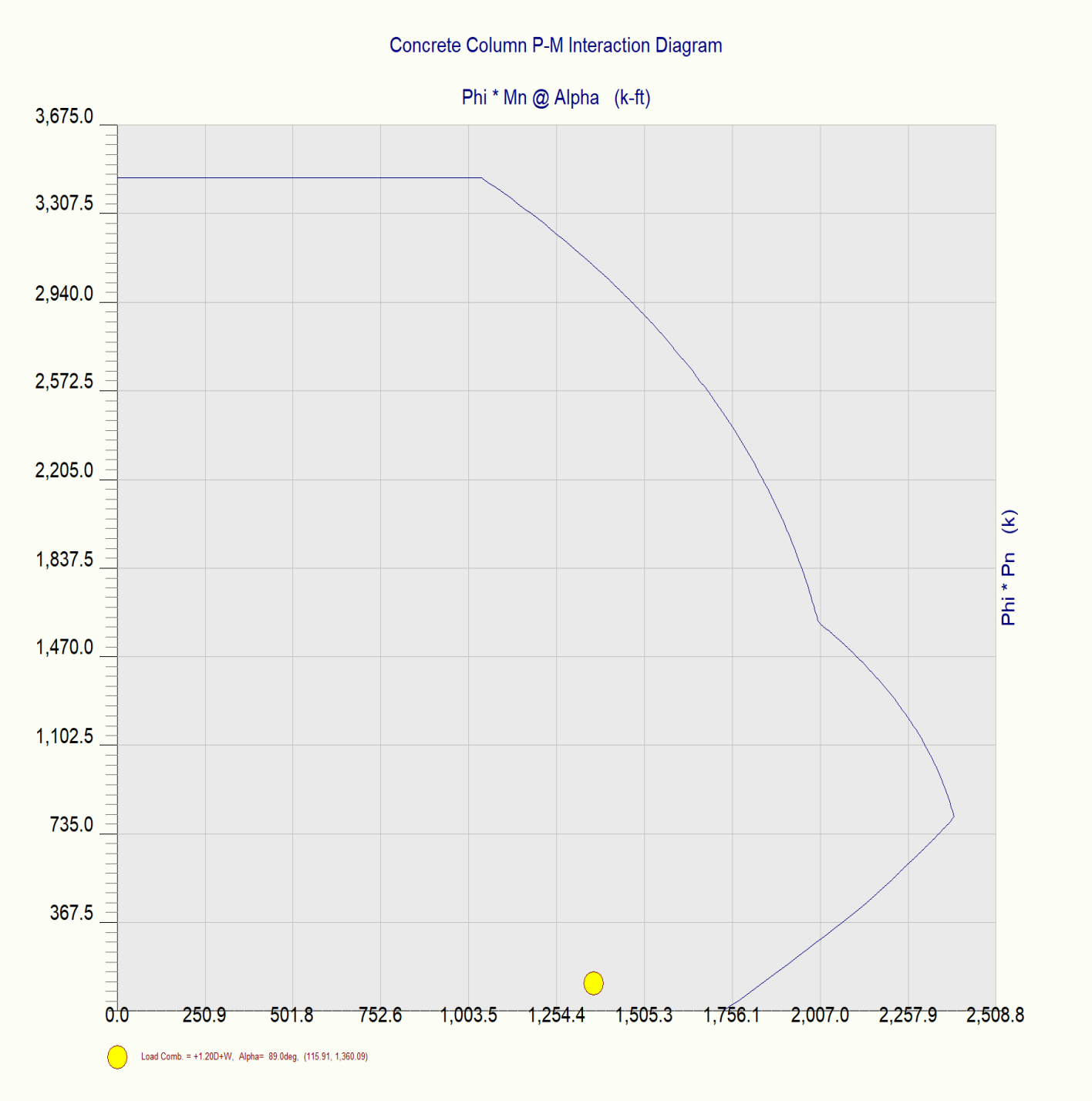
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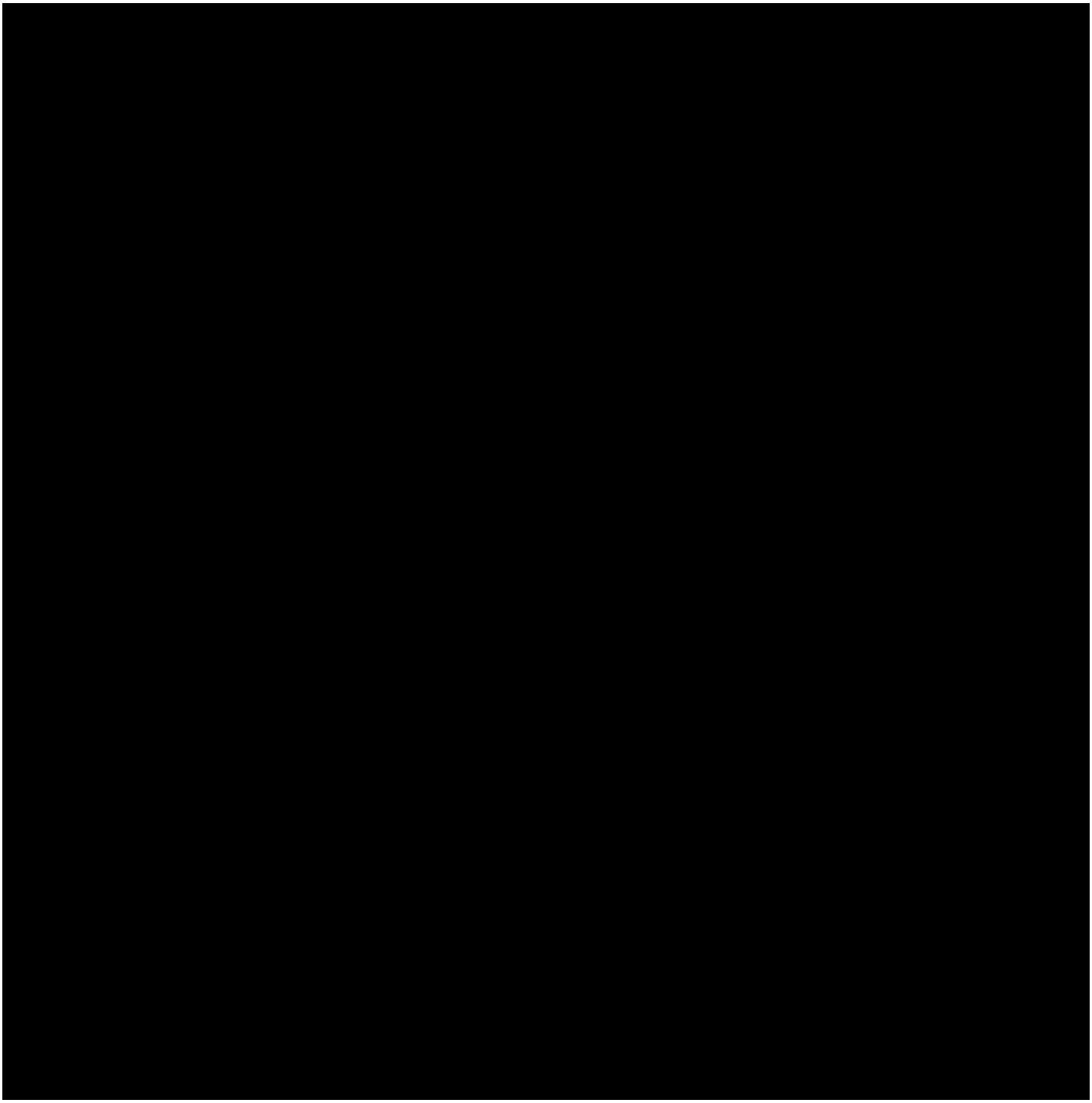
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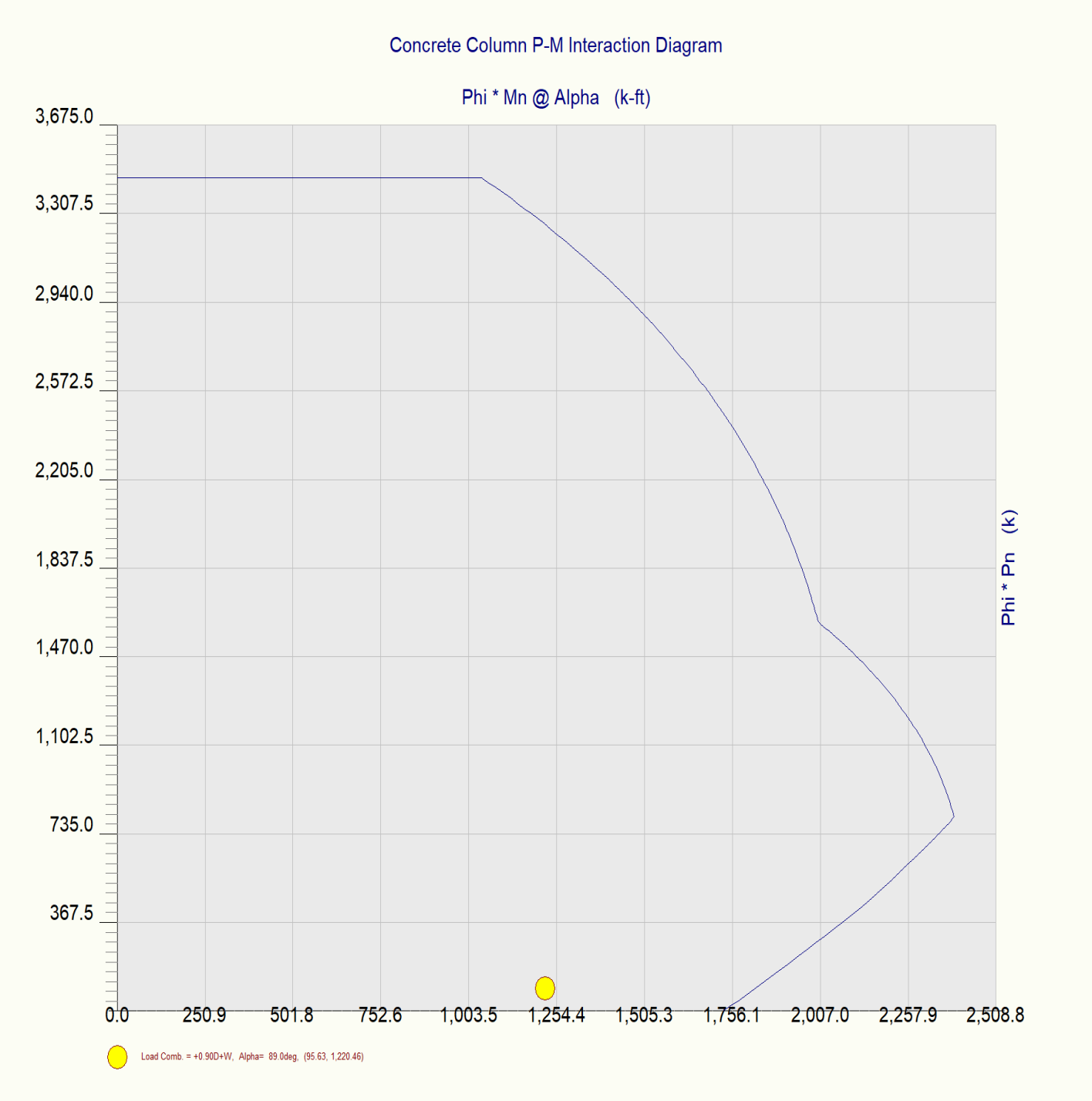
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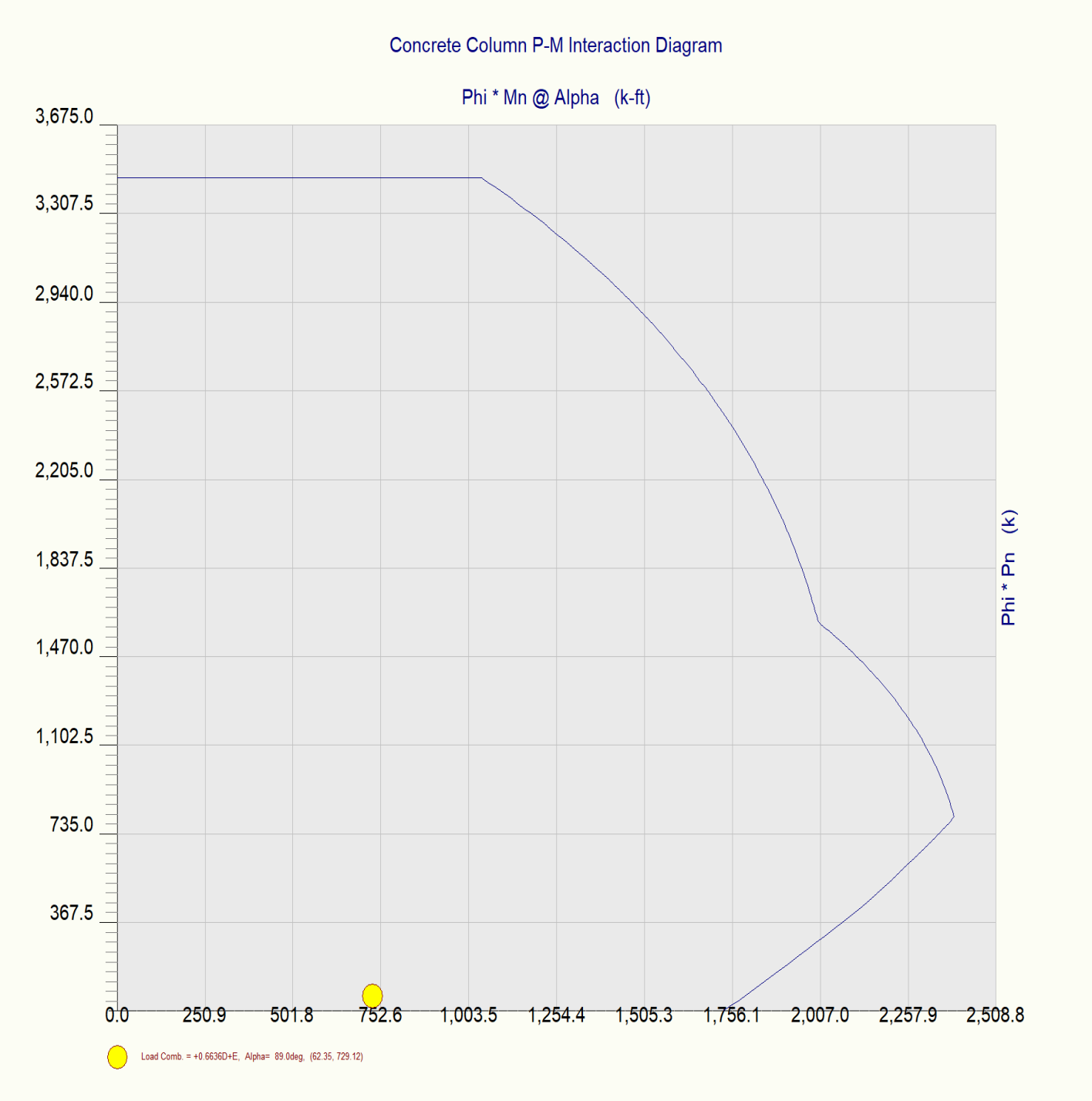
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DESCRIPTION: 42" Dia. Concrete Pedestal



Tetra Tech
17885 Von Karman Ave, Suite 500
Irvine, CA
(949) 809-5000

JOB TITLE	Ben Lomond TS		
JOB NO.	200-42064-22005	**SHEET NO.**	
CALCULATED BY	BMB	**DATE**	
CHECKED BY	MSO	**DATE**	

STRUCTURAL CALCULATIONS

FOR

Ben Lomond TS - Exterior Equipment Pads

TETRA TECH

SHEET NO.		**DATE**	12/3/2024
CHECKED BY		**OFFICE**	Irvine
TELEPHONE	(949) 809 - 5000		
ENGINEER	Tony Arzate	**JOB NUMBER**	200-42064-22005

SUBJECT Ben Lomond Transfer Station
Electrical Equipment

Design Criteria

Soil Properties:

Allowable Bearing Pressure = 3500 psf + 1/3 Increase for Wind & Seismic for Slabs on Grade
Lateral Passive Pressure = 210 psf/ft
Coefficient of Friction, μ = 0.40

Seismic Loading

Site Class = B
Risk Category = II
Importance Factor, I_E , I_P = 1.0
Seismic Design Category = E

S_S = 1.97 g S_1 = 0.783 g S_{DS} = 1.182 g S_{D1} = 0.418 g

Seismic Coefficients

Mechanical & Electrical Equipment: ASCE 7-16 Table 15.4-2, All Other Self Supporting Structures

R = 1.25
Ω_0 = 2.00
C_d = 2.50

Mechanical & Electrical Equipment: ASCE 7-16 Table 13.6-1, Other Mechanical or Electrical Equipment

R_p = 1.50
Ω_0 = 2.00
a_p = 1.00

Wind Loading (ASCE 7-16)

Design Wind Speed = 92 mph
Exposure Category = C
Occupancy Category = II

Material Properties

Concrete f'_c = 4500 psi Min. at 28 days

Live Loading

*Area of the foundation that do not have equipment will have a live load of 100 psf for pedestrian loading

TETRA TECH

ENGINEER Tony Arzate
SUBJECT Ben Lomond Transfer Station

SHEET NO. DATE
CHECKED BY OFFICE Irvine
TELEPHONE (949) 809 - 5000
JOB NUMBER 200-42064-22005

Transformer Properties

Width, D	=	7.8	ft
Length, L	=	5.3	ft
Equipment Height	=	5.3	ft
Weight, W	=	9,360	lb

D600 GC Diesel Generator Properties

Width, D	=	6.1	ft
Length, L	=	16.3	ft
Equipment Height	=	8.4	ft
Weight Full, W	=	24,000	lb

ATS Properties

Width, D	=	3.4	ft
Length, L	=	2.8	ft
Equipment Height	=	7.9	ft
Weight, W	=	1,776	lb

UMC & MDP Properties

Width, D	=	5.5	ft
Length, L	=	2.0	ft
Equipment Height	=	7.7	ft
Weight, W	=	2,850	lb

Oil Tank Properties (Assumed filled with 500 gallons of oil)

Width, D	=	5.8	ft
Length, L	=	3.8	ft
Equipment Height	=	4.9	ft
Weight, W	=	5,432	lb

Anti Freeze Tank Properties (Assumed filled with 120 gallons of water for conservative design)

Width, D	=	2.5	ft
Length, L	=	2.5	ft
Equipment Height	=	4.0	ft
Weight, W	=	1,128	lb

45 kVA Transformer Properties (T2-T5)

Width, D	=	2.07	ft
Length, L	=	1.76	ft
Equipment Height	=	3.78	ft
Weight, W	=	625	lb

TETRA TECH

SHEET NO.		DATE	8/1/2024
CHECKED BY	MSO	OFFICE	Irvine
TELEPHONE			(949) 809 - 5000
ENGINEER	Tony Arzate	JOB NUMBER	200-42064-22005
SUBJECT	Ben Lomond Transfer Station		
	Electrical Equipment		

Seismic Base Shear (Non-Building Structure) - All Other Structures

Per ASCE 7-16, Chapter 15

Design Spectral Response Acceleration

Risk Category	II		(Table 1.5-1)
Soil Site Class	E		(Table 20.3-1)
S_s =	1.97	g	
S_1 =	0.783	g	
F_a =	0.900	g	(Table 11.4-1)
F_v =	0.800	g	(Table 11.4-2)
$S_{DS} = 2/3S_sF_a$ =	1.182	g	(Eq. 11.4-3)
$S_{D1} = 2/3S_1F_v$ =	0.418	g	(Eq. 11.4-4)

Seismic Design Category (SDC)

SDC =	E		(Table 11.6-1,2)

Period Determination

$T_s = S_{D1}/S_{DS}$ =	0.35	sec	(Sec.11.4.5)
$T_o = 0.2(S_{D1}/S_{DS})$ =	0.07	sec	(Sec.11.4.5)
T_L =	12.0	sec	(Figures 22-12)
Structure Type	All other structral systems		(Table 12.8-2)
h_n =	8.4	ft	
C_t =	0.020		
x =	0.75		
$T_a = C_th_n^x$ =	0.099	sec	(Eqt. 12.8-7)

Seismic Response Coefficient (C_s) Determination

All Other Self Supporting Structures

Importance Factor (I)	1.00		(Table 1.5-2)
Response Modification Coefficient (R)	1.25		(Table 15.4-1)
Overstrength Factor (Ω_0)	2.00		(Table 15.4-1)
Deflection Amplification Factor (C_d)	2.50		(Table 15.4-1)

For 0 sec ≤ Ta ≤ 0.354 sec, use	$C_S = S_{DS} \times I / R$	0.946	g	(Eq 12.8-2) <- Governs
For 0.354 sec < Ta ≤ 12 sec, use	$C_S = (S_{D1} \times I) / (T_a \times R)$	3.383	g	(Eq 12.8-3)
For Ta > 12 sec, use	$C_S = (S_{D1} \times T_L \times I)/ (T_a^2 \times R)$	411.062	g	(Eq 12.8-4)
For S_1 > 0.6, use	$C_S > 0.5S_1 \times I / R$	0.313	g	(Eq 12.8-6)
For any cases	$C_S > 0.044S_{DS} I > 0.01g$	0.052	g	(Eq 12.8-5)

Cs =	0.946	g	
$V = C_S W$	0.946	W	(Eq 12.8-1)
$E_v = 0.2S_{DS}W$	0.236	W	(Eq 12.4-4a)

NOTE:

1. PG&E TO PROVIDE AND INSTALL PRIMARY CONDUCTOR PRI.

45 kVA XFMR = 625 LBS
HEIGHT = 3.78 FT
Eh = 591 LBS
Ev = 148 LBS
OT MOMENT = 1,489 LB-FT

INSTALL PRIMARY CONDUCTORS BETWEEN FENCE AND STREET CURB

INSTALL PRIMARY CONDUCTORS BETWEEN FENCE AND STREET CURB, TYPICAL

PULLBOX

PRI

UE

(E) ELECTRIC BOX

NOTE 1

(N) XFMR T5

(E) UTILITY OVERHEAD POLE

(E) PUMP HOUSE. SEE E-106 FOR ENLARGED DRAWING

(E) OVERHEAD POLE WITH POLE-MOUNTED XFMR

(E) PUMP HOUSE MAIN DISTRIBUTION PANEL

SCALE HOUSE SEE E-103

CANOPY

(N) XFMR T3

(N) FUSE DISC SWITCH "DS-3". INSTALLED ON METAL STRUT FRAME.

(N) FUSE DISC SWITCH "DS-4"

(N) XFMR T4

SD

W

VK

(N) DISC SWITCH INSTALLED ON COLUMN FOR CRANE

TRANSFER BUILDING

ATS = 1,776 LBS
HEIGHT = 7.9 FT
Eh = 1, 681 LBS
Ev = 419 LBS
OT MOMENT = 8, 853 LB-FT

ADMIN BLDG

PANEL XFER BLDG

(N) UTILITY XFMR T1

(N) XFMR T2

UMC = 2,850 LBS
HEIGHT = 7.7 FT
Eh = 2,696 LBS
Ev = 673 LBS
OT MOMENT = 13, 839 LB-FT

TRANSFORMER = 9,360 LBS
HEIGHT = 5.3 FT
Eh = 8,855 LBS
Ev = 2, 209 LBS
OT MOMENT = 31, 288 LB-FT

5'x 5' PULL BOX, TYPICAL

(N) MAIN DISTRIBUTION PANEL

(N) ATS

(N) UTILITY METER CABINET

GENERATOR = 24,000 LBS
HEIGHT = 8.4 FT
Eh = 22, 704 LBS
Ev = 5, 664 LBS
OT MOMENT = 127, 142 LB-FT

SEE E-101

(N) DISC SWITCH INSTALLED ON COLUMN FOR FUTURE

ELECTRICAL OVERALL SITE PLAN

0 30' 60' 120'
SCALE: 1" = 60'

TETRA TECH
www.tetratech.com

100% DESIGN

NOT FOR CONSTRUCTION

MARK	DATE	DESCRIPTION	BY
1	01/29/24	30% DESIGN	WTM
2	04/12/24	60% DESIGN	WTM
3	06/14/24	90% DESIGN	WTM
4	08/02/24	100% DESIGN	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
ELECTRICAL OVERALL SITE PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E100

Copyright Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

10/4/2024 10:17:03 AM - \\TT-LOCAL\IER\PROJECTS\IRVINE\420642\200-42064-22005\CAD\SHEETFILES\E-100 - ELECTRICAL OVERALL SITE PLAN.DWG - PHAN, DUAN

TETRA TECH

Sheet No.:		**of**	**Date:** 1-Aug-24
Checked By:			**Office:** Irvine
Telephone:	(949) 809 - 5000		
Engineer:	Tony Arzate	**Job No.:**	200-42064-22005
Subject:	Ben Lomond Transfer Station		
	Electrical Equipment		

Global Stability of Generator due to Seismic Loads

Properties

W, Weight	=	24.00	kip
V, Seismic Force	=	22.69	kip
Height	=	8.41	ft
Min. Width	=	6.12	ft
C.O.G.	=	5.61	ft (Assumed 2/3 height)
Equipment Area	=	99.96	ft^2
Load	=	0.24	ksf

Overturning Moment

(1.0EL) Mot = 22.69 kips x 1 x 5.61 ft = 127.2 kip - ft

Resisting Moment

(0.9-0.2Sds) Mr = (0.9 - 0.2 x 1.182) x 24 kips x 3.06 ft = 48.7 kip - ft

Net Moment

$M_{OT\ NET}$ = 127.2 kip-ft - 48.7 kip-ft = 78.5 kip-ft

Factor of Safety for Overturning

F.S. = 0.38 < 1.5 **NG!**

**** Equipment not stable enough to self-support; Mechanical anchorage required.***

Anchorage Loads & Requirements

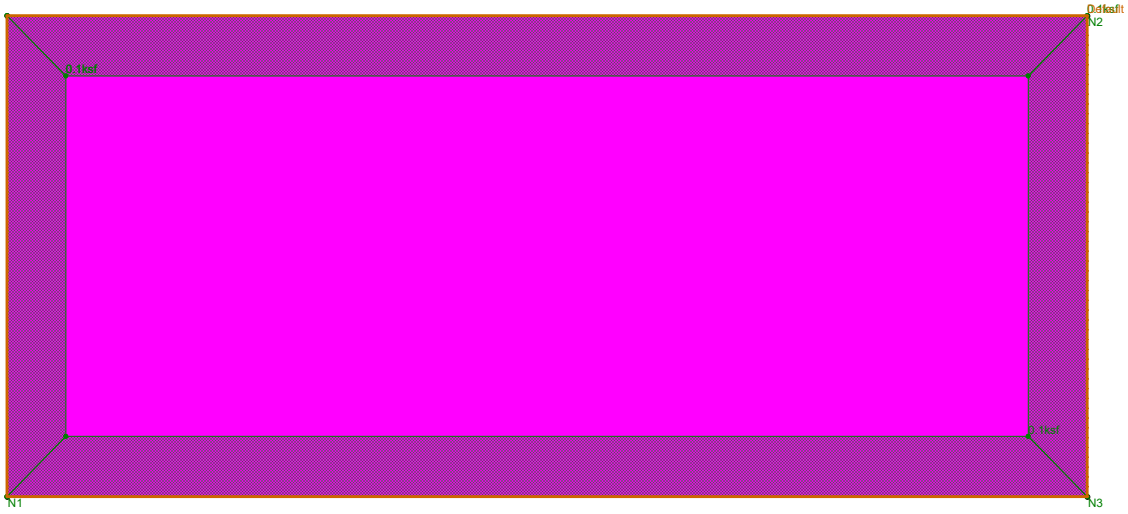
No.of Base Plates	=	10								
Ω_0	=	2								
$\Omega_0 * M_{OT\ NET}$	=	157.0	kip-ft							
T/C	=	157.0	kip-ft	/	(3.06 ft	x	5.00 anchors)	=	10.3	kip uplift/per baseplate
$\Omega_0 * V$	=	45.4	kip							
V	=	45.4	kip	/	10 anchors	=	4.5	kip shear/per anchor		

T/C	=	10.3	kip uplift/per anchor
V	=	4.5	kip shear/per anchor



Loads: DL - Dead Load
Results for LC 1, Service1

		1
		Aug 1, 2024 at 10:51 AM
	DEAD LOAD	Generator Foundation Calc.fnd



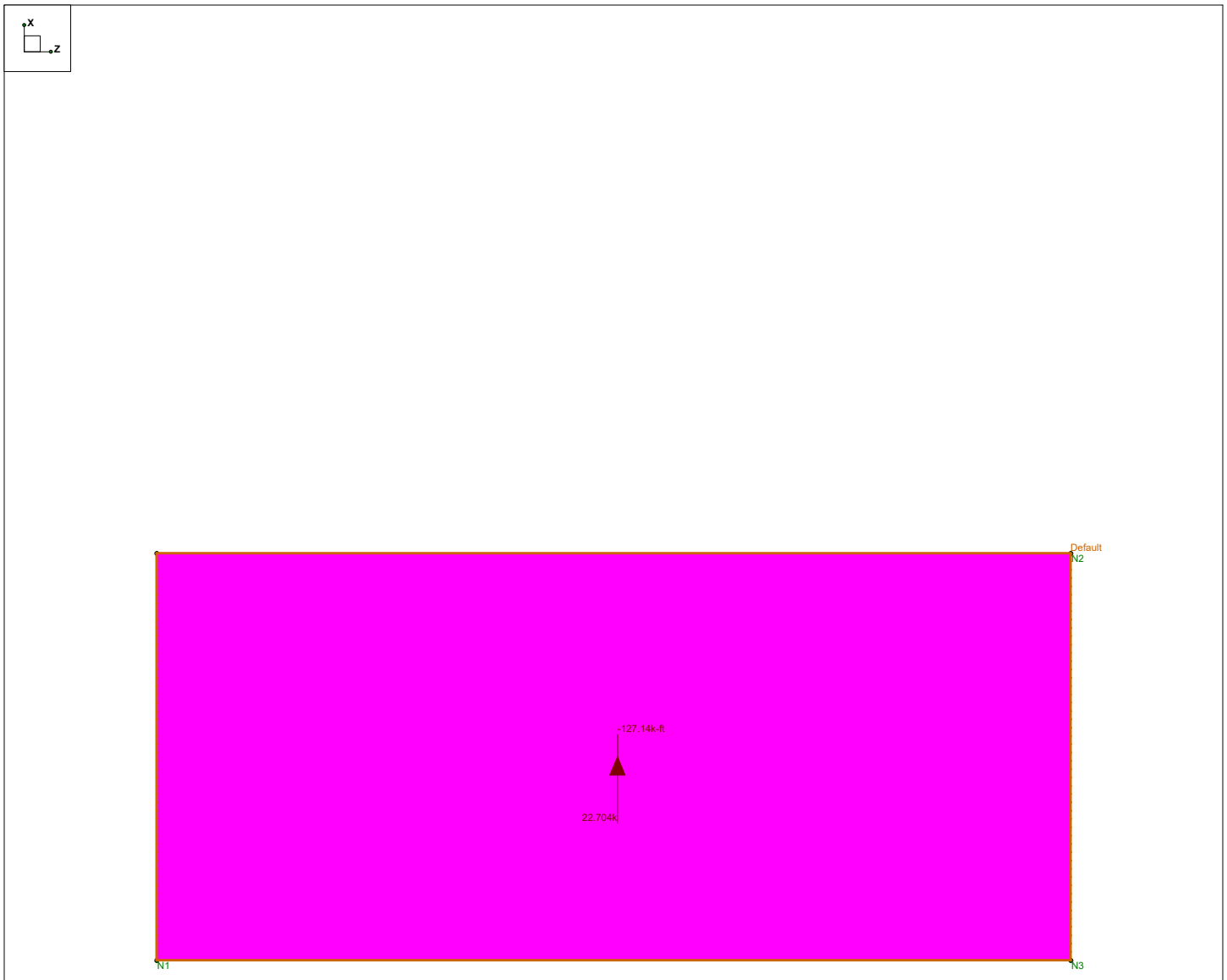
Loads: LL - Live Load
Results for LC 1, Service1

		2
		Aug 1, 2024 at 10:52 AM
	LIVE LOAD	Generator Foundation Calc.fnd



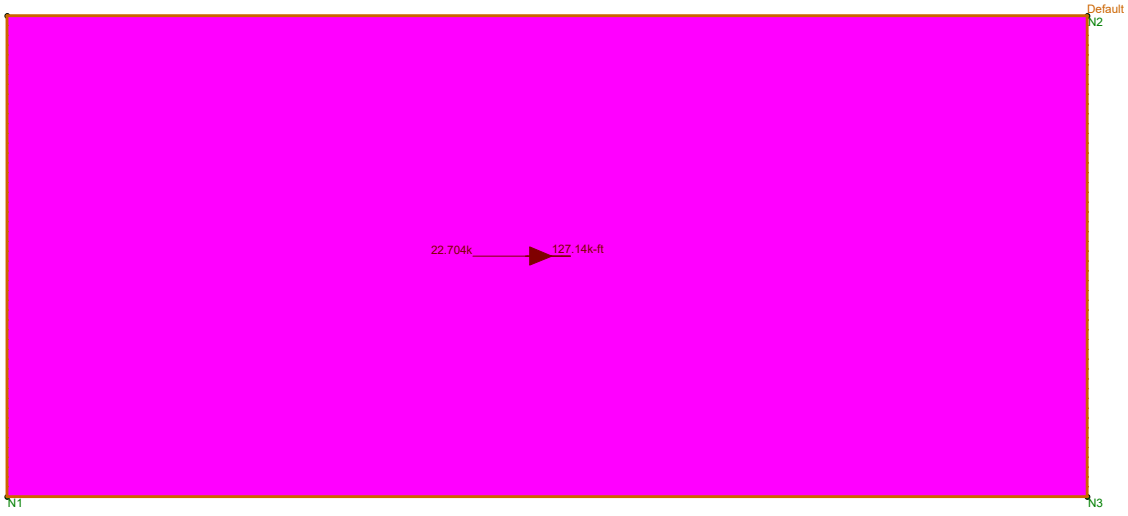
Loads: EL - Earthquake Load
Results for LC 1, Service1

		3
		Aug 1, 2024 at 10:52 AM
	ELY	Generator Foundation Calc.fnd



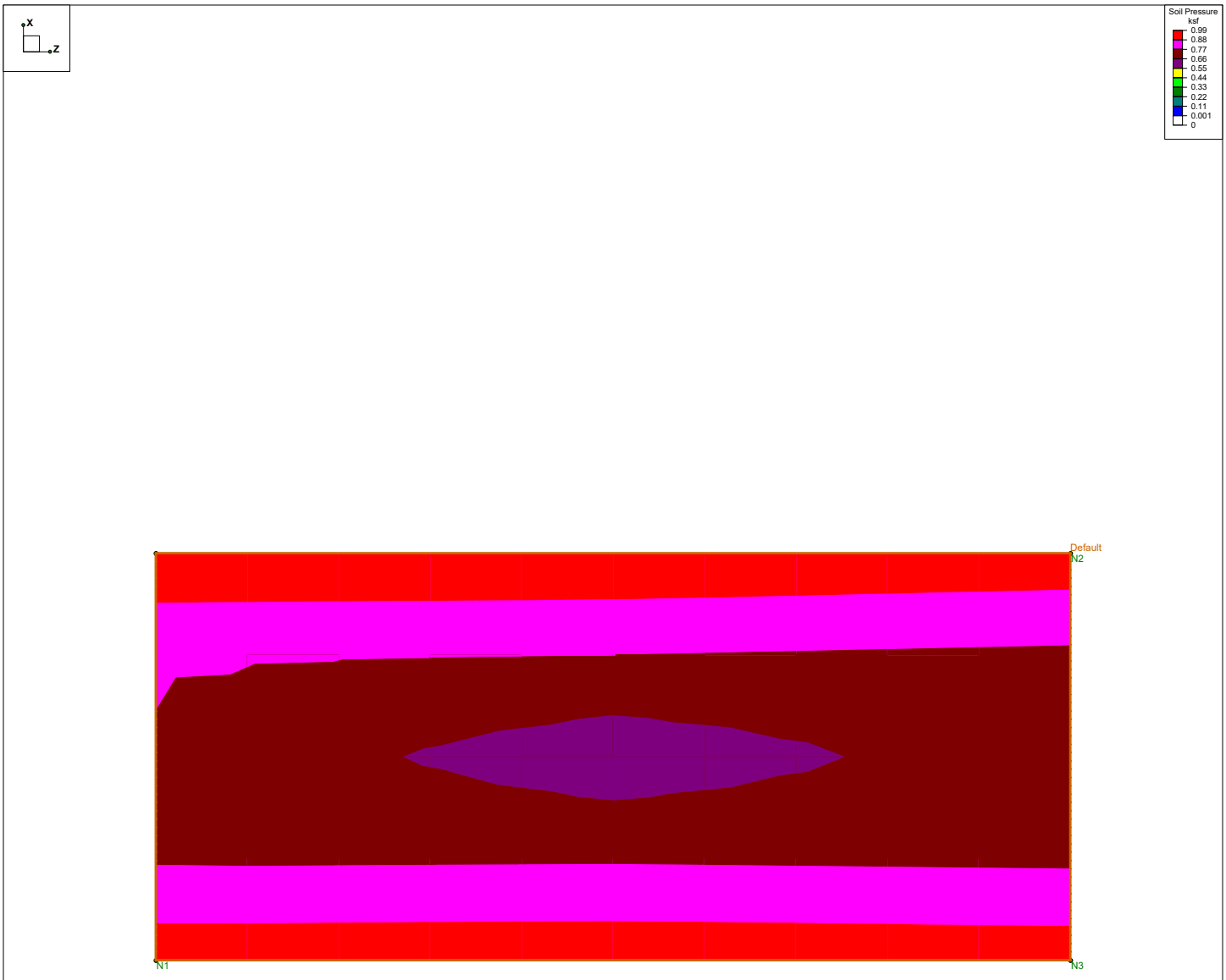
Loads: ELX - Earthquake Load X
Results for LC 1, Service1

		4
		Aug 1, 2024 at 10:53 AM
	ELX	Generator Foundation Calc.fnd



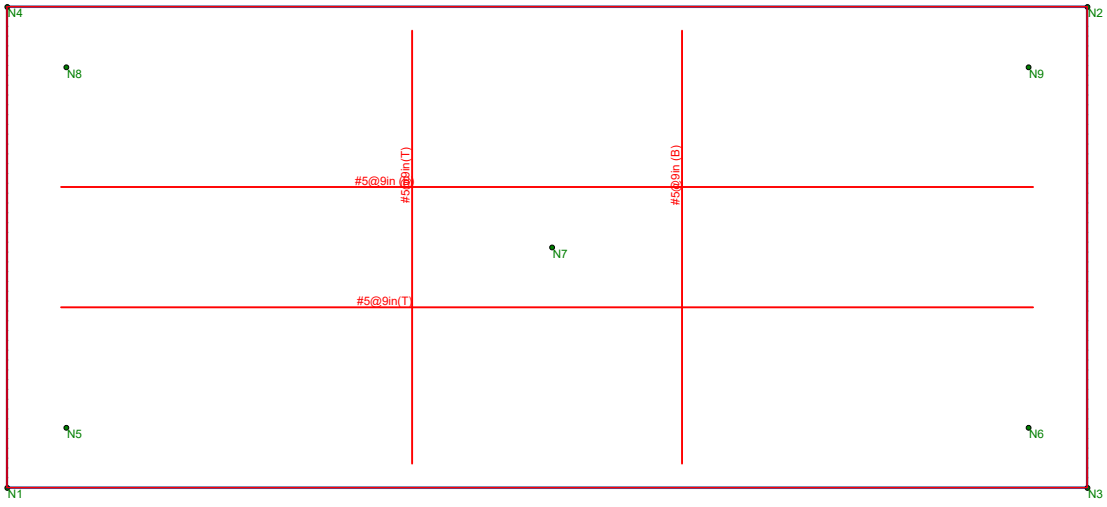
Loads: ELZ - Earthquake Load Z
Results for LC 1, Service1

		5
		Aug 1, 2024 at 10:53 AM
	ELZ	Generator Foundation Calc.fnd



Enveloped Results

		6
		Aug 1, 2024 at 10:54 AM
	SOIL PRESSURE	Generator Foundation Calc.fnd



Enveloped Results

		7
		Aug 1, 2024 at 10:55 AM
	DESIGN STRIPS	Generator Foundation Calc.fnd

Company :
Designer :
Job Number :
Model Name :

Aug 1, 2024
10:56 AM
Checked By:_____

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[k/ft^3]	f'c[ksi]	Lambda	Flex St...	Shear ...
1	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
2	Conc4500NW	4967	2160	0.15	0.6	0.15	4.5	1	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	2	3

Load Categories

	Category	Point Loads	Line Loads	Area Loads
1	DL			1
2	LL			4
3	EL			1
4	ELX	2		
5	ELZ	2		

Load Combinations

	Label	S...	S...	A...	SF	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...
1	Service1	Yes	Yes		1.5	DL	1	LL	1																
2	Service2	Yes	Yes		1.5	DL	1	EL	0.7	ELX	0.7														
3	Service3	Yes	Yes		1.5	DL	1	EL	0.7	ELX	-0.7														
4	Service4	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	0.7														
5	Service5	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	-0.7														
6	Service6	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	0.5...	LL	0.75												
7	Service7	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	-0....	LL	0.75												
8	Service8	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	0.5...	LL	0.75												
9	Service9	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	-0....	LL	0.75												
10	Service10	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	0.7														
11	Service11	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	-0.7														
12	Service12	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	0.7														
13	Service13	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	-0.7														
14	Strength1	Yes				DL	1.2	LL	1.6																
15	Strength2	Yes				DL	1.2	EL	1	ELX	1	LL	1												
16	Strength3	Yes				DL	1.2	EL	1	ELX	-1	LL	1												
17	Strength4	Yes				DL	1.2	EL	1	ELZ	1	LL	1												
18	Strength5	Yes				DL	1.2	EL	1	ELZ	-1	LL	1												
19	Strength6	Yes				DL	0.9	EL	-1	ELX	1														
20	Strength7	Yes				DL	0.9	EL	-1	ELX	-1														
21	Strength8	Yes				DL	0.9	EL	-1	ELZ	1														
22	Strength9	Yes				DL	0.9	EL	-1	ELZ	-1														

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	100	3.5	None	Yes

Slabs

	Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburde...	Icr Factor
1	S1	30	Conc4500NW	0	0	0.126	0	0.25

Area Loads (Cat 1 : DL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL1	0.24	0.24

Area Loads (Cat 2 : LL)

Label	Base Mag[ksf]	Peak Mag[ksf]

Area Loads (Cat 2 : LL) (Continued)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL2	0.1	0.1
2	AL3	0.1	0.1
3	AL4	0.1	0.1
4	AL5	0.1	0.1

Area Loads (Cat 3 : EL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL6	0.06	0.06

Strip Reinforcing

	Label	UC Top	LC	Top Bars	Governin...	UC Bot	LC	Bot Bars/...	Governin...	UC Shear	LC	Governin...
1	DS1	0.14	21	#5@9in	DS1-X25	0.165	18	#5@9in	DS1-X25	0.092	18	DS1-X25
2	DS2	0.06	15	#5@9in	DS2-X25	0.076	20	#5@9in	DS2-X25	0.088	19	DS2-X37

Slab Overturning Safety Factors (By Combination)

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	780.717	0	347.619	9.99+	9.99+
2	2	S1	0	0	773.599	128.73	344.45	9.99+	2.676
3	3	S1	0	0	773.599	128.73	344.45	9.99+	2.676
4	4	S1	0	128.73	773.599	0	344.45	6.009	9.99+
5	5	S1	0	128.73	773.599	0	344.45	6.009	9.99+
6	6	S1	0	0	798.195	96.548	355.401	9.99+	3.681
7	7	S1	0	0	798.195	96.548	355.401	9.99+	3.681
8	8	S1	0	96.548	798.195	0	355.401	8.267	9.99+
9	9	S1	0	96.548	798.195	0	355.401	8.267	9.99+
10	10	S1	0	38.514	441.051	145.879	196.381	9.99+	1.346
11	11	S1	0	38.514	441.051	145.879	196.381	9.99+	1.346
12	12	S1	0	167.244	441.051	17.149	196.381	2.637	9.99+
13	13	S1	0	167.244	441.051	17.149	196.381	2.637	9.99+

Slab Sliding Safety Factors

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
1	1	S1	0	0	39.832	0	36.628	9.99+	9.99+
2	2	S1	0	15.893	39.522	0	36.317	2.487	9.99+
3	3	S1	0	15.893	39.522	0	36.317	2.487	9.99+
4	4	S1	0	0	39.522	15.893	36.317	9.99+	2.285
5	5	S1	0	0	39.522	15.893	36.317	9.99+	2.285
6	6	S1	0	11.92	40.595	0	37.39	3.406	9.99+
7	7	S1	0	11.92	40.595	0	37.39	3.406	9.99+
8	8	S1	0	0	40.595	11.92	37.39	9.99+	3.137
9	9	S1	0	0	40.595	11.92	37.39	9.99+	3.137
10	10	S1	0	15.893	23.336	0	20.131	1.468	9.99+
11	11	S1	0	15.893	23.336	0	20.131	1.468	9.99+
12	12	S1	0	0	23.336	15.893	20.131	9.99+	1.267
13	13	S1	0	0	23.336	15.893	20.131	9.99+	1.267

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Specifier's comments:

1 Input data



Anchor type and diameter:	**HIT-HY 200 V3 + HAS-B-105 (ASTM F1554 Gr.105) 1**
Item number:	2197963 HAS-B-105 1"x12" (element) / 2334276 HIT-HY 200-R V3 (adhesive)
Specification text:	Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 105 injection mortar with 10 in embedment hef, 1, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868
Effective embedment depth:	$h_{ef,act}$ = 10.000 in. ($h_{ef,limit}$ = - in.)
Material:	ASTM F1554 Grade 105
Evaluation Service Report:	ESR-4868
Issued I Valid:	6/1/2023 | 11/1/2024
Proof:	Design Method ACI 318-19 / Chem
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 0.500 in.
Anchor plate[R] :	l_x x l_y x t = 3.701 in. x 3.701 in. x 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 30.000 in., Temp. short/long: 32/32 °F
Installation:	**Hammer drilled hole, Installation condition: Dry**
Reinforcement:	tension: not present, shear: not present; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

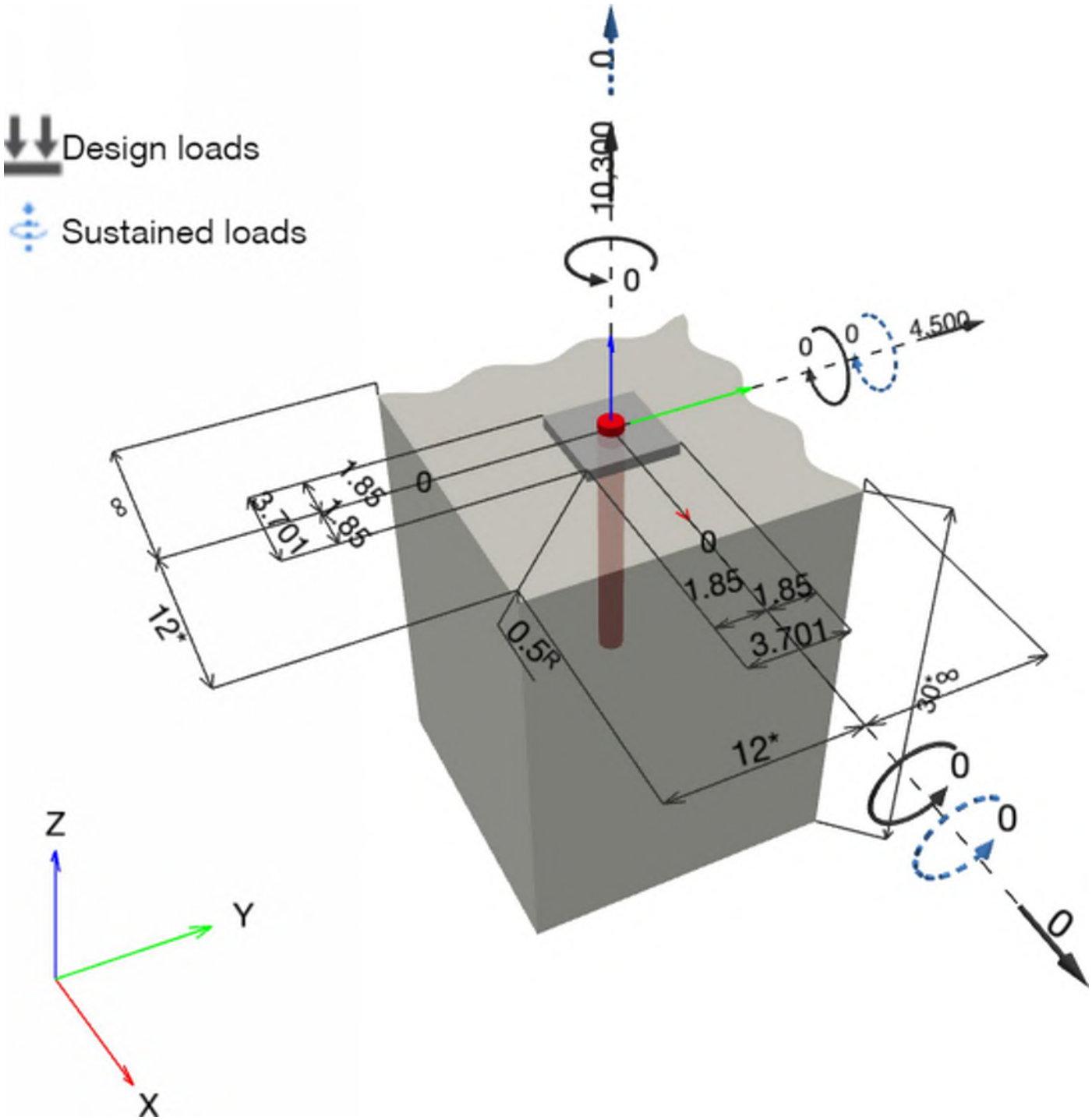
Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Geometry [in.] & Loading [lb, in.lb]



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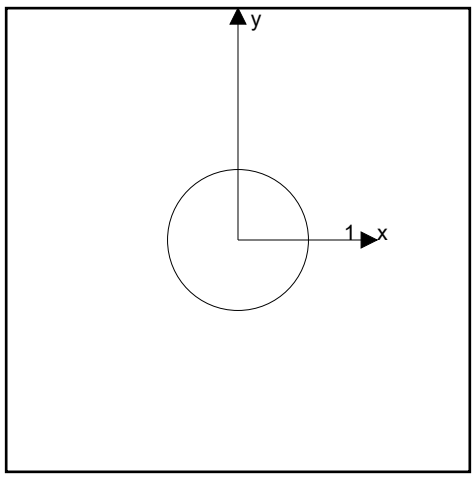
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1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 10,300; V_x = 0; V_y = 4,500; M_x = 0; M_y = 0; M_z = 0;	yes	77

2 Load case/Resulting anchor forces



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	10,300	4,500	0	4,500

Max. concrete compressive strain: - [‰]
Max. concrete compressive stress: - [psi]
Resulting tension force in (x/y)=(0.000/0.000): 10,300 [lb]
Resulting compression force in (x/y)=(-/-): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	10,300	56,786	19	OK
Bond Strength**	10,300	16,106	64	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	10,300	13,386	77	OK

* highest loaded anchor **anchor group (anchors in tension)

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3.1 Steel Strength

N_{sa} = ESR value	refer to ICC-ES ESR-4868
$\phi\ N_{sa} \geq N_{ua}$	ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.61	125,000

Calculations

N_{sa} [lb]
75,715

Results

N_{sa} [lb]	ϕ_{steel}	$\phi\ N_{sa}$ [lb]	N_{ua} [lb]
75,715	0.750	56,786	10,300

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.2 Bond Strength

$N_a = \left(\frac{A_{Na}}{A_{Na0}}\right) \psi_{ed,Na} \psi_{cp,Na} N_{ba}$ ACI 318-19 Eq. (17.6.5.1a)

$\phi N_a \geq N_{ua}$ ACI 318-19 Table 17.5.2

A_{Na} see ACI 318-19, Section 17.6.5.1, Fig. R 17.6.5.1(b)

$A_{Na0} = (2 c_{Na})^2$ ACI 318-19 Eq. (17.6.5.1.2a)

$c_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}}$ ACI 318-19 Eq. (17.6.5.1.2b)

$\psi_{ed,Na} = 0.7 + 0.3 \left(\frac{c_{a,min}}{c_{Na}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.4.1b)

$\psi_{cp,Na} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{c_{Na}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.5.1b)

$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \alpha_{N,seis} \cdot \pi \cdot d_a \cdot h_{ef}$ ACI 318-19 Eq. (17.6.5.2.1)

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$c_{a,min}$ [in.]	$\alpha_{overhead}$	$\tau_{k,c}$ [psi]
2,354	1.000	10.000	12.000	1.000	1,405

c_{ac} [in.]	λ_a	$\alpha_{N,seis}$
16.003	1.000	0.950

Calculations

c_{Na} [in.]	A_{Na} [in.^{2}]	A_{Na0} [in.^{2}]	$\psi_{ed,Na}$
14.564	705.64	848.43	0.947

$\psi_{cp,Na}$	N_{ba} [lb]
1.000	41,939

Results

N_a [lb]	ϕ_{bond}	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_a [lb]	N_{ua} [lb]
33,038	0.650	0.750	1.000	16,106	10,300

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.3 Concrete Breakout Failure

$N_{cb} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b$ ACI 318-19 Eq. (17.6.2.1a)

$\phi N_{cb} \geq N_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5h_{ef}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ ACI 318-19 Eq. (17.6.2.2.1)

Variables

h_{ef} [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
10.000	12.000	1.000	16.003	17	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
729.00	900.00	0.940	1.000	36,062

Results

N_{cb} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{cb} [lb]	N_{ua} [lb]
27,458	0.650	0.750	1.000	13,386	10,300

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	4,500	29,529	16	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Concrete Breakout Strength controls)**	4,500	38,441	12	OK
Concrete edge failure in direction x+**	4,500	29,280	16	OK

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa,eq}$ = ESR value refer to ICC-ES ESR-4868
ϕ $V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]	$\alpha_{V,seis}$
0.61	125,000	1.000

Calculations

$V_{sa,eq}$ [lb]
45,430

Results

$V_{sa,eq}$ [lb]	ϕ_{steel}	ϕ $V_{sa,eq}$ [lb]	V_{ua} [lb]
45,430	0.650	29,529	4,500

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength (Concrete Breakout Strength controls)

$V_{cp} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1a)

$\phi V_{cp} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = MAX \left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ ACI 318-19 Eq. (17.6.2.2.1)

Variables

k_{cp}	h_{ef} [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
2	10.000	12.000	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
16.003	17	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
729.00	900.00	0.940	1.000	36,062

Results

V_{cp} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cp} [lb]	V_{ua} [lb]
54,916	0.700	1.000	1.000	38,441	4,500

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4.3 Concrete edge failure in direction x+

$V_{cb} = \left(\frac{A_{Vc}}{A_{Vc0}}\right) \psi_{ed,V} \psi_{c,V} \psi_{h,V} \psi_{parallel,V} V_b$ — ACI 318-19 Eq. (17.7.2.1a)

$\phi V_{cb} \geq V_{ua}$ — ACI 318-19 Table 17.5.2

A_{Vc} see ACI 318-19, Section 17.7.2.1, Fig. R 17.7.2.1(b)

$A_{Vc0} = 4.5 c_{a1}^2$ — ACI 318-19 Eq. (17.7.2.1.3)

$\psi_{ed,V} = 0.7 + 0.3\left(\frac{c_{a2}}{1.5c_{a1}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.4.1b)

$\psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0$ — ACI 318-19 Eq. (17.7.2.6.1)

$V_b = 9 \lambda_a \sqrt{f_c'} c_{a1}^{1.5}$ — ACI 318-19 Eq. (17.7.2.2.1b)

Variables

c_{a1} [in.]	c_{a2} [in.]	$\psi_{c,V}$	h_a [in.]	l_e [in.]
12.000	12.000	1.000	30.000	8.000

λ_a	d_a [in.]	f_c' [psi]	$\psi_{parallel,V}$
1.000	1.000	4,500	2.000

Calculations

A_{Vc} [in.^{2}]	A_{Vc0} [in.^{2}]	$\psi_{ed,V}$	$\psi_{h,V}$	V_b [lb]
540.00	648.00	1.000	1.000	25,097

Results

V_{cb} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cb} [lb]	V_{ua} [lb]
41,828	0.700	1.000	1.000	29,280	4,500

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.769	0.154	5/3	70	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-19, Section 26.7.

Fastening meets the design criteria!

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Company:		Page:	11
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Generator Anchorage	Date:	10/1/2024
Fastening point:			

7 Installation data

Profile: no profile

Hole diameter in the fixture: d_f = 1.125 in.

Plate thickness (input): 0.500 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-HY 200 V3 + HAS-B-105 (ASTM F1554 Gr.105) 1

Item number: 2197963 HAS-B-105 1"x12" (element) / 2334276 HIT-HY 200-R V3 (adhesive)

Maximum installation torque: 1,800 in.lb

Hole diameter in the base material: 1.125 in.

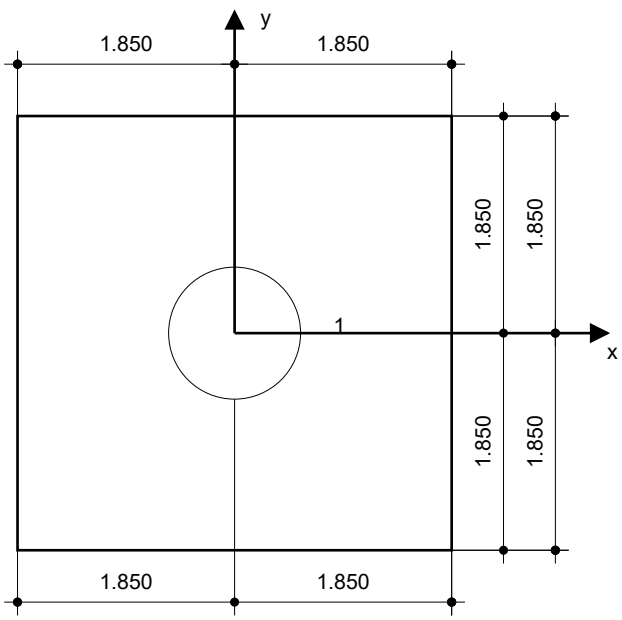
Hole depth in the base material: 10.000 in.

Minimum thickness of the base material: 12.250 in.

Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 105 injection mortar with 10 in embedment hef, 1, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868

7.1 Recommended accessories

Drilling	Cleaning	Setting
• Suitable Rotary Hammer • Properly sized drill bit	• Compressed air with required accessories to blow from the bottom of the hole • Proper diameter wire brush	• Dispenser including cassette and mixer • Torque wrench



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	0.000	0.000	-	12.000	12.000	-

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Company:		Page:	12
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Generator Anchorage	Date:	10/1/2024
Fastening point:			

8 Remarks; Your Cooperation Duties

- Any and all information and data contained in the Software concern solely the use of Hilti products and are based on the principles, formulas and security regulations in accordance with Hilti's technical directions and operating, mounting and assembly instructions, etc., that must be strictly complied with by the user. All figures contained therein are average figures, and therefore use-specific tests are to be conducted prior to using the relevant Hilti product. The results of the calculations carried out by means of the Software are based essentially on the data you put in. Therefore, you bear the sole responsibility for the absence of errors, the completeness and the relevance of the data to be put in by you. Moreover, you bear sole responsibility for having the results of the calculation checked and cleared by an expert, particularly with regard to compliance with applicable norms and permits, prior to using them for your specific facility. The Software serves only as an aid to interpret norms and permits without any guarantee as to the absence of errors, the correctness and the relevance of the results or suitability for a specific application.
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Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Engineer: Tony Arzate
Subject: Ben Lomond Design Check

Generator Equipment

$\phi N_n := 0.8 \cdot 56.8\ \textbf{kip} = 45.44\ \textbf{kip}$ From Hilti Profis

$N_{ua} := 10.3\ \textbf{kip}$ From Hilti Profis

$\frac{N_{ua}}{\phi N_n} = 0.227$

$\phi V_n := 0.8 \cdot 29.529\ \textbf{kip} = 23.623\ \textbf{kip}$ From Hilti Profis

$V_{ua} := 4.5\ \textbf{kip}$ From Hilti Profis

$\frac{V_{ua}}{\phi V_n} = 0.19$

$\beta_v := \max\left(\frac{V_{ua}}{\phi V_n}, .16\right) = 0.19$ From Hilti Profis

$\beta_n := \max\left(\frac{N_{ua}}{\phi N_n}, .77\right) = 0.77$ From Hilti Profis

$\beta_v + \beta_n = 0.96$ < 1.2 per ACI 318 17.8.3

TETRA TECH

Sheet No.:		**of**	**Date:** 1-Aug-24
Checked By:			**Office:** Irvine
Telephone:	(949) 809 - 5000		
Engineer:	Tony Arzate	**Job No.:**	200-42064-22005
Subject:	Ben Lomond Transfer Station		
	Electrical Equipment		

Global Stability of Transformer due to Seismic Loads

Properties

W, Weight	=	9.36	kip
V, Seismic Force	=	8.85	kip
Height	=	5.33	ft
Min. Width	=	5.25	ft
C.O.G.	=	3.56	ft (Assumed 2/3 height)
Equipment Area	=	40.69	ft^2
Load	=	0.23	ksf

Overturning Moment

(1.0EL) Mot = 8.85 kips x 1 x 3.56 ft = 31.5 kip - ft

Resisting Moment

(0.9-0.2Sds) Mr = (0.9 - 0.2 x 1.182) x 9 kips x 2.63 ft = 16.3 kip - ft

Net Moment

$M_{OT\ NET}$ = 31.5 kip-ft - 16.3 kip-ft = 15.2 kip-ft

Factor of Safety for Overturning

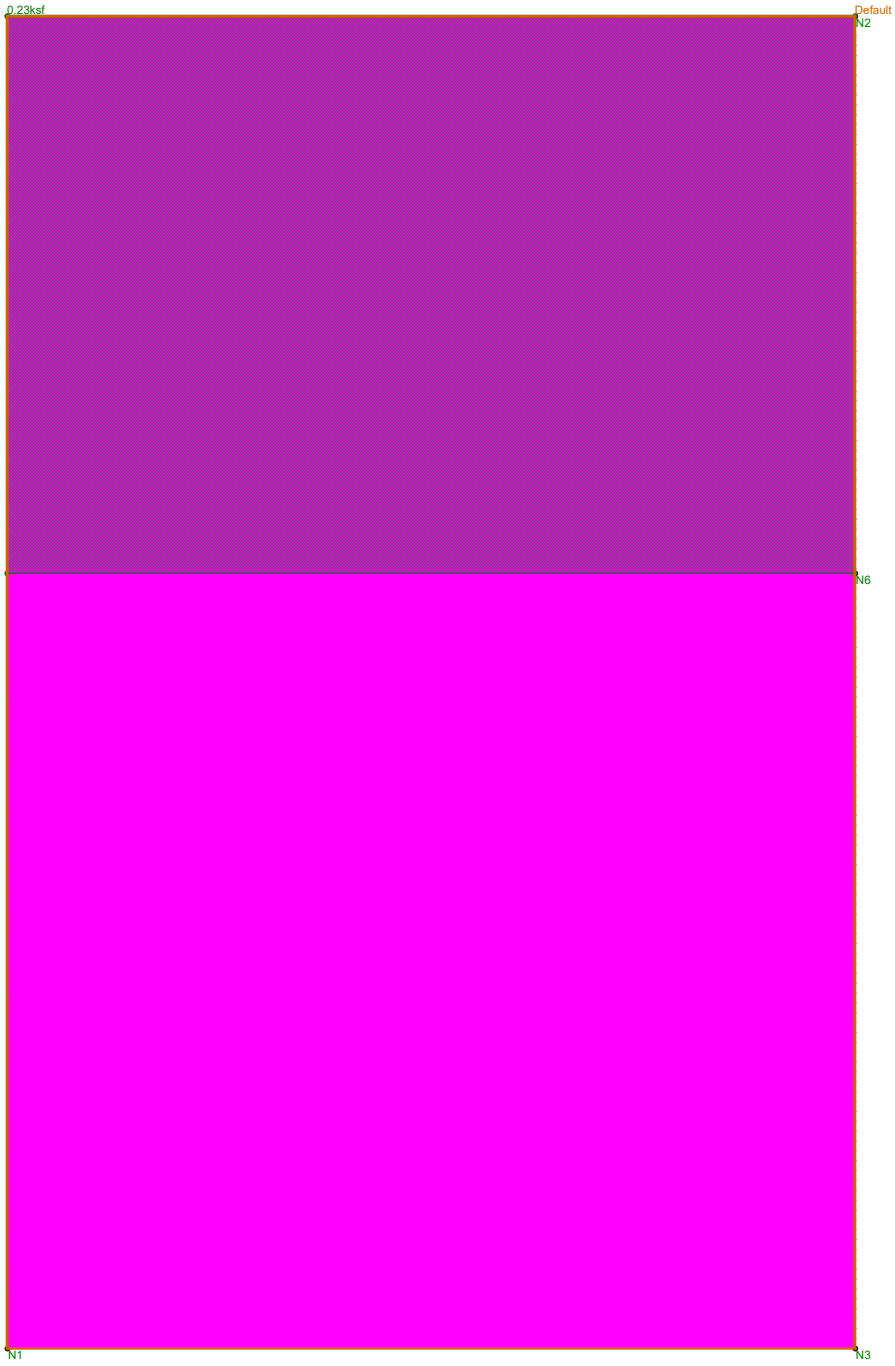
F.S. = 0.52 < 1.5 **NG!**

**** Equipment not stable enough to self-support; Mechanical anchorage required.***

Anchorage Loads & Requirements

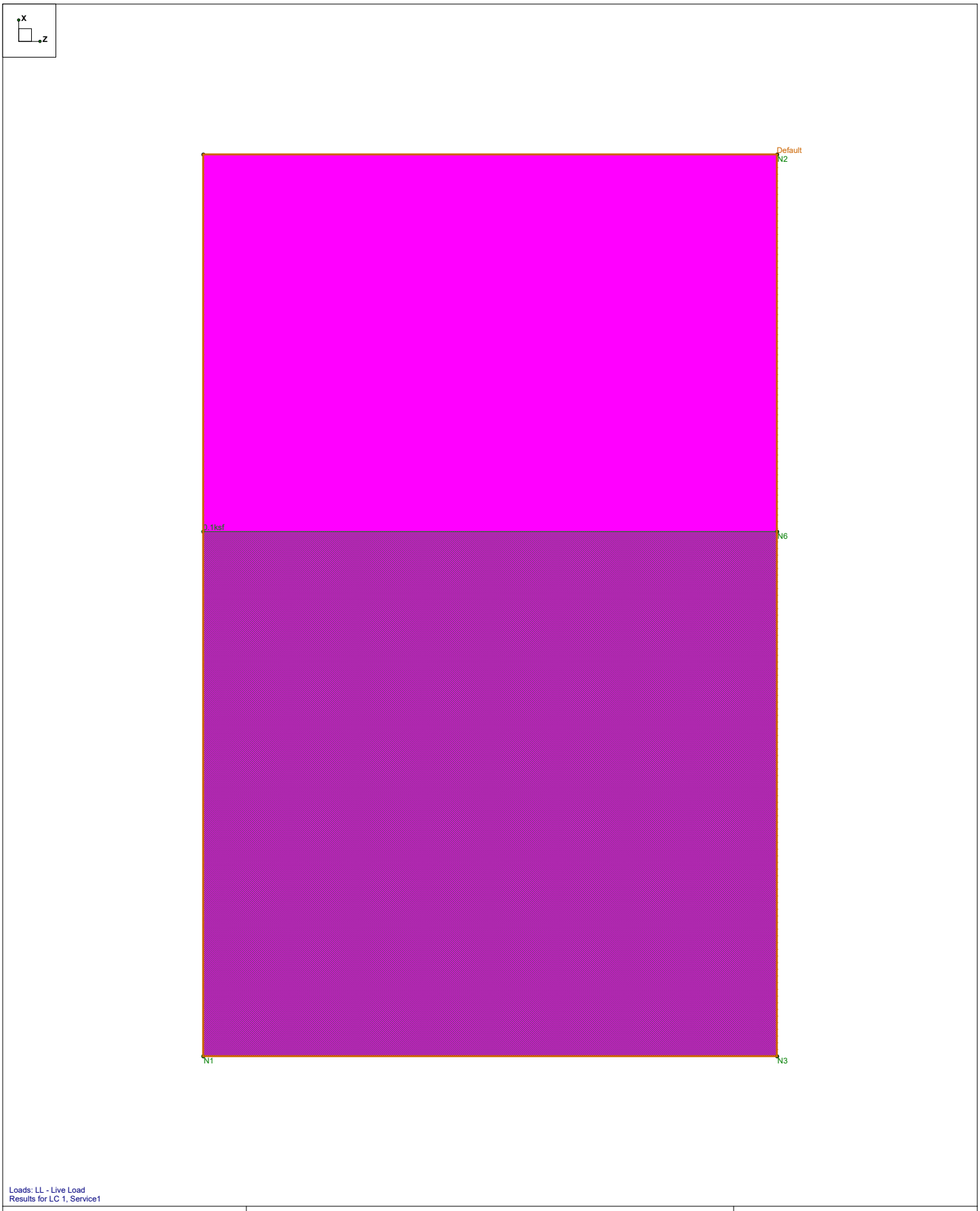
No. of Bolts	=	4								
Ω_0	=	2								
$\Omega_0 * M_{OT\ NET}$	=	30.3	kip-ft							
T/C	=	30.3	kip-ft	/	(2.63	ft	x	2.00	anchors)	= 5.8 kip uplift/per 2 anchors
$\Omega_0 * V$	=	17.7	kip							
V	=	17.7	kip	/	4	anchors		=	4.4	kip shear/per anchor

T/C	=	2.9	kip uplift/per anchor
V	=	4.4	kip shear/per anchor



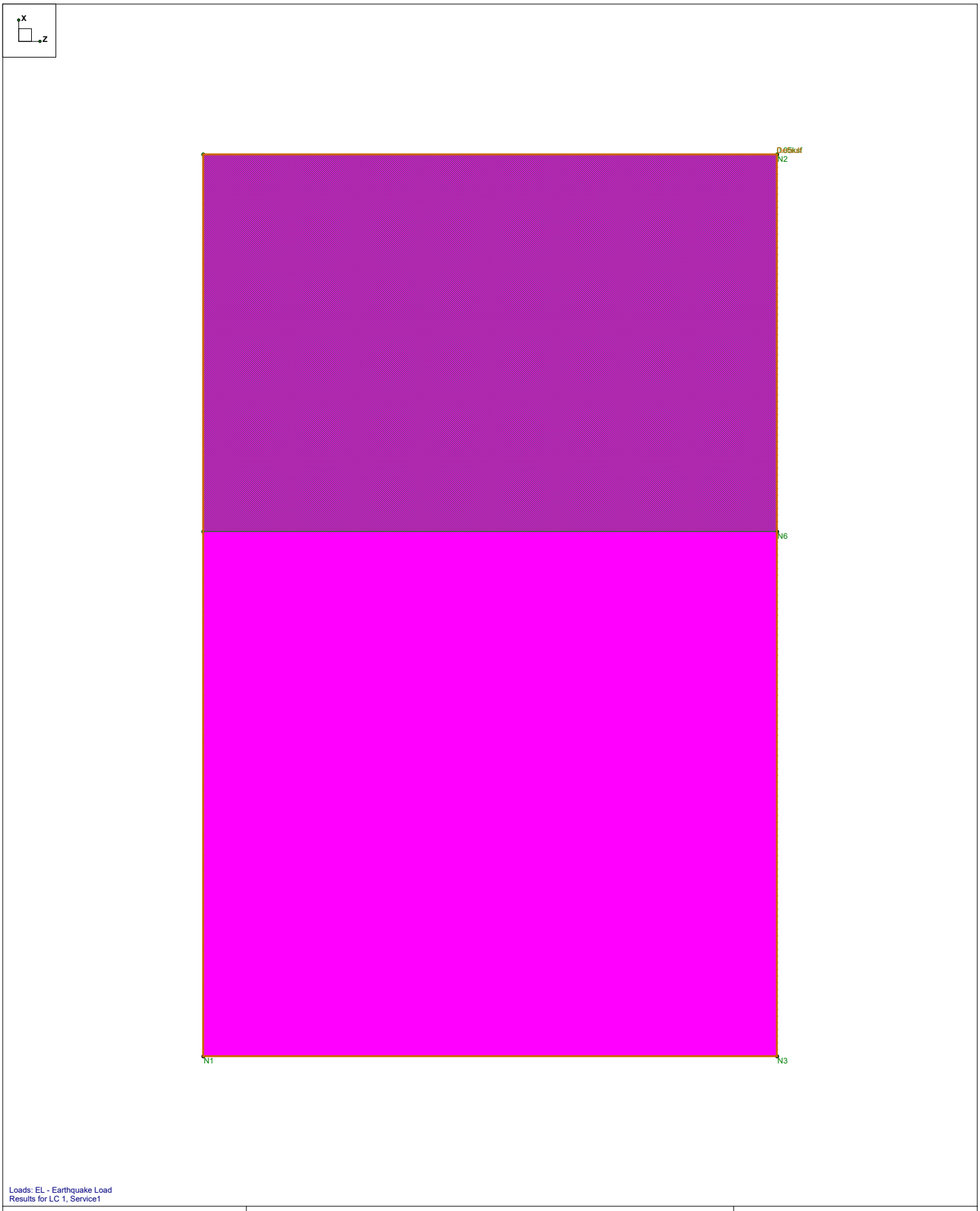
Loads: DL - Dead Load
Results for LC 1, Service1

		1
		Aug 1, 2024 at 11:03 AM
	DEAD LOAD	Transformer Foundation Calc.fnd



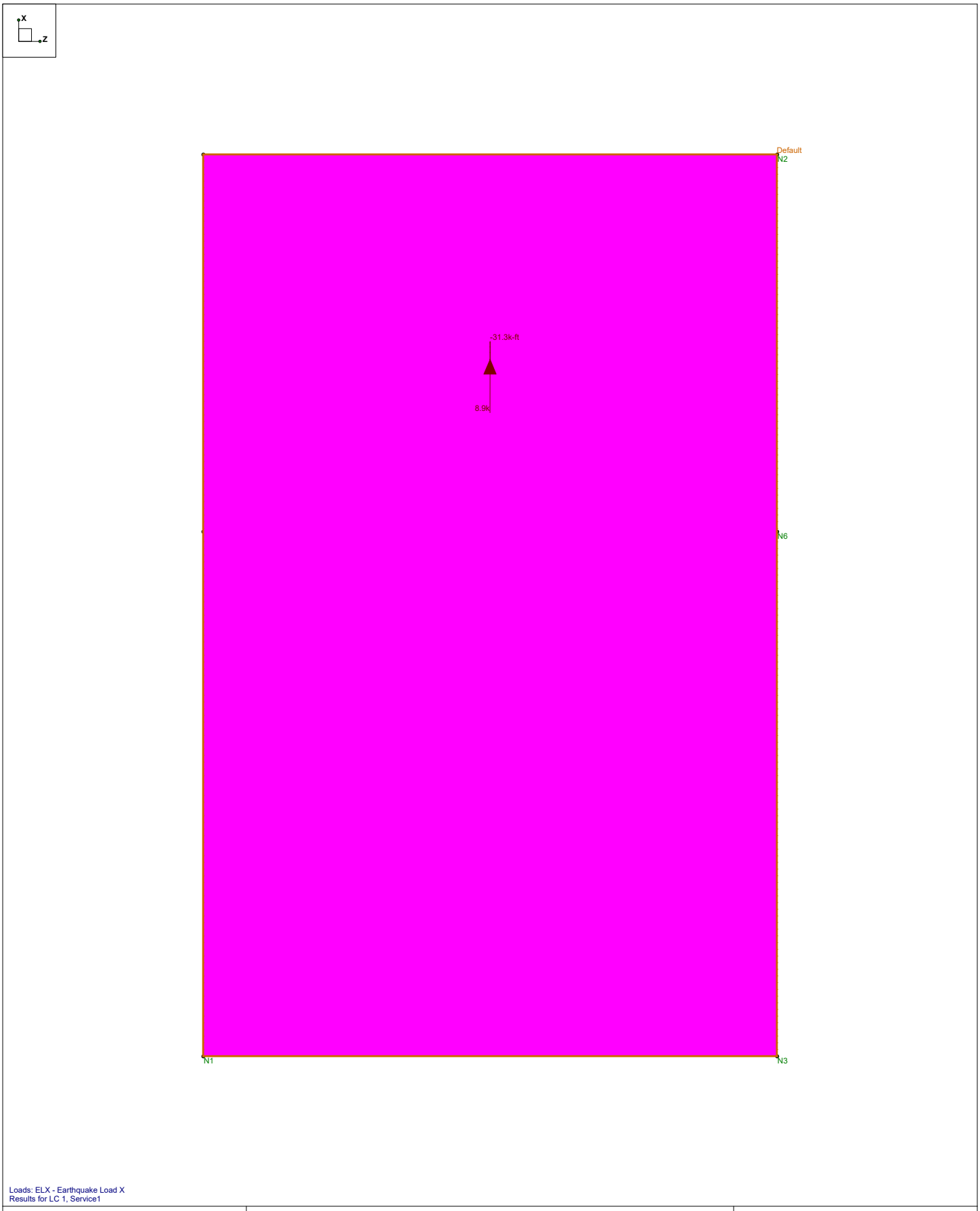
Loads: LL - Live Load
Results for LC 1, Service1

		2
		Aug 1, 2024 at 11:04 AM
	LIVE LOAD	Transformer Foundation Calc.fnd



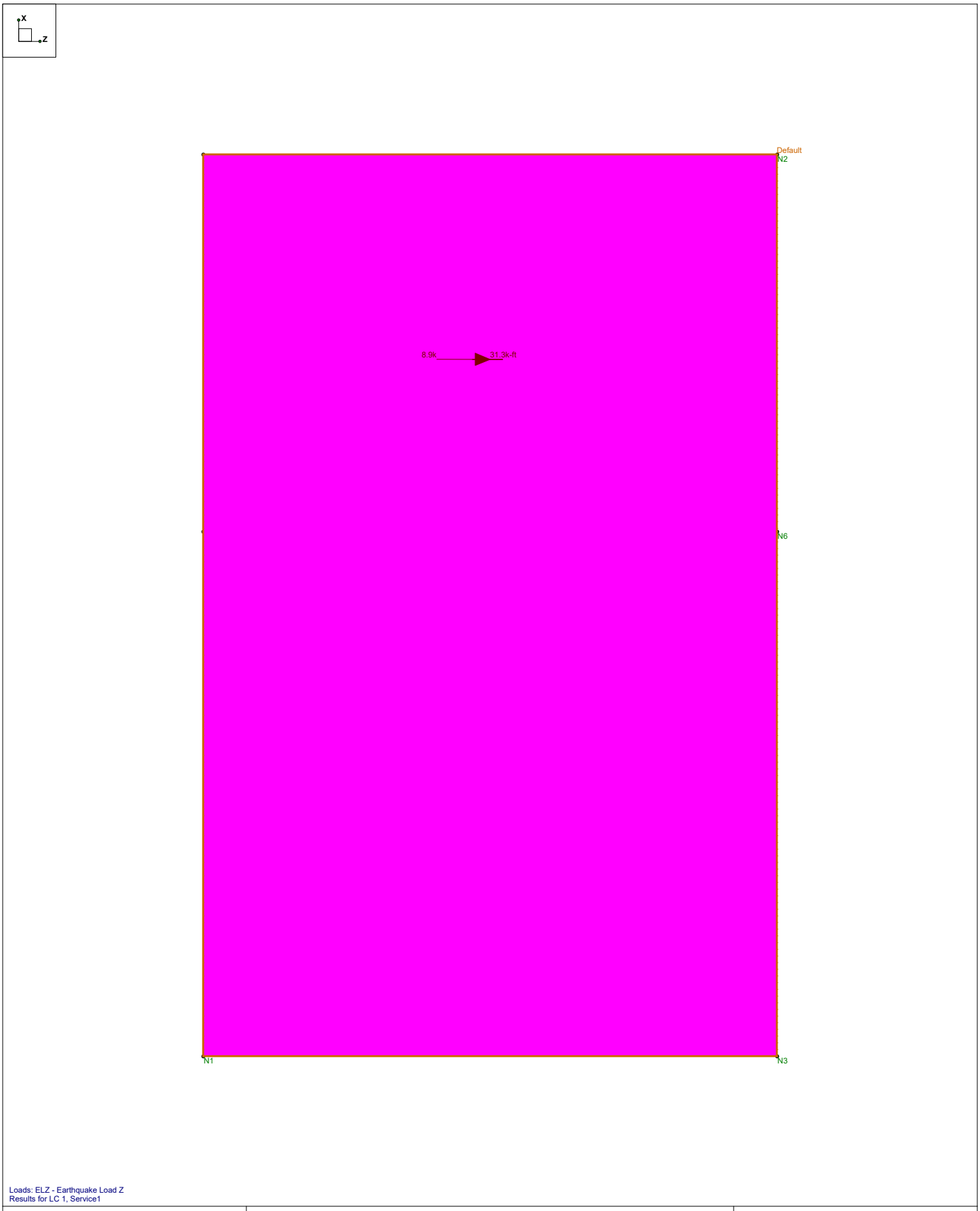
Loads: EL - Earthquake Load
Results for LC 1, Service1

		3
		Aug 1, 2024 at 11:05 AM
	ELY	Transformer Foundation Calc.fnd



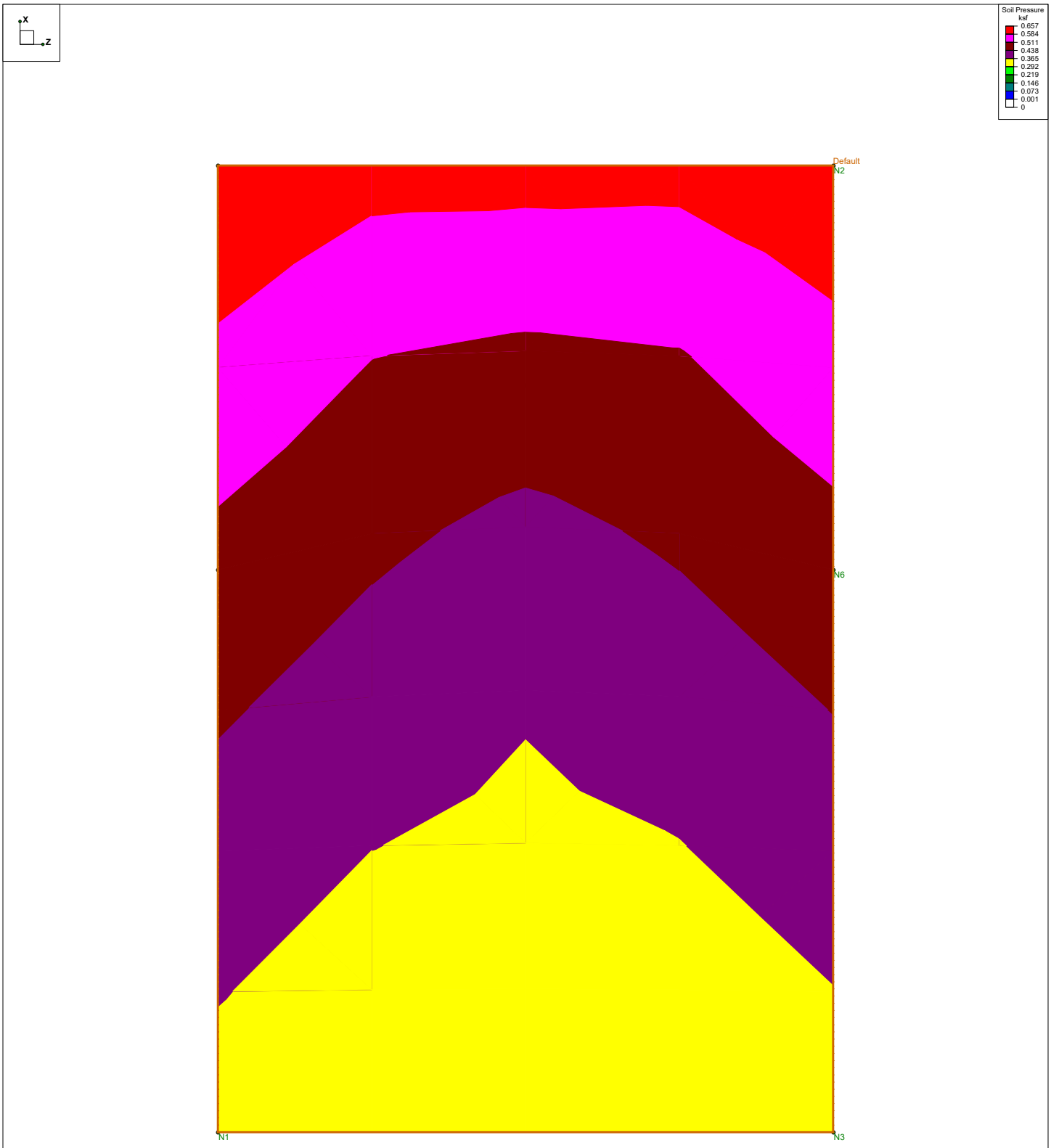
Loads: ELX - Earthquake Load X
Results for LC 1, Service1

		4
		Aug 1, 2024 at 11:06 AM
	ELX	Transformer Foundation Calc.fnd



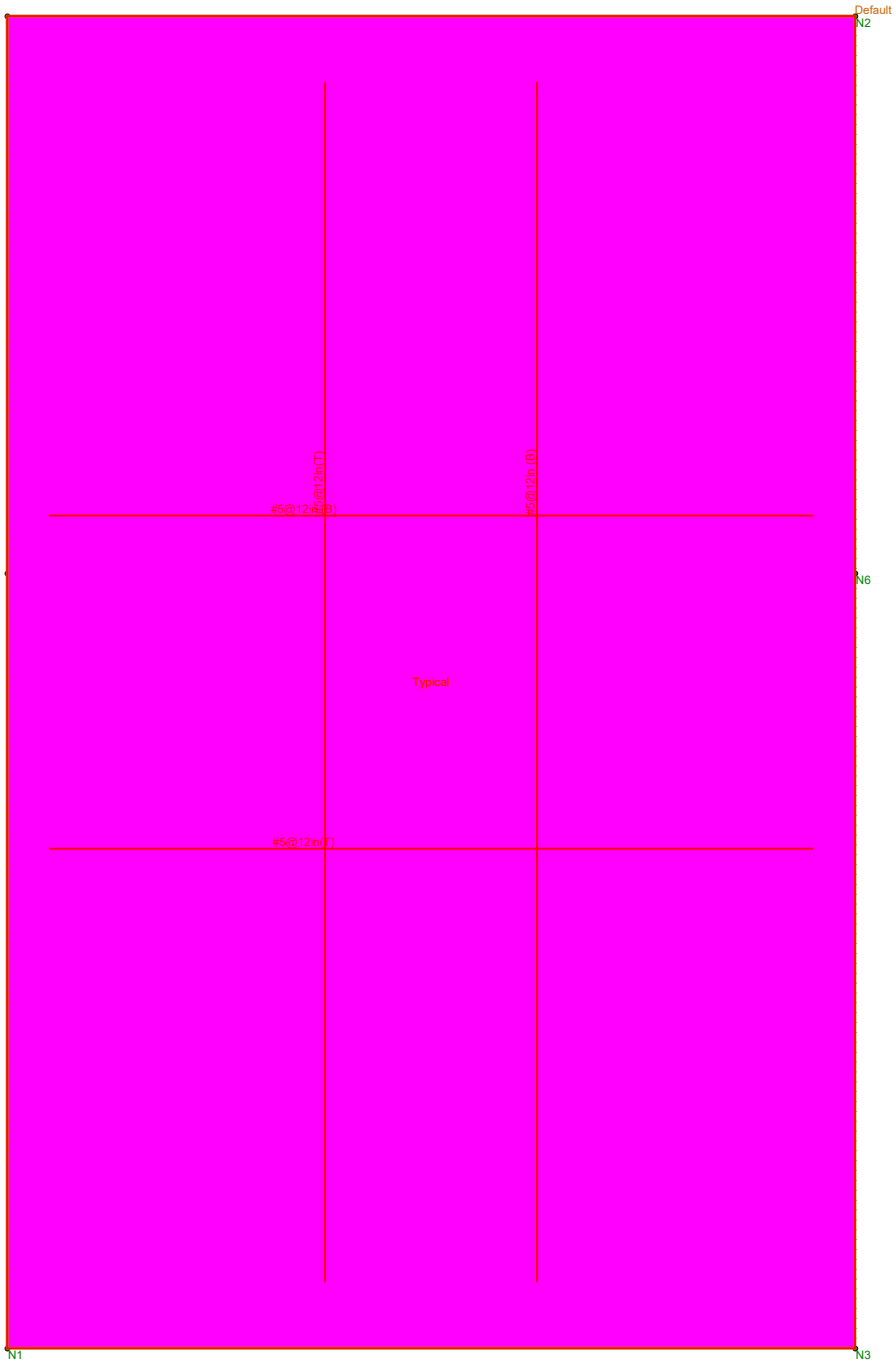
Loads: ELZ - Earthquake Load Z
Results for LC 1, Service1

		5
		Aug 1, 2024 at 11:06 AM
	ELZ	Transformer Foundation Calc.fnd



Enveloped Results

		6
		Aug 1, 2024 at 11:07 AM
	SOIL PRESSURE	Transformer Foundation Calc.fnd



Enveloped Results

		7
		Aug 1, 2024 at 11:07 AM
	DESIGN STRIPS	Transformer Foundation Calc.fnd

Company :
Designer :
Job Number :
Model Name :

Aug 1, 2024
11:09 AM
Checked By:_____

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[k/ft^3]	f'c[ksi]	Lambda	Flex St...	Shear ...
1	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
2	Conc4500NW	4967	2160	0.15	0.6	0.15	4.5	1	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	2	3

Load Categories

	Category	Point Loads	Line Loads	Area Loads
1	DL			1
2	LL			1
3	EL			1
4	ELX	2		
5	ELZ	2		

Load Combinations

	Label	S...	S...	A...	SF	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...
1	Service1	Yes	Yes		1.5	DL	1	LL	1																
2	Service2	Yes	Yes		1.5	DL	1	EL	0.7	ELX	0.7														
3	Service3	Yes	Yes		1.5	DL	1	EL	0.7	ELX	-0.7														
4	Service4	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	0.7														
5	Service5	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	-0.7														
6	Service6	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	0.5...	LL	0.75												
7	Service7	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	-0....	LL	0.75												
8	Service8	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	0.5...	LL	0.75												
9	Service9	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	-0....	LL	0.75												
10	Service10	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	0.7														
11	Service11	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	-0.7														
12	Service12	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	0.7														
13	Service13	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	-0.7														
14	Strength1	Yes				DL	1.2	LL	1.6																
15	Strength2	Yes				DL	1.2	EL	1	ELX	1	LL	1												
16	Strength3	Yes				DL	1.2	EL	1	ELX	-1	LL	1												
17	Strength4	Yes				DL	1.2	EL	1	ELZ	1	LL	1												
18	Strength5	Yes				DL	1.2	EL	1	ELZ	-1	LL	1												
19	Strength6	Yes				DL	0.9	EL	-1	ELX	1														
20	Strength7	Yes				DL	0.9	EL	-1	ELX	-1														
21	Strength8	Yes				DL	0.9	EL	-1	ELZ	1														
22	Strength9	Yes				DL	0.9	EL	-1	ELZ	-1														
23	Combination 23	Yes				DL	1.4																		

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	100	3.5	None	Yes

Slabs

	Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburde...	Icr Factor
1	S1	18	Conc4500NW	0	0	0	0	0.25

Area Loads (Cat 1 : DL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL1	0.23	0.23

Area Loads (Cat 2 : LL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL3	0.1	0.1

Area Loads (Cat 3 : EL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL2	0.05	0.05

Point Loads and Moments (Cat 16 : ELX)

	Label	Direction	Magnitude[k,k-ft]
1	N7	X	8.9
2	N7	MZ	-31.3

Point Loads and Moments (Cat 18 : ELZ)

	Label	Direction	Magnitude[k,k-ft]
1	N7	MX	31.3
2	N7	Z	8.9

Strip Reinforcing

	Label	UC Top	LC	Top Bars	Governin...	UC Bot	LC	Bot Bars/...	Governin...	UC Shear	LC	Governin...
1	DS1	0.052	18	#5@12in	DS1-X26	0.054	21	#5@12in	DS1-X26	0.041	18	DS1-X37
2	DS2	0.109	15	#5@12in	DS2-X31	0.12	16	#5@12in	DS2-X40	0.059	16	DS2-X29

Slab Overturning Safety Factors

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	199.685	0	287.628	9.99+	9.99+
2	2	S1	0	0	176.764	31.255	224.44	9.99+	7.181
3	3	S1	0	0	176.764	31.255	331.103	9.99+	9.99+
4	4	S1	0	31.255	176.764	0	224.44	5.656	9.99+
5	5	S1	0	31.255	176.764	0	224.44	5.656	9.99+
6	6	S1	0	0	197.806	23.441	274.362	9.99+	9.99+
7	7	S1	0	0	197.806	23.441	347.315	9.99+	9.99+
8	8	S1	0	23.441	197.806	0	274.362	8.438	9.99+
9	9	S1	0	23.441	197.806	0	274.362	8.438	9.99+
10	10	S1	0	7.704	101.436	36.318	131.627	9.99+	3.624
11	11	S1	0	7.704	101.436	50.405	187.172	9.99+	3.713
12	12	S1	0	38.959	101.436	19.15	187.172	2.604	9.774
13	13	S1	0	38.959	101.436	19.15	187.172	2.604	9.774

Slab Sliding Safety Factors

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
1	1	S1	0	0	18.257	0	18.257	9.99+	9.99+
2	2	S1	0	6.23	16.161	0	16.161	2.594	9.99+
3	3	S1	0	6.23	16.161	0	16.161	2.594	9.99+
4	4	S1	0	0	16.161	6.23	16.161	9.99+	2.594
5	5	S1	0	0	16.161	6.23	16.161	9.99+	2.594
6	6	S1	0	4.673	18.085	0	18.085	3.871	9.99+
7	7	S1	0	4.673	18.085	0	18.085	3.871	9.99+
8	8	S1	0	0	18.085	4.673	18.085	9.99+	3.871
9	9	S1	0	0	18.085	4.673	18.085	9.99+	3.871
10	10	S1	0	6.23	8.57	0	8.57	1.376	9.99+
11	11	S1	0	6.23	8.57	0	8.57	1.376	9.99+
12	12	S1	0	0	8.57	6.23	8.57	9.99+	1.376
13	13	S1	0	0	8.57	6.23	8.57	9.99+	1.376

Hilti PROFIS Engineering 3.1.3

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Company:		Page:	1
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Transformer Anchorage	Date:	10/1/2024
Fastening point:			

Specifier's comments:

1 Input data



Anchor type and diameter:	**HIT-HY 200 V3 + HAS-E-55 (ASTM F1554 Gr.55) 3/4**
Item number:	2197983 HAS-E-55 3/4"x8" (element) / 2334276 HIT-HY 200-R V3 (adhesive)
Specification text:	Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 55 injection mortar with 6 in embedment hef, 3/4, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868
Effective embedment depth:	$h_{ef,act}$ = 6.000 in. ($h_{ef,limit}$ = - in.)
Material:	ASTM F1554 Grade 55
Evaluation Service Report:	ESR-4868
Issued I Valid:	6/1/2023 | 11/1/2024
Proof:	Design Method ACI 318-19 / Chem
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 0.500 in.
Anchor plate[R] :	l_x x l_y x t = 2.677 in. x 2.677 in. x 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, 4000, f_c' = 4,000 psi; h = 18.000 in., Temp. short/long: 32/32 °F
Installation:	**Hammer drilled hole, Installation condition: Dry**
Reinforcement:	tension: not present, shear: not present; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

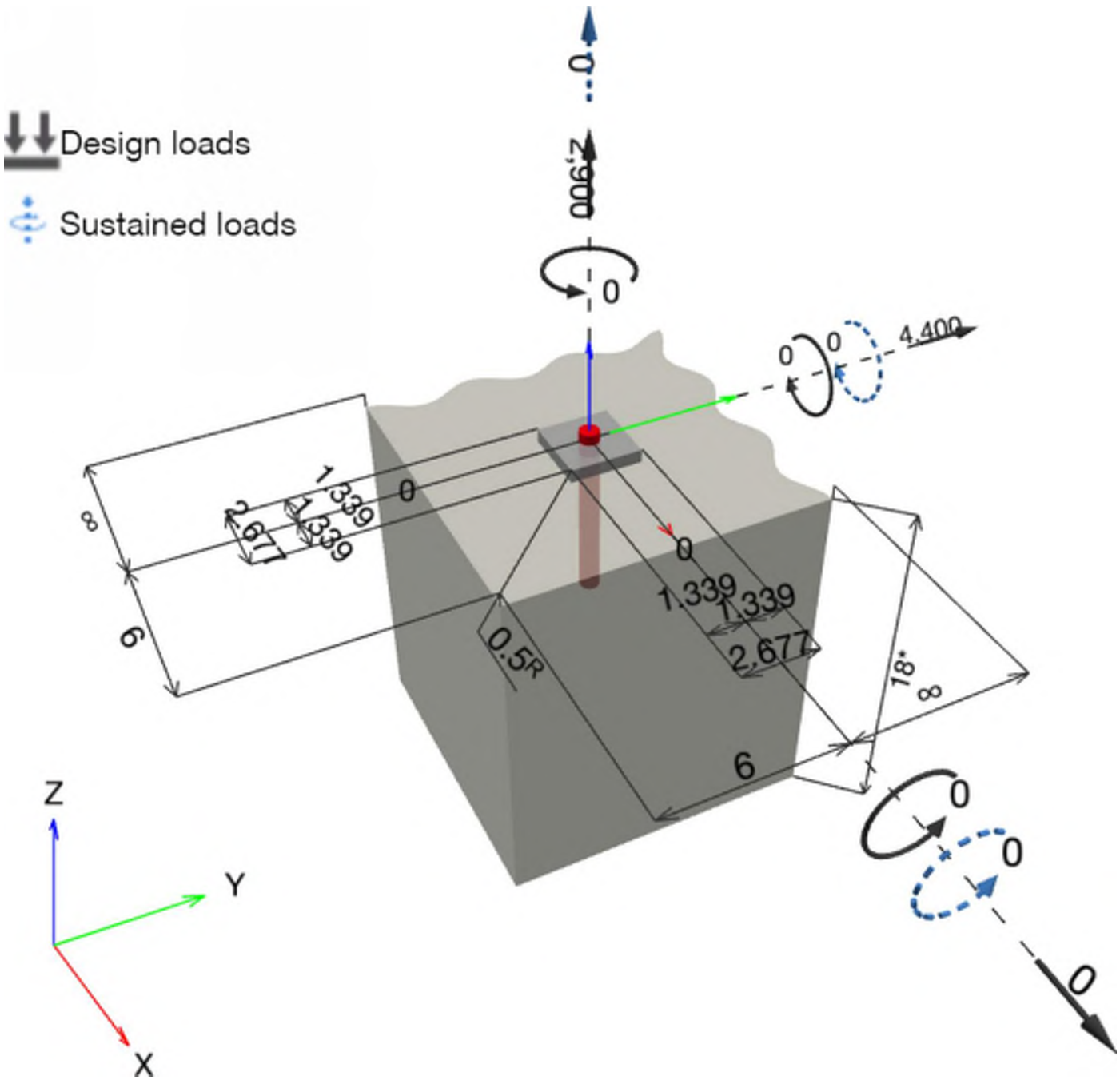
[R] - The anchor calculation is based on a rigid anchor plate assumption.

Hilti PROFIS Engineering 3.1.3

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Company:		Page:	2
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Transformer Anchorage	Date:	10/1/2024
Fastening point:			

Geometry [in.] & Loading [lb, in.lb]



Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Hilti PROFIS Engineering 3.1.3

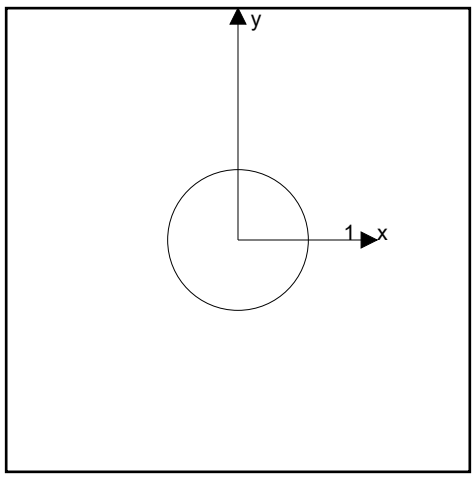
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Company:		Page:	3
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Transformer Anchorage	Date:	10/1/2024
Fastening point:			

1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 2,900; V_x = 0; V_y = 4,400; M_x = 0; M_y = 0; M_z = 0;	yes	71

2 Load case/Resulting anchor forces



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	2,900	4,400	0	4,400

Max. concrete compressive strain: - [‰]
Max. concrete compressive stress: - [psi]
Resulting tension force in (x/y)=(0.000/0.000): 2,900 [lb]
Resulting compression force in (x/y)=(-/-): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	2,900	18,817	16	OK
Bond Strength**	2,900	4,748	62	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	2,900	4,815	61	OK

* highest loaded anchor **anchor group (anchors in tension)

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Design:	Transformer Anchorage	Date:	10/1/2024
Fastening point:			

3.1 Steel Strength

N_{sa} = ESR value	refer to ICC-ES ESR-4868
$\phi\ N_{sa} \geq N_{ua}$	ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.33	75,000

Calculations

N_{sa} [lb]
25,090

Results

N_{sa} [lb]	ϕ_{steel}	$\phi\ N_{sa}$ [lb]	N_{ua} [lb]
25,090	0.750	18,817	2,900

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.2 Bond Strength

$N_a = \left(\frac{A_{Na}}{A_{Na0}}\right) \psi_{ed,Na} \psi_{cp,Na} N_{ba}$ ACI 318-19 Eq. (17.6.5.1a)

$\phi N_a \geq N_{ua}$ ACI 318-19 Table 17.5.2

A_{Na} see ACI 318-19, Section 17.6.5.1, Fig. R 17.6.5.1(b)

$A_{Na0} = (2 c_{Na})^2$ ACI 318-19 Eq. (17.6.5.1.2a)

$c_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}}$ ACI 318-19 Eq. (17.6.5.1.2b)

$\psi_{ed,Na} = 0.7 + 0.3 \left(\frac{c_{a,min}}{c_{Na}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.4.1b)

$\psi_{cp,Na} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{c_{Na}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.5.1b)

$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \alpha_{N,seis} \cdot \pi \cdot d_a \cdot h_{ef}$ ACI 318-19 Eq. (17.6.5.2.1)

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$c_{a,min}$ [in.]	$\alpha_{overhead}$	$\tau_{k,c}$ [psi]
2,327	0.750	6.000	6.000	1.000	1,321

c_{ac} [in.]	λ_a	$\alpha_{N,seis}$
9.500	1.000	1.000

Calculations

c_{Na} [in.]	A_{Na} [in.^{2}]	A_{Na0} [in.^{2}]	$\psi_{ed,Na}$
10.859	284.22	471.66	0.866

$\psi_{cp,Na}$	N_{ba} [lb]
1.000	18,670

Results

N_a [lb]	ϕ_{bond}	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_a [lb]	N_{ua} [lb]
9,740	0.650	0.750	1.000	4,748	2,900

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.3 Concrete Breakout Failure

$N_{cb} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b$ — ACI 318-19 Eq. (17.6.2.1a)

$\phi N_{cb} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ — ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5h_{ef}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ — ACI 318-19 Eq. (17.6.2.2.1)

Variables

h_{ef} [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
6.000	6.000	1.000	9.500	17	1.000	4,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
225.00	324.00	0.900	1.000	15,802

Results

N_{cb} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{cb} [lb]	N_{ua} [lb]
9,876	0.650	0.750	1.000	4,815	2,900

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	4,400	9,786	45	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Bond Strength controls)**	4,400	13,636	33	OK
Concrete edge failure in direction x+**	4,400	9,760	46	OK

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa,eq}$ = ESR value refer to ICC-ES ESR-4868
ϕ $V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]	$\alpha_{V,seis}$
0.33	75,000	1.000

Calculations

$V_{sa,eq}$ [lb]
15,055

Results

$V_{sa,eq}$ [lb]	ϕ_{steel}	ϕ $V_{sa,eq}$ [lb]	V_{ua} [lb]
15,055	0.650	9,786	4,400

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength (Bond Strength controls)

$V_{cp} = k_{cp}\left[\left(\frac{A_{Na}}{A_{Na0}}\right) \psi_{ed,Na} \psi_{cp,Na} N_{ba}\right]$ ACI 318-19 Eq. (17.7.3.1a)

$\phi V_{cp} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Na} see ACI 318-19, Section 17.6.5.1, Fig. R 17.6.5.1(b)

$A_{Na0} = (2 c_{Na})^2$ ACI 318-19 Eq. (17.6.5.1.2a)

$c_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}}$ ACI 318-19 Eq. (17.6.5.1.2b)

$\psi_{ed,Na} = 0.7 + 0.3 \left(\frac{c_{a,min}}{c_{Na}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.4.1b)

$\psi_{cp,Na} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{c_{Na}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.5.1b)

$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \alpha_{N,seis} \cdot \pi \cdot d_a \cdot h_{ef}$ ACI 318-19 Eq. (17.6.5.2.1)

Variables

k_{cp}	$\alpha_{overhead}$	$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$c_{a,min}$ [in.]	$\tau_{k,c}$ [psi]
2	1.000	2,327	0.750	6.000	6.000	1,321

c_{ac} [in.]	λ_a	$\alpha_{N,seis}$
9.500	1.000	1.000

Calculations

c_{Na} [in.]	A_{Na} [in.^{2}]	A_{Na0} [in.^{2}]	$\psi_{ed,Na}$
10.859	284.22	471.66	0.866

$\psi_{cp,Na}$	N_{ba} [lb]
1.000	18,670

Results

V_{cp} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cp} [lb]	V_{ua} [lb]
19,481	0.700	1.000	1.000	13,636	4,400

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.3 Concrete edge failure in direction x+

$V_{cb} = \left(\frac{A_{Vc}}{A_{Vc0}}\right) \psi_{ed,V} \psi_{c,V} \psi_{h,V} \psi_{parallel,V} V_b$ ACI 318-19 Eq. (17.7.2.1a)

$\phi V_{cb} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Vc} see ACI 318-19, Section 17.7.2.1, Fig. R 17.7.2.1(b)

$A_{Vc0} = 4.5 c_{a1}^2$ ACI 318-19 Eq. (17.7.2.1.3)

$\psi_{ed,V} = 0.7 + 0.3\left(\frac{c_{a2}}{1.5c_{a1}}\right) \leq 1.0$ ACI 318-19 Eq. (17.7.2.4.1b)

$\psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0$ ACI 318-19 Eq. (17.7.2.6.1)

$V_b = 9 \lambda_a \sqrt{f_c'} c_{a1}^{1.5}$ ACI 318-19 Eq. (17.7.2.2.1b)

Variables

c_{a1} [in.]	c_{a2} [in.]	$\psi_{c,V}$	h_a [in.]	l_e [in.]
6.000	6.000	1.000	18.000	6.000

λ_a	d_a [in.]	f_c' [psi]	$\psi_{parallel,V}$
1.000	0.750	4,000	2.000

Calculations

A_{Vc} [in.^{2}]	A_{Vc0} [in.^{2}]	$\psi_{ed,V}$	$\psi_{h,V}$	V_b [lb]
135.00	162.00	1.000	1.000	8,366

Results

V_{cb} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cb} [lb]	V_{ua} [lb]
13,943	0.700	1.000	1.000	9,760	4,400

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.611	0.451	5/3	71	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-19, Section 26.7.

Fastening meets the design criteria!

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Fastening point:			

7 Installation data

Profile: no profile

Hole diameter in the fixture: d_f = 0.812 in.

Plate thickness (input): 0.500 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-HY 200 V3 + HAS-E-55 (ASTM F1554 Gr.55) 3/4

Item number: 2197983 HAS-E-55 3/4"x8" (element) / 2334276 HIT-HY 200-R V3 (adhesive)

Maximum installation torque: 1,200 in.lb

Hole diameter in the base material: 0.875 in.

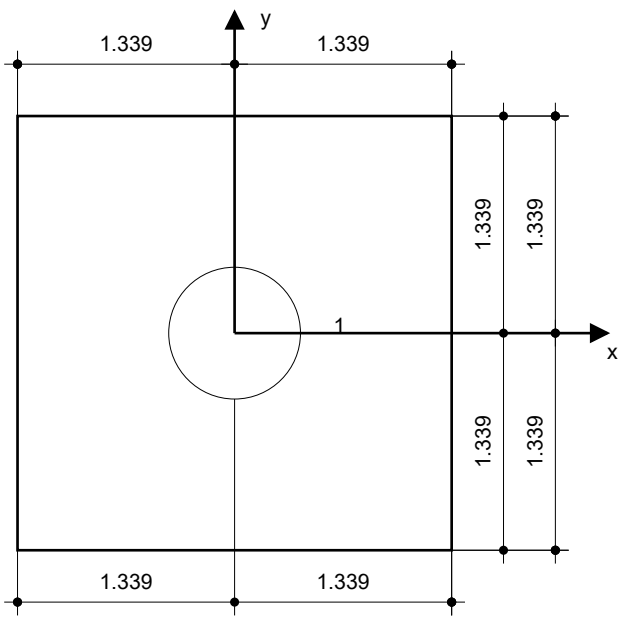
Hole depth in the base material: 6.000 in.

Minimum thickness of the base material: 7.750 in.

Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 55 injection mortar with 6 in embedment hef, 3/4, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868

7.1 Recommended accessories

Drilling	Cleaning	Setting
• Suitable Rotary Hammer • Properly sized drill bit	• Compressed air with required accessories to blow from the bottom of the hole • Proper diameter wire brush	• Dispenser including cassette and mixer • Torque wrench



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	0.000	0.000	-	6.000	6.000	-

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Fastening point:			

8 Remarks; Your Cooperation Duties

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Engineer: Tony Arzate
Subject: Ben Lomond Design Check

Transformer Equipment

$\phi N_n := 0.8 \cdot 18.82\ kip = 15.056\ kip$ From Hilti Profis

$N_{ua} := 2.9\ kip$ From Hilti Profis

$\frac{N_{ua}}{\phi N_n} = 0.193$

$\phi V_n := 0.8 \cdot 9.79\ kip = 7.832\ kip$ From Hilti Profis

$V_{ua} := 4.4\ kip$ From Hilti Profis

$\frac{V_{ua}}{\phi V_n} = 0.562$

$\beta_v := \max\left(\frac{V_{ua}}{\phi V_n}, .46\right) = 0.562$ From Hilti Profis

$\beta_n := \max\left(\frac{N_{ua}}{\phi N_n}, .62\right) = 0.62$ From Hilti Profis

$\beta_v + \beta_n = 1.182 <$ 1.2 per ACI 318 17.8.3

TETRA TECH

Sheet No.:		**of**	**Date:** 1-Aug-24
Checked By:			**Office:** Irvine
Telephone:	(949) 809 - 5000		
Engineer:	Tony Arzate	**Job No.:**	200-42064-22005
Subject:	Ben Lomond Transfer Station		
	Electrical Equipment		

Global Stability of ATS due to Seismic Loads

Properties

W, Weight	=	1.78	kip
V, Seismic Force	=	1.68	kip
Height	=	7.92	ft
Min. Width	=	2.75	ft
C.O.G.	=	5.28	ft (Assumed 2/3 height)
Equipment Area	=	9.40	ft^2
Load	=	0.19	ksf

Overturning Moment

(1.0EL) Mot = 1.68 kips x 1 x 5.28 ft = 8.9 kip - ft

Resisting Moment

(0.9-0.2Sds) Mr = (0.9 - 0.2 x 1.182) x 2 kips x 1.38 ft = 1.6 kip - ft

Net Moment

$M_{OT\ NET}$ = 8.9 kip-ft - 1.6 kip-ft = 7.2 kip-ft

Factor of Safety for Overturning

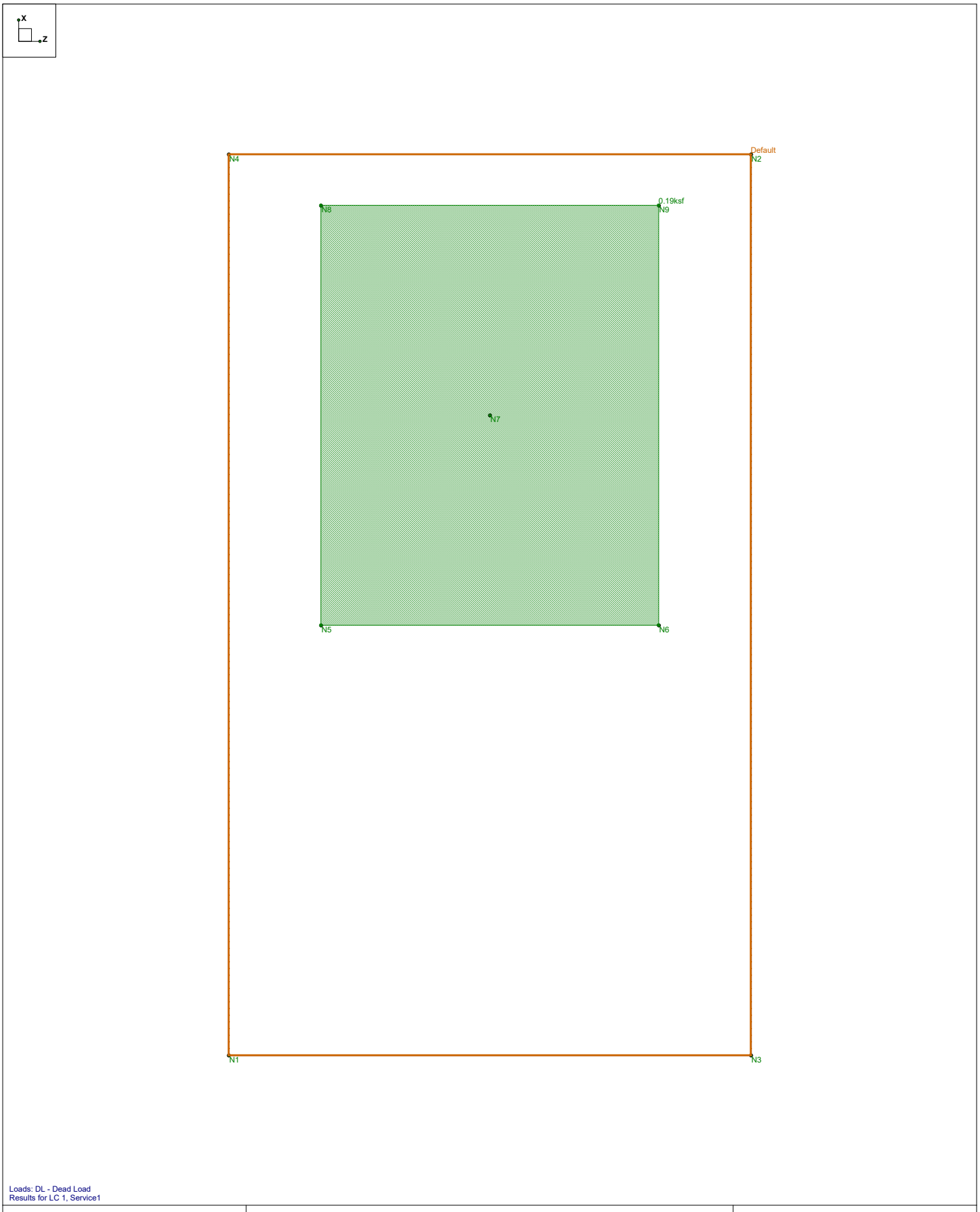
F.S. = 0.18 < 1.5 **NG!**

**** Equipment not stable enough to self-support; Mechanical anchorage required.***

Anchorage Loads & Requirements

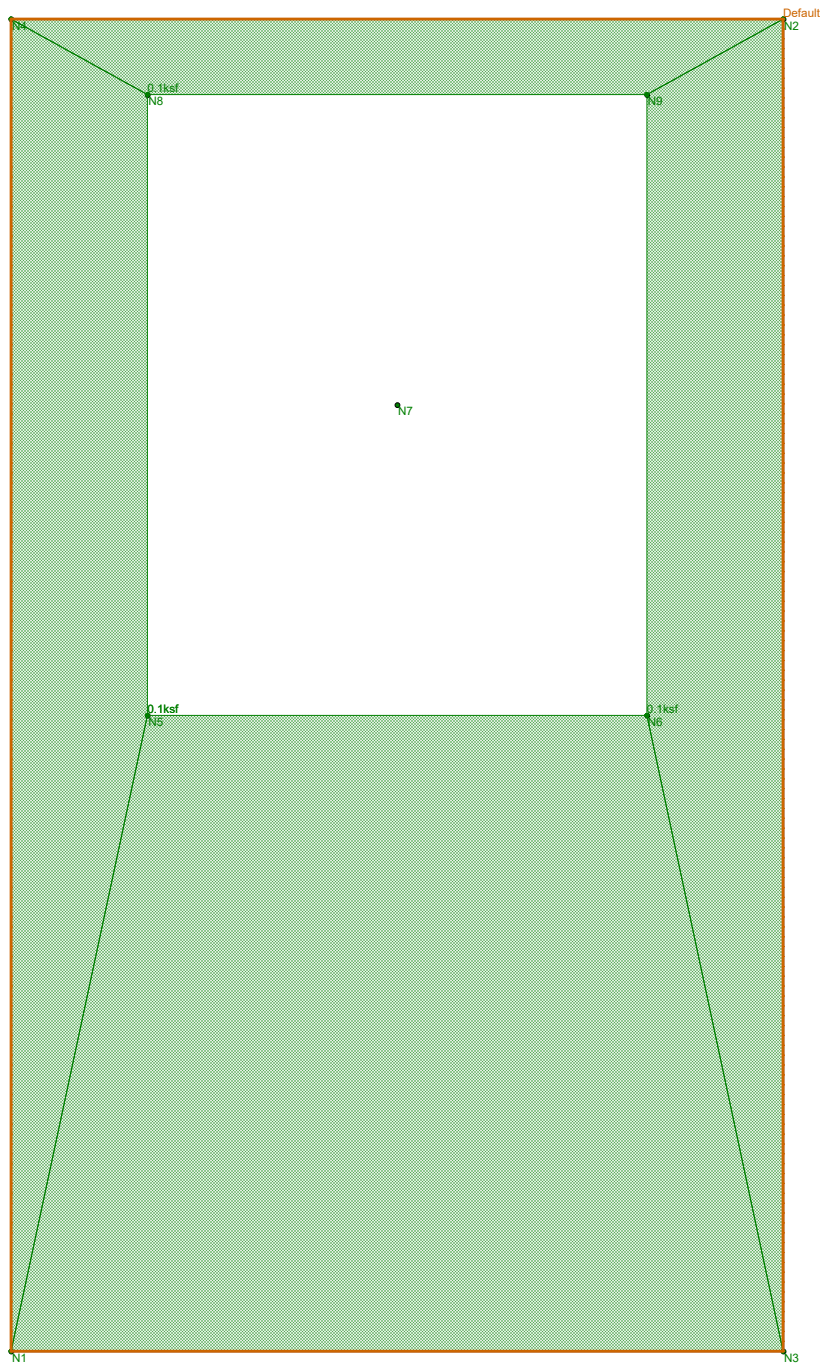
No. of Bolts	=	4								
Ω_0	=	2								
$\Omega_0 * M_{OT\ NET}$	=	14.5	kip-ft							
T/C	=	14.5	kip-ft	/	(	2.23 ft	x	2.00 anchors)	=	3.3 kip uplift/per 2 anchors
Ω_0*V	=	3.4	kip							
V	=	3.4	kip	/	4	anchors	=	0.8	kip shear/per anchor	

T/C	=	3.3	kip uplift/per base plate
V	=	3.4	kip shear/per base plate



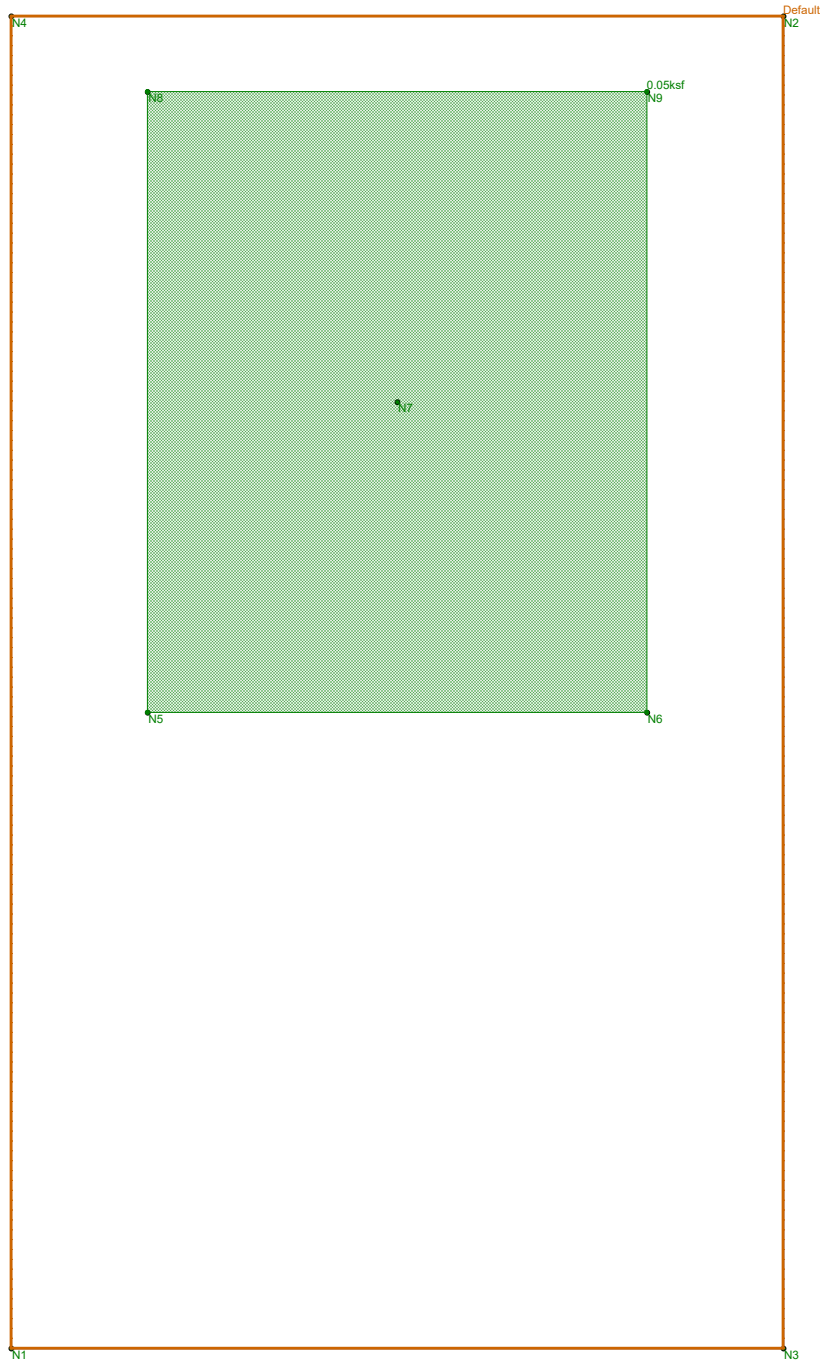
Loads: DL - Dead Load
Results for LC 1, Service1

		1
		Aug 1, 2024 at 11:11 AM
	DEAD LOAD	ATS Foundation Calc.fnd



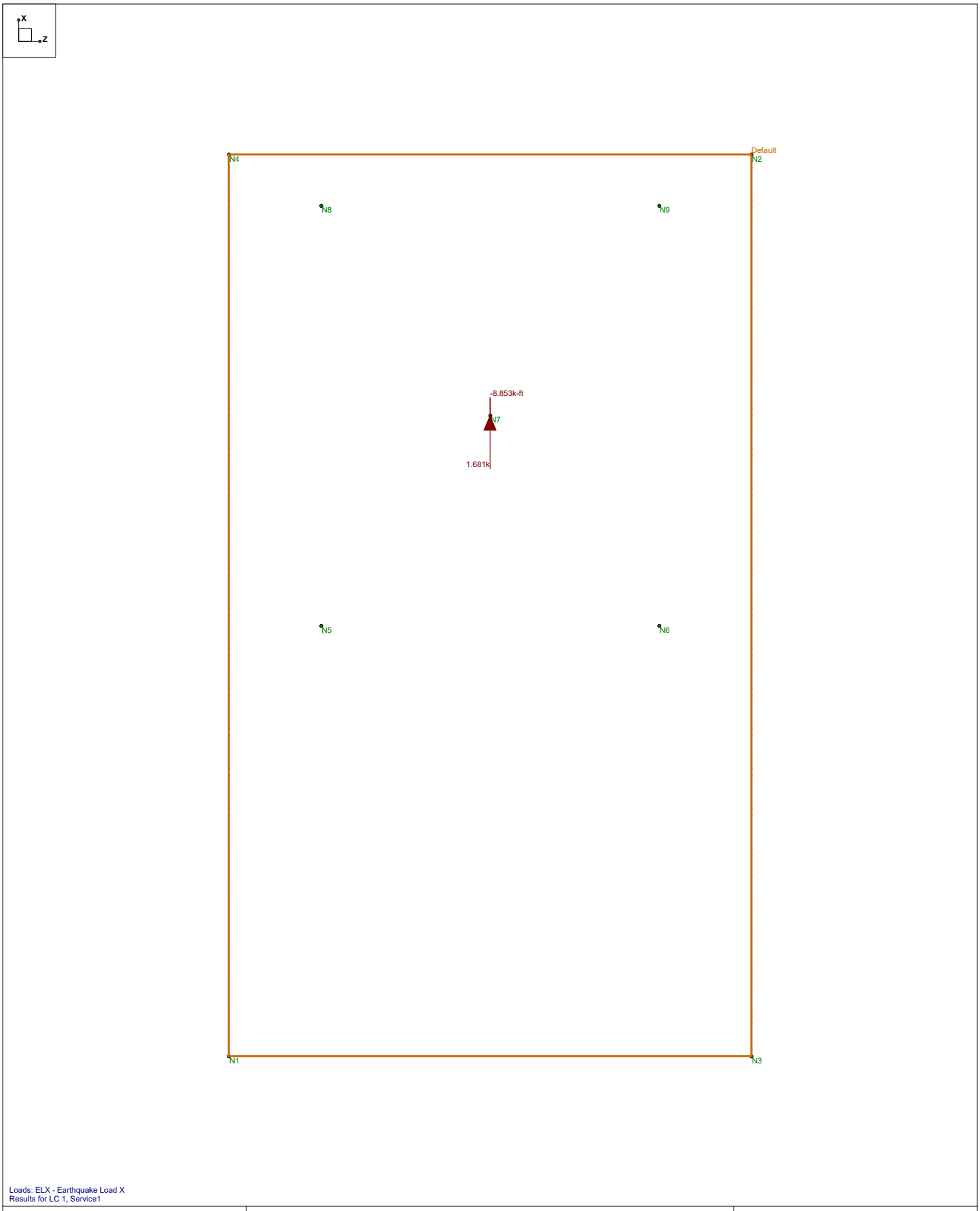
Loads: LL - Live Load
Results for LC 1, Service1

		2
		Aug 1, 2024 at 11:12 AM
	LIVE LOAD	ATS Foundation Calc.fnd



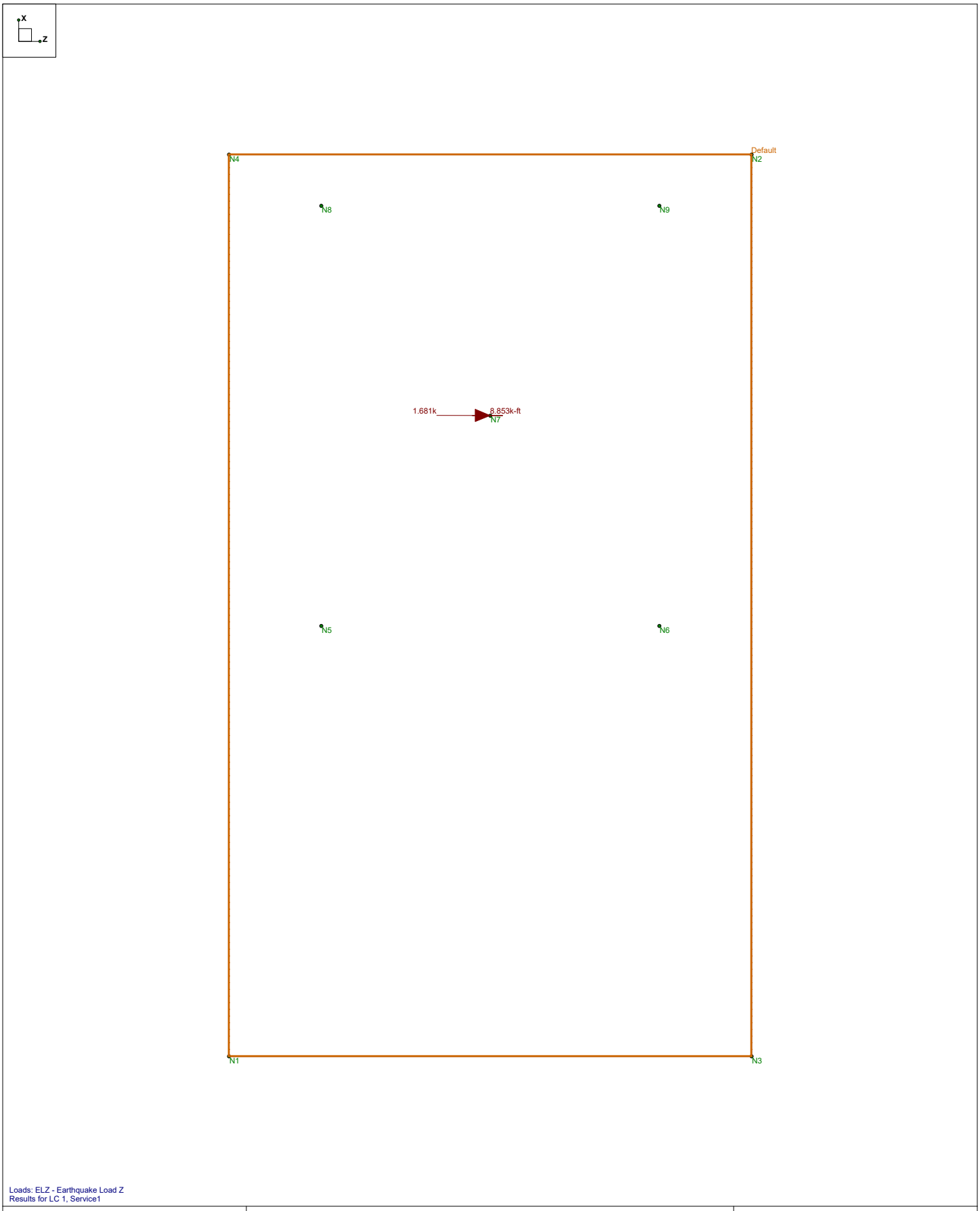
Loads: EL - Earthquake Load
Results for LC 1, Service1

		3
		Aug 1, 2024 at 11:13 AM
	ELY	ATS Foundation Calc.fnd



Loads: ELX - Earthquake Load X
Results for LC 1, Service1

		4
		Aug 1, 2024 at 11:13 AM
	ELX	ATS Foundation Calc.fnd



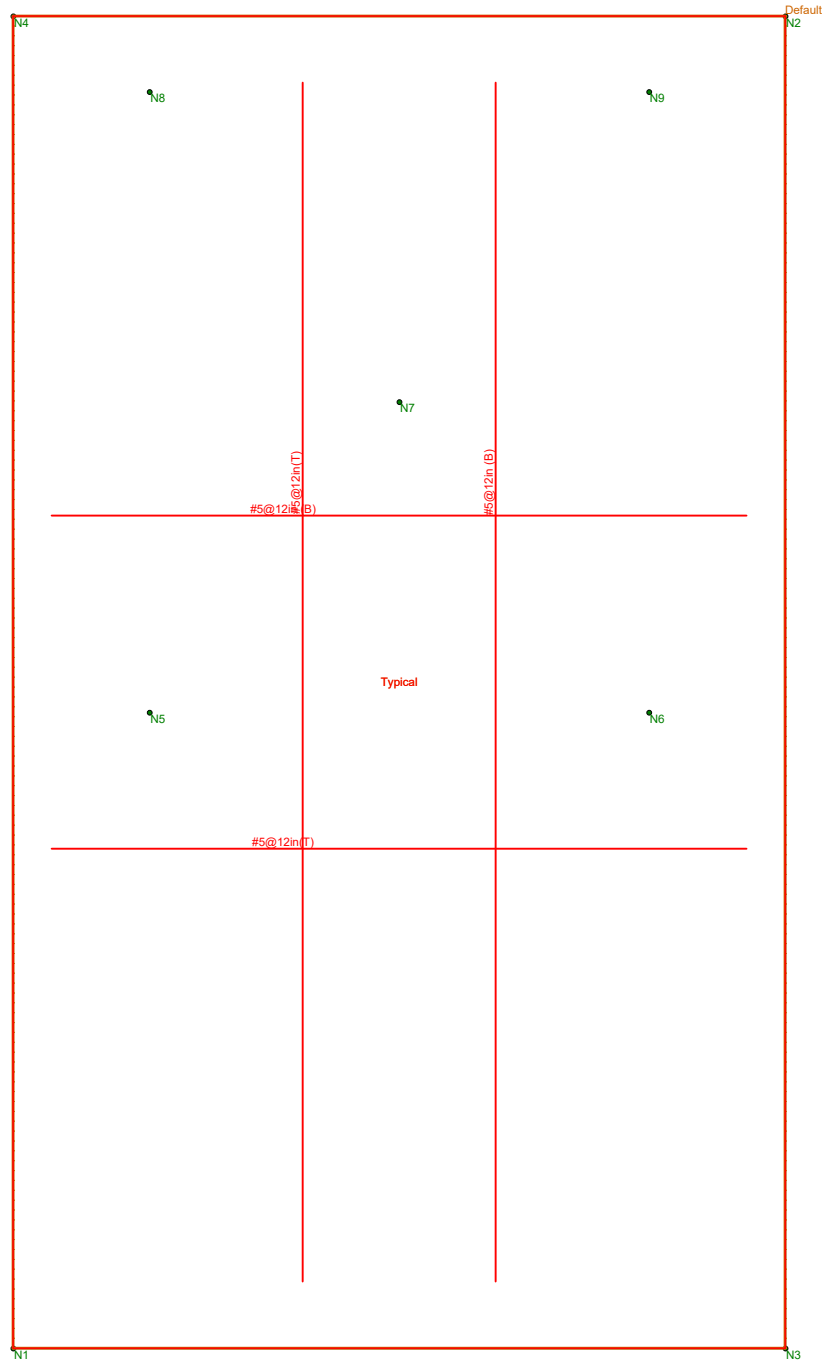
Loads: ELZ - Earthquake Load Z
Results for LC 1, Service1

		5
		Aug 1, 2024 at 11:14 AM
	ELZ	ATS Foundation Calc.fnd



Enveloped Results

		6
		Aug 1, 2024 at 11:14 AM
	SOIL PRESSURE	ATS Foundation Calc.fnd



Enveloped Results

		7
		Aug 1, 2024 at 11:15 AM
	DESIGN STRIPS	ATS Foundation Calc.fnd

Company :
Designer :
Job Number :
Model Name :

Aug 1, 2024
11:15 AM
Checked By:_____

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[k/ft^3]	f'c[ksi]	Lambda	Flex St...	Shear ...
1	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
2	Conc4500NW	4967	2160	0.15	0.6	0.15	4.5	1	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	2	3

Load Categories

	Category	Point Loads	Line Loads	Area Loads
1	DL			1
2	LL			4
3	EL			1
4	ELX	2		
5	ELZ	2		

Load Combinations

	Label	S...	S...	A...	SF	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...
1	Service1	Yes	Yes		1.5	DL	1	LL	1																
2	Service2	Yes	Yes		1.5	DL	1	EL	0.7	ELX	0.7														
3	Service3	Yes	Yes		1.5	DL	1	EL	0.7	ELX	-0.7														
4	Service4	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	0.7														
5	Service5	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	-0.7														
6	Service6	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	0.5...	LL	0.75												
7	Service7	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	-0....	LL	0.75												
8	Service8	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	0.5...	LL	0.75												
9	Service9	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	-0....	LL	0.75												
10	Service10	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	0.7														
11	Service11	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	-0.7														
12	Service12	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	0.7														
13	Service13	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	-0.7														
14	Strength1	Yes				DL	1.2	LL	1.6																
15	Strength2	Yes				DL	1.2	EL	1	ELX	1	LL	1												
16	Strength3	Yes				DL	1.2	EL	1	ELX	-1	LL	1												
17	Strength4	Yes				DL	1.2	EL	1	ELZ	1	LL	1												
18	Strength5	Yes				DL	1.2	EL	1	ELZ	-1	LL	1												
19	Strength6	Yes				DL	0.9	EL	-1	ELX	1														
20	Strength7	Yes				DL	0.9	EL	-1	ELX	-1														
21	Strength8	Yes				DL	0.9	EL	-1	ELZ	1														
22	Strength9	Yes				DL	0.9	EL	-1	ELZ	-1														
23	Combination 23	Yes				DL	1.4																		
24	Combination 24	Yes																							

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	100	3.5	None	Yes

Slabs

	Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburde...	Icr Factor
1	S1	15	Conc4500NW	0	0	0	0	0.25

Area Loads (Cat 1 : DL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL4	0.19	0.19

Area Loads (Cat 2 : LL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL3	0.1	0.1
2	AL5	0.1	0.1
3	AL6	0.1	0.1
4	AL7	0.1	0.1

Area Loads (Cat 3 : EL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL8	0.05	0.05

Point Loads and Moments (Cat 16 : ELX)

	Label	Direction	Magnitude[k,k-ft]
1	N7	X	1.681
2	N7	MZ	-8.853

Point Loads and Moments (Cat 18 : ELZ)

	Label	Direction	Magnitude[k,k-ft]
1	N7	MX	8.853
2	N7	Z	1.681

Strip Reinforcing

	Label	UC Top	LC	Top Bars	Governin...	UC Bot	LC	Bot Bars/...	Governin...	UC Shear	LC	Governin...
1	DS1	0.021	17	#5@12in	DS1-X21	0.034	22	#5@12in	DS1-X21	0.055	22	DS1-X19
2	DS2	0.06	15	#5@12in	DS2-X38	0.072	16	#5@12in	DS2-X38	0.06	16	DS2-X25

Slab Overturning Safety Factors

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	20.837	0	34.649	9.99+	9.99+
2	2	S1	0	0	16.91	7.668	25.917	9.99+	3.38
3	3	S1	0	0	16.91	7.668	32.437	9.99+	4.23
4	4	S1	0	7.668	16.91	0	25.917	2.205	9.99+
5	5	S1	0	7.668	16.91	0	25.917	2.205	9.99+
6	6	S1	0	0	20.205	5.751	32.815	9.99+	5.706
7	7	S1	0	0	20.205	5.751	36.908	9.99+	6.418
8	8	S1	0	5.751	20.205	0	32.815	3.513	9.99+
9	9	S1	0	5.751	20.205	0	32.815	3.513	9.99+
10	10	S1	0	0.699	9.727	8.367	15.131	9.99+	1.808
11	11	S1	0	0.699	9.727	9.381	18.435	9.99+	1.965
12	12	S1	0	8.367	9.727	1.713	18.435	1.163	9.99+
13	13	S1	0	8.367	9.727	1.713	18.435	1.163	9.99+

Slab Sliding Safety Factors

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
1	1	S1	0	0	3.922	0	3.922	9.99+	9.99+
2	2	S1	0	1.177	3.183	0	3.183	2.705	9.99+
3	3	S1	0	1.177	3.183	0	3.183	2.705	9.99+
4	4	S1	0	0	3.183	1.177	3.183	9.99+	2.705
5	5	S1	0	0	3.183	1.177	3.183	9.99+	2.705
6	6	S1	0	0.883	3.803	0	3.803	4.31	9.99+
7	7	S1	0	0.883	3.803	0	3.803	4.31	9.99+

Slab Sliding Safety Factors (Continued)

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
8	8	S1	0	0	3.803	0.883	3.803	9.99+	4.31
9	9	S1	0	0	3.803	0.883	3.803	9.99+	4.31
10	10	S1	0	1.177	1.699	0	1.699	1.444	9.99+
11	11	S1	0	1.177	1.699	0	1.699	1.444	9.99+
12	12	S1	0	0	1.699	1.177	1.699	9.99+	1.444
13	13	S1	0	0	1.699	1.177	1.699	9.99+	1.444

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Specifier's comments:

1 Input data



Anchor type and diameter:	**HIT-HY 200 V3 + HAS-E-55 (ASTM F1554 Gr.55) 5/8**
Item number:	2197997 HAS-E-55 5/8"x12" (element) / 2334276 HIT-HY 200-R V3 (adhesive)
Specification text:	Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 55 injection mortar with 10 in embedment hef, 5/8, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868
Effective embedment depth:	$h_{ef,act}$ = 10.000 in. ($h_{ef,limit}$ = - in.)
Material:	ASTM F1554 Grade 55
Evaluation Service Report:	ESR-4868
Issued I Valid:	6/1/2023 | 11/1/2024
Proof:	Design Method ACI 318-19 / Chem
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 0.500 in.
Anchor plate[R] :	l_x x l_y x t = 41.000 in. x 33.000 in. x 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 15.000 in., Temp. short/long: 32/32 °F
Installation:	**Hammer drilled hole, Installation condition: Dry**
Reinforcement:	tension: not present, shear: not present; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

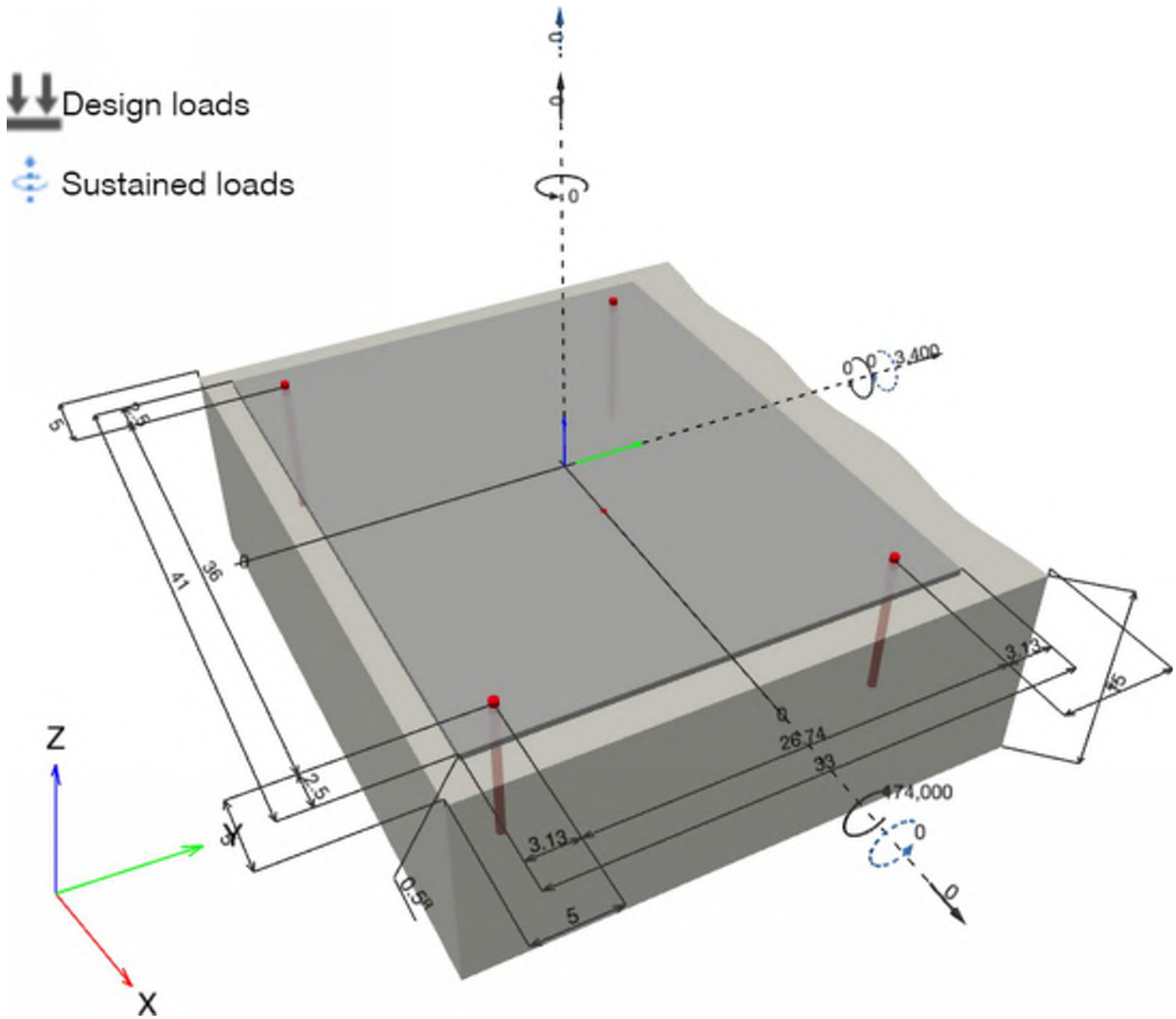
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Geometry [in.] & Loading [lb, in.lb]



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1.1 Design results

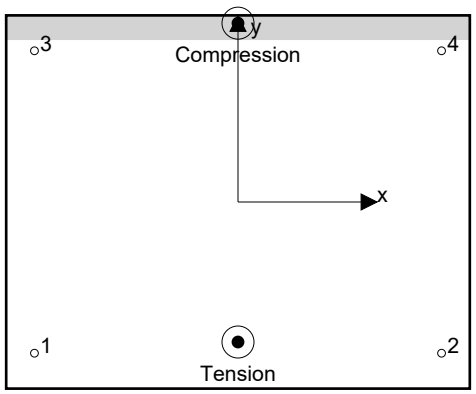
Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 0; V_x = 0; V_y = 3,400; M_x = -174,000; M_y = 0; M_z = 0;	yes	53

2 Load case/Resulting anchor forces

Anchor reactions [lb]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	2,972	850	0	850
2	2,972	850	0	850
3	114	850	0	850
4	114	850	0	850



Max. concrete compressive strain:	0.03 [‰]
Max. concrete compressive stress:	146 [psi]
Resulting tension force in (x/y)=(0.000/-12.380):	6,172 [lb]
Resulting compression force in (x/y)=(0.000/15.813):	6,172 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	2,972	12,713	24	OK
Bond Strength**	6,172	11,847	53	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	6,172	16,006	39	OK

* highest loaded anchor **anchor group (anchors in tension)

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.1 Steel Strength

N_{sa} = ESR value refer to ICC-ES ESR-4868
$\phi\ N_{sa} \geq N_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.23	75,000

Calculations

N_{sa} [lb]
16,950

Results

N_{sa} [lb]	ϕ_{steel}	$\phi\ N_{sa}$ [lb]	N_{ua} [lb]
16,950	0.750	12,713	2,972

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.2 Bond Strength

$N_{ag} = \left(\frac{A_{Na}}{A_{Na0}}\right) \psi_{ec1,Na} \psi_{ec2,Na} \psi_{ed,Na} \psi_{cp,Na} N_{ba}$ ACI 318-19 Eq. (17.6.5.1b)

$\phi N_{ag} \geq N_{ua}$ ACI 318-19 Table 17.5.2

A_{Na} see ACI 318-19, Section 17.6.5.1, Fig. R 17.6.5.1(b)

$A_{Na0} = (2 c_{Na})^2$ ACI 318-19 Eq. (17.6.5.1.2a)

$c_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}}$ ACI 318-19 Eq. (17.6.5.1.2b)

$\psi_{ec,Na} = \left(\frac{1}{1 + \frac{e'_N}{c_{Na}}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.3.1)

$\psi_{ed,Na} = 0.7 + 0.3 \left(\frac{c_{a,min}}{c_{Na}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.4.1b)

$\psi_{cp,Na} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{c_{Na}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.5.1b)

$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \alpha_{N,seis} \cdot \pi \cdot d_a \cdot h_{ef}$ ACI 318-19 Eq. (17.6.5.2.1)

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$c_{a,min}$ [in.]	$\alpha_{overhead}$	$\tau_{k,c}$ [psi]
2,354	0.625	10.000	5.000	1.000	1,241

$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	c_{ac} [in.]	λ_a	$\alpha_{N,seis}$
0.000	12.380	27.210	1.000	0.990

Calculations

c_{Na} [in.]	A_{Na} [in.^{2}]	A_{Na0} [in.^{2}]	$\psi_{ed,Na}$
9.102	911.23	331.42	0.865

$\psi_{ec1,Na}$	$\psi_{ec2,Na}$	$\psi_{cp,Na}$	N_{ba} [lb]
1.000	0.424	1.000	24,120

Results

N_{ag} [lb]	ϕ_{bond}	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{ag} [lb]	N_{ua} [lb]
24,301	0.650	0.750	1.000	11,847	6,172

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.3 Concrete Breakout Failure

$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b$ — ACI 318-19 Eq. (17.6.2.1b)

$\phi N_{cbg} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ — ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ — ACI 318-19 Eq. (17.6.2.2.1)

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
10.000	0.000	12.380	5.000	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
27.210	17	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
1,869.60	900.00	1.000	0.548	0.800	1.000	36,062

Results

N_{cbg} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{cbg} [lb]	N_{ua} [lb]
32,833	0.650	0.750	1.000	16,006	6,172

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	850	6,611	13	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Bond Strength controls)**	3,400	80,291	5	OK
Concrete edge failure in direction x+**	3,400	16,147	22	OK

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa,eq}$ = ESR value refer to ICC-ES ESR-4868
ϕ $V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]	$\alpha_{V,seis}$
0.23	75,000	1.000

Calculations

$V_{sa,eq}$ [lb]
10,170

Results

$V_{sa,eq}$ [lb]	ϕ_{steel}	ϕ $V_{sa,eq}$ [lb]	V_{ua} [lb]
10,170	0.650	6,611	850

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength (Bond Strength controls)

$V_{cpg} = k_{cp}\left[\left(\frac{A_{Na}}{A_{Na0}}\right) \psi_{ec1,Na}\ \psi_{ec2,Na}\ \psi_{ed,Na}\ \psi_{cp,Na}\ N_{ba}\right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi\ V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Na} see ACI 318-19, Section 17.6.5.1, Fig. R 17.6.5.1(b)

$A_{Na0} = (2\ c_{Na})^2$ ACI 318-19 Eq. (17.6.5.1.2a)

$c_{Na} = 10\ d_a \sqrt{\frac{\tau_{uncr}}{1100}}$ ACI 318-19 Eq. (17.6.5.1.2b)

$\psi_{ec,Na} = \left(\frac{1}{1 + \frac{e'_N}{c_{Na}}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.3.1)

$\psi_{ed,Na} = 0.7 + 0.3\left(\frac{c_{a,min}}{c_{Na}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.4.1b)

$\psi_{cp,Na} = \mathrm{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{c_{Na}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.5.5.1b)

$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \alpha_{N,seis} \cdot \pi \cdot d_a \cdot h_{ef}$ ACI 318-19 Eq. (17.6.5.2.1)

Variables

k_{cp}	$\alpha_{overhead}$	$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$c_{a,min}$ [in.]	$\tau_{k,c}$ [psi]
2	1.000	2,354	0.625	10.000	5.000	1,241

$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	c_{ac} [in.]	λ_a	$\alpha_{N,seis}$
0.000	0.000	27.210	1.000	0.990

Calculations

c_{Na} [in.]	A_{Na} [in.^{2}]	A_{Na0} [in.^{2}]	$\psi_{ed,Na}$
9.102	911.23	331.42	0.865

$\psi_{ec1,Na}$	$\psi_{ec2,Na}$	$\psi_{cp,Na}$	N_{ba} [lb]
1.000	1.000	1.000	24,120

Results

V_{cpg} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi\ V_{cpg}$ [lb]	V_{ua} [lb]
114,701	0.700	1.000	1.000	80,291	3,400

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.3 Concrete edge failure in direction x+

$V_{cbg} = \left(\frac{A_{Vc}}{A_{Vc0}}\right) \psi_{ec,V}\ \psi_{ed,V}\ \psi_{c,V}\ \psi_{h,V}\ \psi_{parallel,V}\ V_b$ — ACI 318-19 Eq. (17.7.2.1b)

$\phi\ V_{cbg} \geq V_{ua}$ — ACI 318-19 Table 17.5.2

A_{Vc} see ACI 318-19, Section 17.7.2.1, Fig. R 17.7.2.1(b)

$A_{Vc0} = 4.5\ c_{a1}^2$ — ACI 318-19 Eq. (17.7.2.1.3)

$\psi_{ec,V} = \left(\frac{1}{1 + \frac{e'_v}{1.5c_{a1}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.3.1)

$\psi_{ed,V} = 0.7 + 0.3\left(\frac{c_{a2}}{1.5c_{a1}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.4.1b)

$\psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0$ — ACI 318-19 Eq. (17.7.2.6.1)

$V_b = \left(7\left(\frac{l_e}{d_a}\right)^{0.2}\sqrt{d_a}\right)\lambda_a \sqrt{f'_c}\, c_{a1}^{1.5}$ — ACI 318-19 Eq. (17.7.2.2.1a)

Variables

c_{a1} [in.]	c_{a2} [in.]	e_{cV} [in.]	$\psi_{c,V}$	h_a [in.]
5.000	5.000	0.000	1.000	15.000

l_e [in.]	λ_a	d_a [in.]	f'_c [psi]	$\psi_{parallel,V}$
5.000	1.000	0.625	4,500	2.000

Calculations

A_{Vc} [in.^{2}]	A_{Vc0} [in.^{2}]	$\psi_{ec,V}$	$\psi_{ed,V}$	$\psi_{h,V}$	V_b [lb]
206.25	112.50	1.000	1.000	1.000	6,291

Results

V_{cbg} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	$\phi\ V_{cbg}$ [lb]	V_{ua} [lb]
23,067	0.700	1.000	1.000	16,147	3,400

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.521	0.211	5/3	42	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Company:		Page:	10
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	ATS Anchorage	Date:	10/1/2024
Fastening point:			

6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-19, Section 26.7.

Fastening meets the design criteria!

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Hilti PROFIS Engineering 3.1.3

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Company:		Page:	11
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	ATS Anchorage	Date:	10/1/2024
Fastening point:			

7 Installation data

Profile: no profile

Hole diameter in the fixture: d_f = 0.687 in.

Plate thickness (input): 0.500 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-HY 200 V3 + HAS-E-55 (ASTM F1554 Gr.55) 5/8

Item number: 2197997 HAS-E-55 5/8"x12" (element) / 2334276 HIT-HY 200-R V3 (adhesive)

Maximum installation torque: 720 in.lb

Hole diameter in the base material: 0.750 in.

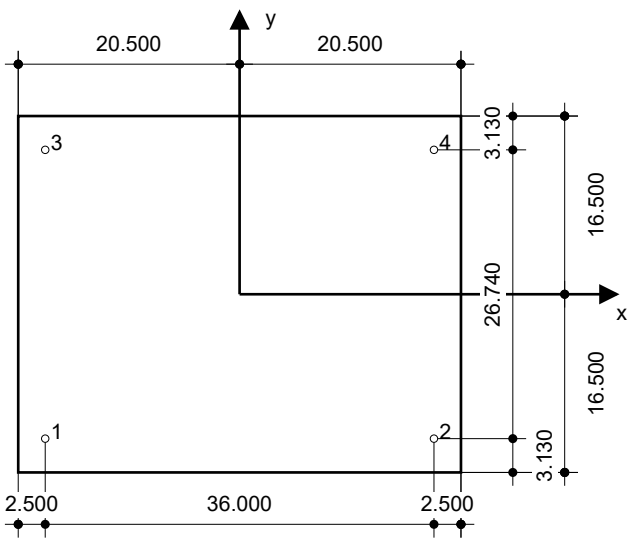
Hole depth in the base material: 10.000 in.

Minimum thickness of the base material: 11.500 in.

Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 55 injection mortar with 10 in embedment hef, 5/8, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868

7.1 Recommended accessories

Drilling	Cleaning	Setting
• Suitable Rotary Hammer • Properly sized drill bit	• Compressed air with required accessories to blow from the bottom of the hole • Proper diameter wire brush	• Dispenser including cassette and mixer • Torque wrench



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-18.000	-13.370	5.000	41.000	5.000	-
2	18.000	-13.370	41.000	5.000	5.000	-
3	-18.000	13.370	5.000	41.000	31.740	-
4	18.000	13.370	41.000	5.000	31.740	-

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Company:		Page:	12
Address:		Specifier:	
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Design:	ATS Anchorage	Date:	10/1/2024
Fastening point:			

8 Remarks; Your Cooperation Duties

- Any and all information and data contained in the Software concern solely the use of Hilti products and are based on the principles, formulas and security regulations in accordance with Hilti's technical directions and operating, mounting and assembly instructions, etc., that must be strictly complied with by the user. All figures contained therein are average figures, and therefore use-specific tests are to be conducted prior to using the relevant Hilti product. The results of the calculations carried out by means of the Software are based essentially on the data you put in. Therefore, you bear the sole responsibility for the absence of errors, the completeness and the relevance of the data to be put in by you. Moreover, you bear sole responsibility for having the results of the calculation checked and cleared by an expert, particularly with regard to compliance with applicable norms and permits, prior to using them for your specific facility. The Software serves only as an aid to interpret norms and permits without any guarantee as to the absence of errors, the correctness and the relevance of the results or suitability for a specific application.
- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Engineer: Tony Arzate
Subject: Ben Lomond Design Check

ATS Equipment

$\phi N_n := 0.8 \cdot 12.7\ kip = 10.16\ kip$ From Hilti Profis

$N_{ua} := 2.97\ kip$ From Hilti Profis

$\frac{N_{ua}}{\phi N_n} = 0.292$

$\phi V_n := 0.8 \cdot 6.61\ kip = 5.288\ kip$ From Hilti Profis

$V_{ua} := .85\ kip$ From Hilti Profis

$\frac{V_{ua}}{\phi V_n} = 0.161$

$\beta_v := \max\left(\frac{V_{ua}}{\phi V_n}, .23\right) = 0.23$ From Hilti Profis

$\beta_n := \max\left(\frac{N_{ua}}{\phi N_n}, .53\right) = 0.53$ From Hilti Profis

$\beta_v + \beta_n = 0.76$ < 1.2 per ACI 318 17.8.3

TETRA TECH

Sheet No.:		**of**	**Date:** 1-Aug-24
Checked By:			**Office:** Irvine
Telephone:	(949) 809 - 5000		
Engineer:	Tony Arzate	**Job No.:**	200-42064-22005
Subject:	Ben Lomond Transfer Station		
	Electrical Equipment		

Global Stability of UMC & MDP due to Seismic Loads

Properties

W, Weight	=	2.85	kip
V, Seismic Force	=	2.69	kip
Height	=	7.75	ft
Min. Width	=	2.00	ft
C.O.G.	=	5.16	ft (Assumed 2/3 height)
Equipment Area	=	11.00	ft^2
Load	=	0.26	ksf

Overturning Moment

(1.0EL) Mot = 2.69 kips x 1 x 5.16 ft = 13.9 kip - ft

Resisting Moment

(0.9-0.2Sds) Mr = (0.9 - 0.2 x 1.182) x 3 kips x 1.00 ft = 1.9 kip - ft

Net Moment

$M_{OT\ NET}$ = 13.9 kip-ft - 1.9 kip-ft = 12.0 kip-ft

Factor of Safety for Overturning

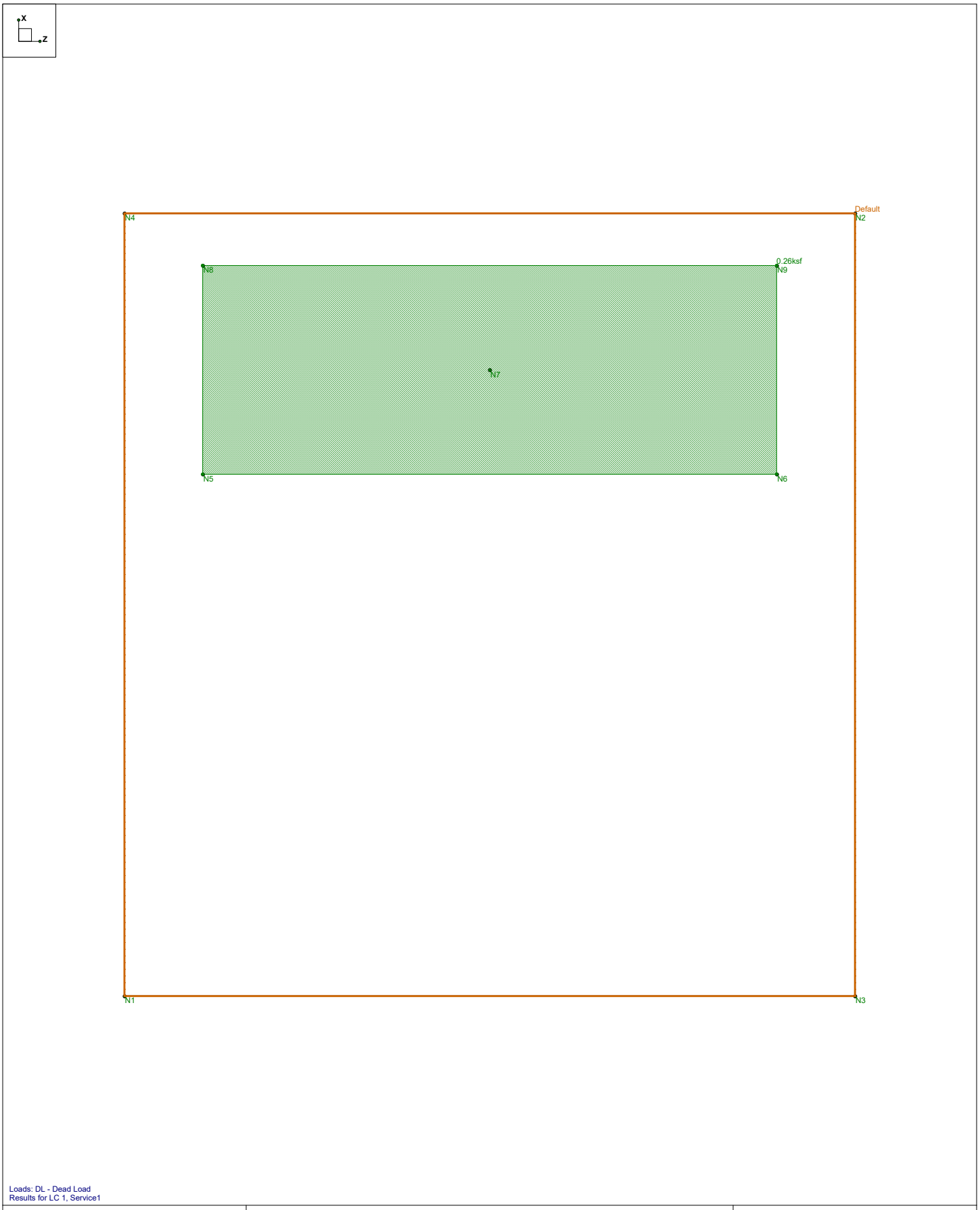
F.S. = 0.14 < 1.5 **NG!**

**** Equipment not stable enough to self-support; Mechanical anchorage required.***

Anchorage Loads & Requirements

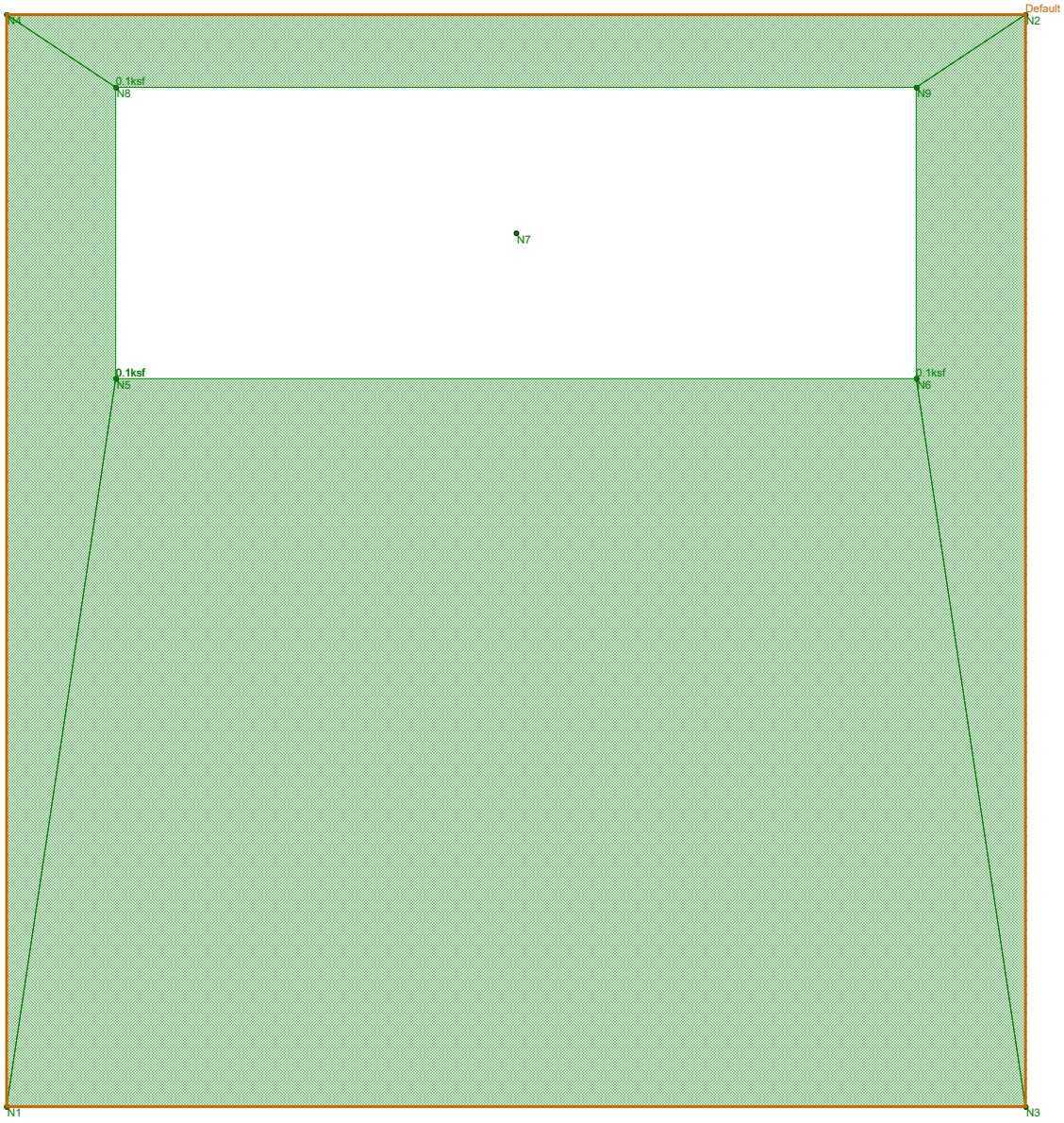
No. of Bolts	=	4								
Ω_0	=	2								
$\Omega_0 * M_{OT\ NET}$	=	24.1	kip-ft							
T/C	=	24.1	kip-ft	/	(	1.00 ft	x	2.00 anchors)	=	12.0 kip uplift/per 2 anchors
$\Omega_0 * V$	=	5.4	kip							
V	=	5.4	kip	/		4 anchors		=		1.3 kip shear/per anchor

T/C	=	6.0	kip uplift/per anchor
V	=	1.3	kip shear/per anchor



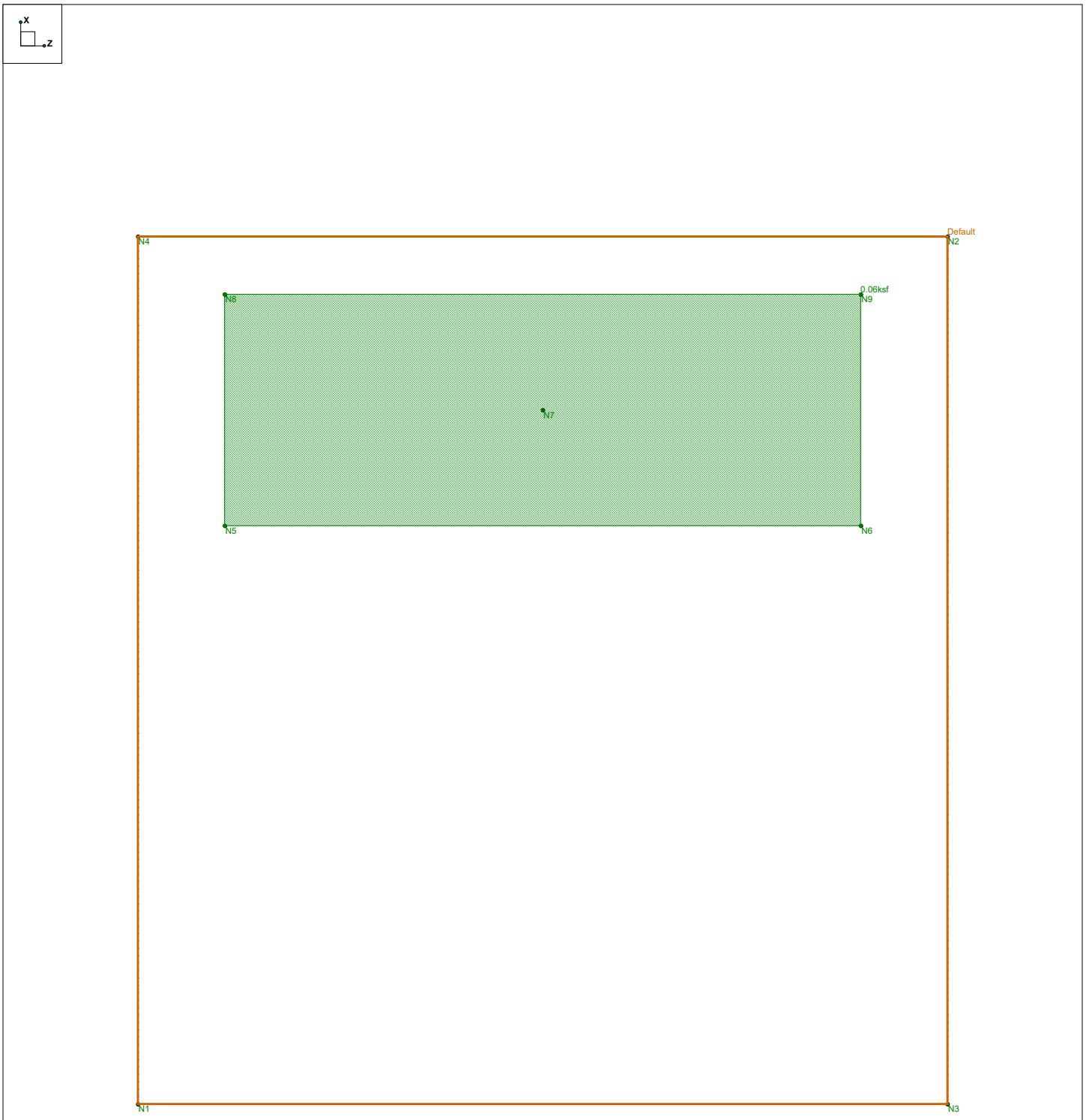
Loads: DL - Dead Load
Results for LC 1, Service1

		1
		Aug 1, 2024 at 11:20 AM
	DEAD LOAD	UMC & MDP Foundation Calc.fnd



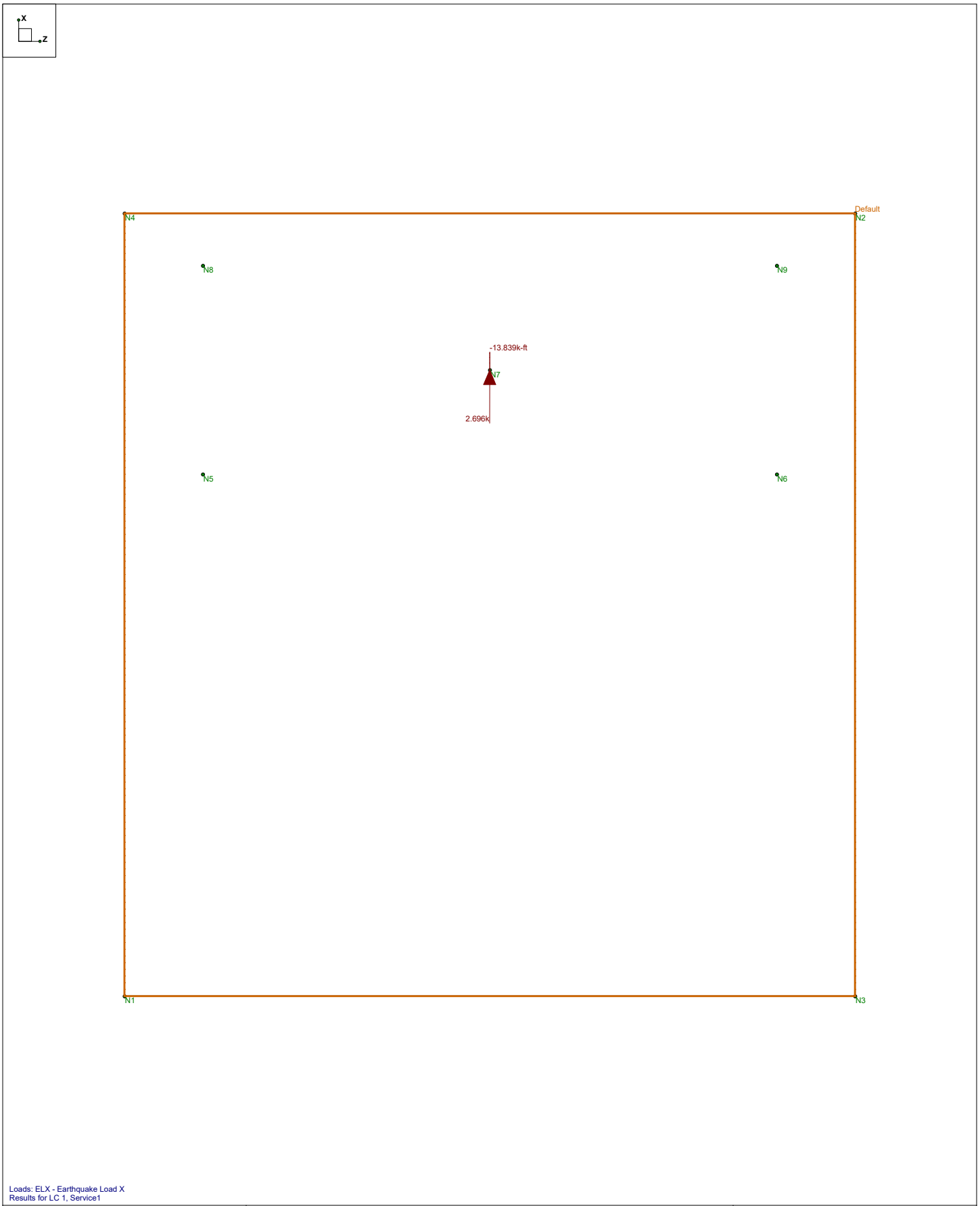
Loads: LL - Live Load
Results for LC 1, Service1

		2
		Aug 1, 2024 at 11:20 AM
	LIVE LOAD	UMC & MDP Foundation Calc.fnd



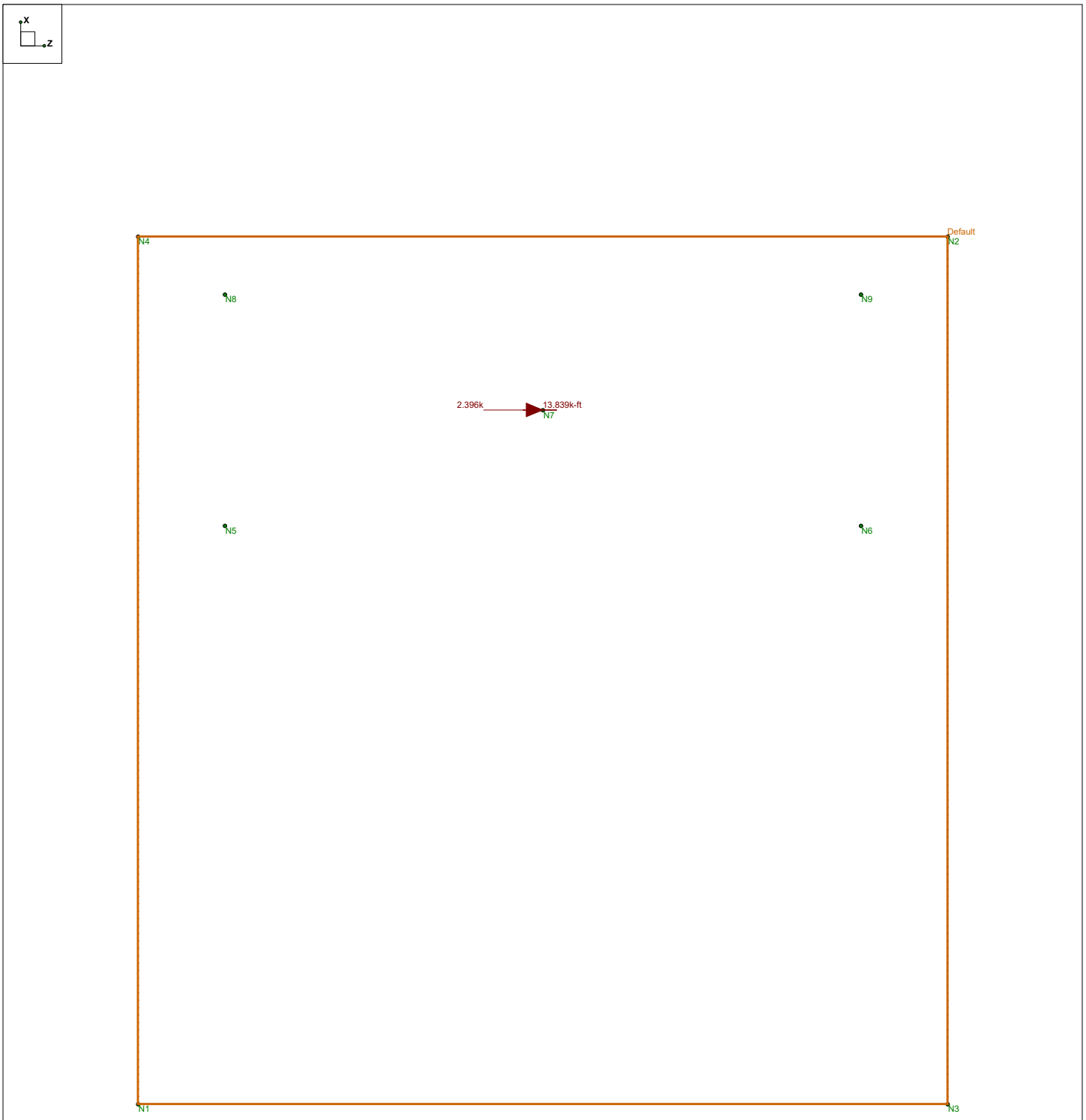
Loads: EL - Earthquake Load
Results for LC 1, Service1

		3
		Aug 1, 2024 at 11:21 AM
	ELY	UMC & MDP Foundation Calc.fnd



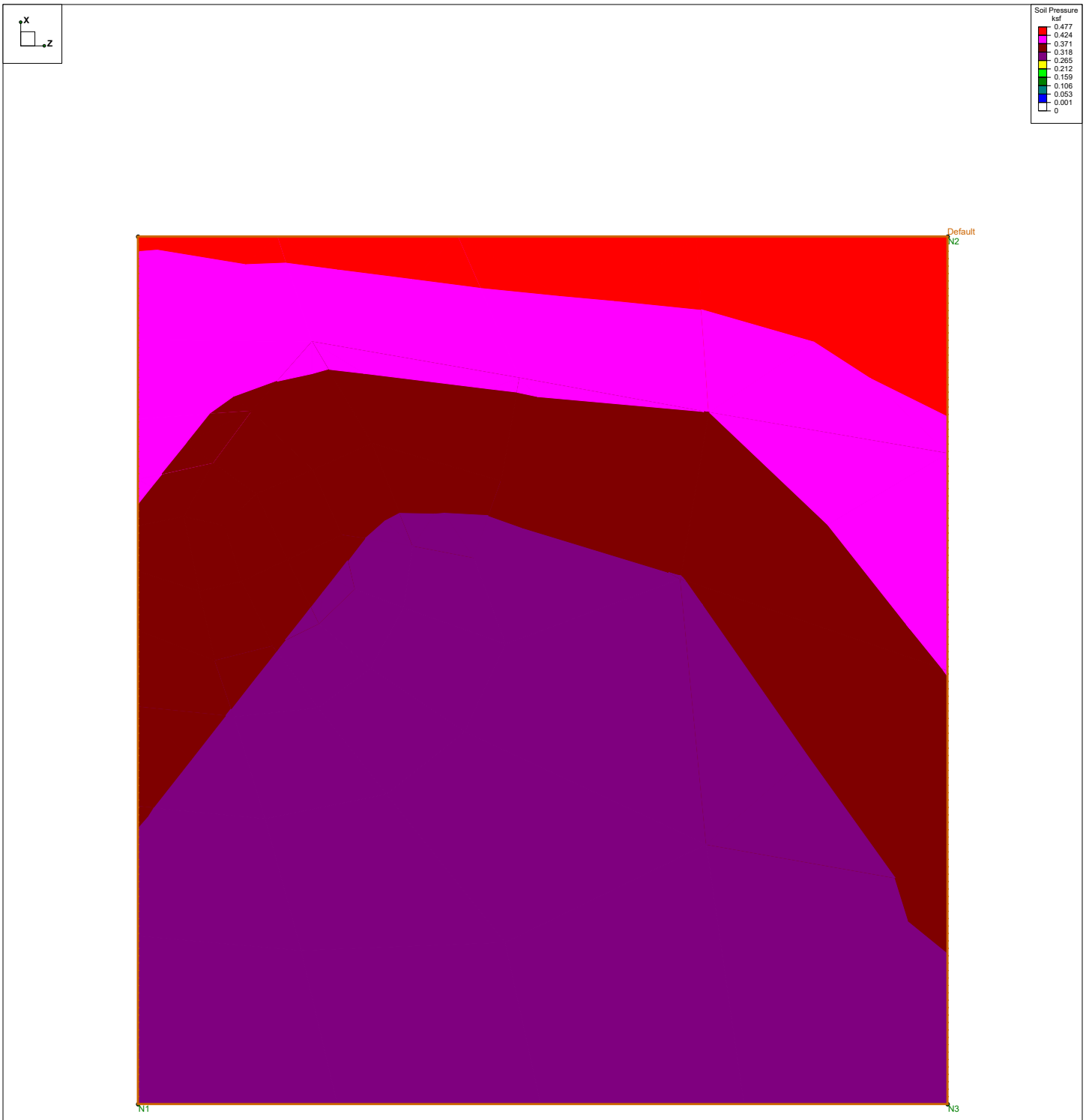
Loads: ELX - Earthquake Load X
Results for LC 1, Service1

		4
		Aug 1, 2024 at 11:21 AM
	ELX	UMC & MDP Foundation Calc.fnd



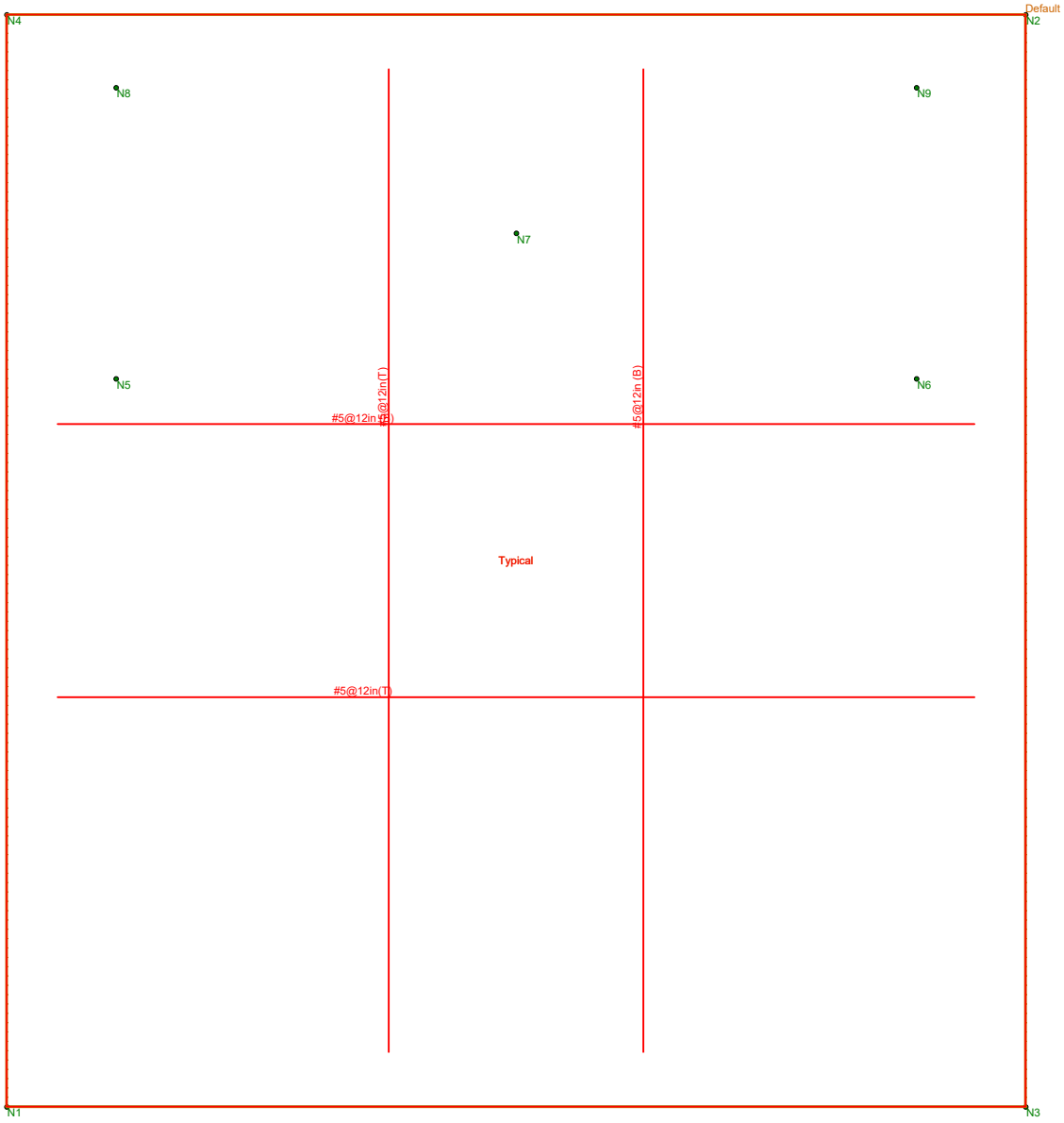
Loads: ELZ - Earthquake Load Z
Results for LC 1, Service1

		5
		Aug 1, 2024 at 11:22 AM
	ELZ	UMC & MDP Foundation Calc.fnd



Enveloped Results

		6
		Aug 1, 2024 at 11:22 AM
	SOIL PRESSURE	UMC & MDP Foundation Calc.fnd



Enveloped Results

		7
		Aug 1, 2024 at 11:23 AM
	DESIGN STRIPS	UMC & MDP Foundation Calc.fnd

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[k/ft^3]	f'c[ksi]	Lambda	Flex St...	Shear ...
1	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
2	Conc4500NW	4967	2160	0.15	0.6	0.15	4.5	1	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	2	3

Load Categories

	Category	Point Loads	Line Loads	Area Loads
1	DL			1
2	LL			4
3	EL			1
4	ELX	2		
5	ELZ	2		

Load Combinations

	Label	S...	S...	A...	SF	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...
1	Service1	Yes	Yes		1.5	DL	1	LL	1																
2	Service2	Yes	Yes		1.5	DL	1	EL	0.7	ELX	0.7														
3	Service3	Yes	Yes		1.5	DL	1	EL	0.7	ELX	-0.7														
4	Service4	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	0.7														
5	Service5	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	-0.7														
6	Service6	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	0.5...	LL	0.75												
7	Service7	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	-0....	LL	0.75												
8	Service8	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	0.5...	LL	0.75												
9	Service9	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	-0....	LL	0.75												
10	Service10	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	0.7														
11	Service11	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	-0.7														
12	Service12	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	0.7														
13	Service13	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	-0.7														
14	Strength1	Yes				DL	1.2	LL	1.6																
15	Strength2	Yes				DL	1.2	EL	1	ELX	1	LL	1												
16	Strength3	Yes				DL	1.2	EL	1	ELX	-1	LL	1												
17	Strength4	Yes				DL	1.2	EL	1	ELZ	1	LL	1												
18	Strength5	Yes				DL	1.2	EL	1	ELZ	-1	LL	1												
19	Strength6	Yes				DL	0.9	EL	-1	ELX	1														
20	Strength7	Yes				DL	0.9	EL	-1	ELX	-1														
21	Strength8	Yes				DL	0.9	EL	-1	ELZ	1														
22	Strength9	Yes				DL	0.9	EL	-1	ELZ	-1														
23	Combination 23	Yes				DL	1.4																		
24	Combination 24	Yes																							

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	100	3.5	None	Yes

Slabs

	Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburde...	Icr Factor
1	S1	12	Conc4500NW	0	0	0	0	0.25

Area Loads (Cat 1 : DL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL4	0.26	0.26

Area Loads (Cat 2 : LL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL3	0.1	0.1
2	AL5	0.1	0.1
3	AL6	0.1	0.1
4	AL7	0.1	0.1

Area Loads (Cat 3 : EL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL8	0.06	0.06

Point Loads and Moments (Cat 16 : ELX)

	Label	Direction	Magnitude[k,k-ft]
1	N7	X	2.696
2	N7	MZ	-13.839

Point Loads and Moments (Cat 18 : ELZ)

	Label	Direction	Magnitude[k,k-ft]
1	N7	MX	13.839
2	N7	Z	2.396

Strip Reinforcing

	Label	UC Top	LC	Top Bars	Governin...	UC Bot	LC	Bot Bars/...	Governin...	UC Shear	LC	Governin...
1	DS1	0.044	21	#5@12in	DS1-X22	0.067	18	#5@12in	DS1-X22	0.064	17	DS1-X28
2	DS2	0.102	15	#5@12in	DS2-X36	0.112	20	#5@12in	DS2-X36	0.07	16	DS2-X34

Slab Overturning Safety Factors

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	52.097	0	51.859	9.99+	9.99+
2	2	S1	0	0	39.19	11.575	34.514	9.99+	2.982
3	3	S1	0	0	39.19	11.575	49.463	9.99+	4.273
4	4	S1	0	11.365	39.19	0	34.514	3.448	9.99+
5	5	S1	0	11.365	39.19	0	34.514	3.448	9.99+
6	6	S1	0	0	49.679	8.681	47.869	9.99+	5.514
7	7	S1	0	0	49.679	8.681	58.586	9.99+	6.749
8	8	S1	0	8.523	49.679	0	47.869	5.829	9.99+
9	9	S1	0	8.523	49.679	0	47.869	5.829	9.99+
10	10	S1	0	1.617	22.543	12.268	20.293	9.99+	1.654
11	11	S1	0	1.617	22.543	14.347	28.015	9.99+	1.953
12	12	S1	0	12.982	22.543	2.772	28.015	1.737	9.99+
13	13	S1	0	12.982	22.543	2.772	28.015	1.737	9.99+

Slab Sliding Safety Factors

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
1	1	S1	0	0	5.954	0	5.954	9.99+	9.99+
2	2	S1	0	1.887	4.479	0	4.479	2.373	9.99+
3	3	S1	0	1.887	4.479	0	4.479	2.373	9.99+
4	4	S1	0	0	4.479	1.677	4.479	9.99+	2.67
5	5	S1	0	0	4.479	1.677	4.479	9.99+	2.67
6	6	S1	0	1.415	5.678	0	5.678	4.011	9.99+
7	7	S1	0	1.415	5.678	0	5.678	4.011	9.99+

Slab Sliding Safety Factors (Continued)

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
8	8	S1	0	0	5.678	1.258	5.678	9.99+	4.514
9	9	S1	0	0	5.678	1.258	5.678	9.99+	4.514
10	10	S1	0	1.887	2.392	0	2.392	1.267	9.99+
11	11	S1	0	1.887	2.392	0	2.392	1.267	9.99+
12	12	S1	0	0	2.392	1.677	2.392	9.99+	1.426
13	13	S1	0	0	2.392	1.677	2.392	9.99+	1.426

Hilti PROFIS Engineering 3.1.3

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Company:		Page:	1
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	UMC & MDP Anchorage	Date:	10/1/2024
Fastening point:			

Specifier's comments:

1 Input data



Anchor type and diameter:	**HIT-HY 200 V3 + HAS-E-55 (ASTM F1554 Gr.55) 3/4**
Item number:	2198001 HAS-E-55 3/4"x12" (element) / 2334276 HIT-HY 200-R V3 (adhesive)
Specification text:	Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 55 injection mortar with 10 in embedment hef, 3/4, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868
Effective embedment depth:	$h_{ef,act}$ = 10.000 in. ($h_{ef,limit}$ = - in.)
Material:	ASTM F1554 Grade 55
Evaluation Service Report:	ESR-4868
Issued I Valid:	6/1/2023 | 11/1/2024
Proof:	Design Method ACI 318-19 / Chem
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 0.500 in.
Anchor plate[R] :	l_x x l_y x t = 2.677 in. x 2.677 in. x 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 12.000 in., Temp. short/long: 32/32 °F
Installation:	**Hammer drilled hole, Installation condition: Dry**
Reinforcement:	tension: not present, shear: not present; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d)) Shear load: yes (17.10.6.3 (c))

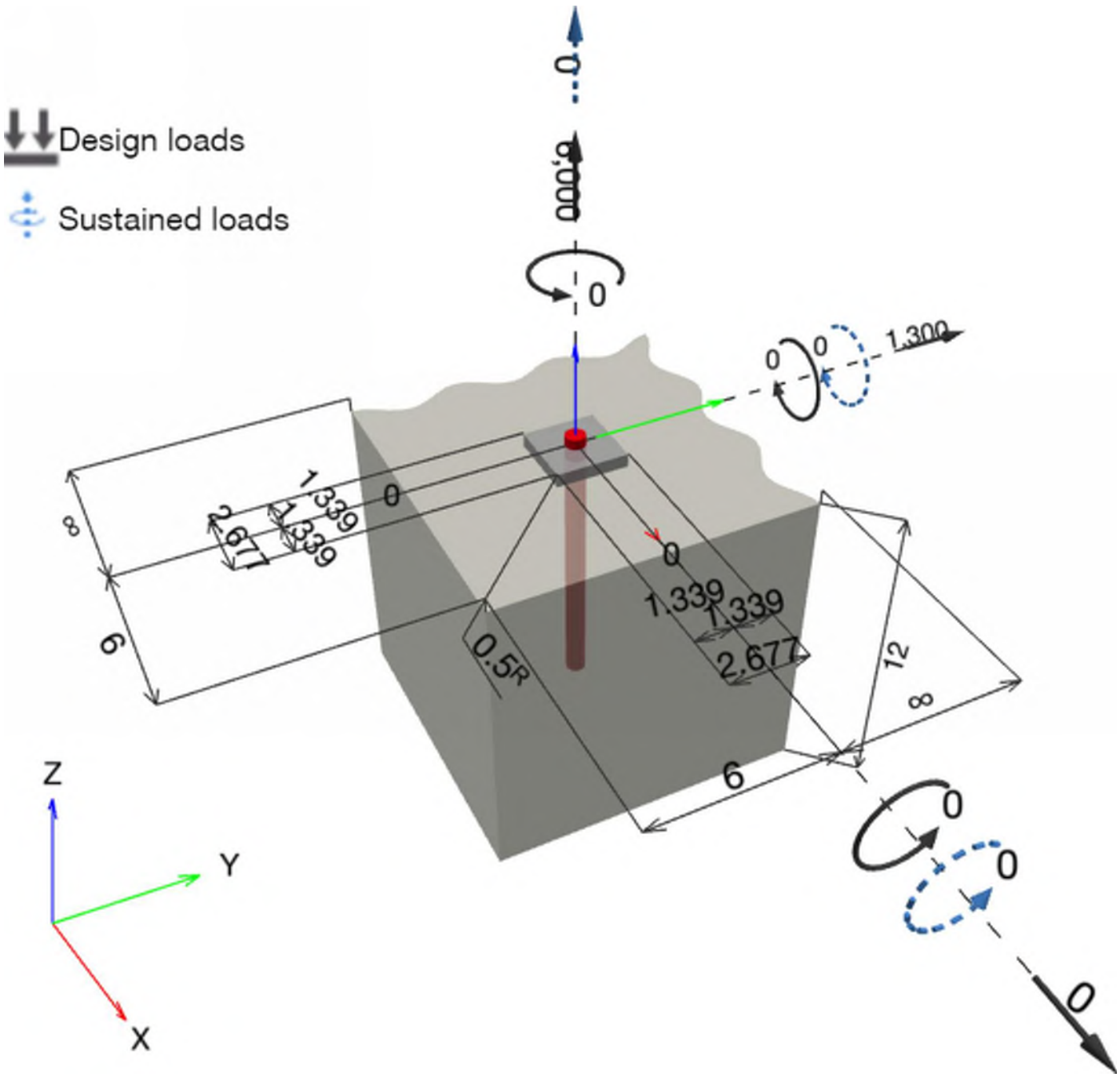
[R] - The anchor calculation is based on a rigid anchor plate assumption.

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Geometry [in.] & Loading [lb, in.lb]



Input data and results must be checked for conformity with the existing conditions and for plausibility!
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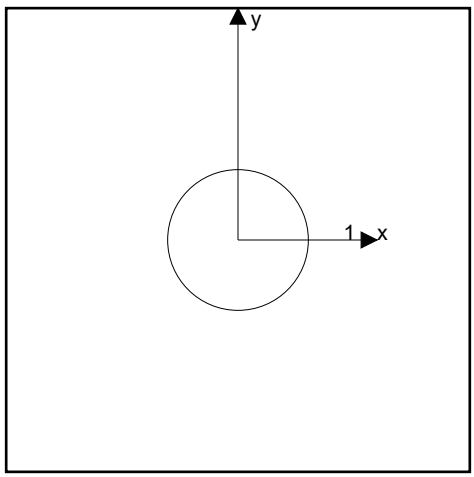
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1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 6,000; V_x = 0; V_y = 1,300; M_x = 0; M_y = 0; M_z = 0;	yes	85

2 Load case/Resulting anchor forces



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	6,000	1,300	0	1,300

Max. concrete compressive strain: - [‰]
Max. concrete compressive stress: - [psi]
Resulting tension force in (x/y)=(0.000/0.000): 6,000 [lb]
Resulting compression force in (x/y)=(-/-): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	6,000	18,817	32	OK
Bond Strength**	6,000	7,965	76	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	6,000	7,064	85	OK

* highest loaded anchor **anchor group (anchors in tension)

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.1 Steel Strength

N_{sa} = ESR value	refer to ICC-ES ESR-4868
$\phi\ N_{sa} \geq N_{ua}$	ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.33	75,000

Calculations

N_{sa} [lb]
25,090

Results

N_{sa} [lb]	ϕ_{steel}	$\phi\ N_{sa}$ [lb]	N_{ua} [lb]
25,090	0.750	18,817	6,000

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.2 Bond Strength

$N_a = \left(\frac{A_{Na}}{A_{Na0}}\right) \psi_{ed,Na} \psi_{cp,Na} N_{ba}$ — ACI 318-19 Eq. (17.6.5.1a)

$\phi N_a \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Na} see ACI 318-19, Section 17.6.5.1, Fig. R 17.6.5.1(b)

$A_{Na0} = (2 c_{Na})^2$ — ACI 318-19 Eq. (17.6.5.1.2a)

$c_{Na} = 10 d_a \sqrt{\frac{\tau_{uncr}}{1100}}$ — ACI 318-19 Eq. (17.6.5.1.2b)

$\psi_{ed,Na} = 0.7 + 0.3 \left(\frac{c_{a,min}}{c_{Na}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.5.4.1b)

$\psi_{cp,Na} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{c_{Na}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.5.5.1b)

$N_{ba} = \lambda_a \cdot \tau_{k,c} \cdot \alpha_{N,seis} \cdot \pi \cdot d_a \cdot h_{ef}$ — ACI 318-19 Eq. (17.6.5.2.1)

Variables

$\tau_{k,c,uncr}$ [psi]	d_a [in.]	h_{ef} [in.]	$c_{a,min}$ [in.]	$\alpha_{overhead}$	$\tau_{k,c}$ [psi]
2,354	0.750	10.000	6.000	1.000	1,336

c_{ac} [in.]	λ_a	$\alpha_{N,seis}$
28.985	1.000	1.000

Calculations

c_{Na} [in.]	A_{Na} [in.^{2}]	A_{Na0} [in.^{2}]	$\psi_{ed,Na}$
10.923	286.39	477.24	0.865

$\psi_{cp,Na}$	N_{ba} [lb]
1.000	31,485

Results

N_a [lb]	ϕ_{bond}	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_a [lb]	N_{ua} [lb]
16,339	0.650	0.750	1.000	7,965	6,000

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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3.3 Concrete Breakout Failure

$N_{cb} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b$ ACI 318-19 Eq. (17.6.2.1a)

$\phi N_{cb} \geq N_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5h_{ef}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = MAX\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5h_{ef}}{c_{ac}}\right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ ACI 318-19 Eq. (17.6.2.2.1)

Variables

h_{ef} [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
10.000	6.000	1.000	28.985	17	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
441.00	900.00	0.820	1.000	36,062

Results

N_{cb} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕN_{cb} [lb]	N_{ua} [lb]
14,490	0.650	0.750	1.000	7,064	6,000

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	1,300	9,786	14	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength (Concrete Breakout Strength controls)**	1,300	20,286	7	OK
Concrete edge failure in direction x+**	1,300	10,352	13	OK

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

$V_{sa,eq}$ = ESR value refer to ICC-ES ESR-4868
ϕ $V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]	$\alpha_{V,seis}$
0.33	75,000	1.000

Calculations

$V_{sa,eq}$ [lb]
15,055

Results

$V_{sa,eq}$ [lb]	ϕ steel	ϕ $V_{sa,eq}$ [lb]	V_{ua} [lb]
15,055	0.650	9,786	1,300

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.2 Pryout Strength (Concrete Breakout Strength controls)

$V_{cp} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1a)

$\phi V_{cp} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = MAX \left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ ACI 318-19 Eq. (17.6.2.2.1)

Variables

k_{cp}	h_{ef} [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
2	10.000	6.000	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
28.985	17	1.000	4,500

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
441.00	900.00	0.820	1.000	36,062

Results

V_{cp} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cp} [lb]	V_{ua} [lb]
28,980	0.700	1.000	1.000	20,286	1,300

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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4.3 Concrete edge failure in direction x+

$V_{cb} = \left(\frac{A_{Vc}}{A_{Vc0}}\right) \psi_{ed,V} \psi_{c,V} \psi_{h,V} \psi_{parallel,V} V_b$ — ACI 318-19 Eq. (17.7.2.1a)

$\phi V_{cb} \geq V_{ua}$ — ACI 318-19 Table 17.5.2

A_{Vc} see ACI 318-19, Section 17.7.2.1, Fig. R 17.7.2.1(b)

$A_{Vc0} = 4.5 c_{a1}^2$ — ACI 318-19 Eq. (17.7.2.1.3)

$\psi_{ed,V} = 0.7 + 0.3\left(\frac{c_{a2}}{1.5c_{a1}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.7.2.4.1b)

$\psi_{h,V} = \sqrt{\frac{1.5c_{a1}}{h_a}} \geq 1.0$ — ACI 318-19 Eq. (17.7.2.6.1)

$V_b = 9 \lambda_a \sqrt{f_c'} c_{a1}^{1.5}$ — ACI 318-19 Eq. (17.7.2.2.1b)

Variables

c_{a1} [in.]	c_{a2} [in.]	$\psi_{c,V}$	h_a [in.]	l_e [in.]
6.000	6.000	1.000	12.000	6.000

λ_a	d_a [in.]	f_c' [psi]	$\psi_{parallel,V}$
1.000	0.750	4,500	2.000

Calculations

A_{Vc} [in.^{2}]	A_{Vc0} [in.^{2}]	$\psi_{ed,V}$	$\psi_{h,V}$	V_b [lb]
135.00	162.00	1.000	1.000	8,873

Results

V_{cb} [lb]	$\phi_{concrete}$	$\phi_{seismic}$	$\phi_{nonductile}$	ϕV_{cb} [lb]	V_{ua} [lb]
14,789	0.700	1.000	1.000	10,352	1,300

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.849	0.133	5/3	80	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Design Strengths of adhesive anchor systems are influenced by the cleaning method. Refer to the INSTRUCTIONS FOR USE given in the Evaluation Service Report for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to https://submittals.us.hilti.com/PROFISAnchorDesignGuide/
- "An anchor design approach for structures assigned to Seismic Design Category C, D, E or F is given in ACI 318-19, Chapter 17, Section 17.10.5.3 (a) that requires the governing design strength of an anchor or group of anchors be limited by ductile steel failure. If this is NOT the case, the connection design (tension) shall satisfy the provisions of Section 17.10.5.3 (b), Section 17.10.5.3 (c), or Section 17.10.5.3 (d). The connection design (shear) shall satisfy the provisions of Section 17.10.6.3 (a), Section 17.10.6.3 (b), or Section 17.10.6.3 (c)."
- Section 17.10.5.3 (b) / Section 17.10.6.3 (a) require the attachment the anchors are connecting to the structure be designed to undergo ductile yielding at a load level corresponding to anchor forces no greater than the controlling design strength. Section 17.10.5.3 (c) / Section 17.10.6.3 (b) waive the ductility requirements and require the anchors to be designed for the maximum tension / shear that can be transmitted to the anchors by a non-yielding attachment. Section 17.10.5.3 (d) / Section 17.10.6.3 (c) waive the ductility requirements and require the design strength of the anchors to equal or exceed the maximum tension / shear obtained from design load combinations that include E, with E increased by ω_0.
- Installation of Hilti adhesive anchor systems shall be performed by personnel trained to install Hilti adhesive anchors. Reference ACI 318-19, Section 26.7.

Fastening meets the design criteria!

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7 Installation data

Profile: no profile

Hole diameter in the fixture: d_f = 0.812 in.

Plate thickness (input): 0.500 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Compressed air cleaning of the drilled hole according to instructions for use is required

Anchor type and diameter: HIT-HY 200 V3 + HAS-E-55 (ASTM F1554 Gr.55) 3/4

Item number: 2198001 HAS-E-55 3/4"x12" (element) / 2334276 HIT-HY 200-R V3 (adhesive)

Maximum installation torque: 1,200 in.lb

Hole diameter in the base material: 0.875 in.

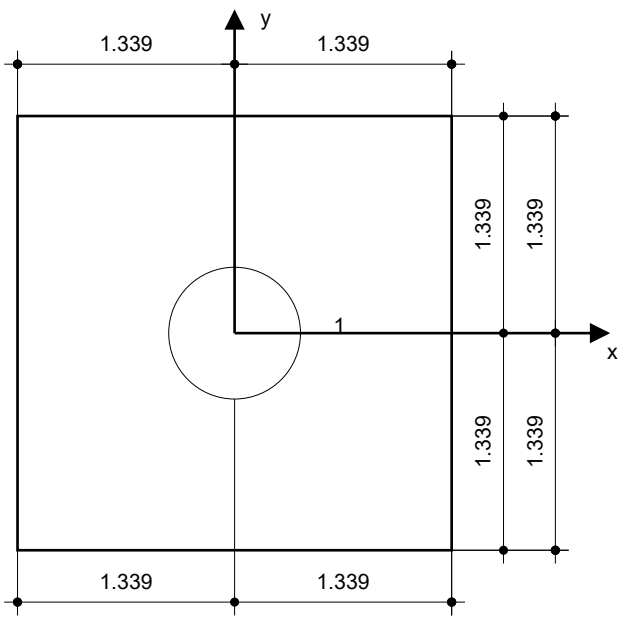
Hole depth in the base material: 10.000 in.

Minimum thickness of the base material: 11.750 in.

Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 55 injection mortar with 10 in embedment hef, 3/4, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868

7.1 Recommended accessories

Drilling	Cleaning	Setting
• Suitable Rotary Hammer • Properly sized drill bit	• Compressed air with required accessories to blow from the bottom of the hole • Proper diameter wire brush	• Dispenser including cassette and mixer • Torque wrench



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	0.000	0.000	-	6.000	6.000	-

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8 Remarks; Your Cooperation Duties

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Engineer: Tony Arzate
Subject: Ben Lomond Design Check

UMC & MDP Equipment

$\phi N_n := 0.8 \cdot 18.82\ kip = 15.056\ kip$ From Hilti Profis

$N_{ua} := 6\ kip$ From Hilti Profis

$\frac{N_{ua}}{\phi N_n} = 0.399$

$\phi V_n := 0.8 \cdot 9.79\ kip = 7.832\ kip$ From Hilti Profis

$V_{ua} := 1.3\ kip$ From Hilti Profis

$\frac{V_{ua}}{\phi V_n} = 0.166$

$\beta_v := \max\left(\frac{V_{ua}}{\phi V_n}, .13\right) = 0.166$ From Hilti Profis

$\beta_n := \max\left(\frac{N_{ua}}{\phi N_n}, .85\right) = 0.85$ From Hilti Profis

$\beta_v + \beta_n = 1.016 <$ 1.2 per ACI 318 17.8.3

TETRA TECH

Sheet No.:		**of**	**Date:** 3-Dec-24
Checked By:			**Office:** Irvine
Telephone:	(949) 809 - 5000		
Engineer:	Tony Arzate	**Job No.:**	200-42064-22005
Subject:	Ben Lomond Transfer Station		
	Electrical Equipment		

Global Stability of 45 KVA Transformer (T2-T5) due to Seismic Loads

Properties

W, Weight	=	0.625	kip
V, Seismic Force	=	0.591	kip
Height	=	3.78	ft
Min. Width	=	1.76	ft
C.O.G.	=	2.52	ft (Assumed 2/3 height)
Equipment Area	=	3.65	ft^2
Load	=	0.17	ksf

Overturning Moment

(1.0EL) Mot = 0.59 kips x 1 x 2.52 ft = 1.5 kip - ft

Resisting Moment

(0.9-0.2Sds) Mr = (0.9 - 0.2 x 1.182) x 1 kips x 0.88 ft = 0.4 kip - ft

Net Moment

$M_{OT\ NET}$ = 1.5 kip-ft - 0.4 kip-ft = 1.1 kip-ft

Factor of Safety for Overturning

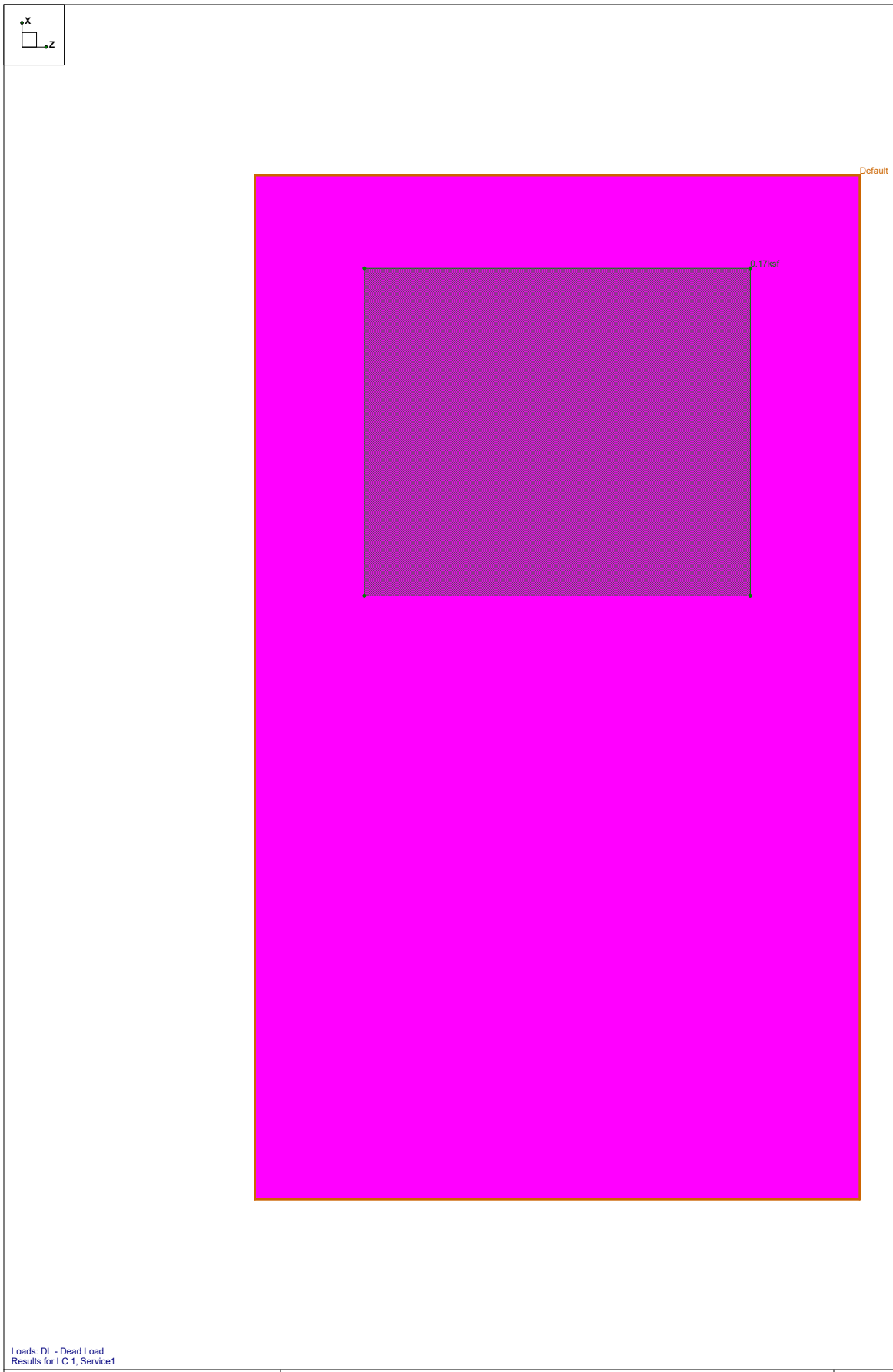
F.S. = 0.25 < 1.5 **NG!**

**** Equipment not stable enough to self-support; Mechanical anchorage required.***

Anchorage Loads & Requirements

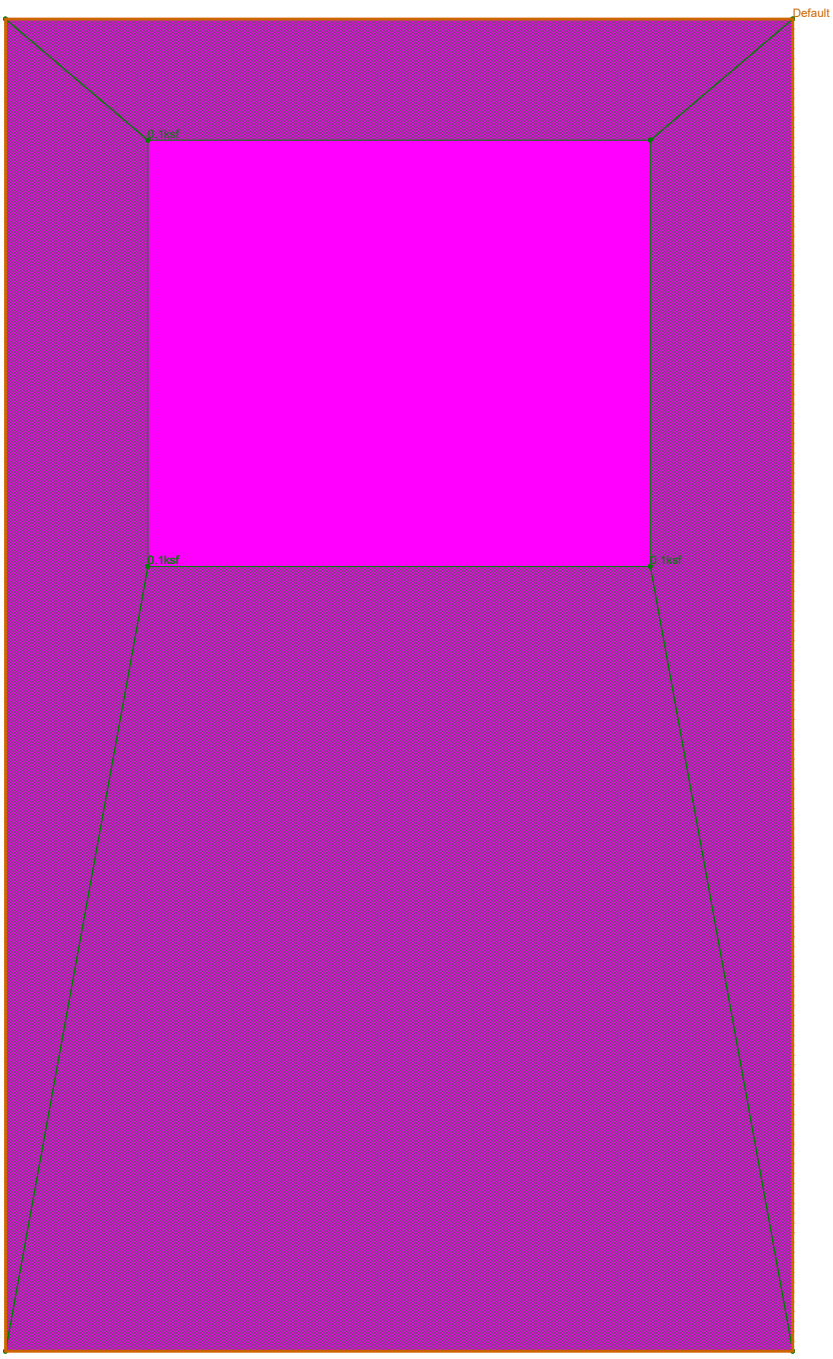
No. of Bolts	=	4								
Ω_0	=	2								
$\Omega_0 * M_{OT\ NET}$	=	2.2	kip-ft							
T/C	=	2.2	kip-ft	/	(	0.88 ft	x	2.00 anchors)	=	1.3 kip uplift/per 2 anchors
$\Omega_0 * V$	=	1.2	kip							
V	=	1.2	kip	/	4	anchors	=	0.3 kip shear/per anchor		

T/C	=	0.6	kip uplift/per anchor
V	=	0.3	kip shear/per anchor



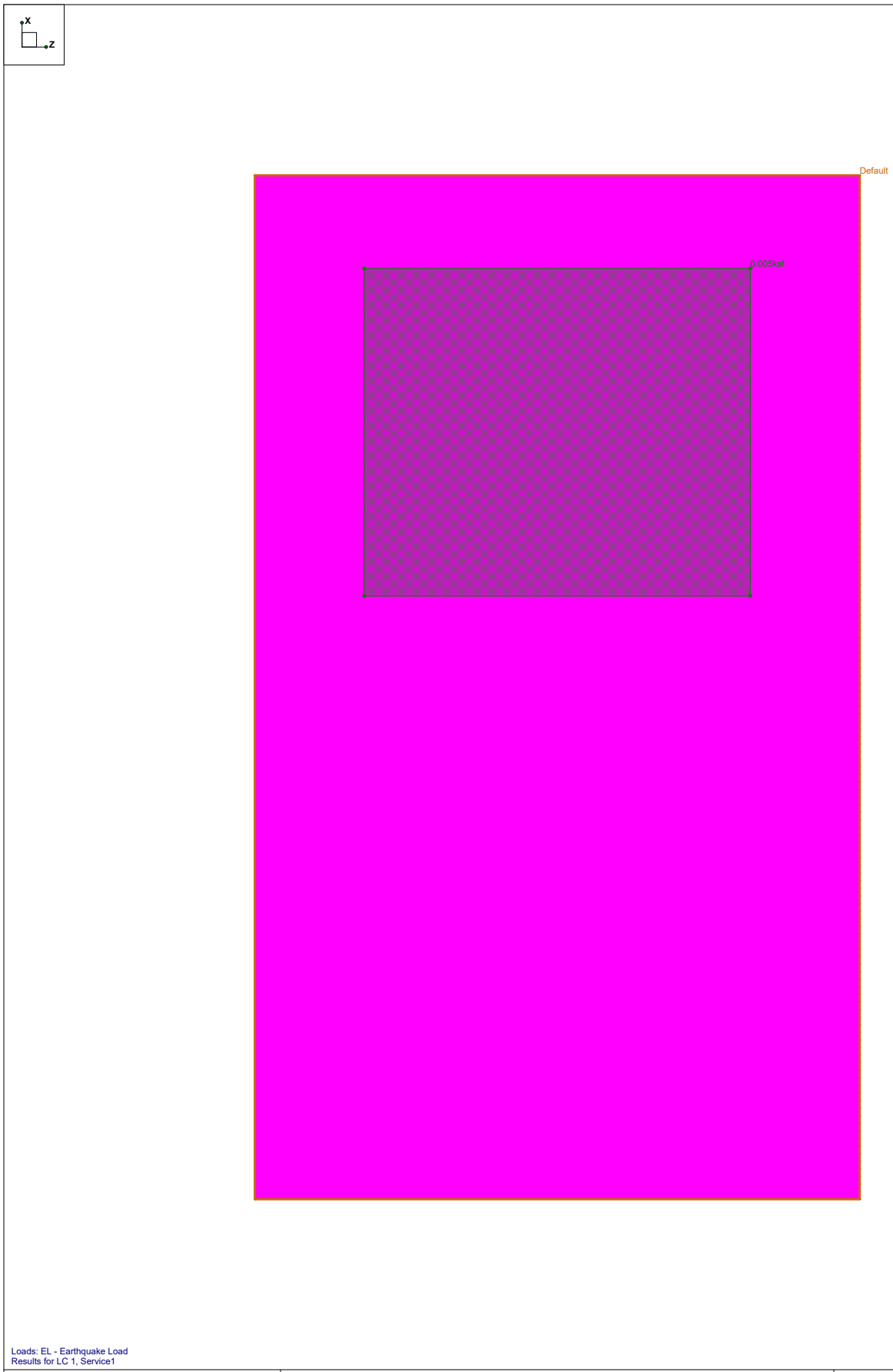
Loads: DL - Dead Load
Results for LC 1, Service1

	DEAD LOAD	1
		Dec 3, 2024 at 10:55 AM
		45 kVA XFMR Foundation Calc.fnd



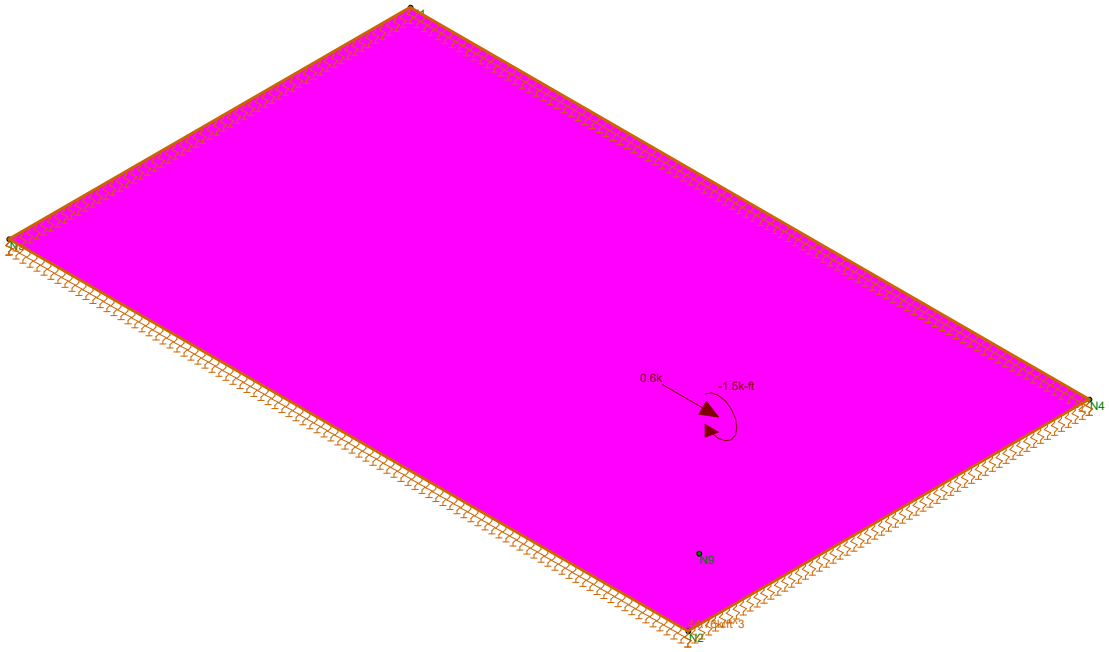
Loads: LL - Live Load
Results for LC 1, Service1

		2
		Dec 3, 2024 at 10:56 AM
	LIVE LOAD	45 kVA XFMR Foundation Calc.fnd



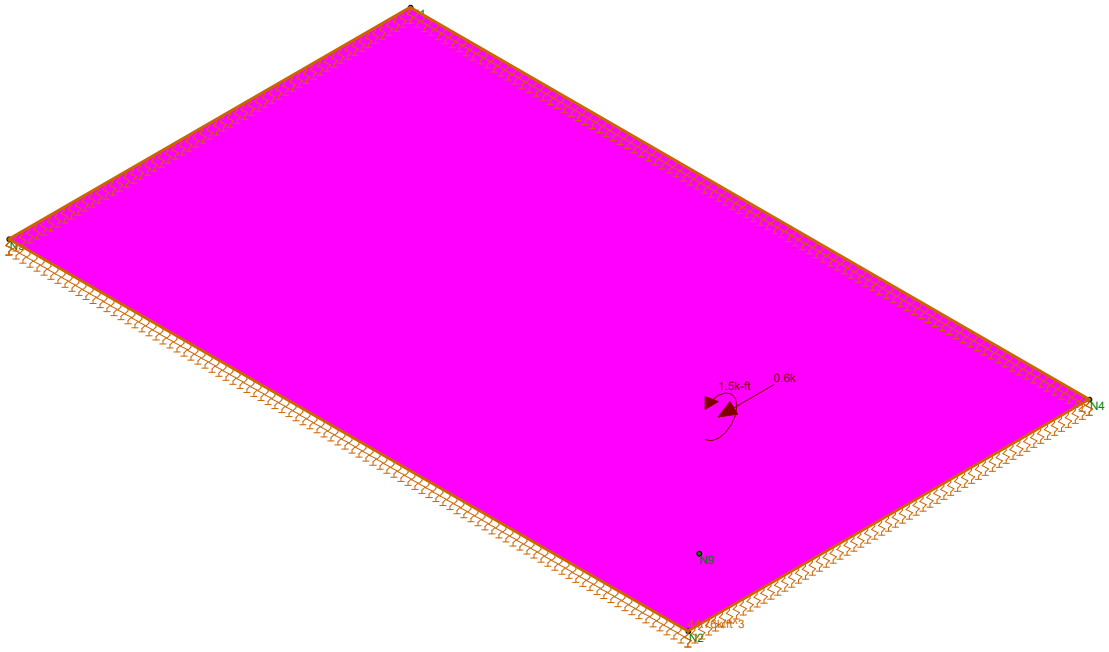
Loads: EL - Earthquake Load
Results for LC 1, Service1

		3
		Dec 3, 2024 at 10:56 AM
	ELY	45 kVA XFMR Foundation Calc.fnd



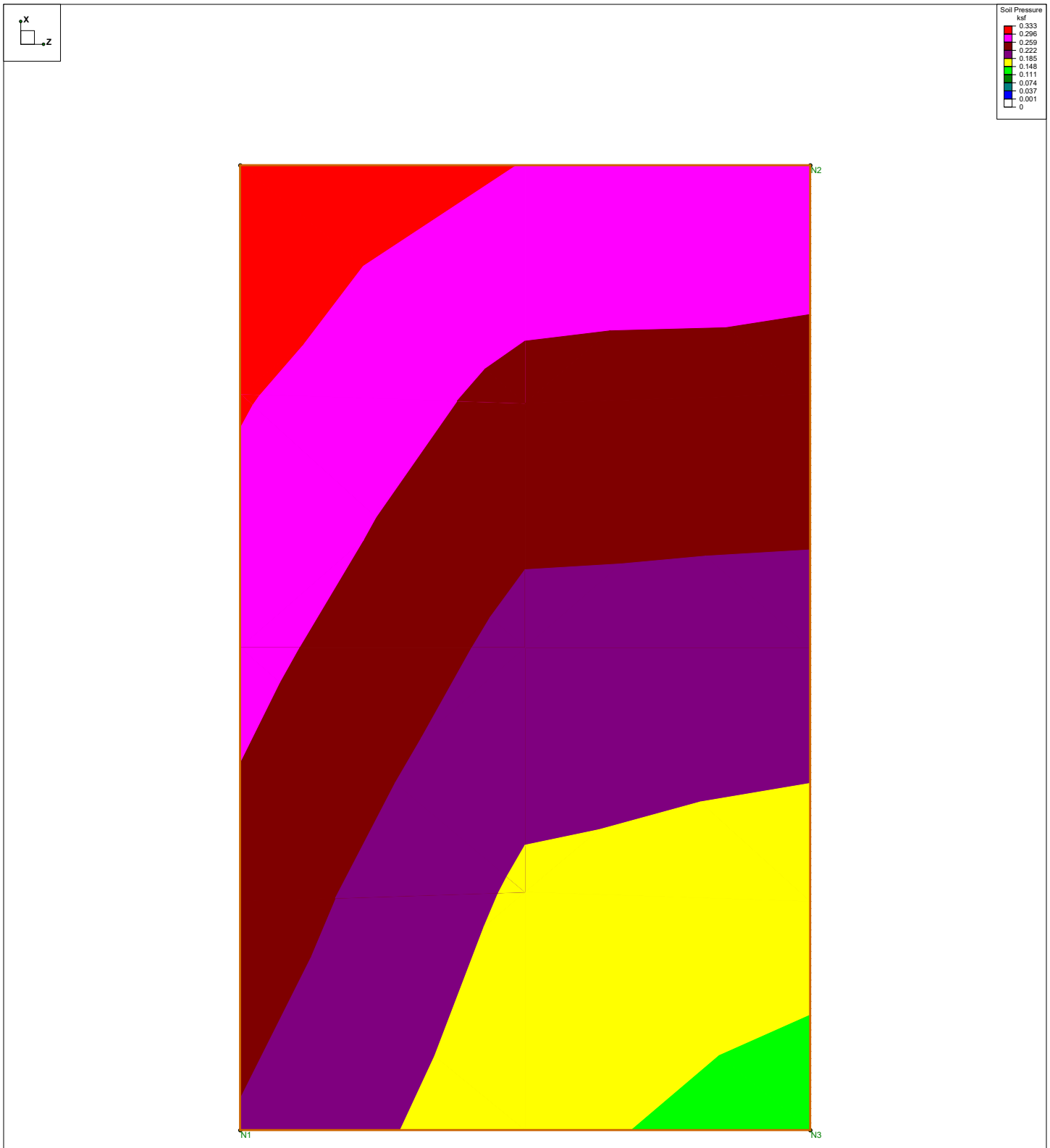
Loads: ELX - Earthquake Load X
Results for LC 1, Service1

		4
		Dec 3, 2024 at 10:58 AM
	ELX	45 kVA XFMR Foundation Calc.fnd



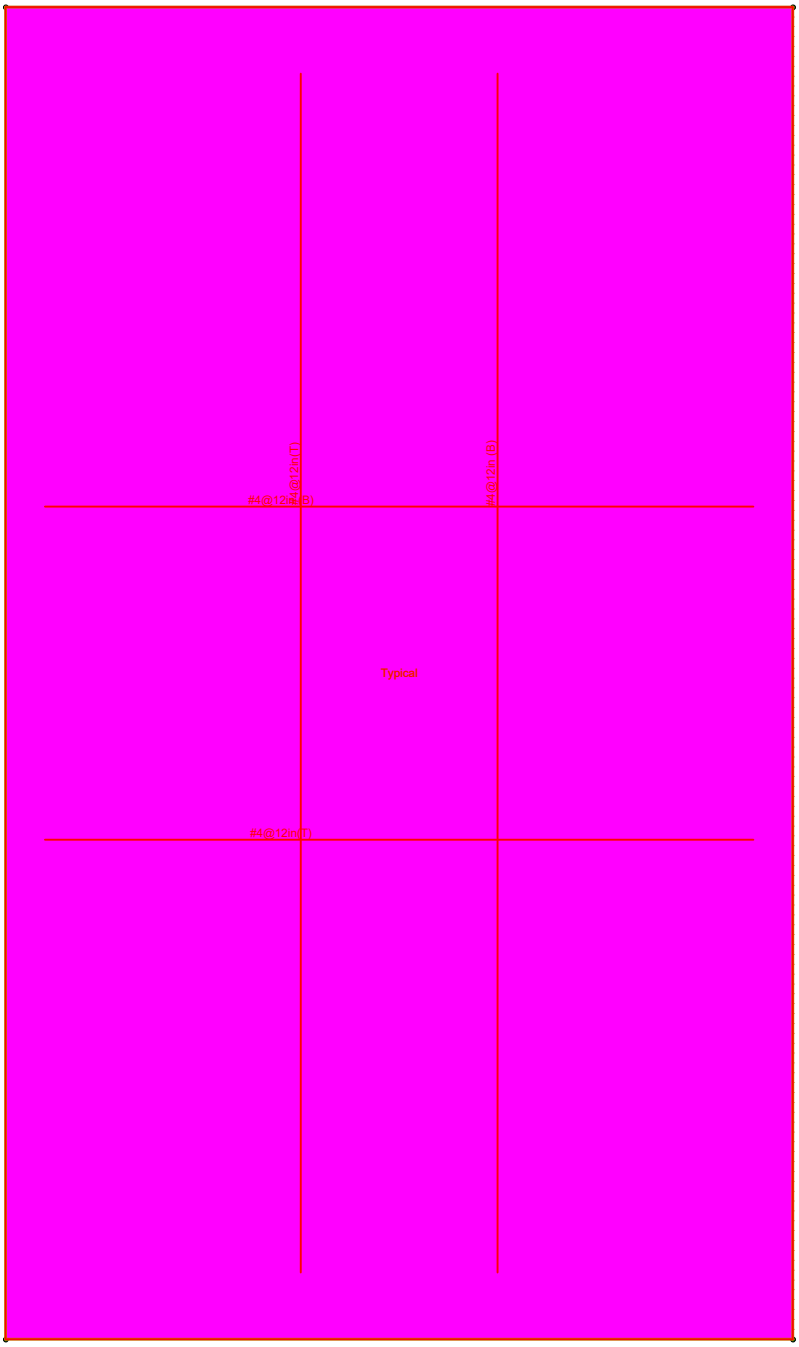
Loads: ELZ - Earthquake Load Z
Results for LC 1, Service1

		5
		Dec 3, 2024 at 10:59 AM
	ELZ	45 kVA XFMR Foundation Calc.fnd



Enveloped Results

		6
		Dec 3, 2024 at 11:00 AM
	SOIL BEARING PRESSURE	45 kVA XFMR Foundation Calc.fnd



Enveloped Results

		7
		Dec 3, 2024 at 11:00 AM
	DESIGN STRIPS	45 kVA XFMR Foundation Calc.fnd

Company :
Designer :
Job Number :
Model Name :

Dec 3, 2024
11:02 AM
Checked By:_____

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[k/ft^3]	f'c[ksi]	Lambda	Flex St...	Shear ...
1	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
2	Conc4500NW	4967	2160	0.15	0.6	0.15	4.5	1	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	2	3

Load Categories

	Category	Point Loads	Line Loads	Area Loads
1	DL			1
2	LL			4
3	EL			1
4	ELX	2		
5	ELZ	2		

Load Combinations

	Label	S...	S...	A...	SF	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...	...	Fa...	Ca...	Fa...	Ca...	Fa...	Ca...	Fa...
1	Service1	Yes	Yes		1.5	DL	1	LL	1																
2	Service2	Yes	Yes		1.5	DL	1	EL	0.7	ELX	0.7														
3	Service3	Yes	Yes		1.5	DL	1	EL	0.7	ELX	-0.7														
4	Service4	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	0.7														
5	Service5	Yes	Yes		1.5	DL	1	EL	0.7	ELZ	-0.7														
6	Service6	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	0.5...	LL	0.75												
7	Service7	Yes	Yes		1.5	DL	1	EL	0.5...	ELX	-0....	LL	0.75												
8	Service8	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	0.5...	LL	0.75												
9	Service9	Yes	Yes		1.5	DL	1	EL	0.5...	ELZ	-0....	LL	0.75												
10	Service10	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	0.7														
11	Service11	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELX	-0.7														
12	Service12	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	0.7														
13	Service13	Yes	Yes		1.5	DL	0.6	EL	-0.7	ELZ	-0.7														
14	Strength1	Yes				DL	1.2	LL	1.6																
15	Strength2	Yes				DL	1.2	EL	1	ELX	1	LL	1												
16	Strength3	Yes				DL	1.2	EL	1	ELX	-1	LL	1												
17	Strength4	Yes				DL	1.2	EL	1	ELZ	1	LL	1												
18	Strength5	Yes				DL	1.2	EL	1	ELZ	-1	LL	1												
19	Strength6	Yes				DL	0.9	EL	-1	ELX	1														
20	Strength7	Yes				DL	0.9	EL	-1	ELX	-1														
21	Strength8	Yes				DL	0.9	EL	-1	ELZ	1														
22	Strength9	Yes				DL	0.9	EL	-1	ELZ	-1														
23	Combination 23	Yes				DL	1.4																		
24	Combination 24	Yes																							

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	44.76	2	None	Yes

Slabs

	Label	Thickness [in]	Material	Local Axis Angl...	Analysis Offset ...	Passive Pressure [ksf]	Soil Overburde...	Icr Factor
1	S1	9	Conc4500NW	0	0	0	0	0.25

Area Loads (Cat 1 : DL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL4	0.17	0.17

Area Loads (Cat 2 : LL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL3	0.1	0.1
2	AL5	0.1	0.1
3	AL6	0.1	0.1
4	AL7	0.1	0.1

Area Loads (Cat 3 : EL)

	Label	Base Mag[ksf]	Peak Mag[ksf]
1	AL8	0.005	0.005

Line Loads and Moments

Start Point	End Point	Direction	Start Magnitude[k/ft,k-ft/ft]	End Magnitude[k/ft,k-ft/ft]
No Data to Print ...				

Envelope Slab Soil Pressures (By Combination)

	Label	Max UC	Max LC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
1	S1	0.162	9	0.325	2	N4

Envelope Soil Pressures (By Combination)

	Label	Max UC	Max LC	Soil Pressure[ksf]	Allowable Bearing[ksf]
1	N5	0.126	9	0.252	2
2	N3	0.065	8	0.13	2
3	N4	0.162	9	0.325	2
4	N2	0.141	8	0.282	2
5	N1	0.109	9	0.218	2
6	N6	0.108	8	0.216	2
7	N7	0.123	6	0.245	2
8	N8	0.143	6	0.286	2
9	N9	0.13	6	0.261	2
10	N10	0.089	1	0.179	2
11	N11	0.083	8	0.166	2
12	N12	0.103	8	0.207	2
13	N13	0.105	1	0.211	2
14	N14	0.123	6	0.246	2
15	N15	0.15	9	0.3	2
16	N16	0.136	9	0.272	2
17	N17	0.122	9	0.244	2
18	N18	0.079	7	0.159	2
19	N19	0.123	8	0.247	2
20	N20	0.148	6	0.295	2

Slab Overturning Safety Factors (By Combination)

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
1	1	S1	0	0	6.588	0	10.798	9.99+	9.99+
2	2	S1	0	0	4.297	1.365	6.404	9.99+	4.692
3	3	S1	0	0	4.297	1.365	8.139	9.99+	5.963
4	4	S1	0	1.365	4.297	0	6.404	3.148	9.99+
5	5	S1	0	1.365	4.297	0	6.404	3.148	9.99+
6	6	S1	0	0	6.025	1.024	9.709	9.99+	9.483
7	7	S1	0	0	6.025	1.024	10.685	9.99+	9.99+
8	8	S1	0	1.024	6.025	0	9.709	5.886	9.99+

Slab Overturning Safety Factors (By Combination) (Continued)

	LC	Slab	Angle[deg]	Mo-xx[k-ft]	Ms-xx[k-ft]	Mo-zz[k-ft]	Ms-zz[k-ft]	Ms-xx/Mo-xx	Ms-zz/Mo-zz
9	9	S1	0	1.024	6.025	0	9.709	5.886	9.99+
10	10	S1	0	0.021	2.566	1.383	3.832	9.99+	2.771
11	11	S1	0	0.021	2.566	1.418	4.852	9.99+	3.423
12	12	S1	0	1.386	2.566	0.053	4.852	1.851	9.99+
13	13	S1	0	1.386	2.566	0.053	4.852	1.851	9.99+

Slab Sliding Safety Factors (By Combination)

	LC	Slab	Angle[deg]	Va-xx[k]	Vr-xx[k]	Va-zz[k]	Vr-zz[k]	SR-xx	SR-zz
1	1	S1	0	0	1.622	0	1.622	9.99+	9.99+
2	2	S1	0	0.42	1.058	0	1.058	2.518	9.99+
3	3	S1	0	0.42	1.058	0	1.058	2.518	9.99+
4	4	S1	0	0	1.058	0.42	1.058	9.99+	2.518
5	5	S1	0	0	1.058	0.42	1.058	9.99+	2.518
6	6	S1	0	0.315	1.483	0	1.483	4.708	9.99+
7	7	S1	0	0.315	1.483	0	1.483	4.708	9.99+
8	8	S1	0	0	1.483	0.315	1.483	9.99+	4.708
9	9	S1	0	0	1.483	0.315	1.483	9.99+	4.708
10	10	S1	0	0.42	0.626	0	0.626	1.492	9.99+
11	11	S1	0	0.42	0.626	0	0.626	1.492	9.99+
12	12	S1	0	0	0.626	0.42	0.626	9.99+	1.492
13	13	S1	0	0	0.626	0.42	0.626	9.99+	1.492

Hilti PROFIS Engineering 3.1.6

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Company:		Page:	1
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	45 kVA Transformers Anchorage	Date:	12/3/2024
Fastening point:			

Specifier's comments:

1 Input data



Anchor type and diameter:	**HIT-HY 200 V3 + HAS-V-36 (ASTM F1554 Gr.36) 1/2**
Item number:	not available (element) / 2334276 HIT-HY 200-R V3 (adhesive)
Specification text:	Hilti HAS threaded rod with HIT-HY 200 V3 ASTM F1554 Grade 36 injection mortar with 6 in embedment hef, 1/2, Carbon steel, Safe Set System, Hammer drilled installation per ESR-4868
Effective embedment depth:	$h_{ef,act}$ = 6.000 in. ($h_{ef,limit}$ = - in.)
Material:	ASTM F1554 Grade 36
Evaluation Service Report:	ESR-4868
Issued I Valid:	6/1/2023 | 11/1/2024
Proof:	Design Method ACI 318-19 / Chem
Stand-off installation:	without clamping (anchor); restraint level (anchor plate): 2.00; e_b = 1.000 in.; t = 0.500 in.
	Hilti Grout: CB-G EG, epoxy, $f_{c,Grout}$ = 14,939 psi
Anchor plate[R] :	l_x x l_y x t = 2.677 in. x 2.677 in. x 0.500 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 9.000 in., Temp. short/long: 32/32 °F
Installation:	**Hammer drilled hole, Installation condition: Dry**
Reinforcement:	tension: not present, shear: not present; no supplemental splitting reinforcement present
	edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (d))
	Shear load: yes (17.10.6.3 (c))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

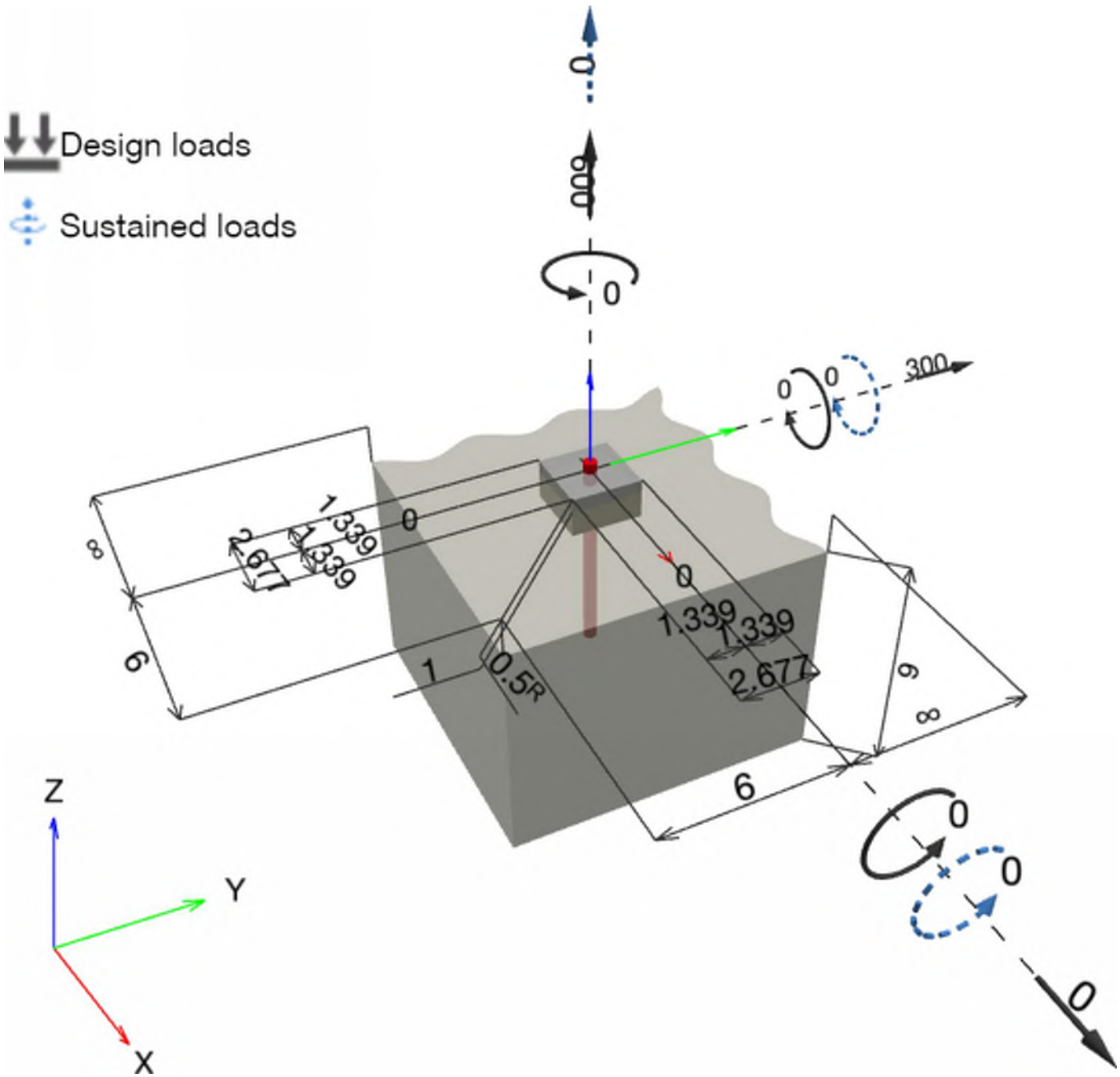
Input data and results must be checked for conformity with the existing conditions and for plausibility!
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Company:		Page:	2
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	45 kVA Transformers Anchorage	Date:	12/3/2024
Fastening point:			

Geometry [in.] & Loading [lb, in.lb]



Input data and results must be checked for conformity with the existing conditions and for plausibility!
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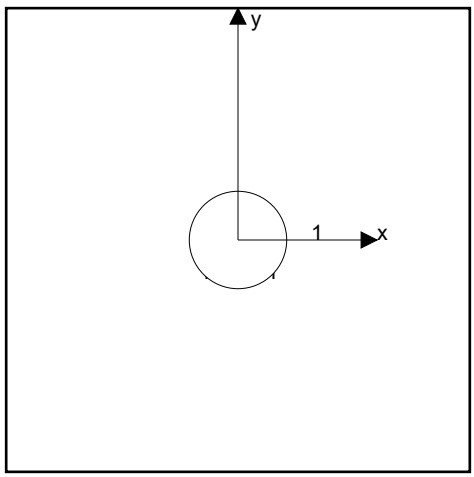
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Company:		Page:	3
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	45 kVA Transformers Anchorage	Date:	12/3/2024
Fastening point:			

1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 600; V_x = 0; V_y = 300; M_x = 0; M_y = 0; M_z = 0;	yes	74

2 Load case/Resulting anchor forces



Anchor reactions [lb]
Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	600	300	0	300

Max. concrete compressive strain: - [‰]
Max. concrete compressive stress: - [psi]
Resulting tension force in (x/y)=(0.000/0.000): 600 [lb]
Resulting compression force in (x/y)=(-/-): 0 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	600	6,172	10	OK
Bond Strength**	600	4,313	14	OK
Sustained Tension Load Bond Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	600	5,107	12	OK

* highest loaded anchor **anchor group (anchors in tension)

Input data and results must be checked for conformity with the existing conditions and for plausibility!
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