BEN LOMOND DESIGN SUPPORT

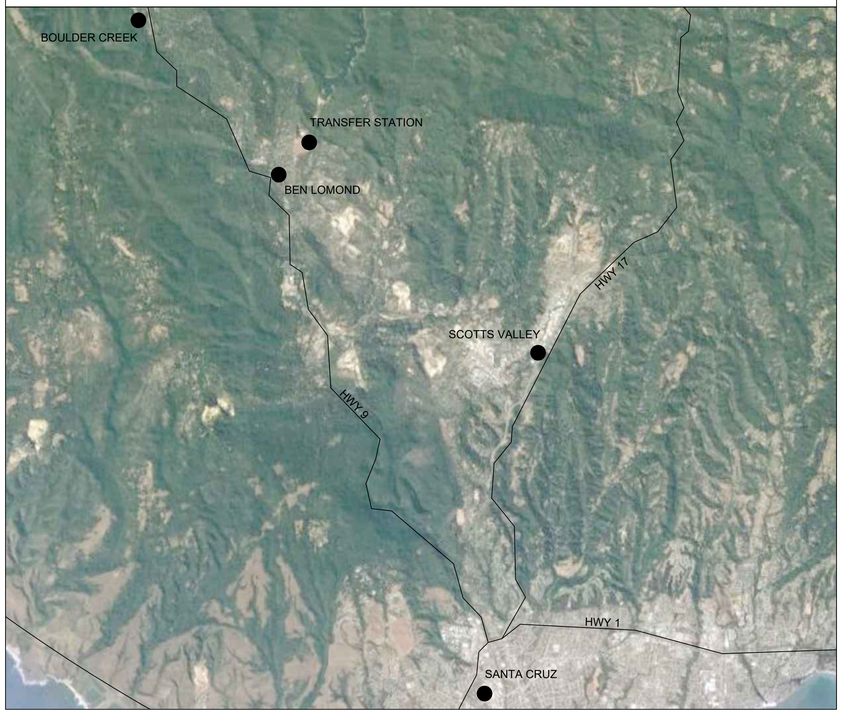
WASTE TRANSFER STATION ELECTRICAL AND STRUCTURAL IMPROVEMENTS

BEN LOMOND, SANTA CRUZ COUNTY

VICINITY MAP

0 500' 1000' 2000'
SCALE: 1"=1000'

REGIONAL MAP



0 3000' 6000' 12000'
SCALE: 1"=6000'

LEGEND:

CROSSED OUT PORTIONS ARE EXCLUDED FROM THE PERMIT REVIEW SET.

Supplemental Documents
Issued documents include supplemental documents that are required to be on the construction site.

BUILDING INSPECTORS MAY REQUIRE ADDITIONAL PLANS AND ANALYSIS IF IN THEIR JUDGEMENT THE WORK DONE EXCEEDS THE SCOPE OF THE PERMIT AND/OR CONVENTIONAL CONSTRUCTION PRACTICES.

FIRE SUPPRESSION NOTES:

1. THESE PLANS ARE IN COMPLIANCE WITH CALIFORNIA BUILDING CODES (2022 EDITION) AS AMENDED AND ADOPTED BY THE SANTA CRUZ COUNTY FIRE DEPARTMENT.
2. OCCUPANCY CLASSIFICATIONS, BUILDING CONSTRUCTION TYPES / FIRE RATINGS ARE LISTED BELOW AS OUTLINED IN THE CALIFORNIA BUILDING CODE:
   - 2.1. RA CANOPY: S-1, TYPE 1-A, SPRINKLERED
   - 2.2. HHW CANOPY: H-2, TYPE 1-A, SPRINKLERED
   - 2.3. ~~SCALE HOUSE: B, TYPE V-B, SPRINKLERED~~
3. ALL BUILDINGS SHALL BE PROTECTED BY AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM COMPLYING WITH THE CURRENTLY ADOPTED EDITION OF NFPA 13 FOR AN ORDINARY HAZARD GROUP 2.
4. A MINIMUM OF 48 HOURS NOTICE TO THE FIRE DEPARTMENT IS REQUIRED PRIOR TO INSPECTION.
5. THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON-SITE DURING INSPECTIONS.

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STRUCTURE AREAS

HOUSEHOLD HAZARDOUS WASTE CANOPY	4,067 SF
RECYCLING AREA CANOPY	16,930 SF
~~SCALE HOUSE BUILDING~~	~~598 SF~~
EXISTING RETAINING WALL REPAIRS	200 SF

DEFERRED SUBMITTALS:
SUBMITTAL DOCUMENTS FOR THE DEFERRED SUBMITTAL ITEMS LISTED BELOW SHALL BE DESIGNED BY A LICENSED PE OR SE AND SUBMITTED BY THE CONTRACTOR TO THE BUILDING DEPARTMENT/APPROVAL AGENCY AND STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

- A. HOUSEHOLD HAZARDOUS WASTE CANOPY DRAWINGS AND CALCULATIONS
- B. RECYCLING AREA CANOPY DRAWINGS AND CALCULATIONS
- ~~C. SCALE DRAWINGS~~
- D. PG&E DRAWINGS
- E. FIRE SUPPRESSION SYSTEMS (AUTOMATED FIRE SPRINKLERS, FIRE WATER SERVICE, ALARM SYSTEMS) FOR RECYCLING AREA CANOPY, HHW CANOPY, AND SCALE HOUSE

1

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C-102	DEMOLITION PLAN
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C-105	SITE PLAN - GATEHOUSE/SCALES
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Santa Cruz County Notes
End sheet "SCC" is attached and issued with the permit

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
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTIN
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM
1	05/09/25	PERMIT REVISIONS	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
COVER SHEET

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

G-100

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Bar Measures 1 inch, otherwise drawing not to scale

5/8/2025 7:48:51 AM - O:\PROJECTS\IRVINE\42064\200-42064-22005\CAD\SHEETFILES\G-100_TITLE SHEET.DWG - BOEHMKE, BRETT

GENERAL NOTES

1. THESE DESIGNS ARE MODIFICATIONS TO AN EXISTING SYSTEM. THE PERFORMANCE OF THIS DESIGN ASSUMES ALL THE COMPONENTS TO REMAIN WITHIN THE SYSTEM ARE IN FULL WORKING ORDER. THE CONTRACTOR SHALL VERIFY THAT THESE COMPONENTS ARE IN FULL WORKING ORDER PRIOR TO THE INITIATION OF WORK.
2. DRAWINGS ARE DIAGRAMMATIC IN NATURE. NOT ALL COMPONENTS ARE SHOWN IN ALL VIEWS. INCLUDE ALL COMPONENTS NECESSARY TO CONSTRUCT A FULLY OPERATIONAL SCALING/TRANSFER SYSTEM.
3. WRITTEN DIMENSIONS ON DRAWINGS MUST HAVE PRECEDENCE OVER SCALED DIMENSIONS. DRAWINGS ARE NOT ALWAYS TO SCALE.
4. THE CONTRACTOR AND SUB CONTRACTORS MUST COORDINATE ALL WORK WITH ALL OTHER TRADES BEFORE ANY INSTALLATION IS MADE.
5. ALL EQUIPMENT MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S APPROVED PUBLISHED LITERATURE.
6. INSTALLATION OF EQUIPMENT MUST PERMIT ACCESSIBILITY FOR SERVICE AND/OR REPLACEMENT.
7. CONTRACTOR MUST COORDINATE WITH USER TO MAKE PROVISIONS FOR TEMPORARY LOADING CAPACITY DURING CONSTRUCTION PHASE.

CIVIL GENERAL NOTES

1. GRADE ALL DISTURBED AREAS TO ENSURE POSITIVE DRAINAGE TO DRAINAGE STRUCTURES AND DITCHES. NATURAL FLOW OF SURROUNDING WATERS MUST NOT BE DISTURBED DURING CONSTRUCTION.
2. ALL TOPSOIL AND EXCAVATED MATERIAL MUST BE STOCKPILED IN AN APPROVED AREA DURING CONSTRUCTION. EXCESS OR UNUSABLE TOPSOIL MUST BE DISPOSED OF OFF-SITE IN A MANNER THAT IS LEGAL AND CONSISTENT WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. REMOVE AND PROPERLY DISPOSE OF ALL CONSTRUCTION WASTE AND DEBRIS FROM THE SITE IN A MANNER THAT IS LEGAL AND CONSISTENT WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENT.
4. VERIFY ALL COORDINATES AND DIMENSIONAL INFORMATION PRIOR TO CONSTRUCTION. BRING ANY DIFFERING CONDITIONS WITH LAYOUT TO ATTENTION OF ERIC MARTIN PRIOR TO STARTING CONSTRUCTION.
5. MATCH ALL NEW PAVEMENT FLUSH WITH EXISTING, UNLESS OTHERWISE NOTED. ALL IMPROVEMENTS WHICH ARE BEING JOINED OR MATCHED MUST BE JOINED OR MATCHED IN A MANNER SATISFACTORY TO THE ENGINEER.
6. ALL DIMENSIONS ARE TAKEN FROM/TO FENCE LINE, FACE OF CURB, EDGE OF PAVEMENT, FACE OF WALL, TANK SHELL, FACE OF BUILDING, CENTERLINE OF STRIPING OR EDGE OF SIDEWALK.
7. ENSURE ALL EXISTING TOPS OF MANHOLES AND VALVE BOXES ARE RAISED AND/OR LOWERED TO BE FLUSH WITH FINISHED GRADES.
8. ALL TRAFFIC SIGNS AND PAVEMENT MARKINGS MUST BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), LATEST EDITION.
9. THE LOCATION OF THE EXISTING UTILITIES AND SUBSTRUCTURES SHOWN HAVE BEEN TAKEN FROM RECORDS. THE ENGINEER DOES NOT WARRANT THE COMPLETENESS OR CORRECTNESS OF THE LOCATIONS. IT MUST BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND FACILITIES BEFORE COMMENCING WORK AND PROTECT THEM FROM DAMAGE. SHOULD UTILITIES BE ENCOUNTERED THAT ARE NOT INDICATED OR IF A DIFFERING CONDITION EXISTS, NOTIFY THE ENGINEER IMMEDIATELY. MARK HIGH VOLTAGE ELECTRICAL SERVICES WITH PROPER WARNING SIGNS AND BARRICADES.
10. COORDINATE INSTALLATION OF ALL NEW UTILITIES WITH THOSE THAT ARE EXISTING. IF EXISTING PRESSURIZED UTILITIES (SUCH AS WATER MAINS) ARE IN CONFLICT WITH THE NEW GRAVITY SYSTEMS. THE CONTRACTOR MUST NOTIFY ENGINEER.

DEMOLITION NOTES

1. LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND BASED ON RECORD DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION, REMOVAL, AND/OR REPLACEMENT OF EXISTING UTILITIES SHOWN ON THE PLANS AND AS-BUILTS.
2. EXISTING UNDERGROUND UTILITIES MUST BE PROTECTED IN PLACE UNLESS OTHERWISE SPECIFIED PER PLAN.
3. REFER TO PROJECT SPECIFICATIONS FOR DEMOLITION REQUIREMENTS.
4. ANY LIGHT THAT WILL BE PROTECTED IN PLACE MUST HAVE A MINIMUM 3.5 FOOT RADIUS PROTECTED BUFFER AROUND THE PERIMETER OF THE LIGHT FOUNDATION.
5. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF DAMAGED FEATURES OR SURFACES CAUSED BY CONSTRUCTION ACTIVITIES AND NOT SPECIFICALLY IDENTIFIED AS "REMOVE" ON THESE DRAWINGS.

EROSION CONTROL:

1. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
2. EROSION CONTROL DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.
3. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
4. AFTER A RAINSTORM , ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS AND BASINS.
5. GRADED AREAS OF THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARDS DESILTING FACILITIES.
6. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
7. THE PERMITTEE AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLAN.

BUILDING NOTES:

1. OPERATION INFORMATION: [CEES 10-103(B)(2)]
   THE BUILDER SHALL PROVIDE THE BUILDING OWNER AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES INSTALLED IN THE BUILDING.
2. OPERATING INFORMATION SHALL INCLUDE INSTRUCTIONS ON HOW TO OPERATE THE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES CORRECTLY AND EFFICIENTLY.
3. THE INSTRUCTIONS SHALL BE CONSISTENT WITH SPECIFICATIONS SET FORTH BY THE COUNTY BOARD OF SUPERVISORS.
4. THIS OPERATING INFORMATION SHALL BE IN PAPER OR ELECTRONIC FORMAT.

MAINTENANCE INFORMATION:

1. MAINTENANCE INFORMATION: [CEES 10-103(B)(3)]
   THE BUILDER SHALL PROVIDE TO THE BUILDING OWNER AT OCCUPANCY, MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION.
2. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL.
3. THE LABEL MAY BE LIMITED TO IDENTIFYING, BY TITLE AND/OR PUBLICATION NUMBER, THE OPERATION AND MAINTENANCE MANUAL FOR THAT PARTICULAR MODEL AND TYPE OF FEATURE, MATERIAL, COMPONENT OR MANUFACTURED DEVICE.

SURVEY NOTES:

BASIS OF BEARING:

THE BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 3 NAD83. BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED BASELINE BETWEEN CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) P213 AND SOD2. SAID BEARING WAS MEASURED TO BE S55°03'50" E.

BENCHMARK:

THE ELEVATIONS SHOWN HEREON ARE BASED ON GLOABAL POSITIONING SYSTEM OBSERVATIONS (GPS) TIES TO CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) P213 HAVING A PUBLISHED ELEVATION OF 657.48 FEET, AND DEFINED LOCALLY BY A FOUND 2 INCH BRASS DISK STAMPED "SANTA CRUZ COUNTY", LOCATED ON THE SIDEWALK SOUTH OF THE MAIN OFFICE BUILDING, HAVING AN ELEVATION OF 470.368 FEET.

ABBREVIATIONS

AB	AGGREGATE BASE
A.B.	ANCHOR BOLT
ABV.	ABOVE
AC	ASPHALTIC CONCRETE
ACP	ASBESTOS CEMENT PIPE
A.F.F.	ABOVE FINISH FLOOR
AGGR.	AGGREGATE
ALT.	ALTERNATE
APPO	APPROVED
APPROX	APPROXIMATE
ASB.	ASBESTOS
ASPH	ASPHALT
A/3P	AMPERES/3 POLE
BCR	BEGIN CURB RETURN
BC	BEGIN CURVE
BITUM.	BITUMINOUS
BLK.	BLOCK
BOT.	BOTTOM
BPS	BUILDING PROTECTION SYSTEM
B.O.D.	BASIS OF DESIGN
BRM.	BROOM
BTWN.	BETWEEN
BW	BACK OF WALK
CATV	CABLE TELEVISION
C.B.	CATCH BASIN
CEM.	CEMENT
CF	CURB FACE
C.I.	CAST IRON
CIP	CAST IRON PIPE
CJ	CEILING JOIST
C.L.	CENTER LINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
C.M.U.	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL.	COLUMN
CONC.	CONCRETE MASONRY UNIT
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CTR.	CENTER
D.F.	DRINKING FOUNTAIN
DG	DECOMPOSED GRANITE
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DIP	DUCTILE IRON PIPE
DN.	DOWN
DWGS	DRAWINGS
(E)	EXISTING
E.	EAST
EA.	EACH
EC	END CURVE
ECR	END CURB RETURN
E.G.	EXTERIOR GRADE
EL	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATION
ENCL.	ENCLOSED
EQUIP.	EQUIPMENT
EX	EXISTING
EXIST.	EXISTING
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
FIN.	FINISH
F.J.	FLOOR JOIST
FL	FLOWLINE
FS	FINISHED SURFACE
FT.	FOOT OR FEET
FTG.	FOOTING
FUT.	FUTURE
G.	GAS
GALV.	GALVANIZED
G.I.	GALVANIZED IRON
GND.	GROUND
HC	HANDICAPPED
HGT/HT.	HEIGHT
HORIZ.	HORIZONTAL
HP	HIGH POINT
HPS	HIGH PRESSURE SODIUM
I.D.	INSIDE DIAMETER
IN.	INCHES
INT.	INTERSECTION
INV.	INVERT
ISSA	INTERNATIONAL SLURRY SURFACING ASSOCIATION
JST.	JOIST
KV	KILOVOLTS
KVA	KILOVOLT-AMPERES
LEN	LENGTH
LOC.	LOCATION
L.P.	LOW POINT
MAX.	MAXIMUM
MFG	MANUFACTURER
M.H.	MANHOLE
MN.	MINIMUM
MISC.	MISCELLANEOUS
N.	NORTH
N.A.	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENER
O.D.	OUTSIDE DIAMETER (DM)
O.H.	OVERHEAD
OSB	ORIENTED STRAND BOARD
O/SHTG.	OVER SHEATHING
PCC	POINT OF COMPOUND CURVE
P.C.C.	PORTLAND CEMENT CONCRETE
PP.	POWER POLE
PL	PROPERTY LINE
P.O.C.	POINT OF CONNECTION
PRC	POINT OF REVERSE CURVE
PT.	POINT
PVC	POLYVINYL CHLORIDE PIPE
R	RATE IN FT. PER 100 FT.
R.	RISER
R	RADIUS
RAD.	RADIAL
RCP	REINFORCED CONCRETE PIPE
RE-BAR	REINFORCED BAR
REV	REVERSE
REINF	REINFORCE, REINFORCED
RR	ROOF RAFTERS
S=	SLOPE FT/FT
S.	SOUTH/SEWER
SD	STORM DRAIN
S.F.	SQUARE FEET
SHT.	SHEET
SHTG.	SHEATHING
SL.	SLOPE
SPEC.	SPECIFICATIONS
SQ.	SQUARE
SST	SIMPSON STRONG TIE
STA.	STATION
STD.	STANDARD
STL.	STEEL
T.C.	TOP OF CURB
TEL.	TELEPHONE
T.F.	TOP OF FOOTING
TL	TOT LOT
T.C.	TOP OF CURB
T.P.	TOP OF PAVEMENT/ TOP OF PLATE
TRANS.	TRANSFORMER
T.W.	TOP OF WALL
TYP.	TYPICAL
U/G	UNDERGROUND
VAR.	VARIES
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
V.I.F.	VERIFY IN FIELD
W.	WEST/WATER
WV	WATER VALVE
XFMR	TRANSFORMER

LEGEND

- EXISTING FENCE
- CURB FACE
- FLOW LINE
- BUILDING
- EDGE OF ASPHALT
- CONCRETE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING SEWER LINE
- EXISTING UTILITY POLE
- LOCAL BENCHMARK
- EXISTING TREE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING TELEPHONE COMMUNICATIONS BOX
- EXISTING ELECTRICAL BOX
- EXISTING WATER METER
- EXISTING SANITARY SEWER CLEANOUT
- EXISTING FOUND MONUMENT
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING STORM DRAIN CATCH BASIN
- PROPOSED ELECTRICAL LINE - SEE SHEET E-100
- PROPOSED ELECTRICAL PULL BOX - SEE SHEET E-100
- PROPOSED STORM DRAIN CLEANOUT - SEE SHEET C-113, DETAIL 4
- PROPOSED 6" SCH. 40 PVC STORM DRAIN LINE
- PROPOSED 4" SCH. 40 PVC SANITARY SEWER LINE
- PROPOSED FLOWLINE

DEMOLITION

- PROPOSED TRENCHING/EXCAVATION
- CONCRETE PAVEMENT REMOVAL
- ASPHALT PAVEMENT REMOVAL

PROPOSED

- PROPOSED CONCRETE - SEE SHEET C-110, DETAIL 4.
- PROPOSED ASPHALT - SEE SHEET C-110, DETAIL 9.

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTIN
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
LEGEND, ABBREVIATIONS AND NOTES

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-001

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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Bar Measures 1 inch, otherwise drawing not to scale

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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AND ENVIRONMENTAL NOTES

1. IN THE CASE OF EMERGENCY, CONTACT EPA.GOV.
2. IT IS HEREBY STATED THAT ALL GENERAL CONTRACTORS, SUBCONTRACTORS, MATERIAL SUPPLIERS, LESSEES AND PROPERTY OWNERS THAT DUMPING OF CHEMICALS INTO THE STORM DRAIN SYSTEM OR THE WATERSHED IS PROHIBITED.

   DURING CONSTRUCTION, CONTRACTOR SHALL DISPOSE OF SUCH MATERIALS IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.
4. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
5. APPROPRIATE BMP'S FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
6. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES UNLESS TREATED TO REDUCE OR REMOVE SEDIMENT AND OTHER POLLUTANTS.
7. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
8. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED OF IN TRASH OR RECYCLE BINS.
9. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORMWATER ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.
10. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, CONTRACTOR SHALL DISPOSE OF SUCH MATERIALS IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
11. DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
12. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARD DESILTING FACILITIES.
13. NO GRADING, FILL OR SPOILS PLACEMENT / OVERFLOW PERMITTED IN ENVIRONMENTALLY SENSITIVE AREAS (ESA). LIMITS OF WORK TO BE DELINEATED IN THE FIELD.
14. THE OWNER/COUNTY AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
15. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
16. THE CONTRACTOR SHALL NOTIFY ALL GENERAL CONTRACTORS, SUBCONTRACTORS, MATERIAL SUPPLIERS, LESSEES, AND PROPERTY OWNERS THAT DUMPING OF CHEMICALS INTO THE STORM DRAIN SYSTEM OR THE WATERSHED IS PROHIBITED.
17. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
18. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
19. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM VEHICLE TRACKING OR WIND TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF.
20. APPROPRIATE BMP'S FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED AND RETAINED ON SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF.
21. **SPECIAL NOTE:**

    "SURVEY MONUMENTS SHALL BE PRESERVED AND REFERENCED BEFORE CONSTRUCTION AND REPLACED AFTER CONSTRUCTION PURSUANT TO SECTIONS 8771 OF THE BUSINESS AND PROFESSIONAL CODE."

GRADING NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE GRADING CODE OF THE COUNTY OF SANTA CRUZ, AND ANY SPECIAL REQUIREMENTS OF THE PERMIT. A COPY OF THE GRADING CODE AND MANUAL SHALL BE RETAINED ON THE JOB SITE WHILE WORK IS IN PROGRESS. WHEN REFERENCED ON THE PLANS, A COPY OF SANTA CRUZ PUBLIC WORKS STANDARD PLANS SHALL ALSO BE RETAINED ON THE SITE.
2. GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING THE DISTRICT GRADING INSPECTOR. A PRE-GRADING MEETING ON THE SITE IS REQUIRED BEFORE START OF GRADING WITH THE FOLLOWING PEOPLE: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOIL ENGINEER, ENGINEERING GEOLOGIST, DISTRICT GRADING INSPECTOR, AND WHEN REQUIRED, THE ARCHAEOLOGIST AND PALEONTOLOGIST. THE REQUIRED INSPECTIONS FOR GRADING WILL BE EXPLAINED AT THE MEETING.
3. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZED ON THIS PLAN.
4. THE GRADING PERMIT AND AN APPROVED COPY OF THE GRADING PLAN SHALL BE ON THE PERMITTED SITE WHILE WORK IS IN PROGRESS.
5. PRELIMINARY SOIL AND GEOLOGY REPORTS , AND ALL SUBSEQUENT REPORTS AS APPROVED BY SC PLANNING, GRADING SECTION, ARE CONSIDERED A PART OF THE APPROVED GRADING PLAN.
6. THE SOIL ENGINEER AND ENGINEERING GEOLOGIST SHALL PERFORM SUFFICIENT INSPECTIONS AND BE AVAILABLE DURING GRADING AND CONSTRUCTION TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND THE CODE WITHIN THEIR PURVIEW.
7. THE CIVIL ENGINEER SHALL BE AVAILABLE DURING GRADING TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS, CODE AND ANY SPECIAL CONDITIONS OF THE PERMIT WITHIN THEIR PURVIEW.
8. THE SOIL ENGINEER AND ENGINEERING GEOLOGIST SHALL, AFTER CLEARING AND PRIOR TO PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY, AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, SUBDRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
9. SUBDRAIN OUTLETS SHALL BE COMPLETED AT THE BEGINNING OF THE SUBDRAIN CONSTRUCTION.
10. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE/GRADE AND SHOWN ON AS-GRADED PLANS.
11. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED IN WRITING BY THE SOIL ENGINEER AND THE BUILDING OFFICIAL PRIOR TO PLACING FILL.
12. FILLS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THE SANTA CRUZ COUNTY GRADING ORDINANCE.
13. ALL EXISTING FILLS SHALL BE APPROVED BY THE BUILDING OFFICIAL OR REMOVED PRIOR TO PLACING ADDITIONAL FILLS.
14. FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90% RELATIVE COMPACTION. AGGREGATE BASE FOR ASPHALTIC AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION. UPPER 18" OF SUBGRADE FILL BELOW STRUCTURAL FOOTINGS SHALL BE COMPACTED TO MINIMUM 95% RELATIVE COMPACTION. MINIMUM MAXIMUM DRY DENSITY SHALL BE DETERMINED BY ASTM D1557.
15. CUT AND FILL SLOPED SHALL BE NO STEEPER THAN 2-FEET HORIZONTAL TO 1-FOOT VERTICAL (2:1) EXCEPT WHERE SPECIFICALLY APPROVED OTHERWISE.
16. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY THE ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEMS EXIST. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL SUBMIT RECOMMENDED TREATMENT TO THE BUILDING OFFICIAL FOR APPROVAL.
17. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, THE SOIL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE BUILDING OFFICIAL PRIOR TO CONSTRUCTION. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
18. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED, AND WILL READILY TRANSMIT WATER.
19. ALL TRENCH BACKFILL SHALL BE TESTED AND APPROVED BY THE SOIL ENGINEER PER THE GRADING CODE.
20. ANY EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED OR CRUSHED IN PLACE AND APPROVED BY THE BUILDING OFFICIAL AND SOIL ENGINEER.
21. ANY EXISTING WATER WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE SPECIFICATIONS APPROVED BY SANTA CRUZ COUNTY HEALTH CARE AGENCY AND DIVISION OF ENVIRONMENTAL HEALTH.
22. STOCKPILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO EXCAVATION.
23. EXPORT SOIL MUST BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE APPROVED BY THE DISTRICT BUILDING INSPECTOR.
24. THE CONTRACTOR SHALL COMPLY WITH THE GRADING CODE REQUIREMENTS FOR HAUL ROUTES WHEN AN EXCESS OF 5,000 CUBIC YARDS OF EARTH IS TRANSPORTED TO OR FROM A PERMITTED SITE ON PUBLIC ROADWAYS.
25. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL MEASURES.
26. THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5 FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, OR OBTAIN PERMIT FROM STATE OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY, AND HEALTH (CAL / OSHA). THIS PERMIT AND ANY OTHER SAFETY PERMIT SHALL BE OBTAINED PRIOR TO COMMENCE OF ANY WORK. CONTACT CAL/OSHA AT 714-558-4451 FOR ADDITIONAL INFORMATION.
27. THE CONTRACTOR SHALL GIVE REASONABLE NOTICE TO THE OWNER OF ADJOINING LANDS AND BUILDING PRIOR TO BEGINNING EXCAVATIONS WHICH MAY AFFECT THE LATERAL AND SUBJACENT SUPPORT OF THE ADJOINING PROPERTY. THE NOTICE SHALL STATE THE INTENDED DEPTH OF EXCAVATION AND WHEN THE EXCAVATION WILL COMMENCE. THE ADJOINING OWNER SHALL BE ALLOWED AT LEAST 30 DAYS AND REASONABLE ACCESS ON THE PERMITTED PROPERTY TO PROTECT HIS STRUCTURE, IF HE SO DESIRES, UNLESS OTHERWISE PROTECTED BY LAW.
28. ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH ON-SITE SOILS SHALL BE CONSTRUCTED WITH TYPE V CEMENT, UNLESS DEEMED UNNECESSARY BY SOLUBLE SULFATE-CONTENT TESTS CONDUCTED BY THE SOIL ENGINEER.
29. SLOPES EXCEEDING 5 FEET IN HEIGHT SHALL BE PLANTED WITH AN APPROVED PLANT MATERIAL. IN ADDITION, SLOPES EXCEEDING 15 FEET IN HEIGHT SHALL BE PROVIDED WITH AN APPROVED IRRIGATION SYSTEM, UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL.
30. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL FACILITIES TO HANDLE STORMWATER ARE APPROVED AND FUNCTIONAL, HOWEVER, IN ANY CASE, THE PERMITTEE SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
31. SANITARY FACILITIES SHALL BE MAINTAINED ON SITE.
32. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
33. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING.
34. GRADING OPERATIONS INCLUDING MAINTENANCE OF EQUIPMENT WITHIN ONE-MILE OF A HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 8:00 P.M. AND 7:00 A.M. DAILY, ON SUNDAY OR ON A COUNTY HOLIDAY.
35. A) ALL CONSTRUCTION VEHICLES OR EQUIPMENT, FIXED OR MOBILE, OPERATED WITHIN 1000 FEET OF A DWELLING SHALL BE EQUIPPED WITH PROPERLY OPERATIONAL AND MAINTAINED MUFFLERS.

    B) ALL OPERATIONS SHALL COMPLY WITH SANTA CRUZ COUNTY CODIFIED NOISE CONTROL ORDINANCE.

    C) STOCKPILING AND/OR VEHICLE STAGING AREAS SHALL BE LOCATED AS FAR AS PRACTICAL FROM DWELLINGS AND WITHIN THE LIMITS OF THE GRADING PERMIT.
37. GRADING AND EXCAVATION SHALL BE HALTED DURING PERIODS OF HIGH WINDS. ACCORDING TO AQMD MEASURE F-4, HIGH WINDS ARE DEFINED AS 30 MPH OR GREATER. THIS LEVEL OCCURS ONLY UNDER EXTREME CONDITIONS.
38. ASPHALT SECTIONS MUST BE PER CODE: PARKING STALL-3" A/C OVER 6" A/B, DRIVES 3" A/C OVER 10" (COMMERCIAL) 12" (INDUSTRIAL). OR: PRIOR TO ROUGH GRADE RELEASE FOR BUILDING PERMITS BY THE DISTRICT GRADING INSPECTOR, THE SOIL ENGINEER SHALL SUBMIT FOR APPROVAL PAVEMENT SECTION RECOMMENDATIONS BASED ON "R" VALUE ANALYSIS OF THE SUB-GRADE SOILS, AND EXPECTED TRAFFIC INDICES.
39. ASPHALT CONCRETE SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF SC PUBLIC WORKS STANDARD PLAN.
40. AGGREGATE BASE SECTION SHALL BE CONSTRUCTED PER SC PUBLIC WORKS STANDARD PLAN.
41. ROOF GUTTERS SHALL BE INSTALLED TO PREVENT ROOF DRAINAGE FROM FALLING ON MANUFACTURED SLOPES.
42. THE CIVIL ENGINEER, AS A CONDITION OF ROUGH GRADE APPROVAL, SHALL PROVIDE A BLUE TOP WITH ACCOMPANYING WITNESS STAKE, SET AT THE CENTER OF EACH PAD REFLECTING THE PAD ELEVATION FOR PRECISE PERMITS, AND BLUE TOP WITH WITNESS STAKE SET AT THE DRAINAGE SWALE HIGH-POINT REFLECTING THE HIGH POINT ELEVATION FOR PRELIMINARY PERMITS.
43. PRIOR TO FINAL APPROVAL, THE CIVIL ENGINEER SHALL CERTIFY TO THE BUILDING OFFICIAL THE AMOUNT OF EARTH MOVED DURING THE GRADING OPERATION.
44. THE ENGINEERING GEOLOGIST SHALL PERFORM INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING.
45. THE GRADING CONTRACTOR SHALL SUBMIT A STATEMENT OF COMPLIANCE TO THE APPROVED GRADING PLAN PRIOR TO FINAL APPROVAL.
46. THE COMPACTION REPORT AND APPROVAL FROM THE SOIL ENGINEER SHALL INDICATE THE TYPE OF FIELD TESTING PERFORMED. THE METHOD OF OBTAINING THE IN-PLACE DENSITY SHALL BE IDENTIFIED WHETHER SAND CONE, DRIVE RING OR NUCLEAR, AND SHALL BE NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
47. IN THE EVENT THAT SOIL CONTAMINATION IS DISCOVERED DURING EXCAVATION AND REMOVAL OF AN EXISTING TANK, WORK SHALL BE SHOPPED UNTIL A SITE ASSESSMENT AND MITIGATION PLAN HAS BEEN PREPARED, SUBMITTED AND APPROVED BY THE HEALTH CARE AGENCY/ENVIRONMENTAL HEALTH AND PDSD/GRADING.
48. FILL MATERIALS SHALL BE OBTAINED FROM AN APPROVED BORROW SOURCE, AND SHALL BE FREE OF ORGANIC MATTER, DEBRIS, AND COBBLES OR OVERSIZED MATERIALS LARGER THAN 6 INCHES IN SIZE.
49. PRIOR TO FILL PLACEMENT, THE EXPOSED SURFACE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 1 FOOT, MOISTURE CONDITIONED AND COMPACTED PER THE GEOTECHNICAL DESIGN REPORT.

GRADING NOTES cont'd

50. FILL SOILS SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS, MOISTURE CONDITIONED AS REQUIRED (-1 TO +3 PERCENT ABOVE OPTIMUM), AND MECHANICALLY COMPACTED TO A MINIMUM OF 90 PERCENT RELATIVE COMPACTION PER ASTM D1557. EACH LIST SHALL BE COMPACTED BEFORE NEXT LIFT IS PLACED.
51. ALL EARTHWORK ACTIVITIES, INCLUDING EXCAVATION, SUBGRADE PREPARATION AND BACKFILL SHALL BE MONITORED AND TESTED BY THE GEOTECHNICAL ENGINEER.
52. ALL STRUCTURES REQUIRE SEPARATE BUILDING PERMITS.

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
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTINEZ
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
GRADING AND NDPES NOTES

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-002

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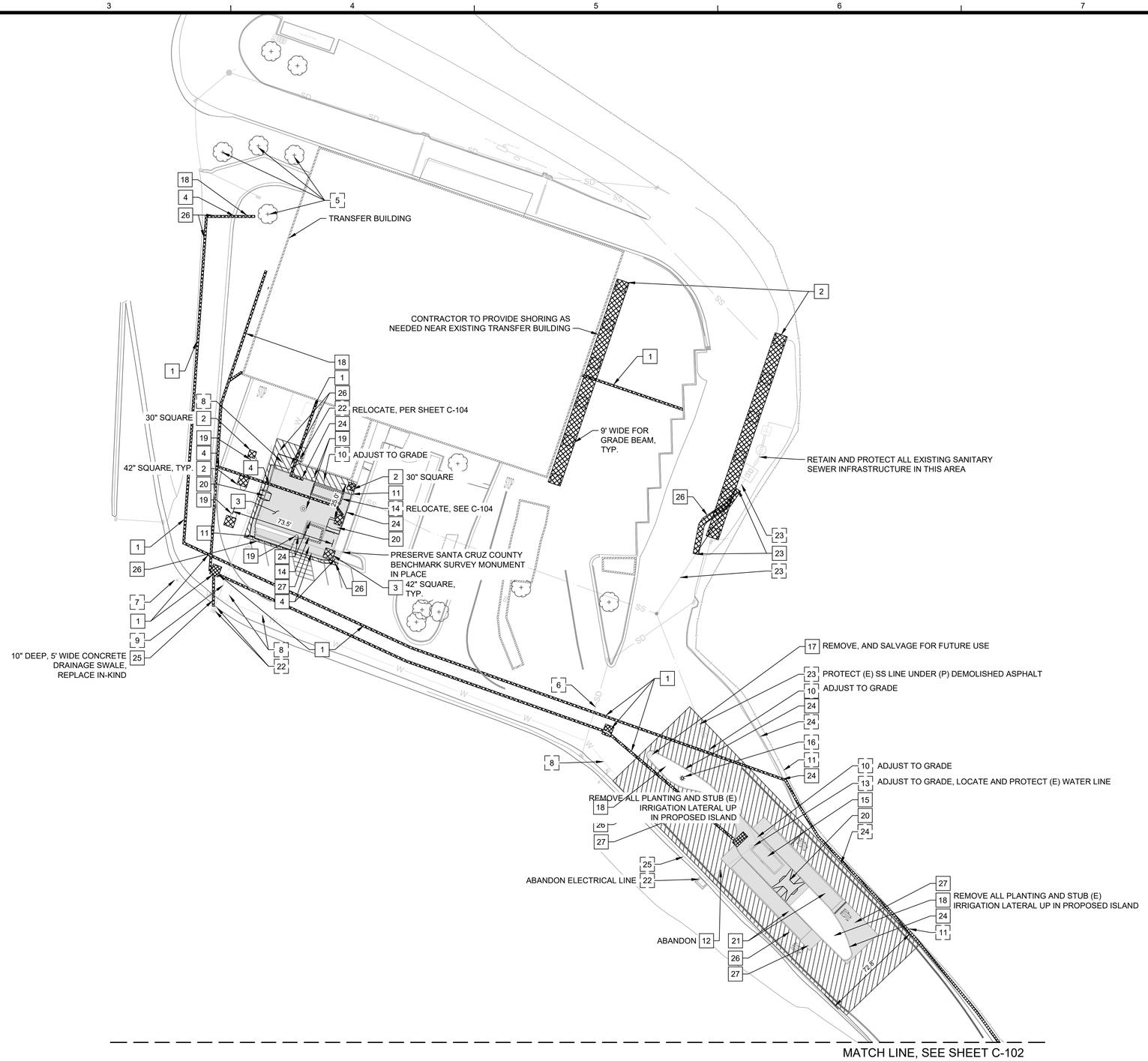
DEMOLITION NOTES

EXISTING-PROTECT IN PLACE REMOVE

1 REMOVE PAVEMENT FOR ELECTRICAL LINE INSTALLATION PER DETAIL 1, SHEET C-110.
2 ASPHALT CONCRETE PAVEMENT. AT LOCATIONS OF PROPOSED CIRCULAR COLUMNS: REMOVE PAVEMENT TO THE LIMITS SHOWN ON THE PLANS. SEE STRUCTURAL PLANS FOR MORE DETAIL IN REGARDS TO EXCAVATION.
3 CONCRETE PAVEMENT. AT LOCATIONS OF PROPOSED CIRCULAR COLUMNS: REMOVE PAVEMENT TO THE LIMITS SHOWN ON THE PLANS. SEE STRUCTURAL PLANS FOR MORE DETAIL IN REGARDS TO EXCAVATION.
4 CONCRETE CURB AND GUTTER
5 TREES
6 STORM DRAIN LINE
7 FIRE HYDRANT
8 WATERLINE
9 ELECTRICAL LINE
10 SANITARY CLEANOUT
11 FENCE AND FENCE POST FOOTINGS
12 ELECTRICAL LINE
13 WATER VALVE/METER
14 SHED OR BUILDING
15 GATEHOUSE BUILDING
16 STREETLIGHT
17 IRRIGATION PULL BOX
18 CLEAR AND GRUB EXISTING PLANTING AREA
19 SHADE CANOPY COLUMN AND COLUMN FOUNDATION
20 CONCRETE RAMP
21 TRUCK SCALE
22 ELECTRICAL BOX
23 SEWER LINE
24 CONCRETE CURB
25 CONCRETE DRAINAGE CHANNEL
26 ASPHALT CONCRETE PAVEMENT
27 CONCRETE PAVEMENT

DEMOLITION NOTES:

A. LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND BASED ON RECORD DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES SHOWN ON THE PLANS AND AS-BUILTS.
B. EXISTING UNDERGROUND UTILITIES MUST BE PROTECTED IN PLACE UNLESS OTHERWISE SPECIFIED PER PLAN.
C. REMOVAL OF CANOPY COLUMNS AND FOUNDATIONS WILL REQUIRE PAVEMENT SAWCUT AND REMOVAL.



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SCALE: 1"=40'

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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
DEMO PLAN

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-101

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DEMOLITION NOTES

EXISTING-PROTECT IN PLACE REMOVE

1 NOT USED
2 NOT USED
3 NOT USED
4 NOT USED
5 NOT USED
6 NOT USED
7 NOT USED
8 NOT USED
9 NOT USED
10 NOT USED
11 FENCE
12 POWER POLE
13 NOT USED
14 NOT USED
15 NOT USED
16 NOT USED
17 NOT USED
18 NOT USED
19 NOT USED
20 NOT USED
21 NOT USED
22 ELECTRICAL BOX
23 NOT USED
24 CONCRETE CURB
25 CONCRETE DRAINAGE CHANNEL
26 ASPHALT CONCRETE PAVEMENT

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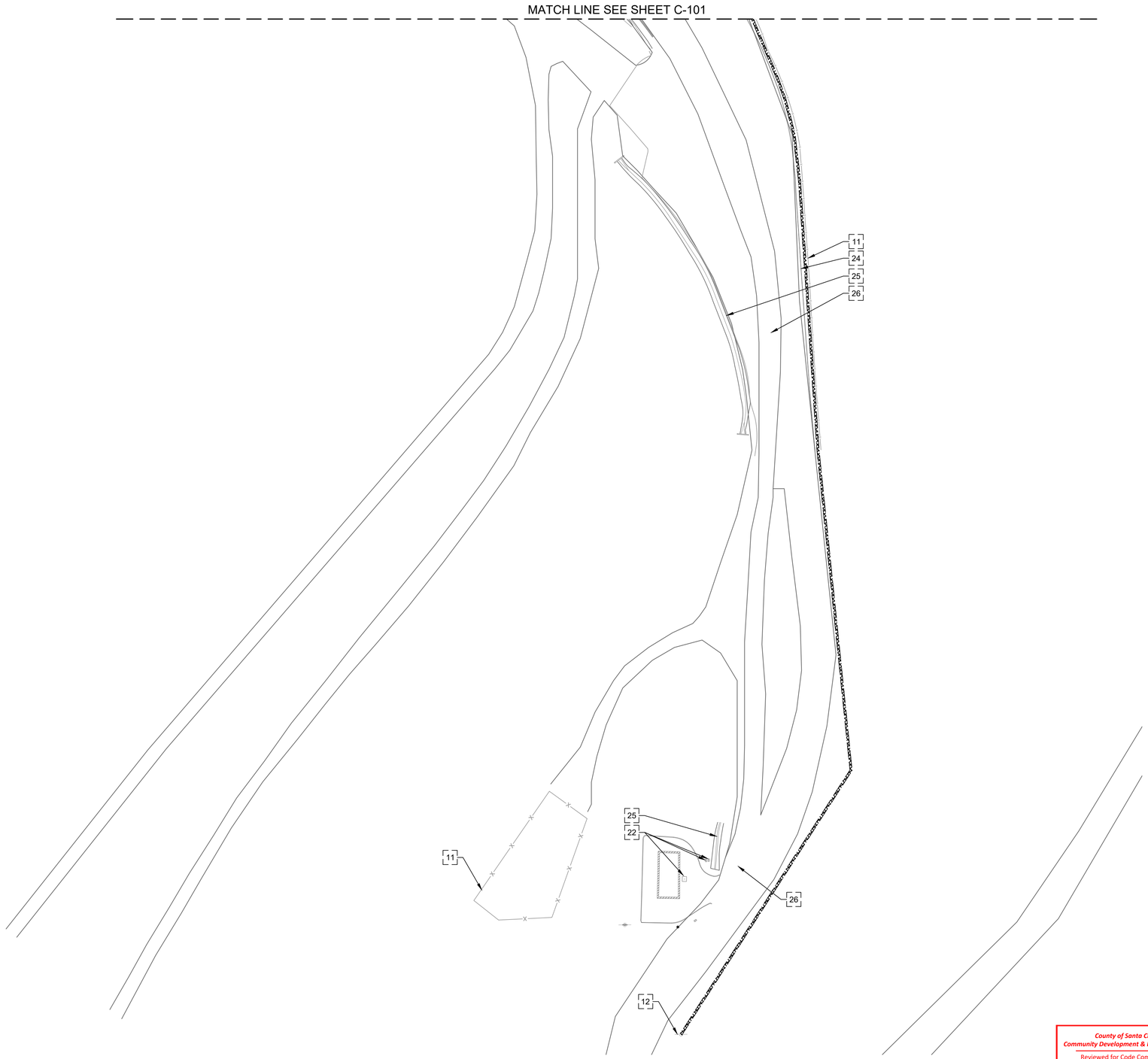

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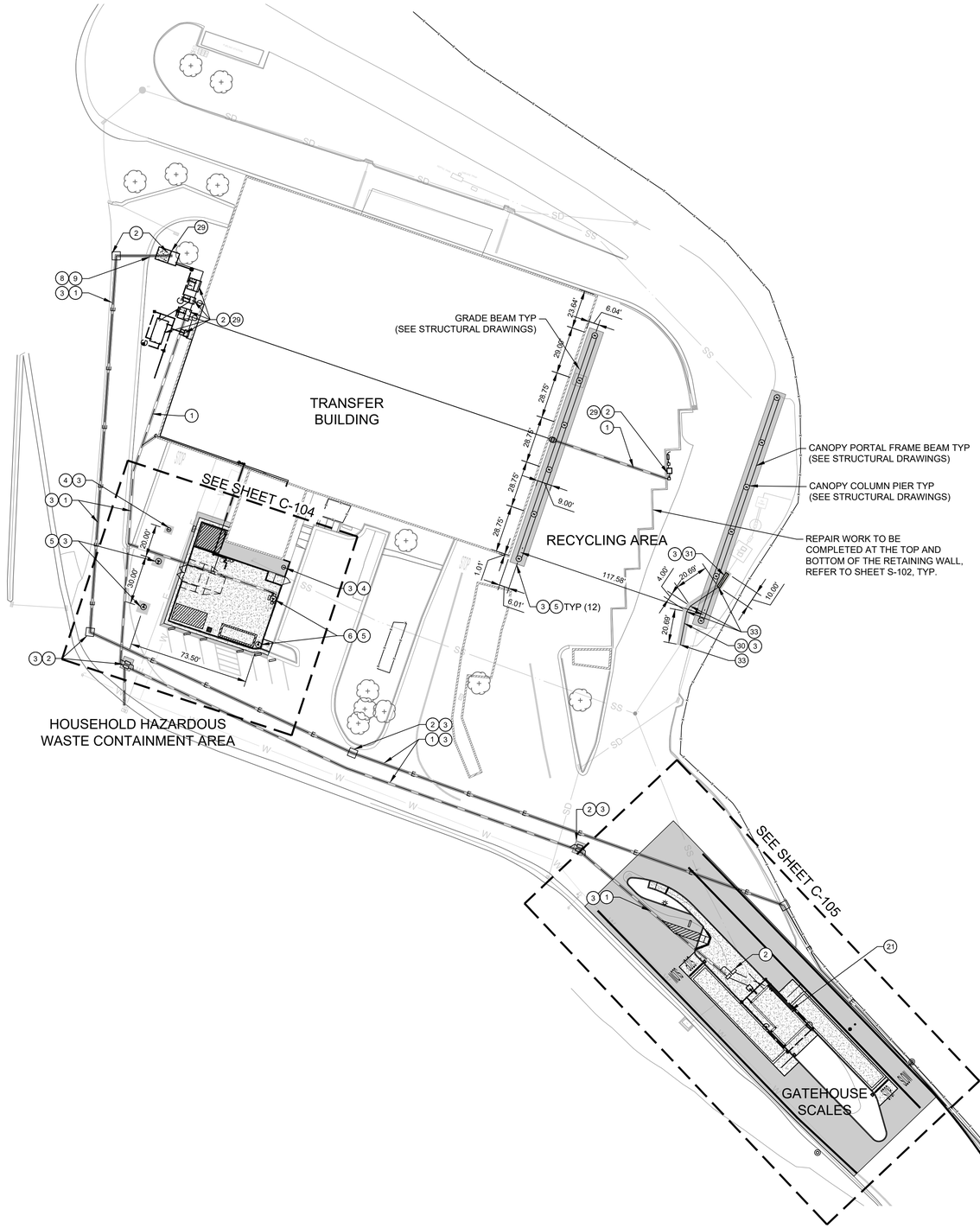
CONSTRUCTION NOTES

1	INSTALL ELECTRICAL/POWER LINE PER ELECTRICAL SHEETS AND DETAIL 1, SHEET C-110.
2	INSTALL ELECTRICAL EQUIPMENT/PULL BOX PER ELECTRICAL SHEETS
3	INSTALL ASPHALT PAVEMENT PER DETAILS 2 & 9, SHEET C-110. REPLACE PAVEMENT MARKINGS WHERE SHOWN.
4	CANOPY COLUMN 30" DIA PIER, PER STRUCTURAL SHEETS.
5	CANOPY COLUMN 42" DIA PIER, PER STRUCTURAL SHEETS.
6	INSTALL STANDARD CONCRETE PAVEMENT PER DETAILS 2, 4, & 5, SHEET C-110
7	INSTALL CONCRETE APPROACH SLAB PER DETAIL 8, SHEET C-110
8	INSTALL STANDARD 6" WIDE CONCRETE CURB, PER DETAILS 5 & 7, SHEET C-110
9	INSTALL STANDARD 2' WIDE CONCRETE GUTTER, PER DETAIL 4, SHEET C-111
10	INSTALL STANDARD CONCRETE TWO-WAY RAMP, PER GRADING PLAN & DETAIL 4, SHEET C-110
11	INSTALL 6' TALL CHAINLINK PRIVACY FENCING AND GATES PER PLAN, PER DETAIL SHEET C-112
12	INSTALL CURB DRAIN OUTLET WITH LOCKABLE VALVE, PER DETAIL 5, SHEET C-111
13	PROPOSED SHED LOCATION
14	PAINTED STRIPED CURB EDGE, CAUTION YELLOW, PER OSHA STANDARDS
15	CONCRETE WHEEL STOP, PER DETAIL 2 , SHEET C-111
16	PROPOSED FUTURE LOCATION FOR SHED
17	PROPOSED OSHA APPROVED EYE-WASH STATION WITH SHOWER AND WATER LINE CONNECTION, PER DETAILS 2 & 3, SHEET C-113
18	PROPOSED ROAD STRIPING & LETTERING PER DETAILS 1 & 3, SHEET C-111, AND CALTRANS STANDARD
19	VEHICULAR BARRIER ARM GATE PER DETAIL 7, SHEET C-111.
20	ENTRANCE SIGN COLUMN AND PIER, INSTALL FENCE AROUND COLUMN, PER STRUCTURAL SHEETS
21	INSTALL PROPOSED GATEHOUSE, PER STRUCTURAL AND ARCHITECTUAL SHEETS
22	INSTALL PROPOSED EMERY WINSLOW TRUCK SCALE AT GATEHOUSE AS B.O.D. OR APPROVED EQUAL. PER DETAILS ON SHEETS C114 AND C115.
23	PLANTING AREA
24	INSTALL CALTRANS STANDARD ADA ACCESSIBLE RAMP, PER DETAIL 8, SHEET C-111
25	INSTALL BOLLARD, PER DETAIL 11, SHEET C-110
26	INSTALL STORM DRAIN CLEANOUT FOR STORM DRAIN LINE, PER DETAIL 4, SHEET C113
27	INSTALL SHUT OFF VALVE ON STORM DRAIN LINE PER DETAIL 10, SHEET C110.
28	PROPOSED LANE LINES PER CALTRANS STANDARD
29	INSTALL CONCRETE SLAB FOR ELECTRICAL UTILITY, SEE ELECTRICAL PLANS AND STRUCTURAL PLANS FOR DETAIL.
30	INSTALL 4" SANITARY SEWER LINE
31	INSTALL CONCRETE ENCASEMENT AROUND PROPOSED SANITARY SEWER LINE PER DETAIL 9, SHEET S-502
32	NOT USED
33	22.5° BEND IN SANITARY SEWER LINE

NOTES:
ALL STORM DRAIN INLETS AND CATCH BASINS ON THIS PROPERTY SHALL BE MARKED WITH PROHIBITIVE LANGUAGE (SUCH AS: "NO DUMPING - DRAINS TO OCEAN. NO TIRE - DESECHO CORRE AL MAR") AND/OR GRAPHICAL ICONS TO DISCOURAGE ILLEGAL DUMPING.



0 20' 40' 80'
SCALE: 1"=40'

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REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTIN
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
SITE PLAN

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-103

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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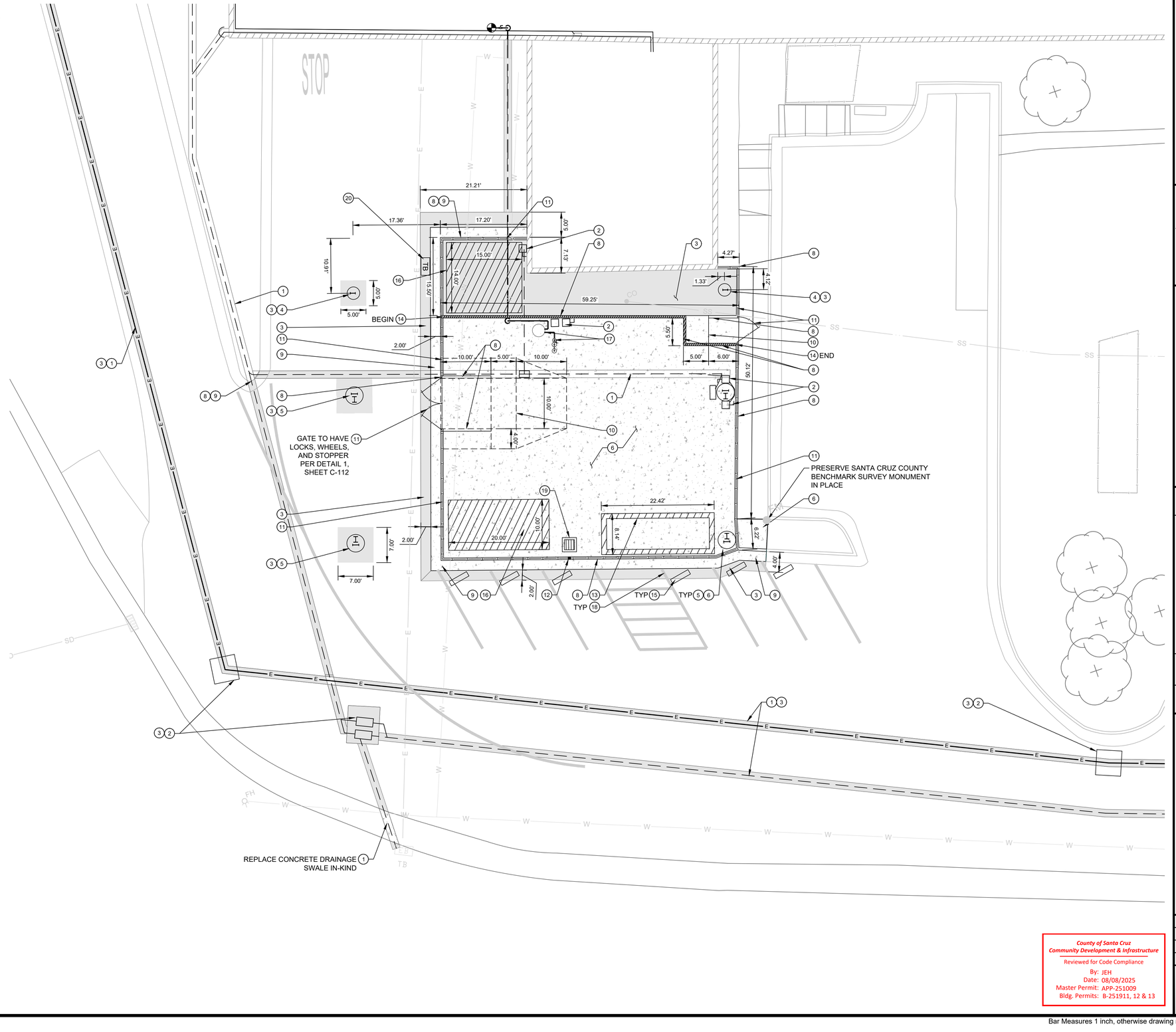
CONSTRUCTION NOTES

1	INSTALL ELECTRICAL/POWER LINE PER ELECTRICAL SHEETS AND DETAIL 1, SHEET C-110.
2	INSTALL ELECTRICAL EQUIPMENT/PULL BOX PER ELECTRICAL SHEETS
3	INSTALL ASPHALT PAVEMENT PER DETAILS 2 & 9, SHEET C-110. REPLACE PAVEMENT MARKINGS WHERE SHOWN.
4	CANOPY COLUMN 30" DIA PIER, PER STRUCTURAL SHEETS.
5	CANOPY COLUMN 42" DIA PIER, PER STRUCTURAL SHEETS.
6	INSTALL STANDARD CONCRETE PAVEMENT PER DETAILS 2, 4, & 5, SHEET C-110
7	INSTALL CONCRETE APPROACH SLAB PER DETAIL 8, SHEET C-110
8	INSTALL STANDARD 6" WIDE CONCRETE CURB, PER DETAILS 5 & 7, SHEET C-110
9	INSTALL STANDARD 2' WIDE CONCRETE GUTTER, PER DETAIL 4, SHEET C-111
10	INSTALL STANDARD CONCRETE TWO-WAY RAMP, PER GRADING PLAN & DETAIL 4, SHEET C-110
11	INSTALL 6' TALL CHAINLINK PRIVACY FENCING AND GATES PER PLAN, PER DETAIL SHEET C-112
12	INSTALL CURB DRAIN OUTLET WITH LOCKABLE VALVE, PER DETAIL 5, SHEET C-111
13	PROPOSED SHED LOCATION
14	PAINTED STRIPED CURB EDGE, CAUTION YELLOW, PER OSHA STANDARDS
15	CONCRETE WHEEL STOP, PER DETAIL 2 , SHEET C-111
16	PROPOSED FUTURE LOCATION FOR SHED
17	PROPOSED OSHA APPROVED EYE-WASH STATION WITH SHOWER, WATER HEATER, AND WATER LINE CONNECTION, PER PLUMBING PLANS
18	PROPOSED ROAD STRIPING & LETTERING PER DETAILS 1 & 3, SHEET C-111, AND CALTRANS STANDARD
19	PROPOSED 2'X2' PRECAST CONCRETE SUMP WITH GRATE PER DETAIL 3, SHEET C-113
20	RELOCATE TELECOMMUNICATIONS PULL BOX
21	NOT USED
22	NOT USED
23	NOT USED
24	NOT USED
25	NOT USED
26	NOT USED
27	NOT USED
28	NOT USED
29	NOT USED
30	NOT USED
31	NOT USED
32	NOT USED

NOTES:
ALL EXPOSED CONCRETE SURFACES LOCATED WITHIN THE CONTAINMENT AREA TO BE COATED WITH SIKAFLOOR 263-SL CONCRETE COATING OR APPROVED EQUAL. CONSULT MANUFACTURER FOR VERTICAL APPLICATION MODIFICATIONS AND INSTRUCTIONS.



SCALE: 1"=10'

Bar Measures 1 inch, otherwise drawing not to scale

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SITE PLAN - CONTAINMENT

PROJ: 200-42064-22005
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DRWN: CM
CHKD: EM

C-104

County of Santa Cruz
Community Development & Infrastructure
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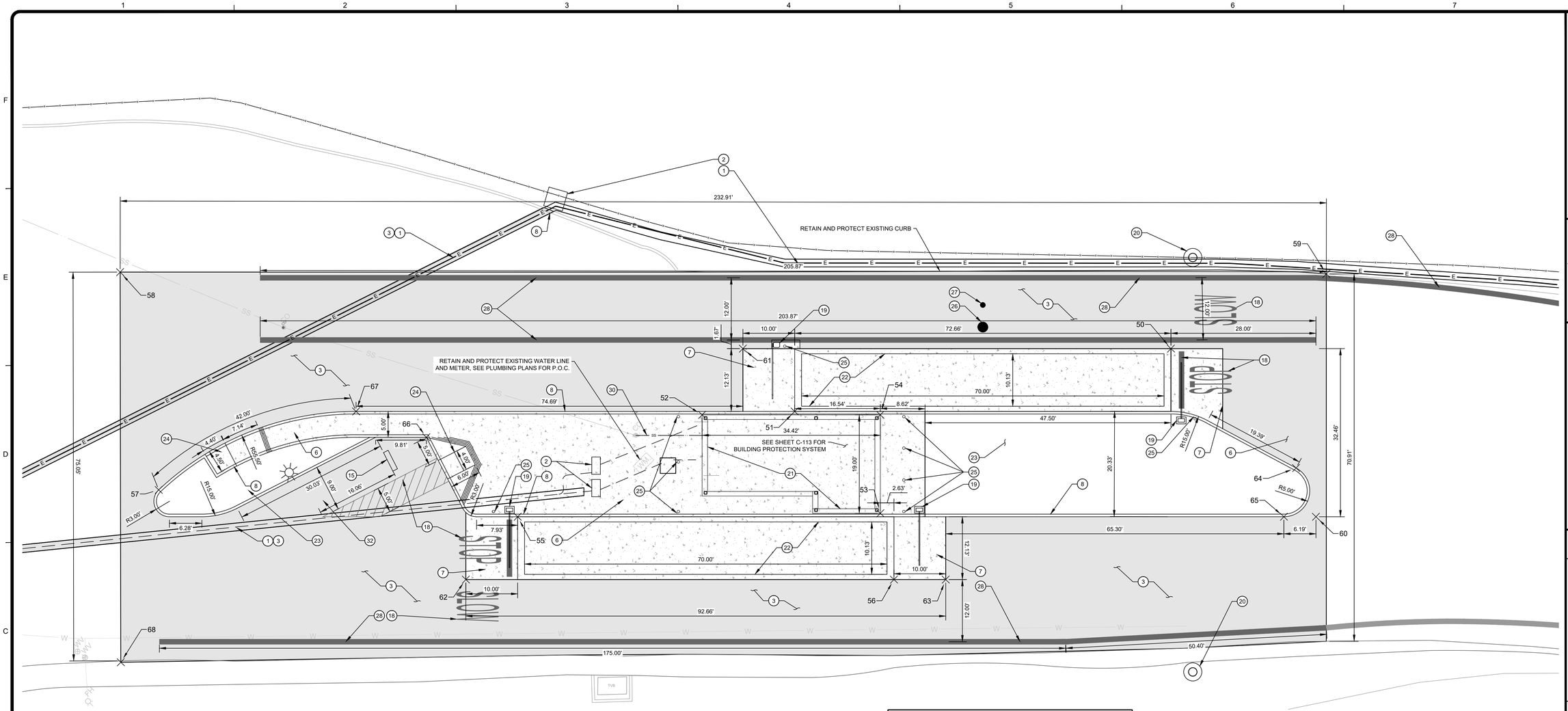

CONSTRUCTION NOTES

1	INSTALL ELECTRICAL/POWER LINE PER ELECTRICAL SHEETS AND DETAIL 1, SHEET C-110.
2	INSTALL ELECTRICAL EQUIPMENT/PULL BOX PER ELECTRICAL SHEETS
3	INSTALL ASPHALT PAVEMENT PER DETAILS 2 & 9, SHEET C-110. REPLACE PAVEMENT MARKINGS WHERE SHOWN.
4	NOT USED
5	NOT USED
6	INSTALL STANDARD CONCRETE PAVEMENT PER DETAILS 2, 4, & 5, SHEET C-110
7	INSTALL CONCRETE APPROACH SLAB PER DETAIL 8, SHEET C-110
8	INSTALL STANDARD 6" WIDE CONCRETE CURB, PER DETAILS 5 & 7, SHEET C-110
9	NOT USED
10	NOT USED
11	NOT USED
12	NOT USED
13	NOT USED
14	NOT USED
15	CONCRETE WHEEL STOP, PER DETAIL 2 , SHEET C-111
16	NOT USED
17	NOT USED
18	PROPOSED ROAD STRIPING & LETTERING PER DETAILS 1 & 3, SHEET C-111, AND CALTRANS STANDARD
19	VEHICULAR BARRIER ARM GATE PER DETAIL 7, SHEET C-111.
20	ENTRANCE SIGN COLUMN AND PIER, INSTALL FENCE AROUND COLUMN, PER STRUCTURAL SHEETS
21	INSTALL PROPOSED GATEHOUSE, PER STRUCTURAL SHEETS
22	INSTALL PROPOSED EMERY WINSLOW TRUCK SCALE AT GATEHOUSE AS B.O.D. OR APPROVED EQUAL. PER DETAILS ON SHEETS C114 AND C115.
23	PLANTING AREA, STUB UP (E) IRRIGATION LATERAL FOR FUTURE USE
24	INSTALL CALTRANS STANDARD ADA ACCESSIBLE RAMP, PER DETAIL 8, SHEET C-111
25	INSTALL BOLLARD, PER DETAIL 11, SHEET C-110
26	INSTALL STORM DRAIN CLEANOUT FOR STORM DRAIN LINE, PER DETAIL 4, SHEET C113
27	INSTALL SHUT OFF VALVE ON STORM DRAIN LINE PER DETAIL 10, SHEET C110.
28	PROPOSED 4" WIDE LANE LINES PER CALTRANS STANDARD
29	NOT USED
30	INSTALL 4" SANITARY SEWER LINE
31	NOT USED
32	INSTALL PARKING STALL PER DETAIL 1, SHEET C-111

Point Table			
Point #	Raw Description	Northing	Easting
50	SCALE CORNER	1860694.2957	6101670.1372
51	SCALE CORNER	1860738.2116	6101610.9943
52	BLDG CORNER	1860750.6221	6101598.1127
53	BLDG CORNER	1860712.6539	6101608.3073
54	BLDG CORNER	1860725.8359	6101621.9906
55	SCALE CORNER	1860762.6293	6101559.2376
56	SCALE CORNER	1860701.8890	6101600.9161
57	CONC CURB	1860816.1381	6101514.8838
58	ASPHALT EXTENTS	1860850.6702	6101539.9960
59	ASPHALT EXTENTS	1860682.6908	6101701.3317
60	CONC CORNER	1860651.6116	6101666.1877
61	CONC CORNER	1860753.8256	6101612.7886
62	CONC CORNER	1860761.4189	6101543.5675
63	CONC CORNER	1860694.6871	6101607.8539
64	CONC CURB	1860660.9002	6101670.3030
65	CONC CURB	1860656.0725	6101661.8903
1	BNCHMRK 2" BRASS DISK	1860959.4810	6101295.1430
66	CONC CURB	1860785.9596	6101558.0532
67	CONC CURB	1860799.2070	6101552.2339
68	ASPHALT EXTENTS	1860798.3323	6101485.8414

SEE SHEET C-104

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

SCALE: 1"=10'

Bar Measures 1 inch, otherwise drawing not to scale

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REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTIN
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
SITE PLAN
GATEHOUSE/SCALES

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-105

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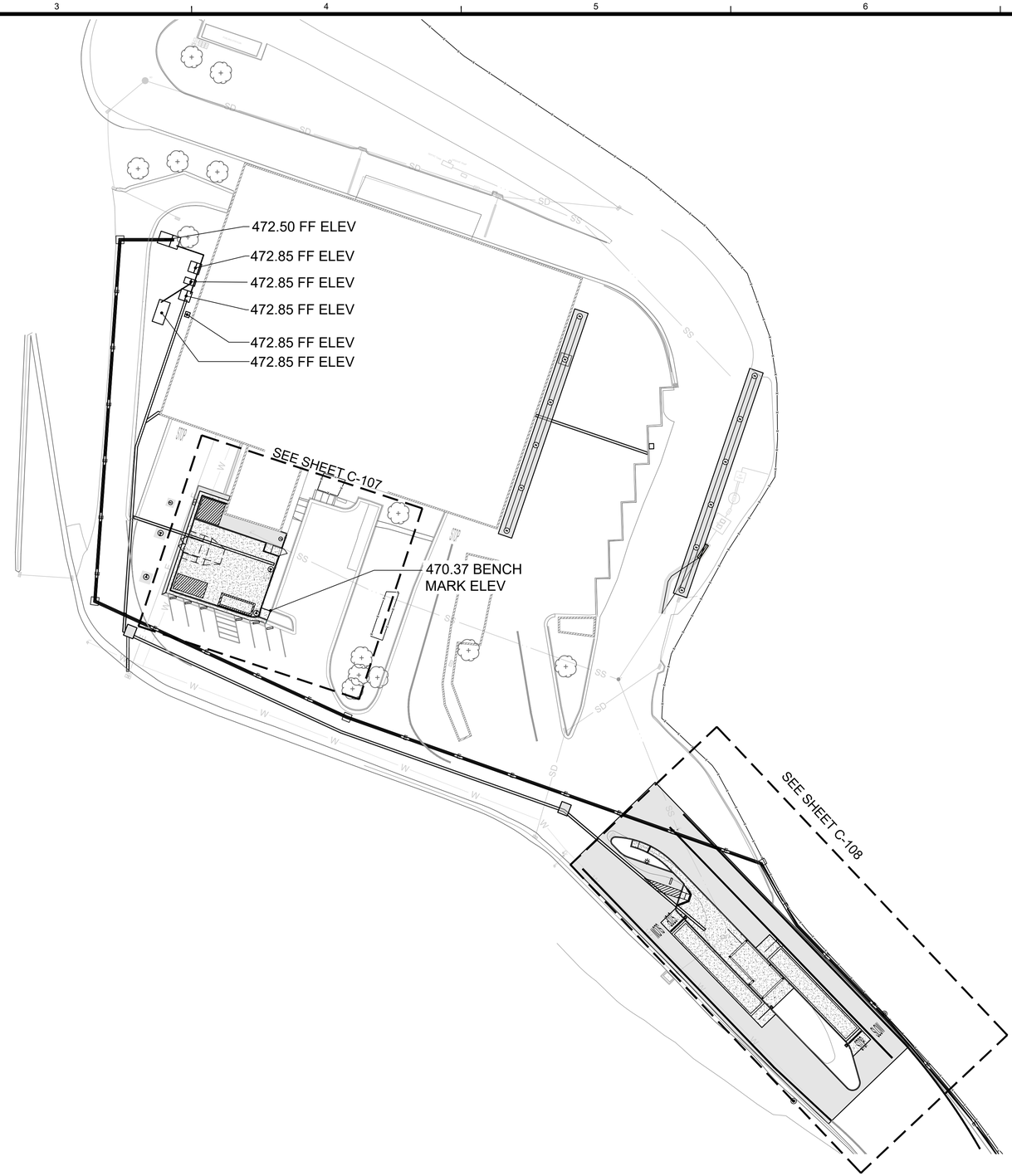
GRADING LEGEND

FS	FINISHED SURFACE
TC	TOP OF CURB
FL	FLOW LINE
INV	INVERT
1083	PROPOSED SURFACE CONTOUR
1083	EXISTING SURFACE CONTOUR
(10.00) XX	EXISTING SURFACE
10.00 XX	PROPOSED SURFACE
2.0%	PROPOSED SURFACE SLOPE

GENERAL NOTES:

1. ALL EXISTING UNDERGROUND UTILITIES SHALL BE PROTECTED IN PLACE UNLESS NOTED OTHERWISE.
2. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND BASED UPON RECORD DRAWINGS. ACTUAL CONDITIONS MAY VARY.
3. REFER TO THE DEMOLITION PLANS FOR THE PROTECTION AND REMOVAL OF EXISTING SITE FEATURES AND UTILITIES.
4. CENTERLINE AND RIGHT-OF-WAY DATA SHOWN IS BASED UPON A SEARCH OF AVAILABLE RECORD DATA ONLY.
5. CONTRACTOR SHALL RESET ANY MONUMENTS OR TIES DISTURBED OR LOST DURING CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE SPECIFICATIONS.
6. IF CONTAMINATED SOILS OR MATERIALS ARE ENCOUNTERED BY THE CONTRACTOR DURING EXCAVATION, THEY SHOULD BE DISPOSED OF PROPERLY. DISPOSAL OF ANY CONTAMINATED SOIL, MATERIALS, OR WATER SHOULD BE IN ACCORDANCE WITH THE LOCAL AND COUNTY GUIDELINES AND JURISDICTIONS.
7. REFER TO THE DEMOLITION AND PLANTING PLANS FOR LANDSCAPE REMOVALS AND IMPROVEMENTS.



0 20' 40' 80'
SCALE: 1"=40'

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
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	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
OVERALL GRADING PLAN

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-106

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Bar Measures 1 inch, otherwise drawing not to scale

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GRADING LEGEND

FS	FINISHED SURFACE
TC	TOP OF CURB
FL	FLOW LINE
INV	INVERT
1083	PROPOSED SURFACE CONTOUR
1083	EXISTING SURFACE CONTOUR
(10.00) XX	EXISTING SURFACE
10.00 XX	PROPOSED SURFACE
2.0%	PROPOSED SURFACE SLOPE

GENERAL NOTES:

1. ALL EXISTING UNDERGROUND UTILITIES SHALL BE PROTECTED IN PLACE UNLESS NOTED OTHERWISE.
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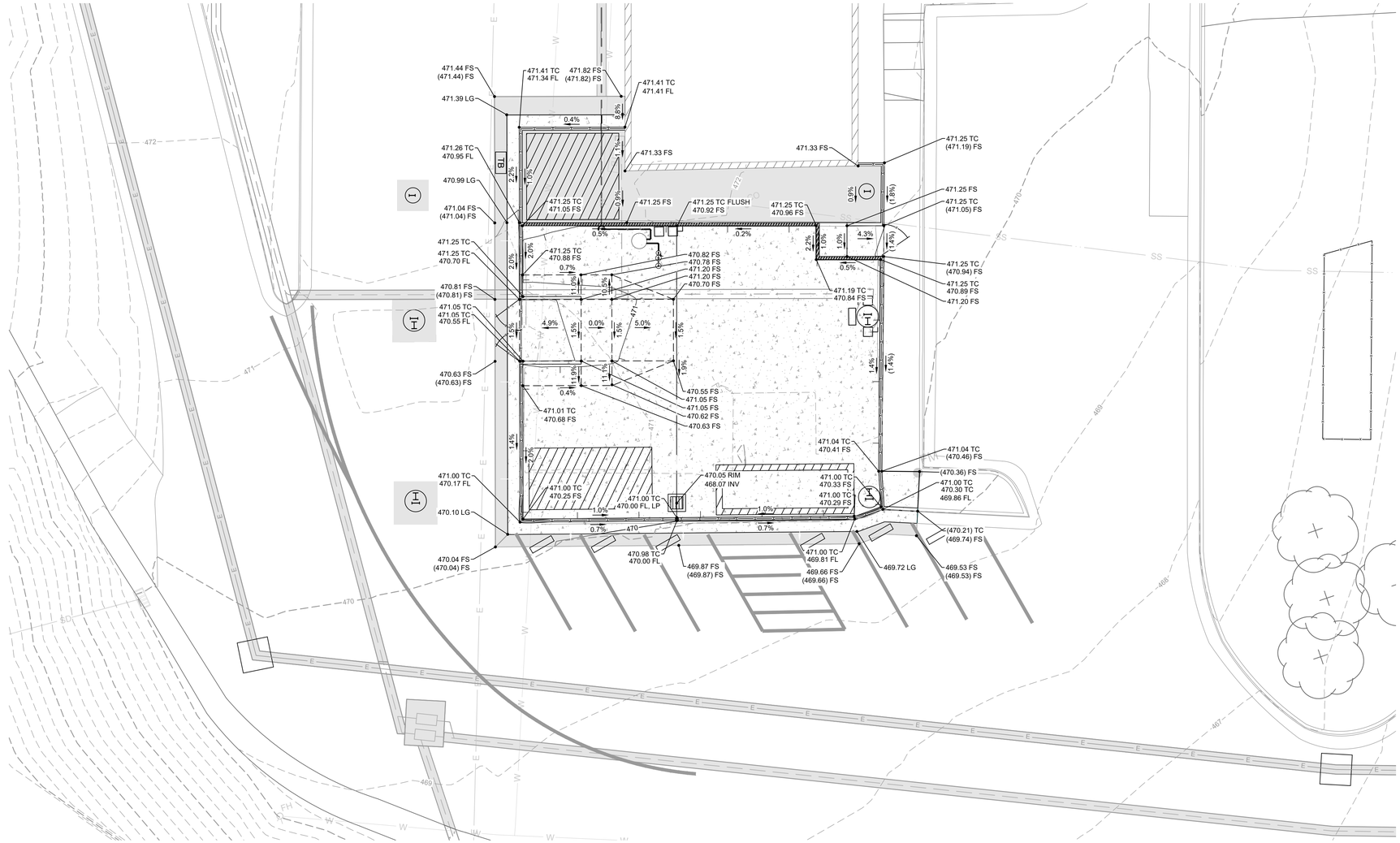
7. REFER TO THE DEMOLITION AND PLANTING PLANS FOR LANDSCAPE REMOVALS AND IMPROVEMENTS.



0 5' 10' 20'
SCALE: 1"=10'

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

Bar Measures 1 inch, otherwise drawing not to scale

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EXP: 03/31/2026
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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

GRADING PLAN CONTAINMENT AREA

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-107

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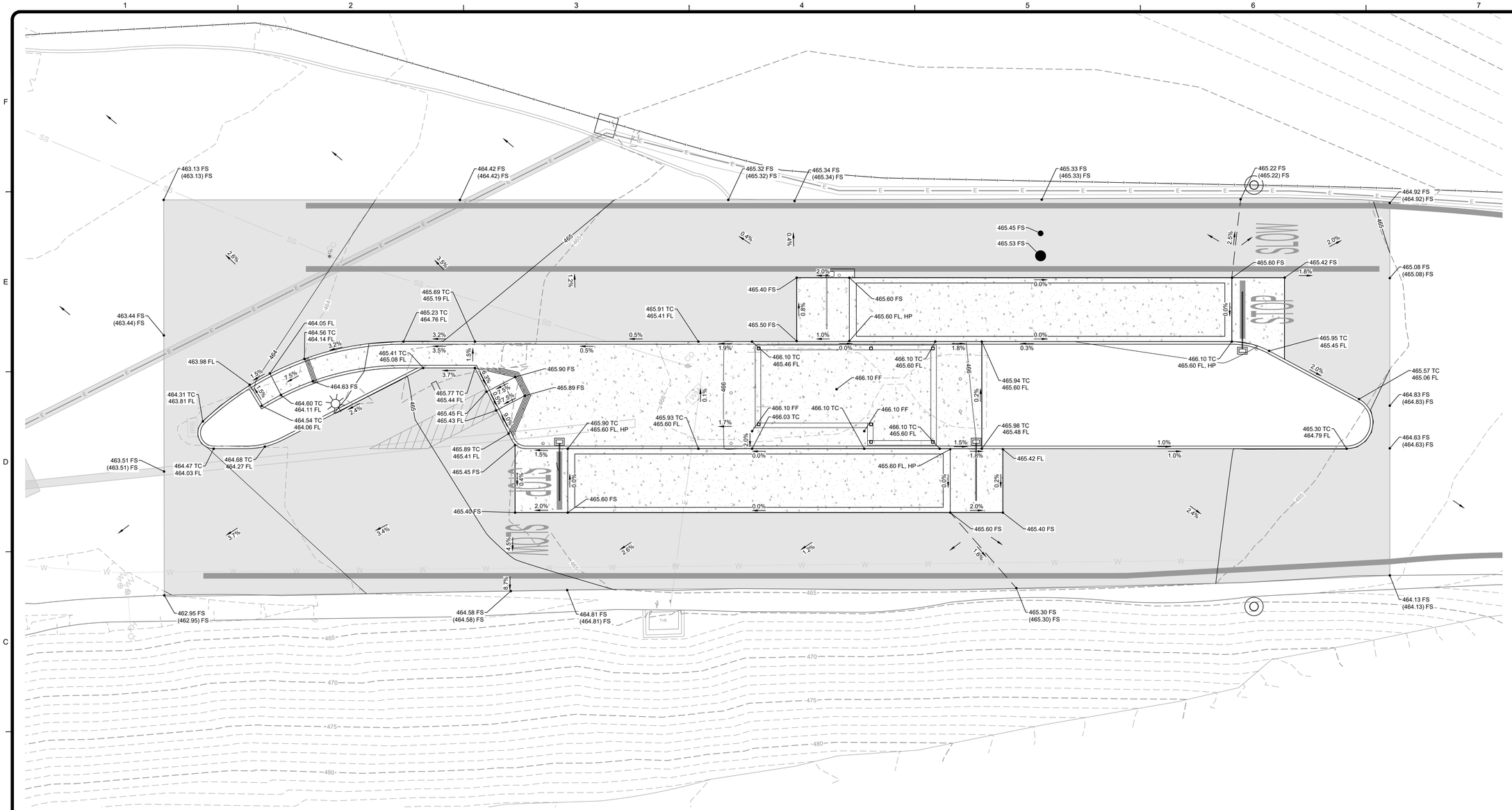

GRADING LEGEND

FS	FINISHED SURFACE
TC	TOP OF CURB
FL	FLOW LINE
INV	INVERT
FF	FINISHED FLOOR
HP	HIGH POINT
1083	PROPOSED SURFACE CONTOUR
1083	EXISTING SURFACE CONTOUR
(10.00) XX	EXISTING SURFACE
10.00 XX	PROPOSED SURFACE
2.0%	PROPOSED SURFACE SLOPE

0 5' 10' 20'
SCALE: 1"=10'

GENERAL NOTES:

1. ALL EXISTING UNDERGROUND UTILITIES SHALL BE PROTECTED IN PLACE UNLESS NOTED OTHERWISE.
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3. REFER TO THE DEMOLITION PLANS FOR THE PROTECTION AND REMOVAL OF EXISTING SITE FEATURES AND UTILITIES.
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6. IF CONTAMINATED SOILS OR MATERIALS ARE ENCOUNTERED BY THE CONTRACTOR DURING EXCAVATION, THEY SHOULD BE DISPOSED OF PROPERLY. DISPOSAL OF ANY CONTAMINATED SOIL, MATERIALS, OR WATER SHOULD BE IN ACCORDANCE WITH THE LOCAL AND COUNTY GUIDELINES AND JURISDICTIONS.
7. REFER TO THE DEMOLITION AND PLANTING PLANS FOR LANDSCAPE REMOVALS AND IMPROVEMENTS.

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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
GRADING PLAN
GATEHOUSE

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-108

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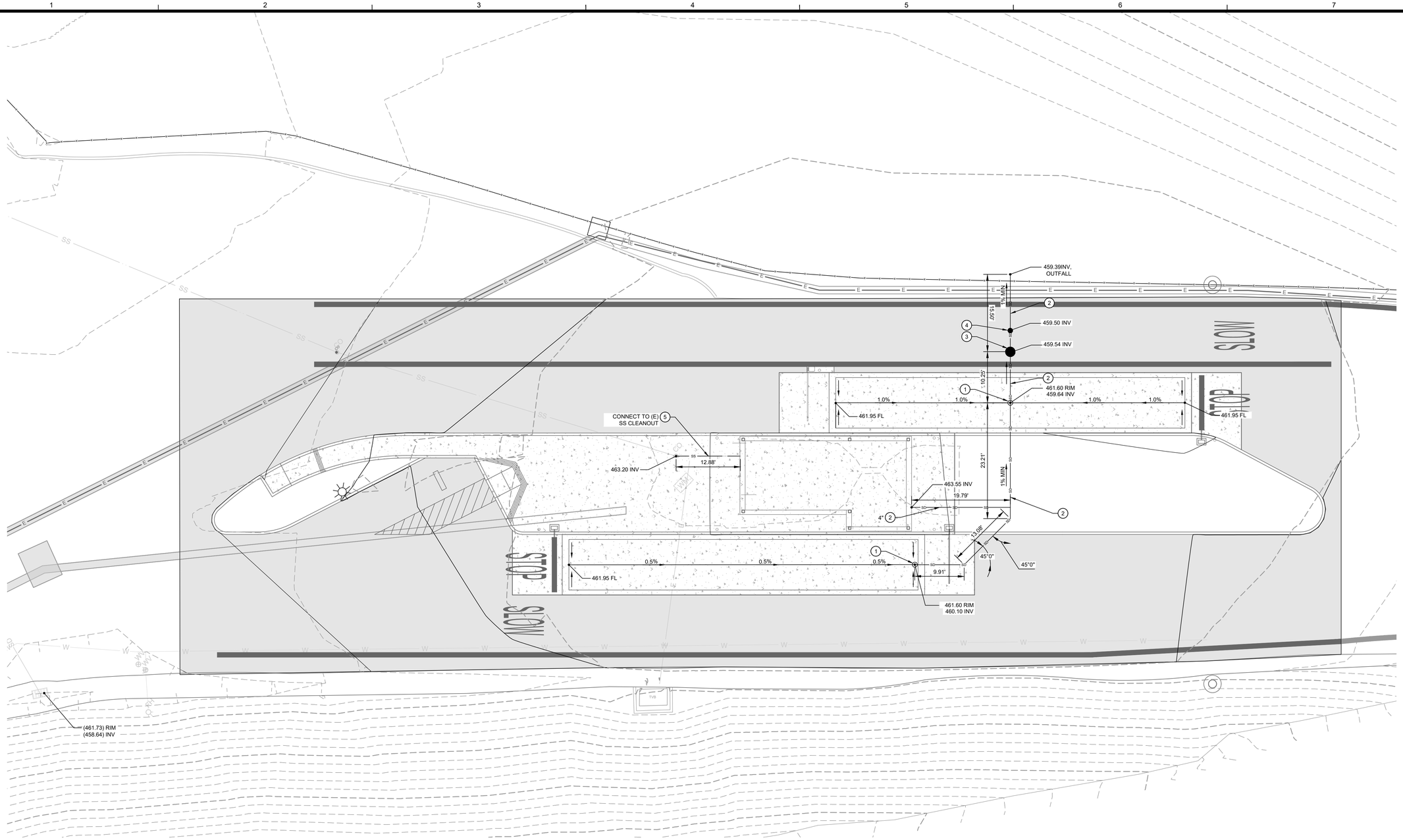

CONSTRUCTION NOTES

1. CONSTRUCT ADS NYLOPLAST 8" INLINE SCALE DRAIN WITH REMOVABLE DUCTILE IRON GRATE OR APPROVED EQUAL, PER DETAIL 6, SHEET C-110
2. CONSTRUCT 6" SCH. 80 PVC STORM DRAIN PIPE OR APPROVED EQUAL, PER DETAILS 1& 6, SHEET C-110, SEE PLUMBING DRAWINGS FOR CONNECTIONS WITHIN BUILDING.
3. CONSTRUCT 6" SCH.80 PVC STORM DRAIN CLEAN OUT, PER DETAIL 4, SHEET C-113
4. CONSTRUCT SHUT OFF VALVE ON 6" SCH. 80 PVC STORM DRAIN LINE IN WELL, PER DETAIL 10, SHEET C-110
5. CONSTRUCT 4" SCH 40 PVC SANITARY SEWER PIPE OR APPROVED EQUAL, PER DETAIL 1, SHEET C-110, SEE PLUMBING DRAWINGS FOR CONNECTIONS WITHIN BUILDING.

GRADING LEGEND

FS	FINISHED SURFACE
TC	TOP OF CURB
FL	FLOW LINE
INV	INVERT
1083	PROPOSED SURFACE CONTOUR
1083	EXISTING SURFACE CONTOUR
(10.00) XX	EXISTING SURFACE
10.00 XX	PROPOSED SURFACE
2.0%	PROPOSED SURFACE SLOPE
	PROPOSED FLOWLINE

0 5' 10' 20'

SCALE: 1"=10'

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SANTA CRUZ COUNTY: DPW
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SCALE DRAINAGE PLAN

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-109

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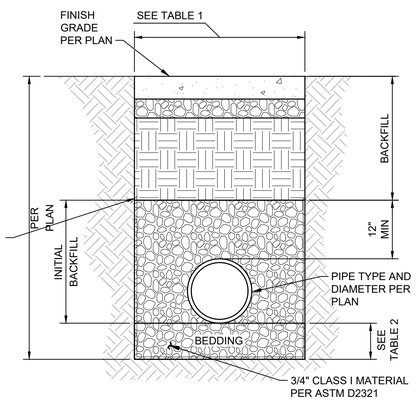
NOTES:
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS," LATEST EDITION.
2. MEASURES SHALL BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WITH NON-WOVEN POLYPROPYLENE GEOTEXTILE FABRIC, MIRAFI 180N OR APPROVED EQUAL.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: PER PROJECT SPECIFICATIONS.
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE 3/4" MINUS CLASS I MATERIAL PER ASTM D2321 IN THE PIPE ZONE EXTENDING NOT LESS THAN 12" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED.
6. MINIMUM COVER: MINIMUM COVER IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 18" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, WHERE SHOWN, IS 36" FOR UP TO 48" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

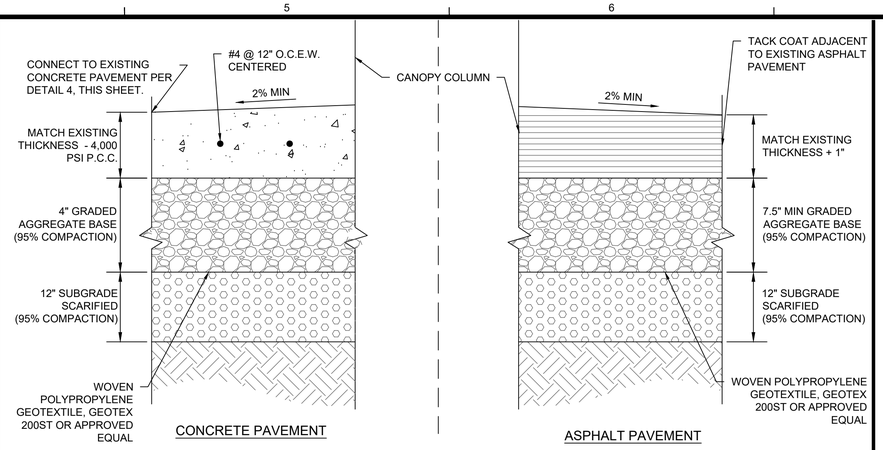
TABLE 1: TRENCH WIDTH	
PIPE DIA.	MIN. WIDTH
1"-6"	18"
36"	48"

TABLE 2: BEDDING THICKNESS	
PIPE DIA.	THICKNESS
2"-6"	4"
36"	12"

NOTE:
1. FOR 2"-6" PIPE, SAND MAY BE SUBSTITUTED FOR 3/4" MINUS BEDDING & BACKFILL WITHIN THE PIPE ZONE.
2. SLURRY BEDDING AND BACKFILL WHERE SHOWN ON PLANS.

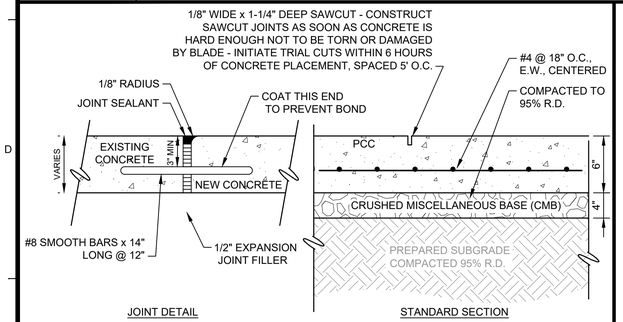


1 TRENCHING AND BEDDING
NTS | REFERENCE SHEET: C-103, C-104, & C-105



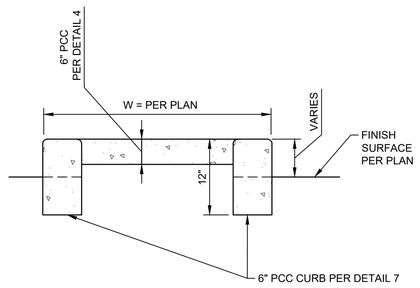
2 PAVEMENT REPLACEMENT AROUND CANOPY COLUMNS
NTS | REFERENCE SHEET: C-103 & C-104

3 NOT USED
NTS | REFERENCE SHEET:

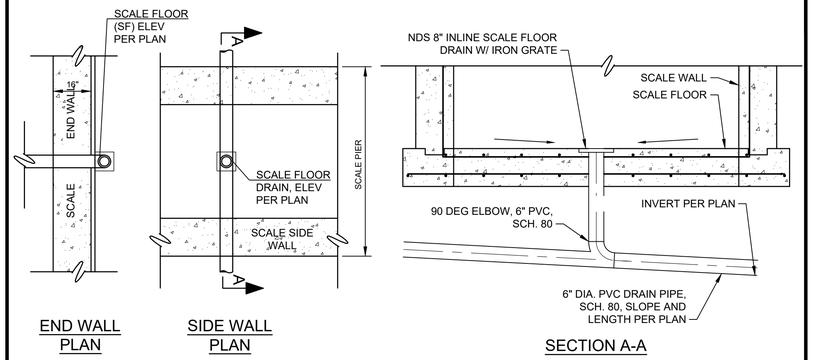


NOTES:
1. SEE GEOTECHNICAL DESIGN REPORT FOR FURTHER SITE PREPARATION INFORMATION.

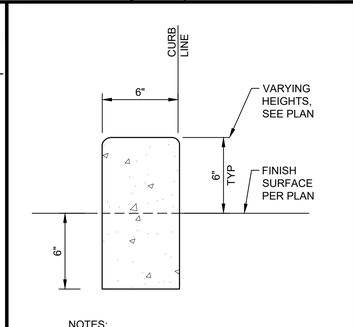
4 CONCRETE PAVEMENT SECTION
NTS | REFERENCE SHEET: C-103, C-104, & C-105



5 CONCRETE ISLAND
NTS | REFERENCE SHEET: C- 105

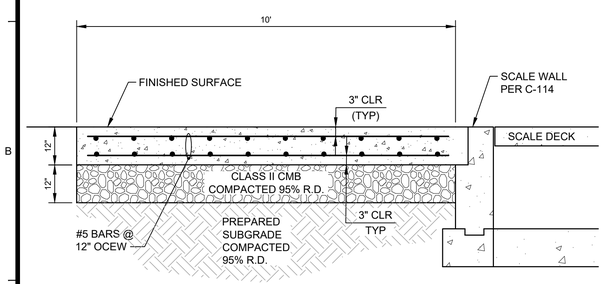


6 SCALE DRAIN
NTS | REFERENCE SHEET: C-109

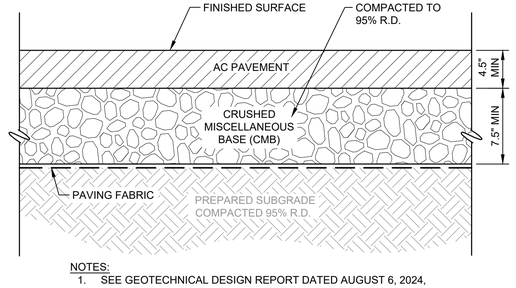


NOTES:
1. ALL EXPOSED CORNERS ON PCC CURB SHALL BE ROUNDED WITH 1/2" RADIUS.

7 PCC CURB
NTS | REFERENCE SHEET: C-104 & C-105

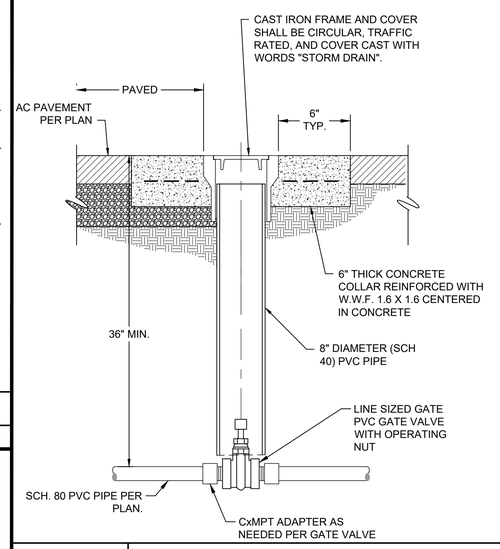


8 CONCRETE APPROACH SLAB
NTS | REFERENCE SHEET: C-105

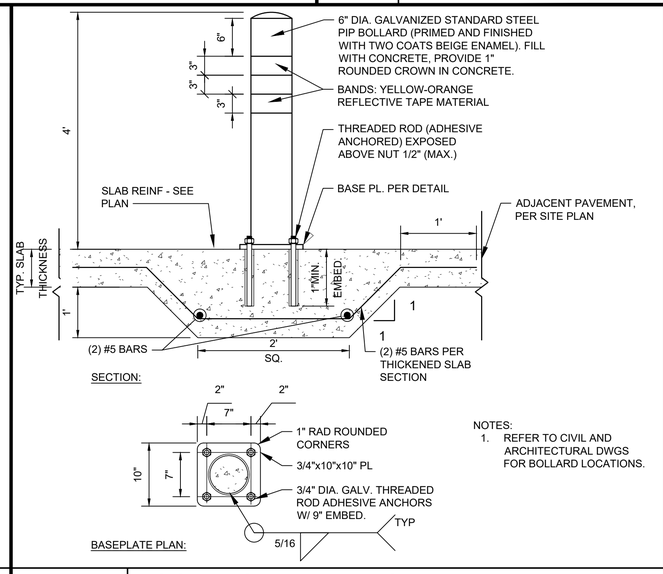


NOTES:
1. SEE GEOTECHNICAL DESIGN REPORT DATED AUGUST 6, 2024, SECTION 10.8.2, TABLE 13 FOR DESIGN DEPTHS.

9 AC PAVEMENT
NTS | REFERENCE SHEET: C-103, C-104, & C-105



10 SHUT OFF VALVE
NTS | REFERENCE SHEET: C-109



NOTES:
1. REFER TO CIVIL AND ARCHITECTURAL DWGS FOR BOLLARD LOCATIONS.

11 POST INSTALLED BOLLARD
NTS | REFERENCE SHEET: C-105

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
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REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTINEZ
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
DETAILS

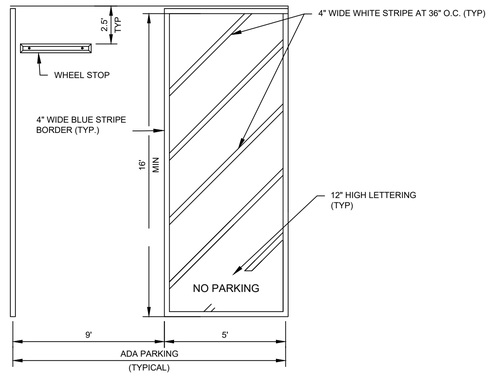
PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-110

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

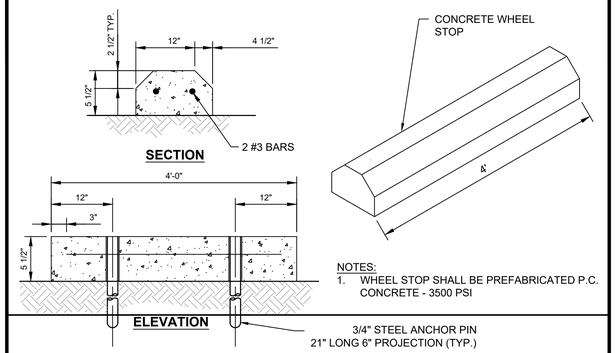
4/11/2025 1:28:42 PM - O:\PROJECTS\IRVINE\42064\200-42064-22005\CAD\SHEETFILES\C-110_DETAILS.DWG - MELTON, CONNOR



ACCESSIBLE PARKING STALL

1 ACCESSIBLE PARKING STALL

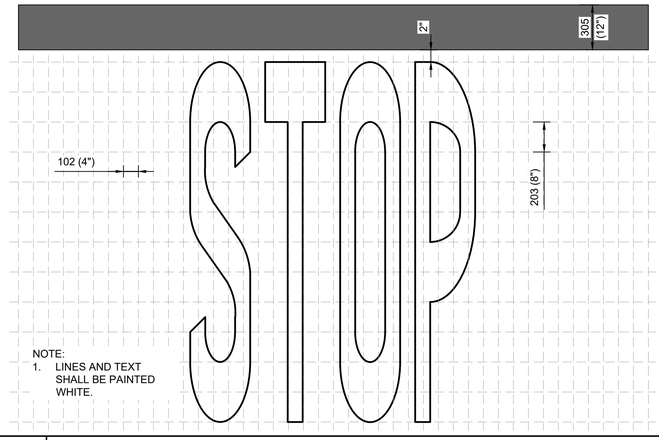
NTS | REFERENCE SHEET: C-105



NOTES:
1. WHEEL STOP SHALL BE PREFABRICATED P.C. CONCRETE - 3500 PSI

2 CONCRETE WHEEL STOP

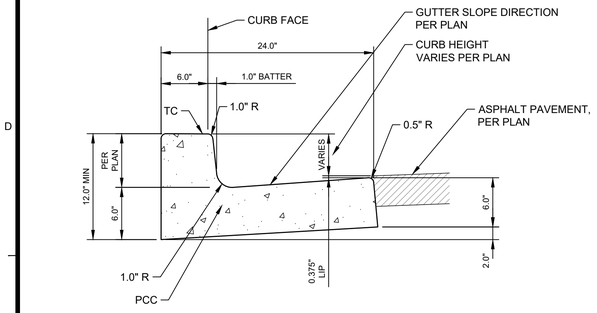
NTS | REFERENCE SHEET: C-104 & C-105



NOTE:
1. LINES AND TEXT SHALL BE PAINTED WHITE.

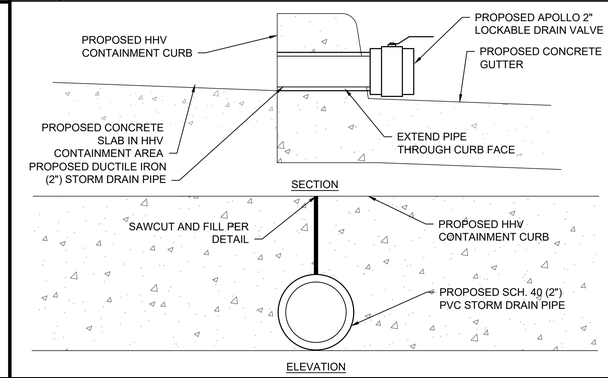
3 STOP BAR PAVEMENT MARKING

NTS | REFERENCE SHEET:



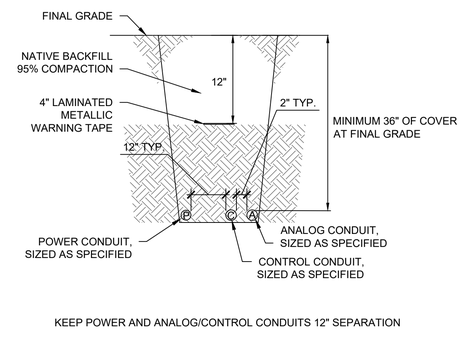
4 CURB AND GUTTER

NTS | REFERENCE SHEET: C-104



5 CURB DRAIN VALVE

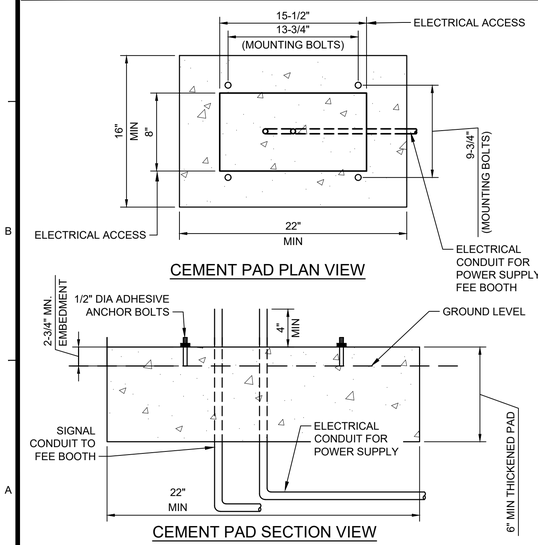
NTS | REFERENCE SHEET: C-104



KEEP POWER AND ANALOG/CONTROL CONDUITS 12" SEPARATION

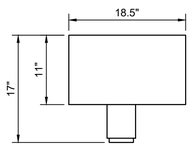
6 DIRECT BURIED CONDUIT TRENCH

NTS | REFERENCE SHEET: C-104 & C-105

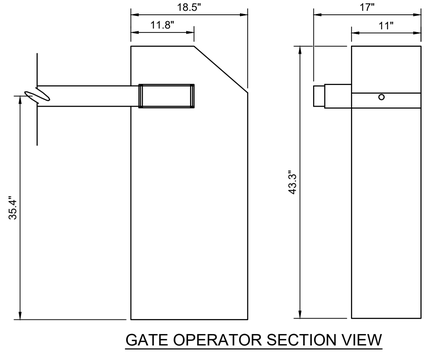


CEMENT PAD PLAN VIEW

CEMENT PAD SECTION VIEW



GATE OPERATOR PLAN VIEW

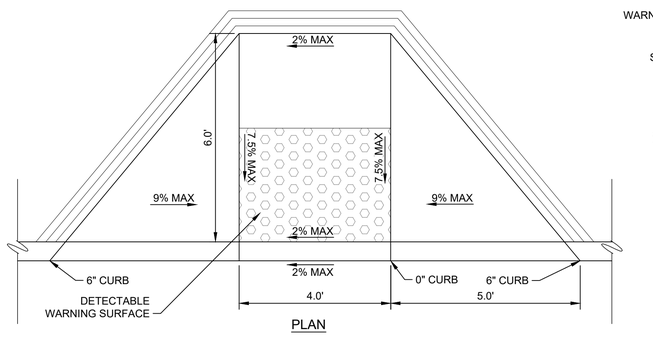


GATE OPERATOR SECTION VIEW

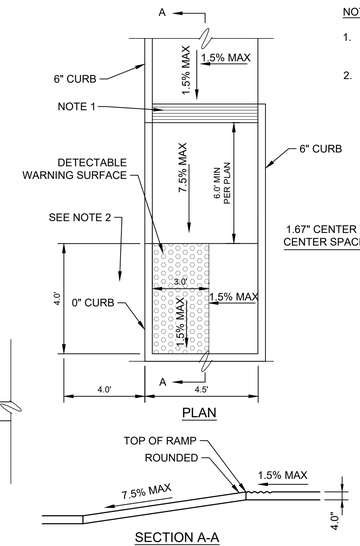
7 SINGLE ARM BARRIER GATE

NTS | REFERENCE SHEET: C-105

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



PLAN

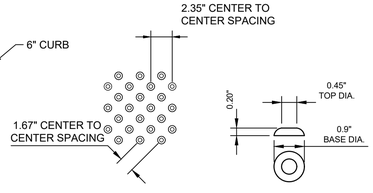


PLAN

SECTION A-A

NOTES

1. THE RAMP SHALL BE PRECEDED AS SHOWN WITH A 12.0" WIDE BORDER AND 0.25" GROOVES APPROXIMATELY 0.75" ON CENTER. SEE GROOVING DETAIL.
2. APPROACH TO RAMP IS TO NOT EXCEED 2% IN ANY DIRECTION.

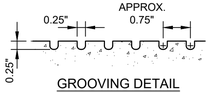


PLAN VIEW PROFILE VIEW

DETECTABLE WARNING SURFACE

RAISED TRUNCATED DOME PATTERN (IN-LINE)

DETECTABLE WARNING SURFACE



GROOVING DETAIL

8 PEDESTRIAN ACCESSIBLE RAMP

NTS | REFERENCE SHEET: C-105

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REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTIN
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

DETAILS

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-111

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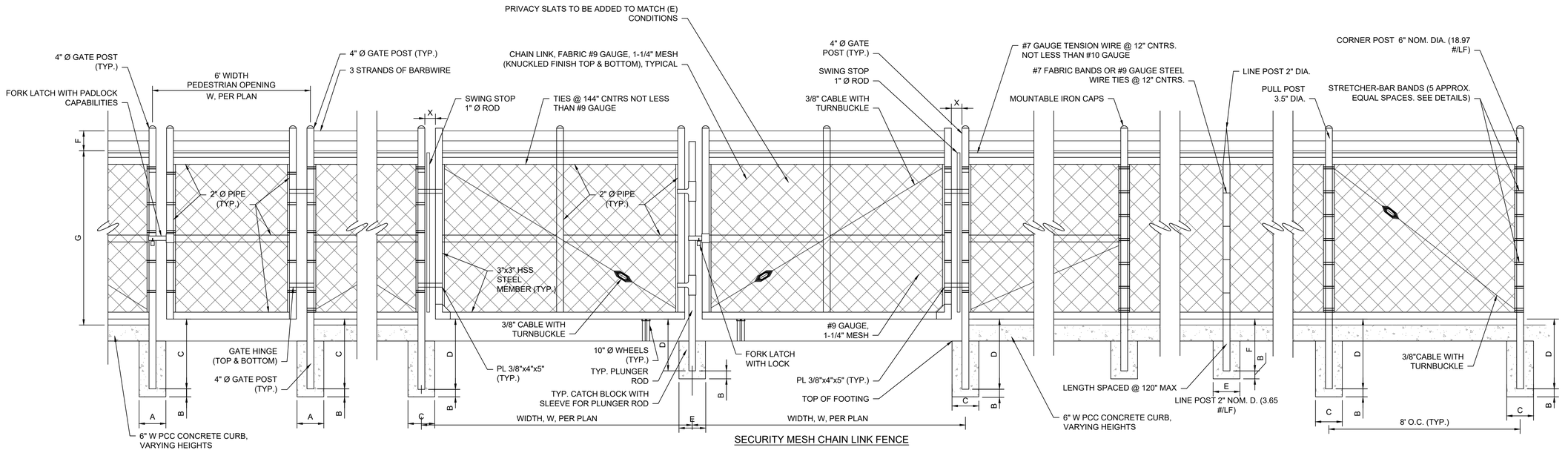
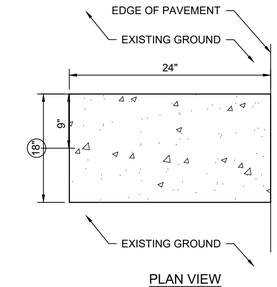
Bar Measures 1 inch, otherwise drawing not to scale

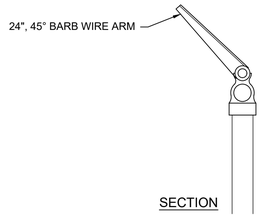


SECURITY MESH CHAIN LINK FENCE

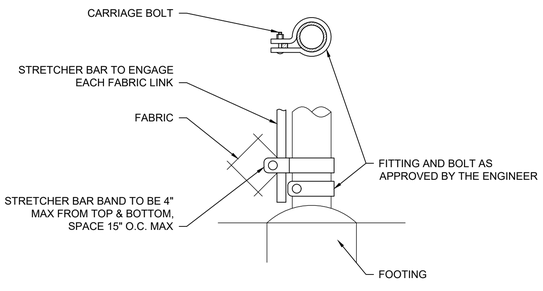
NOTE:
1. A = (18") E = (12") X = (5")
   B = (6") F = (24")
   C = (30") G = (72")
   D = (54") W PER PLAN
2. FENCE POSTS TO BE MOUNTED INTO CURB WITH FOOTING BELOW.



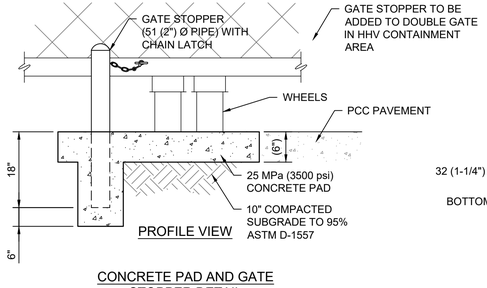
PLAN VIEW



SECTION

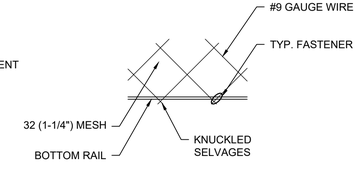


TERMINAL POST DETAIL
BAR DETAIL

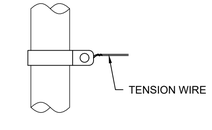


PROFILE VIEW

CONCRETE PAD AND GATE STOPPER DETAIL
(WHEN GATES ARE OPEN)

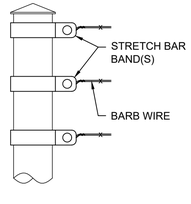


FABRIC & BOTTOM RAIL DETAIL
BOTTOM



REINFORCING WIRE ATTACHMENT

REINFORCING WIRE STRETCHING DETAIL



BARBED WIRE STRETCHING DETAIL

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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REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTINEZ
C 84829
EXP: 03/31/2026
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STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

DETAILS

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-112

1 CHAIN LINK FENCE AND GATE DETAILS

NTS REFERENCE SHEET: C-104

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Bar Measures 1 inch, otherwise drawing not to scale

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METHANE DETECTION SYSTEM
L.E.L. PRE-ALARM
ALERT BUILDING OPERATIONS

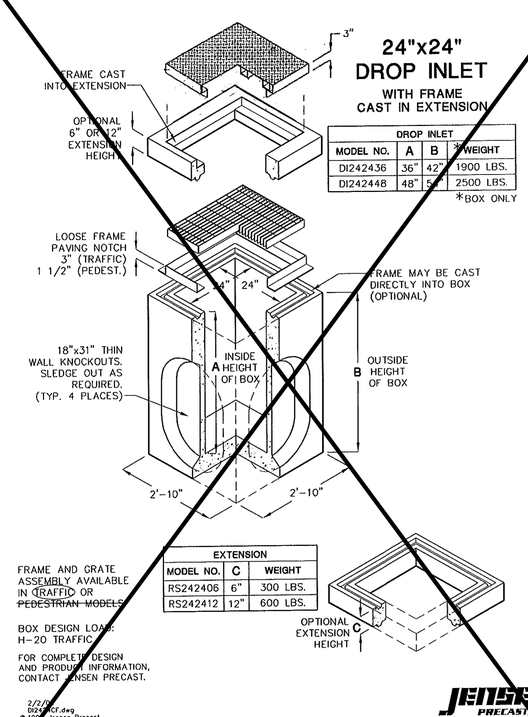
NOTES:
1. THIS SIGN SHALL BE POSTED ADJACENT TO STROBE LIGHT / HORN. ALL LETTERS SHALL BE 1" HIGH, RED LETTERS ON WHITE BACKGROUND.

WARNING
THIS BUILDING IS PROTECTED WITH A MEMBRANE GAS CONTROL BARRIER. ANY PROPOSED PENETRATION OR ALTERATION OF THE FLOOR SLAB REQUIRES NOTIFICATION OF THE BUILDING OFFICIAL AND INSPECTION BY AN ENGINEER.

NOTES:
1. THIS SIGN SHALL BE IN PROMINENT LOCATIONS IN THE BUILDING. THE WORD "WARNING" SHALL BE WHITE LETTERS 3/4" HIGH. THE REMAINING WORDS SHALL BE 1/2" HIGH. ALL WORDS SHALL BE PLACED ON A RED BACKGROUND.

1 METHANE DETECTION SYSTEM SIGN

NTS | REFERENCE SHEET: C-105



DROP INLET			
MODEL NO.	A	B	*WEIGHT
DI242436	36"	42"	1900 LBS.
DI242448	48"	54"	2500 LBS.

*BOX ONLY

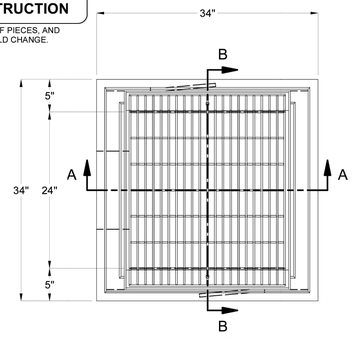
EXTENSION		
MODEL NO.	C	WEIGHT
RS242406	6"	300 LBS.
RS242412	12"	600 LBS.

4 PRECAST CONCRETE SD CLEANOUT

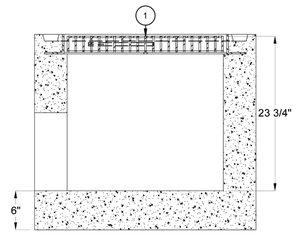
NTS | REFERENCE SHEET: C-109

PRELIMINARY DRAWING NOT FOR CONSTRUCTION

THICKNESSES, NUMBER OF PIECES, AND TYPES OF PIECES COULD CHANGE.



PLAN VIEW



SECTION A-A

BURY DEPTH:	1.1' - 4.1' to Top		
WATER LEVEL:	5.0'	APPROX. WEIGHT:	1858.05 Lbs
DESIGN SPEC:	ASTM C857,ACI 318	LOADING SPEC:	A-16 (AASHTO HS20-44)
AGENCY:		AGENCY SPEC:	

JENSEN PRECAST EST. 1968
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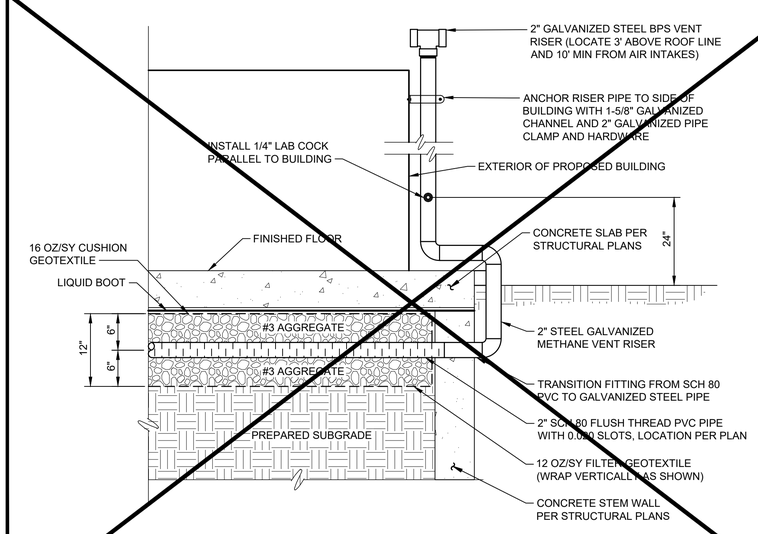
DESCRIPTION:	Utility Vault 2424 Layout Assembly		REV:
	LAYOUT REVIEW		
PART NUMBER:	2424_LAYOUT	DRAWN BY:	UnattendedEngA
CREATED:	11/26/2024	MODIFIED:	11/26/2024
			SHEET: 2 OF 2

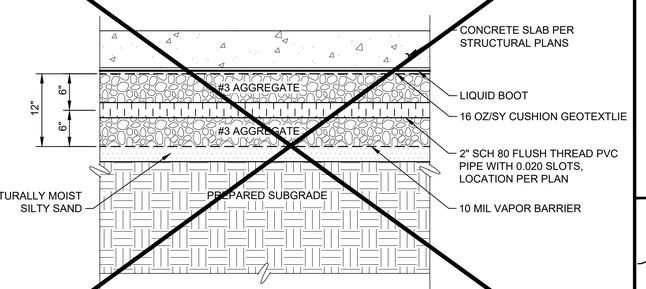
3 PRECAST CONCRETE DROP INLET SUMP

NTS | REFERENCE SHEET: C-104



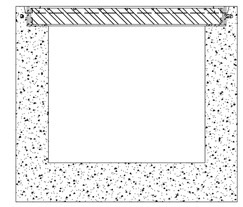
5 BPS VENT RISER

NTS | REFERENCE SHEET: C-105

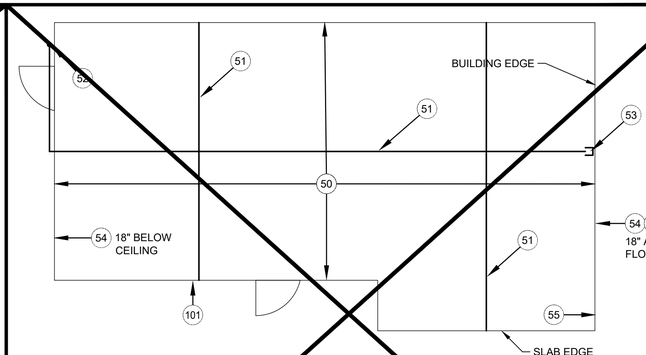


2 BPS LINER SYSTEM

NTS | REFERENCE SHEET:



SECTION B-B



CONSTRUCTION NOTES

50 CONSTRUCT BUILDING PROTECTION LINER SYSTEM

51 INSTALL 2" PERFORATED PVC PIPE IN GRAVEL PER DETAIL 5, SHEET C-113

52 INSTALL BPS VENT RISER PER DETAIL 6, SHEET C-113

53 INSTALL 2" PVC CAP

54 INSTALL METHANE SENSOR

55 CONSTRUCT REQUIRED SIGNAGE PER SPECIFICATIONS AND PER DETAIL 1, SHEET C-113

100 INSTALL HYDROGEN SULFIDE SENSOR

101 INSTALL METHANE DETECTION SYSTEM CONTROLLER AND HORN STROBE ALARM SYSTEM

NOTES:
1. FINAL LOCATION OF METHANE SENSORS, HYDROGEN SULFIDE SENSORS, METHANE DETECTION SYSTEM CONTROLLERS AND HORN STROBE ALARM SYSTEMS TO BE DETERMINED IN THE FIELD.

6 BUILDING PROTECTION SYSTEM

NTS | REFERENCE SHEET: C-105

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
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTINEZ
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
DETAILS

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-113

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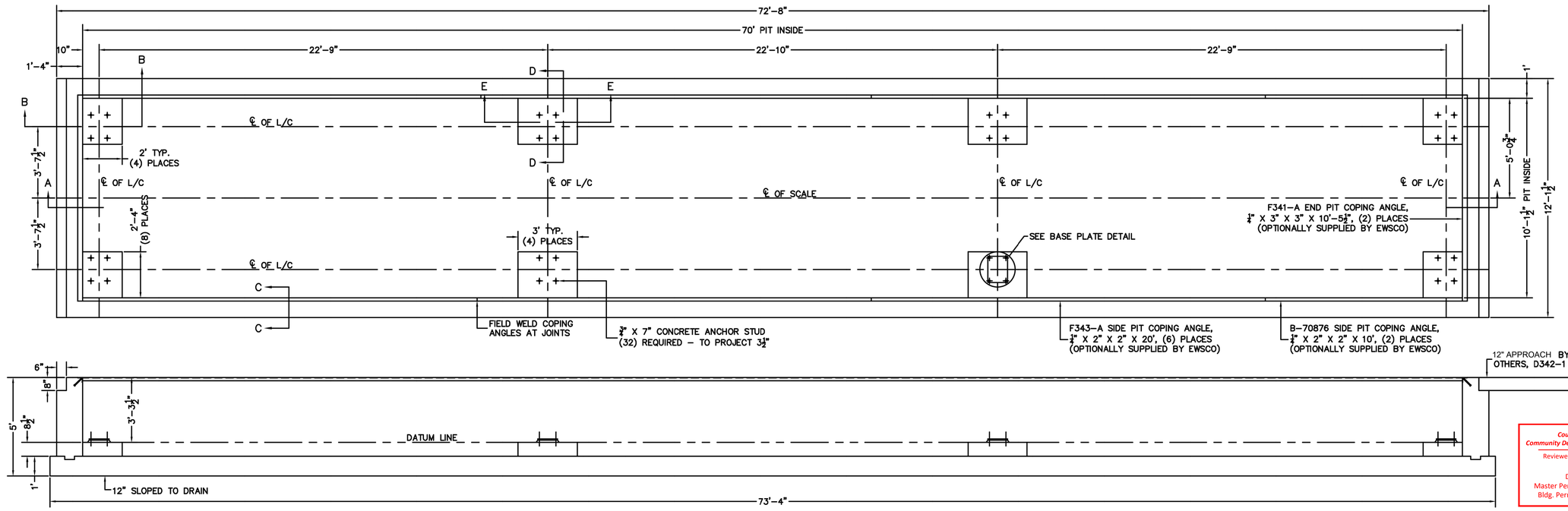
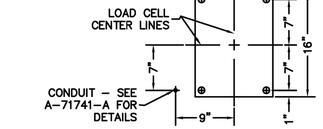
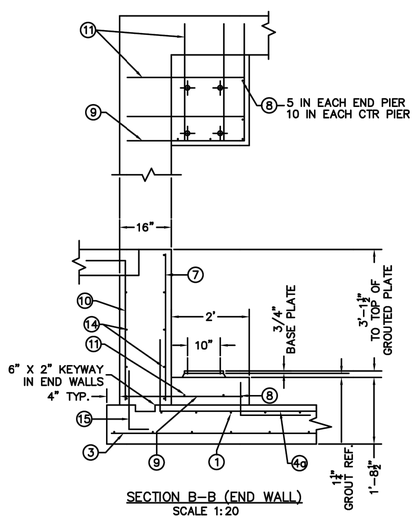
4/11/2025 1:31:02 PM - O:\PROJECTS\IRVINE\42064\200-42064-22005\CAD\SHEETFILES\C-113_DETAILS.DWG - MELTON, CONNOR

Bar Measures 1 inch, otherwise drawing not to scale





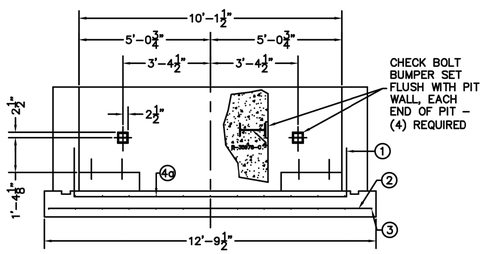
TYPICAL LOAD CELL BASE PLATE DETAIL
USE PLATES FOR TRANSFER DRILLING
SCALE: 1:10



SECTION B–B (END WALL)
SCALE 1:20

DIM A	COPING LOCATION
3"	ENDS
2"	SIDES
SEE PART CALL OUT ON PLAN VIEW	

DETAIL OF PIT COPING
SCALE: none



INTERIOR VIEW OF END PIT WALL

TYPE 1	TYPE 2	TYPE 3
A	B, A	B, A, C

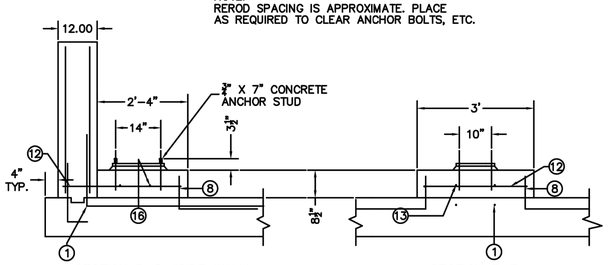
REINFORCING ROD SCHEDULE H44-10070

ITEM	QTY	SPACING	SIZE	LENGTH FT	LENGTH IN.	TYPE	DESCRIPTION A	DESCRIPTION B	DESCRIPTION C	WEIGHT LBS
1	71	12	#6	16	02	3	10'-6"	2'-10"	2'-10"	1724
2	73	12	#5	12	04	1	12'-4"			939
3	39	12	#5	25	02	1	25'-2"			1024
4	11	12	#6	25	02	1	25'-2"			416
4a	22	12	#6	27	02	2	25'-2"	2'-0"		898
5	60	12	#4	25	02	1	25'-2"			1009
6	72	24	#4	3	10	1	3'-10"			184
7	168	12	#4	3	10	1	3'-10"			430
8	60	12	#6	2	09	2	2'-0"	0'-9"		248
9	4	12	#6	6	00	2	3'-0"	3'-0"		36
10	26	12	#4	4	09	2	3'-9"	1'-0"		83
11	16	12	#4	3	00	1	3'-0"			32
12	4	12	#6	8	09	3	2'-9"	3'-0"	3'-0"	53
13	8	12	#6	3	00	1	3'-0"			36
14	18	12	#4	11	10	1	11'-10"			142
15	168	12	#4	3	04	2	2'-10"	0'-6"		374
16	8	12	#4	2	09	1	2'-9"			15
									TOTAL	7643

REBAR = 7643 LBS
EXCAVATION = 174 CU. YDS.
CONCRETE = 62 CU. YDS.

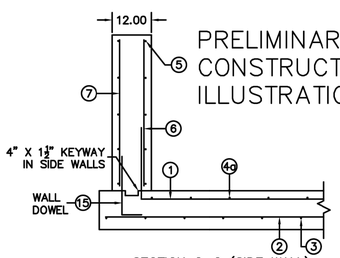
MIN OVERLAP 20" FOR ITEM 5
MIN OVERLAP 26" FOR ITEM 3
MIN OVERLAP 31" ON ITEMS 4 & 4a

NOTE:
REROD SPACING IS APPROXIMATE. PLACE
AS REQUIRED TO CLEAR ANCHOR BOLTS, ETC.



SECTION D–D (SIDE WALL)
SCALE 1:20

SECTION E–E
SCALE 1:20



SECTION C–C (SIDE WALL)
SCALE 1:20

PRELIMINARY NOT FOR CONSTRUCTION. FOR ILLUSTRATION ONLY.

NOTES:

FOR COMMERCIAL SCALES CHECK WITH LOCAL WEIGHTS AND MEASURES OFFICIALS BEFORE STARTING CONSTRUCTION. NATIONAL BUREAU OF STANDARDS HANDBOOK 44 REQUIRES:
A.) A STRAIGHT APROACH OF AT LEAST ONE–HALF THE LENGTH OF THE PLATFORM.
B.) NOT LESS THAN 10 FEET OF APPROACH ADJACENT TO THE PLATFORM TO BE CONSTRUCTED OF CONCRETE OR SIMILAR DURABLE MATERIAL AND BE LEVEL AND IN THE SAME PLANE AS THE PLATFORM.

FOR NON COMMERCIAL SCALES PROVIDE AN APPROACH OF 2 FEET MINIMUM LENGTH WHICH IS LEVEL AND IN THE SAME PLANE AS THE PLATFORM.

CHECK WITH THE PROPER REGULATORY AUTHORITIES AS TO ANY SPECIAL STATE OR OTHER REGULATORY REQUIREMENTS REGARDING PIT DEPTHS. PIT CONSTRUCTION AND APPROACH DIMENSIONS WHICH MIGHT AFFECT INSTALLATION ARE SHOWN. EMERY WINSLOW WILL ASSUME NO RESPONSIBILITY FOR CHANGES NECESSITATED BY ANY STATE OR ANY OTHER REGULATORY REQUIREMENTS AS TO INSTALLATION OF OUR SCALES.

EMERY WINSLOW SCALE COMPANY WILL NOT BE RESPONSIBLE FOR THE STABILITY OF THE FOUNDATION IF CONSTRUCTION IS NOT IN STRICT ACCORDANCE WITH THIS PLAN.

A SOIL BEARING CAPACITY OF 3500 POUNDS PER SQUARE FOOT (MINIMUM) IS REQUIRED. THE END USER SHALL BE RESPONSIBLE FOR DETERMINING WHETHER OR NOT SOIL CHARACTERISTICS MEET THIS REQUIREMENT.

EXCAVATION, FOUNDATION FORMS, REBAR AND CONCRETE ARE FURNISHED BY OTHER THAN EMERY WINSLOW. ERECT AND SET ANCHOR BOLTS FROM CENTERLINES. TOLERANCES ON DIMENSIONS LOCATING ANCHOR BOLTS ARE PLUS OR MINUS ONE–QUARTER INCH. TOPS OF PIERS SHALL BE FINISHED SMOOTH AND LEVEL, ALSO IN THE SAME PLANE. THE SIDE AND END WALLS SHALL BE SQUARE WITH EACH OTHER. THE TOP OF THE WALLS AT THE COPING ANGLES IS TO BE ON ONE LEVEL PLANE.

ALL CONCRETE SHOULD DEVELOP 4000 PSI IN 28 DAYS WITH Fc = 1600 MINIMUM.

ALL REINFORCING STEEL SHALL BE INTERMEDIATE OR HARD GRADE NEW BILLET STEEL AND CONFORM TO ASTM SPECIFICATION NUMBER A615 GRADE 60, MINIMUM.

HOLD ALL REINFORCING STEEL TO WITHIN 1–1/2" FROM FACE OF CONCRETE, EXCEPT FOR WHERE CONCRETE IS EXPOSED TO SOIL, IN WHICH CASE THE COVERAGE SHALL BE 3".

ALL REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH CRSI CODE AND SHALL BE PROPERLY TIED TO REMAIN IN PLACE DURING CONCRETE POURING.

THE SCALE PIT SHALL REMAIN DRY AT ALL TIMES AND ADEQUATE DRAINAGE SHALL BE PROVIDED FOR THE PURPOSE OF INSPECTION AND CLEANING. IN CASE A DRAIN CAN NOT BE USED AND A SUMP PUMP IS USED, IT MUST BE AUTOMATIC. FLOOR OF PIT MUST SLOPE TOWARD DRAIN OR SUMP INLET. DRAIN SHOULD BE 4" MINIMUM WITH GRATE COVER.

MARK	DATE	DESCRIPTION	BY
F		REV.'S UPDATED	CEM
E	11/08	PIT COPING NOW OPTIONALLY SUPPLIED	CEM
D	02/08	SEC B–B B. PL. & GROUT DIM'S ADJUSTED	CEM
C	11/06	CONDUIT NOTE ADDED TO BASE PLATE DETAIL	CEM
B	03/05	FRACTIONAL DIM.'S WERE DECIMAL	CEM
A	10/04	L/C SPANS CHANGED – EVENED OUT	CEM
LTR	04/04	REVISION	BY
	DATE		

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FULL SIZE PLOT D–24X36

ALL SHARP CORNERS AND EDGES TO BE BROKEN

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
MACHINING .XX = ± .01 .XXX = ± .005
FABRICATION ± .13

DRAWN CEM DATE 03/22/04
CHECKED DATE
ACAD FILENAME: T01691
LAYERS USED: ALL

EMERY WINSLOW SCALE COMPANY
SEYMOUR, CT U.S.A TERRE HAUTE, IN.

MODEL H44–10070–10
6" CD, 70' X 10'
FOUNDATION w/4' PIT

SCALE 1:30 | FIRST USED ON | DRAWING NO. D– 71554 | REV. F

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
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTIN
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION
IMPROVEMENTS

SCALE DETAILS

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-114

1 | EMERY WINSLOW SCALE
NTS | REFERENCE SHEET:

Bar Measures 1 inch, otherwise drawing not to scale

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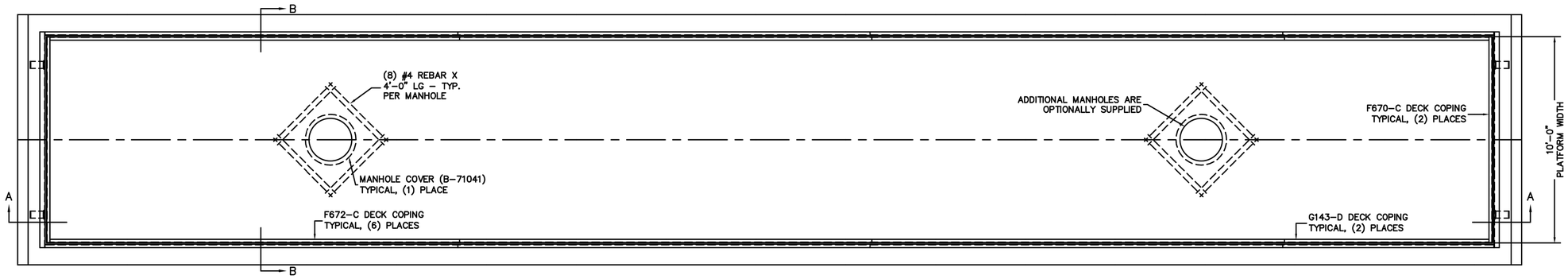
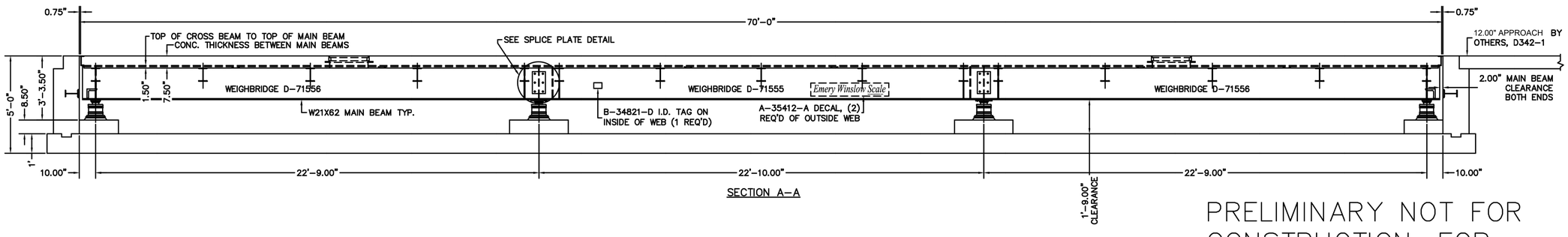
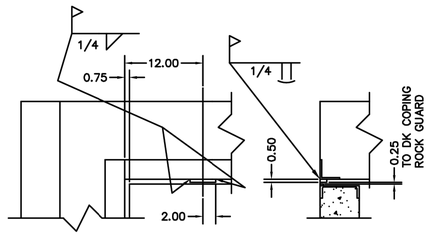




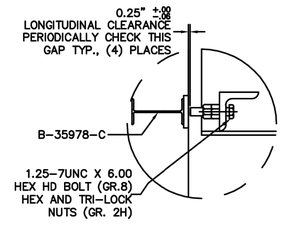
SECTION A–A

PRELIMINARY NOT FOR CONSTRUCTION. FOR ILLUSTRATION ONLY.



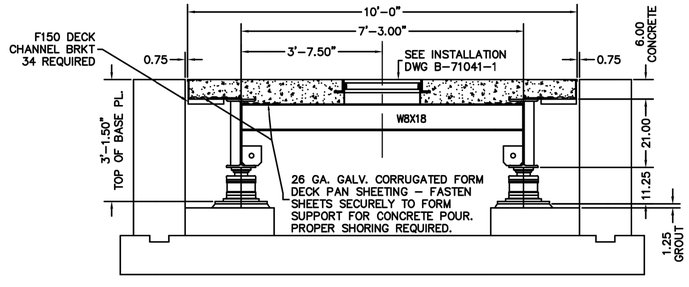
TYPICAL CORNER DETAIL SHOWING INSTALLATION OF TRANSVERSE CHECKING BUMPER PLATE (0.50 X 1.00 X 4.00) (4) REQUIRED PER PLATFORM

SCALE 1:10



DETAIL OF LONGITUDINAL CHECK BOLT BUMPER (END WALL)

SCALE 1:10



SECTION B–B

ROTATE 90°, SCALE 1:20

NOTES:

1. REFERENCE INFORMATION:

FOUNDATION PLAN	D-71554-F
PIPING DIAGRAM (4 SECTION)	B-33069-G
DECK REINFORCING DETAIL	A5928 Line 5
DECK CHANNEL INSTALLATION	D-9302B-G
APPROACH	D342-1
LOAD CELL INSTALLATION INSTR.	A-72143
NTEP NUMBER	92-086PA2
CLC	80,000
LOADING AT EACH LOAD CELL	50,000 LB

2. CRANE CAPACITY & INSTALLATION NOTES:
   THE MINIMUM CAPACITY IS 3600 LB, LARGEST PIECE APPROXIMATELY 24' X 8' X 2'
   SET TWO END BRIDGES FIRST, FOLLOWED BY THE CENTER BRIDGE SUCH THAT THE CENTER BRIDGE IS CONNECTED TO THE END BRIDGES BY THE FOUR (4) LOAD PLATES WITH CENTERING RINGS ET AL. ALIGN BRIDGES AND INSTALL SPLICE PLATES.
   LIFT BRIDGES MADE FOR CONCRETE DECKS BY (4) LOOPS ON THE MAIN BEAMS.
   LIFT BRIDGES MADE FOR STEEL DECKS BY THE STRINGERS.
   INSTALL BRIDGE(S) BEFORE INSTALLING THE DECK.

3. FOR COMMERCIAL SCALES CHECK WITH LOCAL WEIGHTS AND MEASURES OFFICIALS BEFORE STARTING CONSTRUCTION. NATIONAL BUREAU OF STANDARDS HANDBOOK 44 REQUIRES:
   A.) A STRAIGHT APPROACH OF AT LEAST ONE–HALF THE LENGTH OF THE PLATFORM.
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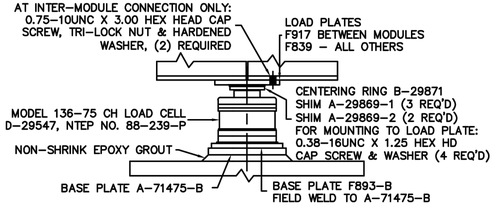
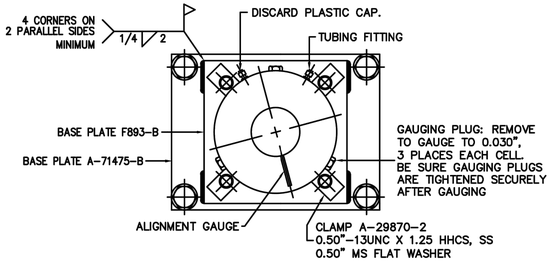


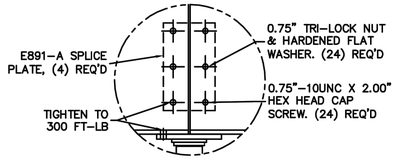
VIEW OF LOAD CELL INSTALLED AT WEIGHBRIDGE CONNECTION (SEE DWG A-72143)

SCALE 1:10



TYPICAL TOP VIEW OF CELL ON BASE PLATE (VIEW ROTATED 90°) FIELD WELD BASE PLATE TO LOWER PLATE AFTER LOADCELL IS PROPERLY CENTERED WITH CENTERING RING

SCALE 1:5



SPLICE PLATE DETAIL

SCALE 1:10

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

LTR	REVISION	DATE	BY
G	REV.'S UPDATED	11/08	CEM
F	DETAILS UPDATED	02/08	CEM
E	REV.'S UPDATED A.R. PL. A-71475 WAS F918	11/06	CEM
D	REV.'S UPDATED	12/05	CEM
C	SPLICE PLATE DETAIL ADDED	03/05	CEM
B	DETAILS & REV.'S UPDATED	10/04	CEM
A	L/C SPANS CHANGED – EVENED OUT	04/04	CEM

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FULL SIZE PLOT D-24X36

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

MACHINING	FABRICATION
XX = ± .01	± .13
XXX = ± .005	

DRAWN CEM DATE 03/22/04
CHECKED DATE
ACAD FILENAME: T01690
LAYERS USED: ALL

EMERY WINSLOW SCALE COMPANY
SEYMOUR, CT U.S.A TERRE HAUTE, IN.

MODEL 44-10070-10
6" CD, 70' X 10'
OUTLINE w/4' PIT

SCALE	FIRST USED ON	DRAWING NO.	REV.
1:30		D– 71553	G

MARK	DATE	DESCRIPTION	BY
	12/23/24	ISSUED FOR PERMIT	EM
	04/11/25	REVISED FOR PERMIT REVIEW	EM

TETRA TECH
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REGISTERED PROFESSIONAL ENGINEER ERIC T. MARTIN C 84829 EXP: 03/31/2026 CIVIL STATE OF CALIFORNIA

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

SCALE DETAILS

PROJ: 200-42064-22005
DESN: EM
DRWN: CM
CHKD: EM

C-115

1 | EMERY WINSLOW SCALE
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Bar Measures 1 inch, otherwise drawing not to scale

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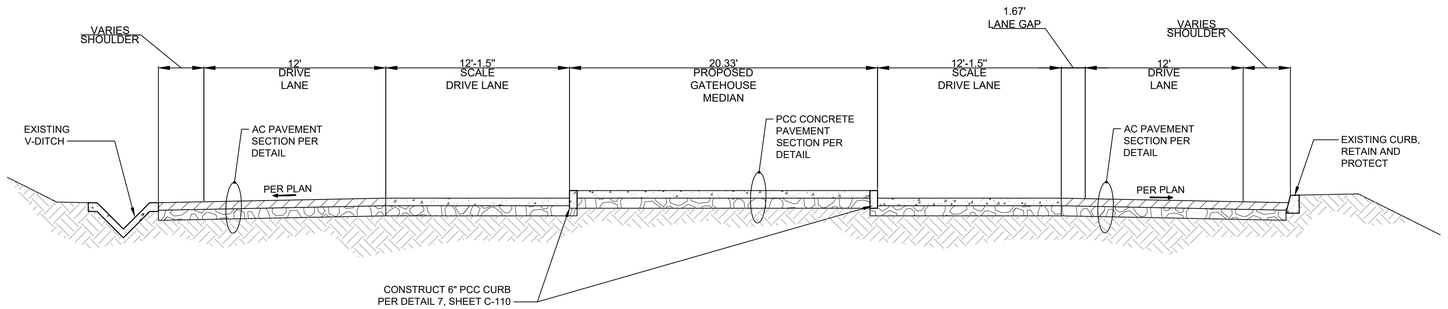
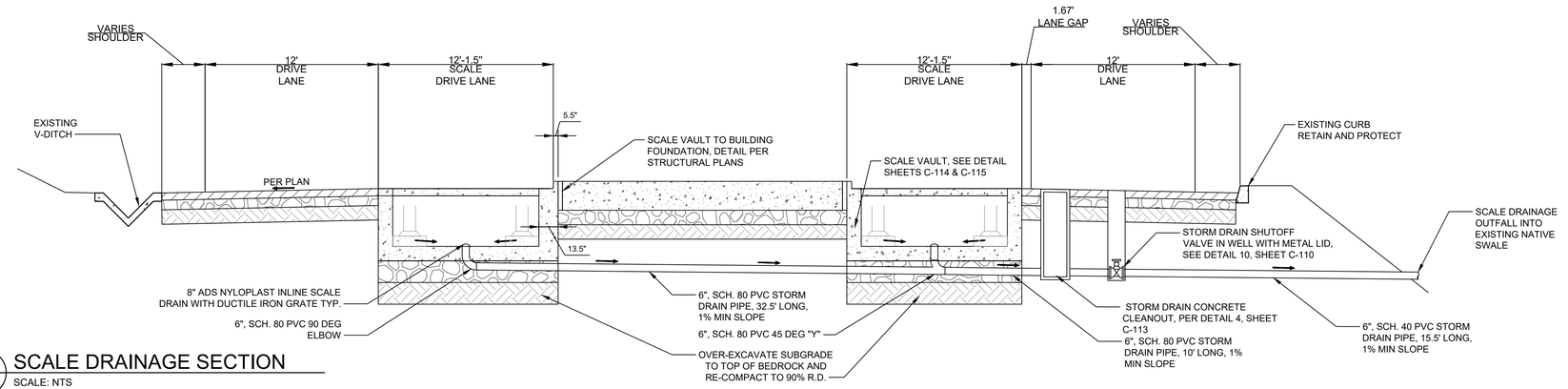


A C-116 SCALE/GATEHOUSE SECTION

SCALE: NTS



B C-116 SCALE DRAINAGE SECTION

SCALE: NTS

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REGISTERED PROFESSIONAL ENGINEER
ERIC T. MARTINEZ
C 84829
EXP: 03/31/2026
CIVIL
STATE OF CALIFORNIA

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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

SECTIONS

PROJ: 200-42064-22005

DESN: EM

DRWN: CM

CHKD: EM

C-116

County of Santa Cruz
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Bar Measures 1 inch, otherwise drawing not to scale

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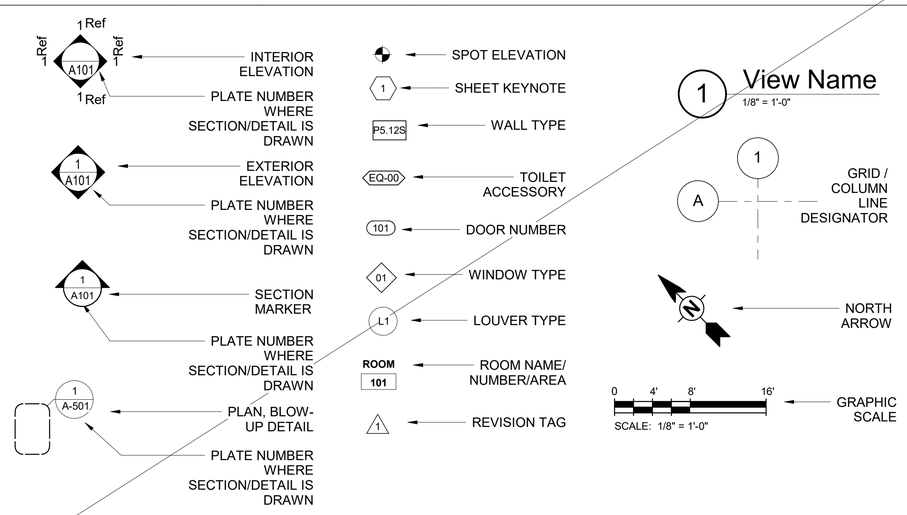
ABBREVIATIONS

A	----------
AB	ANCHOR BOLT
ACC	ACCESSIBLE
ACI	AMERICAN CONCRETE INSTITUTE
ACP	ACOUSTICAL CEILING PANEL
ACT	ACOUSTICAL CEILING TILE
ACU	AIR CONDITIONING UNIT
ADA	AMERICANS WITH DISABILITIES ACT
ADD	ADDITIONAL
AFF	ABOVE FINISH FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZE
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)
AWT	ACOUSTICAL WALL TREATMENT
B	----------
BD	BOARD
BFF	BELOW FINISH FLOOR
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BRG	BEARING
BRKT	BRACKET
BTWN	BETWEEN
C	----------
CBB	CEMENTITIOUS BACKER BOARD
CD	CONSTRUCTION DOCUMENT(S)
CF	CONTRACTOR FURNISHED
CFCI	CONTRACTOR FURNISHED (CONTRACTOR INSTALLED)
CFT	CERAMIC FLOOR TILE
CG	CORNER GUARD
CI	CAST IRON
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLG DIFF	CEILING DIFFUSER
CLG HT	CEILING HEIGHT
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
COMM	COMMUNICATIONS
CONC	CONCRETE
CONC FLR	CONCRETE FLOOR
CONF	CONFERENCE
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CORR	CORRIDOR
CPT	CARPET
CSWK	CASEWORK
CT	CERAMIC TILE
CTR	CENTER
CU FT	CUBIC FEET
CWT	CERAMIC WALL TILE
D	----------
DBL	DOUBLE
DEMO	DEMOLISH
DEPT	DEPARTMENT
DIA	DIAMETER
DIM	DIMENSION
DIST	DISTANCE
DN	DOWN
DOC	DOCUMENT
DR	DOOR
DS	DOWNSPOUT
DWG(S)	DRAWING(S)
E	----------
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
F	----------
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FAS BD	FASCIA BOARD
FD	FLOOR DRAIN
FDTN	FOUNDATION
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HOSE
FIG	FIGURE
FIN	FINISH (ED)
FIXT	FIXTURE
FL	FLOOR
FLMT	FLUSH MOUNTED
FLR	FLOOR
FLUOR	FLUORESCENT
FM	FACTORY MUTUAL
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STEEL
FR	FIRE RESISTANT
FRMG	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
FRT	FIRE RETARDANT TREATED
FT	FOOT
FTG	FOOTING
FUR	FURRING
G	----------
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GFCI	GOVERNMENT FURNISHED / CONTRACTOR INSTALLED
GL	GRID LINE
GLZ	GLAZING
GR FL	GROUND FLOOR
GRTG	GRATING
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	----------
HB	HOSE BIB
HK	HOOK
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING VENTILATION AND AIR CONDITIONING
HW, HDWR	HARDWARE
I	----------
IBC	INTERNATIONAL BUILDING CODE
IG	INSULATING GLASS
IJ	ISOLATION JOINT
IN	INCH
INSUL	INSULATION
IWP	INSULATED WALL PANEL
J	----------
J	JUNCTION BOX
JAN	JANITOR
JST	JOIST
JT	JOINT
K	----------
KPL	KICKPLATE
L	----------
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LF	LINEAR FOOT (FEET)
LIN	LINEAR
LKR	LOCKER
LOC	LOCATION
LP	LIGHT POLE
LT	LIGHT
LVR	LOUVER
M	----------
MATL	MATERIAL
MAX	MAXIMUM
MD	METAL DECK
MECH	MECHANICAL (ROOM)
MEMB	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MIRR	MIRROR
MO	MASONRY OPENING
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
N	----------
NA	NOT APPLICABLE
ND	NAPKIN DISPOSAL
NDS	NAPKIN DISPENSER
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	----------
OC	ON CENTER
OCC	OCCUPANCY
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFF	OFFICE
OFOI	OWNER FURNISHED OWNER INSTALLED
OPCI	OWNER PROVIDED (CONTRACTOR INSTALLED)
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OTS	OPEN TO STRUCTURE
OZ	OUNCE
P	----------
PA	PUBLIC ADDRESS
PB	PULL BOX
PCC	PRECAST CONCRETE
PCT	PERCENT
PEMB	PRE-ENGINEERED METAL BUILDING
PERF	PERFORATED
PERM	PERIMETER
PERP	PERPENDICULAR
PLAM	PLASTIC LAMINATE
PLAS	PLASTIC
PLBG	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
POLY	POLYSTYRENE
PR	PAIR
PRCST	PRECAST
PREFAB	PREFABRICATED
PRKG	PARKING
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PWR	POWER
Q	----------
QTY	QUANTITY
R	----------
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REC	RECESSED
REF	REFERENCE
REFR	REFRIGERATOR
REQ	REQUIRE
REQ'D	REQUIRED
RESIL	RESILIENT
REV	REVISION
RM	ROOM
RO	ROUGH OPENING
RR	RESTROOM
S	----------
SCHED	SCHEDULE
SCW	SOLID CORE WOOD
SCWD	SOLID CORE WOOD DOOR
SD	SMOKE DETECTOR
SDSF	SOLID SURFACE
SF	SQUARE FOOT
SF	SQUARE FEET
SH	SOAP HOLDER
SHT MTL	SHEET METAL
SHTHG	SHEATHING
SIM	SIMILAR
SJ	SCORED JOINT
SKLT	SKYLIGHT
SLR	SEALER
SM	SQUARE METER
SND	SANITARY NAPKIN AND TAMPON DISPENSER
SPEC	SPECIFICATIONS
SQ	SQUARE
SQ FT	SQUARE FOOT (FEET)
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STL JST	STEEL JOIST
STOR	STORAGE
STRUCT	STRUCTURE(AL)
SUSP	SUSPENDED
SV	SHEET VINYL
T	----------
T	TREAD
TD	TRAVEL DISTANCE
TEMP	TEMPORARY
THK	THICKNESS
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TS	TUBE STEEL
TYP	TYPICAL
U	----------
UNO	UNLESS NOTED OTHERWISE
V	----------
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VTR	VENT THROUGH ROOF
W	----------
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD

ANNOTATION CALLOUTS/DRAWING SYMBOLS



GENERAL NOTES

1. THE DRAWINGS INDICATE THE GENERAL EXTENT OF WORK. THE DRAWINGS ARE NOT INTENDED TO INDICATE OR DESCRIBE ALL WORK REQUIRED FOR THE FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. REPETITIVE FEATURES NOT NOTED ON THE DRAWINGS SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
2. ROOM AND DOOR NUMBERS SHOWN ON DRAWINGS ARE FOR CONSTRUCTION PURPOSES ONLY.
3. DIMENSIONS ON DRAWINGS ARE TAKEN FROM THE LOCATIONS LISTED BELOW:

   FACE OF CMU WALLS

   ROUGH OPENING OF DOORS

   ROUGH OPENING OF WINDOWS

   MASONRY OPENINGS
4. DIMENSIONS ON INTERIOR ELEVATIONS ARE TAKEN FROM THE LOCATIONS LISTED BELOW:

   FINISHED GYPSUM WALLBOARD

   FACE OF PLASTIC LAMINATE

   FACE OF CABINETRY

   CENTERLINE OF FIXTURES
5. ALL WORK SHALL COMPLY WITH APPLICABLE BUILDING CODES, ORDINANCES AND REGULATORY AGENCIES.
6. BUILDING HEIGHTS AND ELEVATIONS ARE BASED UPON PROJECT FINISH ELEVATION OF 0'-0" AT THE FIRST FLOOR. REFERENCE CIVIL DRAWINGS FOR FIRST FLOOR ELEVATIONS RELATIVE TO SEA LEVEL.
7. CONFIRM QUANTITY, TYPE AND PLACEMENT OF ALL FIRE EXTINGUISHERS WITH THE FIRE MARSHAL . COORDINATE FINAL LOCATIONS WITH THE ARCHITECT PRIOR TO PLACEMENT. FIRE EXTINGUISHER BASIS OF DESIGN: LARSEN OR APPROVED EQUAL.
8. REFER TO LIFE SAFETY DRAWINGS FOR FIRE-RATED FLOOR, WALL, CEILING AND ROOF LOCATIONS. INSTALL FIRESTOPPING AT PENETRATIONS IN RATED CONSTRUCTION AND AT TOPS OF RATED WALLS.
9. MECHANICAL, ELECTRICAL, CIVIL, STRUCTURAL AND PROCESS INFORMATION ON THE ARCHITECTURAL DRAWINGS IS PROVIDED FOR CLARITY AND / OR LOCATION COORDINATION PURPOSES ONLY, SEE RELEVANT DISCIPLINE DRAWINGS FOR SPECIFIC INFORMATION.
10. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL OF MECHANICAL AND ELECTRICAL COORDINATION DRAWINGS TO ARCHITECT OR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES.
11. ROOF PITCHES INDICATED ARE NOMINAL. SEE STRUCTURAL DRAWINGS FOR BEARING HEIGHTS.
12. WORK SHALL CONFORM TO APPLICABLE INDUSTRY AND MANUFACTURER'S PUBLISHED STANDARDS FOR QUALITY OF MATERIALS AND WORKMANSHIP, AS WELL AS REQUIREMENTS IN THESE DRAWINGS AND SPECIFICATIONS. ANY CONFLICTING REQUIREMENTS OF THE SOURCES LISTED ABOVE SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION PRIOR TO PROCEEDING WITH THE WORK.
13. PROTECT EXISTING, IN-PLACE AND NEW WORK.
14. CONTRACTOR SHALL VERIFY DIMENSIONS AND EXISTING CONDITIONS, SHOWN ON THESE DRAWINGS AND, AT THE SITE. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES, OMISSIONS AND OR CONFLICTS BEFORE COMMENCEMENT OF WORK. COMMENCEMENT OF WORK SHALL CONSTITUTE CONTRACTOR'S ACCEPTANCE OF ALL NEW OR EXISTING CONDITIONS.
15. PROVIDE UNDERSLAB TERMITE PROTECTION AS REQUIRED BY GOVERNING BUILDING CODE REQUIREMENTS.
16. PIPE DUCTS AND BUSS DUCTS THAT PENETRATE FLOOR SLABS OR WALL PARTITIONS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE MOISTURE RESISTANCE, FIRE RATING, AIR AND/OR VAPOR BARRIER, AND STRUCTURAL INTEGRITY OF THE BUILDING.
17. VERIFY MOUNTING HEIGHTS OF ACCESSORIES, EQUIPMENT, DOOR HARDWARE, CASEWORK, ETC., AND PROVIDE SOLID BLOCKING BEHIND ITEMS REQUIRING ANCHORAGE. PROVIDE FIRE-TREATED WOOD BLOCKING OR METAL STRAPS BETWEEN FRAMING MEMBERS AS REQUIRED TO SUPPORT WEIGHT AND USE OF ITEMS TO BE SUPPORTED. WHERE MOUNTING HEIGHTS ARE NOT INDICATED, MOUNT ITEMS IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS, COORDINATE LOCATIONS AND BLOCKING REQUIREMENTS WITH MANUFACTURER OR SUPPLIER AND REFER MOUNTING HEIGHT QUESTIONS TO ARCHITECT FOR INTERPRETATION.
18. ALL CONCEALED WOOD FRAMING, AND PLYWOOD SHALL BE FIRE RETARDANT TREATED (FRT) EXCEPT THAT NON-FRT BLOCKING, NAILERS AND FURRING MAY BE USED WHERE INSTALLED IN ACCORD WITH IBC 718 (INCLUDING DIMENSIONAL WOOD BLOCKING, FIRE BLOCKING, REQUIREMENTS, ETC.). WOOD BLOCKING INSTALLED IN ACCORD WITH IBC SECITON 603 FOR HANDRAILS, MILLWORK, CABINETS, WINDOWS AND DOORS IS NOT REQUIRED TO BE FRT. AT COPINGS AND ROOFING TERMINATIONS ALL BLOCKING SHALL BE PRESSURE TREATED (PT).
19. AT EXTERIOR MASONRY WALLS, CMU SHALL BE EXTENDED TIGHT TO FLOOR AND / OR ROOF DECKS, INCLUDING AROUND ALL PENETRATIONS SUCH AS BEAMS, JOIST ENDS, AND ETC. FILLING VOIDS IN EXT. CMU BACK-UP WITH INSULATION IN LIEU OF A SOLID MASONRY ENCLOSURE SHALL NOT BE PERMITTED.
20. VERTICAL COURSING FOR NEW MASONRY WALL CONSTRUCTION SHALL EQUAL EIGHT INCHES (8") FOR ONE CONCRETE MASONRY UNIT PLUS ONE MORTAR JOINT AND THREE BRICK COURSES PLUS THREE MORTAR JOINTS, UNLESS NOTED OTHERWISE.
21. PROVIDE CONTROL JOINTS (C.J.) IN MASONRY WALL CONSTRUCTION AS INDICATED. WHERE NOT SHOWN, PROVIDE MAXIMUM SPACING BETWEEN JOINTS OF 40'-0" AND MAXIMUM DISTANCE BETWEEN OUTSIDE CORNERS AND JOINTS OF 10'-0." PROVIDE JOINTS BETWEEN INTERIOR LOAD BEARING AND NON-LOAD BEARING PARTITIONS, AT ALL ABRUPT CHANGES IN WALL HEIGHT, AT CHANGES IN PARTITION THICKNESS AND AT PILASTER LOCATIONS. VERIFY FINAL CONTROL JOINT LOCATIONS WHETHER OR NOT INDICATED ON THE DRAWINGS WITH ARCHITECT PRIOR TO STARTING WORK.
22. PROVIDE CONTROL JOINTS (C.J.) IN GYPSUM BOARD WALL CONSTRUCTION AS INDICATED. WHERE NOT SHOWN, PROVIDE MAXIMUM SPACING BETWEEN JOINTS OF 30'-0." VERIFY FINAL CONTROL JOINT LOCATIONS WHETHER OR NOT INDICATED ON THE DRAWINGS WITH ARCHITECT PRIOR TO STARTING WORK.
23. INTERIOR PARTITION MOVEMENT CONTROL: (A). VERTICAL CONTROL JOINTS FOR ANY WALL ARE TO OCCUR AT NOT MORE THAN 30'-0" O.C. IN THE HORIZONTAL DIRECTION, UNO. (B). THE TYPICAL MOVEMENT OF THE STRUCTURE DUE TO DEFLECTION AT THE HEAD OF THE WALL CONSTRUCTION RUNNING TO THE UNDERSIDE OF THE STRUCTURE SHALL BE +/- 1/2".
24. INTERIOR STUD SPACING SHALL BE MINIMUM 16" ON CENTER UNLESS NOTED OTHERWISE.
25. PROVIDE WATER-RESISTANT GYPSUM BOARD ON WALLS WITH OPERABLE PLUMBING FIXTURES AND WITHIN 4'-0" OF DRINKING FOUNTAINS OR WATER COOLERS.
26. PROVIDE FINISHED END PANELS, FILLERS, SUPPORTS, ETC. REQUIRED FOR A COMPLETE CABINETRY INSTALLATION. PROVIDE CUTOUTS, ACCESS PANELS AND REMOVABLE COMPONENTS AS REQUIRED BY NEW OR EXISTING CONDITIONS SUCH AS ELECTRICAL OUTLETS, JUNCTION BOXES, CLEANOUTS, ETC.
27. PROVIDE SEALANT BETWEEN HOLLOW METAL FRAME PERIMETERS AND SURROUNDING WALL CONSTRUCTION UNLESS OTHERWISE INDICATED.
28. PROVIDE SEALANT BETWEEN INTERIOR AND EXTERIOR WINDOW AND STOREFRONT FRAME PERIMETERS AND SURROUNDING CONSTRUCTION UNLESS OTHERWISE INDICATED. DON NOT BLOCK DRAINAGE CHANNELS OR WEEPS.
29. PROVIDE SEALANT BETWEEN DISSIMILAR MATERIALS SUCH AS GYPSUM BOARD AND MASONRY, MASONRY AND CONCRETE, COUNTERTOPS AND WALLS, ETC.
30. MANUFACTURERS ARE REFERENCED TO ESTABLISH STYLE, SIZE, COLOR AND MATERIAL CHARACTERISTICS AND ARE NOT INTENDED TO LIMIT SELECTIONS FROM OTHER MANUFACTURERS. WHEN AN ALTERNATE SELECTION IS SUBMITTED, SUBMITTALS SHALL HAVE INCLUDED THE MATERIAL LISTED FOR COMPARISION.
31. CHAMFER EXTERNAL CORNERS OF EXPOSED CONCRETE WALLS 1" TYPICAL. UNLESS OTHERWISE NOTED. COORDINATE WITH STRUCTURAL.
32. FLASHING COLOR TO MATCH ADJACENT WALL COLOR UNLESS NOTED OTHERWISE.
33. ALL DOORS IN STUD WALLS NOT LOCATED BY DIMENSION ON PLANS OR DETAILS SHALL BE 4" (100mm) FROM FRAMING TO ADJACENT PERPENDICULAR WALL TO EDGE OF DOOR OPENING.
34. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED WOOD.
35. UNLESS NOTED OTHERWISE ALL GYPSUM WALLBOARD IS TO RECEIVE ONE PRIMER COAT AND TWO COATS OF PAINT AS PER SPECIFICATION 099000.
36. PROVIDE EXPANSION AND CONTROL JOINTS IN ALL WORK AS PER PRODUCT MANUFACTURER'S STANDARDS.
37. ALL DISSIMILAR MATERIALS SHALL BE ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
38. PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR MECHANICAL EQUIPMENT AND PLUMBING WORK AND MAINTENANCE. ALL ACCESS PANEL LOCATIONS SHALL BE REVIEWED WITH THE ARCHITECT OR ARCHITECTS REPRESENTATIVE PRIOR TO PROCEEDING.
39. "ALIGN" AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE FINISHED FACES IN THE SAME PLAN AND/OR TO INSTALL NEW CONSTRUCTION ADJACENT TO EXISTING CONSTRUCTION WITHOUT ANY VISIBLE JOINTS OR SURFACE IRREGULARITIES.
40. "CLEAR" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS NOT ADJUSTABLE WITHOUT APPROVAL OF THE ARCHITECT. CLEAR DIMENSIONS ARE TYPICAL.
41. "MAXIMUM" OR "MAX" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY GREATER THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
42. "MINIMUM" OR "MIN" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY LESS THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
43. "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION OR DIMENSION IS THE SAME OR REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT.
44. "+/-" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE DIMENSION OR QUALITY IS SLIGHTLY ADJUSTABLE TO ACCOMMODATE ACTUAL CONDITIONS, FIELD VERIFICATION AND COORDINATION WITH OTHER ELEMENTS AS MIGHT BE NECESSARY.

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100% DESIGN

ISSUED FOR PERMIT REVIEW

MARK	DATE	DESCRIPTION	BY
	1/29/24	30% DESIGN	MMB
	4/12/24	60% DESIGN	MMB
	6/14/24	90% DESIGN	MMB
	8/02/24	100% DESIGN	MMB
	12/23/24	100% PERMIT REVIEW	MMB
	2/14/25	REVISED FOR PERMIT REVIEW	MMB

COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL ABBREVIATIONS & GENERAL NOTES

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

A-001

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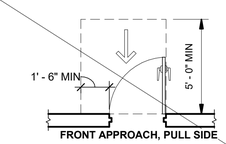
2/14/2025 10:10:19 AM Autodesk Docs://213-42064-24001 BL Scale House/A-BL_Scale_House-213-42064-24001-v2023.rvt

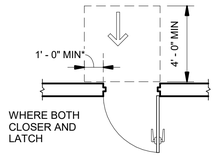
Bar measures 1 inch, otherwise drawing is not to scale

GENERAL NOTES - ACCESSORY MOUNTING HEIGHTS

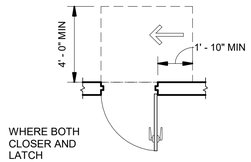
1. IT IS THE INTENT OF THE DESIGN THAT ALL ITEMS SHOWN MOUNTED AT TYPICAL HEIGHTS FOR COMPLIANCE WITH GOVERNING AUTHORITY OF ADAAG, ADA, AND/OR ANSI 117.1 CURRENT EDITIONS
2. THE PURPOSE OF THIS SHEET IS TO ILLUSTRATE TYPICAL MOUNTING HEIGHTS AND CLEARANCES - WHERE APPLICABLE - CAUTION: THIS SHEET MAY ILLLUSTRATE ITEMS OR CONFIGURATIONS WHICH DO NOT OCCUR AS PART OF THE WORK. REFER TO PLANS, ELEVATIONS, SECTIONS AND SCHEDULES TO DETERMINE WHICH ITEMS AND CONFIGURATIONS APPLY TO THE WORK OF THIS PROJECT.
3. PROVIDE IN-WALL BLOCKING AS REQUIRED FOR ALL SURFACE MOUNTED ACCESSORIES. REFER TO SHEET 7/S-504 FOR BLOCKING DETAILS.



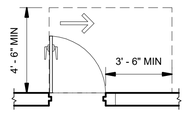
FRONT APPROACH, PULL SIDE



FRONT APPROACH, PUSH SIDE



HINGE APPROACH, PUSH SIDE



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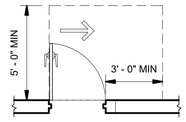
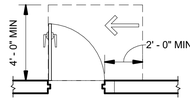
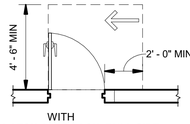


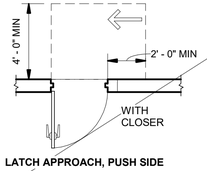
HINGE APPROACH, PULL SIDE



LATCH APPROACH, PULL SIDE



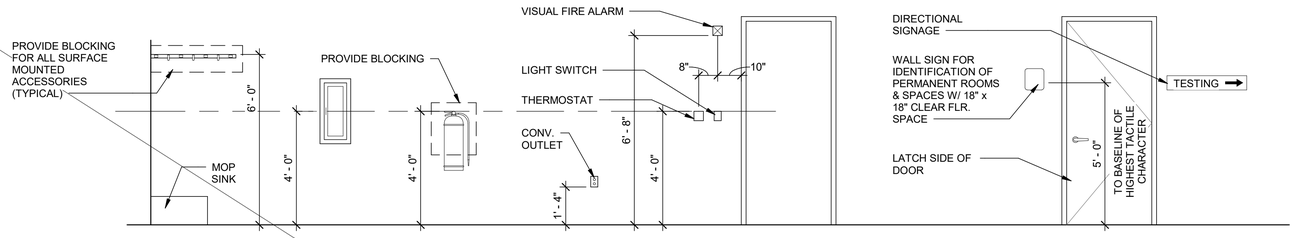
LATCH APPROACH, PULL SIDE



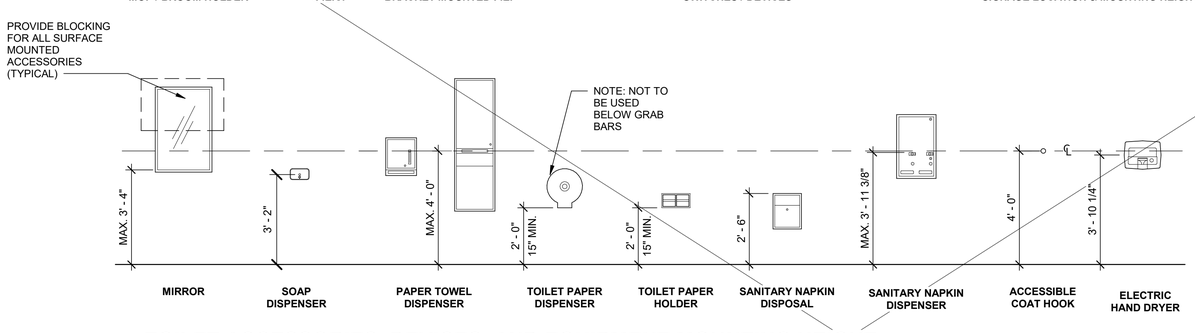
LATCH APPROACH, PUSH SIDE

MANUVERING CLEARANCE

SCALE: NTS

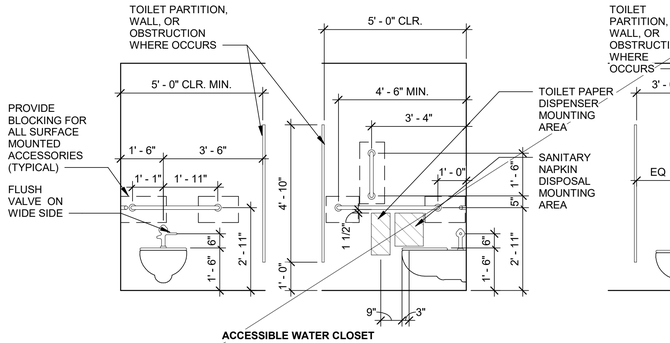


MOP / BROOM HOLDER | F.E.C. | BRACKET MOUNTED F.E. | SWITCHES / DEVICES | SIGNAGE LOCATION & MOUNTING HEIGHT

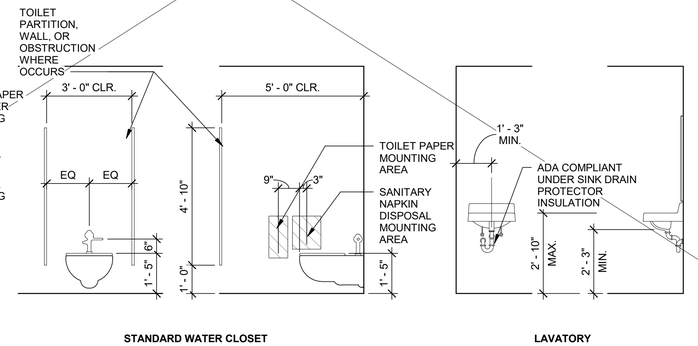


MIRROR | SOAP DISPENSER | PAPER TOWEL DISPENSER | TOILET PAPER DISPENSER | TOILET PAPER HOLDER | SANITARY NAPKIN DISPOSAL | SANITARY NAPKIN DISPENSER | ACCESSIBLE COAT HOOK | ELECTRIC HAND DRYER

TOILET ACCESSORIES, DEVICES, AND EQUIPMENT MOUNTING HEIGHT

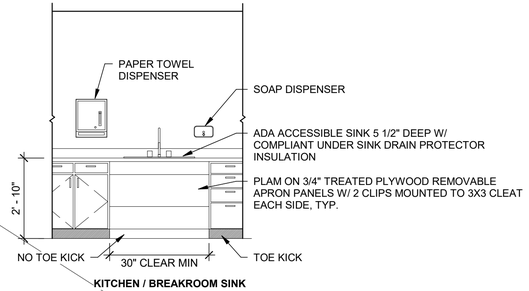


ACCESSIBLE WATER CLOSET

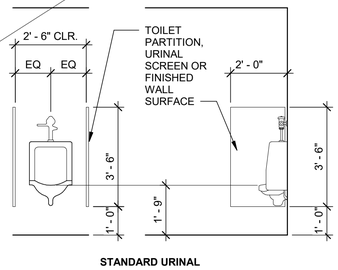


STANDARD WATER CLOSET

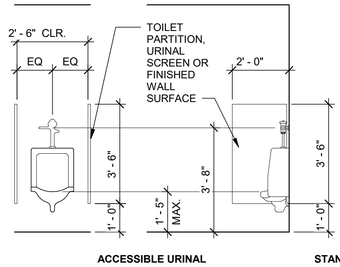
LAVATORY



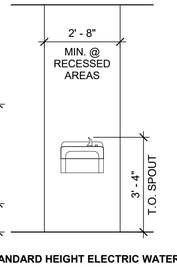
KITCHEN / BREAKROOM SINK



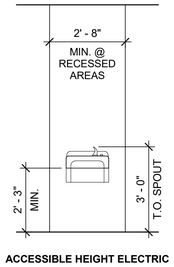
STANDARD URINAL



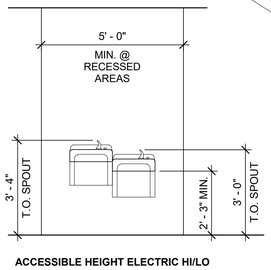
ACCESSIBLE URINAL



STANDARD HEIGHT ELECTRIC WATER COOLER



ACCESSIBLE HEIGHT ELECTRIC WATER COOLER



ACCESSIBLE HEIGHT ELECTRIC HI/LO WATER COOLER

MOUNTING HEIGHTS

SCALE: NTS

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL STANDARDS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

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Bar measures 1 inch, otherwise drawing is not to scale

BUILDING CODE AND LIFE SAFETY ANALYSIS

SUMMARY		
"B" GROUP USE OCCUPANCY	BUSINESS GROUP B	(CBC 304.1)
SINGLE-USE		
NON-SPRINKLERED		
GENERAL BUILDING LIMITATIONS		
AREAS BASED ON USE GROUP - BUSINESS GROUP B	BUSINESS GROUP B	(CBC TABLE 503)
NUMBER OF STORIES PERMITTED - NON SPRINKLED - TYPE VB CONSTRUCTION	2 STORIES	(CBC TABLE 504.4)
STORY INCREASE - FULLY SPRINKLED	2+1 STORIES	(CBC TABLE 504.4)
PLANNED BUILDING STORIES - NON SPRINKLED	1 STORY	
TOTAL AREA PERMITTED - B / VB	9,000 SF	(CBC TABLE 506.2)
AREA INCREASE FOR FULLY SPRINKLED	36,000 SF	(CBC TABLE 506.2)
PLANNED BUILDING AREA	598 SF	
BUILDING HEIGHT PERMITTED - NON SPRINKLED - TYPE VB CONSTRUCTION	40 FEET	(CBC TABLE 504.3)
BUILDING HEIGHT PERMITTED - FULLY SPRINKLED	60 FEET	(CBC TABLE 504.3)
PLANNED BUILDING HEIGHT	19 FEET	
SEPARATION OF OCCUPANCIES	N/A	(CBC TABLE 508.4)
INCIDENTAL USE	N/A	(CBC 509 / TABLE 509.1)
TYPE OF CONSTRUCTION		
TYPE "VB" NON-COMBUSTIBLE	TYPE VB	(CBC TABLE 601)
FIRE-RESISTANT CONSTRUCTION		
BUILDING ELEMENTS - FIRE-RESISTANCE RATING	TYPE VB	(CBC TABLE 601)
PRIMARY STRUCTURAL FRAMING	0 HR	
BEARING WALLS - EXTERIOR	0 HR	
BEARING WALLS - INTERIOR	0 HR	
NON-BEARING WALLS AND PARTITIONS - INTERIOR	0 HR	
FLOOR CONSTRUCTION AND ASS. SECONDARY	0 HR	
ROOF CONSTRUCTION AND ASS. SECONDARY	0 HR	
MAX AREA OF EXTERIOR OPENINGS	NOT REQUIRED	(CBC TABLE 705.8)
FIRE WALLS	N/A	(CBC TABLE 706.4)
FIRE BARRIERS	N/A	(CBC TABLE 707.3.10)
FIRE PARTITIONS	N/A	(CBC 708)
SMOKE BARRIERS	N/A	(CBC 709)
SMOKE PARTITIONS	N/A	(CBC 710)
FLOOR AND ROOF ASSEMBLIES - TYPE VB	NOT REQUIRED	(CBC 711.2.3)
SHAFT ENCLOSURES	1HR REQUIRED SEPARATION, FIRE-RESISTANT	(CBC 713.4)
INTERIOR WALL & CEILING FINISHES - EXITS & STAIRWAYS	CLASS A	(CBC TABLE 803.13)
INTERIOR WALL & CEILING FINISHES - CORRIDORS	CLASS B	(CBC TABLE 803.13)
INTERIOR WALL & CEILING FINISHES - ROOMS	CLASS C	(CBC TABLE 803.13)
FLOOR FINISHES	CLASS II	(CBC 804)
FIRE PROTECTION SYSTEMS		
AUTOMATIC SPRINKLER SYSTEM - SPRINKLER REQUIREMENT	NOT REQUIRED	(CBC 903.2)
STANDPIPE SYSTEM	NOT REQUIRED	(CBC 905.3)
FIRE EXTINGUISHERS - ORDINARY (MODERATE) HAZARD	CLASS A, 2A-10B-C	(CBC 906.3, NFPA 10)
FIRE ALARM & DETECTION SYSTEM	NOT REQUIRED; PER CONDITIONS	(CBC 907.2.2, NFPA 72)
MEANS OF EGRESS / EXITS		
REQUIRED EXIT WIDTH / OCCUPANTS - STAIRS (#OCC. X .3 INCHES) = 4 x 0.3 = 1.2"	NA - NO STAIRS	(CBC 1005.3.1)
REQUIRED EXIT WIDTH / OCCUPANTS - DOORS, OTHER (#OCC. X .2 INCHES) = 4 x 0.2 = 0.8"	0.8 INCHES - 3 EXITS PROVIDED	(CBC 1005.3.2)
OCCUPANT LOAD - 586 GSF / 150 LOAD FACTOR = 4 OCCUPANTS	4 OCCUPANTS	(CBC 1004)
ACCESSIBLE MEANS OF EGRESS	0 REQUIRED / 0 PROVIDED	(CBC 1009)
MAX COMMON PATH OF EGRESS	100 FEET, FULLY SPRINKLED	(CBC TABLE 1014.3)
MAX EXIT ACCESS TRAVEL DISTANCE	250 FEET, FULLY SPRINKLED	(CBC TABLE 1017.2)
CORRIDOR FIRE-RESISTANCE RATING	0.5 HR	(CBC TABLE 1020.1)
MIN CORRIDOR WIDTH	44 INCHES	(CBC TABLE 1020.2)
MAX CORRIDOR DEAD END	50 FEET	(CBC 1020.4)
EXITS	0 REQUIRED / 2 PROVIDED	(CBC TABLE 1006.2.1)
PLUMBING FIXTURES		
WATER CLOSETS	1 REQUIRED / 1 PROVIDED	(CBC TABLE 2902.1)
LAVATORIES	1 REQUIRED / 1 PROVIDED	(CBC TABLE 2902.1)
DRINKING FOUNTAINS - LOCATED IN MAIN BUILDING (BREAK ROOM)	0 REQUIRED / 0 PROVIDED	(CBC TABLE 2902.1)
MOP BASINS - LOCATED IN MAIN BUILDING (JANITOR ROOM AND SUPPLIES)	0 REQUIRED / 0 PROVIDED	(CBC TABLE 2902.1)
ENERGY CODE		
2022 CALIFORNIA ENERGY CODE; TITLE 24; PART 6	CLIMATE ZONE 3	
BEN LOMOND TRANSFER STATION - 9835 NEWELL CREEK ROAD, BEN LOMOND CA 95005		
NEW TRANSFER STATION ENTRY PAY BOOTH		
LOW SLOPE ROOF - MINIMUM SOLAR REFLECTANCE OF 0.63		(CEC TABLE 140.3-B)
LOW SLOPE ROOF - MINIMUM THERMAL EMITTANCE OF 0.75		(CEC TABLE 140.3-B)
ROOFS/CEILINGS - METAL BUILDINGS - MAXIMUM U-VALUE OF 0.041 - CONTINUOUS INSUL	RIGID INSUL (ALONE) - R-30	(CEC TABLE 140.3-B)
WALLS - METAL-FRAMED - REQUIRED MAXIMUM U-VALUE OF 0.071	PROVIDED U-0.083 + U-0.067 (R-12CI + R-15)	(CEC TABLE 140.3-B)
AIR BARRIER - REQUIRED		(CEC TABLE 140.3-B)
FENESTRATION - FIXED WINDOW - U=0.36 / RSHGC-0.25		(CEC TABLE 140.3-B)
FENESTRATION - CURTAIN WALL - U-0.41 / RSHGC-0.26		(CEC TABLE 140.3-B)
FENESTRATION - OPERABLE WINDOW - U-0.46 / RSHGC-0.22		(CEC TABLE 140.3-B)
DOOR UNITS - OPAQUE - SWINGING - U=1.45		(CEC TABLE 140.3-B)

LIFE SAFETY LEGEND

T.D. = XX' — TRAVEL DISTANCE = __ FEET
PATH OF TRAVEL SYMBOL

FEC — FIRE EXTINGUISHER AND SURFACE MOUNTED CABINET

OCCUPANCY - USE CLASSIFICATION (IBC 1004.1.2)

OCCUPANT LOAD FACTOR (IBC 1004.1.2)

SQUARE FOOT AREA OF SPACE

0 | 0

NUMBER OF OCCUPANTS PER SPACE

EXIT — ACCESSIBLE EXIT

0" | 0" — EXITING WIDTH REQUIRED

WIDTH PROVIDED

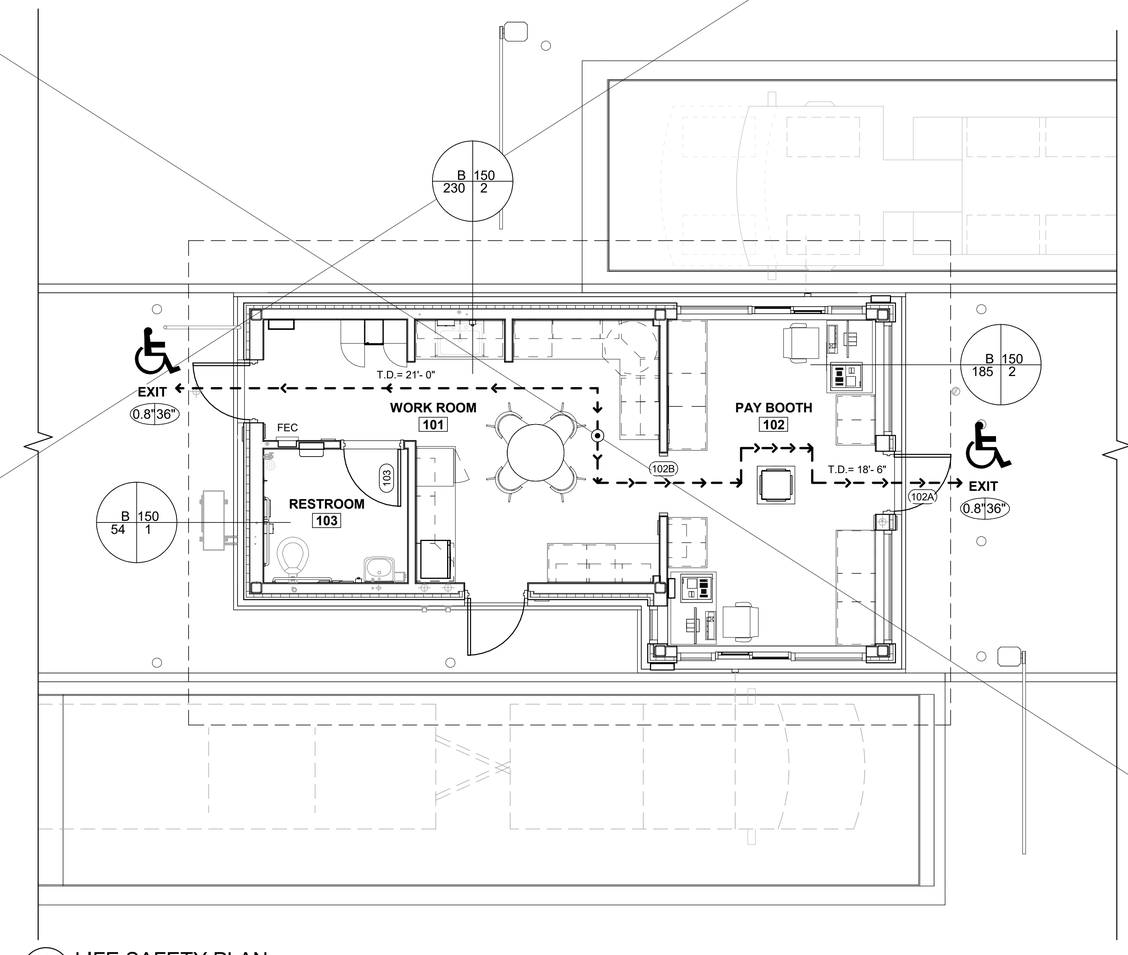
APPLICABLE BUILDING CODES

2022 CALIFORNIA BUILDING CODE (IBC)

2010 ADA STANDARDS / 2017 ICC A117.1

OCCUPANCY SCHEDULE

ROOM NO	ROOM NAME	AREA	OCC CLASS	OCC. LOAD
101	WORK ROOM	228 SF	B = 1/150	2
102	PAY BOOTH	189 SF	B = 1/150	2
103	RESTROOM	54 SF	B = 1/150	1
TOTAL:		471 SF		5



1 / A-003 LIFE SAFETY PLAN
SCALE: 1/4" = 1'-0"

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL CODE REVIEW

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

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KEYNOTES

8 OUTLINE OF ROOF ABOVE.

9 6" DIA BOLLARD.

10 VEHICULAR SCALES.

11 SCALE ENTRY SWING GATE; CFCI.

12 SCALE EXIT SWING GATE; CFCI.

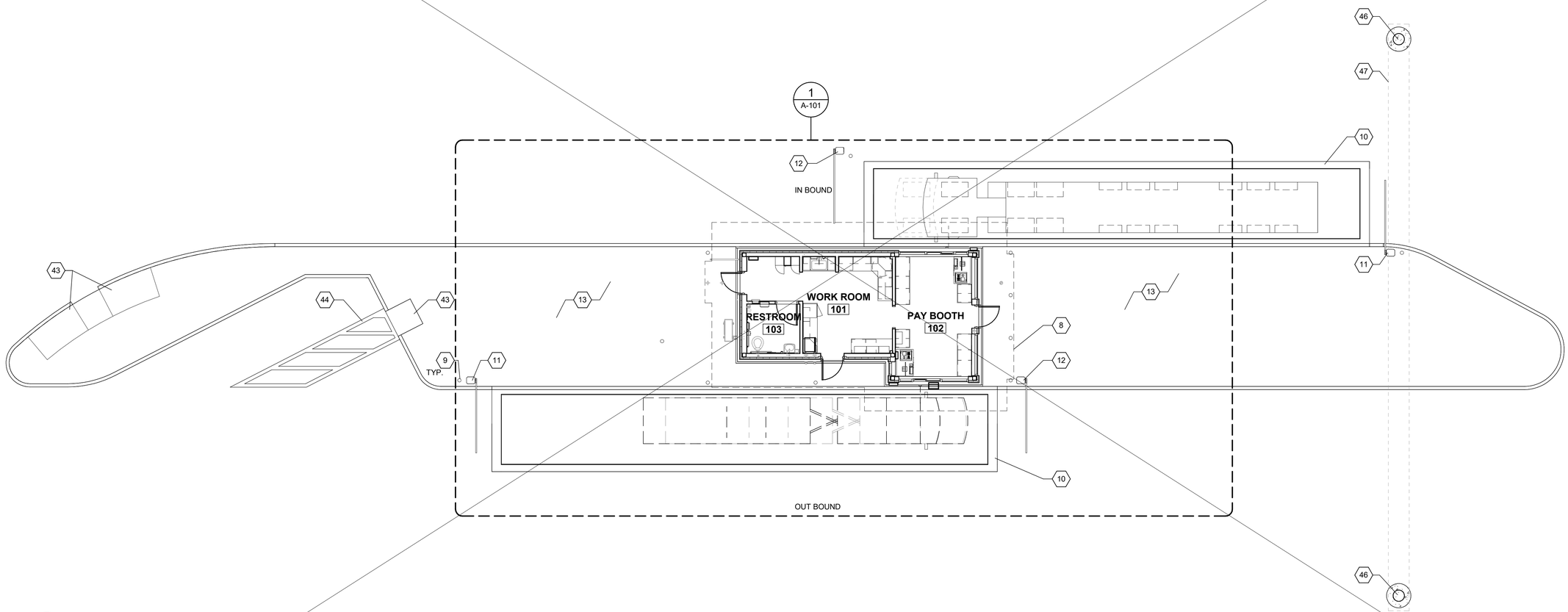
13 SIDEWALK, SEE CIVIL DWGS.

43 ADA RAMP, SEE CIVIL DRAWINGS.

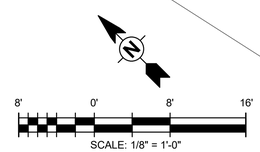
44 STRIPING PAINT, SEE CIVIL DWGS.

46 CONCRETE PEDESTAL, SEE STRUCTURAL DWGS.

47 OVERHEAD BANNER FRAME, SEE STRUCTURAL DWGS.



1 SCALE HOUSE SITE PLAN
A-100 SCALE: 1/8" = 1'-0"



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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL
SCALE HOUSE SITE PLAN

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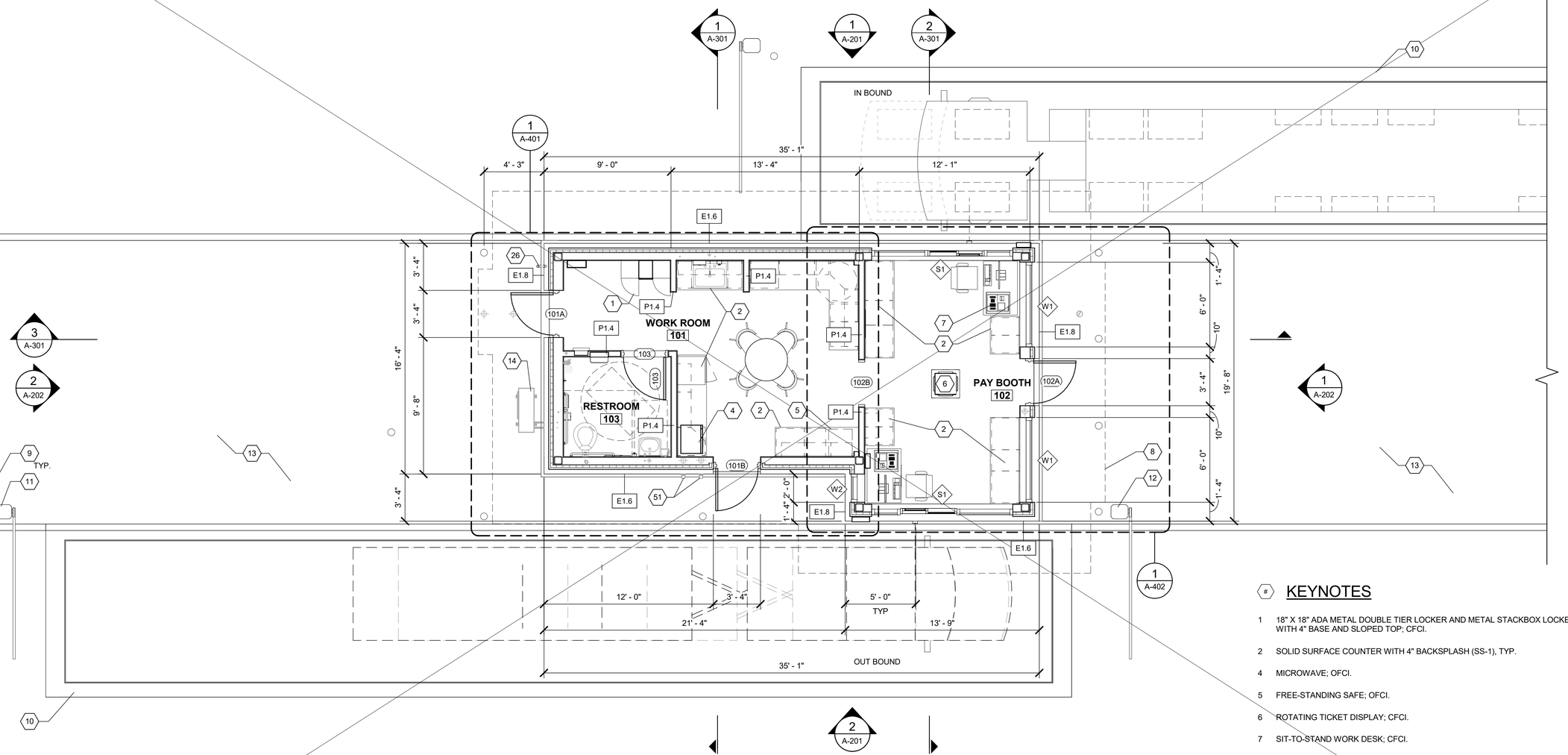
GENERAL NOTES - FLOOR PLAN

1. REFER TO SHEETS A-001 AND A-002 FOR GENERAL NOTES, SYMBOLS, LEGENDS AND STANDARDS AND TYPICAL MOUNTING HEIGHTS.
2. REFER TO SHEET A-601 FOR DOOR AND WINDOW TYPES, DOOR AND WINDOW SCHEDULE, PARTITION TYPES AND DETAILS.
3. REFER TO SHEET A-602 FOR ROOM FINISH SCHEDULE AND DETAILS.
4. REFER TO SHEET A-603 FOR SIGNAGE SCHEDULE AND DETAILS.



KEYNOTES

1 18" X 18" ADA METAL DOUBLE TIER LOCKER AND METAL STACKBOX LOCKER WITH 4" BASE AND SLOPED TOP; CFCI.

2 SOLID SURFACE COUNTER WITH 4" BACKSPLASH (SS-1), TYP.

4 MICROWAVE; OFCI.

5 FREE-STANDING SAFE; OFCI.

6 ROTATING TICKET DISPLAY; CFCI.

7 SIT-TO-STAND WORK DESK; CFCI.

8 OUTLINE OF ROOF ABOVE.

9 6" DIA BOLLARD.

10 VEHICULAR SCALES.

11 SCALE ENTRY SWING GATE; CFCI.

12 SCALE EXIT SWING GATE; CFCI.

13 SIDEWALK, SEE CIVIL DWGS.

14 EQUIPMENT, SEE MECHANICAL.

26 BPS VENT RISER, SEE CIVIL DWGS.

51 BRONZE COW TONGUE, SEE PLUMBING DWGS.

1 A-101 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

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BEN LOMOND SCALE HOUSE

ARCHITECTURAL FLOOR PLAN

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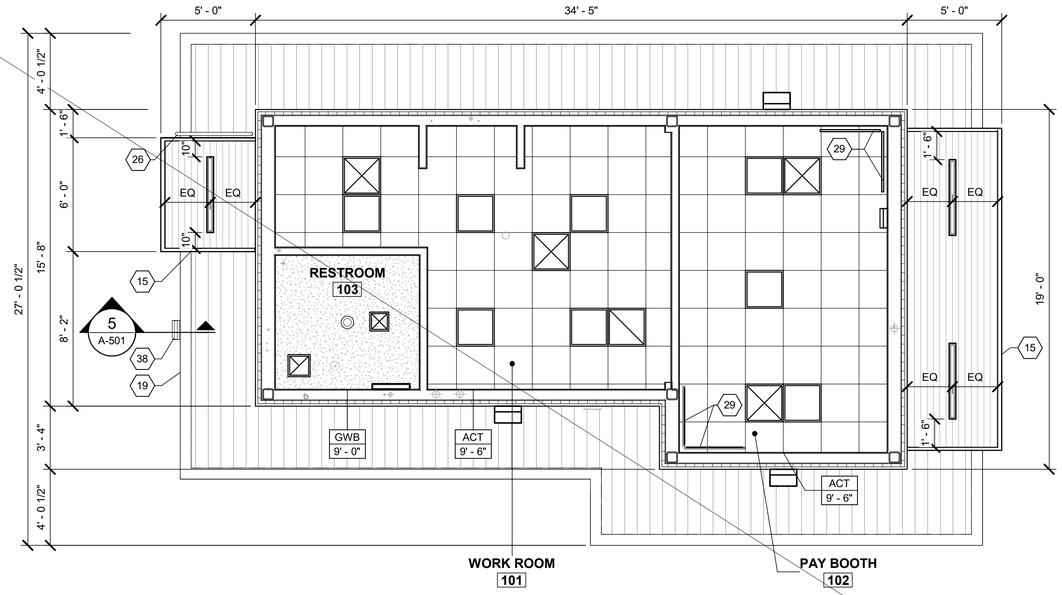
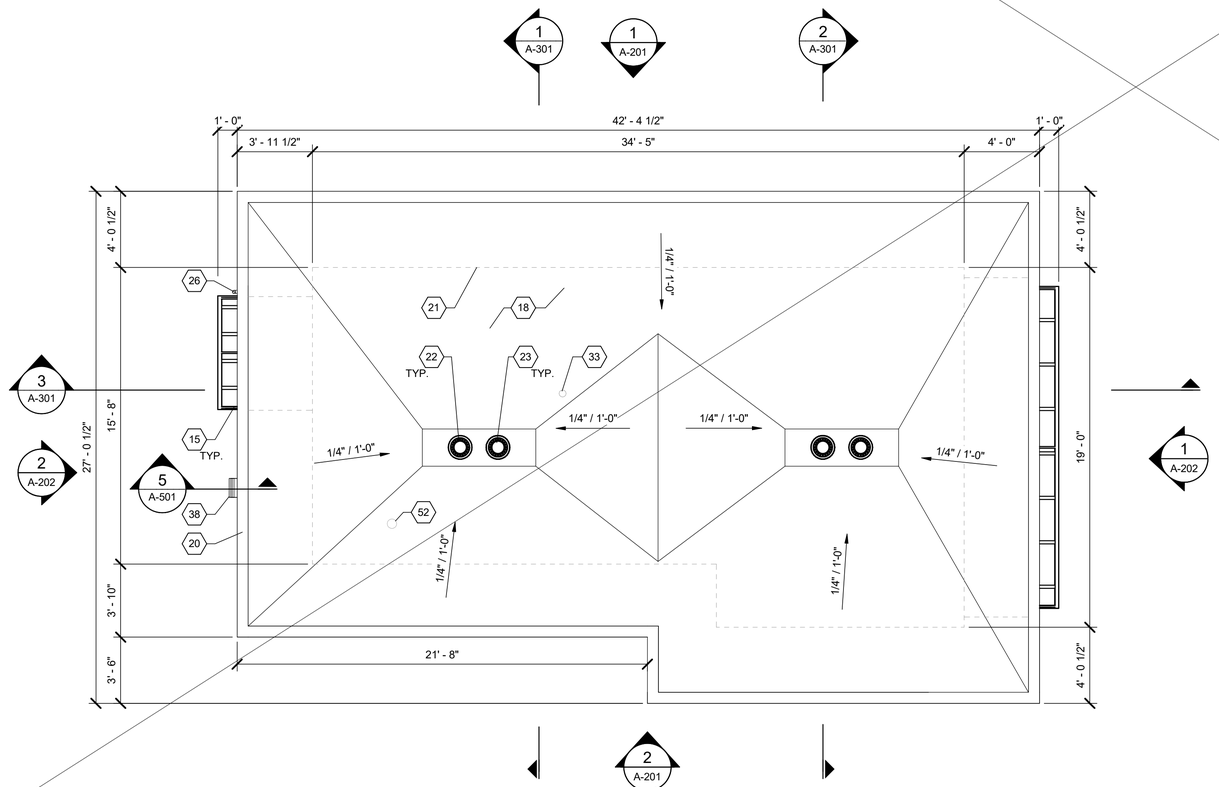


1 A-102 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"



2 A-102 ROOF PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES - ROOF PLAN

1. VERIFY SIZE, LOCATION, AND NUMBER OF ROOF PENETRATIONS INCLUDING VENTS, PIPES, CURBS, CONDUITS, ETC. PRIOR TO PLACEMENT OF ROOFING SYSTEM.
2. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EQUIPMENT AND ROOF PENETRATION LOCATIONS.

GENERAL NOTES - RCP

1. ALL ELECTRICAL, FIRE PROTECTION, HVAC, ETC. COMPONENTS TO BE CENTERED ON ACT PANELS.
2. CENTER ALIGN CEILING GRID SYSTEM WITHIN EACH ROOM.
3. THE INFORMATION ON THE REFLECTED CEILING PLAN IS PROVIDED ONLY AS A LOCATIONAL GUIDE FOR THE CONTRACTOR. REFER TO MECHANICAL, ELECTRICAL, AND FIRE SAFETY PLANS FOR EXACT TYPE, AND LOCATIONS OF FIXTURES, REGISTERS, AND EQUIPMENT
4. NOTIFY THE ARCHITECT OR ARCHITECT'S REPRESENTATIVE IN WRITING, PRIOR TO CONSTRUCTION, OF ANY CONFLICTS BETWEEN PROPOSED REFLECTED CEILING ASSEMBLIES AND OTHER WORK.
5. LIGHTS IN INDIVIDUAL OFFICE ROOMS SHALL BE SWITCHED FROM INDIVIDUAL SWITCHES IN EACH ROOM.
6. SWITCH ALL DOWNLIGHTS SEPARATELY FROM 2X4 FIXTURES.
7. COORDINATE SIZE, LOCATION, AND FINISH OF REQUIRED ACCESS PANELS IN GYPSUM BOARD CEILIGS WITH ARCHITECT OR ARCHITECT'S REPRESENTATIVE AND OTHER TRADES PRIOR TO PROCEEDING WITH CONSTRUCTION.
8. ALL GYPSUM BOARD CEILINGS TO BE PAINTED PURE WHITE, UNLESS NOTED OTHERWISE.
9. REFER TO SHEET A-402 FOR TV MOUNTING HEIGHTS.

(#) KEYNOTES

15 PRE-ENGINEERED CANOPY. MAPES SUPER LUMIDECK FLAT SOFFIT CANOPY OR APPROVED EQUAL.

18 ROOF SYSTEM 1 (RS-1): 60 MIL (MIN) SINGLE PLY ROOF (EPDM) MEMBRANE SYSTEM OVER 1/2" COVERBOARD OVER CONTINUOUS R-30 INSULATION OVER SELF-ADHESIVE VAPOR BARRIER MEMBRANE OVER 5/8" GYPSUM BOARD ROOF SHEATHING OVER 1 1/2" METAL DECK OVER STEEL BAR JOISTS.

19 EXTERIOR LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS.

20 METAL COPING CAP.

21 OUTLINE OF BUILDING ELEMENTS BELOW.

22 ROOF DRAIN.

23 ROOF DRAIN, OVERFLOW.

26 BPS VENT RISER, SEE CIVIL DWGS.

29 WALL MOUNTED 43" TV MONITORS AND TV MOUNT, PROVIDE BLOCKING FOR DISPLAY MOUNT; OPCI.

33 VENT PIPE, SEE PLUMBING DWGS.

38 METAL LADDER BRACKET.

52 EXHAUST DUCT, SEE MECHANICAL DWGS.

CEILING LEGEND

- 24" x 24" ACT CEILING
- GYP. BD. CEILING
- METAL SOFFIT
- METAL SOFFIT, PRE-ENGINEERED CANOPY
- WALL LIGHT PACK
- RETURN AIR DIFFUSER
- SUPPLY AIR DIFFUSER
- EXHAUST AIR DIFFUSER
- 24" x 24" LIGHT FIXTURE
- 4" X 24" LED LIGHT

4' 0' 4' 8'

SCALE: 1/4" = 1'-0"

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL REFLECTED CEILING & ROOF PLAN

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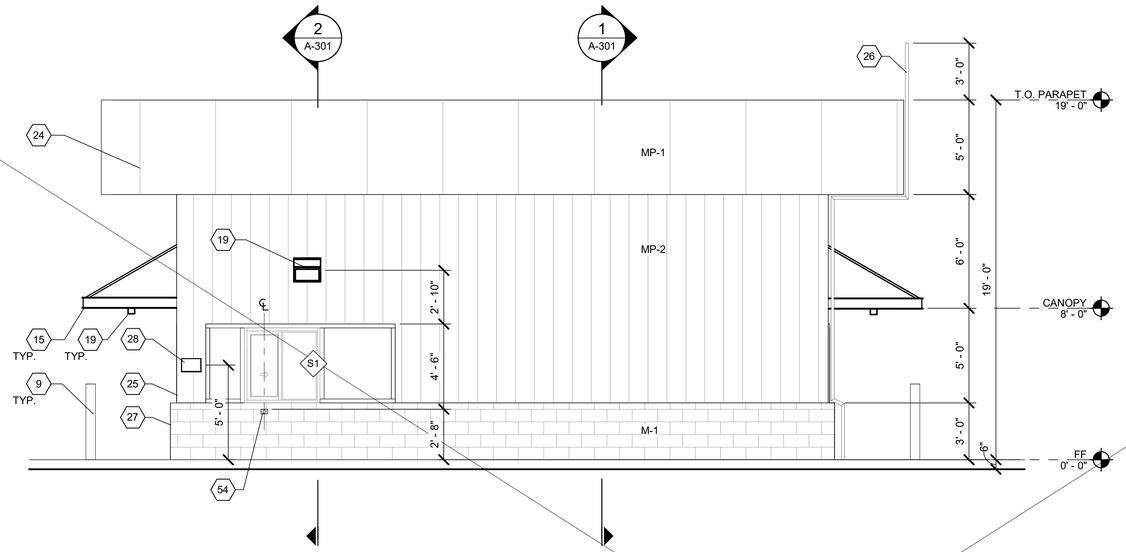
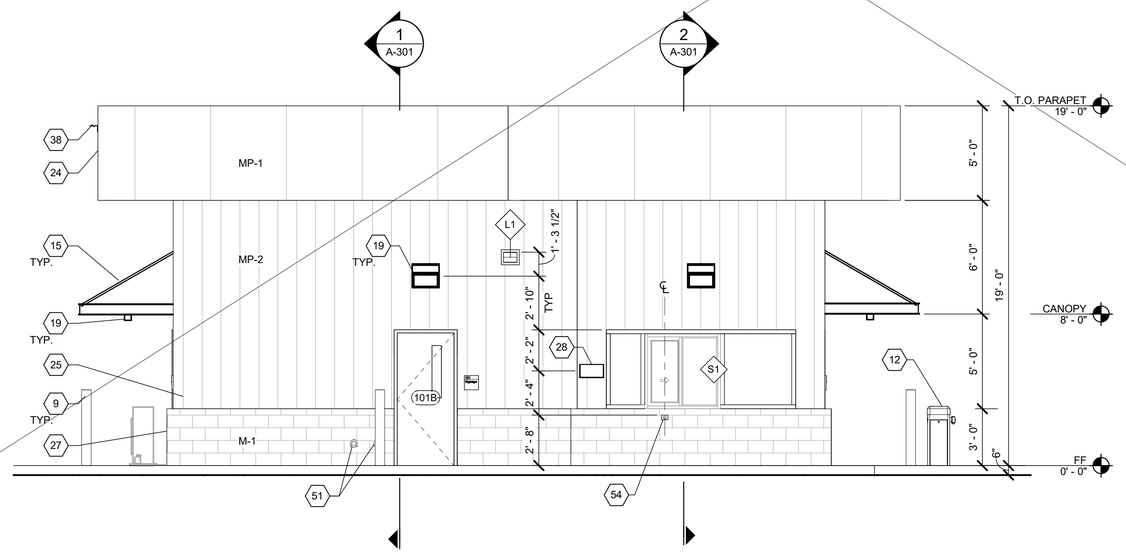


1 A-201 BUILDING ELEVATION

SCALE: 1/4" = 1'-0"



2 A-201 BUILDING ELEVATION

SCALE: 1/4" = 1'-0"

KEYNOTES

#	
9	6" DIA BOLLARD.
12	SCALE EXIT SWING GATE; CFCI.
15	PRE-ENGINEERED CANOPY. MAPES SUPER LUMIDECK FLAT SOFFIT CANOPY OR APPROVED EQUAL.
19	EXTERIOR LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS.
24	SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-1). SEE EXTERIOR COLOR SCHEDULE.
25	SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-2). SEE EXTERIOR COLOR SCHEDULE.
26	BPS VENT RISER, SEE CIVIL DWGS.
27	CMU WAINSCOT (M-1).
28	SCALE READER EXTERIOR DISPLAY, SEE ELECTRICAL DRAWINGS.
38	METAL LADDER BRACKET.
51	BRONZE COW TONGUE, SEE PLUMBING DWGS.
54	INTERCOM, SEE ELECTRICAL DWGS.

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

EXTERIOR ELEVATIONS

PROJ:	200-42064-22005
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4' 0' 4' 8'

SCALE: 1/4" = 1'-0"

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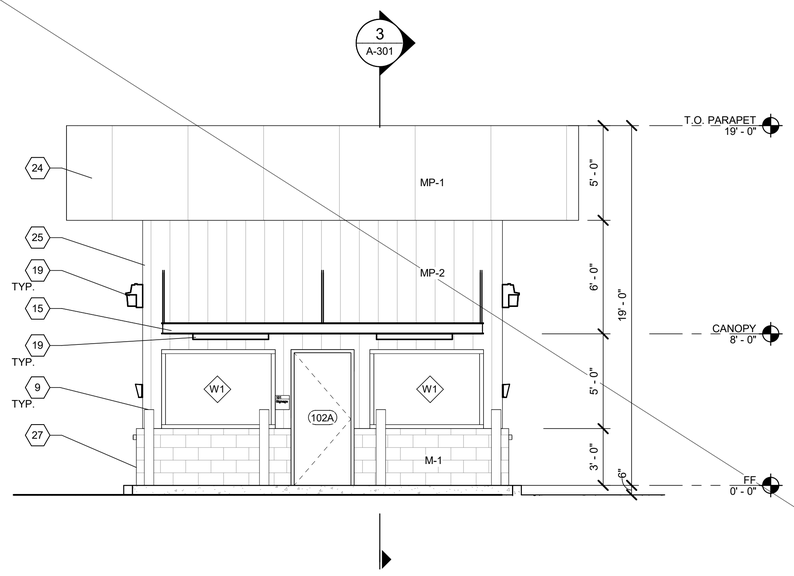
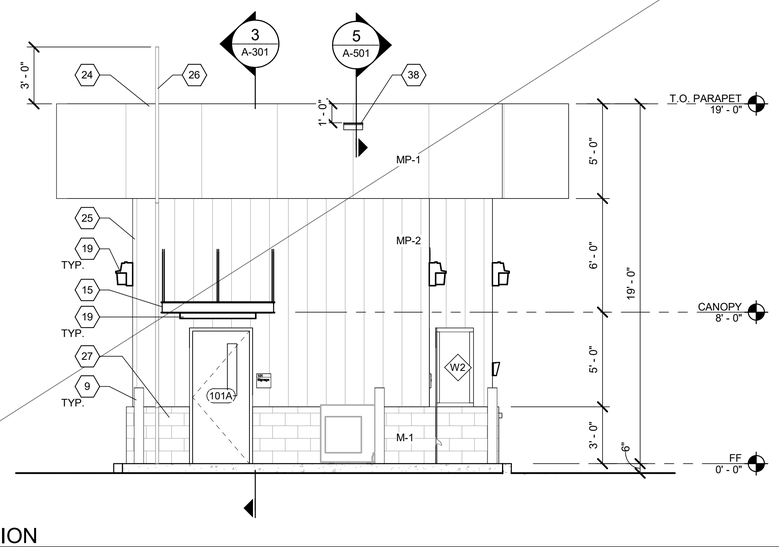


1 A-202 **BUILDING ELEVATION**

SCALE: 1/4" = 1'-0"



2 A-202 **BUILDING ELEVATION**

SCALE: 1/4" = 1'-0"

KEYNOTES

9 6" DIA BOLLARD.

15 PRE-ENGINEERED CANOPY. MAPES SUPER LUMIDECK FLAT SOFFIT CANOPY OR APPROVED EQUAL.

19 EXTERIOR LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS.

24 SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-1). SEE EXTERIOR COLOR SCHEDULE.

25 SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-2). SEE EXTERIOR COLOR SCHEDULE.

26 BPS VENT RISER, SEE CIVIL DWGS.

27 CMU WAINSCOT (M-1).

38 METAL LADDER BRACKET.

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

EXTERIOR ELEVATIONS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

A-202

4' 0' 4' 8'

SCALE: 1/4" = 1'-0"

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Bar measures 1 inch, otherwise drawing is not to scale

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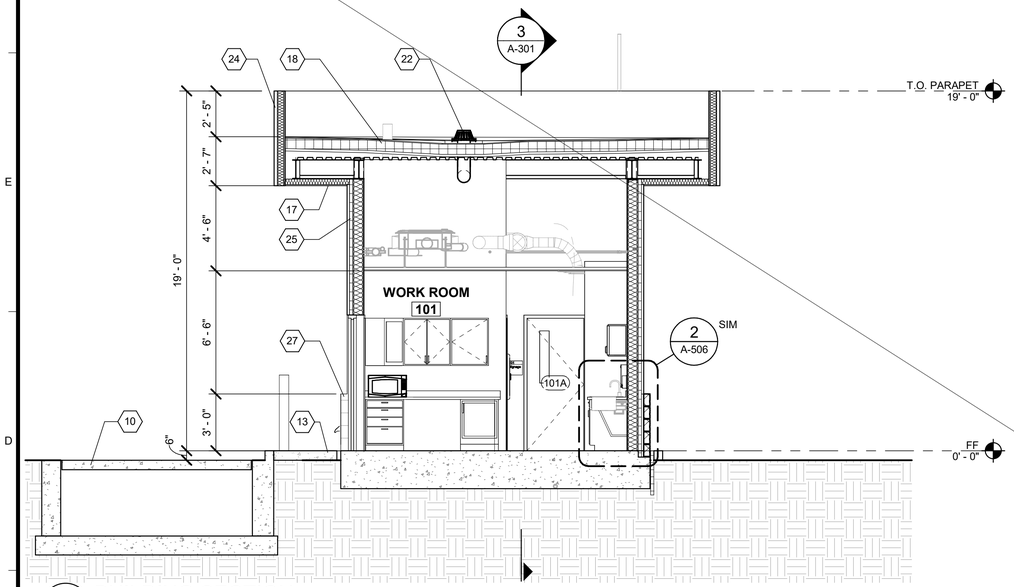
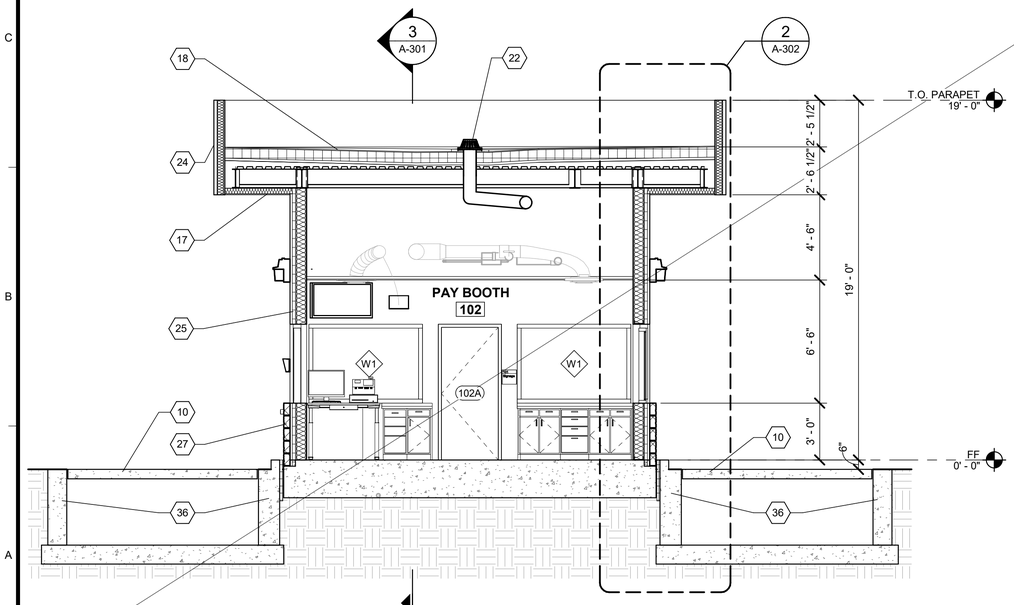
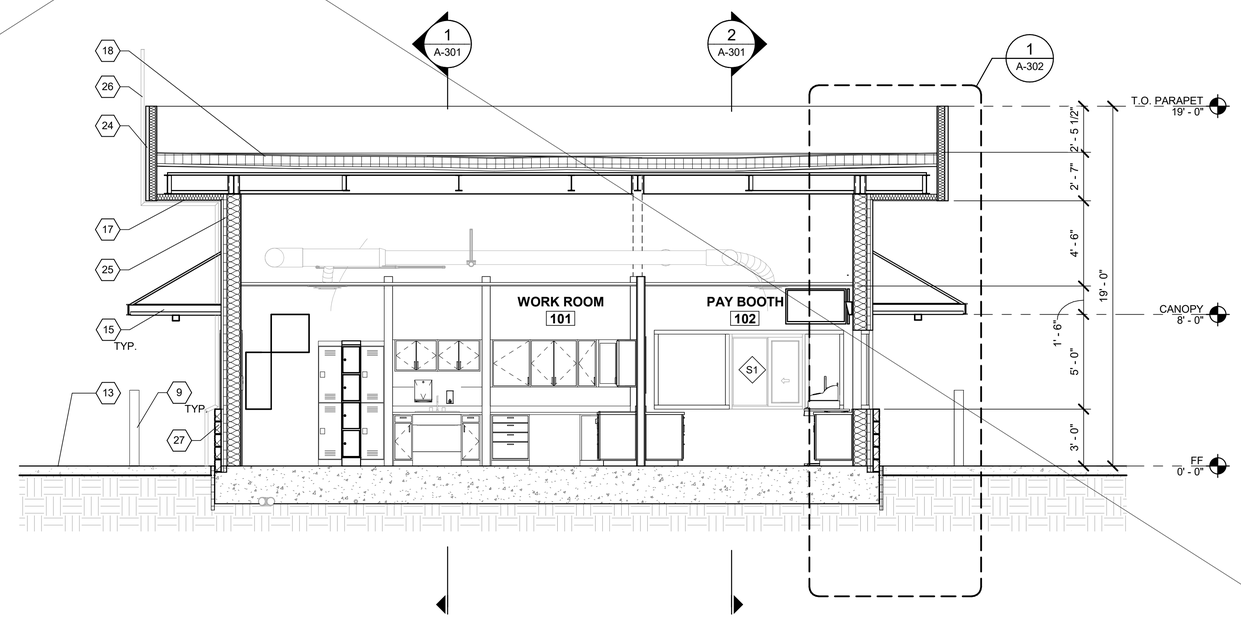


1 A-301 BUILDING SECTION
SCALE: 1/4" = 1'-0"



2 A-301 BUILDING SECTION
SCALE: 1/4" = 1'-0"



3 A-301 BUILDING SECTION
SCALE: 1/4" = 1'-0"

KEYNOTES

9 6" DIA BOLLARD.

10 VEHICULAR SCALES.

13 SIDEWALK, SEE CIVIL DWGS.

15 PRE-ENGINEERED CANOPY. MAPES SUPER LUMIDECK FLAT SOFFIT CANOPY OR APPROVED EQUAL.

17 NON-PERFORATED METAL SOFFIT.

18 ROOF SYSTEM 1 (RS-1): 60 MIL (MIN) SINGLE PLY ROOF (EPDM) MEMBRANE SYSTEM OVER 1/2" COVERBOARD OVER CONTINUOUS R-30 INSULATION OVER SELF-ADHESIVE VAPOR BARRIER MEMBRANE OVER 5/8" GYPSUM BOARD ROOF SHEATHING OVER 1 1/2" METAL DECK OVER STEEL BAR JOISTS.

22 ROOF DRAIN.

24 SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-1). SEE EXTERIOR COLOR SCHEDULE.

25 SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-2). SEE EXTERIOR COLOR SCHEDULE.

26 BPS VENT RISER, SEE CIVIL DWGS.

27 CMU WAINSCOT (M-1).

36 SCALE WALL, SEE STRUCTURAL AND CIVIL DWGS.

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL BUILDING SECTIONS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

A-301

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

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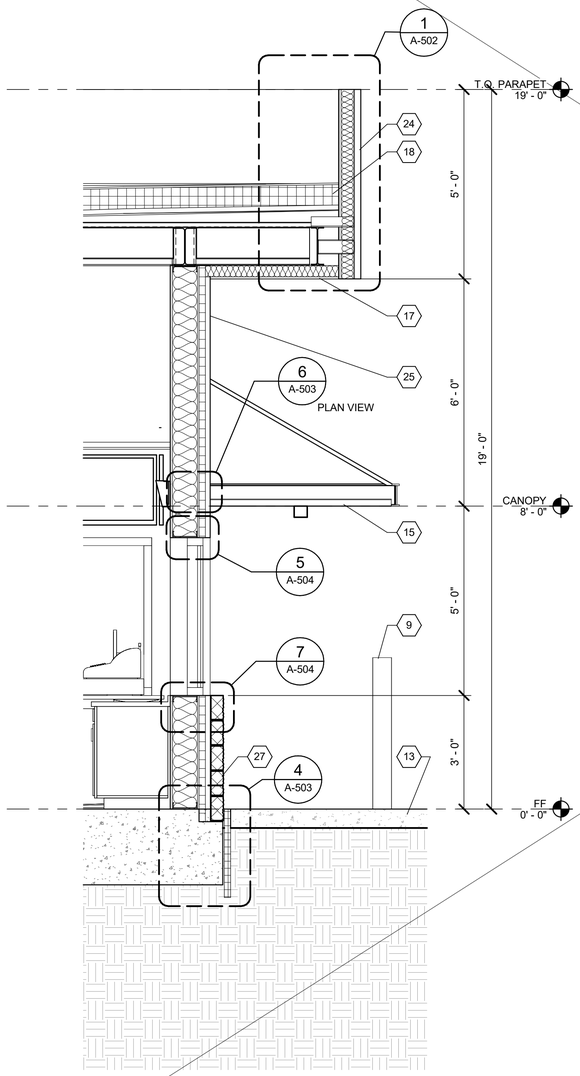

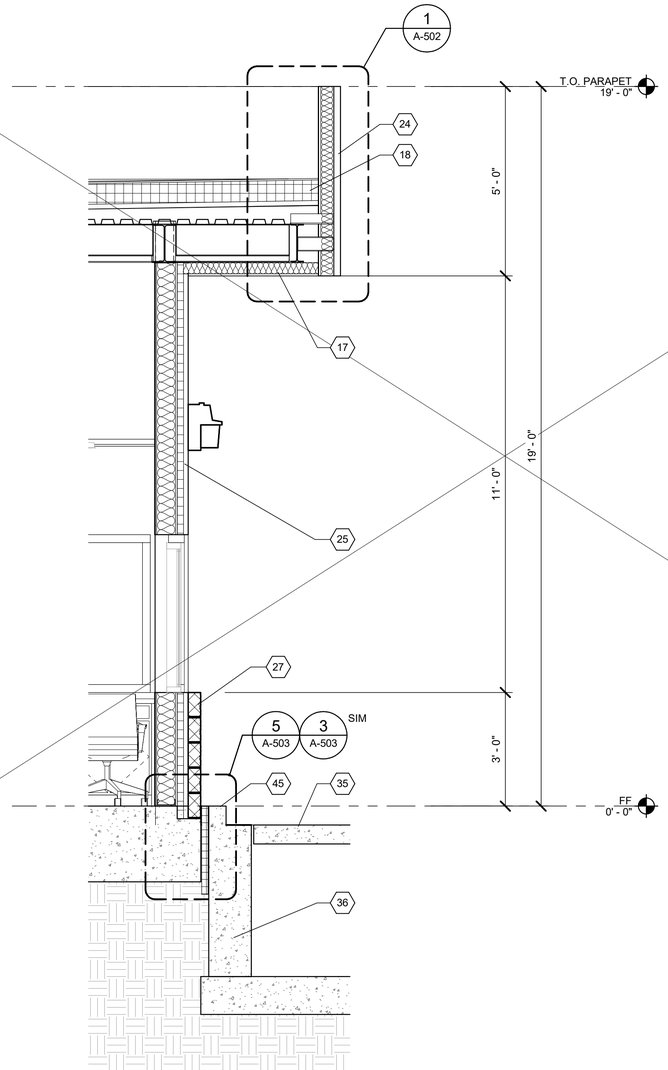

KEYNOTES

9 6" DIA BOLLARD.

13 SIDEWALK, SEE CIVIL DWGS.

15 PRE-ENGINEERED CANOPY. MAPES SUPER LUMIDECK FLAT SOFFIT CANOPY OR APPROVED EQUAL.

17 NON-PERFORATED METAL SOFFIT.

18 ROOF SYSTEM 1 (RS-1): 60 MIL (MIN) SINGLE PLY ROOF (EPDM) MEMBRANE SYSTEM OVER 1/2" COVERBOARD OVER CONTINUOUS R-30 INSULATION OVER SELF-ADHESIVE VAPOR BARRIER MEMBRANE OVER 5/8" GYPSUM BOARD ROOF SHEATHING OVER 1 1/2" METAL DECK OVER STEEL BAR JOISTS.

24 SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-1). SEE EXTERIOR COLOR SCHEDULE.

25 SHEET METAL WALL PANEL WITH CONCEALED FASTENERS (MP-2). SEE EXTERIOR COLOR SCHEDULE.

27 CMU WAINSCOT (M-1).

35 TOP OF SCALE, SEE STRUCTURAL AND CIVIL DWGS.

36 SCALE WALL, SEE STRUCTURAL AND CIVIL DWGS.

45 SIDEWALK CURB, SEE CIVIL DWGS.

1 A-302 WALL SECTION
SCALE: 1/2" = 1'-0"

2 A-302 WALL SECTION
SCALE: 1/2" = 1'-0"

2' 0' 2' 4'
SCALE: 1/2" = 1'-0"

Bar measures 1 inch, otherwise drawing is not to scale

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL WALL SECTIONS

PROJ: 200-42064-22005
DESN: M.BODSKY
DRWN: T.LARSON / E.HAN
CHKD: M.BODSKY

A-302

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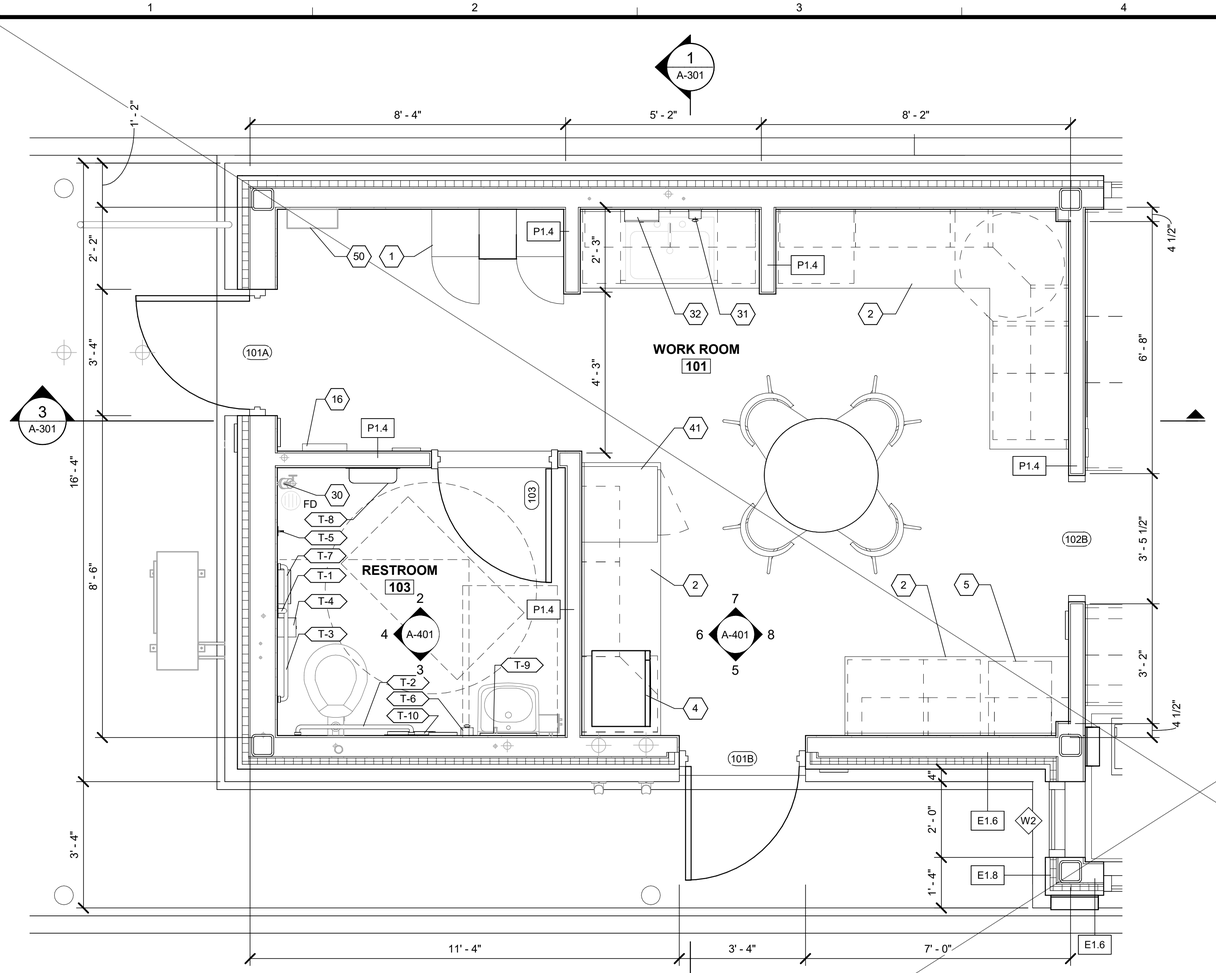
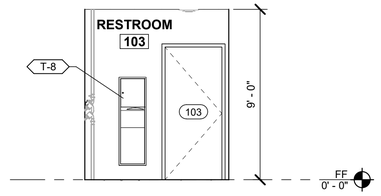
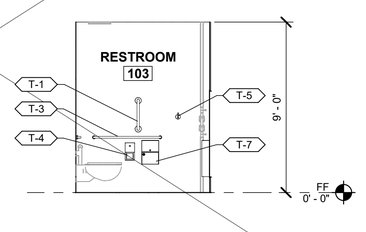


1 A-401 — ENLARGED PLAN
SCALE: 1/2" = 1'-0"



2 A-401 — RESTROOM 103 - NORTH
SCALE: 1/4" = 1'-0"

3 A-401 — RESTROOM 103 - SOUTH
SCALE: 1/4" = 1'-0"



4 A-401 — RESTROOM 103 - WEST
SCALE: 1/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN

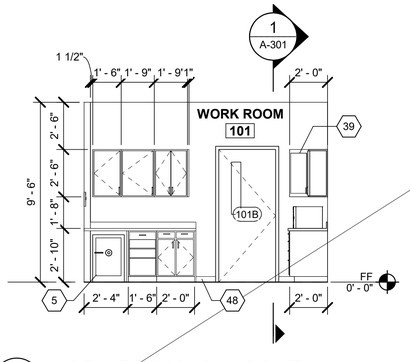
1. REFER TO SHEETS A-001 AND A-002 FOR GENERAL NOTES, SYMBOLS, LEGENDS AND STANDARDS AND TYPICAL MOUNTING HEIGHTS.
2. REFER TO SHEET A-601 FOR DOOR AND WINDOW TYPES, DOOR AND WINDOW SCHEDULE, PARTITION TYPES AND DETAILS.
3. REFER TO SHEET A-602 FOR ROOM FINISH SCHEDULE AND DETAILS.
4. REFER TO SHEET A-603 FOR SIGNAGE SCHEDULE AND DETAILS.

(#) KEYNOTES

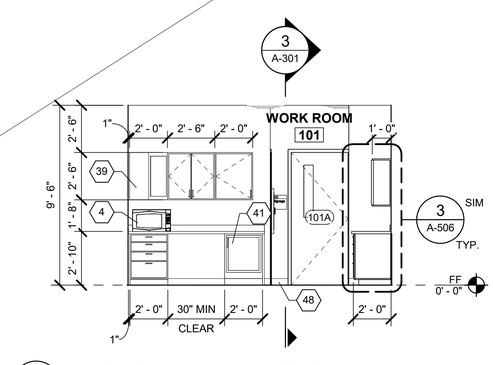
1 18" X 18" ADA METAL DOUBLE TIER LOCKER AND METAL STACKBOX LOCKER WITH 4" BASE AND SLOPED TOP; CFCI.
2 SOLID SURFACE COUNTER WITH 4" BACKSPLASH (SS-1), TYP.
4 MICROWAVE; OFCI.
5 FREE-STANDING SAFE; OFCI.
16 RECESSED FIRE EXTINGUSHER CABINET.
30 WATER BACKFLOW PREVENTER, SEE PLUMBING DRAWINGS.
31 WALL MOUNTED SOAP DISPENSER; NON-RESTROOM, ADA RATED.
32 WALL MOUNTED PAPER TOWEL DISPENSER; NON-RESTROOM, ADA RATED.
39 24" x 24" UPPER CORNER CABINET WITH LAZY SUSAN SHELVING.
40 36" X 36" BASE CORNER CABINET WITH LAZY SUSAN SHELVING.
41 UNDERCOUNTER FRIDGE; CFCI.
48 WALL BASE, SEE FINISH SCHEDULE.
50 EQUIPMENT, SEE ELECTRICAL DWGS.

(T-#) RESTROOM ACCESSORIES SCHEDULE

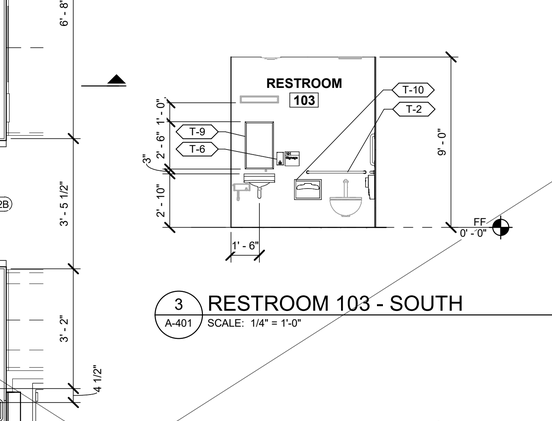
MARK	DESCRIPTION	COMMENTS
T-1	18" GRAB BAR, VERTICAL	ADA
T-2	36" GRAB BAR	ADA
T-3	42" GRAB BAR	ADA
T-4	MULTI-ROLL TOILET PAPER DISPENSER, SURFACE MOUNTED	ADA
T-5	CLOTHES HOOK	ADA
T-6	SOAP DISPENSER, SURFACE MOUNTED	ADA
T-7	SANITARY NAPKIN DISPOSER, SURFACE MOUNTED	ADA
T-8	PAPER TOWEL DISPENSER AND RECEPTACLE, SURFACE MOUNTED	ADA
T-9	18" X 30" MIRROR	ADA
T-10	SEAT COVER DISPENSER, SURFACE MOUNTED	ADA



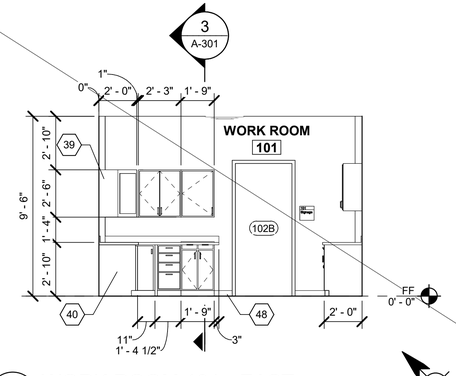
5 A-401 — WORK ROOM 101 - SOUTH
SCALE: 1/4" = 1'-0"



6 A-401 — WORK ROOM 101 - WEST
SCALE: 1/4" = 1'-0"



7 A-401 — WORK ROOM 101 - NORTH
SCALE: 1/4" = 1'-0"



8 A-401 — WORK ROOM 101 - EAST
SCALE: 1/4" = 1'-0"

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

2' 0' 2' 4'
SCALE: 1/2" = 1'-0"

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ENLARGED PLAN & INTERIOR ELEVATIONS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

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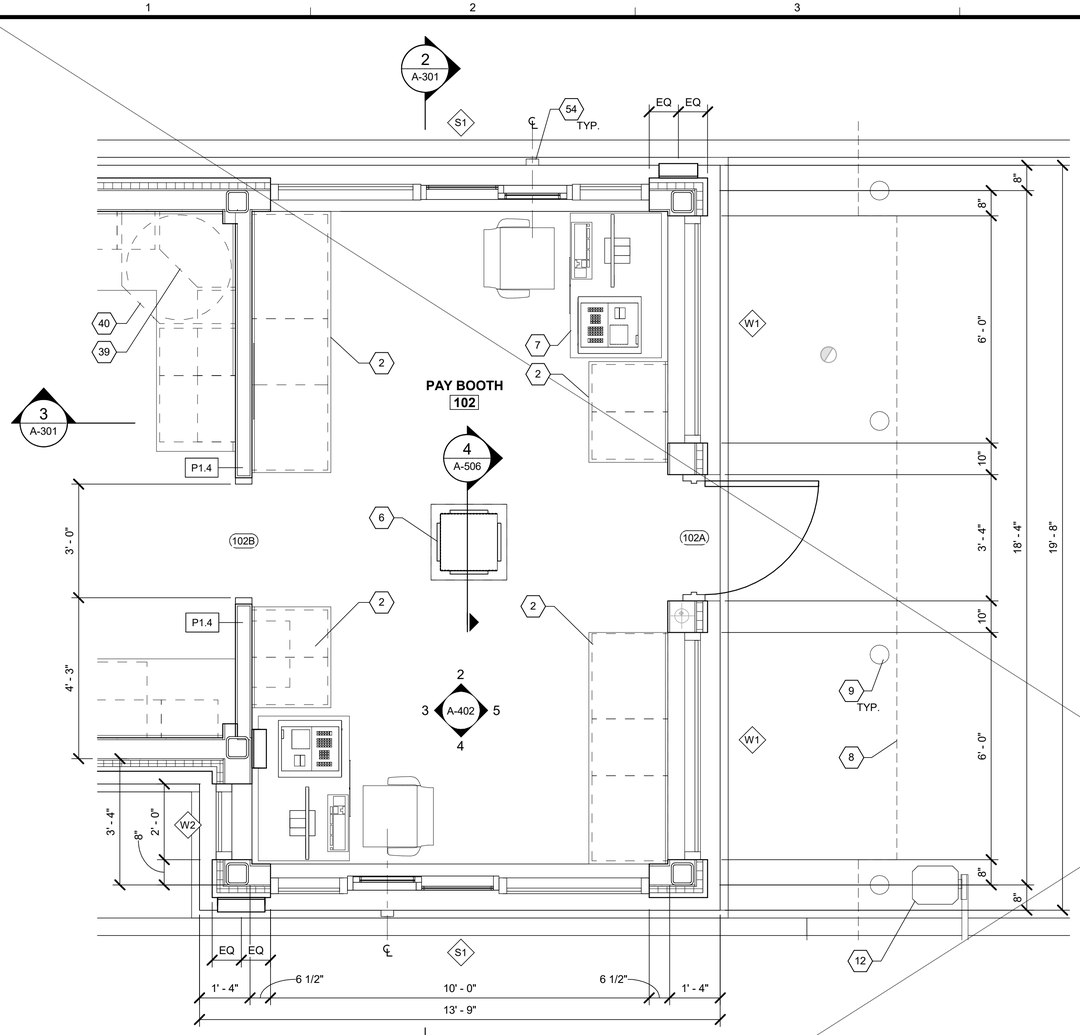
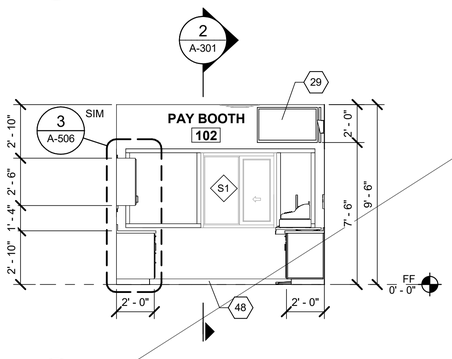
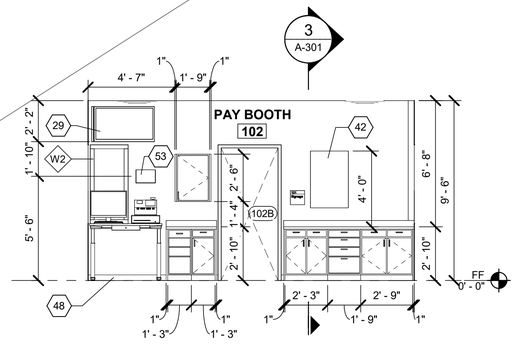


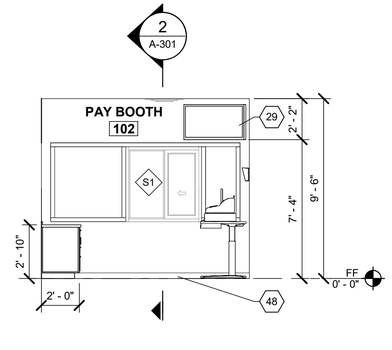
1 A-402 ENLARGED PLAN - PAY BOOTH
SCALE: 1/2" = 1'-0"



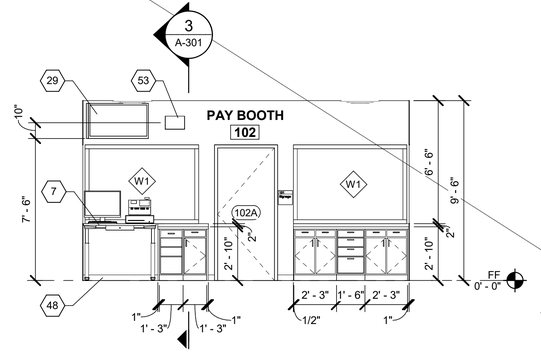
2 A-402 PAY 102 - NORTH
SCALE: 1/4" = 1'-0"



3 A-402 PAY 102 - WEST
SCALE: 1/4" = 1'-0"



4 A-402 PAY 102 - SOUTH
SCALE: 1/4" = 1'-0"



5 A-402 PAY 102 - EAST
SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

SCALE: 1/2" = 1'-0"

GENERAL NOTES - FLOOR PLAN

1. REFER TO SHEETS A-001 AND A-002 FOR GENERAL NOTES, SYMBOLS, LEGENDS AND STANDARDS AND TYPICAL MOUNTING HEIGHTS.
2. REFER TO SHEET A-601 FOR DOOR AND WINDOW TYPES, DOOR AND WINDOW SCHEDULE, PARTITION TYPES AND DETAILS.
3. REFER TO SHEET A-602 FOR ROOM FINISH SCHEDULE AND DETAILS.
4. REFER TO SHEET A-603 FOR SIGNAGE SCHEDULE AND DETAILS.

(#) KEYNOTES

2 SOLID SURFACE COUNTER WITH 4" BACKSPLASH (SS-1), TYP.

6 ROTATING TICKET DISPLAY; CFCI.

7 SIT-TO-STAND WORK DESK; CFCI.

8 OUTLINE OF ROOF ABOVE.

9 6" DIA BOLLARD.

12 SCALE EXIT SWING GATE; CFCI.

29 WALL MOUNTED 43" TV MONITORS AND TV MOUNT, PROVIDE BLOCKING FOR DISPLAY MOUNT; OPCI.

39 24" x 24" UPPER CORNER CABINET WITH LAZY SUSAN SHELVING.

40 36" X 36" BASE CORNER CABINET WITH LAZY SUSAN SHELVING.

42 BULLETIN BOARD OR APPROVED EQUAL; CFCI.

48 WALL BASE, SEE FINISH SCHEDULE.

53 SCALE READER INTERIOR DISPLAY FOR OPERATOR, SEE ELECTRICAL DWGS.

54 INTERCOM, SEE ELECTRICAL DWGS.

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ENLARGED PLAN & INTERIOR ELEVATIONS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

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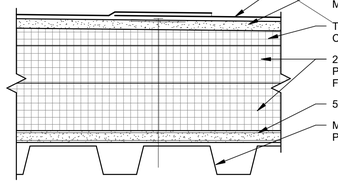
Bar measures 1 inch, otherwise drawing is not to scale

ROOF ASSEMBLY REQUIREMENTS:

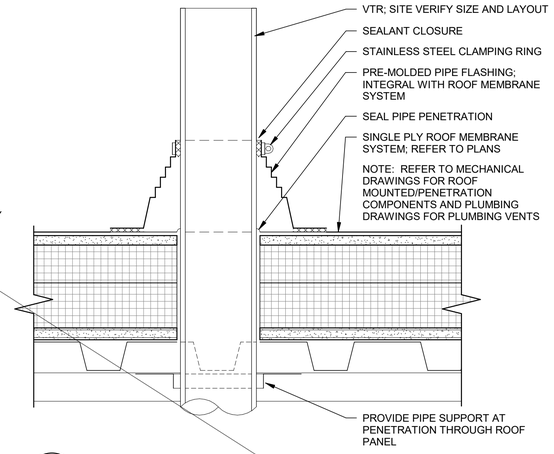
a. REQUIRED: R-30 CI. ILLUSTRATED (R-30) 5.2" @ 5.77 (R-VALUE) PER INCH POLYISO INSULATION, PLUS 5/8" ROOF BOARD AND 1/2" COVERBOARD = 6.35" TOTAL ROOF DEPTH BASE INSULATION.
b. SOLAR REFLECTANCE: MINIMUM 0.63 AND EMITTANCE OF 0.75
c. DENSDECK COVERBOARD TO ACT AS AIR BARRIER SEAL. ALL SEAMS AND PENETRATIONS SHALL COMPLY WITH AIR BARRIER REQUIREMENTS AND DETAILS PER IECC 2015.



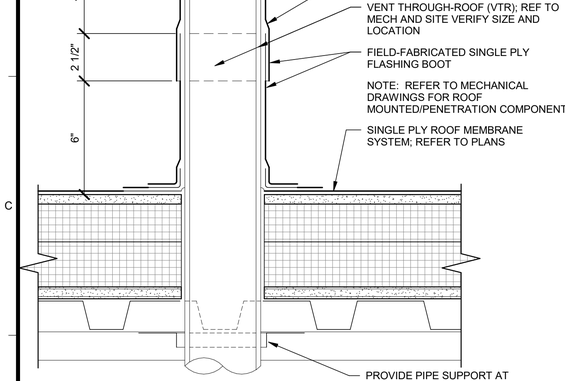
***FM GLOBAL REQUIREMENTS FOR ROOFING:**

ENTIRE ROOF ASSEMBLY AND ANCHORAGE SYSTEMS SHALL COMPLY WITH FM ROOFNAV.COM. ROOFING SUBCONTRACTOR SHALL SUBMIT DETAILED DOCUMENTATION THAT MANUFACTURER AND ALL PRODUCTS ARE FM GLOBAL APPROVED AND INSTALLATION WILL BE IN ACCORDANCE WITH ALL FM GLOBAL REQUIREMENTS. SEE ROOFING SPECIFICATIONS FOR ADDITIONAL INFORMATION.

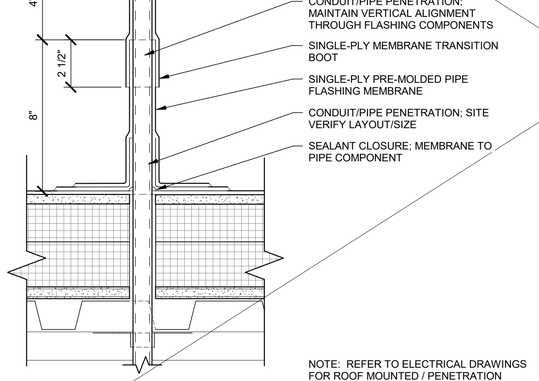
1 TYP ROOF TYPE (RS-1)
A-501 SCALE: 3" = 1'-0"



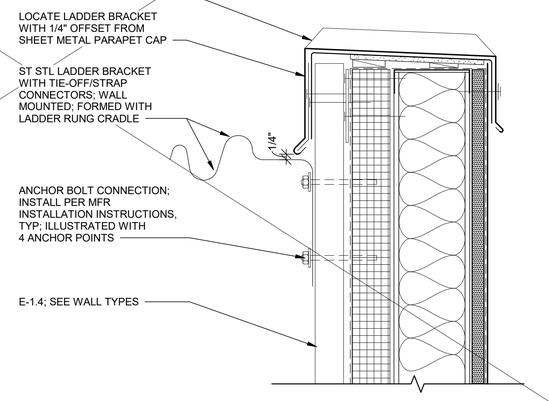
2 VENT THRU ROOF - PRE-FAB
A-501 SCALE: 3" = 1'-0"



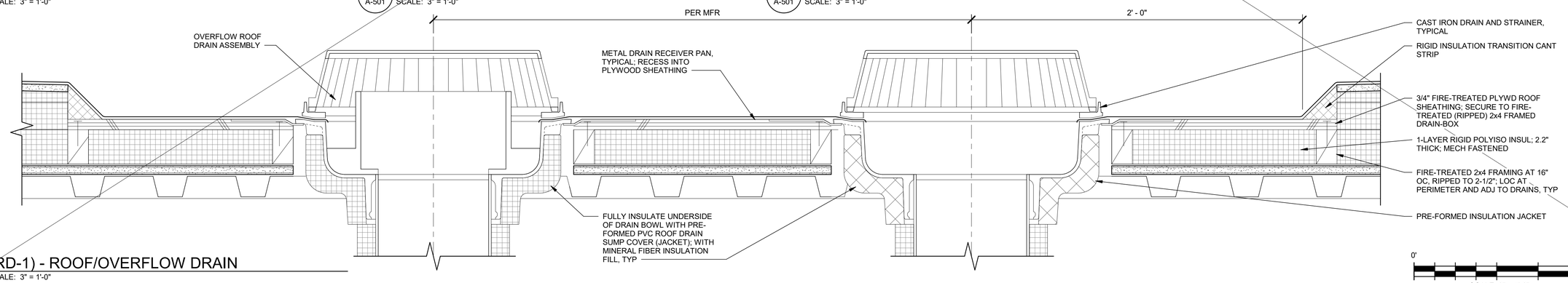
3 VTR / SUPPORT PIPE - FIELD FAB
A-501 SCALE: 3" = 1'-0"



4 CONDUIT PENETRATION
A-501 SCALE: 3" = 1'-0"



5 ROOF ACCESS LADDER BRACKET
A-501 SCALE: 3" = 1'-0"



6 (RD-1) - ROOF/OVERFLOW DRAIN
A-501 SCALE: 3" = 1'-0"

0' 1'
SCALE: 3" = 1'-0"

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL DETAILS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

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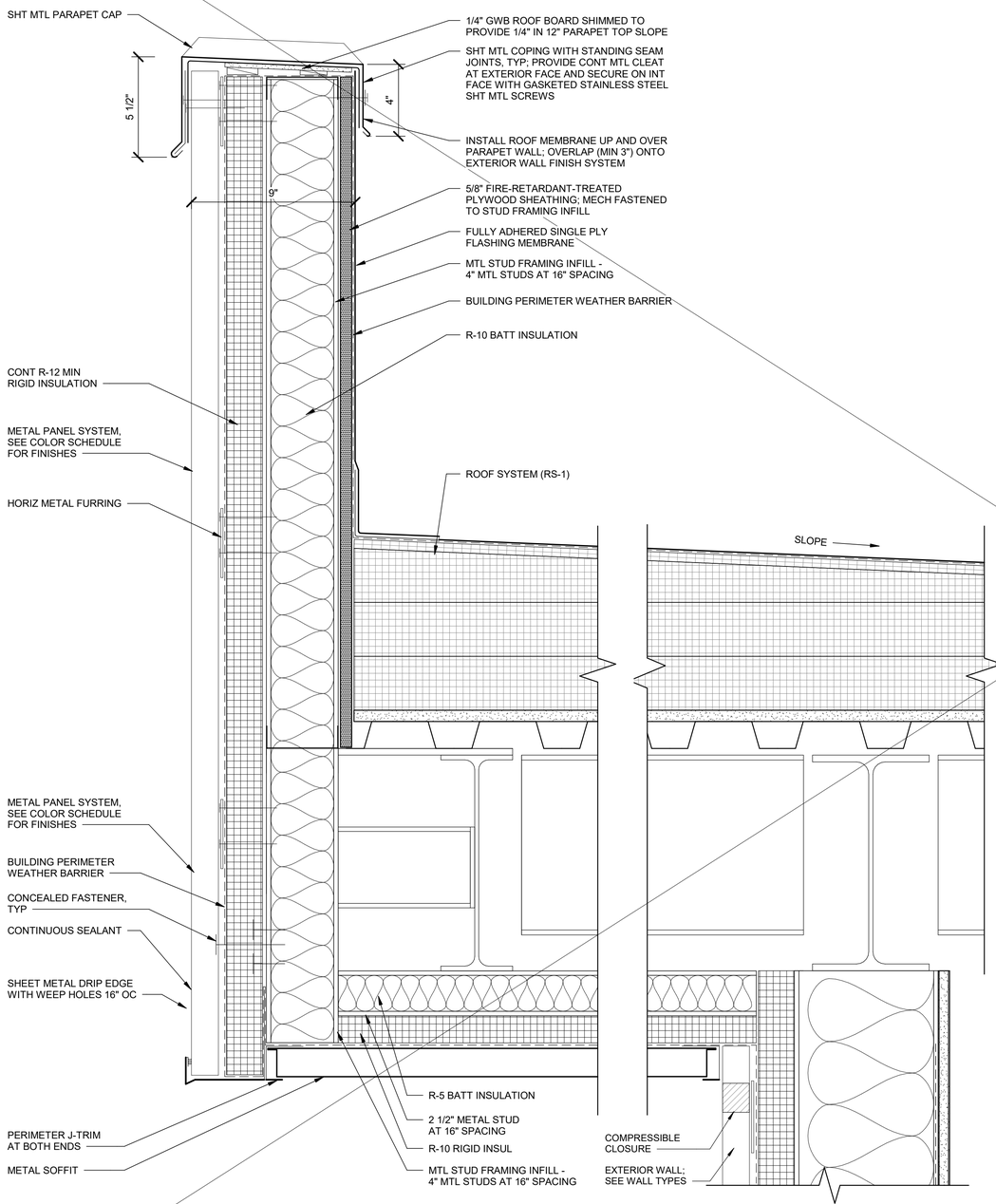
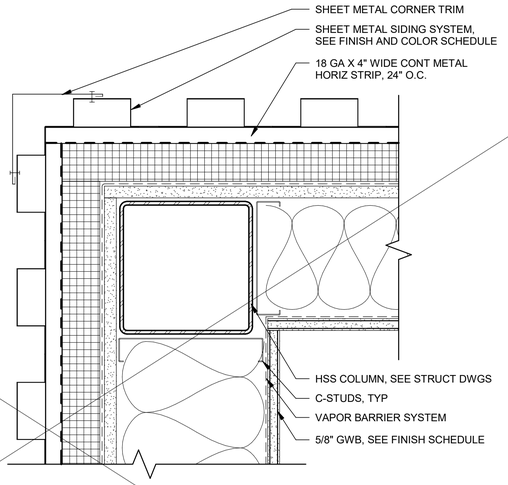
Bar measures 1 inch, otherwise drawing is not to scale



1 A-502 ROOF PARAPET AND SOFFIT
SCALE: 3" = 1'-0"



2 A-502 CORNER, TYP
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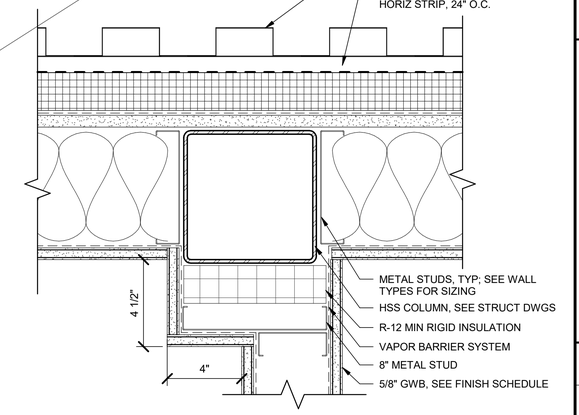
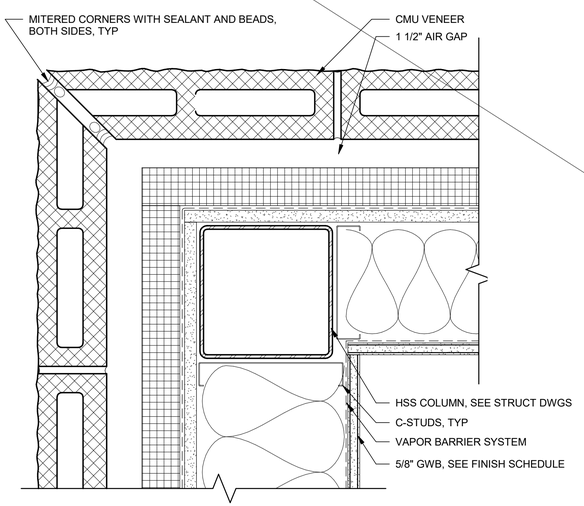
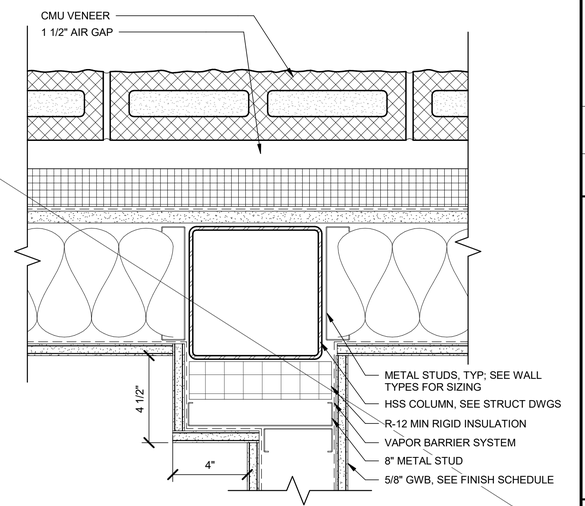


4 A-502 INTERMEDIATE COLUMN, TYP
SCALE: 3" = 1'-0"



3 A-502 CMU CORNER, TYP
SCALE: 3" = 1'-0"



5 A-502 INTERMEDIATE COLUMN, TYP
SCALE: 3" = 1'-0"

0' 1'
SCALE: 3" = 1'-0"

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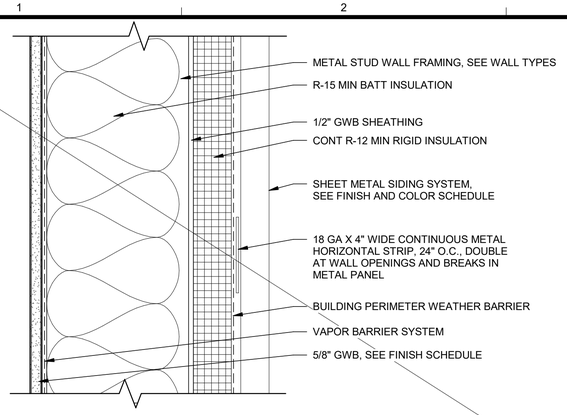
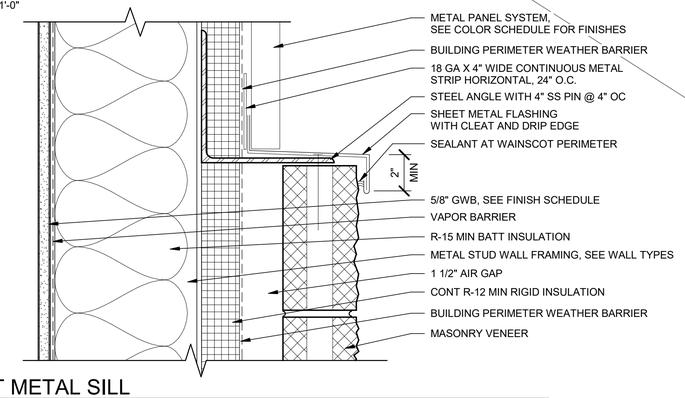
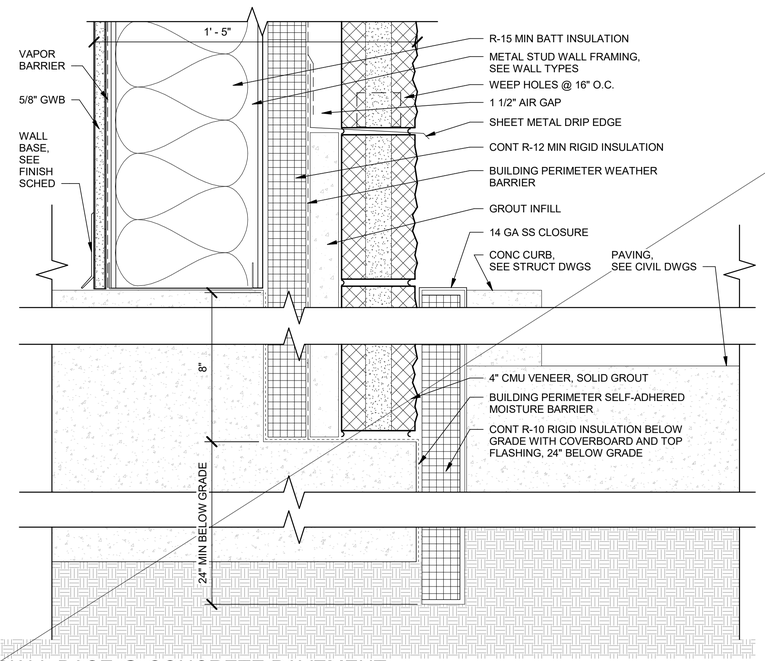


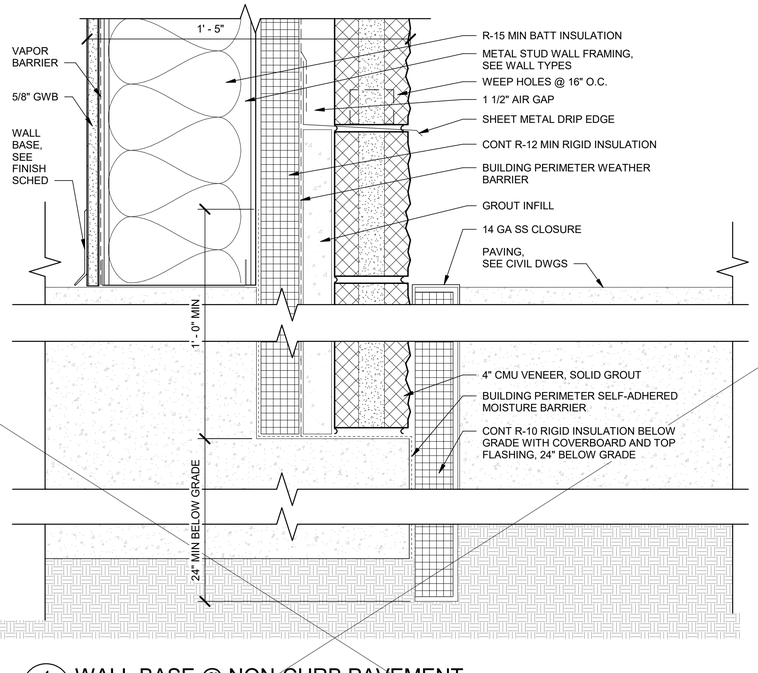
1 EXTERIOR WALL CONDITION
A-503 SCALE: 3" = 1'-0"



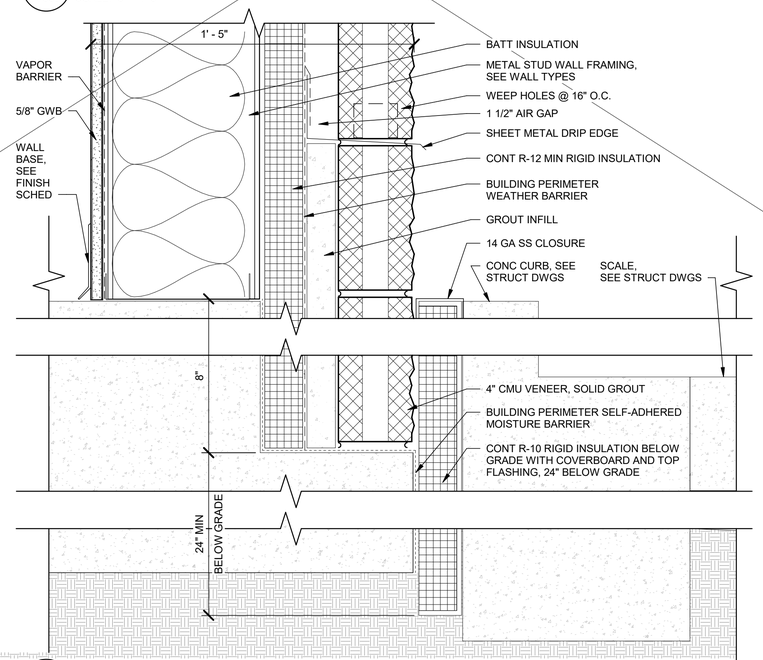
2 SHEET METAL SILL
A-503 SCALE: 3" = 1'-0"



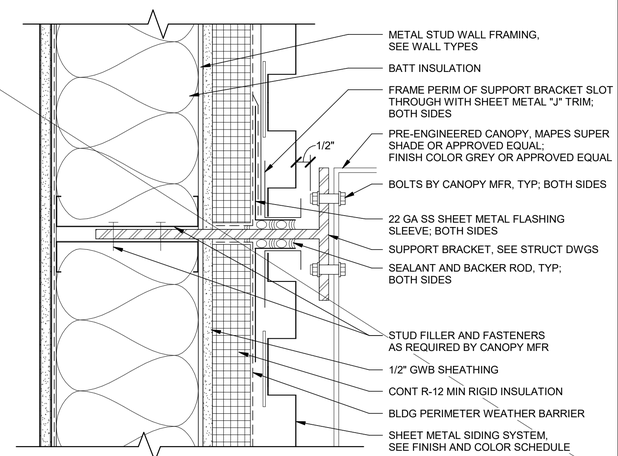
3 WALL BASE @ CONCRETE PAVEMENT
A-503 SCALE: 3" = 1'-0"



4 WALL BASE @ NON-CURB PAVEMENT
A-503 SCALE: 3" = 1'-0"



5 WALL BASE @ VEHICULAR SCALE
A-503 SCALE: 3" = 1'-0"



6 TYPICAL CANOPY SUPPORT STRUCTURE
A-503 SCALE: 3" = 1'-0"

0' 1'
SCALE: 3" = 1'-0"

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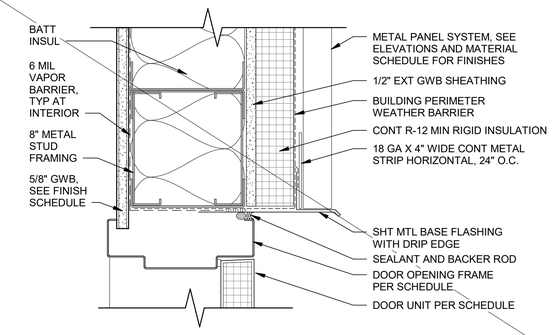
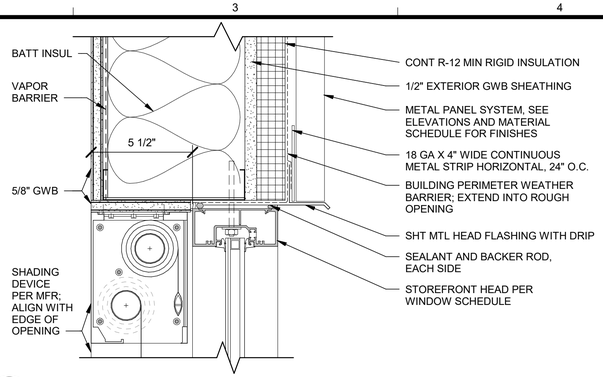
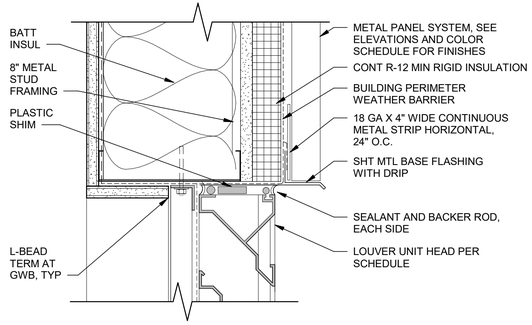


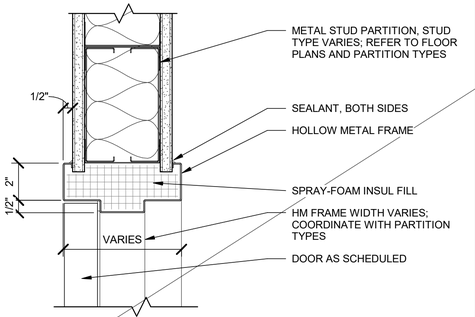
1 A-504 **HM DOOR HEAD**
SCALE: 3" = 1'-0"



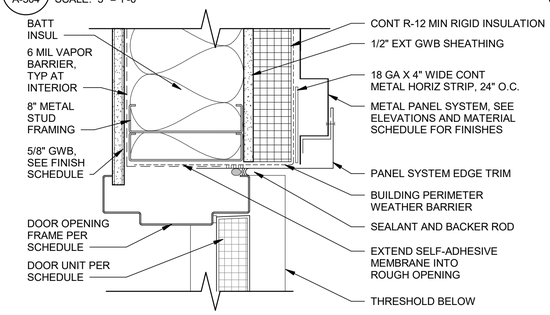
5 A-504 **WINDOW HEAD, TYP**
SCALE: 3" = 1'-0"



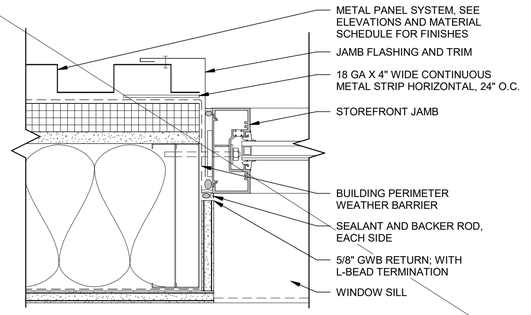
8 A-504 **LOUVER HEAD**
SCALE: 3" = 1'-0"



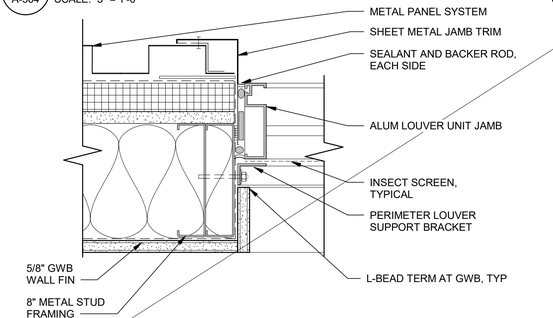
11 A-504 **HM DOOR HEAD**
SCALE: 3" = 1'-0"



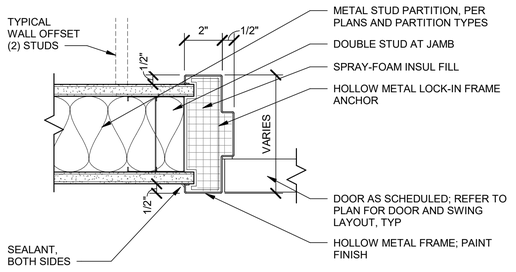
2 A-504 **HM DOOR JAMB**
SCALE: 3" = 1'-0"



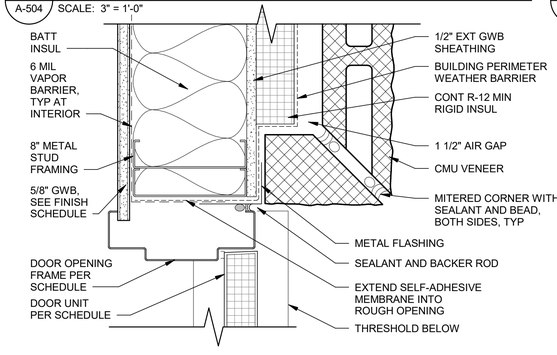
6 A-504 **WINDOW JAMB, TYP**
SCALE: 3" = 1'-0"



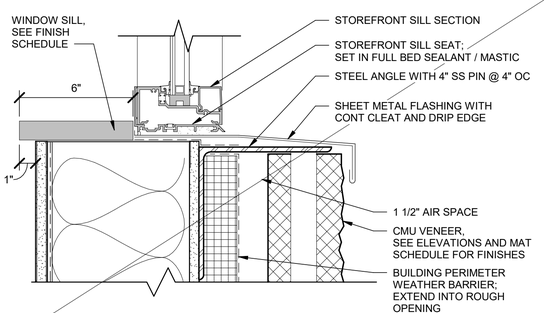
9 A-504 **LOUVER JAMB**
SCALE: 3" = 1'-0"



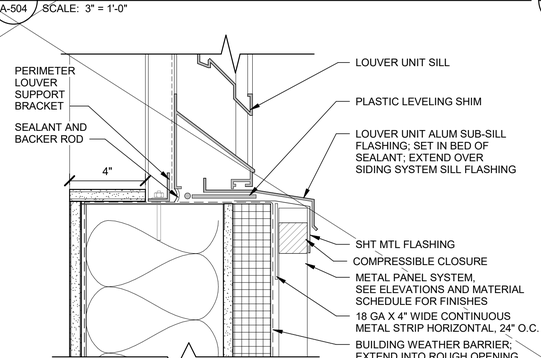
12 A-504 **HM DOOR JAMB**
SCALE: 3" = 1'-0"



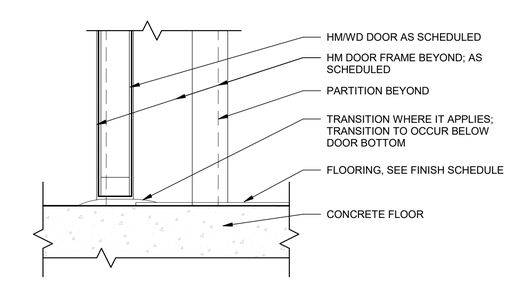
3 A-504 **HM DOOR JAMB @ WAINSCOT**
SCALE: 3" = 1'-0"



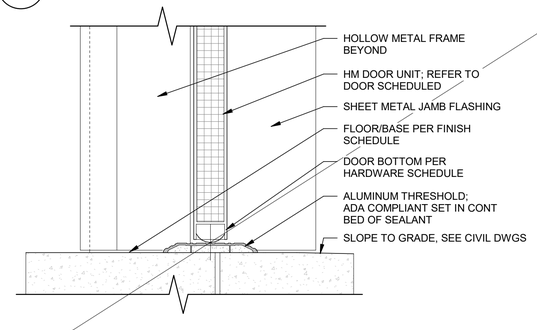
7 A-504 **WINDOW SILL, TYP**
SCALE: 3" = 1'-0"



10 A-504 **LOUVER SILL**
SCALE: 3" = 1'-0"



13 A-504 **HM DOOR SILL - INTERIOR, TYP.**
SCALE: 3" = 1'-0"



4 A-504 **HM DOOR SILL - EXTERIOR, TYP.**
SCALE: 3" = 1'-0"

0' 1'
SCALE: 3" = 1'-0"

Bar measures 1 inch, otherwise drawing is not to scale

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COUNTY OF SANTA CRUZ
BEN LOMOND SCALE HOUSE
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PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
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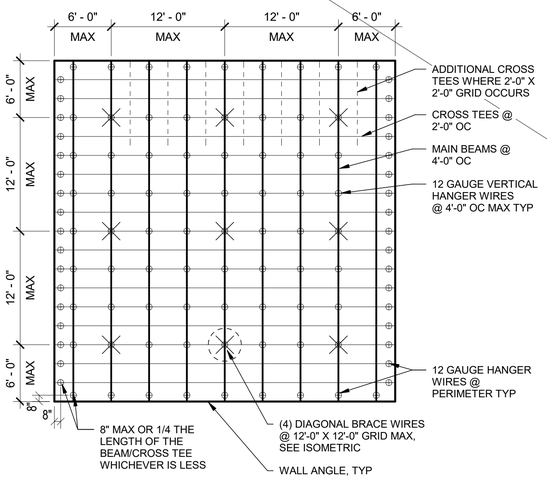
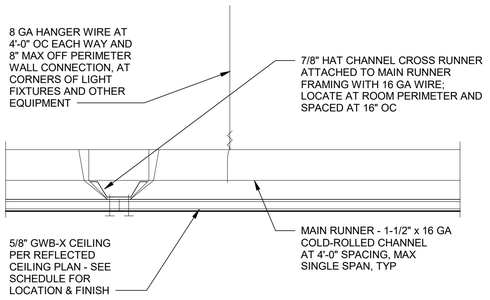
GENERAL NOTES:
1. ALL COMPONENTS OF CEILING GRID SHALL BE CLASSIFIED "HEAVY DUTY".
2. AT THE PERIMETER OF THE CEILING AREA, WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS TO PREVENT LATERAL SPREADING. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNER IS 8" OR LESS, THIS INTERLOCK IS NOT REQUIRED.
3. REFER TO ASTM C635 and C636.

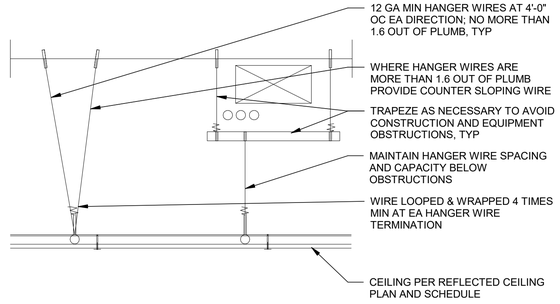
COMPRESSION STRUTS:
1. COMPRESSION STRUTS SHALL NOT REPLACE HANGER WIRES.
2. ATTACH COMPRESSION STRUTS TO MAIN BEAMS WITHIN 2" OF CROSS TEE.
3. THE ATTACHMENT AT THE TOP SHALL BE CAPABLE OF SUPPORTING FOUR TIMES THE WEIGHT OF THE STRUT.



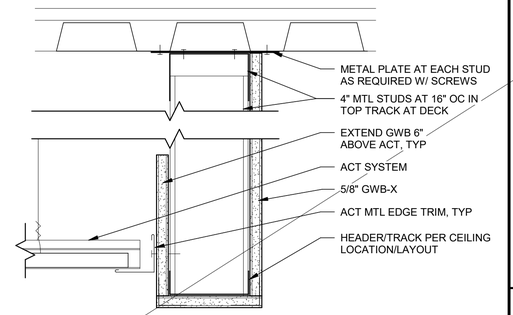
PLAN



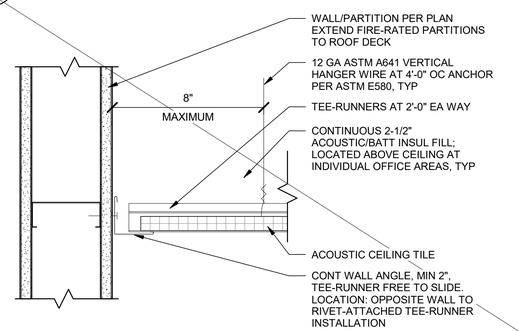
2 A-505 SUSP. GWB CEILING SYSTEM
SCALE: 3" = 1'-0"



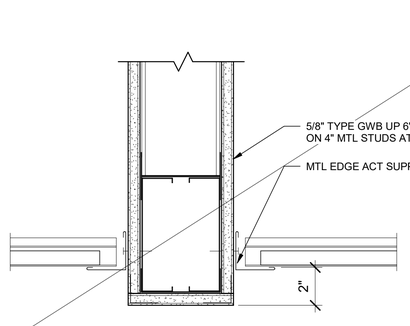
5 A-505 CEILING OBSTRUCTIONS
SCALE: 1/2" = 1'-0"



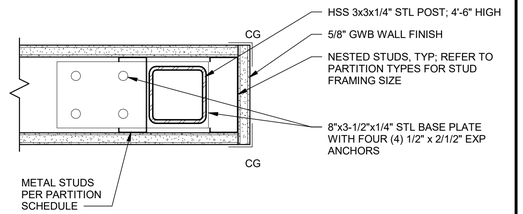
7 A-505 CEILING DROP
SCALE: 3" = 1'-0"



3 A-505 SUSP. ACT CEILING SYSTEM
SCALE: 3" = 1'-0"



6 A-505 CEILING DIVIDER
SCALE: 3" = 1'-0"

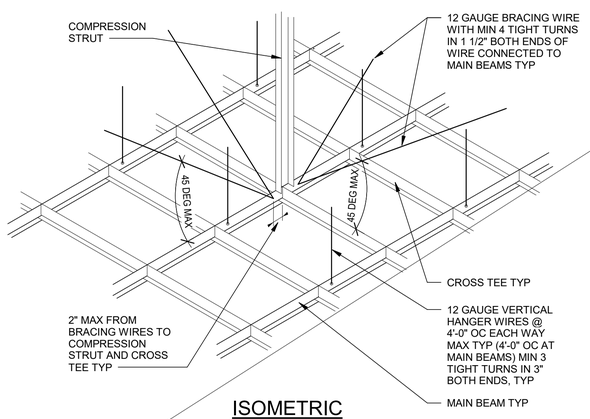


8 A-505 PARITION SUPPORT END POST
SCALE: 3" = 1'-0"

COMPRESSION STRUT:
STEEL SECTION WITH L/R RATION OF 200 MAXIMUM. ATTACH TO MAIN RUNNERS WITH 1/4" MACHINE BOLT AND TO STRUCTURE. COMPRESSION STRUT SHALL NOT REPLACE HANGER WIRE

LENGTH	REQ	STRUT	SUPP
4'	0.24 IN	158IU20	0.410
		250IU20	0.399
		350IU20	0.382
1 1/4" 6'	0.36 IN	400IU20	0.380
8'	0.48 IN	C3 5/8xC20	0.594
10'	0.60 IN	C3 5/8xC20	0.594
1 5/8"			

* STUDS & PROPERTIES AS LISTED BY M.S.M.A



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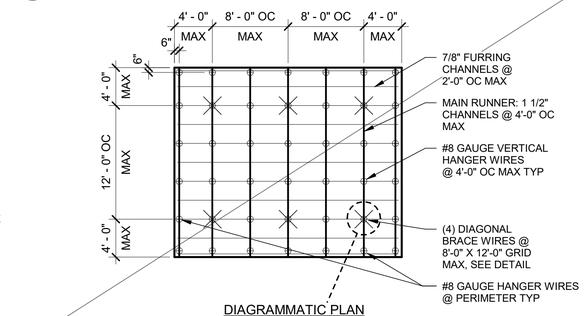
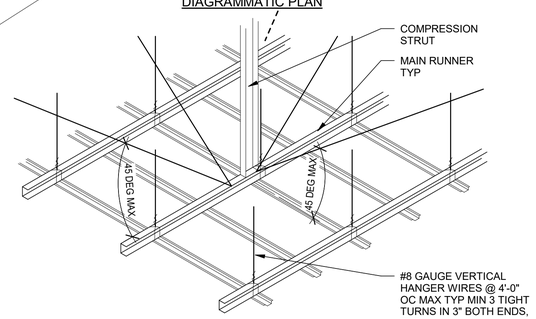
1 A-505 ACT SUSPENSION SYSTEM
SCALE: 1/8" = 1'-0"



DIAGRAMMATIC PLAN



ISOMETRIC

4 A-505 SUSPENDED GWB CEILING
SCALE: 1/8" = 1'-0"

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

2' 0' 2' 4'
SCALE: 1/2" = 1'-0"

0' 1'
SCALE: 3" = 1'-0"

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Bar measures 1 inch, otherwise drawing is not to scale

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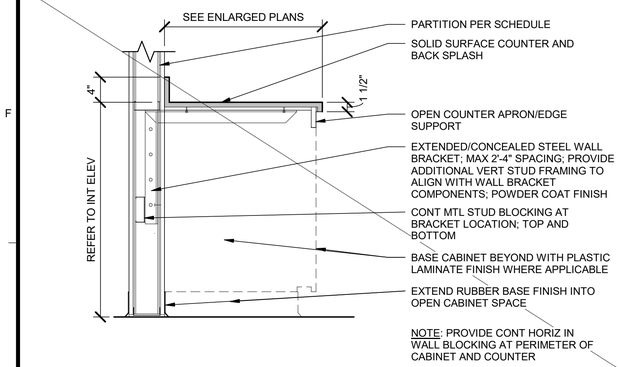
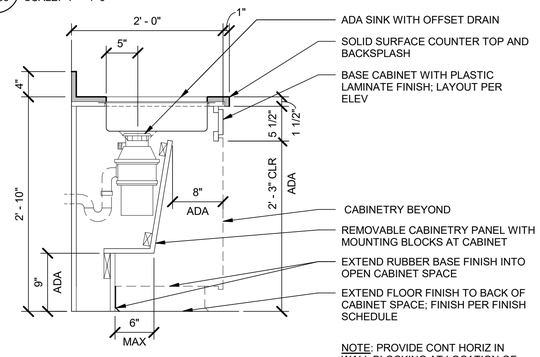
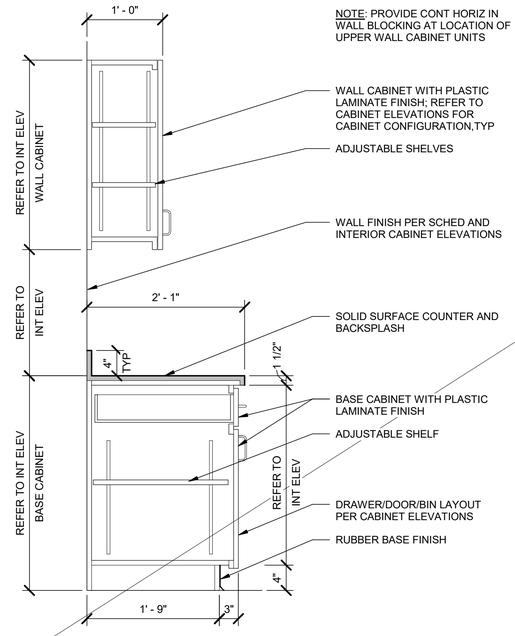


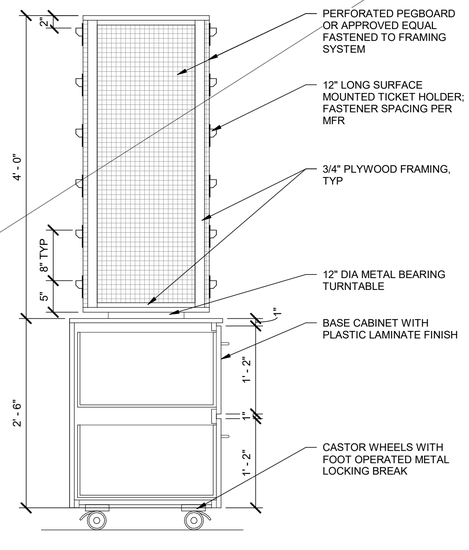
1 COUNTER
A-506 SCALE: 1" = 1'-0"



2 CABINET - ADA SINK
A-506 SCALE: 1" = 1'-0"



3 TYPICAL CABINET SECTION
A-506 SCALE: 1" = 1'-0"



4 ROTATING TICKET DISPLAY
A-506 SCALE: 1" = 1'-0"

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100% DESIGN

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	4/12/24	60% DESIGN	MMB
	6/14/24	90% DESIGN	MMB
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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL DETAILS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

A-506

1' 0' 1' 2'
SCALE: 1" = 1'-0"

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DOOR SCHEDULE

#		DOOR						FRAME			DETAILS			HARDWARE SET	COMMENTS
NO.	U-VALUE	WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD	JAMB	SILL		
101A	1.45	3' - 0"	7' - 0"	0' - 1 3/4"	N	HM	PT-2	F1	HM	PT-2	1/A-504	2/A-504, 3/A-504	4/A-504	1	
101B	1.45	3' - 0"	7' - 0"	0' - 1 3/4"	N	HM	PT-2	F1	HM	PT-2	1/A-504	2/A-504, 3/A-504	4/A-504	1	
102A	1.45	3' - 0"	7' - 0"	0' - 1 3/4"	F	HM	PT-2	F1	HM	PT-2	1/A-504	2/A-504, 3/A-504	4/A-504	1	
102B	1.45	3' - 0"	7' - 0"	0' N / A	N / A	N / A	-	F1	HM	PT-2	11/A-504	12/A-504	-	-	CASED OPENING
103	1.45	3' - 0"	7' - 0"	0' - 1 3/4"	F	WD	PT-2	F1	HM	PT-2	11/A-504	12/A-504	13/A-504	2	

OPENINGS SCHEDULE

MARK	U-VALUE, SHGC	R.O.		FRAME		GLAZING		DETAILS			COMMENTS
		WIDTH	HEIGHT	FINISH	MATERIAL	TYPE	THICKNESS	HEAD	JAMB	SILL	
S1	0.36, 0.25	10'-0"	4'-2"	FF	ALUM	GL	1"	5/A-504	6/A-504	7/A-504	TRANSACTION WINDOW TO HAVE AN ELECTRIC ACTUATOR.
W1	0.36, 0.25	5'-8"	4'-2"	FF	ALUM	GL	1"	5/A-504	6/A-504	7/A-504	
W2	0.36, 0.25	3'-0"	4'-2"	FF	ALUM	GL	1"	5/A-504	6/A-504	7/A-504	

GLAZING SCHEDULE

TYPE	DESCRIPTION	COMMENTS
GL	1" INSULATING GLASS UNIT (1/4" CLEAR TEMPERED, 1/2" AIRSPACE, 1/4" CLEAR TEMPERED)	REQUIRED ENERGY VALUES ON SHEET A-003

LEGEND

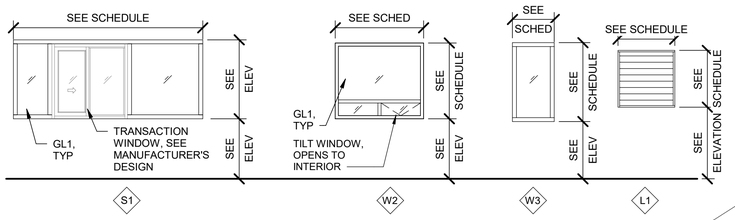
HM = HOLLOW METAL
PT= PAINT
GL = GLAZING

ROOM SCHEDULE

NUMBER	NAME	AREA
101	WORK ROOM	228 SF
102	PAY BOOTH	189 SF
103	RESTROOM	54 SF

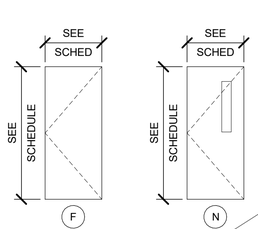
GENERAL NOTES - PARTITION TYPES

1. PROVIDE MOLD & MOISTURE RESISTANT GYPSUM BOARD PANELS IN ALL ROOMS CONTAINING OPERABLE PLUMBING FIXTURES AND WITHIN 4 FEET OF WATER COOLERS, U.N.O.
2. PROVIDE BLOCKING AT ALL AREAS TO RECEIVE CASEWORK, TACKBOARDS, PLUMBING ACCESSORIES, TOILET AND SHOWER ROOM ACCESSORIES. REFER TO SHEET A-002 FOR BLOCKING DETAIL REFERENCE.
3. FOR UL DETAILS SHOWN, REFER TO UL STANDARDS FOR COMPLIANT ASSEMBLY.
4. FOR PENETRATION THROUGH UL DESIGN, PROVIDE THRU PENETRATION ASSEMBLIES AS SHOWN OR AS REQUIRED BY CODE



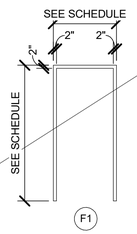
WINDOW TYPES

SCALE: 1/4" = 1'-0"



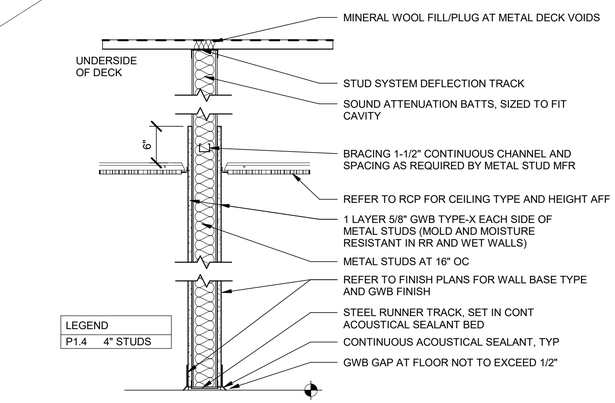
DOOR TYPES

SCALE: 1/4" = 1'-0"



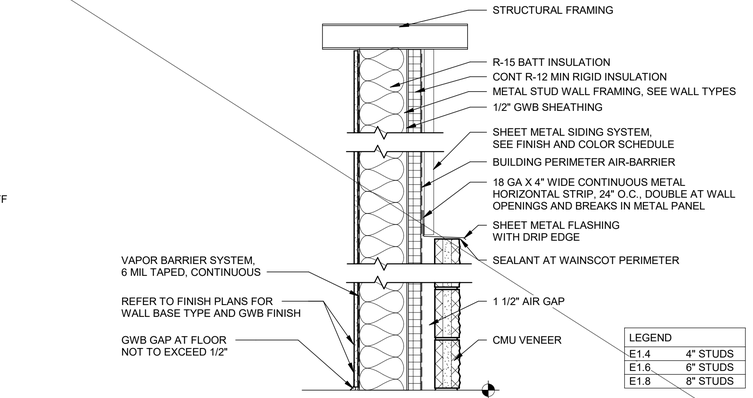
FRAME TYPES

SCALE: 1/4" = 1'-0"



1 PARTITION TYPE P1

A-601 SCALE: 1" = 1'-0"



2 EXTERIOR WALL TYPE E1

A-601 SCALE: 1" = 1'-0"

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

1' 0' 1' 2'
SCALE: 1" = 1'-0"

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL SCHEDULES & DETAILS & WALL TYPES

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

A-601

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FURNITURE SCHEDULE

MARK	MANUFACTURER	DESIGN	STYLE	COMMENTS
BB-1	CLARIDGE	EDGE WRAPPED TACKBOARD	SQUARE CORNER GUILDFORD OF MAINE FR701 FABRICS, 1680 LIME	
CH-1	HERMAN MILLER	PRONTA, STACKING CHAIR	SHELL, CARBON (CBR); FRAME, POLISHED ALUMINUM (47)	
CH-2	HERMAN MILLER	VERUS, WORK CHAIR	TRIFLEX POLYMER BACK, DARK CARBON; UPHOLSTERED SEAT, HEMLOCK (1RV05); BASE AND FRAME WITH ADJUSTABLE LUMBAR SUPPORT, BLACK	
DK-1	UPLIFT DESK	V2-COMMERCIAL	42" X 30", MAPLE LAMINATE, 1 GROMMET COVER & 1 POWER GROMMET WITH USB IN BLACK, C-FRAME IN INDUSTIRAL COLOR, ADVANCED COMFORT ANGLED KEYPAD	
MT-1	MOUNT IT!	SINGLE MONITOR DESK MOUNT, MI-2761	FACTORY FINISH	
RS-1	DRAPER	CLUTCH-OPERATED FLEXSHADE	MANUAL STAINLESS STEEL BEAD CHAIN CLUTCH OPERATOR, DUAL ROLLER HARDWARE WITH FASICA (WHITE); E SCREEN INNER FABRIC (030061 CHARCOAL/COCOA 10%), OUTER FABRIC (02002 WHITE/WHITE 0.5%)	
TB-1	HERMAN MILLER	EVERYWHERE TABLES, ROUND TABLE	42" DIAMETER, SQUARE EDGE, HIGH-PRESSURE LAMINATE TOP WITH THERMOPLASTIC EDGE, 4-COLUMN BASE; TOP, WOODGRAIN LAMINATE OAK ON ASH (LBB)	

FINISH SCHEDULE

ROOM NO	ROOM NAME	FLOOR		WALL BASE	WALLS (MATERIAL/FINISH)				CEILING		COMMENTS
		MAT.	FINISH		NORTH	EAST	SOUTH	WEST	FINISH	HEIGHT	
101	WORK ROOM	CONC	VCT-1, VCT-2	R	GWB / PT-1	GWB / PT-1	GWB / PT-1	GWB / PT-1	ACT	9' - 0"	
102	PAY BOOTH	CONC	VCT-1, VCT-2	R	GWB / PT-1	GWB / PT-1	GWB / PT-1	GWB / PT-1	ACT	9' - 6"	
103	RESTROOM	CONC	TL-1	TL-1	GWB / 6'-0" TL-2, TL-3, TL-4 WAINSCOT	GWB / 6'-0" TL-2, TL-3, TL-4 WAINSCOT	GWB / 6'-0" TL-2, TL-3, TL-4 WAINSCOT	GWB / 6'-0" TL-2, TL-3, TL-4 WAINSCOT	GWB	9' - 0"	

INTERIOR COLOR SCHEDULE

CODE	MANUFACTURER	DESCRIPTION	SIZE	COMMENTS
ACT	CERTAINTEED	CASHMERE, TRIMMED EDGE CM-457, WHITE	24 X 24	
G-1	CUSTOM BUILDING PRODUCTS	HAYSTACK #380	-	INTERIOR RESTROOM TILES
PLAM	WILSONART	NEOWALNUT 7991	-	
PT-1	SHERWIN WILLIAMS	SNOWBOUND SW 7004	-	
PT-2	SHERWIN WILLIAMS	GRIZZLE GRAY SW 7068	-	
R	NORA	DARK BROWN	4" TALL	
SSF-1	WILSONART	AVALANCHE MELANGE 9175ML	-	MAIN COUNTER TOPS
SSF-2	WILSONART	COCONUT OIL 9100GS	-	WINDOW SILLS
TL-1	DALTILE	INDUSTRIAL PARK, BEIGE	12 X 12	FLOOR TILE; COVE BASE AT PERIMETER OF ROOM, CUT HEIGHT TO 4" TO ABUT WALL TILE
TL-2	DALTILE	COLOR WHEEL CLASSIC, ALMOND 0135, SQUARE	6 X 6	MAIN WALL TILE
TL-3	DALTILE	COLOR WHEEL CLASSIC, ELEMENTAL TAN 0166, SQUARE	6 X 6	ACCENT WALL TILE
TL-4	DALTILE	COLOR WHEEL CLASSIC, GARDEN SPOT 0141, SQUARE	6 X 6	ACCENT WALL TILE
VCT-1	ARMSTRONG	STANDARD EXCELON IMPERIAL TEXTURE, SILK 59234	12 X 12	MAIN FLOOR TILE
VCT-2	ARMSTRONG	STANDARD EXCELON IMPERIAL TEXTURE, LIME ZEST 57546	12 X 12	ACCENT FLOOR TILE
VCT-3	ARMSTRONG	STANDARD EXCELON IMPERIAL TEXTURE, LITTLE GREEN APPLE 51866	12 X 12	ACCENT FLOOR TILE

EXTERIOR COLOR SCHEDULE

CODE	MANUFACTUERER	DESCRIPTION	COMMENT
-	METAL SALES	SOFFIT PANEL, V-GROOVES, 12" COVERAGE, CLASSIC GREEN	
-	SHERWIN WILLIAMS	PAINT TO MATCH ROOF COLOR	
M-1	MUTUAL MATERIALS	4-8-16, SPLIT FACE, KHAKI	
MO	SOLOMON COLORS	X SERIES COLOR, 10X	
MP-1	METAL SALES	EM15-126, OLD ZINC GREY	
MP-2	METAL SALES	EM15-1293, OLD TOWN GREY	
PT-2	SHERWIN WILLIAMS	WEB GRAY SW 7075	OR APPROVED EQUAL

BLINDS AND SHADES SCHEDULE

ROOM	DIRECTION	TYPE / COMMENT
101	SOUTH	NONE
101	WEST	NONE
102	EAST	DUAL BLIND AND ROLLER SHADES
102	NORTH	DUAL BLIND AND ROLLER SHADES
102	SOUTH	DUAL BLIND AND ROLLER SHADES
102	WEST	DUAL BLIND AND ROLLER SHADES

LEGEND

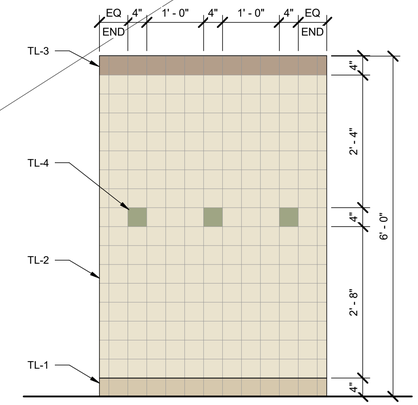
ACT = ACOUSTIC CEILING TILE
CG = CMU GROUT
CONC = CONCRETE
FRP = FIBERGLASS REINFORCED PLASTIC
G = GROUT
GWB = GYPSUM WALL BOARD
M = MASONRY
MO = MORTAR
MP = METAL WALL PANEL
MRP = METAL ROOF PANEL
PLAM = PLASTIC LAMINATE
R = RUBBER BASE
SSF = SOLID SURFACE
TL = CERAMIC / PORCELAIN TILE
VCT = VINYL COMPOSITE TILE

GENERAL NOTES - FURNITURE

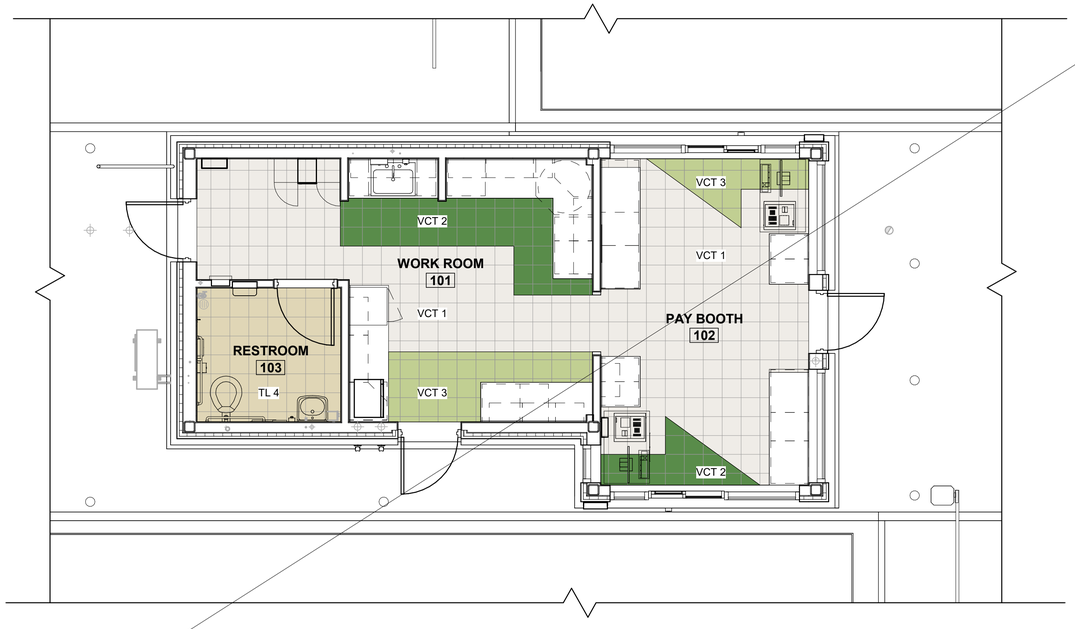
1. ALL FURNITURE SHOWN IS BASIS OF DESIGN. ALTERNATIVES AND MUST BE SUBMITTED TO ARCHITECT FOR APPROVAL.
2. FURNITURE IN SCHEDULE TO BE CFCI, TYP.

GENERAL NOTES - FINISHES

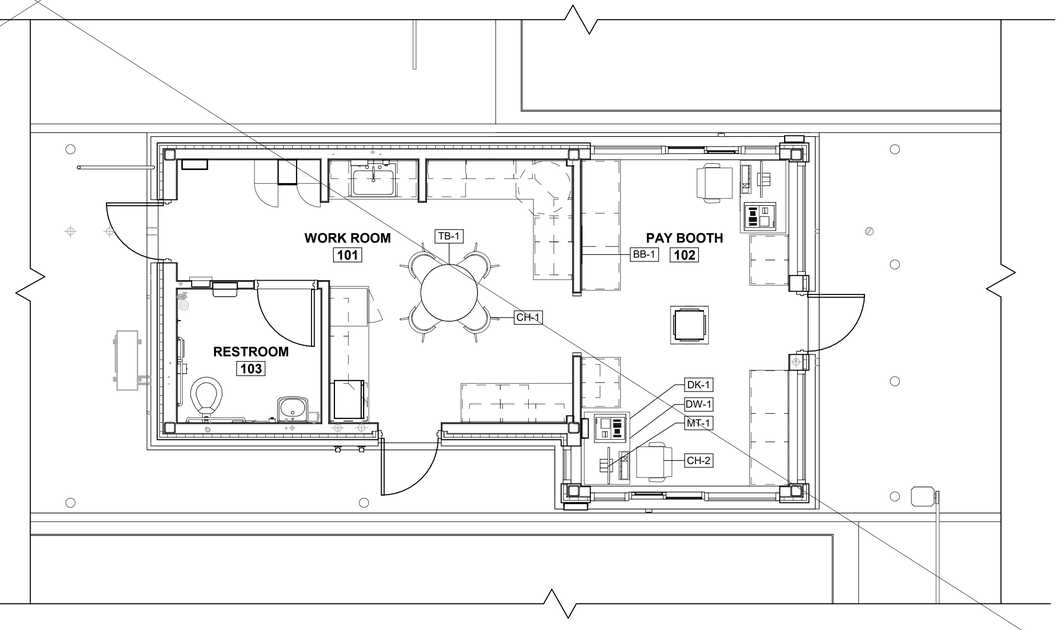
1. ALL FINISHES ARE BASIS OF DESIGN. ALTERNATIVES MUST BE SUBMITTED TO ARCHITECT FOR APPROVAL.
2. REFER TO FINISHES PLAN FOR FLOOR LAYOUT.



3 / A-602 CERAMIC TILE LAYOUT, TYP
SCALE: 3/4" = 1'-0"



1 / A-602 INTERIOR FINISH PLAN
SCALE: 1/4" = 1'-0"



2 / A-602 FURNITURE PLAN
SCALE: 1/4" = 1'-0"

1' 0' 1' 2' 3'
SCALE: 3/4" = 1'-0"

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL FINISH PLAN & SCHEDULE

PROJ:	200-42064-22005
DESN:	M.BODSKY
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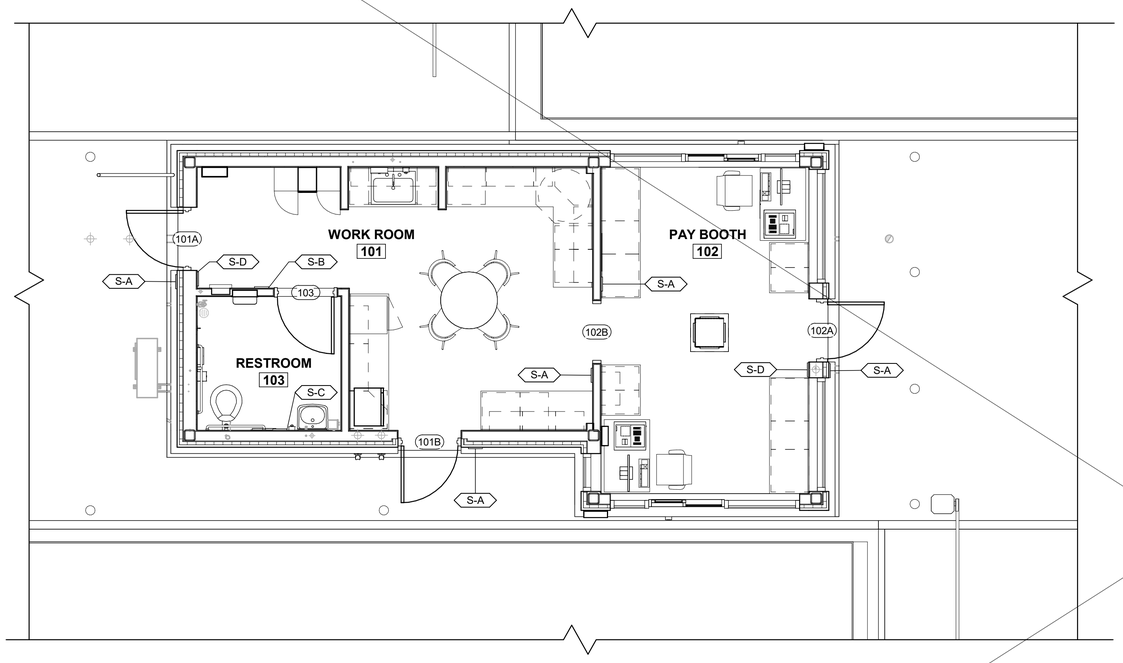
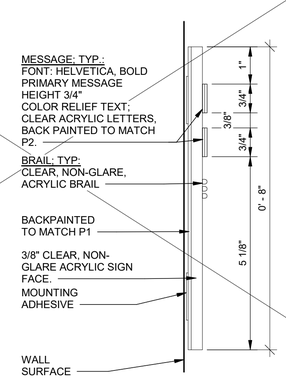
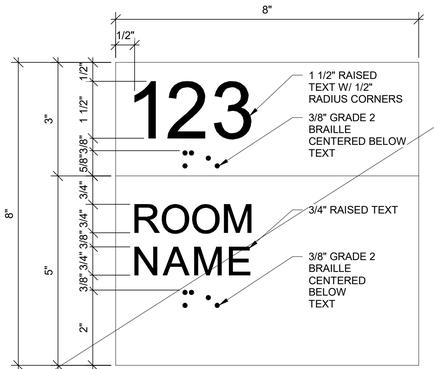


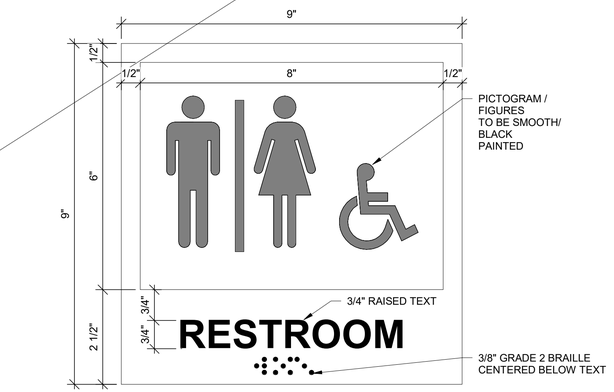
1 FIRST FLOOR PLAN
A-603 SCALE: 1/4" = 1'-0"



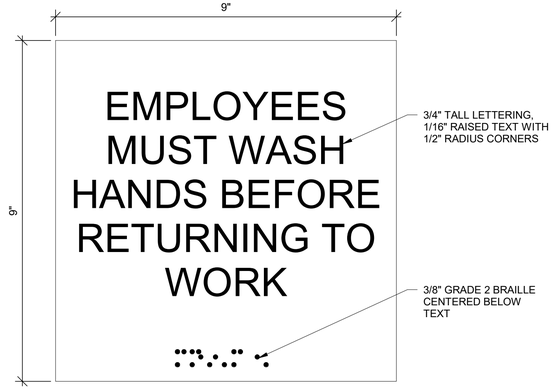
4 TYP. PLAQUE SECTION
A-603 SCALE: 6" = 1'-0"



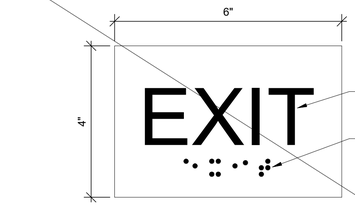
2 SIGN A - PERMANENT ROOM
A-603 SCALE: 6" = 1'-0"



3 SIGN B - UNISEX RESTROOM
A-603 SCALE: 6" = 1'-0"



5 SIGN C - RESTROOM INTERIOR
A-603 SCALE: 6" = 1'-0"



6 SIGN D - ADA EXIT
A-603 SCALE: 6" = 1'-0"

GENERAL NOTES - SIGNAGE

1. REFER TO UFC AIR FORCE BASE GUIDELINES 3-120-0, AND ADA STANDARDS FOR SIGANGE REQUIREMENTS.
2. SIGNAGE WITH TACTILE LETTERING MUST COMPLY WITH ANSI A117.1
3. CONFIRM ALL TEXT WITH END USER
4. ALL SIGNAGE TO BE WALL MOUNTED UNLESS NOTED OTHERWISE. REFER TO SHEET A-002 FOR TYPICAL MOUNTING HEIGHTS.
5. RESTROOM SIGNAGE WILL HAVE RAISED PICTOGRAMS FOR THE MALE AND FEMALE RESTROOMS AND THE UNIVERSAL SYMOBL FOR HANDICAP ACCESS AND RAISED BRAILLE BELOW.
6. REFER TO SIGNAGE PLANS, TYPICALS, AND SPECIFICATIONS FOR MORE INFORMATION.
7. PROVIDE SOFTWARE AND TRAINING FOR CHANGEABLE PAPER INSERT STRIPS TO BE EDITED ON CLIENTS COMPUTER. EXTRA STRIPS SHALL BE PROVIDED. MUST BE ABLE TO BE PRINTED ON A TYPICAL 8.5"x11" BLACK AND WHITE PRINTER
8. ALL FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS, AND SMOKE PARTITIONS OR ANY OTHER WALLS REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS MUST BE PERMANENTLY IDENTIFIED BY STENCILING (PAINT) OR SIGNAGE IDENTIFYING THE RATING IN HOURS (i.e, 1-HR) WITH LETTERS NOT LESS THAN 1/2" HIGH AT INTERVALS NO GREATER THAN 8'-0" WITH AT LEAST ONE SUCH SIGN PER WALL FOR WALLS LESS THAN 8'-0" HORIZONTALLY, AND MIN. 1'0" ABOVE SCHEDULED CEILING
9. PROVIDE BACK PANEL IF ANY SIGNS ARE INSTALLED ON GLASS.
10. ROOM NUMBERS LISTED IN SCHEDULE ARE GENERIC NUMBERS. ACTUAL ROOM NUMBERS TO BE LISTED ON SIGN ARE TO BE ESTABLISHED BY END USER.
11. RESTROOMS NOT LABELED AS MEN'S AND WOMEN'S IN FLOOR PLAN ARE TO HAVE A UNISEX PIUTCOGRAM INCLUDING BOTH THE MALE AND FEMALE AND THE HANDICAP SYMBOL

12 HELVETICA MEDIUM FONT SHALL BE USED FOR ALL HEADER COPY AND FOR DIRECTIONAL ARROWS

13 HELVETICAL REGULAR FONT SHALL BE USED FOR ALL BODY COPY

14 GRAPHIC EMBLEMS MAY BE USED, EMBLEMS SHALL BE 4" X 4" LOCATED ON THE LEFT SIDE OF HEADER; EMBLEMS TO COMPLY WITH SECTION C.8 OF SID TECH. GUIDE SPECS.

15 COLORS OF INTERIOR SIGNS TO COORDINATE WITH BUILDING INTERIOR DESIGN SCHEME; TYP. DARK BACKGROUND AND WHITE GRAPHICS

16 ANY SIGNAGE TO BE MOUNTED ON A DEMOUNTABLE WALL SURFACE OR GLASS SURFACE TO HAVE PROPER MOUNTING HARDWARE

17 MOUNTING HARDWARE FOR DEMOUNTABLE WALL AND GLASS WALLS SIGNAGE TO BE THAT OF PERMANENT MOUNTS

18 SIGNAGE TYPES A & B ARE TO BE PROVIDED AND INSTALLED BY END USER; SIGNAGE TYPES A & B ARE NOT A PART OF CONTRACTORS S.O.W.

19 MOUNTING HARDWARE TO CHAIN LINK FENCES TO BE THAT OF PERMANENT MOUNTING BRACKETS

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

ARCHITECTURAL SIGNAGE PLAN & SCHEDULE

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	T.LARSON / E.HAN
CHKD:	M.BODSKY

A-603

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0' 2' SCALE: 6" = 1'-0"

4' 0' 4' 8' SCALE: 1/4" = 1'-0"

Bar measures 1 inch, otherwise drawing is not to scale

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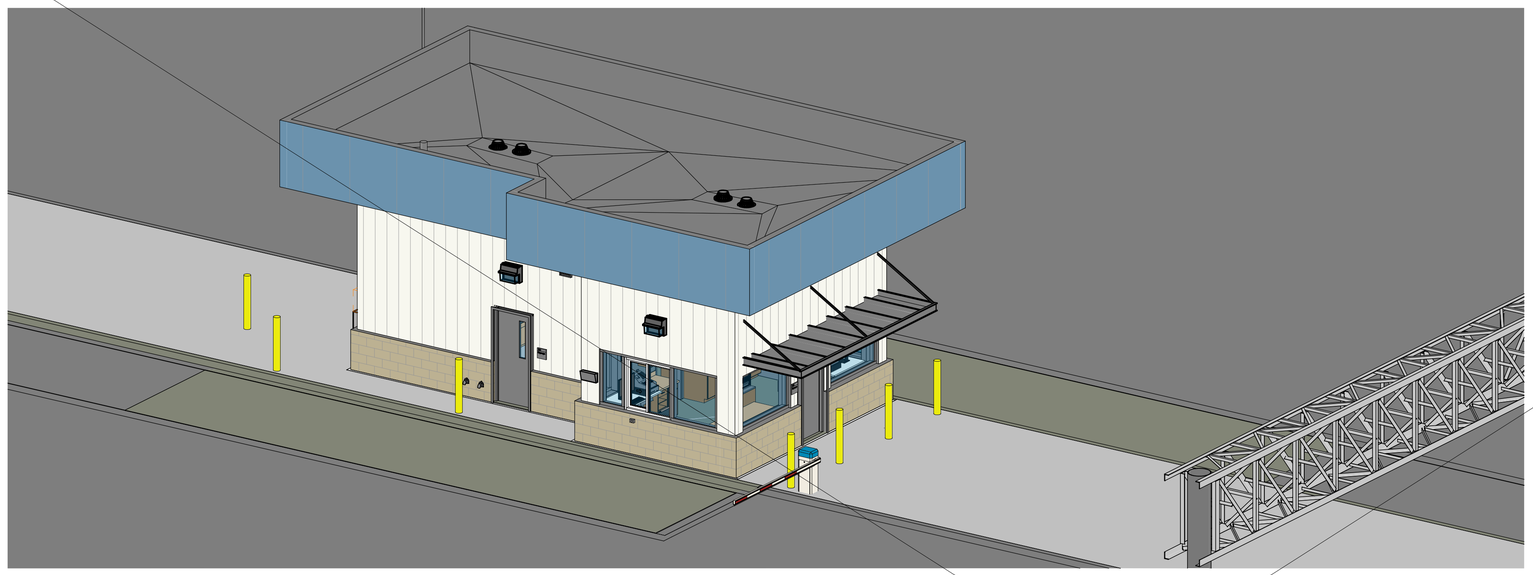
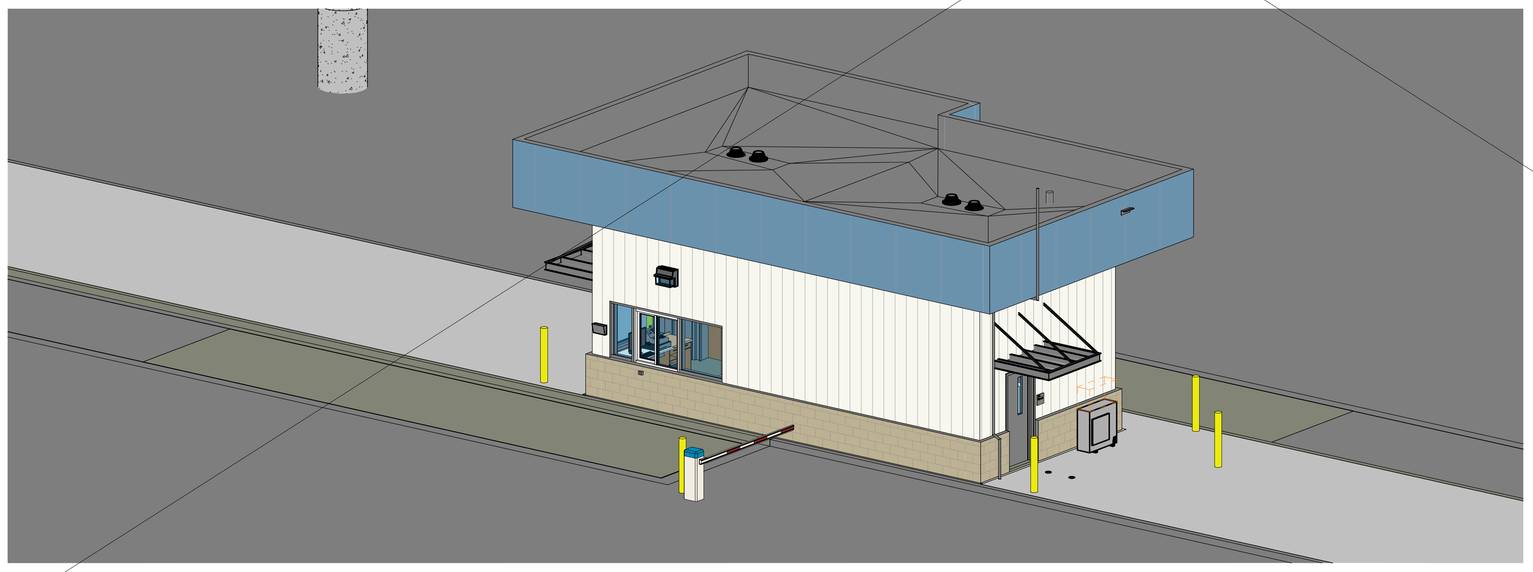


1 3D PERSPECTIVE



2 3D PERSPECTIVE

TETRA TECH
ENGINEERING BUSINESS NO. 2429
www.tetratech.com
17885 VON KARMAN AVE., SUITE 500
IRVINE, CALIFORNIA 92614
TEL: (949) 809-5000

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COUNTY OF SANTA CRUZ

BEN LOMOND SCALE HOUSE

AXONOMETRIC VIEWS

PROJ:	200-42064-22005
DESN:	M.BODSKY
DRWN:	E.HAN
CHKD:	M.BODSKY

A-901

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2/14/2025 10:10:35 AM Autodesk Docs://213-42064-24001 BL Scale House/A-BL_Scale_House-213-42064-24001-v2023.rvt

Bar measures 1 inch, otherwise drawing is not to scale

STRUCTURAL GENERAL NOTES

1. THESE GENERAL NOTES PRESENT AND/OR SUMMARIZE KEY PROJECT INFORMATION FOR THE DRAWING READER'S CONVENIENCE. SEE ALSO INDIVIDUAL DRAWING NOTES AND PROJECT SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.
2. ALL REFERENCED STANDARDS HEREIN ARE TO MOST RECENT ISSUE IN EFFECT AS OF THE DATE OF THESE DOCUMENTS, UNLESS NOTED OTHERWISE IN PROJECT SPECIFICATIONS OR ON THE DRAWING.
3. ALL EXISTING DIMENSIONS SHOWN WITH THE ± SYMBOL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE FABRICATION AND CONSTRUCTION.
4. DIMENSIONS MARKED WITH A "X" SHALL BE DETERMINED BY EQUIPMENT MANUFACTURER AND COORDINATED BY CONTRACTOR
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, PROJECT DATA AND SAMPLES AS SPECIFIED IN PROJECT SPECIFICATIONS.
6. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE (C.B.C.).
7. THE CONTRACTOR ACKNOWLEDGES RESPONSIBILITY FOR JOBSITE SAFETY AND ACKNOWLEDGES THAT THE ENGINEER WILL NOT HAVE SUCH RESPONSIBILITY. IF A LAWSUIT IS FILED BY ONE OF THE CONTRACTOR'S OR SUBCONTRACTOR'S EMPLOYEES, OR ANYONE ELSE, THE CONTRACTOR WILL INDEMNIFY, DEFEND AND HOLD THE OWNER AND TETRA TECH, INC., THEIR PARENT AND SUBSIDIARY COMPANIES HARMLESS OF ANY AND ALL SUCH CLAIMS.
8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. SHOULD CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON PLANS, THE ENGINEER SHALL BE NOTIFIED IN WRITING BEFORE PROCEEDING WITH WORK.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL WORK IS ADEQUATELY BRACED AND SHORED DURING CONSTRUCTION. ALL BRACING/SHORING SHALL BE DESIGNED BY A REGISTERED ENGINEER HIRED BY THE CONTRACTOR.
10. UNLESS DETAILED, SPECIFIED, OR INDICATED OTHERWISE, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND THESE GENERAL NOTES. TYPICAL DETAILS ARE MEANT TO APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS ON DRAWINGS WHERE THEY OCCUR.
11. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKERS AND PEDESTRIANS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK, ETC. OBSERVATION VISITS BY THE ENGINEER SHALL NOT BE CONSIDERED AN INSPECTION OF SUCH ITEMS.
12. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS.
13. ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
14. BY ACCEPTING THE CONTRACT, CONTRACTOR HEREBY RELEASES AND AGREES TO INDEMNIFY, DEFEND, HOLD HARMLESS THE OWNER, ENGINEER, (HEREINAFTER TETRA TECH, INC.), THEIR PARENT AND SUBSIDIARY COMPANIES, AGENTS, EMPLOYEES, TO THE FULLEST EXTENT PERMITTED BY LAW. SUCH INDEMNIFICATION SHALL EXTEND TO ALL CLAIMS, DEMANDS, ACTIONS, OR LIABILITY FOR INJURIES, DEATH OR DAMAGES OCCURRING AFTER COMPLETION OF THE PROJECT, AS WELL AS DURING THE WORK'S PROGRESS. CONTRACTOR FURTHER AGREES THAT IT SHALL ACCOMPLISH THE ABOVE AT ITS OWN COST, EXPENSE AND RISK EXCLUSIVE OF AND REGARDLESS OF ANY APPLICABLE INSURANCE POLICY OR POSITION TAKEN BY ANY INSURANCE COMPANY REGARDING COVERAGE.
15. CONTRACTOR SHALL VERIFY LOCATION OF ALL SITE UTILITIES PRIOR TO STARTING WORK, BOTH ABOVE GROUND AND BELOW GROUND, WHICH MAY BE IMPACTED BY THE WORK SHOWN ON THESE DRAWINGS. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
16. CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CLIENT AND TETRA TECH, IN.C THEIR PARENT AND SUBSIDIARY COMPANIES, ITS EMPLOYEES, OFFICERS, OR AGENTS, HARMLESS AGAINST ANY AND ALL CLAIMS BY ANY PARTIES ARISING FROM, OR RELATED TO, ANY AND ALL DAMAGES, INCLUDING LEGAL COSTS AND ATTORNEY'S FEES, RESULTING FROM INTERFERENCE WITH, INTERRUPTION OF, DAMAGE TO, OR ANY AND ALL INJURIES WHICH RESULT FROM DAMAGE CAUSED TO SUBSURFACE INSTALLATION, WHICH IS UNFORESEEN AND DESPITE ENGINEER'S EFFORT DURING THE DESIGN PROCESS WAS NOT LOCATED, EXPECTING ONLY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF ENGINEER IN PROVIDING ITS SERVICES.
17. ALL ITEMS SHOWN ON THESE PLANS ARE NEW UNLESS NOTED (E), EXIST. OR EXISTING.

DESIGN CRITERIA

A. REFERENCES:

1. ICC INTERNATIONAL BUILDING CODE, 2021 EDITION
   RISK CATEGORY II IN ACCORDANCE WITH TABLE 1604.5
2. STATE BUILDING CODE: 2022 CALIFORNIA BUILDING CODE
3. ASCE/SEI 7-16 - MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
4. CALTRANS STANDARD SPECFICIATIONS FROM THE STATE OF CALIFORNIA, 2023 EDITION

B. DEAD LOADS:

ROOF DEAD LOAD	= SELF WEIGHT (OR 5 PSF)
ROOF COLLATERAL* LOAD	= 15 PSF (ASSUMES 5 PSF FOR AUTOMATIC SPRINKLER SYSTEM)
AVAILABLE TO RESIST UPLIFT	= SELF WEIGHT OF STRUCTURAL FRAMING ONLY

1

* COLLATERAL LOAD INCLUDES PROVISION FOR HANGING LOADS INCLUDING SPRINKLERS, PLUMBING, FUTURE SOLAR PANEL BUILDOUT AND OTHER COMPONENTS. REFER TO DRAWINGS FOR CONCENTRATED LOADING.

C. LIVE LOADS (U.N.O.):

ROOF	= 20 PSF

D. WIND LOAD:

ULTIMATE DESIGN WIND SPEED, Vult	= 92 MPH
NOMINAL DESIGN WIND SPEED, Vasd	= 72(Vult* √0.6) MPH
RISK CATEGORY	= II
WIND EXPOSURE CATEGORY	= C
DIRECTIONALITY FACTOR, Kd	= 0.85
TOPOGRAPHY	= 1.0
CANOPY STRUCTURES	
BUILDING ENCLOSURE CLASSIFICATION	= OPEN BUILDING
SCALE HOUSE	
BUILDING ENCLOSURE CLASSIFICATION	= ENCLOSED BUILDING

E. SEISMIC DESIGN DATA:

RISK CATEGORY	= II
SEISMIC IMPORTANCE FACTOR, Ie	= 1.0
SDS	= 1.182
SD1	= 0.418
SS	= 1.97
S1	= 0.783
SITE CLASS	= 'B'
SEISMIC DESIGN CATEGORY	= 'E'
CANOPY STRUCTURES	
RESPONSE MODIFICATION FACTOR, R	= 2.5
BASIC SEISMIC FORCE RESISTING SYSTEM	= STEEL ORDINARY MOMENT FRAME w/ PERMITTED HEIGHT INCREASE, ASCE 7-16 TABLE 15.4-1
SEISMIC RESPONSE COEFFICIENT, Cs	= 0.473
ANALYSIS PROCEDURE:	= EQUIVALENT LATERAL FORCE
SCALE HOUSE	
RESPONSE MODIFICATION FACTOR, R	= 3.5
BASIC SEISMIC FORCE RESISTING SYSTEM	= STEEL ORDINARY MOMENT FRAME ASCE 7-16 TABLE 12.2-1 (W/ EXCEPTION PER SECTION 12.2.5.6.1)
REDUNDANCY	= 1.3
SEISMIC RESPONSE COEFFICIENT, Cs	= 0.338
ANALYSIS PROCEDURE:	= MODAL RESPONSE SPECTRUM ANALYSIS
ENTRANCE SIGN	
RESPONSE MODIFICATION FACTOR, R	= 2
BASIC SEISMIC FORCE RESISTING SYSTEM	= INVERTED PENDULUM, ASCE 7-16 TABLE 15.4-2
SEISMIC RESPONSE COEFFICIENT, Cs	= 0.591
ANALYSIS PROCEDURE:	= EQUIVALENT LATERAL FORCE

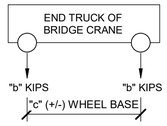
DESIGN CRITERIA - (CONTINUED)

F. UNDER RUNNING BRIDGE CRANE (SEE DIAGRAM ON SHEET S-001):

CAPACITY	= 1/2 TON
MAX WHEEL LOAD	= 1 KIP
VERTICAL IMPACT FORCE	= 25% INCREASE IN MAX. WHEEL LOAD
LATERAL FORCE	= 20% OF CRANE CAPACITY + HOIST/TROLLEY WEIGHT
LONGITUDINAL FORCE	= 10% OF WHEEL LOAD
HOOK HEIGHT	= 10'-0" MIN. ABOVE FINISH FLOOR
VERTICAL SERVICE DEFLECTION (RUNWAY BEAMS)	= L/600

1. CONTRACTOR TO VERIFY WHEEL LOAD AND SPACING WITH CRANE MANUFACTURER DEVIATIONS FROM THE ASSUMED LOADS MAY REQUIRE REDESIGN OF CRANE SUPPORT SYSTEM.
2. CRANE CLASSIFICATION: CMAA, CLASS B
3. THE BRIDGE CRANE SYSTEM SHALL BE TESTED AS NOTED IN THE SPECIFICATION
4. ALL BOLTED CONNECTIONS FOR ANY CRANE STRUCTURAL MEMBERS SHALL BE SLIP CRITICAL
5. CRANE SYSTEM TO HAVE MOTORIZED TROLLEY, HOIST AND HOIST TROLLEY.

BRIDGE CRANE SCHEDULE			
DESIGN BASIS MODEL (COFFING)	CAPACITY	"b" WHEEL LOAD	"c" WHEEL SPACING
JLC-1016	1/2 TON	1 KIPS	0'-3.54"



CRANE MAX. WHEEL LOADS
(DOES NOT INCLUDE IMPACT. RE S-001)

FOUNDATIONS

1. SEE GEOTECHNICAL/SUBSURFACE INVESTIGATION REPORTS BY TETRA TECH BAS, INC., PROJECT NO. BAS 21-185E, DATED JULY 11, 2022 AND FEBRUARY 9, 2024. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHETHER OR NOT ADDITIONAL GEOTECHNICAL INFORMATION IS REQUIRED AND TO PROVIDE SUCH INFORMATION AS THE CONTRACTOR DEEMS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
2. ALLOWABLE BEARING PRESSURES AS FOLLOWS:
   A. MAT. FOUNDATIONS = 2000 PSF EMBED. AT LEAST 2'-0" BELOW EXISTING GRADE
      ALLOWABLE BEARING VALUE MAY BE INCREASED BY ONE-THIRD FOR TRANSIENT LOADS FROM WIND AND SEISMIC
3. GEOTECHNICAL ENGINEER SHALL BE RETAINED BY THE CONTRACTOR TO PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF CONSTRUCTION. INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER.
4. PRIOR TO PLACING ENGINEERED FILL, THE CONTRACTOR SHALL STRIP AND PROOF ROLL THE SITE. ANY SOFT SPOTS ENCOUNTERED SHALL BE REMOVED AND REPLACED, BY THE CONTRACTOR, WITH ENGINEERED FILL. REFER TO EARTHWORK SPECIFICATION FOR ADDITIONAL INFORMATION.
5. THERE SHALL BE NO BACKFILLING OPERATIONS UNTIL THE CONCRETE WALLS HAVE REACHED THEIR 28 DAY DESIGN STRENGTH, UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER IN WRITING.
6. HEAVY EQUIPMENT OR WHEELED/TRACKED VEHICLES EXCEEDING 20 PSF CONTACT PRESSURE ARE NOT ALLOWED ON ELEVATED SLABS, ROOFS, OR WITHIN 10 FT OF EARTH RETAINING WALLS UNLESS NOTED OTHERWISE ON PLANS OR APPROVED BY STRUCTURAL ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
7. THE TYPE OF CAST-IN-DRILLED-HOLE (CIDH) PILE TO BE USED FOR THIS PROJECT SHALL BE 'DRILLED HOLES FILLED WITH CONCRETE' AS DEFINED IN THE CALTRANS STANDARD SPECIFICATIONS.
8. THE CONSTRUCTION OF CAST-IN-DRILLED-HOLE (CIDH) PILES SHALL BE IN COMFORMANCE WITH THE 2023 CALTRANS STANDARD SPECIFICATIONS FROM THE STATE OF CALIFORNIA STATE TRANSPORTATION AGENCY DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR SHALL BE RESPONSIBLE. THIS INCLUDES THE FOLLOWING SECTIONS:
   A. SECTION 49 - PILING
   B. SECTION 52 - REINFORCEMENT
   C. SECTION 90 - CONCRETE

CONCRETE

1. REFERENCES

   A. ACI 318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   B. ACI 350-06 CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES
   C. ACI SP-66 ACI DETAILING MANUAL
   D. ACI 301-16 SPECIFICATION FOR STRUCTURAL CONCRETE
   E. ACI 117-10 SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS
   F. CRSI MSP-2-01 MANUAL OF STANDARD PRACTICE
   G. CRSI REINFORCING BAR DETAILING
   H. CRSI PLACING REINFORCING BARS

2. MATERIALS

   A. STRUCTURAL CONCRETE

      a. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (f'c): 4500 PSI
      b. UNLESS NOTED OTHERWISE ON THE PLANS, ALL CONCRETE TO HAVE THE FOLLOWING EXPOSURE CLASSIFICATION AS DEFINED IN ACI 318-14, CHAPTER 19: F1, S1, W1, C0
      c. ALL CONCRETE EXPOSED TO THE ELEMENTS SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ASTM C260. SEE SPECIFICATIONS.
      d. ALL CONCRETE IN 8" WALLS OR COLUMNS WITH TWO PLANES OF REINFORCEMENT SHALL HAVE MAXIMUM 3/4" AGGREGATE. IT IS RECOMMENDED THAT THE CONTRACTOR CONSIDER SUPER-PLASTICIZED CONCRETE PER SPECIFICATIONS.
      e. ALL CONCRETE AGGREGATE SHALL COMPLY WITH ASTM C33 (NORMAL WEIGHT).
      f. WATER TO CEMENT RATIO (MAX) = 0.45
      g. AIR CONTENT PERCENT BY VOLUME = 3 +/- 1%
      h. CEMENT FOR CONCRETE SHALL BE TYPE V PORTLAND CEMENT CONFORMING TO A.S.T.M. C150.
      i. SLUMP AT POINT OF PLACEMENT
         - WITH WATER REDUCING ADMIXTURE: 2" - 4"
         - WITH HIGH RANGE WATER REDUCING ADMIXTURE: 6" - 8"
      j. FLY ASH: ASTM C 618, TYPE F WITH LOSS ON IGNITION NOT MORE THAN 6 PERCENT. REPLACEMENT QUANTITY OF CEMENT CONTENT BY WEIGHT SHALL BE NOT LESS THAN 15 PERCENT OR MORE THAN 25 PERCENT IN CONCRETE
      k. WATER-REDUCING ADMIXTURE: ASTM C 494, TYPE A.
      l. PROHIBITED ADMIXTURES: CALCIUM CHLORIDE THYOCYANATES OR ADMIXTURES CONTAINING MORE THAN 0.1 PERCENT CHLORIDE IONS.
      m. CEMENT CONTENT PER CUBIC YARD OF CONCRETE: 564 LBS

   B. REINFORCEMENT

      a. REINFORCING BARS: ASTM A615, GRADE 60
      b. WELDED SMOOTH WIRE FABRIC - ASTM A185 (SHEETS ONLY, ROLL FABRIC NOT ALLOWED)

   C. ACCESSORIES

      a. BAR SUPPORTS CLASS 1, MAXIMUM PROTECTION (CRSI MANUAL OF STANDARD PRACTICE) FOR ALL SLABS AND BEAMS WITH SOFFITS EXPOSED TO VIEW

   D. CAST-IN-PLACE ANCHOR RODS AND ADHESIVE ANCHOR RODS

      a. SHALL BE GALVANIZED, FURNISHED WITH CHAMFERED ENDS, AND SHALL MEET STRENGTH AND DUCTILITY REQUIREMENTS EQUIVALENT ASTM F1554, GR 55 WELDABLE MATERIAL, UNLESS NOTED OTHERWISE.

   E. GROUT: HIGH STRENGTH, NON-SHRINK STRUCTURAL GROUT. SEE SPECIFICATIONS.

CONCRETE - (CONTINUED)

3. REINFORCEMENT DETAILING
   A. ALL REINFORCING STEEL DETAILS SHALL BE IN ACCORDANCE WITH THE ACI CODE REQUIREMENTS (ACI 318 OR 350 - CURRENT EDITIONS).
   B. REINFORCING STEEL PLACING DRAWINGS AND BAR LISTS SHALL CONFORM TO THE ACI OR CRSI DETAILING MANUALS. ALL BAR AND MESH SUPPORTS MUST BE CLEARLY DETAILED
   C. CONCRETE COVER FOR REINFORCING SHALL BE INDICATED ON THE APPLICABLE REINFORCING STEEL SHOP DRAWINGS. HOWEVER, NO REINFORCING IN AREAS EXPOSED TO EARTH, WEATHER ,SEWAGE OR WATER SHALL HAVE COVER LESS THAN TWO INCHES.
   D. SPECIFIED COVER FOR REINFORCING PER ACI 318 (BUILDING STRUCTURES):

FOOTINGS (BOTTOM)	3.0" (CAST AGAINST EARTH)
FOOTINGS	2.0" (FORMED)
COLUMNS (TIES)	1.5"
WALLS (EXTERIOR)	1.5"
WALLS (INTERIOR)	3/4"
BEAMS	1.5"
SLAB-ON-GRADE (WWF)	1/3 x DEPTH FROM TOP OF SLAB
SLAB-ON-GRADE (REBAR)	2" FROM TOP OF SLAB (U.N.O.)

   E. REINFORCEMENT IN WALLS AND STRIP FOOTINGS SHALL BE CONTINUOUS. HORIZONTAL BAR LAP SPLICES SHALL BE STAGGERED
   F. PROVIDE CORNER BARS AT ALL WALL AND FOUNDATION CORNERS, AND LAP WITH THE HORIZONTAL BARS. CORNER BARS ARE TO MATCH THE HORIZONTAL BARS IN SIZE, GRADE AND SPACING UNLESS OTHERWISE SHOWN.
   G. HOOKS AND BENDS SHALL MEET ACI STANDARD UNLESS OTHERWISE INDICATED.
   H. SPLICES: CONTINUOUS REINFORCING BARS SHALL BE FURNISHED WITH CLASS 'B' TENSION LAPS SPLICES INCLUDING CORNER BARS, UNLESS NOTED OTHERWISE.
   I. MECHANICAL SPLICES SHALL NOT BE PERMITTED UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER
   J. REINFORCING STEEL FABRICATION AND PLACEMENT SHALL BE IN ACCORDANCE WITH CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS (LATEST EDITIONS).
   K. REINFORCING STEEL IN FOOTINGS SHALL BE ASSEMBLED IN MAT GRILLES EQUALLY SPACED AND SECURELY WIRED TOGETHER BEFORE THE CONCRETE IS POURED.
   L. WALL FOOTING DOWELS ARE TO HAVE A FULL TENSION LAP SPLICE WITH VERTICAL WALL STEEL PER THE REINFORCING LAP SPLICE CHART AND NOTES ON SHEET S-002 STEEL UNLESS NOTED OTHERWISE.
   M. SPREAD BARS AROUND SMALL OPENINGS AND SLEEVES IN SLABS AND WALLS WHERE POSSIBLE AND WHERE BAR SPACING WILL NOT EXCEED 1.5 TIMES THE NORMAL SPACING. DISCONTINUE BARS AT LARGE OPENINGS WHERE NECESSARY AND PROVIDE AN AREA OF REINFORCEMENT EQUAL TO THE INTERRUPTED REINFORCEMENT DISTRIBUTING ONE-HALF OF THIS REINFORCEMENT EACH SIDE OF THE OPENING (TENSION LAP SPLICED). HOLES LARGER THAN 12 INCHES IN ANY DIRECTION SHALL HAVE (2) #6 X 4'-0" DIAGONAL BARS IN BOTH FACES AT EACH CORNER.
   N. ALL REINFORCING SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES IN CONCRETE
   O. NO REINFORCING STEEL SHALL BE FIELD BENT WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER. FIELD BENDING OF PLAIN REINFORCEMENT, IF PERMITTED, SHALL BE PERFORMED USING AN APPROVED AND APPROPRIATE SIZED PORTABLE HYDRAULIC DEVICE THAT MAKES ACI STANDARD RADIUS BENDS. NO OTHER FIELD BENDING METHOD SHALL BE PERMITTED.
   P. WELDING, INCLUDING TACK WELDING, FOR REINFORCING STEEL IS PROHIBITED. WELDING OF REINFORCING STEEL AND HIGH STRENGTH BOLTS, IE. A36, F1554, WILL BE PERMITTED ONLY BY WRITTEN APPROVAL OF THE ENGINEER.
   Q. ALL OPENINGS THROUGH WALLS, SLABS OR OTHER STRUCTURAL ELEMENTS NOT DETAILED ON THE STRUCTURAL DRAWINGS MUST BE LOCATED BY THE CONTRACTOR AND SHOWN ON THE APPLICABLE REINFORCING STEEL SHOP DRAWINGS. THE FINAL LOCATION OF ALL OPENINGS MUST BE REVIEWED BY THE ENGINEER BEFORE THE CONCRETE IS POURED.
   R. MODIFICATION AND REPAIR TO EXISTING CONCRETE:
      a. SEE CONCRETE SPECIFICATIONS FOR COMPLETE EXPLANATION.
      b. CONNECTION METHODS:
         1. METHOD A - BONDING TO SATURATED SURFACE
         2. METHOD B - BONDING BY USING BONDING AGENT
         3. METHOD C - DOWELS USING EPOXY BONDING AGENT
4. FOOTINGS

   A. CENTER ALL FOOTINGS ON WALL, PIER OR COLUMN ABOVE UNLESS OTHERWISE INDICATED.

5. FORMWORK

   A. SEE SPECIFICATIONS
   B. CAMBER: PROVIDE CAMBER TO COMPENSATE FOR DISPLACEMENT OF FORMS (SEE ALSO SPECS.) AND TO PROVIDE AS-CAST MEMBER CAMBER AS NOTED ON DRAWINGS.
   C. RUSTICATION STRIPS, CHAMFERS, DRIPS, MISC. EMBEDS, ETC. SEE DRAWINGS AND/OR ARCHITECTURAL DRAWINGS.
   D. PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS OF BEAMS, WALLS ETC. UNLESS OTHERWISE NOTED.
   E. OPENINGS FOR MEP TRADES ARE TO BE INCLUDED IN THE BID. ALL HOLES FOR OTHER TRADES WHICH MUST BE CUT OR FORMED AND WHICH ARE NOT SHOWN ON THE STRUCTURAL DESIGN DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. ANY STRENGTHENING OR ADDITIONAL REINFORCEMENT REQUIRED SHALL BE FURNISHED BY THE CONTRACTOR WITHOUT ADDITIONAL COST TO THE OWNER.

6. CONCRETE FINISHES: SEE SPECIFICATIONS

   A. FORMED SURFACES:
      a. EXPOSED TO VIEW: GROUT CLEANED FINISH.
      b. COVERED OR AS NOTED ON PLANS: AS-CAST

   B. FLATWORK:
      a. EXPOSED TO VIEW: TROWELED
      b. TILED OR CARPETED: TROWELED
      c. STAIRS OR RAMPS: BROOMED
      d. SIDEWALKS, DRIVEWAYS: BROOMED

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

7. CURING AND PROTECTION: SEE SPECIFICATIONS.
8. SEE THE MECHANICAL, ELECTRICAL AND SUPPLIERS DRAWINGS AND THE SPECIFICATIONS FOR THE LOCATIONS OF SPECIAL ANCHORS, CHAMFERS, SLEEVES, PIPES, CONDUITS AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
9. EMBEDDED PIPES OR CONDUIT. MAXIMUM DIAMETER ONE THIRD x SLAB OR WALL THICKNESS, SPACED MINIMUM OF 3 TIMES DIAMETER ON CENTER. ALL EMBEDDED PIPES OR CONDUITS SHALL BE APPROVED BY ENGINEER OF RECORD PRIOR TO INSTALLING
10. SIZE AND LOCATION OF EQUIPMENT PADS AND ANCHOR BOLTS SHALL BE AS REQUIRED BY THE EQUIPMENT MANUFACTURER. ALL CONDUIT PLACED IN SLAB SHALL BE APPROVED BY STRUCTURAL ENGINEER OF RECORD PRIOR TO INSTALLING CONDUIT AND POURING SLAB.
11. ANY CONSTRUCTION JOINTS IN STRUCTURES WHERE WATERSTOPS ARE USED SHALL BE PROTECTED BY WATERSTOP UNLESS OTHERWISE NOTED. CONTRACTOR SHALL SUBMIT A CONSTRUCTION JOINT LAYOUT PLAN FOR APPROVAL BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
12. CONTRACTOR SHALL DESIGN, FURNISH, INSTALL, TEST, OPERATE, MONITOR, AND MAINTAIN A DEWATERING SYSTEM TO CONTROL HYDROSTATIC PRESSURE AND GROUND WATER ENTERING THE EXCAVATION.
13. CONSTRUCTION JOINTS IN CONCRETE SHALL BE PREPARED BY INTENTIONALLY ROUGHENING THE SURFACE OF THE EXISTING CONCRETE. THE EXISTING CONCRETE SURFACE SHALL BE MECHANICALLY ROUGHENED TO EXPORE THE EXISTING AGGREGATE TO A 1/4" AMPLITUDE. INTENTIONALLY ROUGHENED SURFACES SHALL BE THOROUGHLY CLEANED TO REMOVE ALL LAITANCE AND OTHER LOOSE DEBRIS. THE CONTRACTOR SHALL APPLY WATER TO ALL EXISTING CONCRETE SURFACES, AND SHALL REMOVE ALL STANDING WATER IMMEDIATELY PRIOR TO PLACING NEW CONCRETE. CONSTRUCTION JOINTS FOR CONCRETE WALLS SHALL BE LIMITED TO A MAXIMUM SPACING OF 18' VERTICALLY, OR LESS AS LIMITED BY CONCRETE FORM STRENGTH. CONSTRUCTION JOINTS FOR SLABS ON GRADE SHALL BE IN ACCORDANCE WITH THE DETAILS ON THE CONTRACT DRAWINGS.
14. SUBMITTALS

   A. AS A MINIMUM, CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE FOLLOWING DOCUMENTS TO THE ENGINEER OF RECORD:
      a. CONCRETE MIX DESIGN
      b. CONCRETE REINFORCING DRAWINGS

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ENGINEERING BUSINESS NO. 2429
17885 VON KARMAN AVE., SUITE 500
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REGISTERED PROFESSIONAL ENGINEER
BRETT M. BOENNKE
No. 91335
Exp. 6/30/
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	1/29/24	30% DESIGN	BMB
	4/12/24	60% DESIGN	BMB
	6/14/24	90% DESIGN	BMB
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB
1	5/09/25	PERMIT REVISIONS	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
GENERAL NOTES

PROJ:	200-42064-22005
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CHKD:	MSO

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Bar measures 1 inch, otherwise drawing is not to scale

CONCRETE POST-INSTALLED ANCHORS

1. MECHANICAL (TORQUE-CONTROLLED) ANCHORS

   A. APPROVED SYSTEMS INCLUDE HILTI KWIK BOLT TZ (ICC ESR 1917) OR HILTI KWIK HUS-EZ (ICC ESR 3027) OR EQUAL CONSIDERING LOAD RESISTANCE. MECHANICAL ANCHORS SHALL BE APPROVED FOR USE WITH CRACKED CONCRETE PER AC 193. CURRENT ICC-ESR SHALL BE SUBMITTED. ALL PERSONNEL INSTALLING ANCHORS SHALL BE TRAINED BY THE MANUFACTURER ON PROPER INSTALLATION TECHNIQUE. TRAINING DOCUMENTATION FROM THE MANUFACTURER SHALL BE AVAILABLE ON REQUEST

2. ADHESIVE ANCHORS

   A. APPROVED SYSTEMS INCLUDE HILTI HIT-RE 500 V3 (ICC ESR 3814) OR HILTI HIT-HY 200 ADHESIVE WITH HAS/HIT-V THREADED ROD WITH SAFESET TECHNOLOGY (ICC ESR 3187) OR EQUAL CONSIDERING LOAD RESISTANCE, IN-SERVICE AND INSTALLATION TEMPERATURE, AVAILABILITY OR COMPREHENSIVE INSTALLATION INSTRUCTIONS, AND CREEP. ADHESIVE ANCHORS SHALL BE APPROVED FOR USE WITH CRACKED CONCRETE PER AC 308. CURRENT ICC-ESR SHALL BE SUBMITTED.
   B. ALL PERSONNEL INSTALLING ANCHORS SHALL BE TRAINED BY THE MANUFACTURER ON PROPER INSTALLATION TECHNIQUE. TRAINING DOCUMENTATION FROM THE MANUFACTURER SHALL BE AVAILABLE ON REQUEST.
   C. HOLE SIZES AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE APPROVED ICC ESR AND MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)
   D. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH SHALL BE BASED ON ACI 355.4 TEMPERATURE CATEGORY A WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CONCRETE THAT HAS BEEN CURED FOR AT LEAST 21 DAYS.
   E. ANY ADHESIVE ANCHOR INSTALLED HORIZONTALLY OR IN A VERTICALLY INCLINED PLANE SHALL BE INSTALLED BY CERTIFIED ADHESIVE ANCHOR INSTALLER, PER ACI 318-14 17.8.2.2, AND SHALL BE INSPECTED PER ACI 318-14 17.8.2.4.
   F. FILL IN ALL ABANDONED ANCHOR HOLES.
   G. WHERE REQUIRED, A PROGRAM FOR ON-SITE PROOF LOADING, THAT IS, PROOF LOADING PROGRAM, TO BE CONDUCTED AS PART OF THE SPECIAL INSPECTION AND SHALL BE ESTABLISHED BY THE ENGINEER OR DESIGN PROFESSIONAL OF RECORD AND SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:

      a. FREQUENCY OF PROOF LOADING BASED ON ANCHOR TYPE, DIAMETER, AND EMBEDMENT.
      b. PROOF LOADS BY ANCHOR TYPE, DIAMETER, EMBEDMENT, AND LOCATION.
      c. ACCEPTABLE DISPLACEMENTS AT PROOF LOAD.
      d. REMEDIAL ACTION IN THE EVENT OF FAILURE TO ACHIEVE PROOF LOAD OR EXCESSIVE DISPLACEMENT.

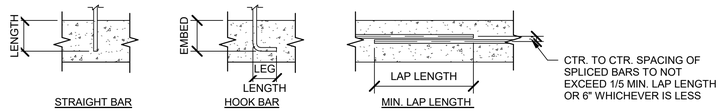
      UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGN PROFESSIONAL OF RECORD, PROOF LOADS SHALL BE APPLIED AS CONFINED TENSION TESTS (4.7.2.3). PROOF LOADS LEVELS SHALL NOT EXCEED THE LESSER OF 50 PERCENT OF THE EXPECTED PEAK LOAD BASED ON ADHESIVE BOND STRENGTH, OR 80 PERCENT OF THE ANCHOR YIELD STRENGTH. MAINTAIN THE PROOF LOAD AT THE REQUIRED LOAD LEVEL FOR A MINIMUM OF 10 SECONDS.

3. EQUIPMENT ANCHORS:
   A. SIZE, LENGTH, AND LOCATION OF EQUIPMENT ANCHORS SHALL BE PROVIDED BY EQUIPMENT MANUFACTURER.

4. UNLESS NOTED OTHERWISE, REINFORCING LAP SPLICES AND DEVELOPMENT LENGTHS SHALL BE AS FOLLOWS:

TENSION DEVELOPMENT / LAP SPLICE SCHEDULE (UNCOATED BARS)

DEVELOPMENT / LAP SPLICE LENGTH IN CONCRETE (f'_c = 4500 PSI)							
BAR SIZE	DEVELOPMENT LENGTH (IN)		CLASS 'B' LAP SPLICE LENGTH (IN)		STD 90 DEG. HOOK (IN)		
	BAR TYPE 1	BAR TYPE 2	BAR TYPE 1	BAR TYPE 2	EMBED	LEG LENGTH	BEND DIA.
4	18	27	24	35	9	8	3
5	23	34	30	44	12	10	3 3/4
6	27	41	35	53	14	12	4 1/2
7	40	59	51	77	16	14	5 1/4
8	45	67	59	88	18	16	6
9	51	76	66	99	21	20	9 1/2
10	57	86	74	111	23	22	10 1/4



BAR TYPE 1 - CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN Db, CLEAR COVER NOT LESS THAN Db, AND STIRRUPS OR TIES THROUGHOUT Ld NOT LESS THAN CODE MINIMUM

OR

CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2*Db AND CLEAR COVER NOT LESS THAN Db.

BAR TYPE 2 - TOP BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW **AND** OTHER CASES

STRUCTURAL STEEL

1. REFERENCES

   A. AISC STEEL CONSTRUCTION MANUAL, 15TH EDITION
   B. AWS D1.1 STRUCTURAL WELDING CODE - STEEL

2. MATERIALS

   A. GRADE STEEL

WIDE FLANGES	ASTM A992, GRADE 50
CHANNELS, ANGLES, AND PLATES	ASTM A36
SHEAR CONNECTOR PLATES	ASTM A572, GRADE 50
STRUCTURAL PIPE	ASTM A53, GRADE B, Fy=35 KSI
ROUND HSS	ASTM A500, GRADE B, Fy=42 KSI
SQUARE OR RECTANGLE HSS	ASTM A500, GRADE C, Fy=50 KSI

   B. WELDED STUDS: ASTM A108, GRADE 60
   C. ANCHOR BOLTS: ASTM F1554, GRADE 55, WELDABLE.
   D. STRUCTURAL BOLTS: ASTM A325-N
   E. WELDS: E70XX ELECTRODES

STRUCTURAL STEEL - (CONTINUED)

3. CONNECTIONS

   A. AISC MANUAL STANDARD CONNECTIONS UNLESS NOTED OTHERWISE. HIGH-STRENGTH BOLTS: ASTM A325-N, 3/4" UNLESS NOTED OTHERWISE. BEARING TYPE INSTALLED IN CONFORMANCE WITH "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", RESEARCH COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS. UNLESS NOTED OTHERWISE, STANDARD AISC "USUAL GAGE" DIMENSIONS SHALL BE USED FOR LOCATING HOLES FOR BOLTS, EXPANSION ANCHORS, ETC. IN ALL ANGLES, BEAM FLANGES, ETC.
   B. THE ASSEMBLY SURFACE, INCLUDING THOSE ADJACENT TO THE WASHER, SHALL BE FREE OF MILL SCALE, OIL, PAINT OR OTHER COATINGS.
   C. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A BOLT TENSION NOT LESS THAN THAT SPECIFIED IN THE AISC MANUAL. FULL TENSIONING SHALL BE BY THE TURN OF NUT METHOD, BY A DIRECT TENSION INDICATOR, OR BY PROPERLY CALIBRATED WRENCHES. PROVIDE HARDENED WASHERS UNDER THE NUT OR BOLT HEAD, WHICHEVER IS THE ELEMENT TURNED IN TIGHTENING.
   D. WELDING - PERFORM ALL WELDING IN ACCORDANCE WITH AWS D1.1 CODE, LATEST EDITION, WELDS SHALL BE MADE ONLY BY OPERATORS CERTIFIED BY AWS IN PERFORMING THE TYPE OF WORK INDICATED.
   E. ALL BEAMS SHALL HAVE SIMPLE SHEAR CONNECTIONS DESIGNED TO SUPPORT 1/2 THE TOTAL UNIFORM LOAD LISTED IN THE AISC MANUAL OF STEEL CONSTRUCTION OR THE REACTION NOTED ON THE DRAWINGS, WHICHEVER IS GREATER.
   F. WHERE INDICATED ON THE DRAWINGS, CONNECTIONS SHALL BE DESIGNED FOR THE REACTIONS SHOWN. WHERE NO REACTIONS ARE INDICATED, REFER TO NOTE "E" ABOVE OR DESIGN FOR A MINIMUM REACTION OF 10 KIPS.

4. TOLERANCES: AISC CODE OF STANDARD PRACTICE (LATEST EDITION)

5. CAMBER: PROVIDE POSITIVE CAMBER AS NOTED ON DRAWINGS. WHERE NO CAMBER IS NOTED, RESIDUAL MILL CAMBER IS TO BE UPWARDS.

6. AS A MINIMUM, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING SHOP DRAWINGS. THE CONTRACTOR SHALL OBTAIN ACCEPTANCE BY THE ENGINEER FOR SUBMITTALS PRIOR TO FABRICATION.
   A. SUBMIT ERECTION AND FABRICATION SHOP DRAWINGS, SEE SPECS.
   B. SUBMIT ERECTION PROCEDURES AND TEMPORARY BRACING PLAN FOR A/E REVIEW.
   C. SUBMIT CONNECTION CALCULATIONS FOR ALL BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS
   D. SHOP DRAWINGS AND CALCULATIONS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE STRUCTURAL STEEL WILL BE INSTALLED.

7. PAINTING: AFTER MATERIAL HAS BEEN PROPERLY CLEANED AND TREATED, APPLY SHOP PRIME COAT TO ALL SURFACES, EXCEPT THOSE INTENDED FOR EMBEDMENT INTO CONCRETE OR TO RECEIVE FIELD WELDING, SLIP CRITICAL BOLTS, OR CEMENTITIOUS FIREPROOFING.

8. ALL EXTERIOR STRUCTURAL STEEL MEMBERS, CONNECTION BOLTS, AND PLATES SHALL RECEIVE A HOT DIPPED GALVANIZED FINISH IN ACCORDANCE WITH ASTM A-123. CONTRACTOR SHALL FIELD TOUCH UP SCRATCHED AND FIELD WELD AREAS WITH A ZINC RICH COATING.

STEEL DECK

1. REFERENCES

   A. SDI DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS
   B. SDI DIAPHRAGM DESIGN MANUAL

2. MATERIAL

   A653 GRADE A (50,000 MIN.), GALVANIZED (G90).

   A. MINIMUM DECK SECTION PROPERTIES SHALL BE AS FOLLOWS:

GAUGE	DEPTH	+I (IN^4)	-I (IN^4)	+S (IN^3)	-S (IN^3)
20	1 1/2"	0.219	0.231	0.230	0.237

3. INSTALLATION

   A. WHERE POSSIBLE, EXTEND OVER 3 OR MORE SUPPORTS. DECK ATTACHMENTS SHALL BE IN ACCORDANCE WITH SDI SPECS UNLESS NOTED OTHERWISE, AND SHALL BE ADEQUATELY SHOWN ON SHOP DRAWING SUBMITTAL.

   B. PROVIDE POUR STOPS AS REQUIRED.

DELEGATED DESIGN TABLE

1. PRE-ENGINEERED METAL CANOPIES AT HOUSEHOLD HAZARDOUS WASTE AND RECYCLING AREAS PER SPEC 133419.
2. BRIDGE CRANE AT HOUSEHOLD HAZARDOUS WASTE CANOPY.
3. COLD-FORMED STEEL STUDS, CONNECTIONS, ANCHORAGE, ETC. AT SCALE HOUSE.
4. NEW INBOUND AND OUTBOUND VEHICLE SCALES.
5. METAL SHADE STRUCTURES AT SCALE HOUSE.

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

COLD-FORMED STEEL FRAMING

1. DESIGN, FABRICATION, AND ERECTION: AMERICAN IRON AND STEEL INSTITUTE (AISI), SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, LATEST EDITION.
2. MATERIAL: ASTM A 500, STANDARD SPECIFICATION FOR COLD FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES. ASTM A 653/A 653M, STANDARD SPECIFICATION FOR STEEL SHEETS, ZINC-COATED (GALVANIZED) OR ZINC-IRON ALLOY COATED BY THE HOT DIP PROCESS.
3. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS BEARING THE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE COLD-FORMED METAL FRAMING WILL BE INSTALLED
4. BRIDGING: IN ACCORDANCE WITH AISI "DESIGN GUIDE FOR COLD-FORMED STEEL STRUCTURAL MEMBERS"
5. MEMBER DESIGNATION INDICATED ON THE DRAWINGS IS IN ACCORDANCE WITH THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) AS DESCRIBED BELOW. SIZES INDICATED ARE MINIMUM SIZES AND SHALL BE VERIFIED, AND REVISED IF REQUIRED BY CONTRACTOR'S CALIFORNIA REGISTERED SPECIALTY ENGINEER.
6. ALL COLD-FORMED STEEL MEMBER DESIGN, INCLUDING CONNECTIONS, SHALL BE BY A CALIFORNIA REGISTERED SPECIALTY ENGINEER. COLD-FORMED STEEL DESIGN SHALL BE IN CONFORMANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".

SSMA DESIGNATION:

DESIGN STIFFENING LIP LENGTH		
SECTION	FLANGE WIDTH	LIP LENGTH (IN)
S125	1 1/4"	0.188
S137	1 3/8"	0.375
S162	1 5/8"	0.500
S200	2"	0.625
S250	2 1/2"	0.625

FLANGE WIDTH:
ALL FLANGE WIDTHS ARE TAKEN AS 1/100 INCHES.
EXAMPLE: 1 5/8" = 1.625" = 162 X 1/100 INCHES.

MEMBER DEPTH:
ALL MEMBER DEPTHS ARE TAKEN AS 1/100 INCHES.
EXAMPLE : 6" = 600 x 1/100 IN.
FOR ALL "C" SECTIONS
MEMBER DEPTH IS THE INSIDE-TO-INSIDE CLEAR DIMENSION.

600 S 162 54

CFS COMPONENT THICKNESS	
MINIMUM THICKNESS (MILS)	GAGE NO. (REFERENCE ONLY)
18	25
27	25
30	20 - DRYWALL
33	25 - STRUCTURAL
43	18
54	16
68	14
97	12

STYLE:
THE FOUR ALPHA CHARACTERS UTILIZED BY THE DESIGNATOR SYSTEM ARE:
S = STUD OR JOIST SECTIONS
T = TRACK SECTIONS
U = CHANNEL SECTIONS
F = FURRING CHANNEL SECTIONS

MATERIAL THICKNESS:
(EXAMPLE: 0.054 IN = 54 MILS; 1 MIL = 1/1000 INCHES
MATERIAL THICKNESS IS THE MINIMUM BASE METAL THICKNESS IN MILS. MINIMUM BASE METAL THICKNESS REPRESENTS 95% OF THE DESIGN THICKNESS

NOTE: FOR THOSE SECTIONS WHERE TWO DIFFERENT YIELD STRENGTHS (33 KSI AND 50 KSI) ARE SHOWN, THE YIELD STRENGTH USED IN THE DESIGN, IF GREATER THAN 33 KSI, NEEDS TO BE IDENTIFIED ON THE DESIGN AND ORDERING OF STEEL (I.E. 600S162-54 (50 KSI))

ABBREVIATIONS

A.B.	ANCHOR BOLT	EJ	EXPANSION JOINT	LBS	POUNDS	R	RISER
ADD'L	ADDITIONAL	EL / ELEV.	ELEVATION	LF	LINEAR FOOT (FEET)	RA	RECYCLING AREA
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	ELEC	ELECTRIC(AL)	LLH	LONG LEG HORIZONTAL	RAD.	RADIUS
		ENGR	ENGINEER	LLV	LONG LEG VERTICAL	RD	ROOF DRAIN
ALUM.	ALUMINUM	EQ	EQUAL	LOC	LOCATION	REF	REFERENCE
APPROX.	APPROXIMATE	EQKE	EARTHQUAKE	MATL	MATERIAL	REINF.	REINFORCEMENT
ARCH.	ARCHITECT(URAL)	EQUIP	EQUIPMENT	MAX	MAXIMUM	REQ/REQ'D	REQUIRED
B.M.	BEAM	EW	EACH WAY	MECH	MECHANICAL	REV	REVISION
B.O.F	BOTTOM OF FOOTING	EXIST	EXISTING	MFR	MANUFACTURER	RO	ROUGH OPENING
B.O.S.	BOTTOM OF STEEL	EXP	EXPANSION	MID	MIDDLE / MIDPOINT	SCHED	SCHEDULE
BLDG.	BUILDING	F.S.	FAR SIDE	MIN	MINIMUM, MINUTE	SF	SQUARE FOOT
BOT.	BOTTOM	F.V.	FIELD VERIFY	MISC.	MISCELLANEOUS	SHT.	SHEET
BPS	BUILDING PROTECTION SYSTEM	FD	FLOOR DRAIN	MTL	METAL	SIM.	SIMILAR
		FFE	FINISH FLOOR ELEVATION	N	NEW	SPA.	SPACE
BRG.	BEARING	FIN	FINISH (ED)	N.S.	NEAR SIDE	SPEC	SPECIFICATIONS
BTWN	BETWEEN	FLG.	FLANGE	N.T.S.	NOT TO SCALE	SQ	SQUARE
CCJ	CRACK CONTROL JOINT	FLR	FLOOR	NA	NOT APPLICABLE	SS	STAINLESS STEEL
CFS	COLD FORMED STEEL	FND.	FOUNDATION	NFS	NON-FROST SUSCEPTIBLE	STAG.	STAGGER
CIP	CAST-IN-PLACE	FRMG	FRAMING			STD	STANDARD
CJ	CONSTRUCTION JOINT	FT	FOOT	NO	NUMBER	STL	STEEL
CL	CENTER LINE	FTG	FOOTING	NOM	NOMINAL	STL JST	STEEL JOIST
CLR	CLEAR	GA	GAGE, GAUGE	O.C.	ON CENTER	STRUCT	STRUCTURE(AL)
CMU	CONCRETE MASONRY UNIT	GALV	GALVANIZED	O.D.	OUTSIDE DIAMETER	SYM	SYMMETRICAL
		GR.	GRADE	OPH	OPPOSITE HAND	T	TREAD
COL	COLUMN	GRTG	GRATING	OPNG	OPENING	T.O.W.	TOP OF WALL
CONC	CONCRETE	H.P.	HIGH POINT	OPP	OPPOSITE	T/	TOP OF
CONST	CONSTRUCTION	H.R.	HAND RAIL	ORIG	ORIGINAL	TEMP	TEMPORARY
CONT	CONTINUOUS	HHW	HOUSEHOLD HAZARDOUS WASTE	PEMB	PRE-ENGINEERED METAL BUILDING	THK	THCKNESS
COORD	COORDINATE	HK	HOOK	PERF	PERFORATED	TOF	TOP OF FOOTING
CTR	CENTER	HORIZ	HORIZONTAL	PERP	PERPENDICULAR	TOS	TOP OF SLAB
DBA	DEFORMED BAR ANCHOR	HT	HEIGHT	PL	PLATE	TRANSV.	TRANSVERE
DEMO	DEMOLISH	HVAC	HEATING VENTILATION AND AIR CONDITIONING	PLF	POUNDS PER LINEAR FOOT	TYP	TYPICAL
DIA	DIAMETER	I.D.	INSIDE DIAMETER	PRCST	PRECAST	UNO	UNLESS NOTED OTHERWISE
DIM	DIMENSION	I.F.	INSIDE FACE	PREFAB	PREFABRICATED	V.I.F.	VERIFY IN FIELD
DIST	DISTANCE	I.J.	ISOLATION JOINT	PSF	POUNDS PER SQUARE FOOT	VERT	VERTICAL
DN	DOWN	IN.	INCH	PSI	POUNDS PER SQUARE INCH	W.P.	WORK POINT
DTL.	DETAIL	INSUL	INSULATION	PT	PRESSURE TREATED	W/	WITH
DWG(S)	DRAWING(S)	L	ANGLE	QTY	QUANTITY	W/O	WITHOUT
DWL	DOWEL	L.P.	LOW POINT			WS	WATER STOP.
E/EXIST.	EXISTING					WWF	WELDED WIRE FABRIC
EA	EACH						
EF	EACH FACE						

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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
GENERAL NOTES

PROJ: 200-42064-22005
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CHKD: MSO

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SPECIAL INSPECTION REQUIRED

SPECIAL INSPECTIONS REQUIRED FOR THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE CHAPTER 17. SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN APPROVED INSPECTION AGENCY U.N.O, EMPLOYED BY THE OWNER.

THE SPECIAL INSPECTOR SHALL BE CERTIFIED BY THE INTERNATIONAL CODE COUNCIL (I.C.C.) TO PERFORM INSPECTION FOR THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND/OR THE ENGINEER. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE STRUCTURAL ENGINEER AND TO THE BUILDING OFFICIAL.

THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THIS CODE.

IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE AT LEAST 48 HOURS ADVANCE NOTICE TO THE OWNER/OWNER'S REPRESENTATIVE WHEN HIS WORK IS READY FOR ANY REQUIRED SPECIAL INSPECTIONS.

SHOP INSPECTION OF STEEL CONSTRUCTION IS NOT REQUIRED WHEN THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATION PRACTICES BY AN APPROVED SPECIAL INSPECTION AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

CONTRACTOR RESPONSIBILITY
EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND- OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL 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'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

OWNER OR OWNER'S REPRESENTATIVE SHALL BE SYNONYMOUS WITH 'BUILDING OFFICIAL' IN THE FOREGOING IF THE PROJECT IS NOT UNDER THE JURISDICTION OF A BUILDING DEPARTMENT.

SPECIAL INSPECTION SHALL BE PROVIDED FOR THE FOLLOWING TYPES OF WORK PERFORMED IN THE FIELD, OR NOT PERFORMED IN AN APPROVED FABRICATION SHOP AS DEFINED ABOVE, UNLESS NOTED AS "N/A".

	SPECIAL INSPECTIONS REQUIRED ("X" = YES "-" = NO)		
	CONTINUOUS	PERIODIC	N/A
REQUIRED VERIFICATION AND INSPECTION OF SOILS (TO BE PERFORMED BY A LICENSED GEOTECHNICAL ENGINEER):			
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X	-
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X	-
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X	-
4. PERFORM CLASSIFICATION AND TESTING OF NATIVE SOILS TO VERIFY ANY SOIL PROPERTIES ASSUMED AS PART OF DESIGN FOR THIS PROJECT IN THE ABSENCE OF A SOILS REPORT (SEE SOIL PROPERTIES ON THIS DRAWING). THIS TESTING SHALL BE PERFORMED IN ADVANCE OF ANY CONSTRUCTION. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IF THE ASSUMED VALUES ARE NOT VALID.	-	-	X
5. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-	-
6. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X	-
CAST-IN-PLACE DEEP FOUNDATION ELEMENTS:			
1. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	-	-
2. VERIFY PLACEMENT LOCATIONS AND PLUMNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	-	-
3. PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH CONCRETE CONSTRUCTION SECTION BELOW.	X	-	-
CONCRETE CONSTRUCTION:			
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT.	-	X	-
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH CALIFORNIA BUILDING CODE TABLE 1705.3, ITEM 2.	-	-	X
3. INSPECTION OF ANCHORS CAST IN CONCRETE.	-	X	-
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.			
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATION TO RESIST SUSTAINED TENSION LOADS.	X	-	-
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4. A.	-	X	-
5. VERIFYING USE OF REQUIRED DESIGN MIX.	-	X	-
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR. CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	-
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	-
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	-
9. INSPECTION OF PRESTRESSED CONCRETE:			
A. APPLICATION OF PRESTRESSING FORCES.	-	-	X
B. GROUTING OF BONDED PRESTRESSING TENDONS.	-	-	X
10. INSPECTION OF ERECTION OF PRECAST CONCRETE MEMBERS.	-	-	X
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	-	X
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF CONCRETE MEMBER BEING FORMED.	-	X	-

	SPECIAL INSPECTIONS REQUIRED ("X" = YES "-" = NO)		
	C	R	N/A
STEEL CONSTRUCTION (STRUCTURAL STEEL):			
R - INSPECT THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS			
C - INSPECT THESE ITEMS ON A CONTINUOUS BASIS			
	C	R	N/A
1. INSPECTION TASKS PRIOR TO WELDING:			
A. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	X	-	-
B. MANUFACTURERS CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	X	-	-
C. MATERIAL IDENTIFICATION (TYPE/GRADE).	-	X	-
D. WELDER IDENTIFICATION SYSTEM.	-	X	-
E. FIT-UP OF GROOVE WELDS (INCLUDING GEOMETRY). - JOINT PREPARATION. - DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL). - CLEANLINESS (CONDITION OF STEEL SURFACES). - TACKING (TACK WELD QUALITY AND LOCATION). - BACKING TYPE AND FIT (IF APPLICABLE).	-	X	-
F. CONFIGURATION AND FINISH OF ACCESS HOLES.	-	X	-
G. FIT-UP OF FILLET WELDS. - DIMENSIONS (ALIGNMENT, GAPS AT ROOT). - CLEANLINESS (CONDITION OF STEEL SURFACES). - TACKING (TACK WELD QUALITY AND LOCATION)	-	X	-
2. INSPECTION TASKS DURING WELDING			
A. USE OF QUALIFIED WELDERS	-	X	-
B. CONTROL AND HANDLING OF WELDING CONSUMABLES - PACKAGING - EXPOSURE CONTROL	-	X	-
C. NO WELDING OVER CRACKED TACK WELDS	-	X	-
D. ENVIRONMENTAL CONDITIONS - WIND SPEED WITHIN LIMITS - PRECIPITATION AND TEMPERATURE	-	X	-
E. WPS FOLLOWED - SETTINGS ON WELDING EQUIPMENT - TRAVEL SPEED - SELECTED WELDING MATERIALS - SHIELDING GAS TYPE/FLOW RATE - PREHEAT APPLIED - INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) - PROPER POSITION (F, V, H, OH)	-	X	-
F. WELDING TECHNIQUES - INTERPASS AND FINAL CLEANING - EACH PASS WITHIN PROFILE LIMITATIONS - EACH PASS MEETS QUALITY REQUIREMENTS	-	X	-
3. INSPECTION TASKS AFTER WELDING			
A. WELDS CLEANED	-	X	-
B. SIZE, LENGTH AND LOCATION OF WELDS	X	-	-
C. WELDS MEET VISUAL ACCEPTANCE CRITERIA - CRACK PROHIBITION - WELD/BASE-METAL FUSION - CRATER CROSS SECTION - WELD PROFILES - WELD SIZE - UNDERCUT - POROSITY	X	-	-
D. ARC STRIKES	X	-	-
E. K-AREA - WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75 MM) OF THE WELD	X	-	-
F. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	X	-	-
G. REPAIR ACTIVITIES	X	-	-
H. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	X	-	-
4. INSPECTION TASKS PRIOR TO BOLTING			
A. MANUFACTURER'S CERTIFICATION AVAILABLE FOR FASTENER MATERIAL.	X	-	-
B. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.	-	X	-
C. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FORM SHEAR PLANE).	-	X	-
D. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	-	X	-
E. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.	-	X	-
F. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	-	X	-
G. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.	-	X	-

	SPECIAL INSPECTIONS REQUIRED ("X" = YES "-" = NO)		
	C	R	N/A
STEEL CONSTRUCTION (STRUCTURAL STEEL CONT.):			
5. INSPECTION TASKS DURING BOLTING.			
A. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	-	X	-
B. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	-	X	-
C. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FOR ROTATING.	-	X	-
D. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	-	X	-
6. INSPECTION TASKS AFTER BOLTING.			
A. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.	X	-	-
7. INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT.			
A. PLACEMENT AND INSTALLATION OF STEEL DECK.	X	-	-
B. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS.	X	-	-
C. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS.	X	-	-

LIGHT GAUGE STEEL CONSTRUCTION AND CONNECTIONS - VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC 1705.2.2, 1705.11.2, 1705.11.3

TASK	INSPECTION TYPE	DESCRIPTION
1. WELDED CONNECTIONS (SEISMIC AND/OR WIND RESISTING SYSTEM)	PERIODIC	VISUALLY INSPECT ALL WELDS COMPOSING PART OF THE MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM, INCLUDING SHEARWALLS, BRACES, COLLECTORS (DRAG STRUTS), AND HOLD-DOWNS.
2. CONNECTIONS (SEISMIC AND/OR WIND RESISTING SYSTEM)	PERIODIC	VISUALLY INSPECT ALL SCREW ATTACHMENT, BOLTING ANCHORING, AND OTHER FASTENING OF COMPONENTS WITHIN THE MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM, INCLUDING ROOF DECK, ROOF FRAMING, EXTERIOR WALL COVERING, WALL TO ROOF/FLOOR CONNECTIONS, BRACES, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS.

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
ENGINEERING BUSINESS NO. 2429
www.tetratech.com
17885 VON KARMAN AVE., SUITE 500
IRVINE, CALIFORNIA 92614
TEL: (949) 809-5000

REGISTERED PROFESSIONAL ENGINEER
BRETT M. BOENINKE
No. 91335
Exp. 6/30/
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	1/29/24	30% DESIGN	BMB
	4/12/24	60% DESIGN	BMB
	6/14/24	90% DESIGN	BMB
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
GENERAL NOTES

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

S-003

Copyright: Tetra Tech

2/13/2025 12:34:01 PM Autodesk Docs://213-42064-24001 BL Scale House/S-BEN LOMOND 200-42064-22005-v2023.rvt

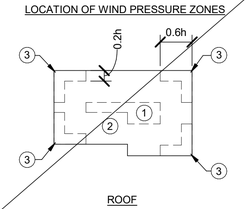
Bar measures 1 inch, otherwise drawing is not to scale

COMPONENTS & CLADDING WIND PRESSURES - SCALE HOUSE

FACTORED (ULTIMATE) COMPONENTS & CLADDING WIND PRESSURES (PSF)			
FLAT/ HIP/ GABLE ROOF 0 TO 7 DEGREES			
ROOF ZONES	EFFECTIVE TRIBUTARY AREA*		
	10 SF	50 SF	100 SF
NEGATIVE ZONE 1	-30	-25	-23
NEGATIVE ZONE 2	-39	-33	-31
NEGATIVE ZONE 3	-39	-33	-31
POSITIVE ALL ZONES	17	16	16
OVERHANG ZONE 1 & 1'	-27	-26	-25
OVERHANG ZONE 2	-36	-28	-25
OVERHANG ZONE 3	-36	-28	-25

WALLS			
WALL ZONES	EFFECTIVE TRIBUTARY AREA*		
	10 SF	100 SF	500 SF
NEGATIVE ZONE 4	-18	-16	-16
NEGATIVE ZONE 5	-23	-18	-16
POSITIVE ZONE 4 & 5	17	16	16

LOCATION OF WIND PRESSURE ZONES



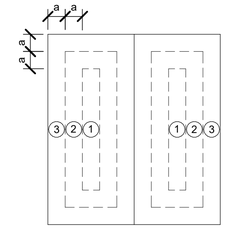
NOTES:

1. EDGE DISTANCE : 'a' = 3'-0", 'h' = 15'-6"
2. * EFFECTIVE TRIBUTARY AREA: SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN 1/3 THE SPAN LENGTH
3. NEGATIVE VALUE DENOTES PRESSURE ACTING AWAY FROM THE SURFACE
4. UNFACTORED (NOMINAL) COMPONENTS AND CLADDING PRESSURES MAY BE OBTAINED BY MULTIPLYING THE VALUES IN THE TABLE BY 0.60

COMPONENTS & CLADDING WIND PRESSURES - RECYCLING AREA CANOPY

FACTORED (ULTIMATE) COMPONENTS & CLADDING WIND PRESSURES (PSF)			
PITCHED ROOF ≥ 10 DEGREES			
ROOF ZONES	EFFECTIVE TRIBUTARY AREA*		
	a^2	> a^2 ,≤ $4a^2$	> $4a^2$
NEGATIVE ZONE 1	-17	-17	-17
NEGATIVE ZONE 2	-26	-26	-17
NEGATIVE ZONE 3	-52	-26	-17
POSITIVE ZONE 1	17	17	17
POSITIVE ZONE 2	26	26	17
POSITIVE ZONE 3	34	26	17

LOCATION OF WIND PRESSURE ZONES



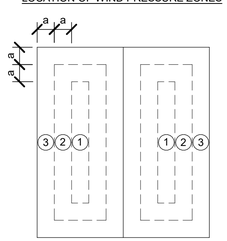
NOTES:

1. EDGE DISTANCE : 'a' = **10'-6"**
2. * EFFECTIVE TRIBUTARY AREA: SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN 1/3 THE SPAN LENGTH
3. NEGATIVE VALUE DENOTES PRESSURE ACTING AWAY FROM THE SURFACE
4. UNFACTORED (NOMINAL) COMPONENTS AND CLADDING PRESSURES MAY BE OBTAINED BY MULTIPLYING THE VALUES IN THE TABLE BY 0.60

COMPONENTS & CLADDING WIND PRESSURES HHW CANOPY

FACTORED (ULTIMATE) COMPONENTS & CLADDING WIND PRESSURES (PSF)			
PITCHED ROOF ≥ 10 DEGREES			
ROOF ZONES	EFFECTIVE TRIBUTARY AREA*		
	a^2	> a^2 ,≤ $4a^2$	> $4a^2$
NEGATIVE ZONE 1	-16	-16	-16
NEGATIVE ZONE 2	-23	-23	-15
NEGATIVE ZONE 3	-30	-23	-16
POSITIVE ZONE 1	16	16	16
POSITIVE ZONE 2	25	25	16
POSITIVE ZONE 3	33	25	16

LOCATION OF WIND PRESSURE ZONES



NOTES:

1. EDGE DISTANCE : 'a' = **5'-0"**
2. * EFFECTIVE TRIBUTARY AREA: SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN 1/3 THE SPAN LENGTH
3. NEGATIVE VALUE DENOTES PRESSURE ACTING AWAY FROM THE SURFACE
4. UNFACTORED (NOMINAL) COMPONENTS AND CLADDING PRESSURES MAY BE OBTAINED BY MULTIPLYING THE VALUES IN THE TABLE BY 0.60

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Community Development & Infrastructure
701 Ocean Street 4th Floor, Santa Cruz, CA 95060
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Special Inspections — Form PLG-240

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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.:
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: 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:

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Special Inspections — Form PLG-240

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Enter N/A for notes, contact information, and area of responsibility.

B. Special Inspection Agency, Material Testing Lab, Geotechnical

Firm Name: / Phone: / Email: / Responsibility:

Firm Name: / Phone: / Email: / Responsibility:

Firm Name: / Phone: / Email: / Responsibility:

Firm Name: / Phone: / Email: / Responsibility:

Firm Name: / Phone: / Email: / 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:

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Special Inspections — Form PLG-240

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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	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, 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:		☐	☐
		☐	☐
		☐	☐
		☐	☐

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Special Inspections — Form PLG-240

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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	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.	8244 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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Special Inspections — Form PLG-240

Page 5 of 5 — Rev 05/13/24

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	1/11/2023
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

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REGISTERED PROFESSIONAL ENGINEER
BRETT M. BOENNEKE
No. 91335
Exp. 6/30/
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB
	1/14/25	EXCLUDED FROM PERMIT SCOPE	BMB
1	5/09/25	PERMIT REVISIONS	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
GENERAL NOTES

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

S-004

County of Santa Cruz
Community Development & Infrastructure
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Date: 08/08/2025
Master Permit: APP-251009
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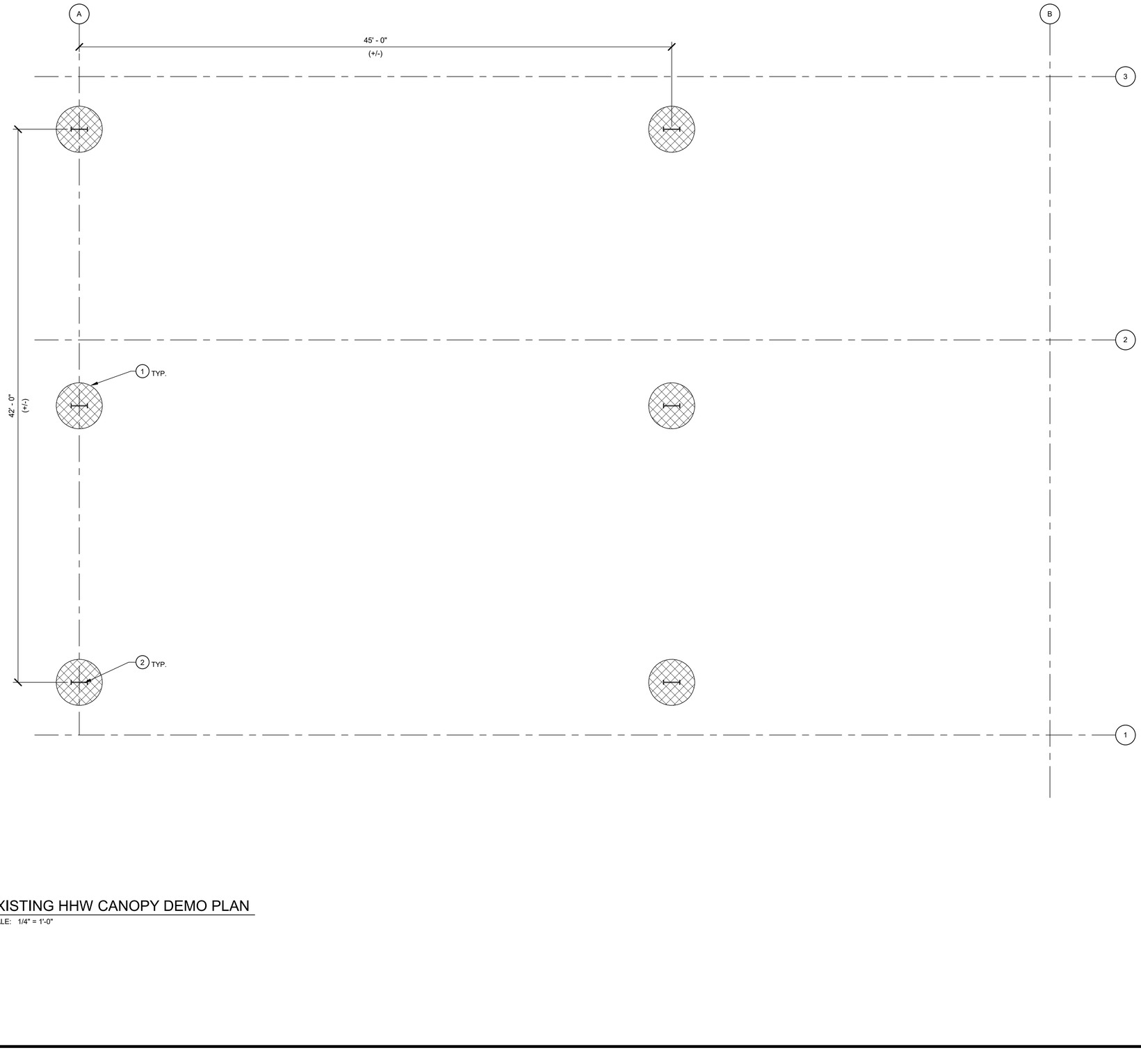
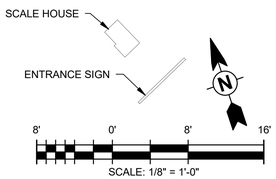


KEYNOTES: (X)

1. EXISTING CONCRETE PIER TO BE DEMOLISHED TO MINIMUM DEPTH OF 2'-0" BELOW FINISHED GRADE, HAULED AWAY AND PROPERLY DISPOSED OF. REPLACE EXISTING SURFACE (ASPHALT OR CONCRETE) PER DETAIL 2 / C-110.
2. EXISTING STEEL PORTAL FRAME TO BE DEMOLISHED, HAULED AWAY AND PROPERLY DISPOSED OF.

EXISTING HHW CANOPY DEMO PLAN

SCALE: 1/4" = 1'-0"



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	8/02/24	100% DESIGN	BMB
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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

HHW CANOPY DEMOLITION PLAN

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DESN:	BMB
DRWN:	AA
CHKD:	MSO

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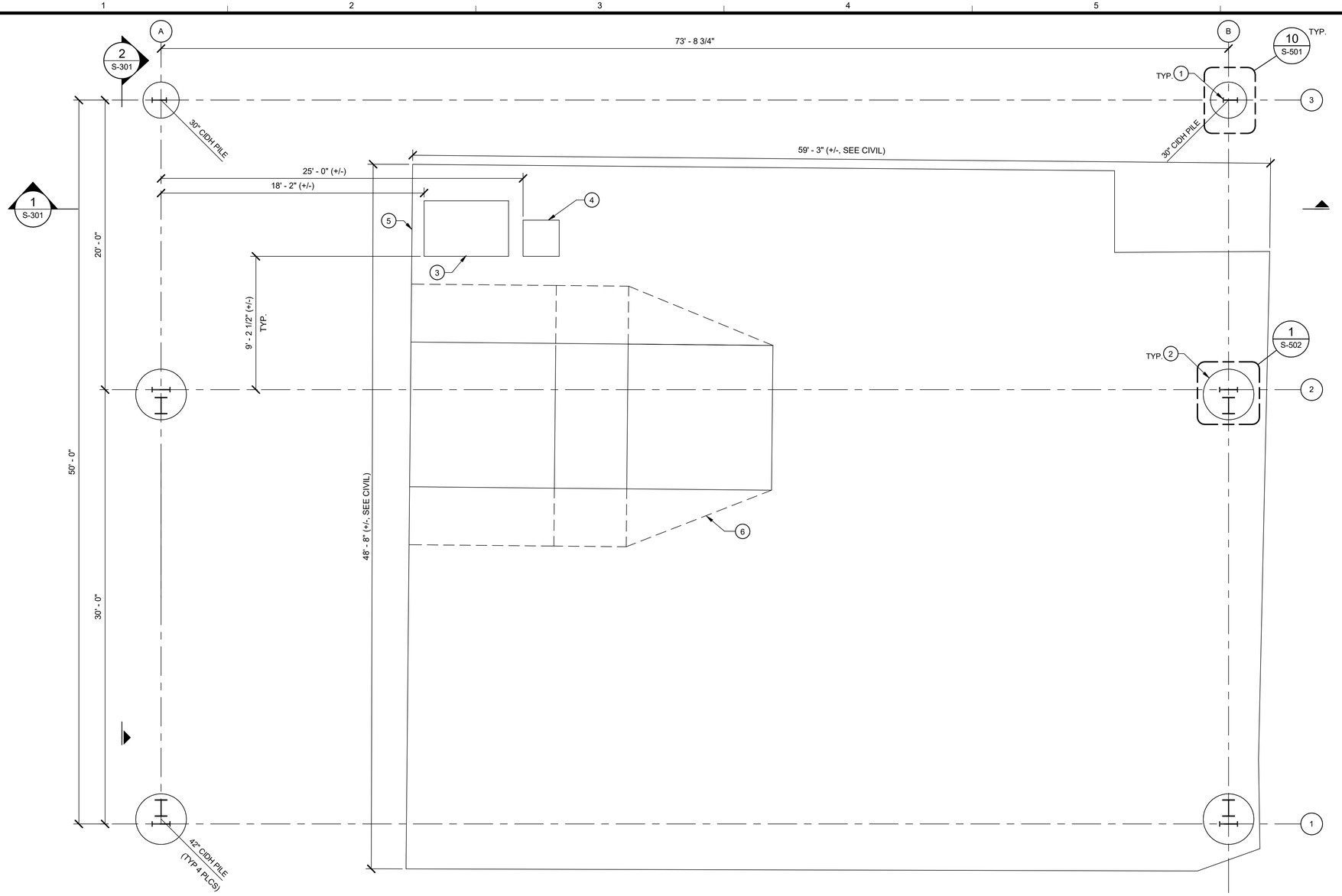


FOUNDATION PLAN NOTES: (X)

1. CANOPY COLUMN BY PRE-ENGINEERED CANOPY DESIGNER/FABRICATOR.
2. CONCRETE PIER AT EACH CANOPY COLUMN. TYPICAL AT 6 PLACES, SEE PLAN FOR PIER DIAMETER. EMBED 15'-0" MIN.
3. PROPOSED 500 GALLON OIL TANK. MIDWEST INDUSTRIAL TANKS DOUBLE WALL USED OIL TANK, OR APPROVED EQUAL. ANCHOR TO CONTAINMENT SLAB WITH (4) 3/4" DIAMETER GR. 55 ANCHORS, EMBED 4".
4. PROPOSED 120 GALLON ANTI FREEZE TANK WITH SEISMIC RESTRAINT SYSTEM. MODEL NO PAK5205 MANUFACTURED BY NEW PIG CORPORATION, OR APPROVED EQUAL. ANCHOR TO CONTAINMENT SLAB WITH (4) 3/4" DIAMETER GR. 55 ANCHORS, EMBED 4".
5. NEW CONCRETE CONTAINMENT SLAB. SEE CIVIL PLANS FOR MORE INFORMATION.
6. CONCRETE RAMP PER CIVIL PLANS.
7. ANCHOR BOLT SIZE, EMBEDMENT, PIER SIZE, AND REINFORCEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING REVIEW OF FINAL APPROVED CANOPY DRAWINGS AND CALCULATIONS. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.

FOUNDATION PLAN - HHW CANOPY

SCALE: 1/4" = 1'-0"

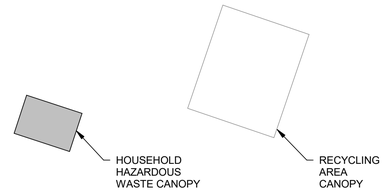
CONSTRUCTION NOTES:

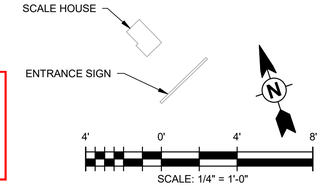
1. STRUCTURAL ELEVATIONS ARE BASED ON ABSOLUTE MEAN SEA LEVEL (MSL) ELEVATIONS.
2. SEE SHEETS S-001 & S-002 FOR GENERAL NOTES AND FOUNDATION DESIGN CRITERIA.
3. DURING CONSTRUCTION, ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.
4. ALL EXPOSED CONCRETE SURFACES WITHIN THE CONTAINMENT AREA TO BE COATED WITH SIKAFLOOR 265 - SL (OR APPROVED EQUAL).

PRELIMINARY DESIGN COLUMN REACTIONS

LOAD SOURCE	LOCATION	LONGITUDINAL (KIPS)	VERT, DOWN (KIPS)	VERT, UPLIFT (KIPS)	TRANSVERSE (KIPS)
DEAD LOAD	GL 1/2	19.37	23.93	0	0.41
	GL 3	10.19	11.73	0	0.23
ROOF LIVE	GL 1/2	22.08	26.45	0	0.36
	GL 3	9.01	10.38	0	0.05
LIVE LOAD	GL 1/2	1.13	1.45	-0.16	0.29
	GL 3	0.99	1.12	0	0.22
WIND LOAD	GL 1/2	16.08	19.95	-19.92	17.52
	GL 3	6.53	7.79	-7.78	4.00
EQKE LOAD	GL 1/2	4.29	2.2	-3.69	6.21
	GL 3	3.34	1.59	-1.1	1.54

NOTES:
1. SIGN CONVENTION: POSITIVE = DOWNWARD, NEGATIVE = UPWARD.
2. LONGITUDINAL LOADS ARE PALLEL TO GRIDLINES 1-3, TRANSVERSE LOADS ARE PARALLEL TO GRIDLINES A-B.
3. LONGITUDINAL AND TRANSVERSE LOADS ARE APPLIED IN BOTH THE POSITIVE AND NEGATIVE DIRECTIONS.





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REGISTERED PROFESSIONAL ENGINEER
BRETT M. BOEHMKE
No. 91335
Exp. 6/30/
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STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
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	4/12/24	60% DESIGN	BMB
	6/14/24	90% DESIGN	BMB
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
HHW CANOPY
FOUNDATION PLAN

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
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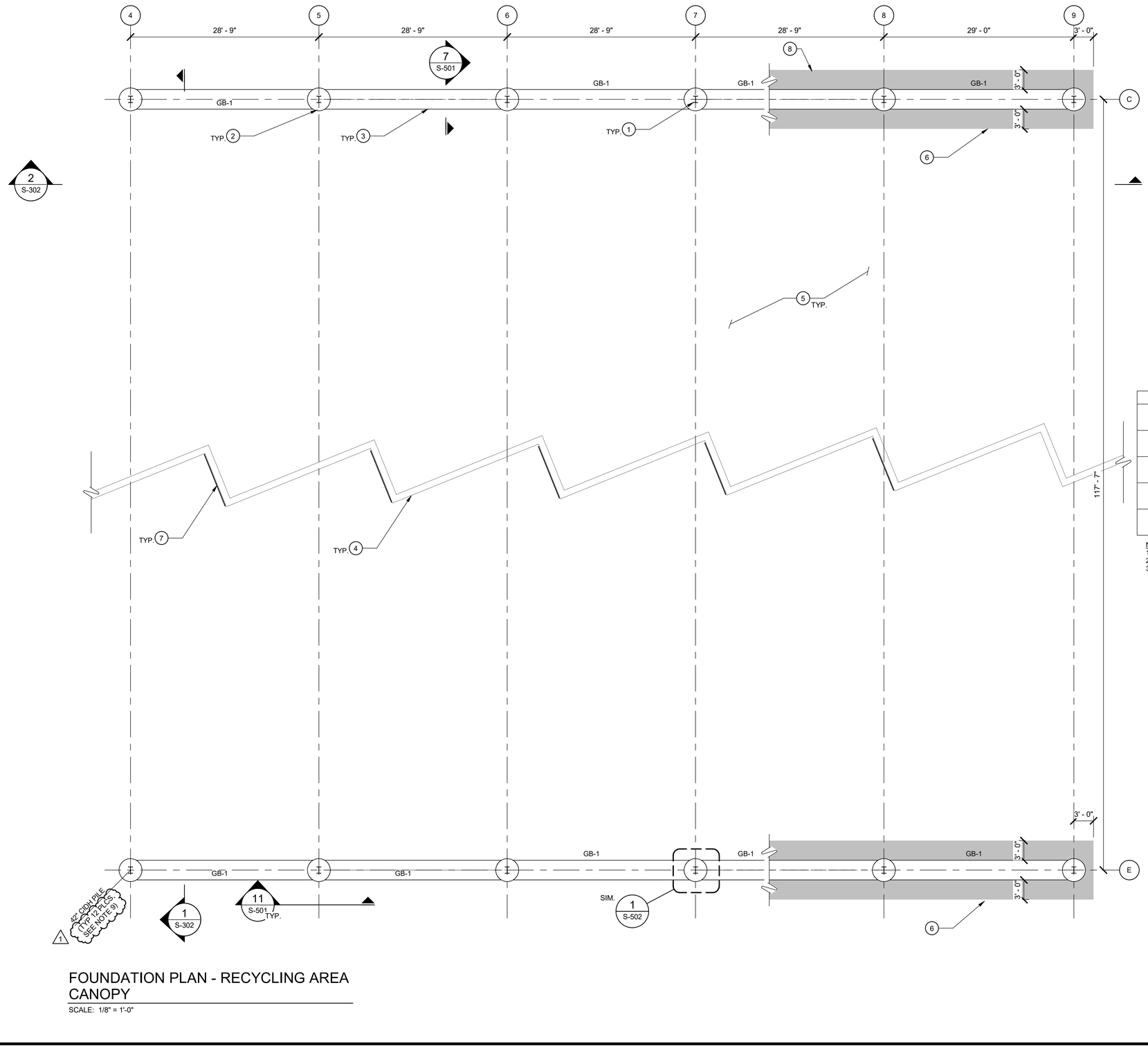


FOUNDATION PLAN - RECYCLING AREA CANOPY

SCALE: 1/8" = 1'-0"

GRADE BEAM SCHEDULE				
BEAM MARK	SIZE: WIDTH x DEPTH (IN)	TOP REINF	BOTT REINF	STIRRUP SIZE AND SPACING
	<varies>	<varies>	<varies>	<varies>
GB-1	36 x 24	(5) #8 CONT. BARS	(5) #8 CONT. BARS	#4 @ 12" O.C.

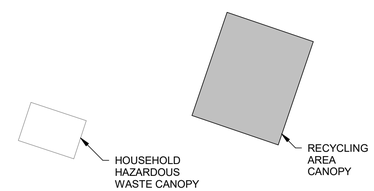
FOUNDATION PLAN NOTES: (X)

1. CANOPY COLUMN BY PRE-ENGINEERED CANOPY DESIGNER/FABRICATOR.
2. CONCRETE PIER AT EACH CANOPY COLUMN. TYPICAL AT 12 PLACES. EMBED 15'-0" MIN.
3. CONCRETE GRADE BEAM.
4. EXISTING CONCRETE RETAINING WALL. PROTECT IN PLACE. REPAIR TOP OF CONCRETE WALL PER DETAIL 8 / S-501. ASSUME 200 LF OF REPAIRS FOR BIDDING PURPOSES.
5. EXISTING ASPHALT CONCRETE PAVING. PROTECT IN PLACE U.N.O. CONTRACTOR SHALL REPAIR OR REPLACE ALL PAVING DAMAGED DURING CONSTRUCTION, TO THE SATISFACTION OF THE OWNER.
6. LIMITS OF ASPHALT CONCRETE PAVING REMOVAL AND REPLACEMENT.
7. PUSH WALL REPAIR AT BOTTOM OF EXISTING WALL PER DETAIL 9 / S-501. ASSUME 5 LOCATIONS FOR BIDDING PURPOSES.
8. VERTICAL SHORING TO BE USED AT GRADE BEAM EXCAVATION ADJACENT TO EXISTING TRANSFER BUILDING. SHORING TO BE DESIGNED AND SUPPLIED BY CONTRACTOR.
9. (1) COLUMN PILES TO MAINTAIN A MINIMUM SETBACK OF 5'-0" TO THE EXISTING ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) SEPTIC TANKS AND PUMP CHAMBER TANKS.
10. ANCHOR BOLT SIZE, EMBEDMENT, PIER SIZE, AND REINFORCEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING REVIEW OF FINAL APPROVED CANOPY DRAWINGS AND CALCULATIONS. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.

PRELIMINARY DESIGN COLUMN REACTIONS

LOAD SOURCE	LOCATION	LONGITUDINAL (KIPS)	VERT, DOWN (KIPS)	VERT, UPLIFT (KIPS)	TRANSVERSE (KIPS)
DEAD LOAD	GL 5-8	28.3	45.13	0.00	0.03
	GL 4/9	17.55	29.41	0.00	0.15
ROOF LIVE	GL 5-8	19.21	27.09	0.00	0.01
	GL 4/9	9.71	13.66	0.00	0.07
WIND LOAD	GL 5-8	31.10	43.44	-43.57	48.79
	GL 4/9	15.95	19.52	-1.22	0.94
EQKE LOAD	GL 5-8	9.73	21.87	-22.08	25.57
	GL 4/9	8.41	3.22	-3.21	1.02

NOTES:
1. SIGN CONVENTION: POSITIVE = DOWNWARD, NEGATIVE = UPWARD.
2. LONGITUDINAL LOADS ARE PALLEL TO GRIDLINES 4-9, TRANSVERSE LOADS ARE PARALLEL TO GRIDLINES C-E.
3. LONGITUDINAL AND TRANSVERSE LOADS ARE APPLIED IN BOTH THE POSITIVE AND NEGATIVE DIRECTIONS.



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	6/14/24	90% DESIGN	BMB
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB
1	5/09/25	PERMIT REVISIONS	BMB

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

RECYCLING AREA CANOPY FOUNDATION PLAN

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

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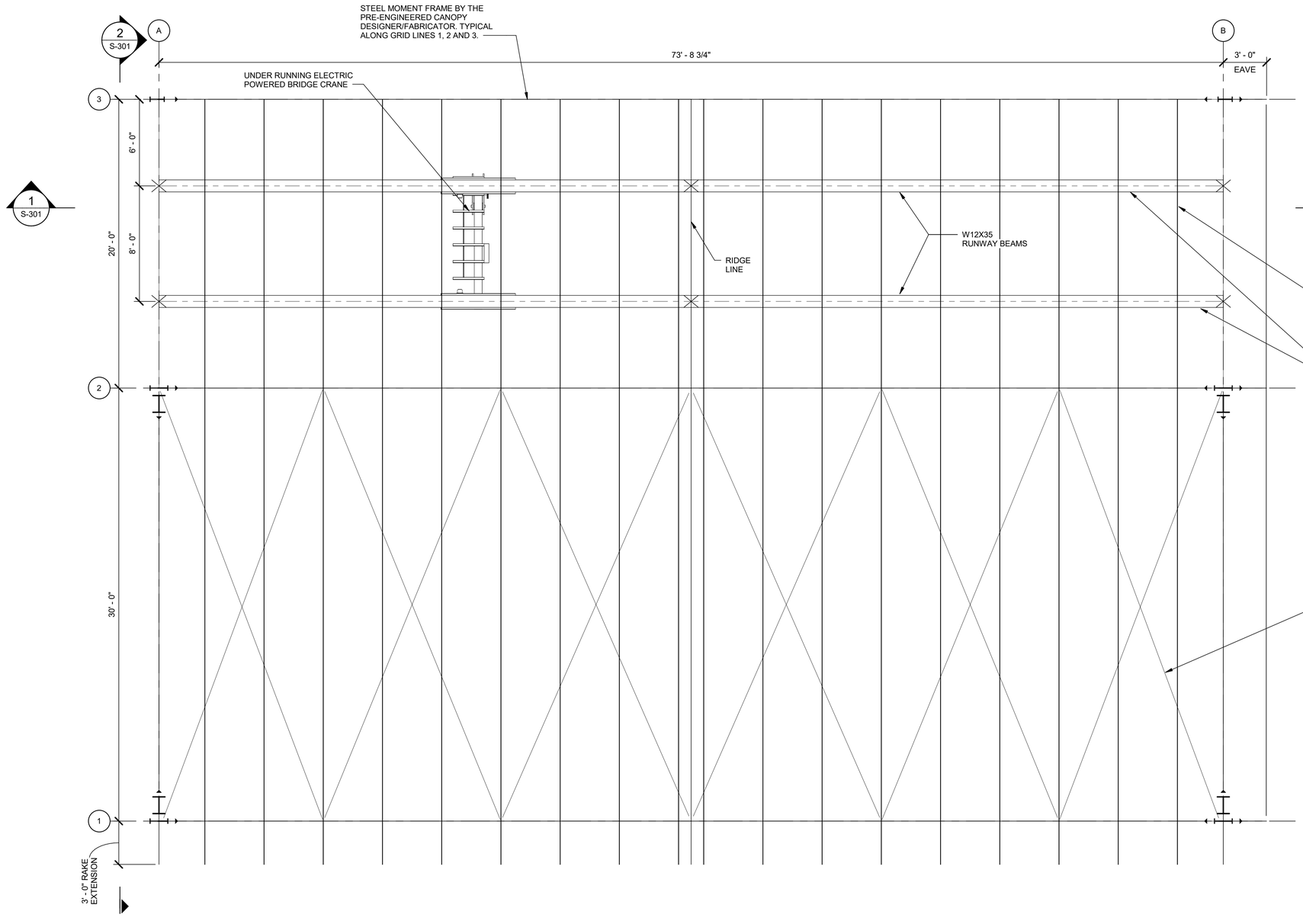


ROOF PLAN NOTES:

1. SEE SHEETS S-001 THRU S-002 FOR GENERAL NOTES AND FOUNDATION DESIGN CRITERIA.
2. SEE S-500 SERIES DRAWINGS FOR TYPICAL DETAILS NOT CUT ON PLAN.
3. BRIDGE CRANE SUPPORT FRAMING INCLUDING RUNWAY BEAM, RUNWAY RAIL, BRACKETS AND CONNECTIONS TO BE DESIGNED AND PROVIDED BY THE PEMB MANUFACTURER. PEMB MANUFACTURER SHALL COORDINATE WITH BRIDGE CRANE MANUFACTURER TO ENSURE THE BRIDGE CRANE SUPPORT FRAMING MEETS THE BRIDGE CRANE REQUIREMENTS.
4. CRANE RUNWAY BEAMS TO SUPPORTED BY PEMB STRUCTURE AT MIDSPAN AND GABLE ENDS. SUPPORTING PEMB ELEMENTS SHALL SATISFY THE CRANE RUNWAY BEAM DEFLECTION CRITERIA SPECIFIED IN THE DESIGN CRITERIA ON SHEET S-001.

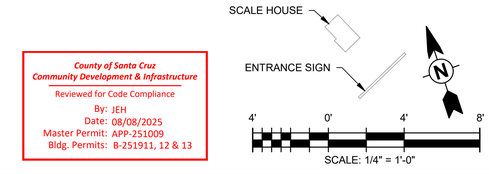
ROOF PLAN LEGEND:

STEEL MOMENT FRAME; SEE NOTES FOR MORE INFORMATION

CRANE RUNWAY BEAM VERTICAL SUPPORT. SEE NOTE 4.

ROOF FRAMING PLAN - HHW CANOPY

SCALE: 1/4" = 1'-0"



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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

HHW CANOPY ROOF FRAMING PLAN

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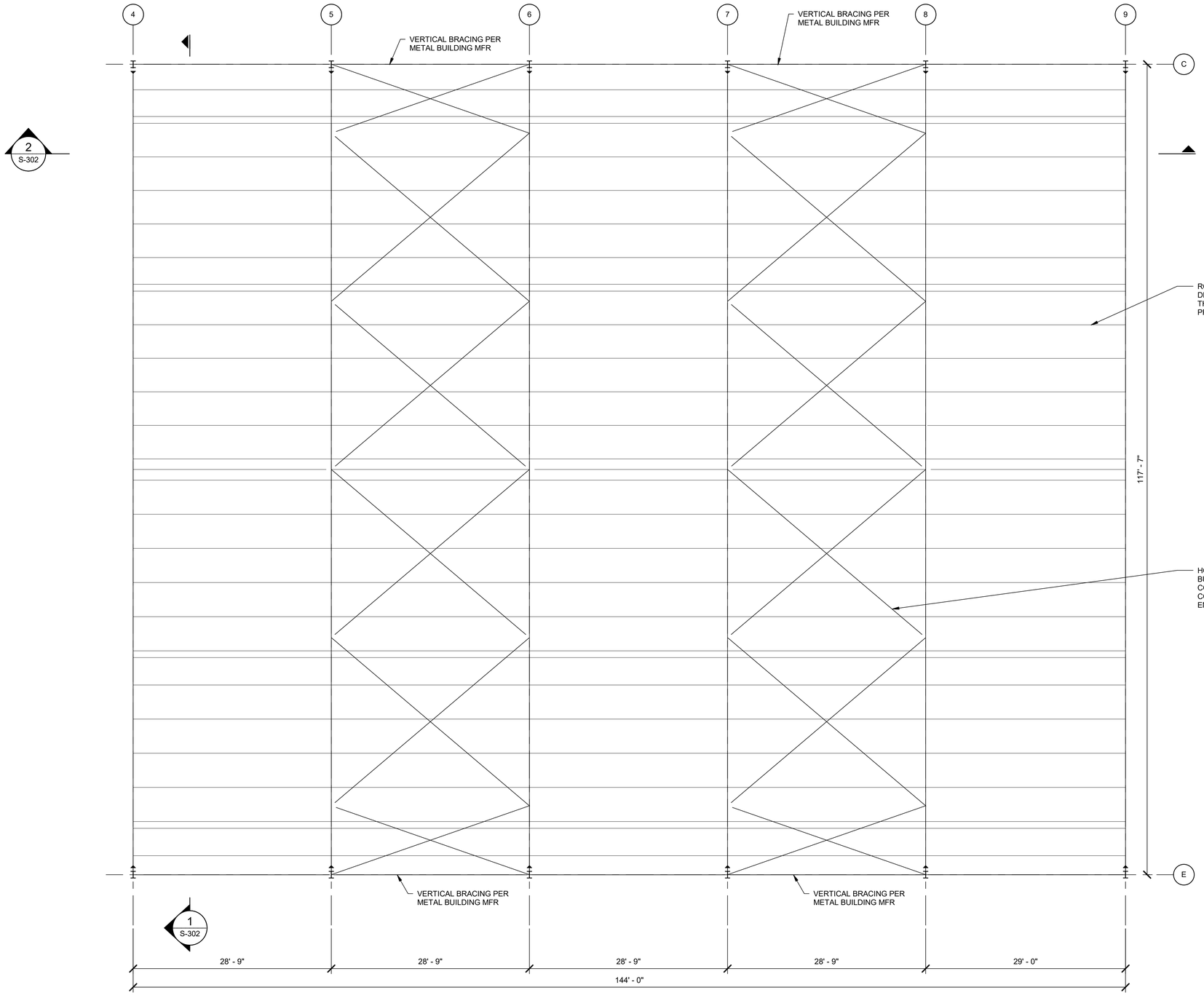


ROOF FRAMING PURLINS BY THE PRE-ENGINEERED CANOPY DESIGNER/FABRICATOR. THE LAYOUT SHOWN IS SCHEMATIC. THE FINAL PURLIN LAYOUT SHALL BE DETERMINED BY THE PRE-ENGINEERED CANOPY DESIGNER/FABRICATOR.

HORIZONTAL ROOF DIAPHRAGM X-BRACING PER METAL BUILDING MANUFACTURER, TYP. THE BRACING CONFIGURATION SHOWN IS SCHEMATIC. THE FINAL BRACING CONFIGURATION SHALL BE DETERMINED BY THE PRE-ENGINEERED CANOPY DESIGNER/FABRICATOR.

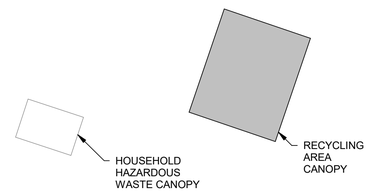
ROOF PLAN NOTES:

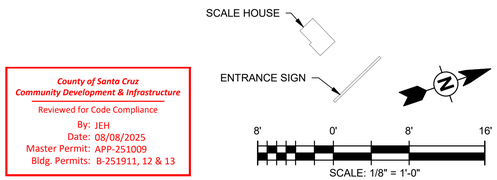
1. SEE SHEETS S-001 THRU S-002 FOR GENERAL NOTES AND FOUNDATION DESIGN CRITERIA.
2. SEE S-500 SERIES DRAWINGS FOR TYPICAL DETAILS NOT CUT ON PLAN.

ROOF PLAN LEGEND:

STEEL MOMENT FRAME; SEE NOTES FOR MORE INFORMATION

CABLE BRACED FRAME





ROOF FRAMING PLAN
RECYCLING AREA CANOPY

SCALE: 1/8" = 1'-0"

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Community Development & Infrastructure
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By: JEH
Date: 08/08/2025
Master Permit: APP-251009
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	12/23/24	100% PERMIT REVIEW	BMB

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

RECYCLING AREA CANOPY
ROOF FRAMING PLAN

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

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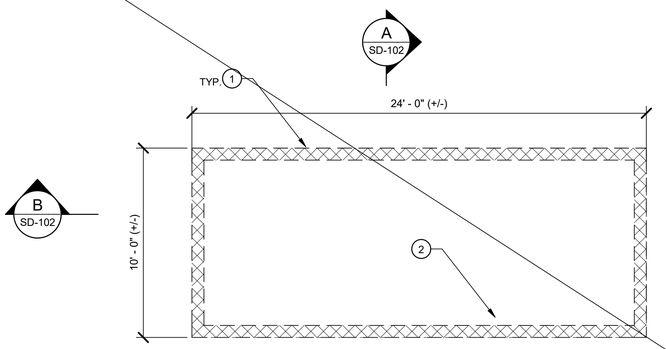
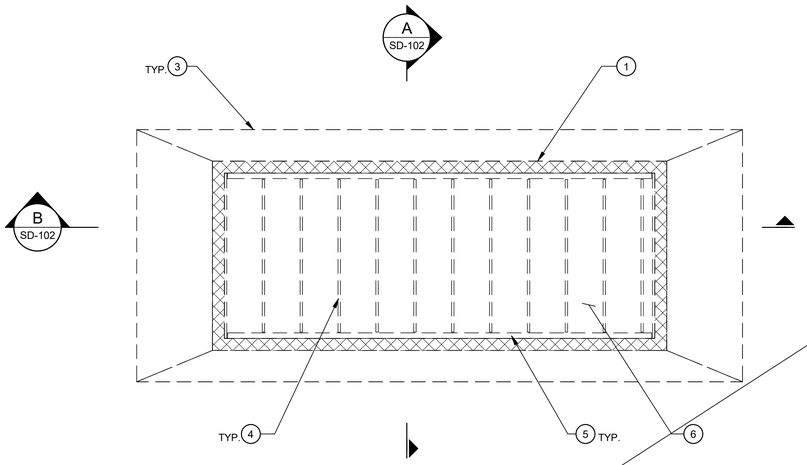
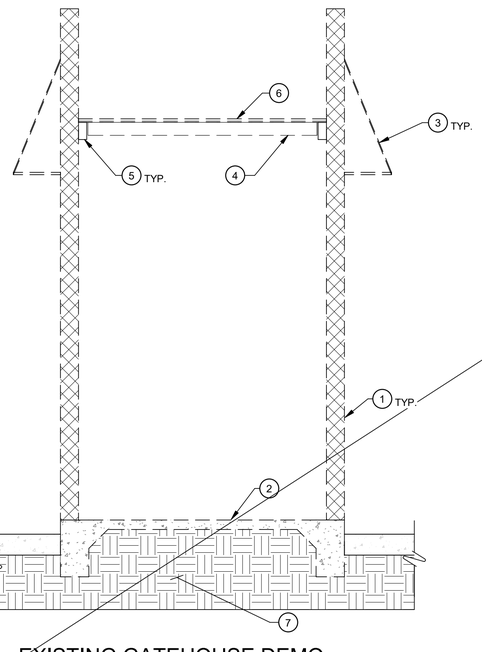


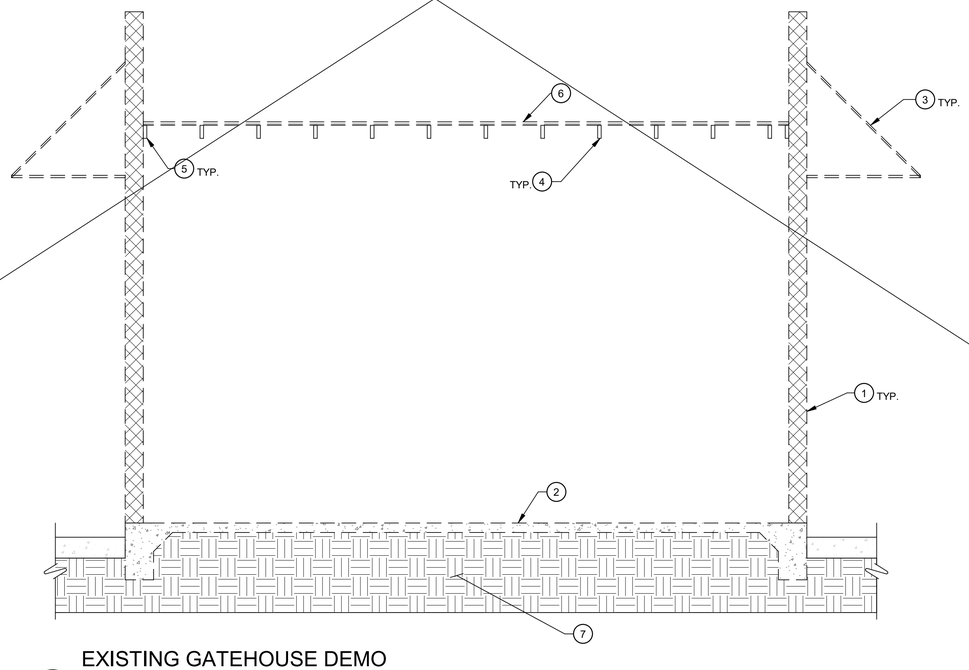
1 SD-102 EXISTING GATEHOUSE FOUNDATION DEMO PLAN
SCALE: 1/4" = 1'-0"



2 SD-102 EXISTING GATEHOUSE ROOF FRAMING DEMO PLAN
SCALE: 1/4" = 1'-0"



A SD-102 EXISTING GATEHOUSE DEMO SECTION A
SCALE: 3/8" = 1'-0"



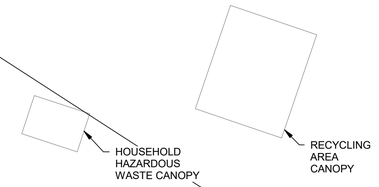
B SD-102 EXISTING GATEHOUSE DEMO SECTION B
SCALE: 3/8" = 1'-0"

KEYNOTES: (X)

1. EXISTING 8" CMU BLOCK TO BE DEMOLISHED
2. EXISTING 4" MIN. CONCRETE SLAB WITH 2'-0" X 1'-0" CONCRETE SLAB EDGE TO BE DEMOLISHED. REBAR TO BE REMOVED FROM CONCRETE AND PROPERLY DISPOSED OF.
3. EXISTING SOFFIT PANELS TO BE DEMOLISHED
4. EXISTING FRAMING TO BE DEMOLISHED
5. EXISTING LEDGER TO BE DEMOLISHED
6. EXISTING ROOFING MATERIAL TO BE DEMOLISHED
7. BACKFILL AND COMPACT DEMOLITION EXCAVATIONS PER DETAIL 4 / S-501, CIVIL GRADING PLANS, AND SPECIFICATIONS.

DEMOLITION NOTES:

1. G.C. TO REVIEW SCALE HOUSE RECORD DRAWINGS TO DETERMINE ESTIMATE OF DEMOLITION QUANTITIES.
2. G.C. TO ASSUME THAT EXISTING BUILDING COMPONENTS CONTAIN MATERIALS THAT WILL REQUIRE SPECIAL HAZMAT HANDLING AND DISPOSAL. G.C. SHALL HAVE SAMPLES OF ROOFING AND SOFFIT PANELS TESTED FOR PRESENCE OF HAZARDOUS MATERIALS. HAZMAT REMOVAL TO BE INCLUDED AS A BID ITEM.
3. ALL ITEMS BEING DEMOLISHED SHALL BE HAULED AWAY AND PROPERLY DISPOSED OF BY THE CONTRACTOR.



2' 0' 2' 4' 6'
SCALE: 3/8" = 1'-0"

4' 0' 4' 8'
SCALE: 1/4" = 1'-0"

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	12/23/24	100% PERMIT REVIEW	BMB
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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

SCALE HOUSE DEMOLITION PLAN

PROJ:	200-42064-22005
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CHKD:	MSO

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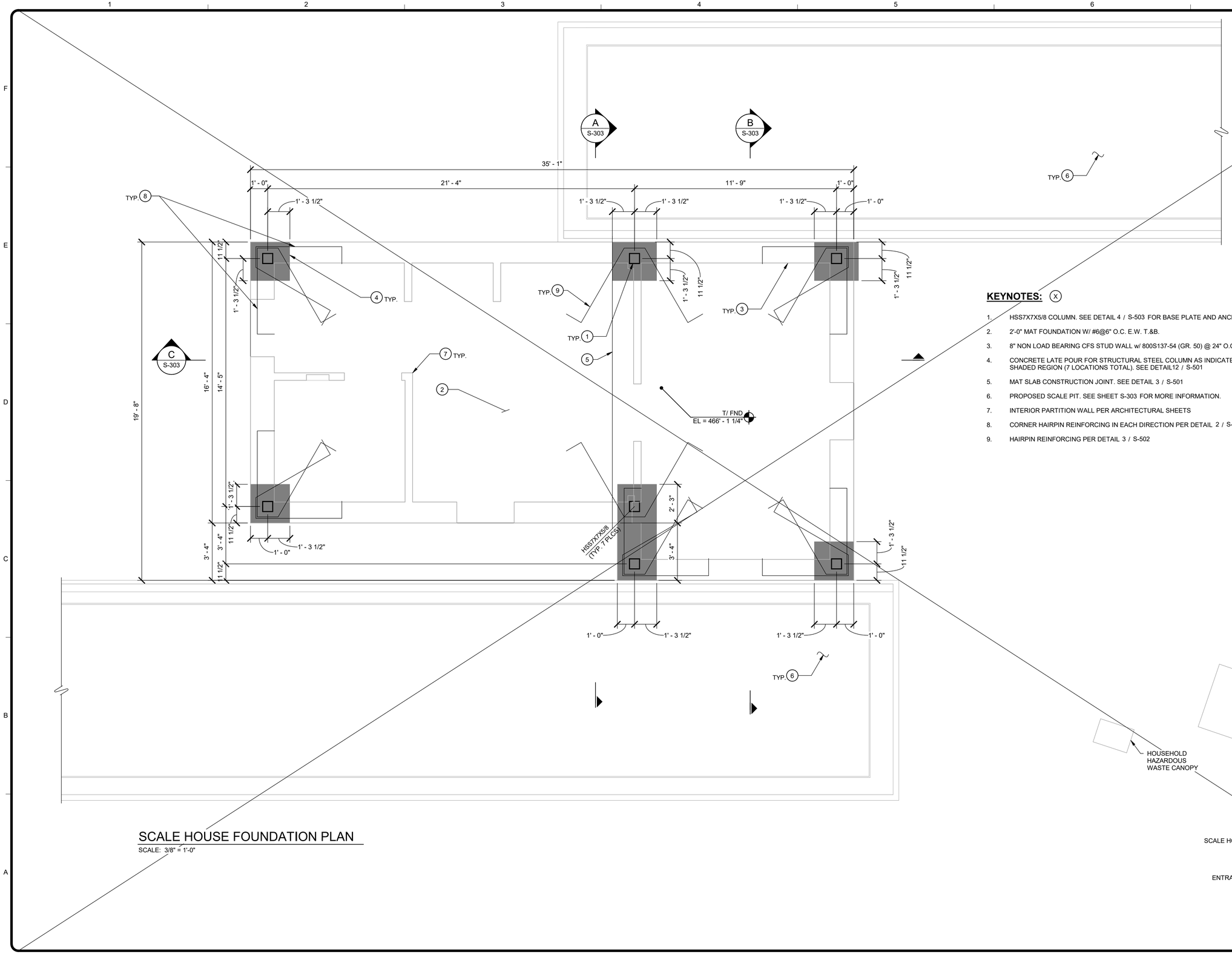

SCALE HOUSE FOUNDATION PLAN

SCALE: 3/8" = 1'-0"

KEYNOTES: (X)

1. HSS7X7X5/8 COLUMN. SEE DETAIL 4 / S-503 FOR BASE PLATE AND ANCHORAGE
2. 2'-0" MAT FOUNDATION W/ #6@6" O.C. E.W. T.&B.
3. 8" NON LOAD BEARING CFS STUD WALL w/ 800S137-54 (GR. 50) @ 24" O.C. (MAX).
4. CONCRETE LATE POUR FOR STRUCTURAL STEEL COLUMN AS INDICATED BY SHADED REGION (7 LOCATIONS TOTAL). SEE DETAIL12 / S-501
5. MAT SLAB CONSTRUCTION JOINT. SEE DETAIL 3 / S-501
6. PROPOSED SCALE PIT. SEE SHEET S-303 FOR MORE INFORMATION.
7. INTERIOR PARTITION WALL PER ARCHITECTURAL SHEETS
8. CORNER HAIRPIN REINFORCING IN EACH DIRECTION PER DETAIL 2 / S-502
9. HAIRPIN REINFORCING PER DETAIL 3 / S-502

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SCALE HOUSE FOUNDATION PLAN

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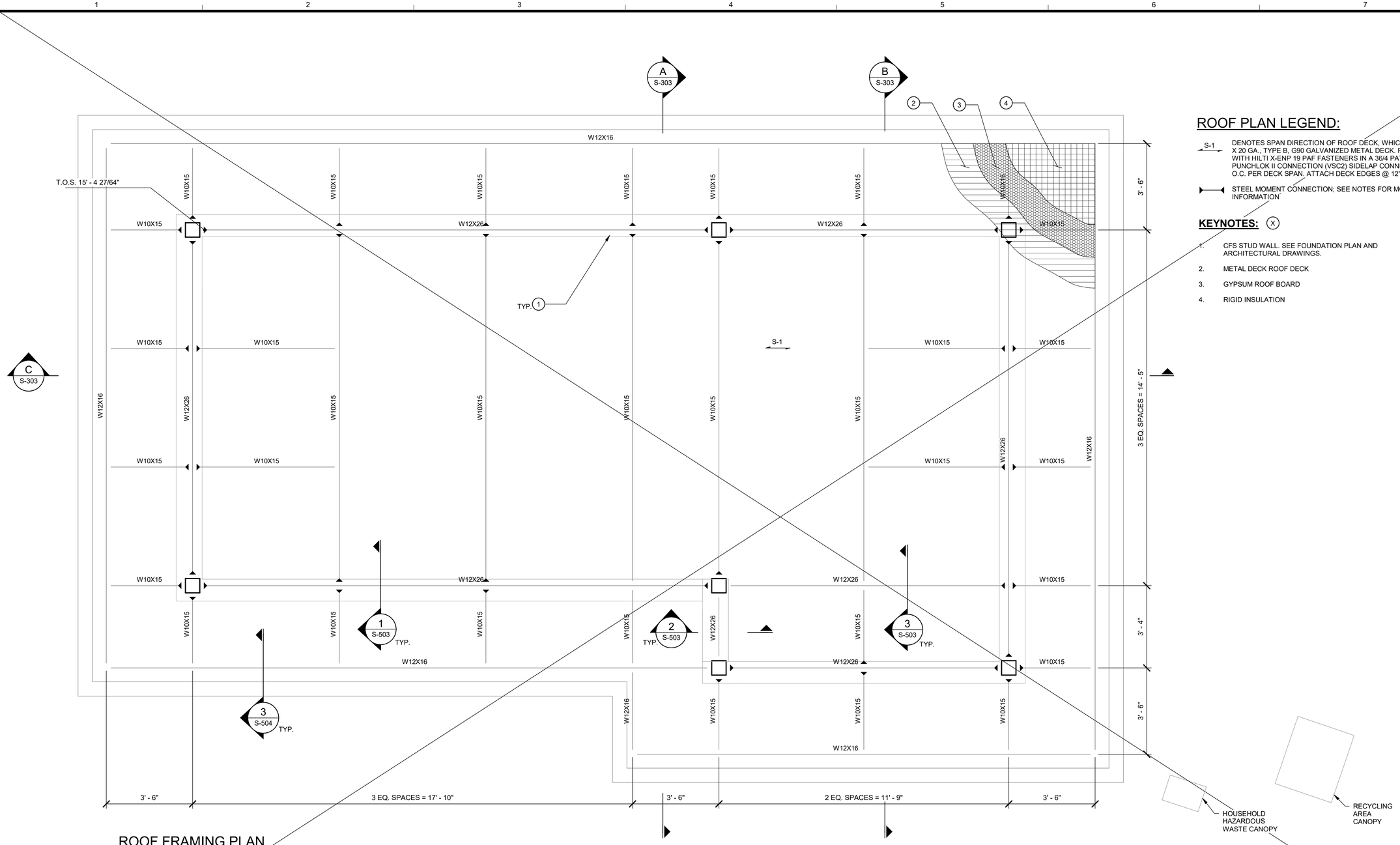

ROOF FRAMING PLAN

SCALE: 1/2" = 1'-0"

ROOF PLAN LEGEND:

S-1 — DENOTES SPAN DIRECTION OF ROOF DECK, 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 AND ARCHITECTURAL DRAWINGS.
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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BEN LOMOND TRANSFER STATION IMPROVEMENTS

SCALE HOUSE ROOF FRAMING PLAN

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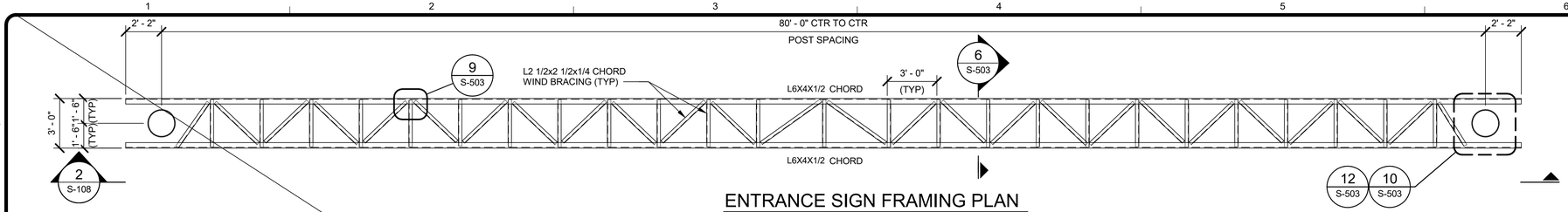
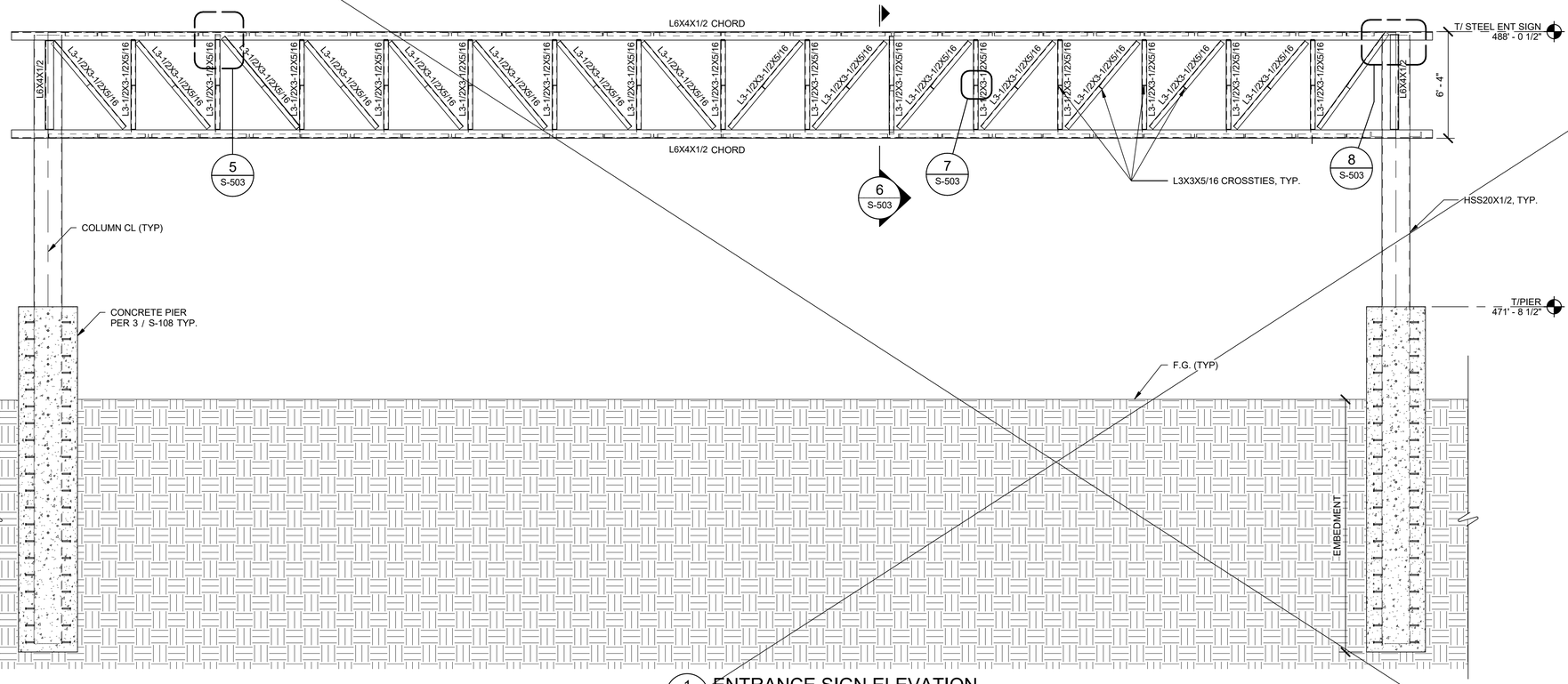


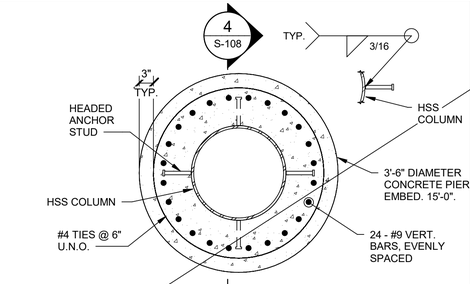
ENTRANCE SIGN FRAMING PLAN

SCALE: 1/4" = 1'-0"



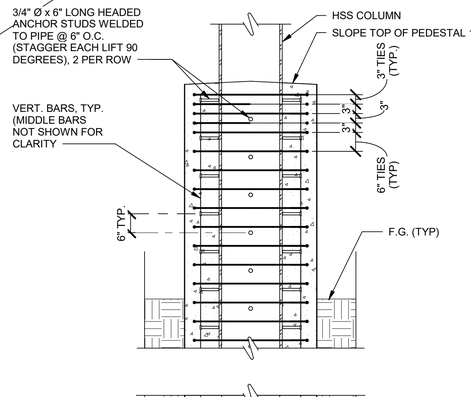
1 ENTRANCE SIGN ELEVATION

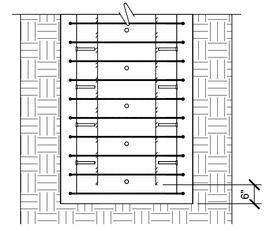
S-108 SCALE: 1/4" = 1'-0"



3 ENTRANCE SIGN PIER PLAN

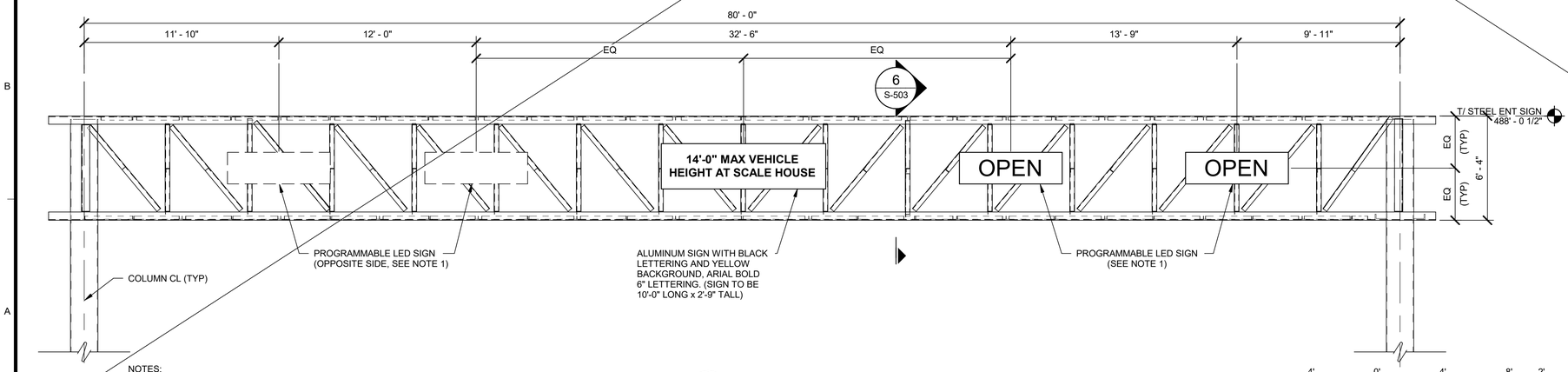
S-108 SCALE: 3/4" = 1'-0"





4 COLUMN PEDESTAL DETAIL

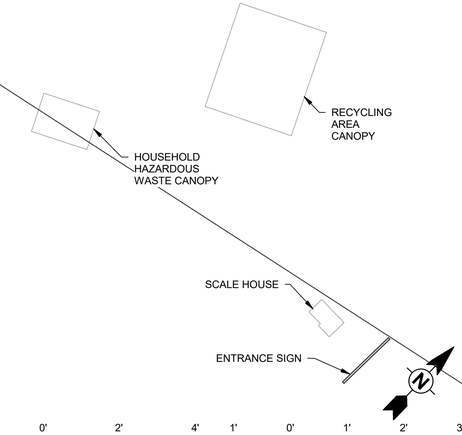
S-108 SCALE: 1/2" = 1'-0"



NOTES:
1. PROGRAMMABLE LED SIGNS (4 TOTAL) TO BE IPLED-32X160-RGB-10-ODX BY IPDISPLAYS, OR APPROVED EQUAL.

2 ENTRANCE SIGN ELEVATION

S-108 SCALE: 1/4" = 1'-0"



SCALE: 1/4" = 1'-0" | SCALE: 1/2" = 1'-0" | SCALE: 3/4" = 1'-0"

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	12/23/24	100% PERMIT REVIEW	BMB
	1/14/25	EXCLUDED FROM PERMIT SCOPE	BMB

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

ENTRANCE SIGN PLAN AND SECTIONS

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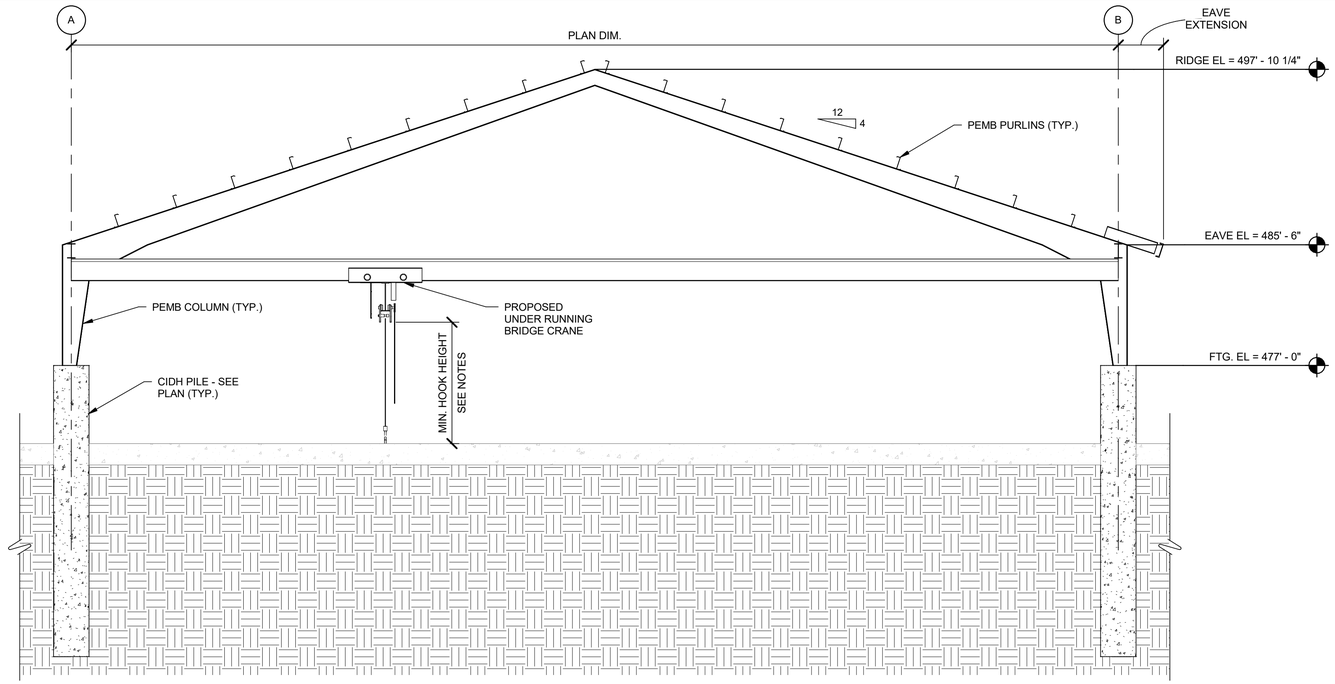
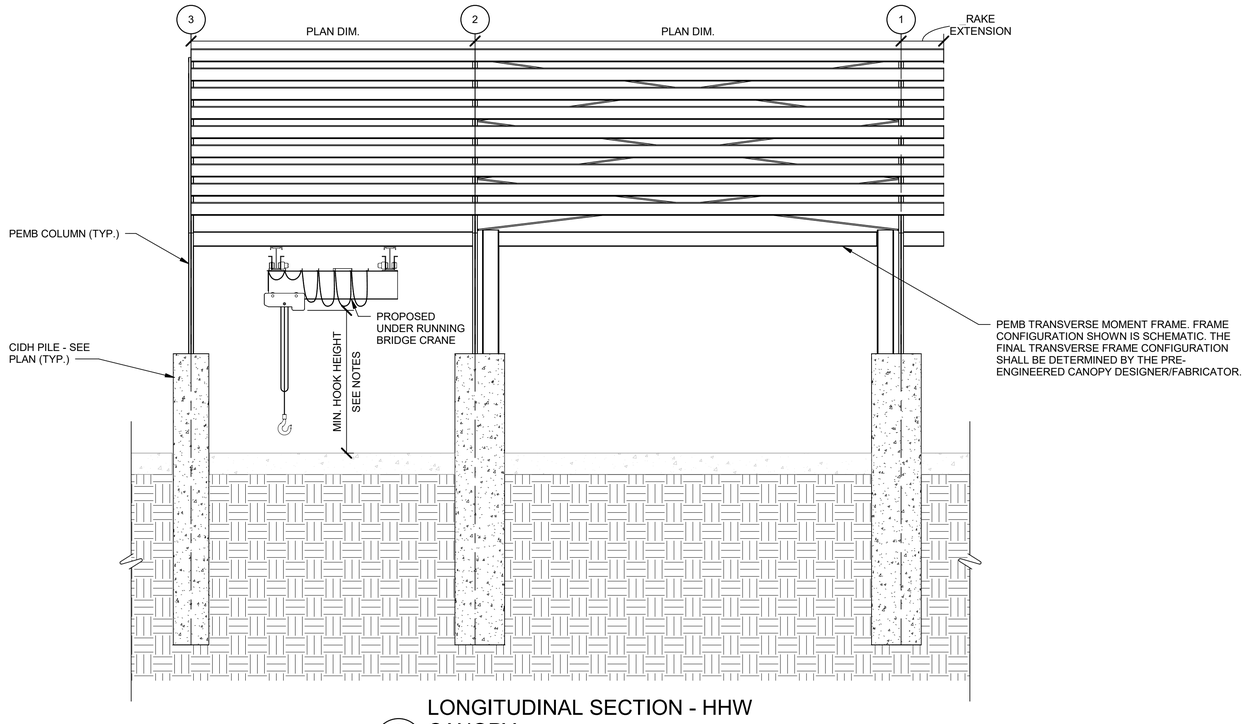


TRANSVERSE SECTION - HHW CANOPY

1 / S-301 SCALE: 3/16" = 1'-0"



LONGITUDINAL SECTION - HHW CANOPY

2 / S-301 SCALE: 3/16" = 1'-0"

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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

HHW CANOPY SECTIONS

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

PROJ:	200-42064-22005
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CHKD:	MSO

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4' 0' 4' 8' 12'
SCALE: 3/16" = 1'-0"

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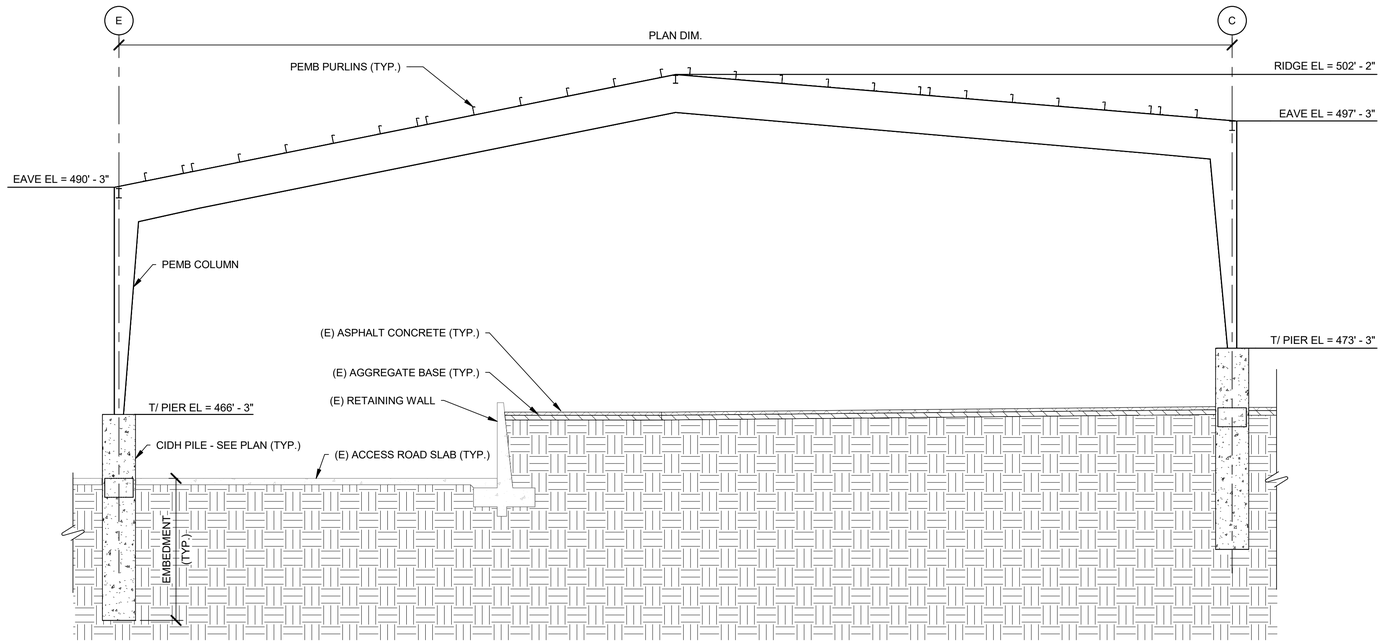
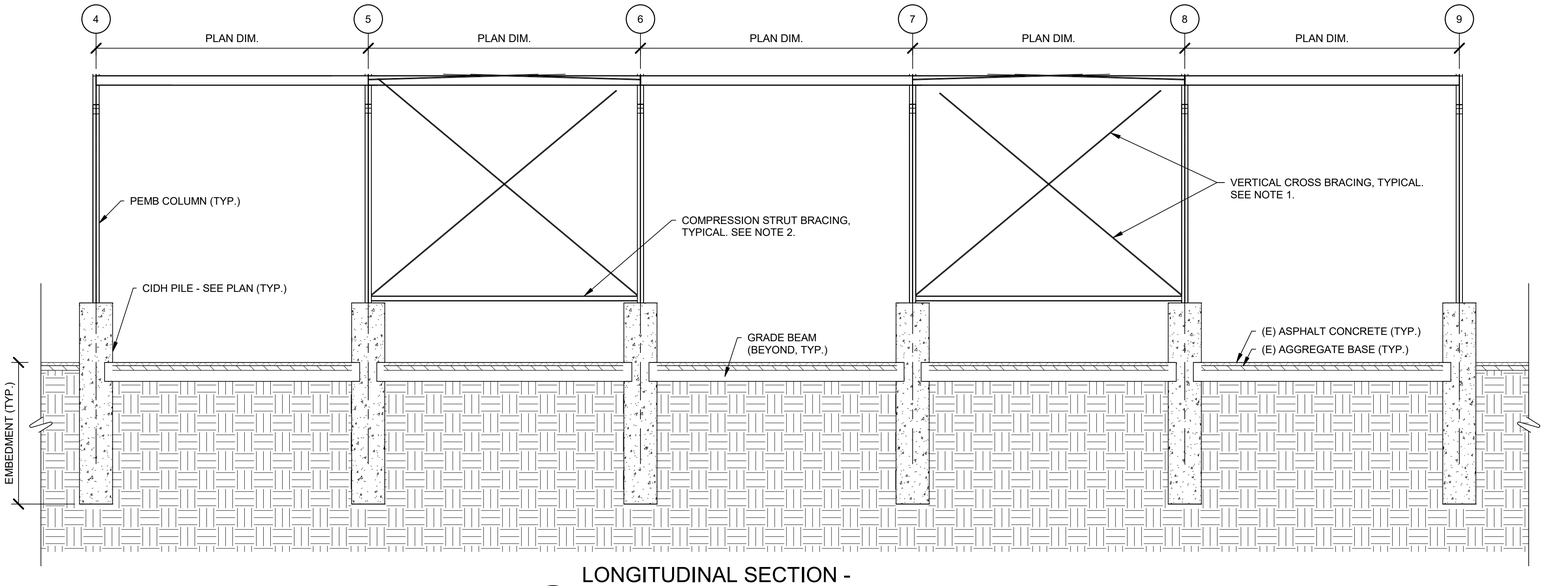


1 / S-302 TRANSVERSE SECTION - RECYCLING AREA CANOPY

SCALE: 1/8" = 1'-0"



2 / S-302 LONGITUDINAL SECTION - RECYCLING AREA CANOPY

SCALE: 1/8" = 1'-0"

NOTES:

1. THE BRACING CONFIGURATION SHOWN IS SCHEMATIC. THE FINAL BRACING CONFIGURATION SHALL BE DETERMINED BY THE PRE-ENGINEERED CANOPY DESIGNER/FABRICATOR.
2. COMPRESSION STRUT BRACING REQUIRED AT BOTTOM OF X-BRACED BAYS TO RESOLVE HORIZONTAL COMPONENT OF FORCE FROM DIAGONAL BRACES.

County of Santa Cruz
Community Development & Infrastructure
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Bldg. Permits: B-251911, 12 & 13

8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

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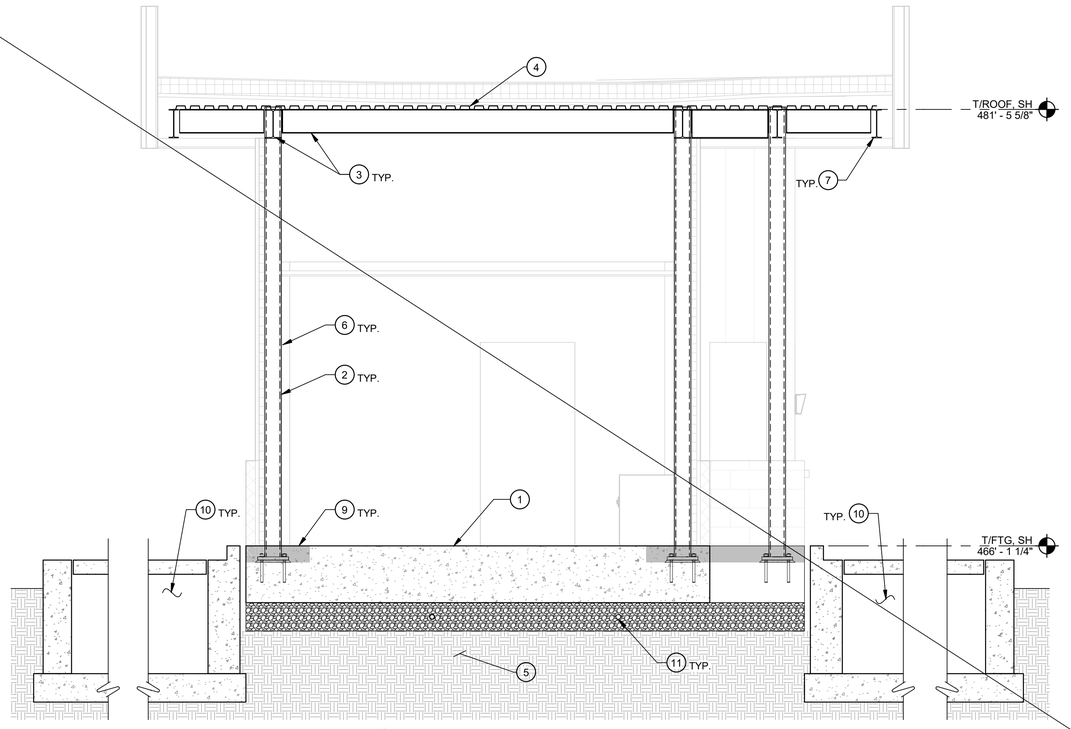
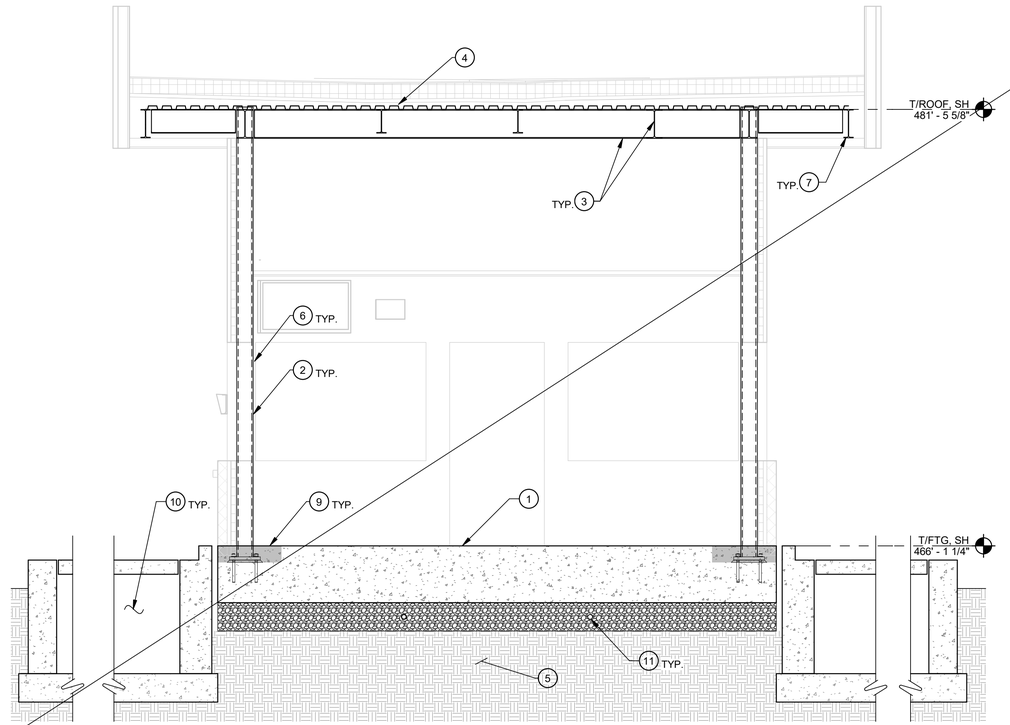
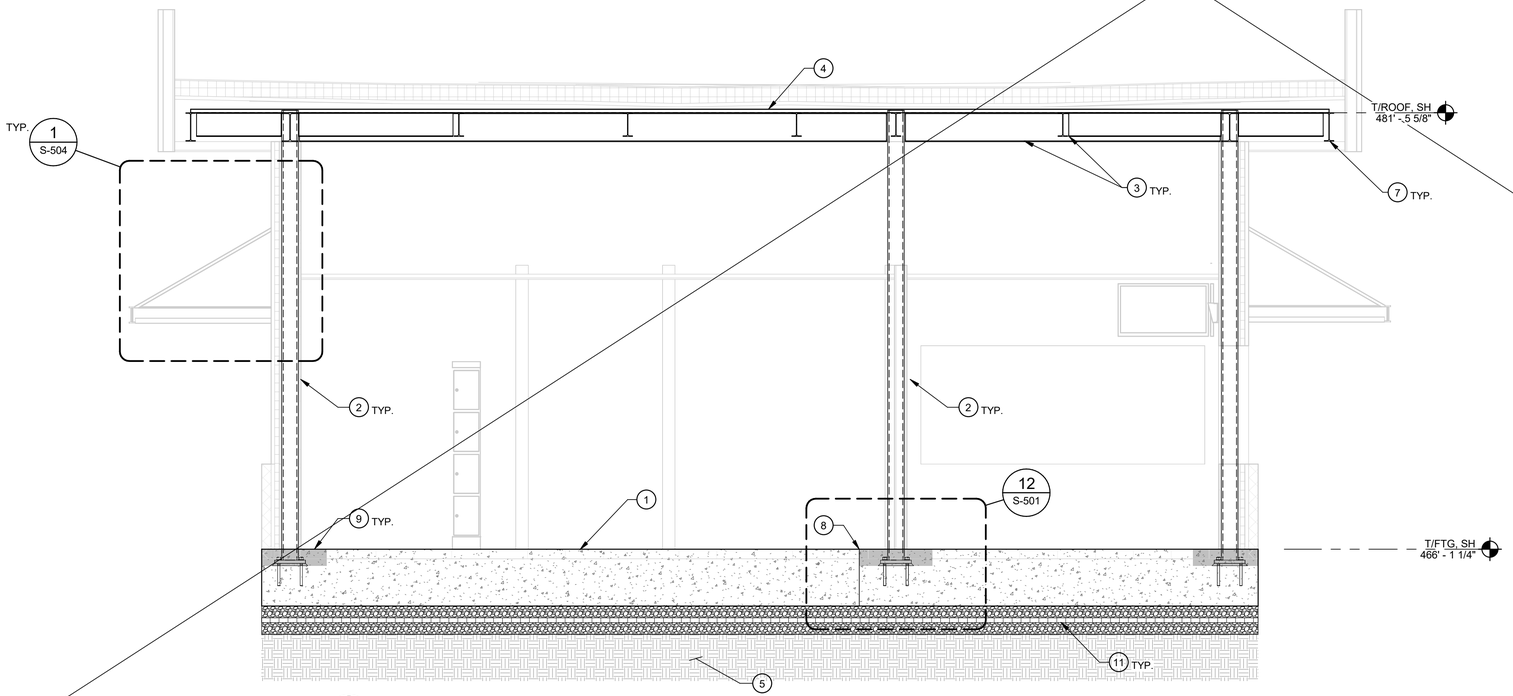
Bar measures 1 inch, otherwise drawing is not to scale



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 12 / S-501
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.
11. BUILDING PROTECTION SYSTEM PIPING AND SURROUNDING AGGREGATE. SEE CIVIL PLANS FOR MORE DETAILS.

2' 0' 2' 4' 6'
SCALE: 3/8" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER
BRETT M. BOEHMKE
No. 91335
Exp. 6/30/
CIVIL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
	1/29/24	30% DESIGN	BMB
	4/12/24	60% DESIGN	BMB
	6/14/24	90% DESIGN	BMB
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB
	1/14/25	EXCLUDED FROM PERMIT SCOPE	BMB

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
SCALE HOUSE SECTIONS

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

S-303

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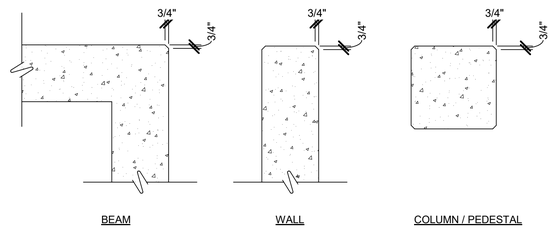
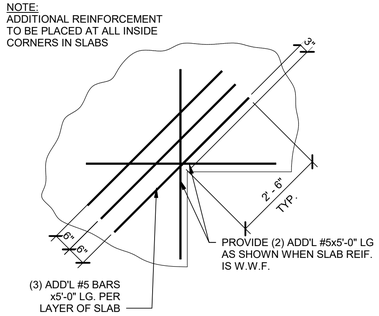
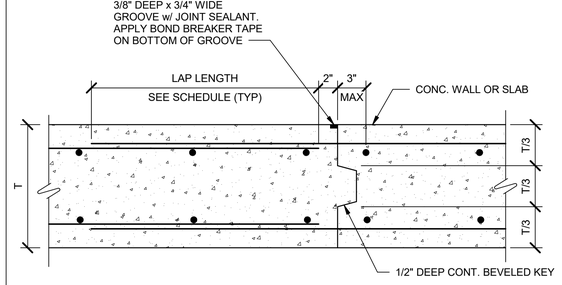


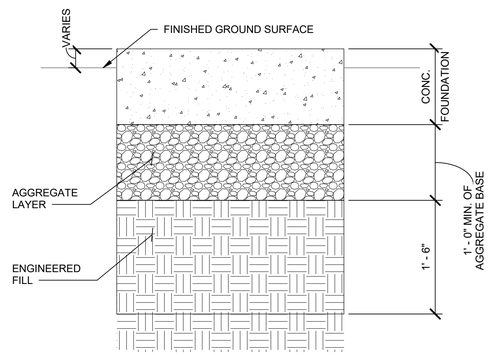
1 CHAMFER DETAILS
S-501 SCALE: NTS



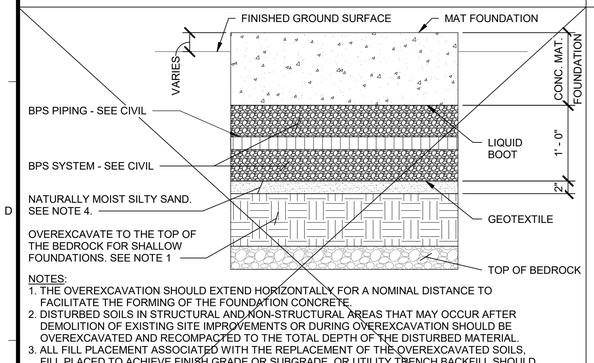
2 REINF. SLAB RE ENTRANT CORNER
S-501 SCALE: NTS



3 CONCRETE CONSTRUCTION JOINT
S-501 SCALE: NTS

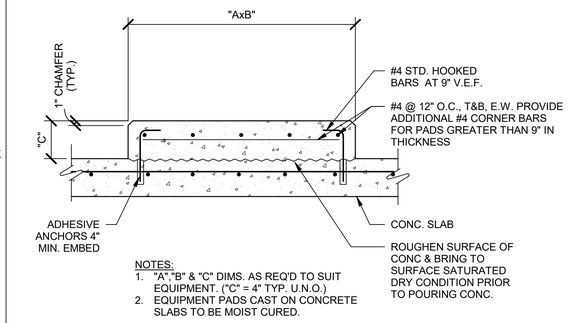


4 SUBGRADE PREPARATION
S-501 SCALE: 1" = 1'-0"



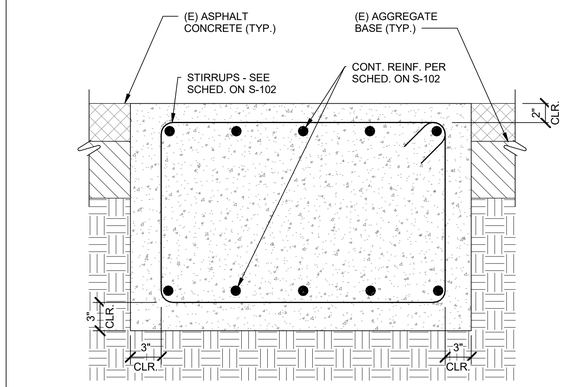
NOTES:
1. THE OVEREXCAVATION SHOULD EXTEND HORIZONTALLY FOR A NOMINAL DISTANCE TO FACILITATE THE FORMING OF THE FOUNDATION CONCRETE.
2. DISTURBED SOILS IN STRUCTURAL AND NON-STRUCTURAL AREAS THAT MAY OCCUR AFTER DEMOLITION OF EXISTING SITE IMPROVEMENTS OR DURING OVEREXCAVATION SHOULD BE OVEREXCAVATED AND RECOMPACTED TO THE TOTAL DEPTH OF THE DISTURBED MATERIAL.
3. ALL FILL PLACEMENT ASSOCIATED WITH THE REPLACEMENT OF THE OVEREXCAVATED SOILS, FILL PLACED TO ACHIEVE FINISH GRADE OR SUBGRADE, OR UTILITY TRENCH BACKFILL SHOULD BE MOISTURE-CONDITIONED TO AT LEAST 110 PERCENT OF THE OPTIMUM MOISTURE CONTENT AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION PER ASTM D1557.
4. IF A 15 MIL STEGO WRAP IS UTILIZED IN LIEU OF THE 10 MIL VAPOR BARRIER AND ADEQUATE CAUTION IS TAKEN DURING SUBGRADE PREPARATION AND SLAB CONSTRUCTION, SILTY SAND COURSE MAY BE ELIMINATED.
5. REFER TO GEOTECHNICAL REPORT FOR ALL SUBGRADE PREPARATION REQUIREMENTS.

5 SUBGRADE PREPARATION AT MAT FOUNDATION
S-501 SCALE: 1" = 1'-0"

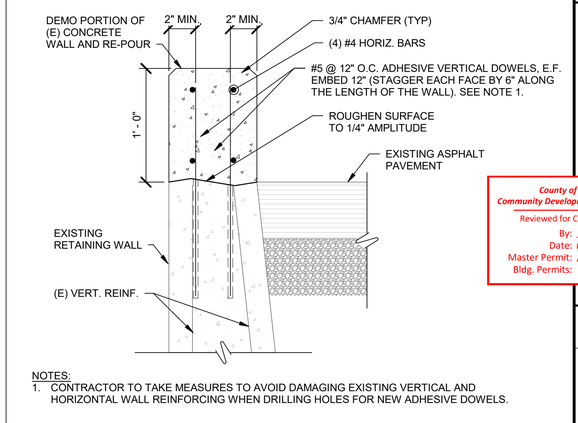


NOTES:
1. "A","B" & "C" DIMS. AS REQ'D TO SUIT EQUIPMENT. ("C" = 4" TYP. U.N.O.)
2. EQUIPMENT PADS CAST ON CONCRETE SLABS TO BE MOIST CURED.

6 TYP. EQUIPMENT PAD
S-501 SCALE: NTS

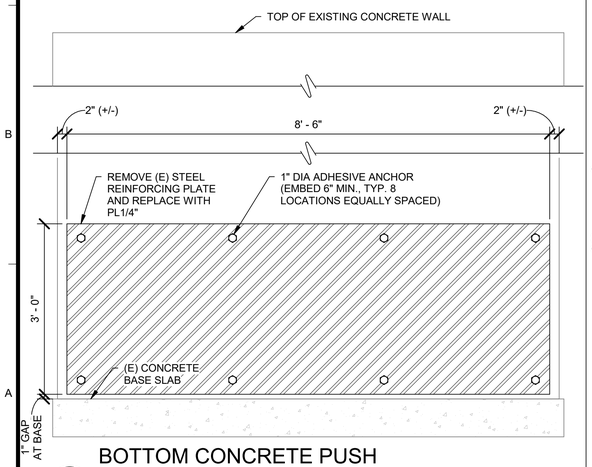


7 GRADE BEAM SECTION
S-501 SCALE: 1 1/2" = 1'-0"

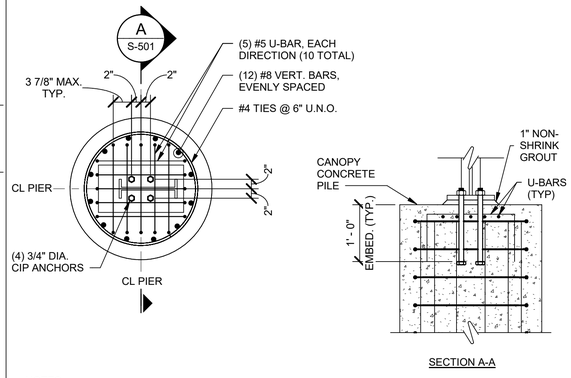


NOTES:
1. CONTRACTOR TO TAKE MEASURES TO AVOID DAMAGING EXISTING VERTICAL AND HORIZONTAL WALL REINFORCING WHEN DRILLING HOLES FOR NEW ADHESIVE DOWELS.

8 TOP CONCRETE PUSH WALL REPAIR DETAIL
S-501 SCALE: 1 1/2" = 1'-0"

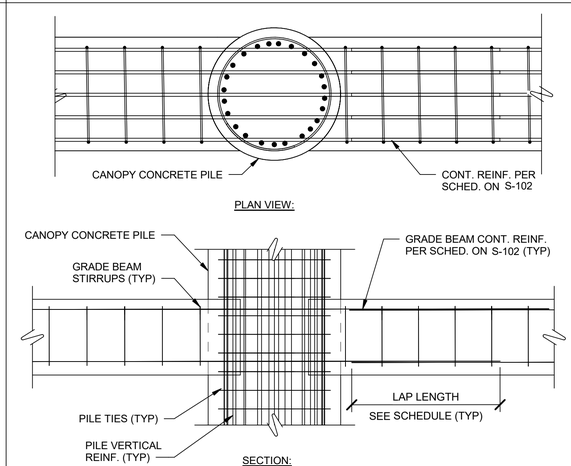


9 BOTTOM CONCRETE PUSH WALL REPAIR DETAIL
S-501 SCALE: 3/4" = 1'-0"

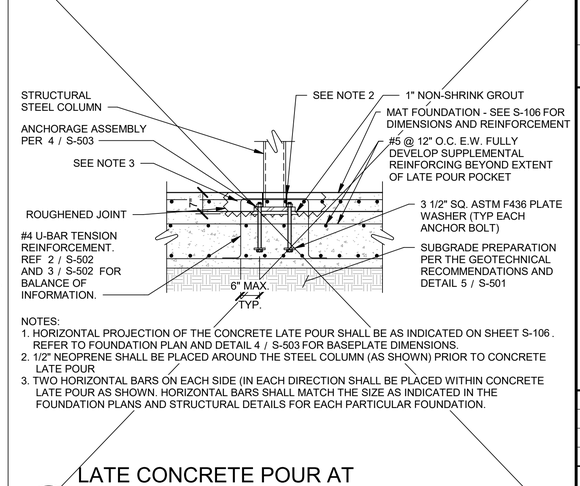


NOTES:
1. LENGTH OF SHEAR/HAIRPIN U-BAR REINFORCEMENT IS SUBJECT TO CHANGE PER ANCHOR AND BASEPLATE LAYOUT PER CANOPY MANUFACTURER
2. ASSUMED ANCHOR BOLT PATTERN IS PROVIDED AS A BASIS OF DESIGN. ANCHOR SIZE, GRADE, EMBEDMENT AND SPACING IS PRELIMINARY AND SUBJECT TO CHANGE PENDING REVIEW OF SIGNED AND STAMPED CANOPY DRAWINGS AND CALCULATIONS.

10 CANOPY ANCHORAGE REINFORCEMENT
S-501 SCALE: 3/4" = 1'-0"



11 GRADE BEAM & COLUMN PILE REINFORCEMENT
S-501 SCALE: 1/2" = 1'-0"



NOTES:
1. HORIZONTAL PROJECTION OF THE CONCRETE LATE POUR SHALL BE AS INDICATED ON SHEET S-106 . REFER TO FOUNDATION PLAN AND DETAIL 4 / S-503 FOR BASEPLATE DIMENSIONS.
2. 1/2" NEOPRENE SHALL BE PLACED AROUND THE STEEL COLUMN (AS SHOWN) PRIOR TO CONCRETE LATE POUR
3. TWO HORIZONTAL BARS ON EACH SIDE (IN EACH DIRECTION SHALL BE PLACED WITHIN CONCRETE LATE POUR AS SHOWN. HORIZONTAL BARS SHALL MATCH THE SIZE AS INDICATED IN THE FOUNDATION PLANS AND STRUCTURAL DETAILS FOR EACH PARTICULAR FOUNDATION.

12 LATE CONCRETE POUR AT STEEL COLUMN
S-501 SCALE: 1/2" = 1'-0"

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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

MARK	DATE	DESCRIPTION	BY
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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
STANDARD DETAILS

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

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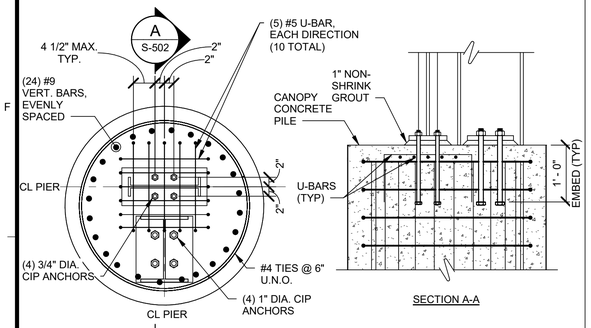
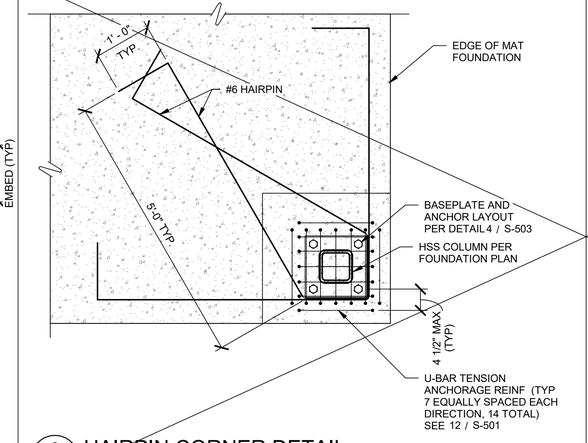
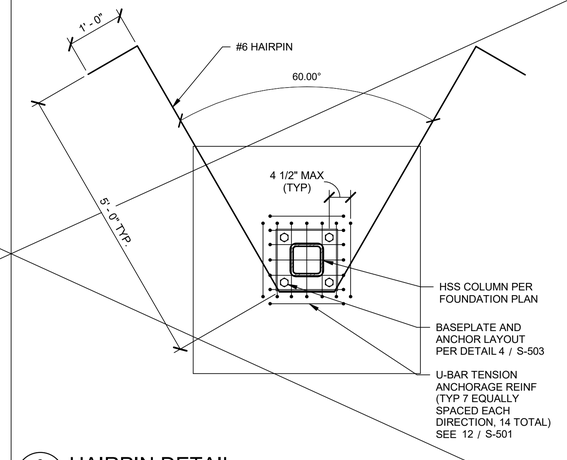


NOTES:
1. LENGTH OF SHEAR/HAIRPIN U-BAR REINFORCEMENT IS SUBJECT TO CHANGE PER ANCHOR AND BASEPLATE LAYOUT PER CANOPY MANUFACTURER
2. ASSUMED ANCHOR BOLT PATTERN IS PROVIDED AS A BASIS OF DESIGN. ANCHOR SIZE, GRADE, EMBEDMENT AND SPACING IS PRELIMINARY AND SUBJECT TO CHANGE PENDING REVIEW OF SIGNED AND STAMPED CANOPY DRAWINGS AND CALCULATIONS.

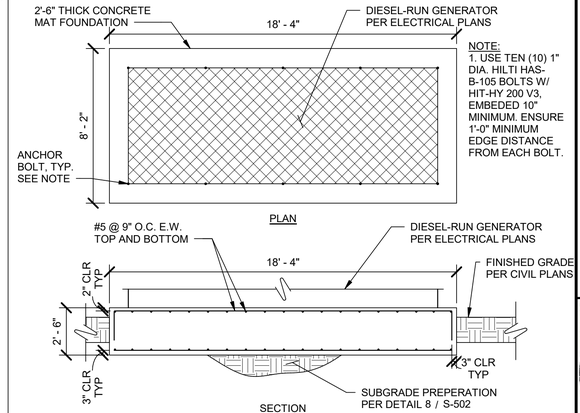
1 S-502 COMBINED CANOPY COLUMN ANCHORAGE REINFORCEMENT
SCALE: 3/4" = 1'-0"



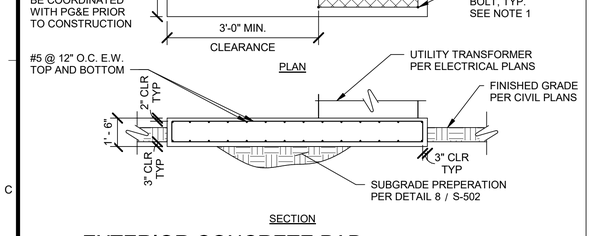
2 S-502 HAIRPIN CORNER DETAIL
SCALE: NTS



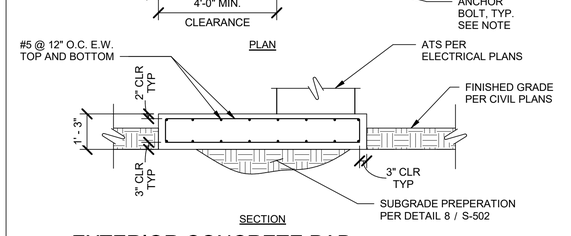
3 S-502 HAIRPIN DETAIL
SCALE: NTS



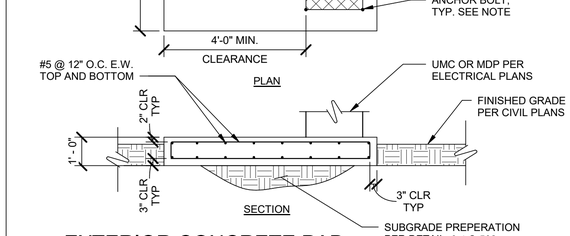
4 S-502 EXTERIOR CONCRETE PAD FOR GENERATOR
SCALE: 1/4" = 1'-0"



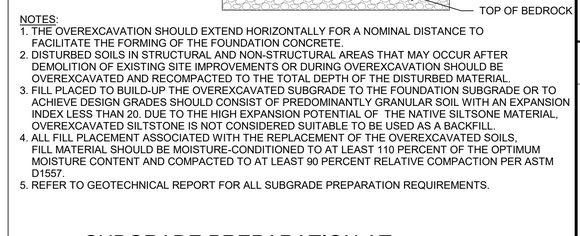
5 S-502 EXTERIOR CONCRETE PAD FOR TRANSFORMER
SCALE: 1/4" = 1'-0"



6 S-502 EXTERIOR CONCRETE PAD FOR ATS EQUIPMENT
SCALE: 3/8" = 1'-0"



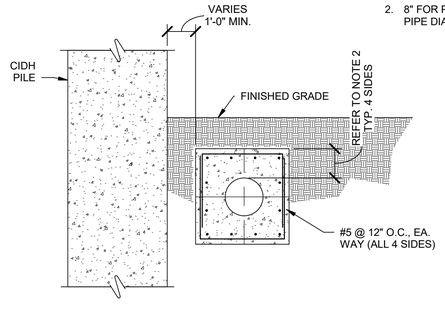
7 S-502 EXTERIOR CONCRETE PAD FOR UMC & MDP
SCALE: 3/8" = 1'-0"

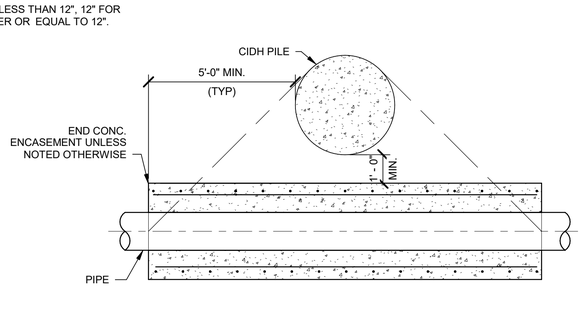


NOTES:
1. THE OVEREXCAVATION SHOULD EXTEND HORIZONTALLY FOR A NOMINAL DISTANCE TO FACILITATE THE FORMING OF THE FOUNDATION CONCRETE.
2. DISTURBED SOILS IN STRUCTURAL AND NON-STRUCTURAL AREAS THAT MAY OCCUR AFTER DEMOLITION OF EXISTING SITE IMPROVEMENTS OR DURING OVEREXCAVATION SHOULD BE OVEREXCAVATED AND RECOMPACTED TO THE TOTAL DEPTH OF THE DISTURBED MATERIAL.
3. FILL PLACED TO BUILD-UP THE OVEREXCAVATED SUBGRADE TO THE FOUNDATION SUBGRADE OR TO ACHIEVE DESIGN GRADES SHOULD CONSIST OF PREDOMINANTLY GRANULAR SOIL WITH AN EXPANSION INDEX LESS THAN 20. DUE TO THE HIGH EXPANSION POTENTIAL OF THE NATIVE SILTSONE MATERIAL, OVEREXCAVATED SILTSTONE IS NOT CONSIDERED SUITABLE TO BE USED AS A BACKFILL.
4. ALL FILL PLACEMENT ASSOCIATED WITH THE REPLACEMENT OF THE OVEREXCAVATED SOILS, FILL MATERIAL SHOULD BE MOISTURE-CONDITIONED TO AT LEAST 110 PERCENT OF THE OPTIMUM MOISTURE CONTENT AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION PER ASTM D1557.
5. REFER TO GEOTECHNICAL REPORT FOR ALL SUBGRADE PREPARATION REQUIREMENTS.

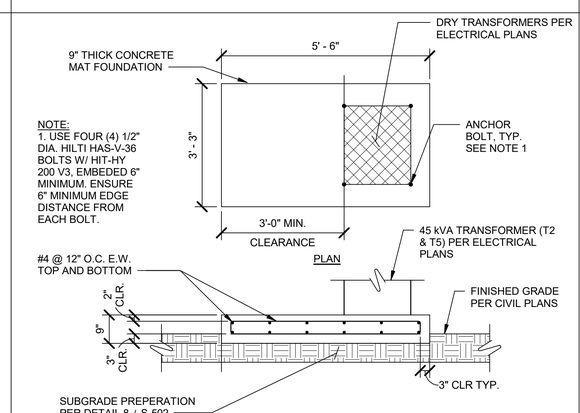
8 S-502 SUBGRADE PREPARATION AT EQUIPMENT PADS
SCALE: 1" = 1'-0"

NOTE:
1. THIS DETAIL APPLICABLE FOR PIPES 42" OR LESS IN DIAMETER.
2. 8" FOR PIPE DIAM. LESS THAN 12", 12" FOR PIPE DIAM. GREATER OR EQUAL TO 12".





9 S-502 CONCRETE PIPE ENCASEMENT
SCALE: NTS



10 S-502 EXTERIOR CONCRETE PAD FOR TRANSFORMERS (T2 & T5)
SCALE: 1/2" = 1'-0"

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SANTA CRUZ COUNTY: DPW
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S-502

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Master Permit: APP-251009
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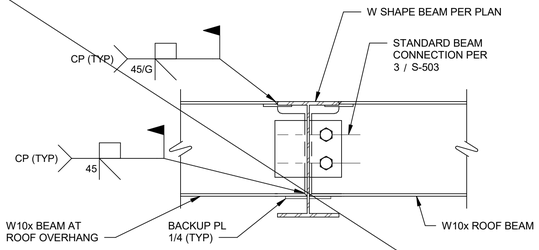
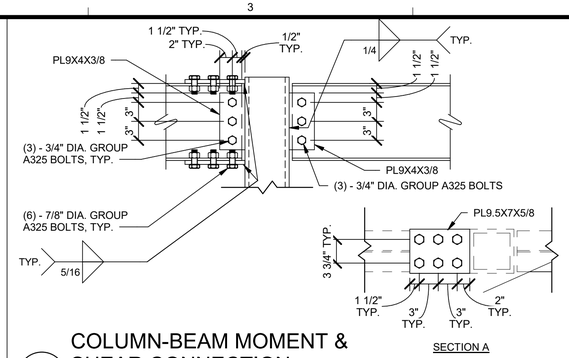


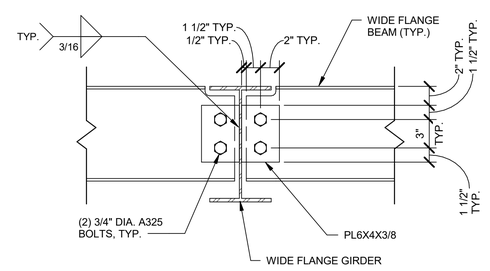
1 S-503 INCIDENTAL BEAM MOMENT CONNECTION

SCALE: 1 1/2" = 1'-0"



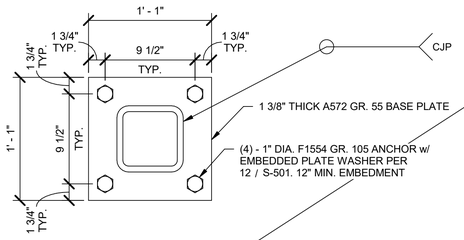
2 S-503 COLUMN-BEAM MOMENT & SHEAR CONNECTION

SCALE: 1" = 1'-0"



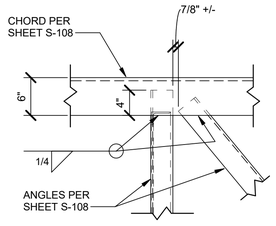
3 S-503 GIRDER-BEAM SHEAR TAB CONNECTION

SCALE: 1 1/2" = 1'-0"



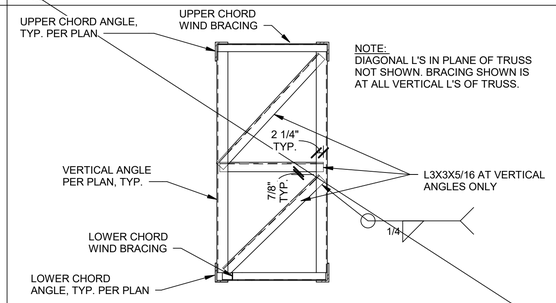
4 S-503 SCALE HOUSE COLUMN BASE PLATE AND ANCHORAGE

SCALE: 1 1/2" = 1'-0"



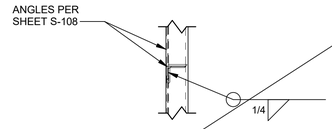
5 S-503 ENTRANCE SIGN VERTICAL BRACE TO CHORD

SCALE: 1" = 1'-0"



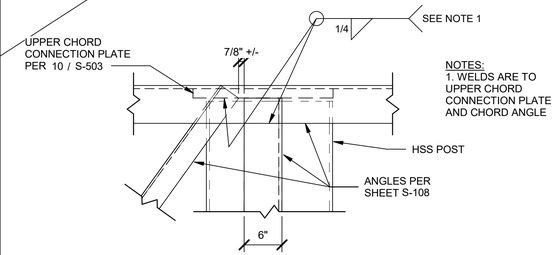
6 S-503 ENTRANCE SIGN FRAME SECTION VIEW

SCALE: 1/2" = 1'-0"



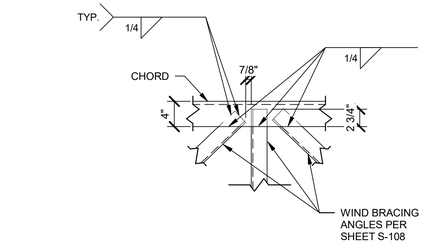
7 S-503 ENTRANCE SIGN CROSS TIE TO VERTICAL L

SCALE: 1" = 1'-0"



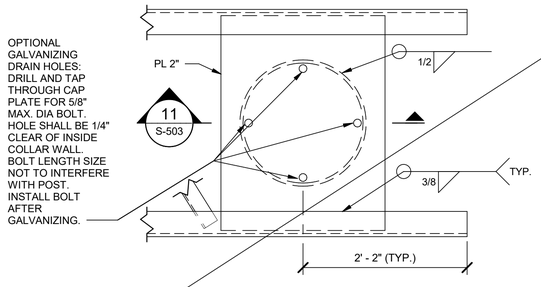
8 S-503 ENTRANCE SIGN VERTICAL BRACE TO CHORD AT POST

SCALE: 1" = 1'-0"



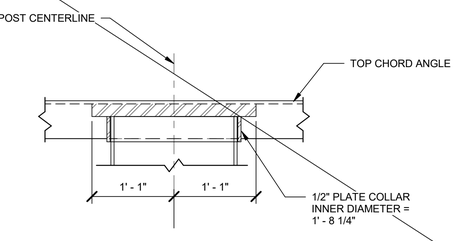
9 S-503 ENTRANCE SIGN WIND BRACING TO CHORD

SCALE: 1" = 1'-0"



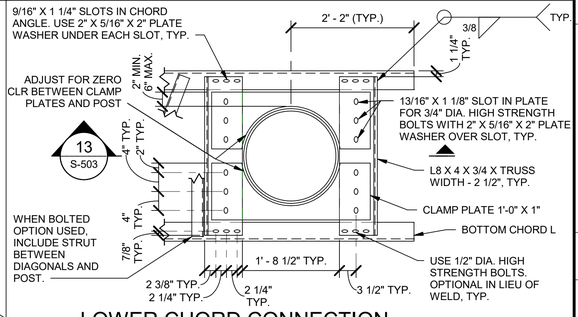
10 S-503 UPPER CHORD CONNECTION TO POST

SCALE: 1" = 1'-0"



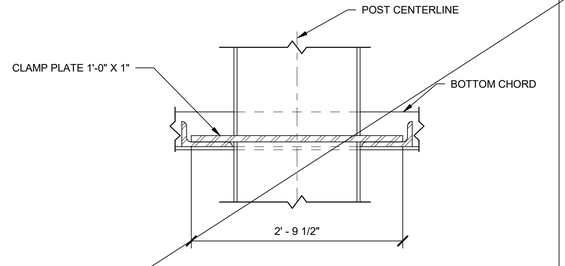
11 S-503 UPPER CHORD CONNECTION TO POST SECTION

SCALE: 1" = 1'-0"



12 S-503 LOWER CHORD CONNECTION TO POST

SCALE: 3/4" = 1'-0"



13 S-503 LOWER CHORD CONNECTION TO POST SECTION

SCALE: 1" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER
BRETT M. BOEHNKE
No. 91335
Exp. 6/30/
CIVIL
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MARK	DATE	DESCRIPTION	BY
	4/12/24	60% DESIGN	BMB
	6/14/24	90% DESIGN	BMB
	8/02/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB
	1/14/25	EXCLUDED FROM PERMIT SCOPE	BMB

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

STANDARD DETAILS

PROJ:	200-42064-22005
DESN:	BMB
DRWN:	A.A.
CHKD:	MSO

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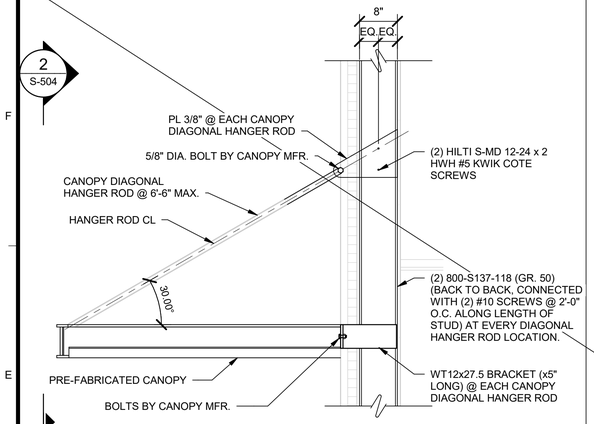
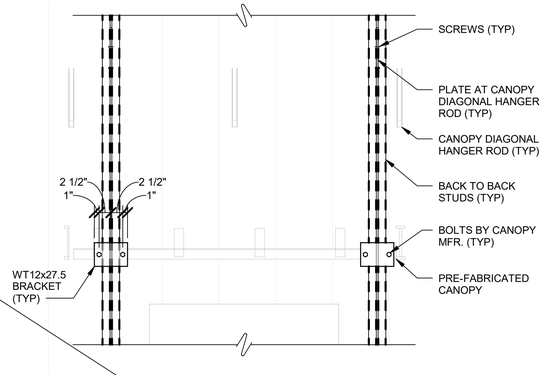
Bar measures 1 inch, otherwise drawing is not to scale



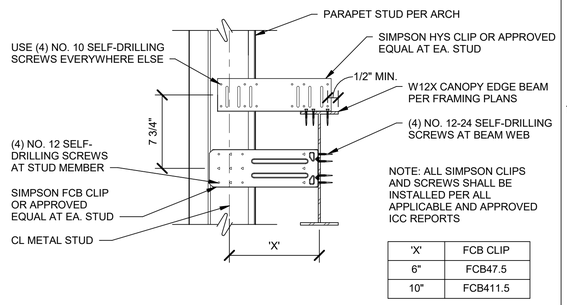
1 S-504 CANOPY SUPPORT SECTION

SCALE: 3/4" = 1'-0"



2 S-504 CANOPY SUPPORT ELEVATION

SCALE: 3/4" = 1'-0"



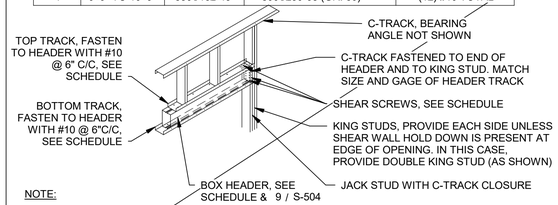
NOTE: ALL SIMPSON CLIPS AND SCREWS SHALL BE INSTALLED PER ALL APPLICABLE AND APPROVED ICC REPORTS

'X'	FCB CLIP
6"	FCB47.5
10"	FCB411.5

3 S-504 FASCIA CONNECTION

SCALE: 1 1/2" = 1'-0"

HEADER SCHEDULE				
ITEM	CLEAR SPAN	HEADER	TOP AND BOTTOM TRACK	SHEAR FASTENERS
1	0'-0" TO 10'-0"	550S162-43	800S250-68 (GR. 50)	(12) #10 TOTAL

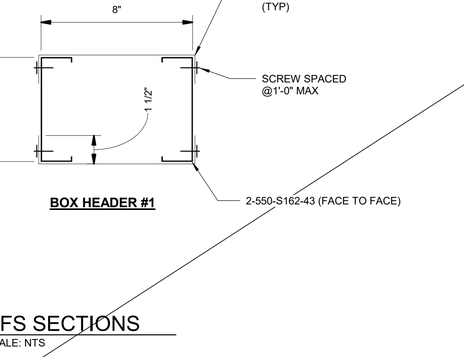


NOTE:

1. LONG SPAN HEADER AT ENTRANCES LOCATED IN CONNECTOR BETWEEN NEW ADDITION AND EXISTING BUILDING MAY UTILIZE ITEM 1 HEADER ABOVE.

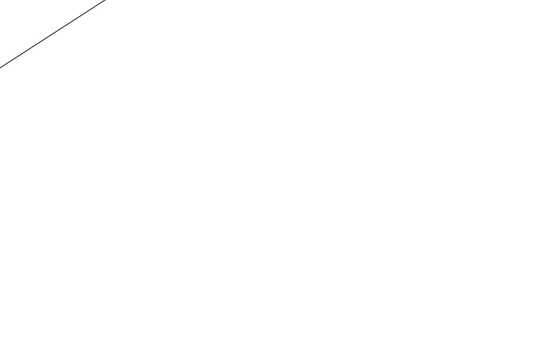
4 S-504 LIGHT GAUGE JAMB AND HEADER DETAIL

SCALE: NTS



5 S-504 TYP. WALL BASE AT FOUNDATION / SLAB

SCALE: NTS



6 S-504 TYP. WINDOW / DOOR JAMB AT FOUNDATION / BASE

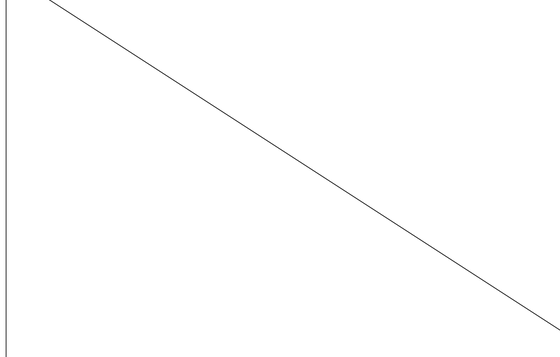
SCALE: NTS

NOTE:

1. BLOCKING THAT IS INTERRUPTED BY STEEL COLUMNS SHALL HAVE CLIPS FASTENED TO COLUMNS WITH #12 TEKS SCREWS.
2. LARGER BLOCKING AND SHEET METAL TO BE USED AS NEEDED AT WALL MOUTED OBJECTS.

7 S-504 BLOCKING DETAIL

SCALE: NTS



8 S-504 CORNER AND WALL INTERSECTION FRAMING

SCALE: NTS

BOX HEADER #1

9 S-504 CFS SECTIONS

SCALE: NTS

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Bar measures 1 inch, otherwise drawing is not to scale

ELECTRICAL SYMBOLS - PLANS

SYMBOL	SYMBOL DESCRIPTION
	DUPLEX RECEPTACLE (WP, GFCI AS INDICATED)
	QUAD RECEPTACLE (WP, GFCI AS INDICATED)
J	JUNCTION BOX
$3	SWITCH (3 = 3-WAY SWITCH, 4 = 4-WAY SWITCH, ETC.)
a	LIGHTING LUMINAIRE CONTROLLED BY SWITCH a
a	LIGHTING LUMINAIRE CONTROLLED BY SWITCH a W/ EMERGENCY BATTERY PACK
	EMERGENCY LIGHT
	WALL MOUNTED LUMINAIRE
	EXIT LIGHT
	POLE MOUNTED LUMINAIRE
A LUMINAIRE TYPE 150 LAMP WATTAGE	LUMINAIRE REFERENCE SEE LUMINAIRE SCHEDULE FOR DETAILS
P001	CONDUIT REFERENCE A = ANALOG SIGNAL C = CONTROL D = DATA LINK F = FIBER OPTIC P = POWER T = TELEPHONE
	CONDUIT OR DUCT BANK IN SLAB OR UNDERGROUND
	EXPOSED CONDUIT
GND	GROUNDING CONDUCTOR 30" BELOW GRADE
A-3	HOMERUN TO PANEL "A", CIRCUIT 3
	CONDUIT STUBBED AND CAPPED
	CONDUIT BENDS TOWARD OBSERVER
	CONDUIT BENDS AWAY FROM OBSERVER
J	FLEXIBLE CONDUIT CONNECTION (FROM COUPLING/STUB-UP OR JBOX)
	PANELBOARD
	DISCONNECT SWITCH
	COMBINATION STARTER & DISCONNECT SWITCH
	HANDHOLE OR PULL BOX
DS	DUCT SMOKE DETECTOR
	SMOKE DETECTOR
F	FIRE ALARM MANUAL PULL STATION
F	FIRE ALARM STROBE
	TELEPHONE OUTLET
	DATA OUTLET
	VOICE/DATA OUTLET
	CONDUIT SEAL
— F — F — F —	CONDUIT & WIRE FOR FIRE ALARM SYSTEM
— R — R — R —	CONDUIT & WIRE FOR ELECTRONIC KEY PAD TO PLC
KP	ELECTRONIC KEYPAD
FACP	FIRE ALARM CONTROL PANEL
	LOCAL CONTROL SWITCH
T	THERMOSTAT
IS	INTRUSION SWITCH
40	MOTOR (NUMBER INDICATES HORSEPOWER)
M	WALL MOUNTED OCCUPANCY SENSOR
M	CEILING MOUNTED OCCUPANCY SENSOR
D	WALL MOUNTED DIMMER
	GROUND WELL
	LIGHTNING AND SURGE ARRESTOR

ELECTRICAL SYMBOLS - SCHEMATIC DIAGRAMS

NORMALLY OPEN	NORMALLY CLOSED	SYMBOL DESCRIPTION
		CONTACT
		TIMED CONTACT, CONTACT ACTION REVERSES ON ENERGIZATION (ON DELAY)
		TIMED CONTACT, CONTACT ACTION REVERSES ON DE-ENERGIZATION (OFF DELAY)
		LEVEL SWITCH
		PRESSURE SWITCH
		TEMPERATURE SWITCH
		LIMIT SWITCH
		FLOW SWITCH
		PUSH BUTTON SINGLE CIRCUIT MOMENTARY CONTACT
HAND OFF AUTO XOO OXO OOX		SELECTOR SWITCH HOA: HAND-OFF-AUTO (HOA SHOWN IN HAND MODE) HO: HAND-OFF HOR: HAND-OFF-REMOTE R-O: REMOTE-OFF SEE SYMBOLE NOTE 2.
O/L		MOTOR OVERLOAD DEVICE CONTACTS
R		PILOT LIGHT A= AMBER, G= GREEN, R= RED, W= WHITE
CR1	AR1	CONTROL RELAY
TD1		TIME DELAY RELAY
M		MOTOR OR STARTER COIL
		SOLENOID OPERATED VALVE
ETM		ELAPSED TIME METER
		FUSE
		CONTROL POWER TRANSFORMER
		GROUND
		MOTOR SPACE HEATER
		THERMISTOR

SYMBOL NOTES

1. THIS DRAWING CONTAINS INDUSTRY STANDARD SYMBOLS. NOT ALL SYMBOLS SHOWN ARE USED ON THIS PROJECT.
2. FOR HOA SWITCHES, "XOO" INDICATES THAT THE TOP CONTACT IS CLOSED WHEN THE SWITCH IS SET TO HAND MODE, AND ALL OTHER SWITCH CONTACTS ARE OPEN; "OXO" INDICATES THAT THE MIDDLE CONTACT IS CLOSED WHEN THE SWITCH IS SET TO OFF MODE, AND ALL OTHER SWITCH CONTACTS ARE OPEN; "OOX" INDICATES THAT THE BOTTOM CONTACT IS CLOSED WHEN SWITCH IS IN AUTOMATIC MODE, ALL OTHER SWITCH CONTACTS ARE OPEN.

ANSI/IEEE C37.2 STANDARD DEVICE NUMBERS

THE FOLLOWING IS A LIST OF TYPICAL DEVICE NUMBERS. SEE ANSI/IEEE C37.2 FOR A COMPLETE LIST OF DEVICES.

11	MULTI-FUNCTION DEVICE
27	UNDERVOLTAGE RELAY
32	DIRECTIONAL POWER RELAY OR REVERSE POWER RELAY
37	UNDERCURRENT OR UNDERPOWER RELAY
42	RUNNING CIRCUIT BREAKER
47	PHASE SEQUENCE OR PHASE-BALANCE VOLTAGE RELAY
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC INVERSE TIME OVERCURRENT RELAY
52	AC CIRCUIT BREAKER
55	POWER FACTOR RELAY
57	SHORT-CIRCUITING OR GROUNDING DEVICE
59	OVERVOLTAGE RELAY
67	AC DIRECTIONAL OVERCURRENT RELAY
86	LOCKOUT RELAY
87	DIFFERENTIAL PROTECTIVE RELAY

ELECTRICAL SYMBOLS - SINGLE LINE DIAGRAM

DEVICE	SYMBOL DESCRIPTION
	DRY TYPE TRANSFORMER
	IRON CORE TRANSFORMER
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER
	FUSE
40	MOTOR, 40 HORSEPOWER
	GROUNDING ELECTRODE
600AF 400AT	LOW VOLTAGE CIRCUIT BREAKER MCCB UNLESS OTHERWISE NOTED
52	MEDIUM VOLTAGE CIRCUIT BREAKER, DRAW-OUT TYPE SEE ANSI/IEEE C37.2 STANDARD DEVICE NUMBERS LIST THIS SHEET
	FUSED DISCONNECT SWITCH WITH CURRENT LIMITING FUSES
VFD	VARIABLE FREQUENCY DRIVE
SSS	SOLID STATE STARTER (SOFT STARTER)
SPD	SURGE PROTECTION DEVICE
PQM	POWER QUALITY MONITOR
SST	SOLID STATE TRIP
MPR	MOTOR PROTECTION RELAY
	NON-FUSED DISCONNECT SWITCH, 30A/3P UON
	FUSED DISCONNECT SWITCH, 30A/3P UON
	VALVE MOTOR AND ACTUATOR
	MOTOR OVERLOAD HEATER
FVNR1	MAGNETIC MOTOR STARTER FVNR1 = FULL VOLTAGE NON-REVERSING, NEMA SIZE 1 RV2S2W = REDUCED VOLTAGE 2-SPEED, 2-WINDING
47	PROTECTION RELAY SEE ANSI/IEEE C37.2 STANDARD DEVICE NUMBERS LIST
M	METER, ELECTRIC UTILITY GRADE UON
	ELECTRIC VEHICLE CHARGER

ELECTRICAL ABBREVIATIONS

(D)	DEMOLISH
(E)	EXISTING
(F)	FUTURE
(N)	NEW
(R)	RELOCATE
A	AMPERES, ANALOG SIGNAL
AC	ALTERNATING CURRENT
AF	AMPERES FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERES INTERRUPTING CAPACITY
AT	AMPERES TRIP
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BFG	BELOW FINISHED GRADE
C	CONDUIT
CB	CIRCUIT BREAKER
CCT	CORRELATED COLOR TEMPERATURE
CO	CONDUIT ONLY
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
DSB	DISTRIBUTION SWITCHBOARD
EF	EXHAUST FAN
ELEV	ELEVATION
EEWS	EMERGENCY EYEWASH STATION
ETM	ELAPSED TIME METER
EWH	ELECTRIC WATER HEATER
FCB	FEEDER CIRCUIT BREAKER
FIT	FLOW INDICATING TRANSMITTER
FLEX	FLEXIBLE
FLUOR	FLUORESCENT
FPP	FIBER OPTIC PATCH PANEL
FPR	FEEDER PROTECTION RELAY
FVNR	FULL VOLTAGE NON-REVERSING STARTER
G, GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
H	HALOGEN
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HMI	HUMAN MACHINE INTERFACE
HOA	HAND / OFF / AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HS	HAND SWITCH
INCAND	INCANDESCENT
JB, JBOX	JUNCTION BOX
KAIC	KILOAMPERES INTERRUPTING CAPACITY
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT-HOUR
LED	LIGHT EMITTING DIODE
LCP	LOCAL CONTROL PANEL
LIT	LEVEL INDICATING TRANSMITTER
LOS	LOCKOUT STOP SWITCH
LSH	LEVEL SWITCH HIGH
LSLL	LEVEL SWITCH LOW-LOW
LV	LOW VOLTAGE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCCB	MOLDED CASE CIRCUIT BREAKER
MCP	MOTOR CIRCUIT PROTECTOR
MH	METAL HALIDE, MANHOLE
MIN	MINIMUM
MLO	MAIN LUG ONLY
MPC	MINI POWER CENTER
MPR	MOTOR PROTECTION RELAY
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
P	POLE
PB	PUSHBUTTON, PULLBOX
PCS	PVC COATED STEEL
PCV	PRESSURE CONTROL VALVE
PDIT	PRESSURE DIFFERENTIAL INDICATING TRANSMITTER
PE	PHOTOELECTRIC
PFR	PHASE FAILURE RELAY
PH	PHASE
PIT	PRESSURE INDICATING TRANSMITTER
PLC	PROGRAMMABLE LOGIC CONTROLLER
PQM	POWER QUALITY MONITOR
PSH	PRESSURE SWITCH HIGH
PT	POTENTIAL TRANSFORMER
PTC	POSITIVE TEMPERATURE COEFFICIENT RESISTOR
REC, RECEPT	RECEPTACLE
RIO	REMOTE I/O
RGS	RIGID GALVANIZED STEEL
SCCR	SHORT CIRCUIT CURRENT RATING
SCE	SOUTHERN CALIFORNIA EDISON
SPD	SURGE PROTECTION DEVICE
SSS	SOLID STATE STARTER (SOFT STARTER)
SWBD	SWITCHBOARD
TEMP	TEMPERATURE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
VA	VOLT-AMPERE
VFD	VARIABLE FREQUENCY DRIVE
W	WATT, WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER

GENERAL ELECTRICAL NOTES

1. REFER TO ELECTRICAL SPECIFICATIONS FOR FURTHER DETAIL AS TO SCOPE, MATERIALS, AND EXECUTION OF ELECTRICAL WORK.
2. ALL MEDIUM VOLTAGE WIRING DESIGN IS BASED ON 90° CELSIUS CONDITIONS FOR COPPER CONDUCTORS. ALL LOW VOLTAGE WIRING DESIGN IS BASED ON 75° CELSIUS CONDITIONS FOR COPPER CONDUCTORS OF TYPE THHN/THWN UNLESS OTHERWISE STATED.
3. ELECTRICAL CONTRACTOR TO SIZE ALL WIRING NOT EXPLICITLY SHOWN ON DRAWINGS ACCORDING TO THE REQUIREMENTS OF NATIONAL ELECTRICAL CODE (NEC) FOR THE SPECIFIC APPLICATION AND CONDITIONS.
4. ALL CONDUCTORS SHALL BE COPPER (MINIMUM SIZE #12 AWG UNLESS SPECIFICALLY NOTED OTHERWISE).
5. THE ELECTRICAL CONTRACTOR SHALL CONFORM WITH ALL LOCAL CODES AND ORDINANCES, THE NATIONAL ELECTRICAL CODE, AND ANY ADDITIONAL JURISDICTIONS RELATING TO THE WORK.
6. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, WIRE, SERVICES, SWITCHBOARDS, AND VARIABLE FREQUENCY DRIVE'S REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM.
7. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS AND/OR SPECIFICATIONS, OR WITH CODE REQUIREMENTS, THE NOTE, SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR HIGHER STANDARD SHALL PREVAIL.
8. ALL ELECTRICAL EQUIPMENT EXPOSED TO THE CLIMATE SHALL BE WEATHERPROOF.
9. ALL ELECTRICAL EQUIPMENT IN THIS PROJECT SHALL BE U.L. LISTED.
10. ALL UNDERGROUND CONDUIT SHALL BE INSTALLED AT 36" BELOW FINISHED GRADE MINIMUM UNLESS OTHERWISE NOTED.
11. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND FACILITIES AND PROTECTING THESE FACILITIES FROM DAMAGE.
12. THE ELECTRICAL CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY FIELD CONDITIONS AND PER N.E.C.
13. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UNDERGROUND FACILITIES.
14. CONTRACTOR SHALL PROVIDE ALL NEEDED CHANNELS, ANGLES, AND ANY OTHER MATERIALS REQUIRED TO SUPPORT LUMINAIRES, CONDUIT, AND ELECTRICAL EQUIPMENT IN THE LOCATIONS SHOWN ON THE DRAWINGS.
15. CONTRACTOR SHALL NOT CUT ANY STRUCTURAL MEMBERS OR USE ANY ATTACHMENTS THAT WOULD IMPAIR THEIR STRENGTH.
16. CONTRACTOR SHALL DESIGN SUPPORTS IN BETWEEN THE STRUCTURAL SUPPORT MEMBERS AND SUBMIT THE DESIGN AS A SHOP DRAWING SUBMITTAL.
17. INSTRUMENTATION IS SHOWN IN THE GENERAL VICINITY OF THE INTENDED LOCATION AND MAY NOT NECESSARILY MATCH LOCATIONS ON THE PLANS. VERIFY ACTUAL LOCATIONS OF INSTRUMENTS AND RUN ASSOCIATED CONDUITS AS REQUIRED.
18. ALL EXPOSED CONDUITS TO BE GALVANIZED RIGID STEEL CONDUIT FOR DRY LOCATIONS AND PVC COATED GALVANIZED RIGID STEEL CONDUIT IN WET LOCATION UNLESS OTHERWISE STATED ON THE PLANS.

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
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REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

ELECTRICAL LEGEND, SYMBOLS, & ABBREVIATIONS

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

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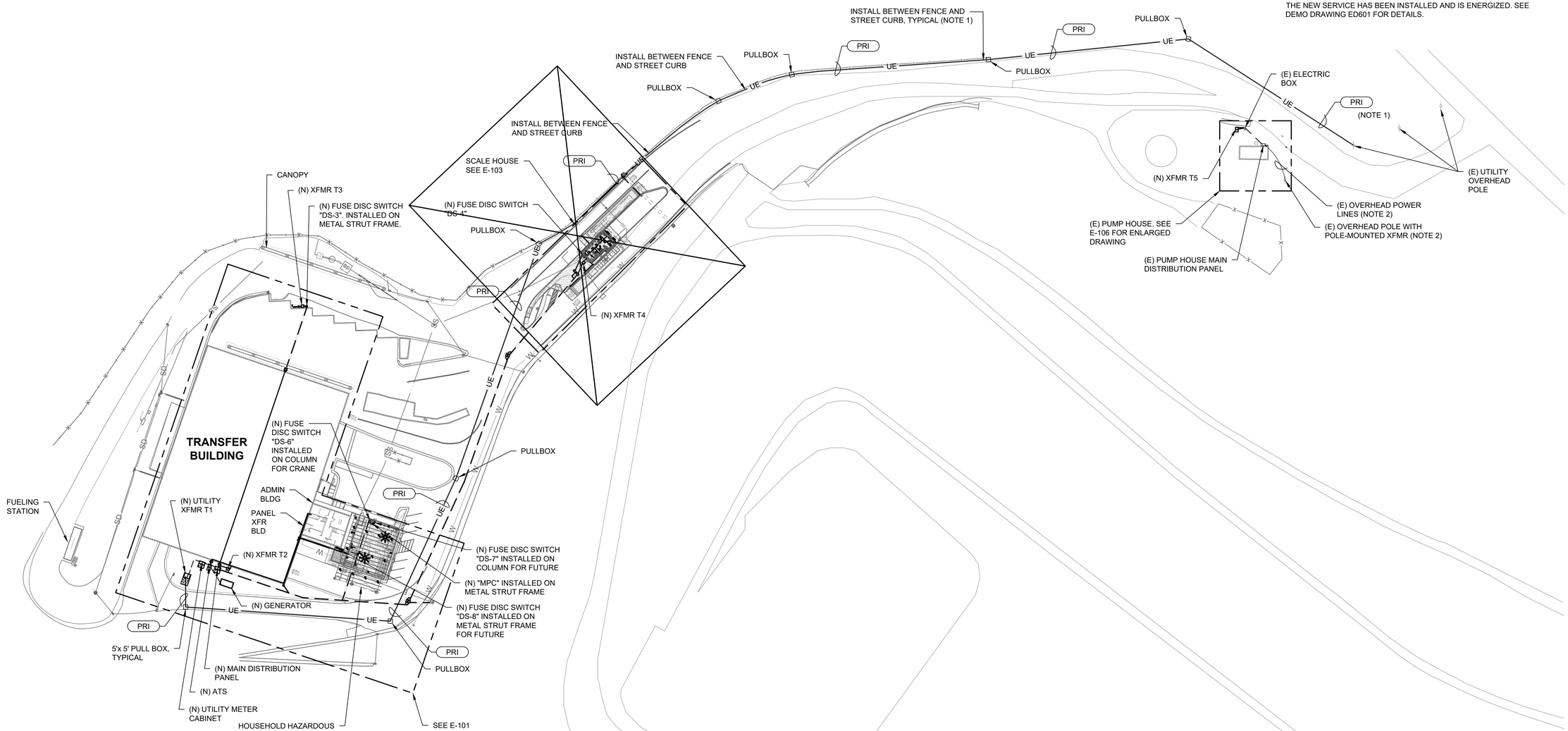
Bar Measures 1 inch, otherwise drawing not to scale

2/14/2025 12:36:44 PM - \\TT.LOCAL\ER\PROJECTS\IRVINE\420642004200-42064-22005\CAD\SHEETFILES\E-001 - ELECTRICAL LEGEND, SYMBOLS, & ABBREVIATIONS.DWG - PHAN, DUAN

NOTES:

1. THE CONTRACTOR TO INSTALL CONDUIT IN ACCORDANCE WITH PG&E GREEN BOOK. PG&E TO PROVIDE AND INSTALL PRIMARY CONDUCTOR PRI.
2. EXISTING ELECTRIC UTILITY SERVICE SHALL REMAIN ACTIVE UNTIL THE NEW SERVICE HAS BEEN INSTALLED AND IS ENERGIZED. SEE DEMO DRAWING ED601 FOR DETAILS.



ELECTRICAL OVERALL SITE PLAN

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

0 30' 60' 120'
SCALE: 1" = 60'

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	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

E-100

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Bar Measures 1 inch, otherwise drawing not to scale

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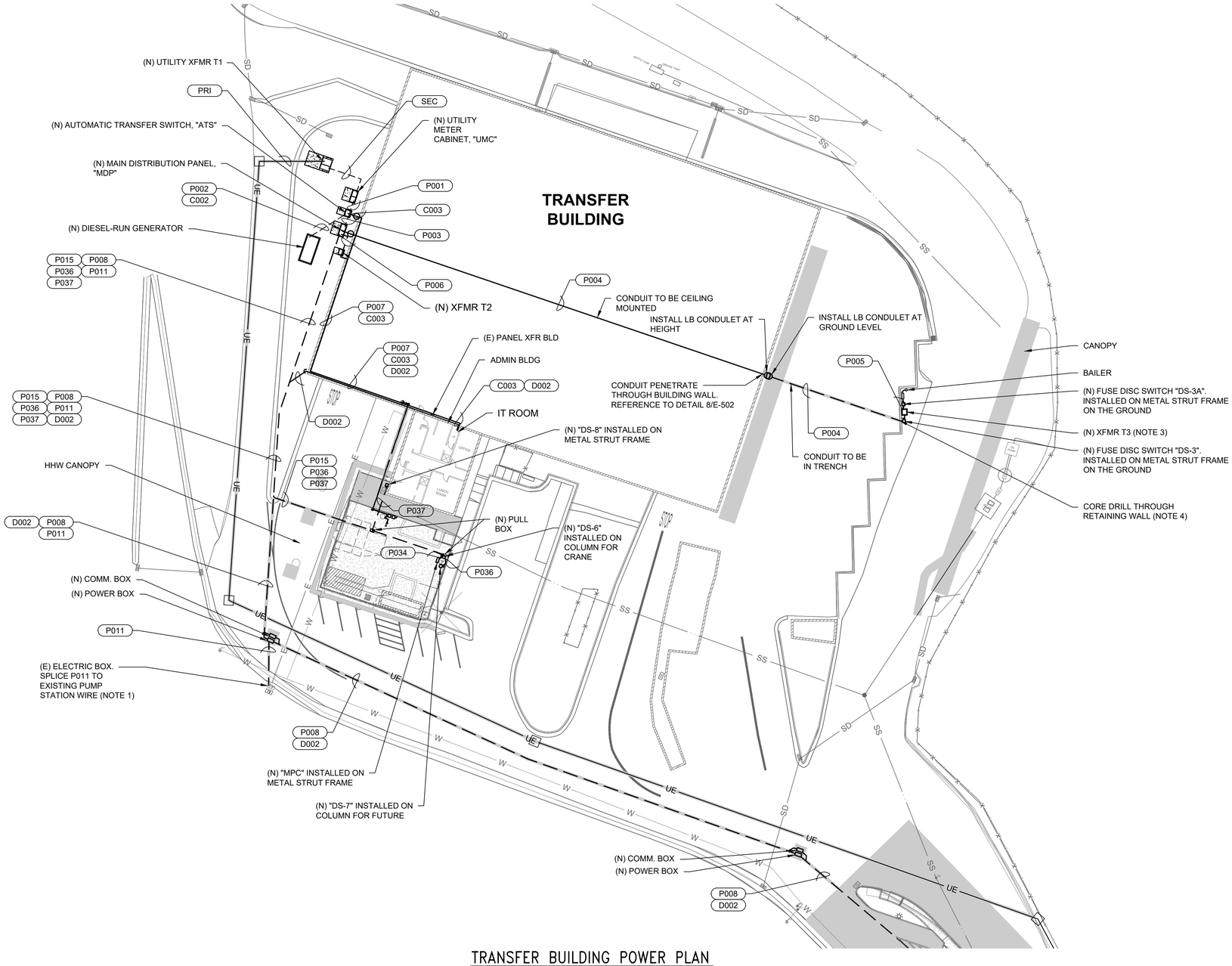

TRANSFER BUILDING POWER PLAN

NOTES:

1. COORDINATE WITH DRAWING E-601 FOR DETAILS.
2. INSTALL UNDERGROUND CONDUCTORS IN DUCT BANK, TYPICAL. SEE DETAIL 5/E-501 FOR DETAILS.
3. INSTALL TRANSFORMER ON CONCRETE PAD. COORDINATE WITH VENDOR FOR EXACT DIMENSION AND WEIGHT.
4. CONTRACTOR TO TAKE MEASURES (GROUND PENETRATING RADAR, ETC) TO LOCATE REINFORCING IN EXISTING RETAINING WALL PRIOR TO CORING. ENSURE EXISTING REINFORCING IS NOT DAMAGED DURING CORING.

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
1	01/29/24	30% DESIGN	WTM
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4	08/02/24	100% DESIGN	WTM
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TRANSFER BUILDING POWER PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-101

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

SCALE: 1" = 30'

Bar Measures 1 inch, otherwise drawing not to scale

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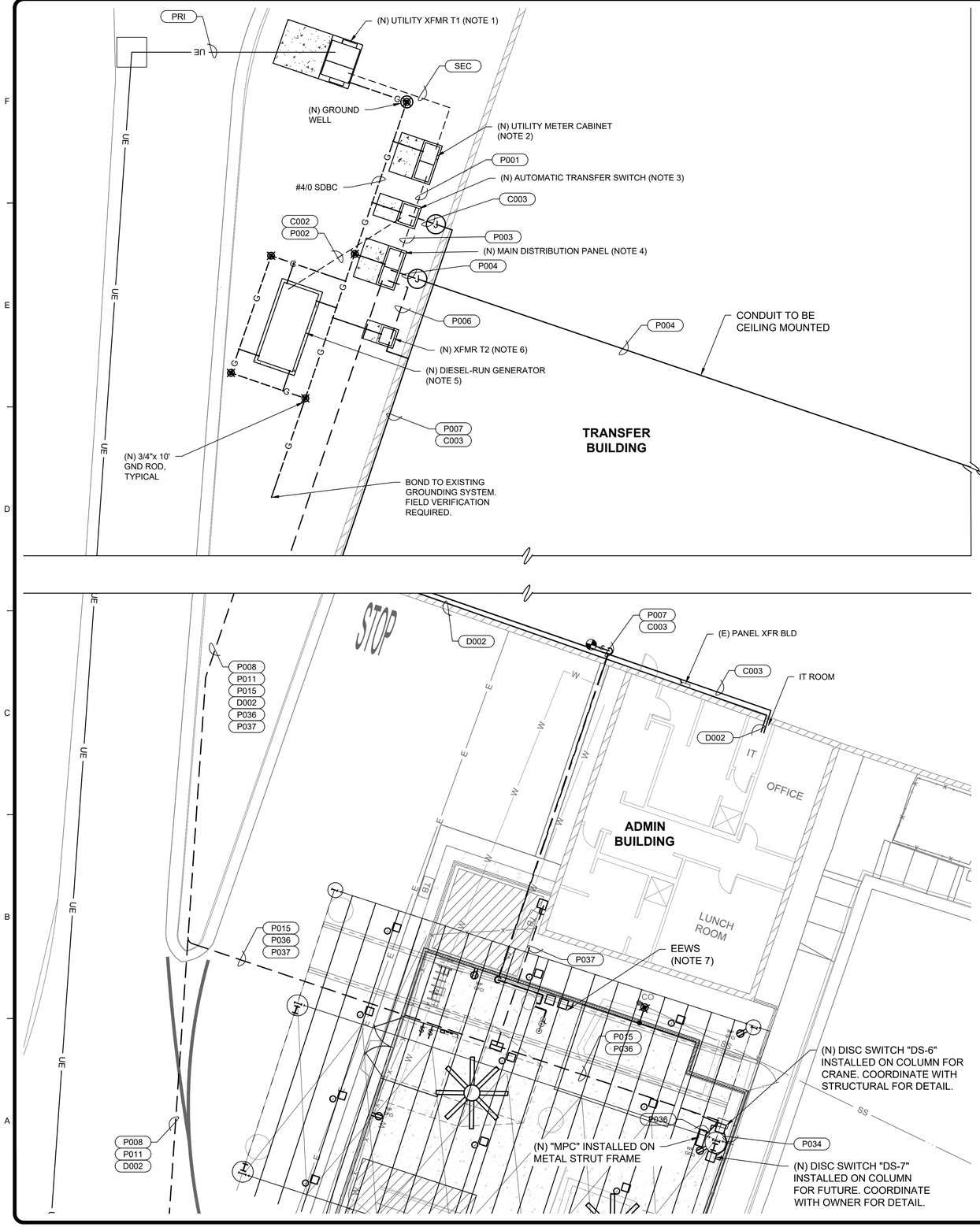

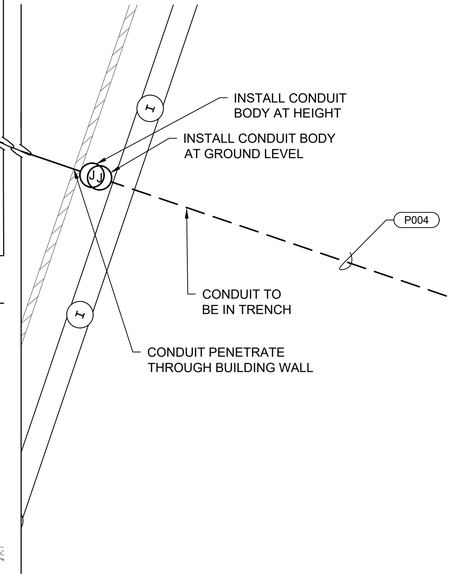

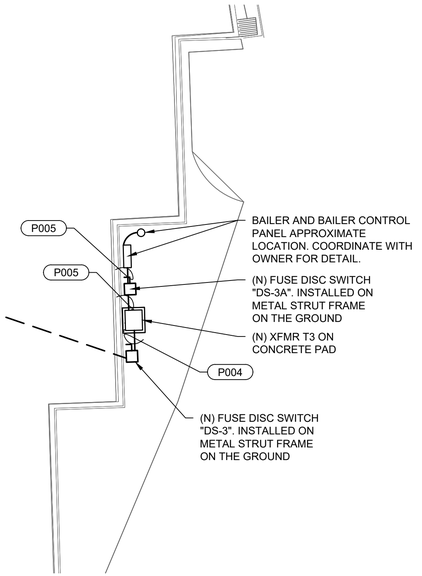

NOTES:

1. UTILITY TRANSFORMER CONCRETE PAD TO BE PROVIDED AND INSTALLED BY CONTRACTOR, TRANSFORMER TO BE PROVIDED AND INSTALLED BY PG&E. COORDINATE WITH PG&E FOR CONCRETE PAD DIMENSION AND REQUIREMENT. SEE S-502 FOR EQUIPMENT PAD DETAIL, TYPICAL.
2. PROVIDE EUSERC - COMPLIANT METERING CABINET PER UTILITY STANDARDS AS MANUFACTURED BY EATON, NO SUBSTITUTIONS. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL DETAILS.
3. AUTOMATIC TRANSFER SWITCH, ASCO 7000 SERIES OR EQUAL. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL DETAILS.
4. MAIN DISTRIBUTION PANEL, EATON NO SUBSTITUTION. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL DETAILS.
5. STANDBY DIESEL GENERATOR. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL DETAILS.
6. DRY TYPE TRANSFORMER. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL DETAILS.
7. SEE MECHANICAL DRAWINGS FOR DETAILS.

ENLARGED SERVICE AREA PLAN

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

SCALE: 1" = 10'

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY WHITE
No. E21554
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
1	01/29/24	30% DESIGN	WTM
2	04/12/24	60% DESIGN	WTM
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4	08/02/24	100% DESIGN	WTM
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
ENLARGED SERVICE AREA PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-102

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Bar Measures 1 inch, otherwise drawing not to scale

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NOTES:

1. INSTALL RECEPTACLES 10" O.C. ABOVE COUNTERTOP, TYPICAL.
2. RECEPTACLE FOR UNDER COUNTERTOP REFRIGERATOR. SEE A-DRAWINGS FOR DETAILS.

KEYNOTES:

1. PROVIDE TWO JUNCTION BOXES FOR ENTRANCE SIGN. ONE FOR POWER, ONE FOR CONTROL. PROVIDE NEMA 4X STAINLESS STEEL DISCONNECT SWITCH FOR SIGNAGE PER MANUFACTURER.
2. PROVIDE POWER SUPPLY FOR ELECTRIC SLIDING WINDOW. POWER SUPPLY VOLTAGE RATING PER SLIDING WINDOW MANUFACTURER REQUIREMENT.
3. INSTALL RECEPTACLE 8'-6" OC AFF FOR WALL-MOUNTED MONITOR, TYPICAL. SEE A-DRAWING FOR DETAILS.
4. INSTALL PER MANUFACTURER'S REQUIREMENTS.
5. PROVIDE J-BOX READY FOR TOILET FLUSH SENSOR.
6. METHANE SENSORS TENTATIVE LOCATIONS. COORDINATE WITH CIVIL DRAWINGS FOR METHANE DETECTION SYSTEM'S STROBE LIGHT/HORN.

COLUMN FOR ENTRANCE SIGN. SEE STRUCTURAL DRAWINGS.
J-BOX
P025
D001
INBOUND GATE 2
J-BOX
C022
P022
PANEL "SH"
SERVICE ENTRANCE DISCONNECT SWITCH
FIBER J-BOX
P022
P021
P018
J-BOX
EWH-1
SH:7.9
P030
TRANSACTION WINDOW INTERCOM
TRANSACTION WINDOW INTERCOM POWER SUPPLY
P027
MATKO DISPLAY
SH:21
SH:27
SH:22
8'-6"
18"
GFCI
WORK ROOM 101
NOTE 1
P021
C021
P025
D001
J-BOX
INBOUND GATE 1
HANDHOLE, TYPICAL, SEE DETAIL 7/E-501
D002
P010
SLIDING WINDOW ACTUATOR
D002
P009
SH:18
RESTROOM 103
SH:15
WAP
ON CEILING FOR WAP POWER
SH:20
PAY BOOTH 102
SH:35
GFCI WP
SH:1
P015
SH:17
SH:16
NOTE 2
CU-1
D002
P008
EF-1
SH:32
GFCI
SH:33
GFCI WP
OUTBOUND GATE 1
XFMR T4, NEMA 3R
CU-1
CU-1 DS
P033
P008
P023
C023
J-BOX
P016
SH:3,5
P024
P023
P035
SH:11
EWH-2
P017
FCU-1
J-BOX
P019
MATKO DISPLAY
P031
SH:29
SH:23
P028
J-BOX
P024
C024
OUTBOUND GATE 2
TRANSACTION WINDOW INTERCOM
TRANSACTION WINDOW INTERCOM POWER SUPPLY
(E) ELECTRIC LINES SHALL REMAIN ACTIVE AND BE PROTECTED DURING CONSTRUCTION AND BE ABANDONED IN PLACE AFTER THE NEW SERVICE HAS BEEN INSTALLED AND IS ENERGIZED
TVB
COLUMN FOR ENTRANCE SIGN. SEE STRUCTURAL DRAWINGS.
N
0 2.5' 5' 10'
SCALE: 1" = 5'

TETRA TECH
www.tetratech.com

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1	01/29/24	30% DESIGN	WTM
2	04/12/24	60% DESIGN	WTM
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	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

SCALE HOUSE POWER PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-103

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

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NOTES:

1. SEE DRAWING E-604 FOR LIGHTING FIXTURE SCHEDULE.
2. LIGHTING FIXTURES "A" AND "C" MOUNTED AT CEILING HEIGHT.
3. LIGHTING FIXTURES "D" MOUNTED AT 9-FEET AFF, TYPICAL.
4. "EXIT" SIGN MOUNTED AT 12" ON CENTER FROM DOOR FRAME.
5. LIGHTING FIXTURE "F" MOUNTED ABOVE VANITY GLASS. COORDINATE WITH ARCHITECTURE DRAWINGS.
6. EXTERIOR LIGHTING ASTRONOMIC TIMER, INTERMATIC MODEL ET8215C OR EQUAL.

IN BOUND

STOP

FIBER J-BOX

PANEL "SH"

IT CABINET

CONCRETE-ENCASED ELECTRODE, SEE DETAIL 8/E-501

GROUNDING ROD, 3/4"x 10', TYP. SEE DETAIL 3/E-501

INSTALL GROUNDING RING AND GROUNDING ROD IN BETWEEN SCALE PIT AND BUILDING, TYPICAL

SERVICE ENTRANCE DISCONNECT SWITCH

WORK ROOM 101

C 39.4 TYP.

RESTROOM 103

EXT. LIGHT TIMER (NOTE 6)

A 45.4

F 9.50

PAY BOOTH 102

G 36 TYP.

INSTALL LIGHT FIXTURE UNDER CANOPY OVERHANG, TYPICAL. SEE ARCHITECTURE DRAWINGS FOR DETAILS

EXIT 3.50 TYP.

LV

MS

XFMR T4

HEAT PUMP, SEE MECHANICAL DRAWINGS

BONDING TO GROUND RING, TYP. SEE DETAIL 4/E-501

CU-1 DS

BONDING TO BUILDING STEEL, TYP.

D 36.0 TYP.

#4/0 AWG BC

GROUNDING WELL. SEE DETAIL 2/E-501

SS

CO

WM

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

Bar Measures 1 inch, otherwise drawing not to scale

TETRA TECH

www.tetratech.com

MARK	DATE	DESCRIPTION	BY
1	01/29/24	30% DESIGN	WTM
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	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

SCALE HOUSE LIGHTING & GROUNDING PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-104

Copyright: Tetra Tech

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KEYNOTES:

1. SEE DRAWING E-602 FOR DETAILS.
2. INSTALL DATA PORT 10" OC ABOVE COUNTER TOP UON, TYPICAL. INSTALL ETHERNET CAT6 PER DATA PORT OUTLET, IN 3/4" CONDUIT, HOME RUN TO ETHERNET SWITCH IN NETWORK RACK.
3. INSTALL J-BOX FOR FIBER OPTIC ENTERING THE BUILDING, NEMA 3R, HEIGHT TBD ON SITE.
4. INSTALL NETWORK RACK ON WALL 72" AFF, PROVIDE REQUIRED MOUNTING HARDWARE. COORDINATE WITH OWNER FOR OUTPUT PORT QUANTITY PRIOR PURCHASE.
5. INSTALL WIRELESS ACCESS POINT ON CEILING AND ITS DEDICATED OUTLET.
6. INSTALL J-BOX FOR DOOR OPERATION AND SECURITY. SEE DETAIL 7/E-502 FOR DOOR SECURITY INSTALLATION.
7. CAMERA LOCATIONS ARE TENTATIVE, COORDINATE WITH OWNER FOR EXACT LOCATIONS. INSTALL INTERIOR CAMERA ON CEILING; INSTALL EXTERIOR CAMERAS 9' AFF. INSTALL ETHERNET IN 3/4" CONDUIT FOR CAMERA FROM NETWORK RACK TO INDIVIDUAL CAMERA, TYPICAL.
8. MATKO DISPLAYS, PROVIDE RS232 IN 3/4" CONDUIT FOR MATKO DISPLAY DATA INPUT. SEE E-602 FOR DETAILS.
9. PROVIDE ALL-IN-ONE ETHERNET AND HDMI PORTS BOX.
10. INSTALL INTERCOM SYSTEM, COORDINATE WITH OWNER FOR EQUIPMENT MADE AND MODEL.

IN BOUND

STOP

STOP

3 FIBER J-BOX

D002

NETWORK RACK

4

PANEL "SH"

10 TRANSACTION WINDOW INTERCOM

8 MATKO DISPLAY, NEMA 4

INSTALL 8'-6" FOR TV 9

CAMERA, TYPICAL

INSTALL 18" AFF

7

2

6

SERVICE ENTRANCE DISCONNECT SWITCH

WM

XFMR T4

CU-1 DS

MS

RESTROOM 103

WORK ROOM 101

WAP

WIRELESS ACCESS POINT

5

PAY BOOTH 102

J-BOX FOR DOOR SECUTIRY, TYPICAL

M

INSTALL 18" AFF

9 INSTALL 8'-6" FOR TV

TRANSACTION WINDOW INTERCOM 10

8 MATKO DISPLAY, NEMA 4

SS

CO

E

G

C

SD

N

0 2' 4' 8'

SCALE: 1/4" = 1'-0"

Bar Measures 1 inch, otherwise drawing not to scale

TETRA TECH

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1	01/29/24	30% DESIGN	WTM
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5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

SCALE HOUSE SYSTEM PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-105

Copyright: Tetra Tech

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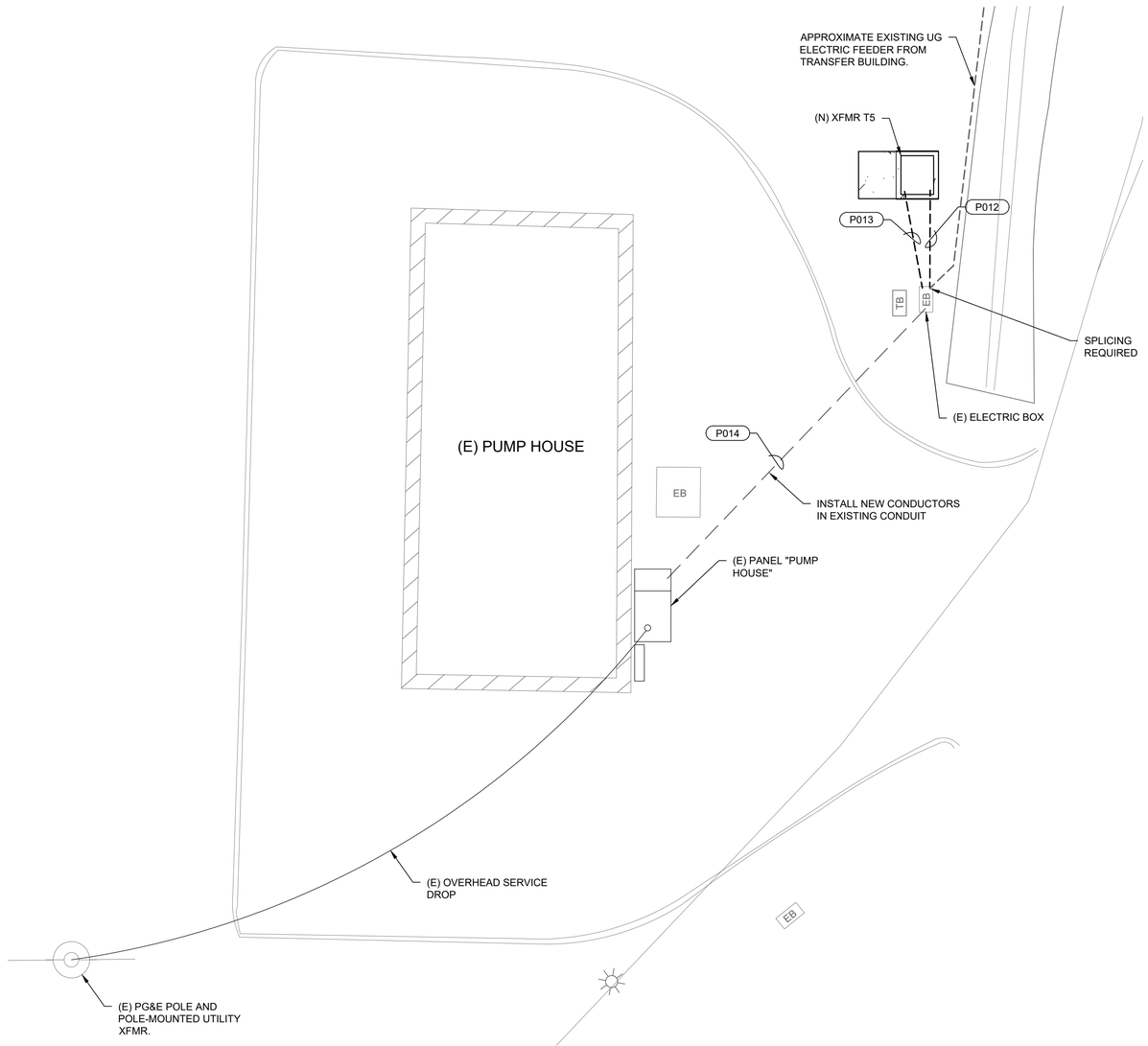

PUMP HOUSE POWER PLAN

NOTES:

1. WORK REQUIRED FIELD VERIFICATION. COORDINATE WITH DRAWINGS ED-601 AND E-601 FOR DETAILS.
2. SPLICE CONDUCTORS INTO EXISTING PUMP HOUSE'S FEEDER FROM TRANSFER BUILDING TO FEED XFMR T5 PRIMARY.
3. INSTALL CONDUCTORS FROM XFMR T5 SECONDARY TO SERVE PANEL "PUMP HOUSE" VIA EXISTING ELECTRIC BOX. INSTALL NEW CONDUIT AND RE-USE EXISTING CONDUIT.

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

MARK	DATE	DESCRIPTION	BY
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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

PUMP HOUSE POWER PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-106

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

0 2.5' 5' 10'
SCALE: 1" = 5'

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

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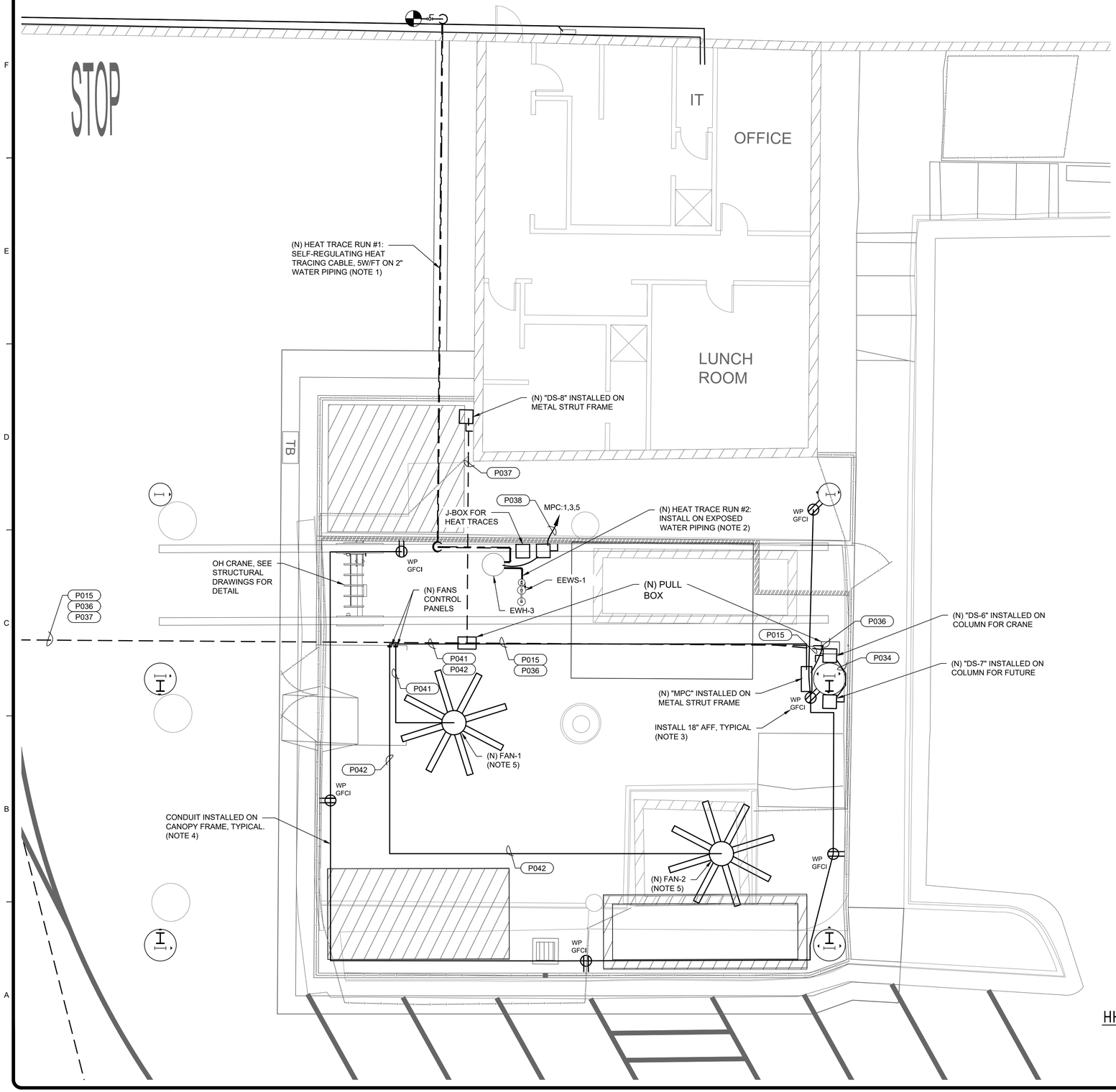

NOTES:

1. INSTALL 5W/FT, LINE SENSING, SELF-REGULATING HEAT TRACE CABLE AND REQUIRED ACCESSORIES. CHROMALOX OR EQUAL. COORDINATE WITH MECHANICAL DRAWINGS FOR DETAILS.
2. INSTALL PROVIDED HEAT TRACE CABLE. COORDINATE WITH MECHANICAL DRAWINGS FOR DETAILS.
3. WEATHERPROOF AND GFCI RECEPTACLES, INSTALL 18" AFF, TYPICAL.
4. SHOWN CONDUIT ARE DIAGRAMMATIC.
5. INSTALL FANS AND CONTROL PANELS, FROM BIGASSFANS, MODEL POWERFOIL PFX4-12 OR EQUAL.

HHW CANOPY POWER PLAN

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

SCALE: 1" = 6'

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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4	08/02/24	100% DESIGN	WTM
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
HHW CANOPY POWER PLAN

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-107

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Bar Measures 1 inch, otherwise drawing not to scale

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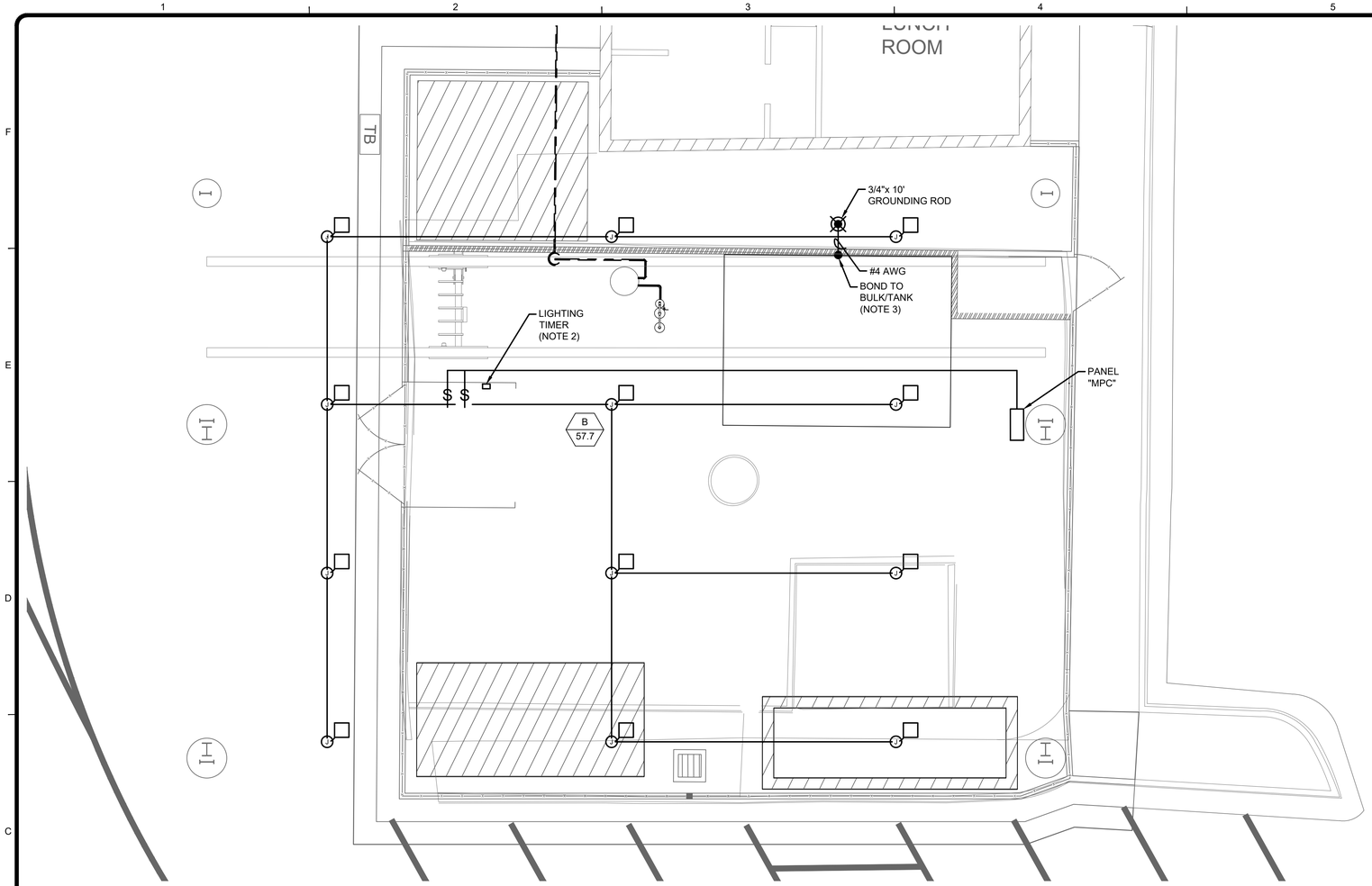

NOTES:

1. INSTALL LIGHTING TYPE B 14' AFF.
2. INSTALL LIGHTING ASTRONOMIC TIMER, INTERMATIC MODEL ET8215C OR EQUAL.
3. COORDINATE WITH OWNER FOR EXACT BULK/TANK LOCATION.

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

HHW CANOPY LIGHTING AND GROUNDING PLAN

0 3' 6' 12'
SCALE: 1" = 6'

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
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Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
HHW CANOPY LIGHTING AND GROUNDING PLAN

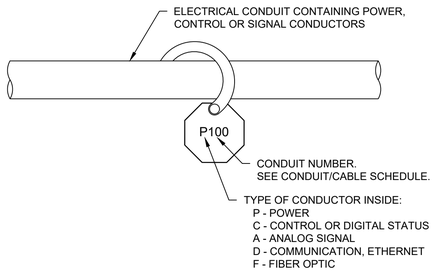
PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-108

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

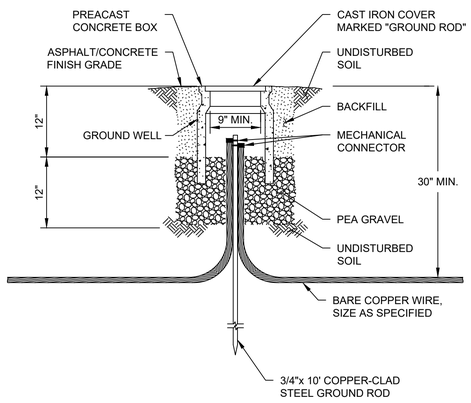
2/14/2025 12:46:06 PM - \\TT.LOCAL\ER\PROJECTS\IRVINE\42064\200-42064-22005\CAD\SHEETFILES\E-108 - HHW CANOPY LIGHTING AND GROUNDING PLAN.DWG - PHAN, DUAN



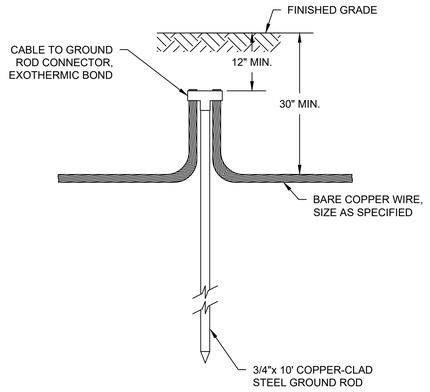
NOTES: CONDUIT TAGS SHALL BE AFFIXED TO CONDUITS:

1. AFTER ALL WORKING DRAWINGS ARE APPROVED AND ALL FIELD MODIFICATIONS HAVE BEEN MADE.
2. BEFORE FINAL ACCEPTANCE TESTING HAS STARTED.

1 CONDUIT IDENTIFICATION TAG
E-501 NO SCALE

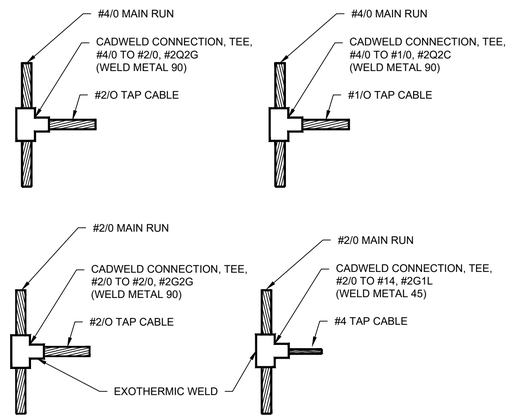


2 GROUND WELL
E-501 NO SCALE

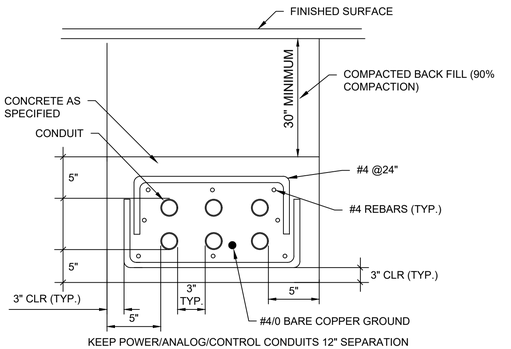


NOTE: THIS DETAIL SHOWS A TYPICAL CONNECTION BETWEEN GROUNDING ROD AND GROUNDING RING CABLE. CONTRACTOR SHALL PROVIDE CONNECTION TOOLS AND REQUIRED ACCESSORIES.

3 GROUND ROD TYPICAL DETAIL
E-501 NO SCALE

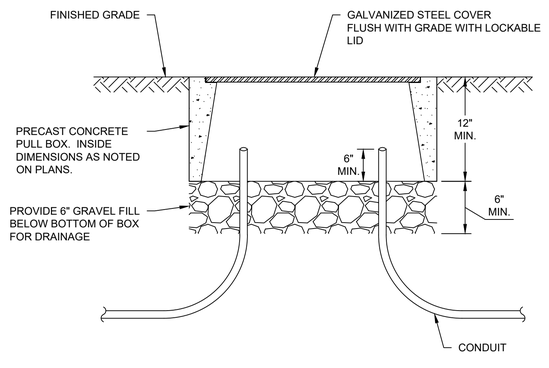


4 TYPICAL GROUND LOOP TAP
E-501 NO SCALE

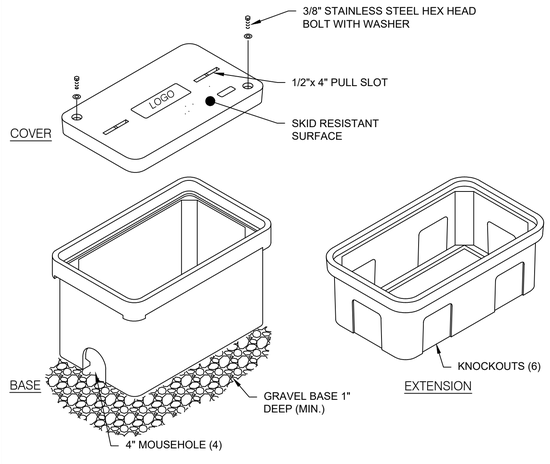


NOTE: THIS DETAIL SHOWS A TYPICAL DUCT BANK CROSS SECTION. COORDINATE NUMBER OF CONDUITS WITH PLANS AND PROVIDE DUCT BANK NECESSARY TO ACCOMMODATE ALL CONDUITS.

5 TYPICAL DUCT BANK DETAILS
E-501 NO SCALE

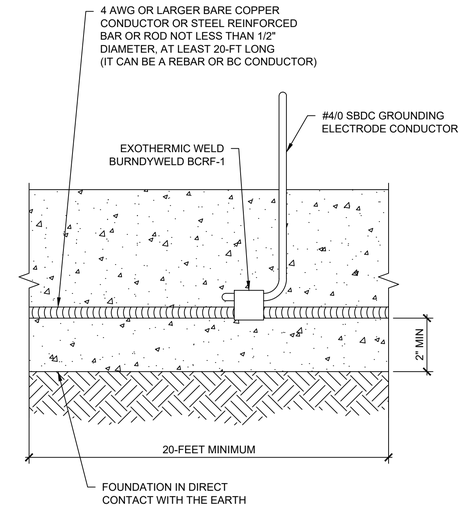


6 PULL BOX
E-501 NO SCALE



NOTE: HANDHOLE SHALL BE RATED FOR HEAVY TRAFFIC.

7 TYPICAL HANDHOLE
E-501 NO SCALE



8 CONCRETE ENCASED ELECTRODE
E-501 NO SCALE

County of Santa Cruz
Community Development & Infrastructure
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By: JEH
Date: 08/08/2025
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Bldg. Permits: B-251911, 12 & 13

TETRA TECH
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REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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1	01/29/24	30% DESIGN	WTM
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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
ELECTRICAL DETAILS

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-501

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Bar Measures 1 inch, otherwise drawing not to scale

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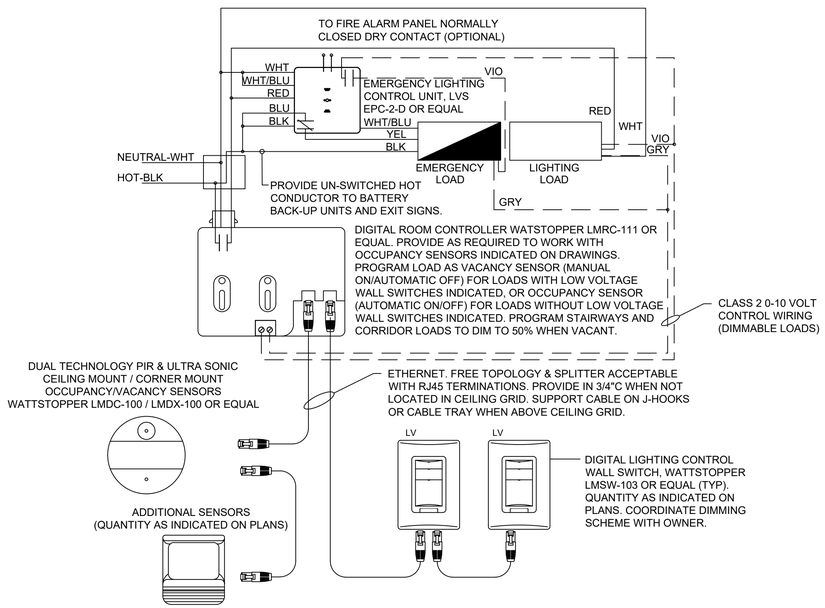
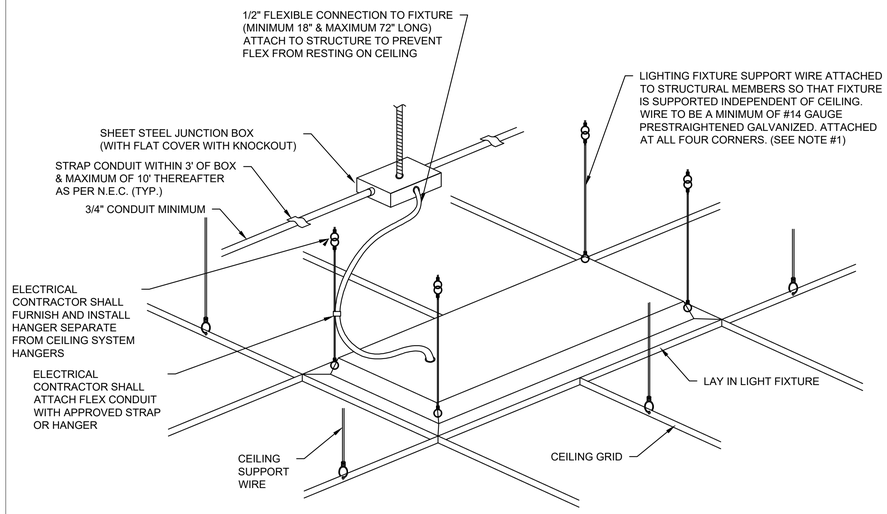


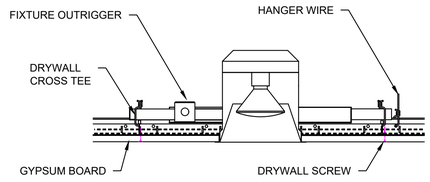
1 TYPICAL LIGHTING CONTROLS
E-502 NO SCALE



NOTES:

1. SUPPORT WIRE TO BE INSTALLED IN SUCH A MANNER THAT WEIGHT OF FIXTURE IS HELD INDEPENDENT OF CEILING GRID THEREFORE WIRES MUST BE TIGHT WITH NO SLACK.
2. FLEXIBLE CONNECTION FROM FIXTURE TO JUNCTION BOX MUST BE MINIMUM 18" & MAXIMUM 72" LONG.

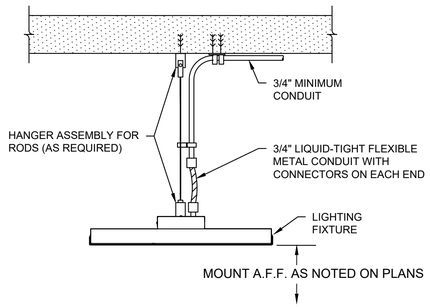
2 LAY-IN MOUNTING LIGHT DETAIL
E-502 NO SCALE



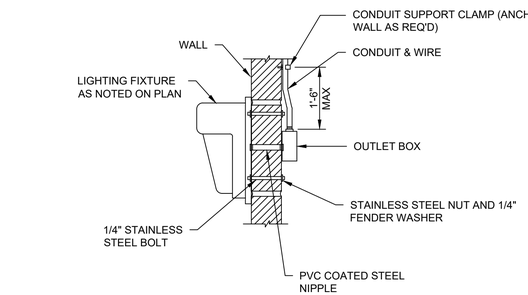
NOTE:

1. SEE LAY-IN MOUNTING LED LIGHT DETAIL FOR CONDUIT AND JUNCTION BOX DETAILS.

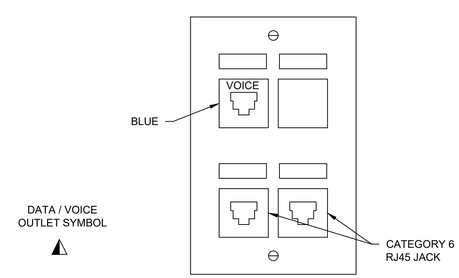
3 TYPICAL FLUSH-MOUNT LIGHTING
E-502 NO SCALE



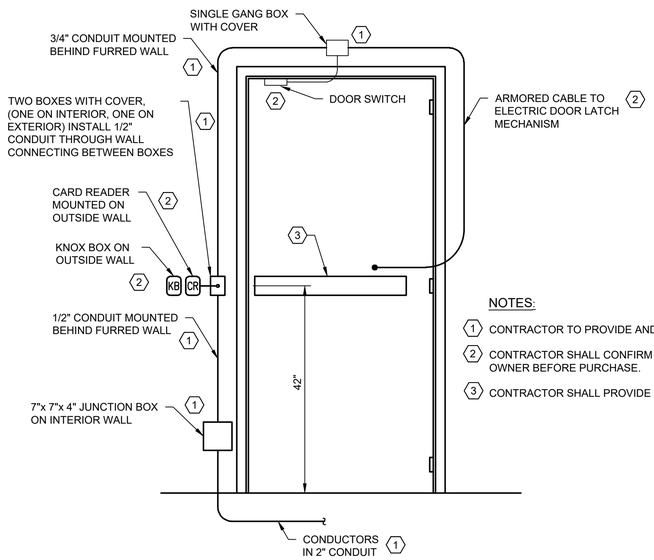
4 TYPICAL PENDANT-MOUNT LIGHTING
E-502 NO SCALE



5 EXTERIOR LIGHT FIXTURE DETAIL
E-502 NO SCALE



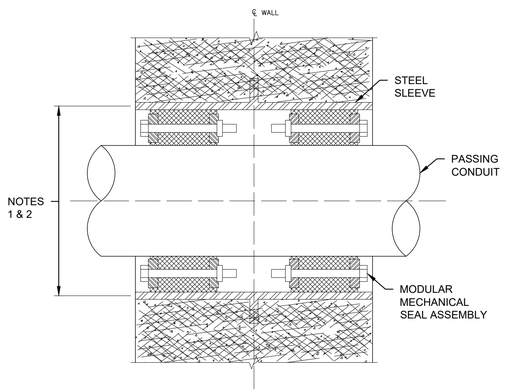
6 TYPICAL DATA & COMMUNICATION OUTLET
E-502 NO SCALE



NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL.
2. CONTRACTOR SHALL CONFIRM MODEL WITH OWNER BEFORE PURCHASE.
3. CONTRACTOR SHALL PROVIDE PANIC BAR.

7 SINGLE DOOR SECURITY SYSTEM
E-502 NO SCALE



NOTES:

1. INSIDE DIAMETER OF CONDUIT SLEEVE AS REQUIRED BY THE MODULAR MECHANICAL SEAL ASSEMBLY MANUFACTURER, FOR THE PASSING CONDUIT SEAL.
2. FOR EXISTING WALL OMIT CONDUIT SLEEVE. CORE DRILL AS REQUIRED FOR PASSING CONDUIT AND MECHANICAL SEAL ASSEMBLY.

8 TYPICAL WALL PENETRATION
E-502 NO SCALE

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REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
ELECTRICAL DETAILS

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
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E-502

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Bar Measures 1 inch, otherwise drawing not to scale

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NOTES:

1. COORDINATE WITH DRAWING E-601 FOR WORK DETAILS.

PG&E POLE MOUNTED SERVICE TRANSFORMERS. COORDINATE WITH PG&E TO DISCONNECT AND REMOVE SECONDARY SERVICE DROP AND METER AFTER NEW SERVICE IS INSTALLED AND ENERGIZED

MDF, 208Y/120V, 600A, 3ϕ

kWH

200A 3P

50A 3P

400A 3P

REPLACED BY A NEW 250A, 3-POLE BREAKER. RETURN IT TO THE OWNER.

PUMP HOUSE

MCC-SECTION 1

MCC-SECTION 2

PANEL

200A 3P

200A

50A 3P

MCC PANEL "A"

50A 3P

2

50A 3P

2

10

BOOSTER PUMP 1

10

BOOSTER PUMP 2

SCALE HOUSE

SCALE HOUSE PANEL

TRANSFER BUILDING

PANEL XFR BLG

400A 3P

LIGHTING PANEL

13/15/17

32/34/36

20/22/24

14/16/18

100A 3P

100A 3P

SEE PANEL SCHEDULE FOR OTHER LOADS

100A 3P

70A 3P

TRANSFER BLDG MOBILE GENERATOR

G

PANEL "E"

70A 2P

ADMIN BLDG

PANEL "B"

EXHAUST FAN

100A 3P

PANEL "A1"

AIR COMP.

11

11

LIFT STATION

BAILER CONTROL PANEL

25

BAILER

ELECTRICAL DEMOLITION ONE-LINE DIAGRAM

County of Santa Cruz
Community Development & Infrastructure
Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
Master Permit: APP-251009
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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

ELECTRICAL DEMOLITION ONE-LINE DIAGRAM

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

ED601

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NOTES:

1. SEE DRAWING ED-601 FOR DEMOLITION DETAILS.
2. CONTACT PG&E FOR NEW ELECTRIC SERVICE APPLICATION. COORDINATE WITH PG&E REQUIREMENTS.
3. FIELD VERIFICATION REQUIRED.

FROM UTILITY OH POLE

PRI (NOTE 2)

(N) T1
PG&E UTIL. XFMR
TBD kVA BY PG&E
12kV-480Y/277V
3ϕ, 4-WIRE
PAD-MOUNTED
(NOTE 2)

SEC

(N) UTILITY METER CABINET
480Y/277V, 800A, 3ϕ, 4-WIRE, 65 kAIC, NEMA 3R

KWH

800AT
800AF
3P

#3/0 AWG

P001

(N) ATS
480V, 800A, 3-POLE
NEMA 3R

P003

(N) MAIN DISTRIBUTION PANEL
480Y/277V, 800A, 3ϕ, 4-WIRE, 65 kAIC, NEMA 3R

80A 3P | 225A 3P | 80A 3P | 125A 3P | 60A 3P | 70A 3P | 60A 3P | 30A 3P

SPD

FUTURE EV CHARGING - PROVIDE SPACE FOR MINIMUM (4) 250AF, 3-POLE BREAKERS

(E) GND. RING (NOTE 4)

P036 | P037 | P015 | P034

MPC

SERVE CRANE SYSTEM (IN HHW CANOPY)

#4 AWG

(N) "DS-6"
FUSIBLE DISC SWITCH
30A RATED, 30A FUSE,
3ϕ, NEMA 3R

(N) "DS-7"
FUSIBLE DISC SWITCH
30A RATED, 30A FUSE,
3ϕ, NEMA 3R

(N) "DS-8" FUSIBLE DISC SWITCH
60A RATED, 60A FUSE, 3ϕ, NEMA 3R

SHED FUTURE LOADS

CANOPY FUTURE LOADS

(E) 208Y/120V, 600A, 3ϕ

200A 3P | 50A 3P | 250A 3P

PUMP HOUSE

(E) MCC-SECTION 1 | (E) MCC-SECTION 2

200A 3P

200A

50A 3P

(E) MCC PANEL "A"

50A 3P | 50A 3P

2 | 2

10 | 10

(E) BOOSTER PUMP 1 | (E) BOOSTER PUMP 2

(E) PANEL

(E) ELECTRIC BOX

P014 (NOTE 3)

P013

#2 AWG

(N) T5
100 kVA
480-208Y/120V
3ϕ, 4-WIRE, NEMA 3R
DRY TYPE, PAD-MOUNTED

P012

(E) 3- #500kcmil and GND IN CONDUIT (NOTE 3)

(N) T4
45 kVA
480-208Y/120V
3ϕ, 4-WIRE, NEMA 3R
DRY TYPE, PAD-MOUNTED

#4 AWG

P009

(N) "DS-4"
FUSIBLE DISC SWITCH
150A RATED, 150A FUSE,
3ϕ, NEMA 3R

SCALE HOUSE

P010

(N) SCALE HOUSE PANEL "SH"

(E) ELECTRIC BOX - SPLICE TO (E) WIRE (NOTE 3)

P011

P008

(N) STANDBY GENERATOR
550 kW/ 687.5 kVA
480/277V, 3-PH, 4-WIRE

P002

BOND TO EXISTING GROUNDING SYSTEM (NOTE 3)

GROUND ROD

(N) 4/0 AWG SDBC GROUNDING RING

GROUND ROD

BOND TO EXISTING GROUNDING SYSTEM (NOTE 3)

P006

(N) T2
150 kVA
480-208Y/120V
3ϕ, 4-WIRE, NEMA 3R
DRY TYPE, PAD-MOUNTED

#2 AWG

P007

P004

P004

TRANSFER BUILDING

(E) PANEL XFR BLG

400A 3P

13/15/17 | 32/34/36 | 20/22/24 | 14/16/18

100A 3P | 100A 3P | 100A 3P | 70A 3P

SEE PANEL SCHEDULE FOR OTHER LOADS

(E) LIGHTING PANEL

(E) PANEL "E"

70A 2P

(E) ADMIN BLDG

(E) PANEL "B"

EXHAUST FAN

100A 3P

(E) PANEL "A1"

AIR COMP.

LIFT STATION

11 | 11

5

100A, 70A FUSE

(N) "DS-3"
FUSIBLE DISC SWITCH
100A RATED, 70A FUSE,
3ϕ, NEMA 3R

(N) T3
45 kVA
480-208Y/120V
3ϕ, 4-WIRE, NEMA 3R
DRY TYPE, PAD-MOUNTED

#4 AWG

P005

P005

150A, 150A FUSE

(N) "DS-3A"
FUSIBLE DISC SWITCH
150A RATED, 150A FUSE, 3ϕ, NEMA 3R.
(PROVIDE IF BAILER CP HAS NO SIZED MAIN, NOTE 3)

25

BAILER

(E) BAILER CONTROL PANEL. VERIFY AND CONFIRM SIZED MAIN EXIST.

FAULT CURRENT CALCULATION

TRANSFORMER DATA		
TRANSFORMER CAPACTITY	750	KVA
SECONDARY VOLTAGE	480	V
% IMPEDANCE Z	3.5	%Z
PHASE	3	

CONDUCTOR DATA	T1	METER CAB.	MDP	T2	T3	T4	T5
CONDUCTOR SIZE	350 kcmil	350 kcmil	350 kcmil	4/0 AWG	4 AWG	4 AWG	4/0 AWG
CONDUCTOR LENGTH "L"		24 ft	15 ft	15 ft	339 ft	660 ft	1460 ft
CONDUCTOR CONSTANT "C"	22737	22737	22737	16673	3826	3826	16673
# CONDUCTOR PER PHASE "n"	3	3	3	1	1	1	1
AVAILABLE FAULT CURRENT (L-L)	@T1 (1)	@METER CAB. (2)	@MDP (3)	@T2 (4)	@T3 (5)	@T4 (6)	@T5 (7)
FAULT MULTIPLIER "M"	31.75	0.9649	0.9785	0.9193	0.1118	0.3664	0.7566
SHORT CIRCUIT I_{SC}	28,638 A	27,634 A	27,041 A	24,859 A	2,778 A	1,018 A	770 A

NOTE:

CALCULATED FAULT CURRENT BASED ON 750 kVA TRANSFORMER.

County of Santa Cruz
Community Development & Infrastructure
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ELECTRICAL ONE-LINE DIAGRAM

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
ELECTRICAL ONE-LINE DIAGRAM

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-601

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Bar Measures 1 inch, otherwise drawing not to scale

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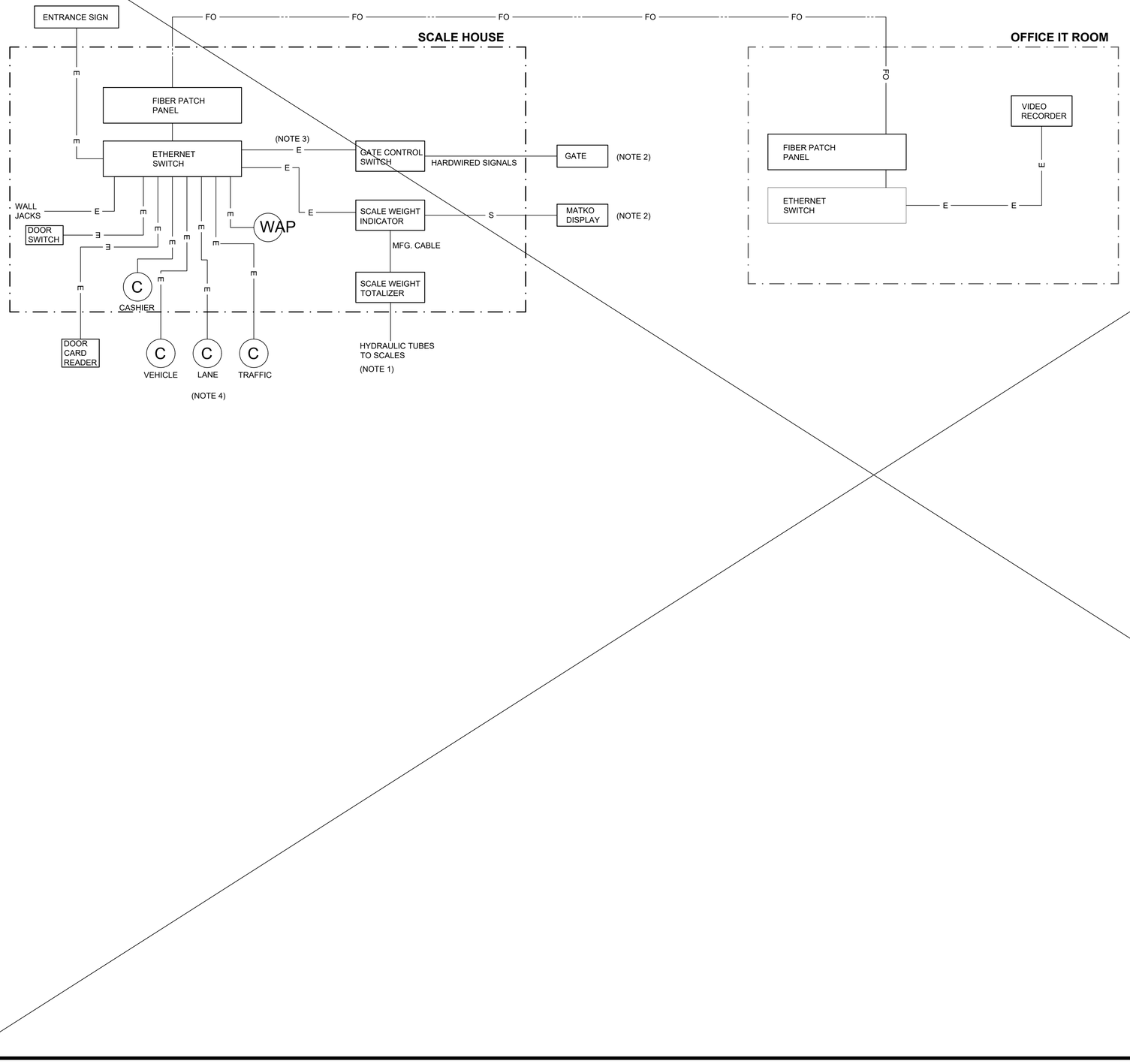

NOTES:

1. ONE SCALE TOTALIZER PER SCALE. TOTALIZER CONNECTS TO THE LOAD CELLS WITH HYDRAULIC TUBES.
2. ONE TRUCK DRIVER SCALE WEIGHT DISPLAY (MATKO) MOUNTED OUTSIDE AT THE FEE BOOTH, ONE SCALE WEIGHT DISPLAY INSIDE THE FEE BOOTH, AND TWO GATES PER SCALE (ONE IN FRONT AND ONE AFTER THE SCALE). MATKO DISPLAY MODEL SBL2, DIMENSION 12.25"Wx 4.75Hx 8.375"D.
3. PROVIDE AND INSTALL ALL REQUIRED COMMUNICATION CABLING AND THE SUPPORTED HARDWARE, TYPICAL.
4. CAMERA ARE PoE TYPE, QNV-8080R OR EQUAL WITH MOUNTING HARDWARE. COORDINATE WITH OWNER FOR PREFERABLE CAMERA MODEL AND ACTUAL CAMERA LOCATION.

LEGEND:

- OTHER AS INDICATED (CABLE/WIRE/HYDRAULIC TUBE)
- E — CAT6 CABLE
- S — SERIAL CABLE
- FO — FIBER OPTIC CABLE
- C — PoE DOME CAMERA
- WAP — WIRELESS ACCESS POINT

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	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION IMPROVEMENTS

NETWORKING CONTROL SYSTEM DIAGRAM

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-602

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Bar Measures 1 inch, otherwise drawing not to scale

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PANELBOARD: SH | BUS AMPS: 225 | VOLTS: 208/120
LOCATION: IN SCALE HOUSE | MCB AMPS: 225 | PHASE: 3
FROM: MDP VIA 45kVA XFMR | MOUNTING: SURFACE | WIRE: 4
SCCR:

LOAD DESCRIPTION	KVA A	KVA B	KVA C	CKT	BRK	BRK	CKT	KVA A	KVA B	KVA C	LOAD DESCRIPTION
EF-1	0.037			1	20	20	2	1.2			INBOUND GATE 1
CU-1 AND FCU-1		0.6		3	25	20	4		1.2		INBOUND GATE 2
			0.6	5		20	6			1.2	OUTBOUND GATE 1
EWH-1 (gfci)	2.9			7	30	20	8	1.2			OUTBOUND GATE 2
		2.9		9		20	10		0.315		LIGHT: R-101, R-102
EWH-2 (gfci)			3.5	11	30	20	12			0.055	LIGHT: RROOM 103
RECEPT: WAP	0.18			13	20	20	14	0.216			LIGHT: EXTERIOR
STROBE/HORN (CH4 DETR)		0.25		15	20	20	16		0.180		RECEPT: RROOM (gfci)
RECEPT: REFRIGERATOR			0.86	17	20	20	18			1.26	RECEPT: R-101
RECEPT: COFFEE MAKER	1.5			19	20	20	20	1.080			RECEPT: R-102
ACTUATOR: INBND WINDOW		0.5		21	20	20	22		1.0		RECEPT: COMP. STA. 1
ACTUATOR: OUTBND WINDW			0.5	23	20	20	24			1.0	RECEPT: COMP. STA. 2
NETWORK RACK	1.0			25	30	20	26	1.5			ENTRANCE SIGN
INTERCOM: INBND WINDOW		0.5		27	20		28		1.5		
INTERCOM: OUTBND WINDOW			0.5	29	20	20	30			0.011	LIGHT: EXIT
DOOR SECURITY	0.75			31	20	20	32	0.5			TOILET FLUSH SENSOR
RECEPT: MICROWAVE		1.2		33	20	20	34				
RECEPT: EXT. OUTLET (wp, gfci)			0.54	35	20	20	36				
MATKO DISPLAYS: INBND	0.026			37	20	20	38				
MATKO DISPLAYS: OUTBND		0.026		39	20	20	40				
				41	20	20	42				
	6.4	6.0	6.5	TOTAL				5.7	4.2	3.5	
	PHASE LOAD			TOTAL LOAD				TOTAL AMPS			
CONNECTED	12.1	10.2	10.0	32.3 kVA				90 A			

LOAD TYPE	A	B	C	CONNECT'D (kVA)	DEMAND FACTOR	DEMAND LOAD	SIZING FACTOR	SIZING LOAD
LIGHTING	1.7	1.8	0.0654	3.6	100%	3.6	125%	4.5
RECEPTACLE	1.080	0.180	1.800					
FISRT 10kVA				3.1	100%	3.1	100%	3.1
REMAINDER				0.0	50%	0.0	100%	0.0
MOTOR	2.4	1.2	1.2					
LARGEST				1.2	100%	1.2	125%	1.5
REMAINDER				4	100%	3.6	100%	3.6
APPLIANCES	1.5	1.5	0.9	3.8	100%	3.8	100%	3.8
HEAT		0.6	0.6	1.2	100%	1.2	100%	1.2
WATER HEAT	2.9	2.9	3.5	9.3	100%	9.3	125%	11.6
COMPUTER	2.5	1.5	1.5	5.5	100%	5.5	100%	5.5
MISC.		0.5	0.5	1.0	100%	1.0	100%	1.0
25% SPARE							25%	9.0
TOTAL				32.3				44.8

PANELBOARD: MPC | BUS AMPS: | VOLTS: 208/120
LOCATION: IN HHW CANOPY | MCB AMPS: | PHASE: 3
FROM: MDP | MOUNTING: SURFACE | WIRE: 4
SCCR:

LOAD DESCRIPTION	KVA A	KVA B	KVA C	CKT	BRK	BRK	CKT	KVA A	KVA B	KVA C	LOAD DESCRIPTION
EWH-3	1.0			1	15	20	2				
		1.0		3		20	4				
			1.0	5		20	6				
HEAT TRACE RUN #1	0.34			7	20	20	8				
LIGHT: CANOPY		0.69		9	20	20	10				
RECEPT: CANOPY			1.08	11	20	20	12				
FAN #1	0.70			13	20	20	14				
		0.70		15		20	16				
FAN #2			0.70	17	20	20	18				
	0.70			19		20	20				
HEAT TRACE RUN #2		0.13		21	20	20	22				
				23	20	20	24				
	2.7	2.5	2.8	TOTAL				0.0	0.0	0.0	
	PHASE LOAD			TOTAL LOAD				TOTAL AMPS			
CONNECTED	2.7	2.5	2.8	8.0 kVA				22 A			

LOAD TYPE	A	B	C	CONNECT'D (kVA)	DEMAND FACTOR	DEMAND LOAD	SIZING FACTOR	SIZING LOAD
LIGHTING		0.7		0.7	100%	0.7	125%	0.9
RECEPTACLE			1.080					
FISRT 10kVA				1.1	100%	1.1	100%	1.1
REMAINDER				0.0	50%	0.0	100%	0.0
MOTOR	1.400	0.700	0.700					
LARGEST				2.1	100%	2.1	125%	2.6
REMAINDER				0.7	100%	0.7	100%	0.7
APPLIANCES				0.0	100%	0.0	100%	0.0
HEAT				0.0	100%	0.0	100%	0.0
WATER HEAT	1.340	1.130	1.000	3.5	100%	3.5	125%	4.3
COMPUTER				0.0	100%	0.0	100%	0.0
MISC.				0.0	100%	0.0	100%	0.0
25% SPARE							25%	2.4
TOTAL				8.0				12.0

PANELBOARD: XFR | BUS AMPS: 400A | VOLTS: 208/120
LOCATION: TRANSFER BLG | MCB AMPS: | PHASE: 3
FROM: XFMR T2 | MOUNTING: SURFACE | WIRE: 4
SCCR: 10kAIC

LOAD DESCRIPTION	KVA A	KVA B	KVA C	CKT	BRK	BRK	CKT	KVA A	KVA B	KVA C	LOAD DESCRIPTION
				1			2				
				3			4				
				5			6				
				7			8				
				9			10				
				11			12				
PANEL E	1.156			13	100	70	14	3.666			LIGHTING PANEL ABOVE
		1.156		15			16		7.332		
			1.156	17			18			5.499	
PRESSURE WASHER				19	50	100	20	1.156			PANEL A1
				21			22		1.156		
LIGHTS: EXTERIOR				23	20		24			1.156	
				25		20	26				BLACK WATER PUMP
LIGHTS: EXTERIOR				27	20		28				
				29		20	30				TOOL SHED
SPARE				31	15	100	32	1.156			PANEL B
SPARE				33	15		34		1.156		
SODA MACHINE				35	20		36			1.156	
WELDER				37	50	50	38				HEAT PUMP
				39			40				
PRESSURE WASHER				41	20		42				
	1.156	1.156	1.156	TOTAL				5.978	9.644	7.811	
	PHASE LOAD			TOTAL LOAD				TOTAL AMPS			
CONNECTED	7.1	10.8	9.0	27 kVA				75 A			

EXISTING PANEL "XFR"

TETRA TECH
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS

ELECTRICAL SCHEDULES

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-603

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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Bar Measures 1 inch, otherwise drawing not to scale

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CONDUIT AND WIRE SCHEDULE

REF. ID	CONDUIT QTY.	CONDUIT SIZE	CONDUCTORS QTY. & SIZE	CONDUCTORS GND	FROM	TO	COMMENT
POWER							
PRI	-	-	-	-	PG&E OH POLE	XFMR T1 PRIMARY	CONDUIT BY CUSTOMER, CONDUCTOR BY PG&E
SEC	-	-	-	-	XFMR T1 SECONDARY	UTILITY METER CABINET	TO BE SIZED UPON PG&E XFMR CAPACITY
P001	3	4"	3-set of 4- #350 kcmil	1- #1/0	UTILITY METER CABINET	ATS	
P002	3	4"	3-set of 4- #350 kcmil	1- #1/0	GENERATOR	ATS	
P003	3	4"	3-set of 4- #350 kcmil	1- #1/0	ATS	MDP	
P004	1	2"	3- #4 AWG	1- #8	MDP	XFMR T3 PRIMARY	VIA NEW "DS-3"
P005	1	2"	4- #1 AWG	1- #6	XFMR T3 SECONDARY	BAILER	VIA NEW "DS-3A"
P006	1	2-1/2"	3- #4/0 AWG	1- #4	MDP	XFMR T2 PRIMARY	
P007	2	2-1/2"	2-set of 4- #4/0 AWG	1- #3	XFMR T2 SECONDARY	PANEL "XFER"	EXISTING PANEL, IN XFER BUILDING
P008	1	2"	3- #4 AWG	1- #8	MDP	XFMR T4 PRIMARY	
P009	1	2"	4- #1 AWG	1- #6	XFMR T4 SECONDARY	DISC SWITCH "DS-4"	
P010	1	2"	4- #1 AWG	1- #6	DISC SWITCH "DS-4"	PANEL "SH"	IN SCALE HOUSE
P011	1	2-1/2"	3- #4/0 AWG	1- #4	MDP	EXISTING ELECTRIC BOX	SPLICING REQUIRED
P012	1	2-1/2"	3- #4/0 AWG	1- #4	EXISTING ELECTRIC BOX	XFMR T5 PRIMARY	SPLICING REQUIRED
P013	2	2-1/2"	2-set of 4- #4/0 AWG	1- #4	XFMR T5 SECONDARY	EXISTING ELECTRIC BOX	
P014	2	2-1/2"	2-set of 4- #4/0 AWG	1- #4	EXISTING ELECTRIC BOX	PANEL "PUMP HOUSE"	EXISTING CONDUIT - INSTALL NEW WIRES
P015	1	1"	3- #6 AWG	1- #10	MDP	DISC SWITCH "DS-6"	MOUNT "DS-6" ON COLUMN, SERVING CRANE
P016	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	EF-1	
P017	1	3/4"	3- #10 AWG	1- #10	PANEL "SH"	CU-1	VIA CU-1 DS
P018	1	3/4"	3- #12 AWG	1- #12	CU-1	FCD-1	
P019	1	3/4"	3- #8 AWG	1- #10	PANEL "SH"	EWH-1	
P020	1	3/4"	2- #10 AWG	1- #10	PANEL "SH"	EWH-2	
P021	1	1"	2- #12 AWG	1- #12	PANEL "SH"	INBOUND GATE 1	
P022	1	1"	2- #12 AWG	1- #12	PANEL "SH"	INBOUND GATE 2	
P023	1	1"	2- #12 AWG	1- #12	PANEL "SH"	OUTBOUND GATE 1	
P024	1	1"	2- #12 AWG	1- #12	PANEL "SH"	OUTBOUND GATE 2	
P025	1	1"	2- #12 AWG	1- #12	PANEL "SH"	ENTRANCE SIGN	
P026	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	STROBE LIGHT	METHANE DETECTOR
P027	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	INBND WINDW ACTUATOR	
P028	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	OUTBND WINDW ACTUATOR	
P029	1	3/4"	2- #10 AWG	1- #10	PANEL "SH"	NETWORK RACK	DEDICATED OUTLET
P030	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	INTERCOM: INBND WINDOW	
P031	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	INTERCOM: OUTBND WINDOW	
P032	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	DOOR SECURITY (x3)	DAISY CHAINED, TYPICAL
P033	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	EXTERIOR OUTLET	GFCI, WP OUTLET NEAR CU-1
P034	1	1"	3- #6 AWG	1- #10	DISC SWITCH "DS-6"	DISC SWITCH "DS-7"	MOUNT "DS-7" ON COLUMN
P035	1	3/4"	2- #12 AWG	1- #12	PANEL "SH"	J-BOX AT TOILET	FOR TOILET FLUSH SENSOR
P036	1	1"	3- #4 AWG	1- #8	MDP	PANEL "MPC"	PANEL "MPC" IN HHW CANOPY
P037	1	3/4"	3- #6 AWG	1- #10	MDP	DISC SWITCH "DS-8"	
P038	1	3/4"	3- #8 AWG	1- #10	PANEL "MPC"	EWH-3	EWH-3 IN HHW CANOPY
P039	1	3/4"	2- #10 AWG	1- #10	PANEL "MPC"	HEAT TRACE RUN 1	
P040	1	3/4"	2- #12 AWG	1- #12	PANEL "MPC"	HEAT TRACE RUN 2	
P041	1	3/4"	3- #12 AWG	1- #12	PANEL "MPC"	FAN-1	VIA FAN CONTROL PANEL
P042	1	3/4"	3- #12 AWG	1- #12	PANEL "MPC"	FAN-2	VIA FAN CONTROL PANEL
CONTROL							
C001	1	3/4"	6- #14	1- #14	T-FCU-1	FCU-1	
C002	1	2"	12- #14	1- #14	GENERATOR	ATS	
C003	1	2"	12- #14	1- #14	ATS	IT ROOM/SCADA	
C004	1	3/4"	2- #14	1- #14	EYESWASH & SHOWER	IT ROOM/SCADA	
C021	1	1"	6- #14	1- #14	GATE CTRL SWITCH	INBND GATE 1 CONTROLLER	
C022	1	1"	6- #14	1- #14	GATE CTRL SWITCH	INBND GATE 2 CONTROLLER	
C023	1	1"	6- #14	1- #14	GATE CTRL SWITCH	OUTBND GATE 1 CONTROLLER	
C024	1	1"	6- #14	1- #14	GATE CTRL SWITCH	OUTBND GATE 2 CONTROLLER	
C025	1	3/4"	6- #14	1- #14	DOOR #1 CARD READER	SECURITY CABINET	COORDINATE WITH OWNER
C026	1	3/4"	6- #14	1- #14	DOOR #2 CARD READER	SECURITY CABINET	COORDINATE WITH OWNER
C027	1	3/4"	6- #14	1- #14	DOOR #3 CARD READER	SECURITY CABINET	COORDINATE WITH OWNER
C028	1	3/4"	2- #14	1- #14	EEWS	IT ROOM/SCADA	COORDINATE WITH OWNER
DATALINK							
D001	1	1"	CAT6		SCALE HOUSE ETHERNET SWITCH	ENTRANCE SIGN	IN NETWORK RACK
D002	1	1"	FIBER		SCALE HOUSE ETHERNET SWITCH	IT ROOM ETHERNET SWITCH	IN NETWORK RACK

EQUIPMENT:

1. ENTRANCE SIGN FROM IPDISPLAYS OR APPROVED EQUAL. IPDISPLAYS MODEL IPLED-32X160-RGB-10-ODX, DIMENSION 13.5" Hx 63.5" Lx 4"D. QUANTITY OF 4. SEE DRAWING S-108 FOR DETAILS.
2. DISPLAY FROM MATKO ELECTRONIC DISPLAY OR APPROVED EQUAL, MATKO DISPLAY MODEL SBL2, DIMENSION 12.25" Wx 4.75" Hx 8.375" D. COORDINATE WITH OWNER FOR APPROVAL PRIOR PROCUREMENT.

LIGHTING FIXTURE SCHEDULE (3)

FIXTURE I.D.	FIXTURE: INCAND.	FIXTURE: FLUOR.	FIXTURE: H.P.S.	FIXTURE: MET. HAL.	FIXTURE: LED	VOLTS	LAMPS: NO	LAMPS: WATTS AND TYPE	LAMPS: COLOR TEMP	FIXTURE: RECESS	FIXTURE: SURFACE	FIXTURE: PEND.	FIXTURE: WALL	FIXTURE: POLE	DESCRIPTION AND VARIATIONS	MANUFACTURER AND CATALOG NO. (2)
A 45.4					●	MVOLT	1	45.4	4000K	●	●				GOTHAM 8" EVO DOWNLIGHT, 4000K, 3000 LUMENS, MWD, 120V, ECOdrive 50W 561/S DRIVER, 950 MA SETTINGS, 8DFR TRIM.	GOTHAM ARCHITECTURAL LIGHTING EVO8SH 40/30 DFR
B 57.7					●	MVOLT	1	57.7			●	●			CANOPY LED WITH ADJUSTABLE LUMEN OUTPUT AND SWITCHABLE CORRELATED COLOR TEMPERATURE (CCT).	LITHONIA LIGHTING SCNY LED ALO2-10L SWW2-40K PFL MVOLT DWHXD M3
C 39.4					●	MVOLT	1	39,4	4000K	●	●				LED CENTER ELEMENT LAY-IN, 2'x 2', SWITCHABLE LUMENS 3000/4000/5000LM OUTPUT. SWITCHABLE CCT 35/40/50K, DIMMABLE.	LITHONIA LIGHTING STAKS 2x2 ALO3 SWW7 UVOLT WITH LED EMERGENCY BATTERY PACK ILBLP CP10 HE SD A
D 36.0					●	MVOLT	1	36.0	4000K				●		CAST-ALUMINUM HOUSING WITH BRONZE POLYESTER POWER PAINT FOR LASTING DURABILITY.	LITHONIA LIGHTING TWR1 LED ALO SWW2 UVOLT PE DDBTXD (1)
EXIT 3.50					●	MVOLT	1	3.50			●	●	●		A COMBINATION OF GREEN LED EXIT AND EMERGENCY LIGHTING. SERVED FROM MVOLT UTILITY POWER AND SWITCHABLE TO AN EQUIPPED 90-MINUTES BATTERY RUN CAPACITY.	LITHONIA LIGHTING ECRG SQ M6 WITH 3.6V BATTERY
F 18.2					●	MVOLT	1	18.2	4000K				●		LED WALL MOUNTED VANITY LIGHT.	LITHONIA LIGHTING FMVCCLS 24IN MVOLT 40K 90CRI BN
G 36					●	MVOLT	1	36.0	4000K		●				CSS LED STRIP, DIMMABLE, DAMP-LOCATION.	LITHONIA LIGHTING CSS L48 ALO3 MVOLT SWW3 80CRI

KEYNOTES:

(1) INDIVIDUAL LIGHTING SHALL BE EQUIPPED WITH PHOTOSENSOR, TYPICAL. ALL EXTERIOR LIGHTINGS SHALL BE CONTROLLED FROM AN ASTRONOMIC TIMER.

(2) MANUFACTURE AND CATALOG NUMBER INDICATED AS BASIS OF DESIGN ONLY AND DOES NOT PREVENT CONTRACTOR FROM SELECTING EQUIVALENT FIXTURES BY A DIFFERENT MANUFACTURER.

(3) SUBMIT FIXTURE FINISH FOR ARCHITECT APPROVAL PRIOR PURCHASE/INSTALL. PROVIDE ALL NECESSARY MOUNTING HARDWARE WITH FIXTURES.

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
www.tetratech.com

REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
ELECTRICAL SCHEDULES

PROJ: 200-42064-22005
DESN: W.T. MOORE
DRWN: D. PHAN
CHKD: M. KASSAR

E-604

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Bar Measures 1 inch, otherwise drawing not to scale

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STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.		
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 1 of 7)**
Project Address: 9835 Newell Creek Rd., Ben Lomond, CA 95005	**Date Prepared:**	2024-07-29T13:51:51-04:00

A. GENERAL INFORMATION

01	Project Location (city)	Ben Lomond	04 Total Conditioned Floor Area (ft²)	471
02	Climate Zone	3	05 Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06 # of Stories (Habitable Above Grade)	1
● Office				

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	Complete Building Method	471	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)	471			

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 2 of 7)**
	Date Prepared:	2024-07-29T13:51:51-04:00

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04	05		06	07		08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	= **Total Allowed** (Watts)	≥	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	=	**Total Adjusted** (Watts) *Includes Adjustments	**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)			(See Table F)	(See Table P)			
Conditioned	282.6				= 282.6	≥	271.1		=	271.1	COMPLIES
Unconditioned					=	≥			=		
Controls Compliance (See Table H for Details)											COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)											

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 3 of 7)**
	Date Prepared:	2024-07-29T13:51:51-04:00

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
A	8" Round LED Downlight	No	NA	45.4	Mfr. Spec	1	No	45.4	☐	☐
C	2 X 2 LED Recessed Troffer	No	NA	39.4	Mfr. Spec	5	No	197	☐	☐
EXIT	LED Exit Sign/Light	No	NA	3.5	Mfr. Spec	3	No	10.5	☐	☐
F	LED Vanity Light	No	NA	18.2	Mfr. Spec	1	No	18.2	☐	☐
							Total Designed Watts: CONDITIONED SPACES	271.1		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Field Inspector	
		Pass	Fail
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 4 of 7)**
	Date Prepared:	2024-07-29T13:51:51-04:00

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Skylit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Work Areas	Office	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
					13				
					Plan Sheet Showing Daylit Zones:				

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Work Areas	Office	0.6	471	282.6	No	No
		TOTALS:	471	282.6	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

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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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TITLE 24
SCALE HOUSE - INDOOR

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-701

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Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 5 of 7)**
	Date Prepared:	2024-07-29T13:51:51-04:00

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS
This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))
This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS
This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS
This section does not apply to this project.

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CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 6 of 7)**
	Date Prepared:	2024-07-29T13:51:51-04:00

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
This section does not apply to this project.

T. DWELLING UNIT LIGHTING
This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/ottcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Work Areas

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CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 7 of 7)**
Project Address: 9835 Newell Creek Rd., Ben Lomond, CA 95005	**Date Prepared:**	2024-07-29T13:51:51-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Troy Moore	Documentation Author Signature:
Company: Tetra Tech	Signature Date:
Address: 1560 Broadway, Suite 1400	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Denver, CO 80202	Phone: (720) 931-9319

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Troy Moore	Responsible Designer Signature:
Company: Tetra Tech	Date Signed: 07/29/2024
Address: 1560 Broadway, Suite 1400	License: E21564
City/State/Zip: Denver, CO 80202	Phone: (720) 931-9319

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4	08/02/24	100% DESIGN	WTM
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TITLE 24
SCALE HOUSE - INDOOR

PROJ: 200-42064-22005
DESN:
DRWN:
CHKD:

E-702

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STATE OF CALIFORNIA
Outdoor Lighting
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CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.		
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 1 of 8)**
Project Address: 9835 Newell Creek Rd., Ben Lomond, CA 95005	**Date Prepared:**	2024-07-31T17:12:59-04:00

A. GENERAL INFORMATION

01	Project Location (city)	Ben Lomond	04	Total Illuminated Hardscape Area (ft²)	270
02	Climate Zone	3			
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):				
☐ LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Urban Clusters	☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval			
☒ LZ-1: Low - Rural Areas	☐ LZ-3: Moderately High - Urban Areas				
05	Occupancy Types within Project				
● Office					

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02	
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6	
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? ○ Yes ○ No	
03	04	05
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%		

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] *FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.*

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Outdoor Lighting
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CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 2 of 8)**
	Date Prepared:	2024-07-31T17:12:59-04:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results			
01		02		03		04		05		06		07		08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
154.32	+	---	+	---	+	---	+	108	OR	---	=	262.32	≥	108	COMPLIES
Shielding Compliance (See Table G for Details)												N/A			
Controls Compliance (See Table H for Details)												COMPLIES			

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
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CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 3 of 8)**
	Date Prepared:	2024-07-31T17:12:59-04:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires [2]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)1[4]	Field Inspector	
										Pass	Fail
D	LED Wallpack	☐ Linear	36	Mfr. Spec	3	New	☐	108	NA: < 6200 lumens	☐	☐
							Total Design Watts:	108			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] *FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)*
[2] *For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.*
[3] *Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.*
[4] *Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)*

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

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CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 4 of 8)**
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H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
Building Entry/Exit Doors: "D"	Astronomical Timer	Provided	NA: >=24 ft	☐	☐

[1] *FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.*
[2] *Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.*
[3] *Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.*

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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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TITLE 24
SCALE HOUSE - OUTDOOR

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-703

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STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	(Page 5 of 8)
	Date Prepared:	2024-07-31T17:12:59-04:00

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-R while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.
Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

01				
	"Use it or lose it" Allowance (select all that apply) (select all that apply)			
☒ General Hardscape Allowance Table I (below)	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☒ Per Specific Area Table M

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel

02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft^2)	Allowed Density (W/ft^2)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Building Entry/Exit Doors	270	0.016	4.32	0	0.13	0	4.32
						Initial Wattage Allowance for Entire Site (Watts):	150
						Instances of Initial Wattage Allowance (LZ 0 only)[1]	
						Total General Hardscape Allowance (Watts):	154.32

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
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CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	(Page 6 of 8)
	Date Prepared:	2024-07-31T17:12:59-04:00

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This table includes areas using the wattage allowance per specific area from Table 140.7-B /Table 170.2-S. More than one specific area allowance may be taken in a single project, if applicable. However, multiple specific area allowances may not be taken for the exact same area on the site.

01	02	03	04	05	06	07	08	09	10
Area Description	Specific Area Type per Table 140.7-B	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		Specific Area (ft^2)[1]	Allowed Density (W/ft^2)	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Vehicle Lanes	GuardStation	2160	0.08	174.96	D	36	3	108	108
							Total Design Watts for this Area:	108	
							Total Allowance (Watts) All Areas:		108

[1] FOOTNOTES: See Table 140.7-B /Table 170.2-S for rules for calculating the specific areas (ft^2) for these additional lighting allowances.
[2] For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	(Page 7 of 8)
	Date Prepared:	2024-07-31T17:12:59-04:00

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	Building Entry/Exit Doors: "D"

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	(Page 8 of 8)
Project Address: 9835 Newell Creek Rd., Ben Lomond, CA 95005	**Date Prepared:**	2024-07-31T17:12:59-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Troy Moore	Documentation Author Signature:
Company: Tetra Tech	Signature Date: 07/31/24
Address: 1560 Broadway, Suite 1400	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Denver, CO 80202	Phone: (720) 931-9319

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Troy Moore	Responsible Designer Signature:
Company: Tetra Tech	Date Signed: 07/31/24
Address: 1560 Broadway, Suite 1400	License: E21564
City/State/Zip: Denver, CO 80202	Phone: (720) 931-9319

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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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TITLE 24
SCALE HOUSE - OUTDOOR

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-704

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

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STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.	
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:** (Page 1 of 7)
Project Address: 9835 Newell Creek Rd., Ben Lomond, CA 95005	**Date Prepared:** 2024-12-04T10:22:52-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Ben Lomond	04	Total Illuminated Hardscape Area (ft²)	3650
02	Climate Zone	3			
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):				
☐ LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Urban Clusters	☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval			
☒ LZ-1: Low - Rural Areas	☐ LZ-3: Moderately High - Urban Areas				
05	Occupancy Types within Project				
● Office					

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? ○ Yes ○ No

03	04	05
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%		

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:** (Page 2 of 7)
	Date Prepared: 2024-12-04T10:22:52-05:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results			
01		02		03		04		05		06		07		08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
0	+	---	+	---	+	---	+	692.4	OR	---	=	692.4	≥	692.4	COMPLIES
Shielding Compliance (See Table G for Details)															N/A
Controls Compliance (See Table H for Details)															COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:** (Page 3 of 7)
	Date Prepared: 2024-12-04T10:22:52-05:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires[2]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)[4]	Field Inspector	
										Pass	Fail
B	LED surface canopy fixture	☐ Linear	57.7	Mfr. Spec	12	New	☐	692.4	NA: Exception in Section 140.7(a)	☐	☐
							Total Design Watts:	692.4			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)
[2] For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.
[3] Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.
[4] Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:** (Page 4 of 7)
	Date Prepared: 2024-12-04T10:22:52-05:00

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
HHW Canopy: "B"	Astronomical Timer	Provided	NA: Industrial Sites Lighting	☐	☐

[1] FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.
[2] Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.
[3] Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-R while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.
Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

01				
	"Use it or lose it" Allowance (select all that apply) (select all that apply)			
☐ General Hardscape Allowance Table I (below)	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☒ Per Specific Area Table M

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

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
www.tetratech.com
REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY KASSAR
No. E21584
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TITLE 24
HHW CANOPY - OUTDOOR

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-705

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Bar Measures 1 inch, otherwise drawing not to scale

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STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 5 of 7)**
	Date Prepared:	2024-12-04T10:22:52-05:00

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This table includes areas using the wattage allowance per specific area from Table 140.7-B /Table 170.2-S. More than one specific area allowance may be taken in a single project, if applicable. However, multiple specific area allowances may not be taken for the exact same area on the site.

01	02	03	04	05	06	07	08	09	10
Area Description	Specific Area Type per Table 140.7-B	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		Specific Area (ft^2)[1]	Allowed Density (W/ft^2)	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
HHW Canopy	ServiceStationCanopy	3650	0.22	803	B	57.7	12	692.4	692.4
							Total Design Watts for this Area:	692.4	
								Total Allowance (Watts) All Areas:	692.4

[1] *FOOTNOTES: See Table 140.7-B /Table 170.2-S for rules for calculating the specific areas (ft^2 for these additional lighting allowances.*

[2] *For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.*

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 6 of 7)**
	Date Prepared:	2024-12-04T10:22:52-05:00

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	HHW Canopy: "B"

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Ben Lomond Transfer Station - Upgrades	**Report Page:**	**(Page 7 of 7)**
Project Address: 9835 Newell Creek Rd., Ben Lomond, CA 95005	**Date Prepared:**	2024-12-04T10:22:52-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Troy Moore	Documentation Author Signature:
Company: Tetra Tech	Signature Date: 12/04/2024
Address: 1560 Broadway, Suite 1400	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Denver, CO 80202	Phone: (720) 931-9319

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Troy Moore	Responsible Designer Signature:
Company: Tetra Tech	Date Signed: 12/04/2024
Address: 1560 Broadway, Suite 1400	License: E21564
City/State/Zip: Denver, CO 80202	Phone: (720) 931-9319

TETRA TECH
www.tetratech.com
REGISTERED PROFESSIONAL ENGINEER
WILLIAM TROY MOORE
No. E21564
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

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
5	12/23/24	100% PERMIT SET	WTM
	02/14/25	REVISED FOR PERMIT REVIEW	WTM

SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION IMPROVEMENTS
TITLE 24
HHW CANOPY - OUTDOOR

PROJ:	200-42064-22005
DESN:	W.T. MOORE
DRWN:	D. PHAN
CHKD:	M. KASSAR

E-706

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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MECHANICAL LEGEND

- 20x12 SA — DUCT SIZE & SYSTEM ABBREVIATION. FIRST FIGURE IS DIMENSION SHOWN ON PLAN
- DUCT SECTION, POSITIVE PRESSURE
- DUCT SECTION, NEGATIVE PRESSURE
- NEW DUCTWORK
- FLEXIBLE DUCTWORK
- DUCT TRANSITION
- RECT. TO ROUND TRANSITION
- BRANCH DUCTWORK
- TURNING VANES
- CEILING DIFFUSER - SUPPLY
- CEILING DIFFUSER - RETURN
- CEILING DIFFUSER - EXHAUST
- CEILING DIFFUSER - ROUND
- LINEAR SLOT DIFFUSER (DOUBLE SLOT)
- LOUVER AND SCREEN
- FIRE DAMPER, PROVIDE ACCESS DOOR
- VOLUME DAMPER
- BD — BACKDRAFT DAMPER
- SUPPLY/INTAKE AIRFLOW DIRECTION
- EXHAUST AIRFLOW DIRECTION
- GRILLE OR REGISTER, SIDEWALL
- PIPE CAP
- PIPE CONNECTION, BOTTOM
- PIPE CONNECTION, TOP
- PIPE ELBOW, TURNED UP
- PIPE ELBOW, TURNED DOWN
- PIPE TEE
- ANCHOR, INTERMEDIATE
- BUTTERFLY VALVE
- GATE VALVE
- BALL VALVE
- CHECK VALVE
- STRAINER VALVE
- THREE-WAY CONTROL VALVE
- TWO-WAY CONTROL VALVE
- PRESSURE GAUGE
- -U- — DOOR UNDERCUT
- Ø — DIAMETER

- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- PUMP (SCHEMATIC)
- T — THERMOSTAT
- CO2 — CARBON DIOXIDE SENSOR
- CO — CARBON MONOXIDE SENSOR
- M — MOTORIZED DAMPER
- A — PNEUMATIC DAMPER
- S — EMERGENCY SHUTDOWN SWITCH
- DP — DIFFERENTIAL PRESSURE SENSOR
- SD — DUCT SMOKE DETECTOR
- M — MASTER EMERGENCY SHUTDOWN SWITCH
- H — HUMIDISTAT
- HVAC - # — EQUIPMENT TAG
- BOD: 4' - 7" — BOTTOM OF DUCT ELEVATION TAG
- POINT OF DISCONNECTION
- POINT OF CONNECTION
- # — KEYED NOTE
- CD-A | W X H | ### — AIR TERMINAL AND AIRFLOW TAG
  - AIR QUANTITY DELIVERED BY DEVICE IN CFM
  - AIR TERMINAL NECK SIZE (IN.)
  - AIR TERMINAL MARK AS INDICATED IN SCHEDULE

  OR

  SAD-# / ### CFM
  - AIR TERMINAL MARK AS INDICATED IN SCHEDULE
  - AIR QUANTITY DELIVERED BY DEVICE
- AREA OUT OF SCOPE
- AREA OF DEMOLITION

NOTES:

1. THIS LEGEND IS FOR REFERENCE ONLY.
2. ALL SYMBOLS WITHIN THIS LEGEND MAY NOT APPLY TO THIS PROJECT.

MECHANICAL ABBREVIATIONS

(D)	DEMOLITION
(E)	EXISTING
(R)	RELOCATED
AAV	AUTOMATIC AIR VENT
ABS	ABSOLUTE
AD	ACCESS DOOR
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
BFF	BELOW FINISHED FLOOR
BHP	BRAKE HORSEPOWER
CAP	CAPACITY
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
CONT	CONTINUATION
CP-1	CONTROL PANEL WITH DESIGNATION
CU	CONDENSING UNIT
CW	CHILLED WATER
DB	DRY BULB
DEG	DEGREES
DEMO	DEMOLITION
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EXHAUST AIR
EAG	EXHAUST AIR GRILLE
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EMCS	EMERGENCY MANAGEMENT AND CONTROL SYSTEM
ENT	ENTERING
ERV	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EWT	ENETERING WATER TEMPERATURE
EXH	EXHAUST
F	FAHRENHEIT
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FH	FIRE HYDRANT
FLEX	FLEXIBLE
FM	FLOW METER
FPM	FEET PER MINUTE
GAL	GALLONS
GH	GRAVITY HOOD
GM	GAS METER
GPM	GALLONS PER MINUTE
GUH	GAS UNIT HEATER
HP	HORSEPOWER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
ID	INSIDE DIAMETER/DIMENSION
IE	INVERT ELEVATION
IN	INCH
L	LOUVER
LAT	LEAVING AIR TEMPERATURE
LP	LOUVERED PENTHOUSE
LVL	LEVEL
LWT	LEAVING WATER TEMPERATURE
M	METER
MAX	MAXIMUM
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
N/A	NOT APPLICABLE
NG	NATURAL GAS
NTS	NOT TO SCALE
OA	OUTDOOR AIR
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
PD	PRESSURE DROP
PSI	POUNDS PER SQUARE INCH
R	RADIUS
RA	RETURN AIR
RAG	RETURN AIR GRILLE
REFRIG	REFRIGERANT
RH	RADIANT HEATER
RL	REFRIGERANT LIQUID LINE
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION LINE
SA	SUPPLY AIR
SAG	SUPPLY AIR GRILLE
SB	SECURITY BARS
SF	SUPPLY FAN
SPEC	SPECIFICATION
STD	STANDARD
T	THERMOMETER
TA	TRANSFER AIR
TBD	TO BE DETERMINED
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TYP	TYPICAL
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VRF	VARIABLE REFRIGERANT FLOW
W	WATT
WB	WET BULB
WMS	WIRE MESH SCREEN
WS	WASTE STACK

APPLICABLE CODES AND STANDARDS

CODE	
TITLE 24, PART 4, CALIFORNIA MECHANICAL CODE.	(CMC 2022)
TITLE 24, PART 6, CALIFORNIA ENERGY CODE.	(CEC 2022)
TITLE 24, PART 5, CALIFORNIA PLUMBING CODE.	(CPC 2022)

NOTE: ALL APPLICABLE BUILDING CODES AND STANDARDS ARE NOT SPECIFIED HEREIN.

DESIGN CONDITIONS FOR LOAD CALCULATIONS

SEASON	OUTDOOR DESIGN CONDITIONS	ELEV. (FT)	INDOOR CONDITIONS / ROOM TYPE		
			PAY BOOTH	WORK ROOM	RESTROOM
SUMMER (1.)	93.4 °F	470	78 °F	78 °F	78 °F
SUMMER (2.)	65.9 °F	470	78 °F	78 °F	78 °F
WINTER (99% DB)	31.5 °F	470	72 °F	72 °F	72 °F

NOTES:
1. BASED ON ASHRAE 0.4% COOLING DB VALUES.
2. BASED ON ASHRAE 0.4% COOLING MCWB VALUES.
3. BASED ON ASHRAE 99.6% HEATING DB VALUES.
4. DESIGN CONDITION DATA FROM ASHRAE WEATHER STATION 749179, HOLLISTER, CA.

TETRA TECH
ENGINEERING BUSINESS NO. 2429
www.tetratech.com
17885 VONKARMAN AVE, SUITE 500
IRVINE, CALIFORNIA 92614
TEL: (949) 809-5000

100% DESIGN

ISSUED FOR PERMIT REVIEW

MARK	DATE	DESCRIPTION	BY
	1/29/24	30% DESIGN	BMB
	4/12/24	60% DESIGN	BMB
	6/14/24	90% DESIGN	BMB
	8/2/24	100% DESIGN	BMB
	12/23/24	100% PERMIT REVIEW	BMB
	2/14/25	REVISED FOR PERMIT REVIEW	BMB

SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION

ABBREVIATIONS, LEGENDS, AND NOTES

PROJ:	200-42064-22005
DESN:	MJB
DRWN:	MJB
CHKD:	KPK

M-001

Copyright: Tetra Tech

2/12/2025 2:25:30 PM Autodesk Docs://213-42064-24001 BL Scale House/M-TRANSFER STATION-42064-22005_V2023.rvt

Bar measures 1 inch, otherwise drawing is not to scale

MECHANICAL GENERAL NOTES

GENERAL NOTES

1. THESE GENERAL NOTES APPLY TO ALL SHEETS. REFER TO INDIVIDUAL SHEETS FOR SHEET SPECIFIC NOTES.
2. CONTRACT DOCUMENT DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. DO NOT SCALE FOR MATERIAL QUANTITIES. ALL SCALING SHOULD BE REFERENCED TO ARCHITECTURAL PLANS ONLY.
3. ALL MECHANICAL WORK SHALL BE IN STRICT COMPLIANCE WITH THE LATEST APPLICABLE EDITION OF THE CALIFORNIA MECHANICAL AND PLUMBING CODES.
4. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ALL OTHER DISCIPLINES AND AS SHOWN ON OTHER CONTRACT DRAWINGS.
5. CONTRACTOR SHALL VISIT SITE AND VERIFY ALL EXISTING CONDITIONS AND CONNECTIONS TO EXISTING WORK PRIOR TO BIDDING AND CONSTRUCTION.
6. COORDINATE ALL CUTTING AND PATCHING WITH GENERAL CONTRACTOR AND OTHER DISCIPLINES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO THEIR WORK.
7. ALL ATTACHMENTS TO THE BUILDING STRUCTURE SHALL BE COORDINATED WITH THE STRUCTURAL DESIGN. ALL BRACING AND MOUNTING OF PIPES AND DUCTS SHALL MEET THE MINIMUM REQUIREMENTS OF THE MOST RECENT SMACNA HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE. CONTRACTOR SHALL MAINTAIN ONE COPY OF THIS MANUAL ON SITE AT ALL TIMES.
8. FOR SEISMIC ZONES REFER TO STRUCTURAL DESIGN FOR SEISMIC ATTACHMENT REQUIREMENTS PER THE BUILDING CODE. ALL SEISMIC RESTRAINTS OF PIPES AND DUCTS SHALL MEET THE MINIMUM REQUIREMENTS OF THE MOST RECENT SMACNA SEISMIC RESTRAINT MANUAL. CONTRACTOR SHALL MAINTAIN ONE COPY ON SITE AT ALL TIMES.
9. PROVIDE FLASHING AND COUNTERFLASHING FOR ALL PENETRATIONS THROUGH WALLS OR ROOF TO MAKE WATERPROOF INSTALLATION.
10. MAINTAIN A MINIMUM OF 6'-8" CLEARANCE TO UNDERSIDE OF PIPES, DUCTS, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS.
11. CONCRETE HOUSEKEEPING PADS FOR MECHANICAL EQUIPMENT SHALL HAVE A MINIMUM PAD THICKNESS OF 6 INCHES. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6 INCHES ON EACH SIDE. CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
12. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN THE DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
13. ALL TESTS SHALL BE COMPLETED BEFORE ANY MECHANICAL EQUIPMENT OR PIPING INSULATION IS APPLIED.
14. BALANCE AIR FLOW AT ALL AIR INLETS AND OUTLETS TO AIR QUANTITIES SHOWN. INSTALL TEST PLUGS WHERE NECESSARY. BALANCING CONTRACTOR SHALL BE INDEPENDENT OF THE INSTALLING CONTRACTORS AND CERTIFIED BY THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) OR ASSOCIATED AIR BALANCE COUNCIL (AABC).
15. ALL EXPOSED PIPE, PIPE SUPPORTS, DUCTWORK, UNFINISHED EQUIPMENT AND DUCT SUPPORTS SHALL MATCH ADJACENT FINISHES AS REQUIRED BY PAINTING SPECIFICATION AND ARCHITECTURAL DRAWINGS.
16. AT COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE COPIES OF BOUND OPERATIONS AND MAINTENANCE MANUALS.
17. REFER TO ARCHITECTURAL PLANS FOR DOOR SCHEDULE WITH DOOR GRILLES AND/OR UNDERCUT DOORS THAT ARE USED FOR TRANSFER AIR.
18. AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEETMETAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM.

EQUIPMENT NOTES

1. INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
2. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
3. IDENTIFY ALL NEW MECHANICAL EQUIPMENT WITH NAMEPLATES PERMANENTLY ENGRAVED PER SPECIFICATIONS.
4. MOTOR STARTERS AND VARIABLE FREQUENCY DRIVES, WHERE REQUIRED, SHALL BE PROVIDED AND MOUNTED BY THE MECHANICAL INSTALLER. CONDUIT AND WIRING SHALL BE PROVIDED BY ELECTRICAL INSTALLER.
5. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING UNITS AND FANS. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
6. ALL ROOF MOUNTED EQUIPMENT CURBS FOR EQUIPMENT PROVIDED BY THE MECHANICAL CONTRACTOR SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR.
7. EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTORS, CONTROLS AND LUBRICATION OF MOVING PARTS.

DUCT WORK NOTES

1. ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED WITH NOT LESS THAN THE AMOUNT OF INSULATION INDICATED IN ACCORDANCE WITH THE SPECIFICATIONS, APPLICABLE MECHANICAL CODE AND BUILDING ENERGY EFFICIENCY CODE. ALL DUCTWORK MOUNTED EXTERIOR TO THE BUILDING ENVELOPE SHALL BE SANDWICHED INSULATION WITH DOUBLE WALL SHEETMETAL CONSTRUCTION.
2. ALL DUCT HANGERS AND SUPPORTS SHALL COMPLY WITH THE MECHANICAL CODE AND THE "SMACNA HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE".
3. ALL SUPPLY, RETURN AND NON-LAB EXHAUST AIR DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH MECHANICAL CODE, SMACNA HVAC DUCT CONSTRUCTION STANDARDS AND ASHRAE STANDARDS. DUCT GAUGE AND CONSTRUCTION SHALL BE SELECTED AT 1.5 TIMES THE DESIGN FAN SUPPLY STATIC, OR GREATER, TO ACCOMMODATE SYSTEM PRESSURE TESTING REQUIREMENTS AND FAN DEADHEAD STATIC. INSTALL TURNING VANES OR RADIUSED ELBOWS AT EACH RECTANGULAR SUPPLY ELBOW AND WHERE SHOWN ON DRAWINGS AND SPECIFICATIONS.
4. DIMENSIONS AND SHAPE OF THE DUCT MAY BE ALTERED, AS LONG AS THE SAME AIR VELOCITY AND FLOW RATE ARE MAINTAINED, TO AVOID INTERFERENCES AND MAINTAIN ADEQUATE CLEARANCES.
5. ALL DUCTWORK DIMENSIONS SHOWN ON THE DRAWINGS ARE INTERNAL CLEAR DIMENSIONS.
6. SEAL ALL DUCT JOINTS, INCLUDING LONGITUDINAL JOINTS, WITH WATER BASED SEALANT. MAXIMUM ALLOWABLE DUCTWORK LEAKAGE SHALL NOT EXCEED 5% AND AS DEFINED ELSEWHERE IN DOCUMENTS.
7. INSTALL VOLUME DAMPERS WHERE SHOWN AND AS REQUIRED FOR PROPER BALANCING OF EACH DIFFUSER/GRILLE/REGISTER, INCLUDING DEVICES WITH OPPOSED BLADE DAMPERS. VOLUME DAMPERS SHALL BE MOUNTED IMMEDIATELY DOWNSTREAM OF BRANCH CONNECTIONS. PROVIDE EXTENDED REGULATORS, WITH CONCEALED COVER PLATES, TO OPERATE DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS.
8. OUTSIDE AIR FOR A HEATING OR COOLING SYSTEM SHALL NOT BE TAKEN FROM CLOSER THAN TEN (10) FEET FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN, UNLESS THE OUTLET IS THREE (3) FEET ABOVE THE OUTSIDE AIR INLET.
9. COORDINATE DIFFUSER, REGISTER, AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, LIGHTING, AND OTHER CEILING ITEMS AND MAKE MINOR DUCT MODIFICATIONS TO SUIT.
10. INDIVIDUAL RUNS OF FLEXIBLE DUCT SHALL NOT EXCEED FIVE (5) FEET. GRILLES, REGISTERS, AND DIFFUSERS CONNECTED BY FLEXIBLE DUCT SHALL BE SUPPORTED INDEPENDENTLY OF THE FLEXIBLE DUCT.
11. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST.
12. PROVIDE ACCESS DOORS IN DUCTWORK TO PROVIDE ACCESS FOR ALL FANS, SMOKE DETECTORS, FIRE DAMPERS, SMOKE DAMPERS, VOLUME DAMPERS, HUMIDIFIERS, COILS, AND OTHER ITEMS LOCATED IN THE DUCTWORK WHICH REQUIRE ADJUSTMENT AND MAINTENANCE.
13. EXTERIOR LOUVERS ARE INDICATED FOR INFORMATION ONLY. DETAILED DESCRIPTIONS ARE PROVIDED IN THE ARCHITECTURAL DOCUMENTS AND SHALL BE COORDINATED WITH GENERAL CONTRACTOR.
14. ALL PENETRATIONS THROUGH FIRE AND SMOKE RATED WALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC., SHALL BE FIRE AND SMOKE STOPPED WITH A UL APPROVED SEALANT SYSTEM.
15. MECHANICAL DUCT PENETRATIONS OF A NON-FIRE RESISTANCE RATED FLOOR ASSEMBLY SHALL BE PROTECTED WITH A SHAFT ASSEMBLY IN ACCORDANCE WITH THE BUILDING CODE. OR, WHEN THE DUCT CONNECTS NOT MORE THAN TWO STORIES, THE ANNULAR SPACE AROUND THE PENETRATING DUCT MUST BE MATERIAL THAT RESISTS THE FREE PASSAGE OF FLAME AND PRODUCTS OF CONSTRUCTION.
16. USE 45 DEG. TAPS FOR DUCT BRANCHES AND PROVIDE VOLUME DAMPER AT EACH BRANCH.

PIPING NOTES

1. CONDENSATE PIPING SHALL BE TYPE L OR M TUBING WITH WROUGHT COPPER FITTINGS. A PRIMARY DRAIN PAN SHALL BE PROVIDED WITH COOLING COIL AND EXTEND BEYOND THE LEAVING SIDE OF THE COIL AND UNDERNEATH THE COOLING COIL CONNECTIONS. PROVIDE SECONDARY DRAIN PIPE FOR EQUIPMENT ABOVE CEILINGS AND ROUTE TO A READILY VISIBLE LOCATION.
2. SUPPORT ALL PIPING SO THAT IT IS FIRMLY HELD IN PLACE BY APPROVED HANGERS AND SUPPORTS.

ANCHORAGE NOTES

1. ALL MECHANICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN CHAPTER 13 OF ASCE 7-16, AND IBC 2108 SECTION 1613 WITH CALIFORNIA AMENDMENTS.
2. THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL RESIST THE ASSIGNED FORCES BUT NEED NOT BE DETAILED ON THE PLANS. THE INSPECTOR SHALL VERIFY THAT THESE EQUIPMENT AND DISTRIBUTION SYSTEMS HAVE BEEN ANCHORED.
   - TEMPORARY OR MOVABLE EQUIPMENT WITH FLEXIBLE CONNECTION TO POWER OR UTILITIES.
   - EQUIPMENT WEIGHING 20 LB OR LESS OR IN CASE OF DISTRIBUTED SYSTEM 5 LB/FT OR LESS.
3. INSTALLATION OF THE COMPONENTS NOT SPECIFICALLY DETAILED ON THE PLANS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE AND/OR STRUCTURAL ENGINEER.
4. PROVIDE CALCULATIONS AND DETAILS FOR THE SUPPORTS, ATTACHMENTS, AND BRACING OF ALL PIPES, DUCTS, AND CONDUITS.
5. A LICENSED PROFESSIONAL ENGINEER SHALL VERIFY THE ADEQUACY OF STRUCTURE FOR SUPPORT AND ANCHORAGE OF THE EQUIPMENT.

CONTROL NOTES

1. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UPSTREAM AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER FOR RATED ACCURACY.
2. UNLESS OTHERWISE SHOWN, LOCATE ALL ROOM SENSORS AND THERMOSTATS SUCH THAT OPERABLE PARTS ARE NO HIGHER THAN 48" ABOVE FINISHED FLOOR.
3. COORDINATE ALL CONTROLS AND SEQUENCES OF OPERATION WITH THE BUILDING AUTOMATION SYSTEM (BAS). PROVIDE ALL DEVICES, CONTROLLERS, SENSORS, CONDUIT, WIRING AND LABOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM TO MEET THE OWNERS PROJECT REQUIREMENTS AND THE DESIGN INDICATED ON THESE DRAWINGS AND SPECIFICATIONS.
4. ALL CONTROL CONDUIT AND WIRING SHALL COMPLY WITH THE ELECTRICAL CODE AND THE SPECIFICATIONS.
5. THE CONTROLS CONTRACTOR IS RESPONSIBLE FOR POWER CIRCUITS AND WIRING TO ALL CONTROL PANELS.

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BEN LOMOND TRANSFER STATION

GENERAL NOTES

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DESN:	MJB
DRWN:	MJB
CHKD:	KPK

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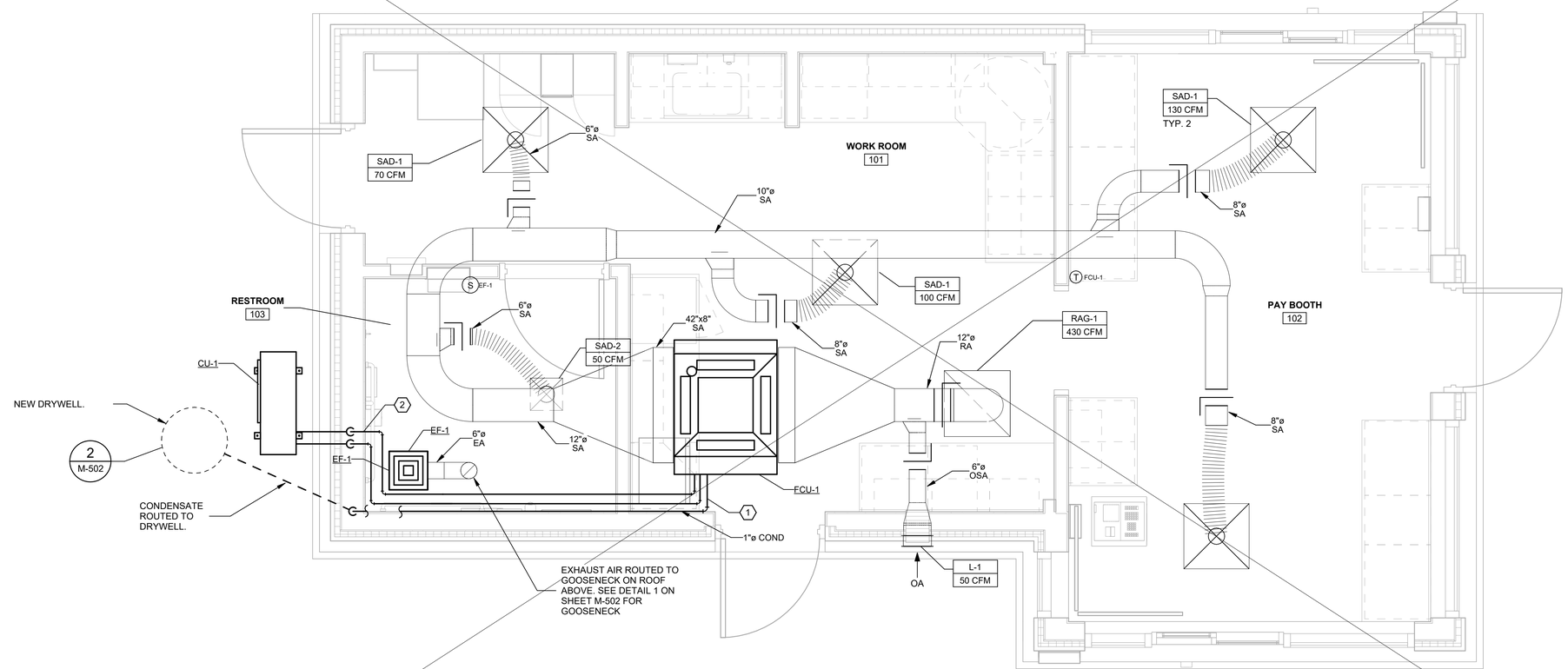
KEYNOTES

1 PROVIDE CONDENSATE CONNECTION TO UNIT ACCORDING TO MANUFACTURERS SPECIFICATIONS.

2 PROVIDE REFRIGERANT LINES ACCORDING TO MANUFACTURERS SPECIFICATIONS.



HVAC FLOOR PLAN

SCALE: 1/2" = 1'-0"

2' 0' 2' 4'

SCALE: 1/2" = 1'-0"

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NEW WORK PLAN

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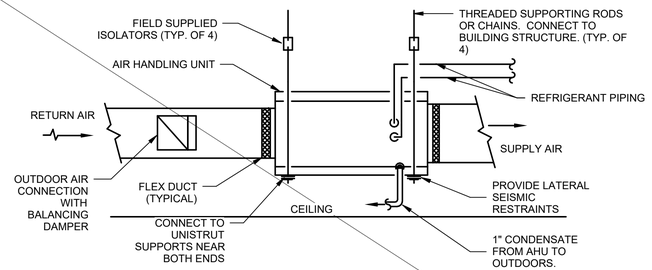
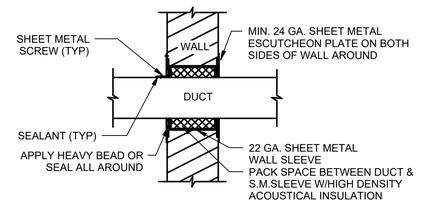


1 HORIZONTAL AIR HANDLING UNIT DETAIL

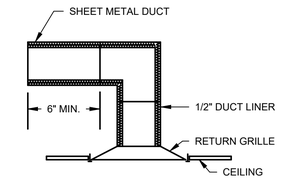
M-501 SCALE: N.T.S.



NOTE:
1. AT EXTERIOR WALLS, FLASH AND SEAL PENETRATION WEATHER TIGHT.
2. PROVIDE UL RATED PENETRATION THROUGH FIRE WALL.

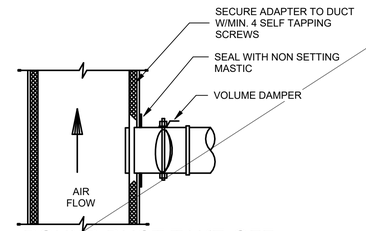
2 DUCT PENETRATION THROUGH WALL DETAIL

M-501 SCALE: NTS



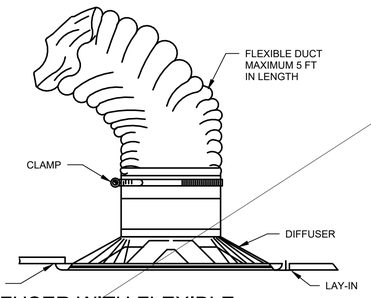
3 CEILING MOUNTED RETURN GRILLE DETAIL

M-501 SCALE: N.T.S.



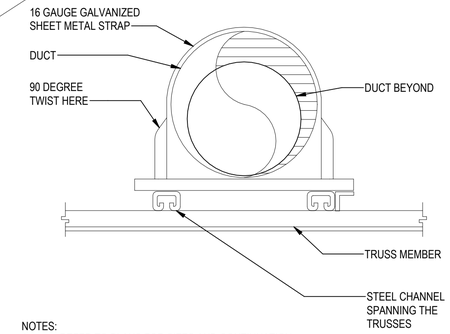
4 ROUND DUCT TAKE-OFF DETAIL

M-501 SCALE: N.T.S.



5 DIFFUSER WITH FLEXIBLE CONNECTION DETAIL

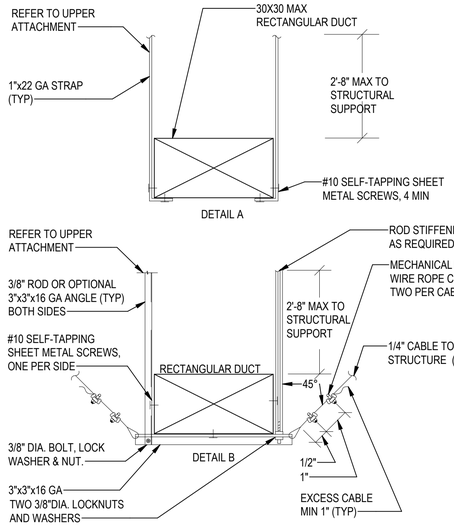
M-501 SCALE: N.T.S.



NOTES:
1. REFER TO PLANS FOR SIZES AND CONTINUATION.

6 ROUND DUCT TRUSS SUPPORT

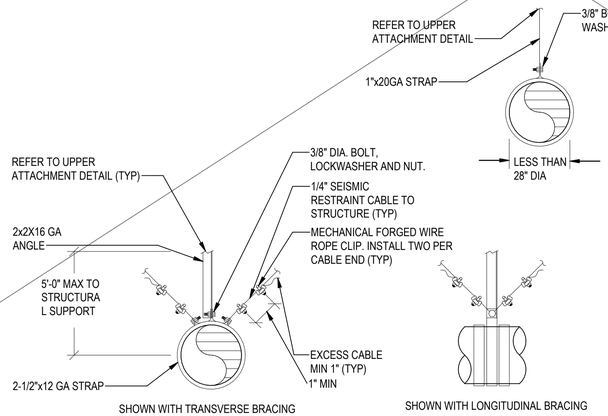
M-501 SCALE: NONE



NOTES:
1. MAXIMUM SPACING OF HANGERS SHALL BE 5'-0".
2. SEISMIC RESTRAINT CABLES MAY BE OMITTED WHERE:
   A. THERE IS A FLEXIBLE CONNECTION BETWEEN THE MECHANICAL EQUIPMENT AND
   B. RECTANGULAR DUCT IS LESS THAN 6 SQUARE FEET IN AREA OR
   C. DUCT OF ANY SIZE IS SUPPORTED WITHIN 12" OF STRUCTURE AS MEASURED FROM THE TOP OF DUCT TO THE BOTTOM OF STRUCTURE.
4. WHERE SEISMIC RESTRAINTS ARE REQUIRED,
   A. PROVIDE TRANSVERSE BRACING AT 30 FT AND
   B. LONGITUDINAL BRACING AT 60 FT.
5. VERTICAL HANGERS, DIAGONAL AND HORIZONTAL BRACES TO BE SIZED IN ACCORDANCE WITH SMACNA SEISMIC RESTRAINT MANUAL TABLE 5-1 AND 5-2.
6. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION NOT SHOWN HERE.
7. INSTALL ROD STIFFENER AS REQUIRED. REFER TO STRUCTURAL DESIGN FOR ADDITIONAL ATTACHMENT REQUIREMENTS. REFER TO HILTI ICC#ESR-1917 PRE-APPROVAL. DUCT HANGERS AND SUPPORTS SHALL COMPLY WITH PRE-APPROVED B-LINE "SEISMIC RESTRAINT SYSTEM".

7 RECTANGULAR DUCT SUPPORT

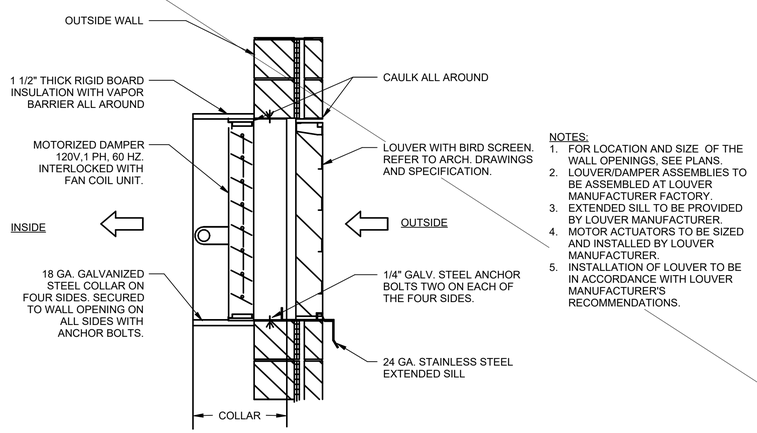
M-501 SCALE: NONE



NOTES:
1. HANGERS SHALL BE INSTALLED AT EVERY CHANGE OF DIRECTION AND NO MORE THAN 10'-0" APART.
2. PROVIDE A FLEXIBLE CONNECTION BETWEEN MECHANICAL EQUIPMENT AND DUCT.
3. STRAP MAY BE REDUCED TO 1"x22 GA FOR DUCT 24" DIA. AND LESS IN DIAMETER.
4. SEISMIC RESTRAINT CABLES MAY BE OMITTED WHERE DUCT IS SUPPORTED WITHIN 12" OF STRUCTURE AS MEASURED FROM THE TOP OF DUCT TO THE BOTTOM OF STRUCTURE.
5. VERTICAL HANGERS, DIAGONAL AND HORIZONTAL BRACES TO BE SIZED IN ACCORDANCE WITH SMACNA SEISMIC RESTRAINT MANUAL.
6. COORDINATE WITH STRUCTURAL ENGINEER FOR UPPER ATTACHMENTS.
7. WHERE SEISMIC CABLE RESTRAINTS ARE REQUIRED,
   A. PROVIDE SEISMIC CABLE TRANSVERSE BRACING AT 30 FT AND
   B. SEISMIC CABLE LONGITUDINAL BRACING AT 60 FT.
   C. SEISMIC CABLE RESTRAINTS ARE NOT REQUIRED AT EVERY HANGER LOCATION.

8 ROUND DUCT SUPPORT

M-501 SCALE: NONE



NOTES:
1. FOR LOCATION AND SIZE OF THE WALL OPENINGS, SEE PLANS.
2. LOUVER/DAMPER ASSEMBLIES TO BE ASSEMBLED AT LOUVER MANUFACTURER FACTORY.
3. EXTENDED SILL TO BE PROVIDED BY LOUVER MANUFACTURER.
4. MOTOR ACTUATORS TO BE SIZED AND INSTALLED BY LOUVER MANUFACTURER.
5. INSTALLATION OF LOUVER TO BE IN ACCORDANCE WITH LOUVER MANUFACTURER'S RECOMMENDATIONS.

9 LOUVER/DAMPER DETAIL

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MECHANICAL DETAILS

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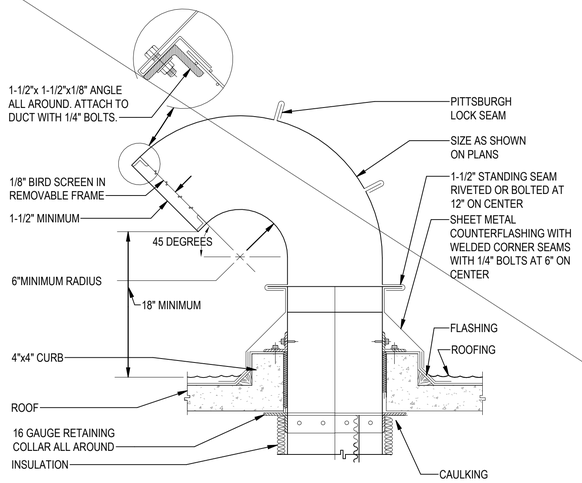
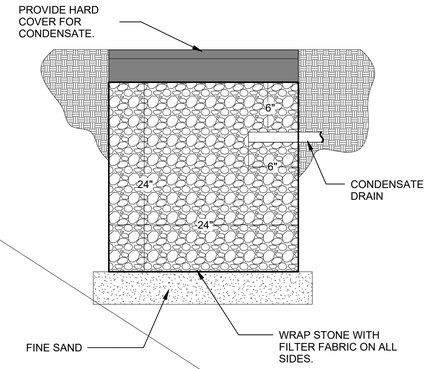


NOTES:
1. COORDINATE ROOF OPENING, BLOCKING, CURBING, CANT STRIP & FLASHING WITH ROOFING INSTALLER. ROOF PENETRATIONS SHALL NOT VOID ROOF WARRANTY.
2. PROVIDE PACKING AND SEALING MATERIALS AS REQUIRED BY ROOF RATING.
3. ALL SIZING, LOCATION, ANCHORING AND SEISMIC RESTRAINTS SHALL BE COORDINATED WITH STRUCTURAL DESIGN.

1 GOOSENECK AIR EXHAUST
M-502 SCALE: NONE



2 CONDENSATE DRYWELL DETAIL
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BEN LOMOND TRANSFER STATION

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FAN SCHEDULE

MARK	AREA SERVED	FAN					ELECTRICAL						MOUNTING TYPE	WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
		AIRFLOW (CFM)	ESP (IN-WC)	FAN RPM	WHEEL TYPE	DRIVE TYPE	HP	BHP	VOLTS / PH / HZ	MCA	MOCP	CONTROL					
EF-1	103 RESTROOM	70	0.3	900	CENTRIFUGAL	DIRECT	1/30	0.01	120/1/60	0.2	5.0	LIGHT SWITCH	CEILING	12	GREENHECK	SP-A90	

SPLIT-SYSTEM AIR HANDLING UNIT (1-5) TON SCHEDULE

MARK	LOCATION	FAN				TYPE	TOTAL CAP (MBH)	SENS CAP (MBH)	COOLING COIL			HEAT PUMP HEATING		FILTER	ELECTRICAL		WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
		AIRFLOW (CFM)		ESP (IN-WC)	HP				EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	OUTPUT (MBH)	DESIGN AMBIENT (°F)	MERV RATING	VOLT / PH / HZ	MCA				
		SA	OA																	
FCU-1	WORKROOM	480	35	0.6	1/6	R410A	24,000	21,000	79.9	59.0	53.2	18,300	31.5	13	208/1/60	2.28	80	TRANE	TPEADA0241AA80A	1,2

1. INDOOR UNIT POWERED BY OUTDOOR UNIT.
2. INCLUDE FACTORY POWERED CONDENSATE PUMP ON INDOOR UNIT.

SPLIT SYSTEM AIR COOLED CONDENSING UNIT SCHEDULE

MARK	PAIRED UNIT	TONS	SEER	MINIMUM RATED DB (°F)	COP @ DEG (°F)	COMPRESSOR		ELECTRICAL			WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
						TYPE	REFRIG	VOLT / PH / HZ	MCA	MOCP				
CU-1	FCU-1	2	19.6	17	2.2 @ 17 DEG	TWIN ROTARY	R410A	208/1/60	19.0	26.0	179	TRANE	TRUZA0241HA70NA	

LOUVER SCHEDULE

MARK	SERVICE	SIZE (IN)			PERFORMANCE CRITERIA				MATERIAL	MANUFACTURER	MODEL	NOTES
		HEIGHT	WIDTH	DEPTH	AIRFLOW (CFM)	VELOCITY (FPM)	FREE AREA (FT²)	PRESSURE DROP (IN WG)				
L-1	OUTSIDE AIR FOR FCU UNIT.	8	10	2	50	461	0.1	0.1	ALUMINUM	GREENHECK	ESD-202	1

NOTES:
1. PROVIDE KYNAR COATING ON LOUVER TO MATCH THE WALL PANEL MATERIAL. COLOR TO BE SELECTED BY ARCHITECT.

DIFFUSERS, GRILLES, & REGISTER SCHEDULE

TAG	DESCRIPTION	PANEL SIZE (IN)	MAX S.P.D (IN WG)	MAX NC	MANUFACTURER	MODEL	NOTES
RAG-1	RETURN AIR GRILL	24 X 24	0.1	30	GREENHECK	XG-CC5-BP	
SAD-1	SUPPLY AIR DIFUSER	24 X 24	0.1	30	GREENHECK	XG-5800	
SAD-2	SUPPLY AIR DIFUSER	12 X 12	0.1	30	GREENHECK	XG-5800	

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SANTA CRUZ COUNTY: DPW

BEN LOMOND TRANSFER STATION

MECHANICAL SCHEDULES

PROJ:	200-42064-22005
DESN:	MJB
DRWN:	MJB
CHKD:	KPK

M-601

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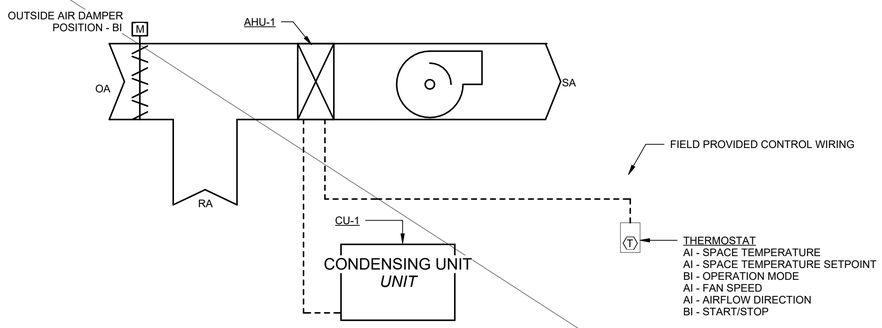


MINI-SPLIT SYSTEM SEQUENCE OF OPERATIONS (AC-1 & CU-1)

THE SPLIT SYSTEM HEAT PUMP SHALL MONITOR SPACE TEMPERATURE THROUGH THE SPACE THERMOSTAT. THE UNIT SHALL PROVIDE COOLING TO THE SPACE AND AUTOMATICALLY SWITCH OVER TO HEATING BASED ON THE COOLING AND HEATING SET POINTS AND THE SPACE TEMPERATURE. THE OUTDOOR UNIT SHALL MODULATE THE COMPRESSOR IN ACCORDANCE WITH MANUFACTURER SEQUENCES TO MAINTAIN SPACE TEMPERATURE. IF SPACE TEMPERATURE IS SATISFIED AND THE COMPRESSOR IS RUNNING AT MINIMUM SPEED BOTH THE INDOOR AND OUTDOOR UNIT SHALL BE OFF. THE OUTSIDE AIR MOTORIZED DAMPER SHALL OPEN WHEN SYSTEM IS ON AND SHALL CLOSE WHEN SYSTEM IS OFF.

THE THERMOSTAT SHALL HAVE THE FOLLOWING MINIMUM FEATURES/FUNCTIONS:

OPERATION:
- START/STOP
- OPERATION MODE
- SPACE TEMPERATURE SET POINT (85°F)
- FAN SPEED (HI-MED-LO)
- AIRFLOW DIRECTION
- AUXILIARY CONTACT FOR DAMPER OPERATION

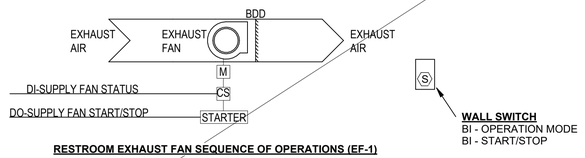
MONITORING:
- STATUS
- OPERATION MODE
- TEMPERATURE SETTING
- FAN SPEED
- AIRFLOW DIRECTION

SCHEDULING:
- ONE TIME TIMER
- DAILY TIMER

FEATURES:
- 4-WIRE VINYL SHEATHED CABLE
- LCD DISPLAY
- 2-HR BATTERY BACKUP

1 SPLIT SYSTEM AC UNIT CONTROLS

M-901 SCALE: N.T.S



RESTROOM EXHAUST FAN SEQUENCE OF OPERATIONS (EF-1)

THE EXHAUST FAN EF-1 SHALL PROVIDE VENTILATION TO THE RESTROOM AND BE CONTROLLED BY A WALL SWITCH THAT WILL BE INTERLOCKED WITH THE LIGHTS. WHEN AN OCCUPANT TURNS ON THE LIGHTS TO PACE, THE EXHAUST FAN SHALL TURN ON.

NOTES:
1. REFER TO PLANS FOR DUCTWORK ARRANGEMENT.
2. REFER TO SEQUENCE OF OPERATION FOR ADDITIONAL REQUIREMENTS.

2 TOILET EXHAUST FAN-CONTROL

M-901 SCALE: NONE

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BEN LOMOND TRANSFER STATION

MECHNICAL CONTROLS

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PLUMBING LEGEND

- SANITARY SEWER PIPING
- COLD WATER PIPING
- HOT WATER PIPING
- HOT WATER RECIRCULATION PIPING
- VENT PIPING
- STORM PIPING
- HIDDEN / UNDERGROUND PIPING

- VENT THROUGH ROOF
- CLEAN OUT, EXPOSED
- CLEAN OUT
- DOUBLE YARD CLEANOUT
- FLOOR DRAIN
- TPL — TRAP PRIMER LINE
- HB — HOSE BIBB W/INTEGRAL VACUUM BREAKER (INTERIOR SURFACE)
- WH — WALL HYDRANT W/INTEGRAL VACUUM BREAKER (EXTERIOR SURFACE)
- PIPE CAP
- PIPE CONNECTION, BOTTOM
- PIPE CONNECTION, TOP
- PIPE ELBOW, TURNED UP
- PIPE ELBOW, TURNED DOWN
- PIPE TEE
- ANCHOR, INTERMEDIATE
- BUTTERFLY VALVE
- GATE VALVE
- BALL VALVE
- CHECK VALVE
- STRAINER VALVE
- STRAINER (BLOW-OFF)
- GAS COCK/GAS STOP
- THERMOMETER
- BALANCING VALVE
- THERMOSTATIC MIXING VALVE
- SOLENOID VALVE
- RELIEF VALVE
- WATER HAMMER ARRESTER/SHOCK ABSORBER
- UNION
- PUMP (SCHEMATIC)
- W — WATER METER
- BFP — BACK FLOW PREVENTER
- M — GAS METER
- Ø — DIAMETER

- SK - # — FIXTURE TAG
- LIMIT OF DEMOLITION
- CONNECT TO EXISTING
- KEYED NOTE
- 3/4"ø HW — PIPE SIZE AND SYSTEM TAG
- AREA OUT OF SCOPE
- AREA OF DEMOLITION

NOTES:

1. THIS LEGEND IS FOR REFERENCE ONLY.
2. ALL SYMBOLS WITHIN THIS LEGEND MAY NOT APPLY TO THIS PROJECT.

PLUMBING ABBREVIATIONS

(D)	DEMOLITION
(E)	EXISTING
(R)	RELOCATED
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
APPROX	APPROXIMATE
BFF	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
CA	COMPRESSED AIR
CAP	CAPACITY
CO	CLEAN OUT
COND	CONDENSATE
CONN	CONNECTION
CONT	CONTINUATION
D	DRAIN
DCW	DOMESTIC COLD WATER
DEG	DEGREES
DEMO	DEMOLITION
DIA	DIAMETER
DN	DOWN
DS	DOWNSPOUT
DWG	DRAWING
EA	EACH
EEW	EMERGENCY EYE/FACE WASH
ENT	ENTERING
ESS	EMERGENCY SAFETY SHOWER
ET	EXPANSION TANK
F	FAHRENHEIT
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FH	FIRE HYDRANT
FM	FLOW METER
FPH	FREEZE PROOF HYDRANT
FPM	FEET PER MINUTE
GAL	GALLONS
GD	GARBAGE DISPOSAL
GM	GAS METER
GPM	GALLONS PER MINUTE
GWH	GAS WATER HEATER
HB	HOSE BIBB
HD	HEAD
HO	HUB OUTLET
HP	HORSEPOWER
HW	HOT WATER
HWR	HOT WATER RETURN
ID	INSIDE DIAMETER/DIMENSION
IE	INVERT ELEVATION
IMVB	ICE MAKER VALVE BOX
IN	INCH
IW	INDUSTRIAL WASTE
IWH	INSTANTANEOUS WATER HEATER
LAV	LAVATORY
M	METER
MAX	MAXIMUM
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
N/A	NOT APPLICABLE
NG	NATURAL GAS
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PCV	PRESSURE CONTROL VALVE
PD	PRESSURE DROP
PG	PRESSURE GAUGE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PW	POTABLE WATER
R	RADIUS
RD	ROOF DRAIN
RP	RECIRCULATION PUMP
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
SAN	SANITARY SEWER PIPING
SK	SINK
SP	SUMP PUMP
SPEC	SPECIFICATION
STD	STANDARD
STO	STORM
SV	SHUTOFF VALVE
SW	SERVICE WATER
TBD	TO BE DETERMINED
TCV	TEMPERING VALVE
TD	TRENCH DRAIN
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER
TW	TEPID WATER
TYP	TYPICAL
UR	URINAL
V	VENT
VIF	VERIFY IN FIELD
VS	VENT STACK
VTR	VENT THRU ROOF
WB	WASHER BOX
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

PLUMBING GENERAL NOTES

APPLICABLE CODES

APPLICABLE CODES AND STANDARDS	
CODE	
TITLE 24, PART 4, CALIFORNIA MECHANICAL CODE.	(CMC 2022)
TITLE 24, PART 6, CALIFORNIA ENERGY CODE.	(CEC 2022)
TITLE 24, PART 5, CALIFORNIA PLUMBING CODE.	(CPC 2022)

NOTE: ALL APPLICABLE BUILDING CODES AND STANDARDS ARE NOT SPECIFIED HEREIN.

GENERAL NOTES

1. THESE GENERAL NOTES APPLY TO ALL SHEETS. REFER TO INDIVIDUAL SHEETS FOR SHEET NOTES.
2. CONTRACT DOCUMENT DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. DO NOT SCALE FOR MATERIAL QUANTITIES. ALL SCALING SHOULD BE REFERENCED TO ARCHITECTURAL PLANS ONLY.
3. ALL EQUIPMENT AND PIPING SHALL BE INSTALLED IN COMPLIANCE WITH THE CODES LISTED IN THE TABLE ABOVE.
4. ALL INTERIOR FLOOR DRAINS AND OPEN RECEPTACLES WITH TRAPS SHALL BE PROTECTED BY A TRAP PRIMER.
5. WATER LINES SHALL NOT BE ROUTED ABOVE ANY ELECTRICAL ROOMS, ELECTRICAL PANELS, OR TELEPHONE ROOMS.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH OTHER TRADES TO MINIMIZE SPATIAL CONFLICTS.
7. PROVIDE ACCESS PANELS WITH SQUARE HINGED, LOCKING DOORS FOR ALL CONCEALED VALVES, SHOCK ABSORBERS AND TRAP PRIMERS.
8. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION BEGINS.
9. PROVIDE ISOLATION VALVES AT ALL PIPE CONNECTIONS TO EQUIPMENT.
10. PROVIDE WALL PIPE PENETRATIONS AS REQUIRED WHERE PIPE ENTERS BUILDING. SLEEVE AND SEAL OPENING WITH CAULKING AND ESCUTCHEON FOR A WATER-TIGHT INSTALLATION.

EQUIPMENT NOTES

1. INSTALL ALL PLUMBING EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
2. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
3. IDENTIFY ALL NEW PLUMBING EQUIPMENT WITH NAMEPLATES PERMANENTLY ENGRAVED WITH 1/2 INCH HIGH WHITE LETTERS ON A BLACK BACKGROUND. IDENTIFY EQUIPMENT WITH SYMBOLS SHOWN ON THE PLANS AND AREA SERVED DESCRIPTION.
4. PROVIDE FLEXIBLE PIPING CONNECTIONS TO ALL OPERATING EQUIPMENT, UNO.
5. EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF PARTS, CONTROLS AND LUBRICATION OF MOVING PARTS.

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Reviewed for Code Compliance
By: JEH
Date: 08/08/2025
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Bldg. Permits: B-251911, 12 & 13

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BEN LOMOND TRANSFER STATION
ABBREVIATIONS, LEGEND, & NOTES

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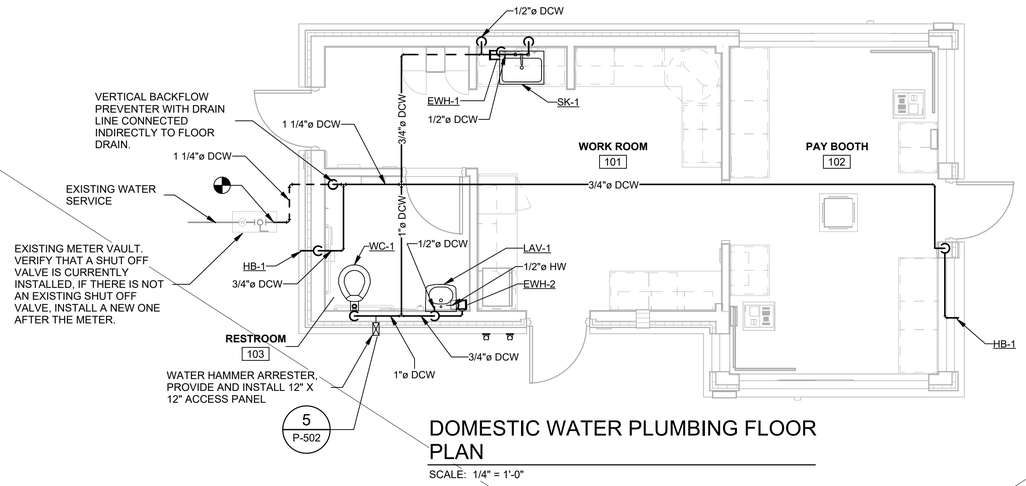
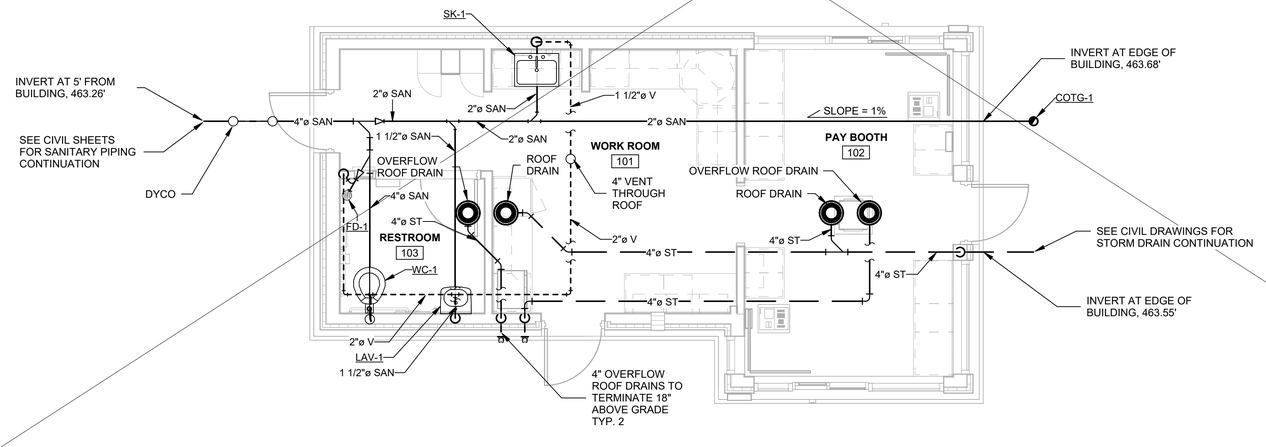


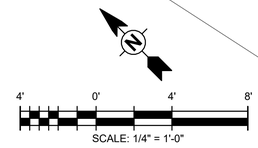
DOMESTIC WATER PLUMBING FLOOR PLAN

SCALE: 1/4" = 1'-0"



SANITARY PLUMBING FLOOR PLAN

SCALE: 1/4" = 1'-0"



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BEN LOMOND TRANSFER STATION

PLUMBING FLOOR PLANS

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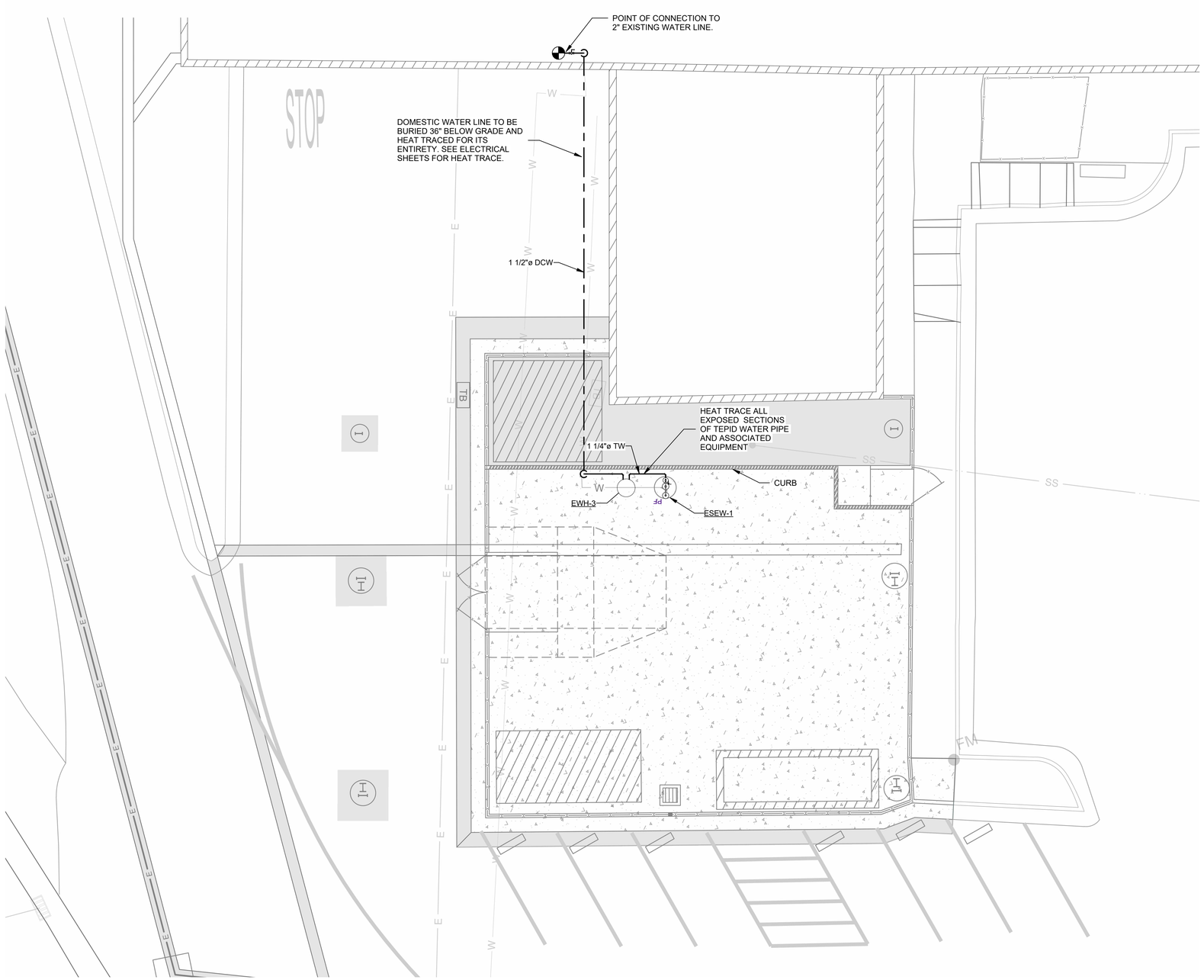

1 P-202 CONTAINMENT BUILDING EEWS PIPING
SCALE: 1/8" = 1'-0"

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8' 0' 8' 16'
SCALE: 1/8" = 1'-0"

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CONTAINMENT BUILDING PLUMBING PLAN

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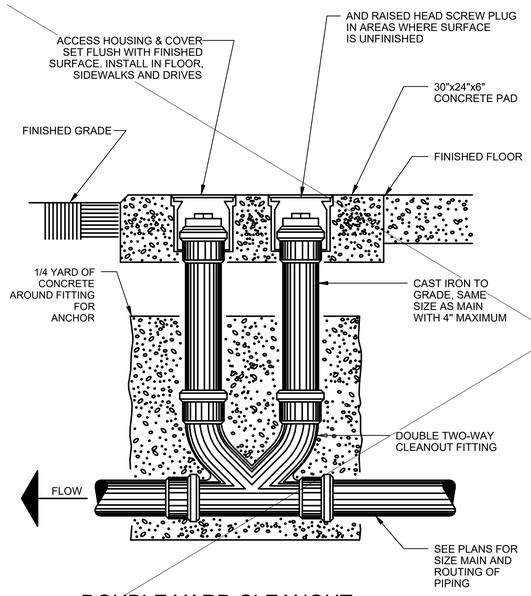
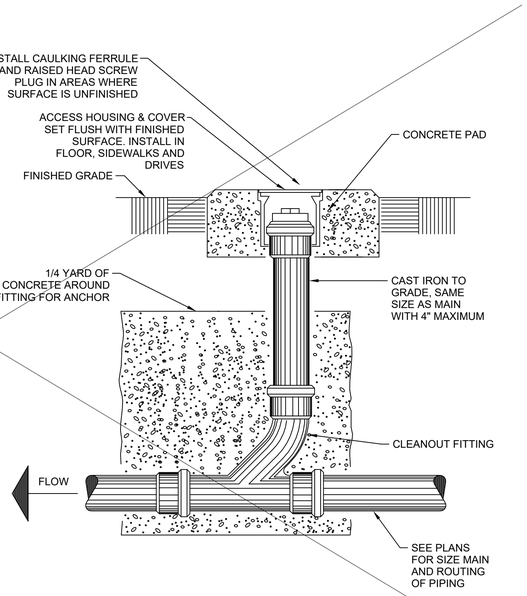
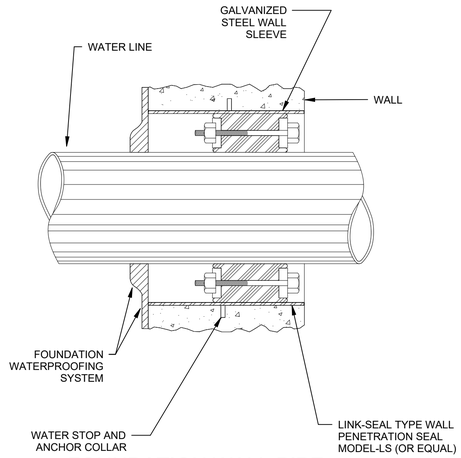


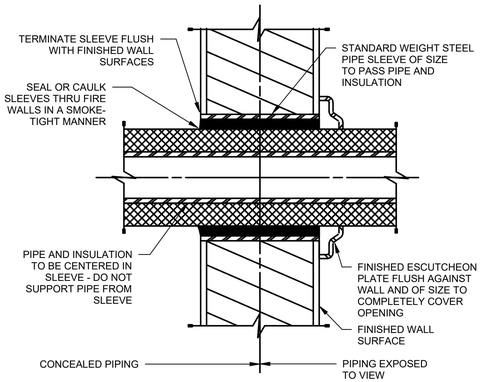
1 P-501 DOUBLE YARD CLEANOUT DETAIL (DYCO)
SCALE: NTS



2 P-501 EXTERIOR CLEANOUT DETAIL
SCALE: NTS



3 P-501 FOUNDATION WALL PIPE PENETRATION
SCALE: N.T.S.



NOTE:
PROVIDE UL RATED ASSEMBLIES FOR ALL WALLS WITH FIRE RATINGS.

4 P-501 PIPE SLEEVE THRU INTERIOR WALL
SCALE: N.T.S.

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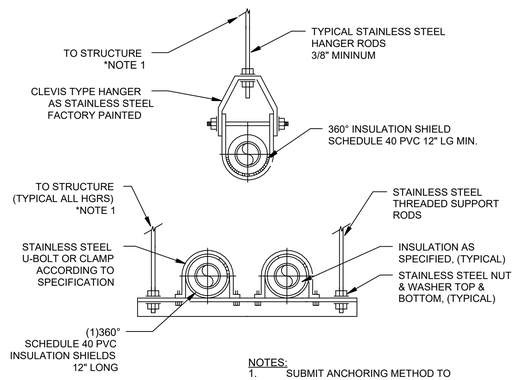
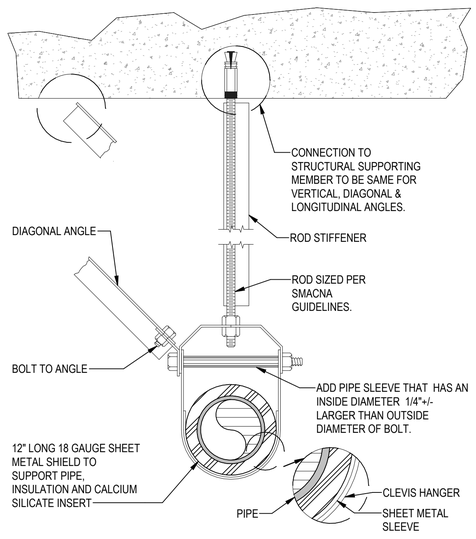


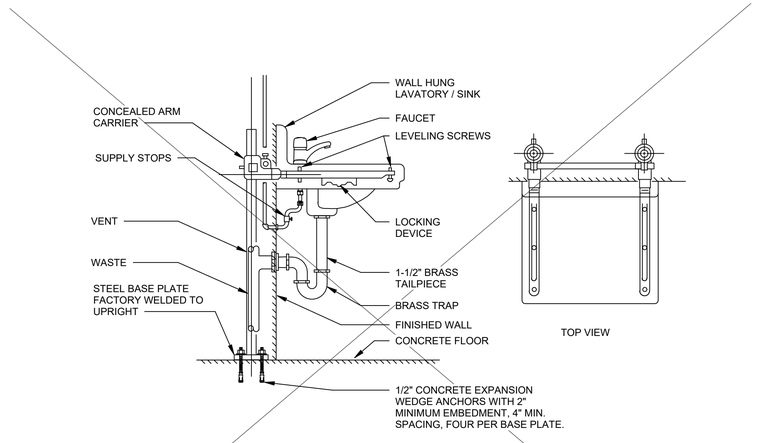
NOTES:
1. SUBMIT ANCHORING METHOD TO STRUCTURAL ENGINEER FOR APPROVAL.
2. SEE SPECIFICATION FOR PAINT REQUIREMENTS ON SUPPORTS.

5 P-501 PIPE HANGER DETAIL
SCALE: NTS



NOTES:
1. REFER TO SMACNA SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS.
2. PIPING SUPPORTS SHALL MEET ALL STATE AND LOCAL SEISMIC RESTRAINT REQUIREMENTS.
3. COORDINATE ANCHORAGE REQUIREMENTS WITH STRUCTURAL DESIGN.
4. PIPE(S) SHALL BE INSTALLED AS HIGH AS POSSIBLE ABOVE FLOOR TO ALLOW CLEARANCE FOR WORK OF OTHER TRADES.
5. PROVIDE LATERAL RESTRAINT ACCORDING TO SMACNA GUIDLINES

6 P-501 TRANSVERSE BRACING
SCALE: NONE



SIDE VIEW

NOTES:
1. REFER TO PLANS FOR SIZES AND CONTINUATION.
2. COORDINATE WATER, WASTE, VENT AND POWER WITH MANUFACTURER REQUIREMENTS.

7 P-501 LAVATORY-WALL HUNG
SCALE: N.T.S.

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M 36190
MECHANICAL
STATE OF CALIFORNIA

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SANTA CRUZ COUNTY: DPW
BEN LOMOND TRANSFER STATION
DETAILS

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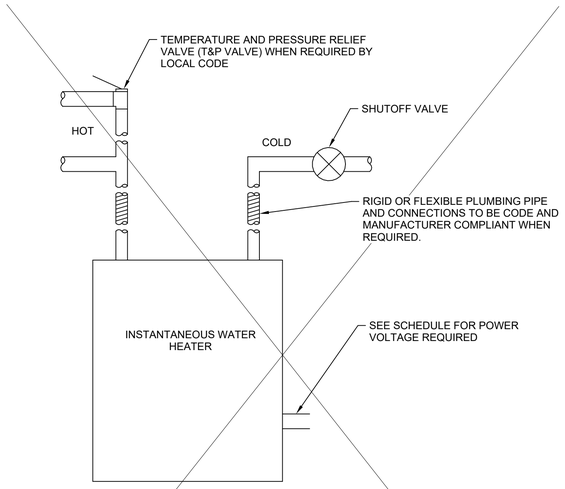
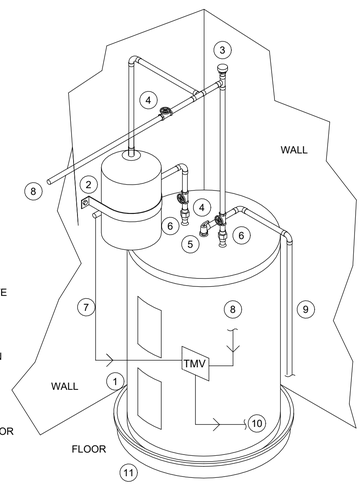


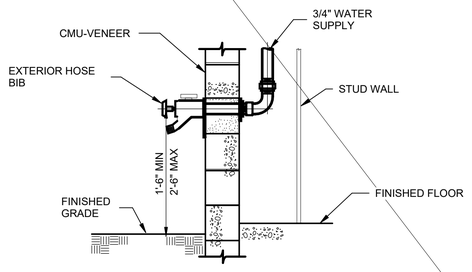
NOTES:
1. WATER HEATER MUST BE INSTALLED TO CONFORM WITH CURRENT NATIONAL ELECTRIC CODE, AND ANY APPLICABLE LOCAL PLUMBING, ELECTRICAL, HEATING AND AIR CONDITIONING CODES.
2. FOLLOW MANUFACTURER INSTALLATION INSTRUCTIONS

1 P-502 INSTANTANEOUS WATER HEATER DETAIL (EWH-1&2)
SCALE: NTS

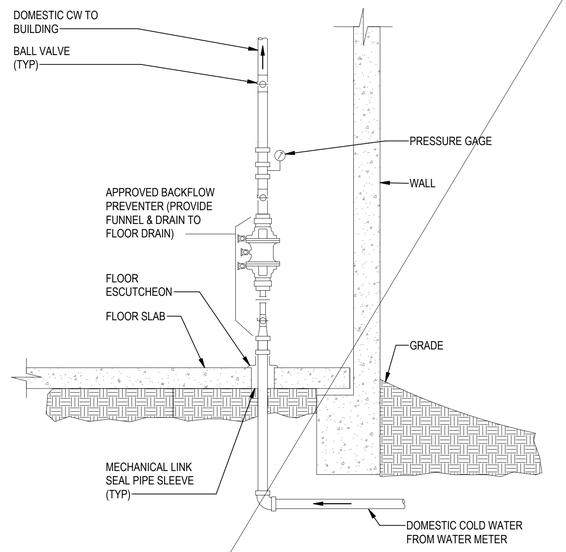


KEYED NOTES:
1. WATER HEATER
2. EXPANSION TANK (STRAP TO WALL)
3. VACUUM RELIEF VALVE
4. SHUTOFF VALVE
5. T&P RELIEF VALVE
6. GROUND JOINT UNION
7. HOT WATER LINE
8. COLD WATER LINE
9. ROUTE T&P RELIEF LINE TO BLDG EXTERIOR
10. TEPID WATER LINE
11. DRAIN PAN

2 P-502 ELECTRIC WATER HEATER DETAIL (EWH-3)
SCALE: NTS

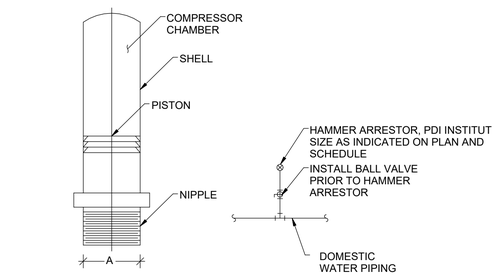


4 P-502 HOSE BIB DETAIL
SCALE: 1/4" = 1'-0"



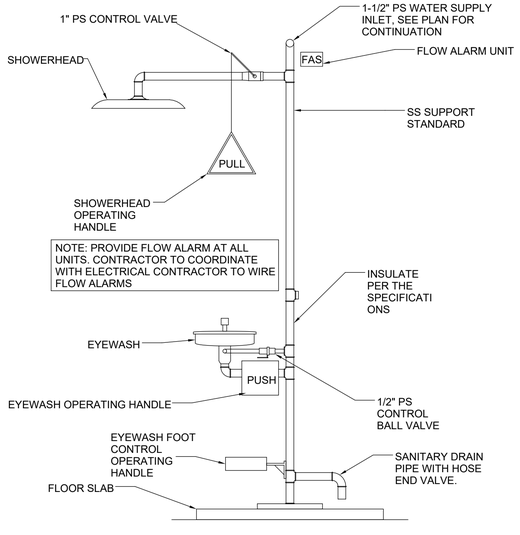
NOTES:
1. PIPE SHALL BE TREATED AS REQUIRED BY CODE FOR UNDERGROUND INSTALLATION.
2. BACKFLOW PREVENTER COULD ALSO BE INSTALLED OUTSIDE OF BUILDING.

3 P-502 BACKFLOW PREVENTER
SCALE: NONE



P.D.I. SYMBOL	FIXTURE UNIT RATING	A SIZE
A	1-11	1/2"
B	12-32	3/4"
C	33-60	1"
D	61-113	1-1/4"
E	114-154	1-1/2"
F	155-330	2"

5 P-502 WATER HAMMER ARRESTOR DETAIL
SCALE: 12" = 1'-0"



6 P-502 EMERGENCY SHOWER AND EYEWASH DETAIL
SCALE: N.T.S.

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By: JEH
Date: 08/08/2025
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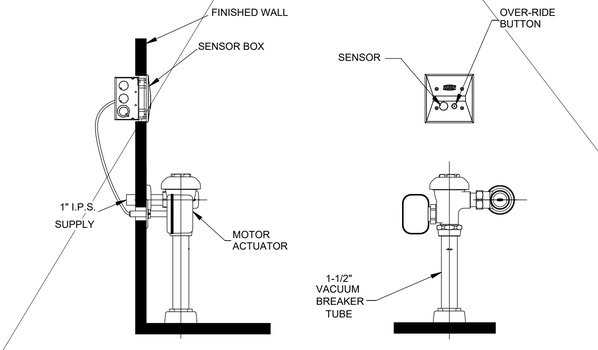

7 P-502 FLUSH VALVE DETAIL
SCALE: N.T.S.

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WATER HEATER SCHEDULE

Mark	DESCRIPTION	VOLTS / PH / HZ	KW	TOTAL AMPS	MOCP	MAXIMUM FLOW	MINIMUM FLOW	TEMP RISE (DEG F) @ 1.0 GPM	MANUFACTURER	MODEL	NOTES
EWH-1	ELECTRIC TANKLESS WATER HEATER	208/1/60	5.8	28	30	4.8 GPM	0.3 GPM	40	RHEEM	RTEX-08	
EWH-2	ELECTRIC TANKLESS WATER HEATER	120/1/60	3.5	29	30	4.8 GPM	0.3 GPM	24	RHEEM	RTEX-04	
EWH-3	ELECTRIC EMERGENCY SHOWER WATER HEATER	208/3/60	3	8	15	25 GPM	20 GPM	-	HUBBEL	EMV-120	

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	CONNECTION SIZE (IN)				NOTES
				CW	HW	WASTE	VENT	
COTG-1	FLOOR CLEANOUT	ZURN	Z1400	-	-	2	-	-
ESEW-1	EMERGENCY SHOWER EYEWASH	HAWS	8315CTFP	-	1-1/4	-	-	7
FD-1	FLOOR DRAIN	JR SMITH	3510	-	-	3	-	1
HB-1	HOSE BIB	ZURN	Z1345-06	3/4	-	-	-	5
LAV-1	LAVATORY	ZURN	Z5351	1/2	1/2	1 1/2	1 1/2	2, 6
SK-1	SINK	ELKAY	DLRS332210	1/2	1/2	2	1 1/2	3
WC-1	FLOOR MOUNTED WATER CLOSET	ZURN	Z5655	1"	-	4	2	4

NOTES:
1. PROVIDE WITH SURE SEAL TYPE TRAP GUARD, NO HUB OUTLET.
2. PROVIDE WITH ADA COMPLIANT P-TRAP, FAUCET HOLES ON 4 INCH CENTERS, Z8746-PC GRID STRAINER, Z810 STYLE FAUCET, AND Z1231 WALL CARRIER.
3. PROVIDE WITH P-TRAP, 1 HOLE KITCHEN FAUCET W/ PULL OUT SPRAY, STAINLESS STEEL STRAINER.
4. PROVIDE WITH ZEMS6000AV FLUSH VALVE.
5. PROVIDE VACUUM BREAKER.
6. PROVIDE EXPOSED PIPING WITH INSULATION TO MAKE THE FIXTURE ADA COMPLIANT.
7. UNIT TO BE PROVIDED WITH INTEGRAL 120 VOLT HEAT TRACING

BACKFLOW PREVENTER SCHEDULE

Mark	LOCATION	MATERIAL	SIZE	WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
BFP-1	RESTROOM	BRONZE	1-1/4"	12	WATTS	007	1

NOTES:
1. BACKFLOW PREVENTER TO BE CAPABLE OF OPERATING IN VERTICAL POSITION

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BEN LOMOND TRANSFER STATION

PLUMBING SCHEDULES

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County of Santa Cruz
Community Development & Infrastructure
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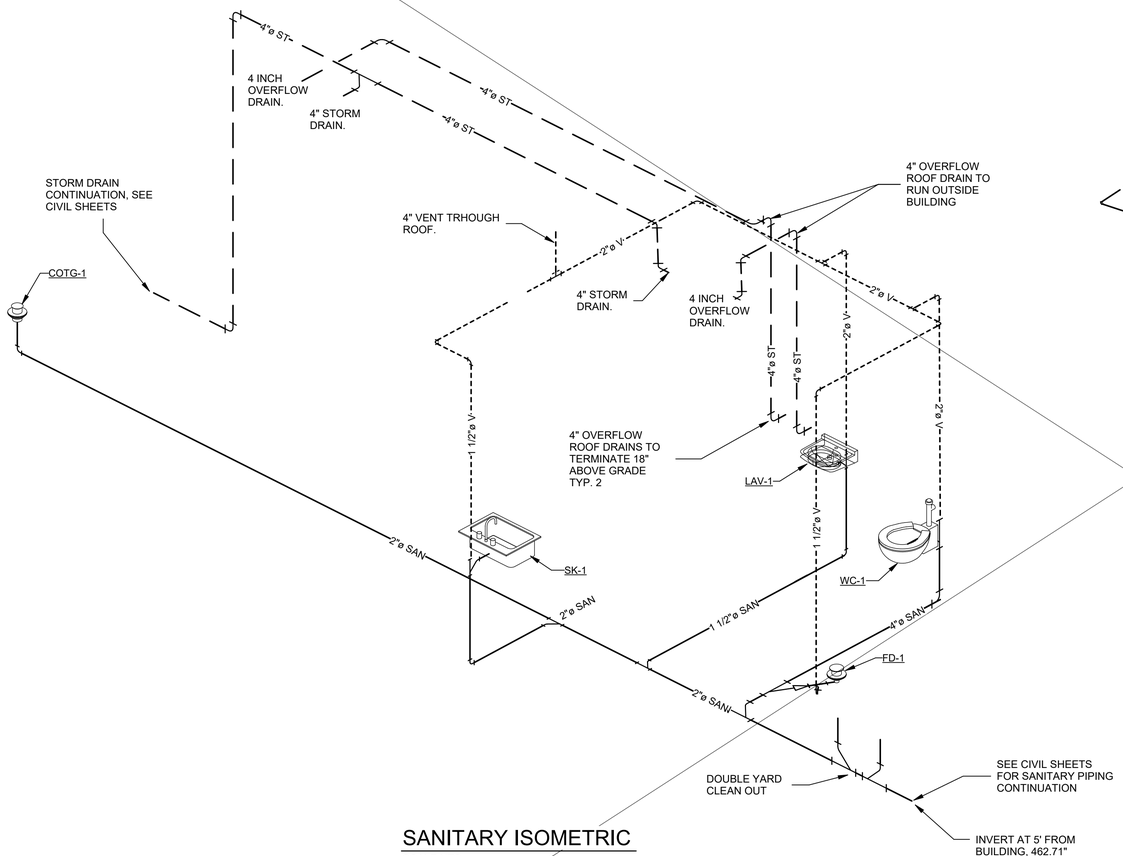
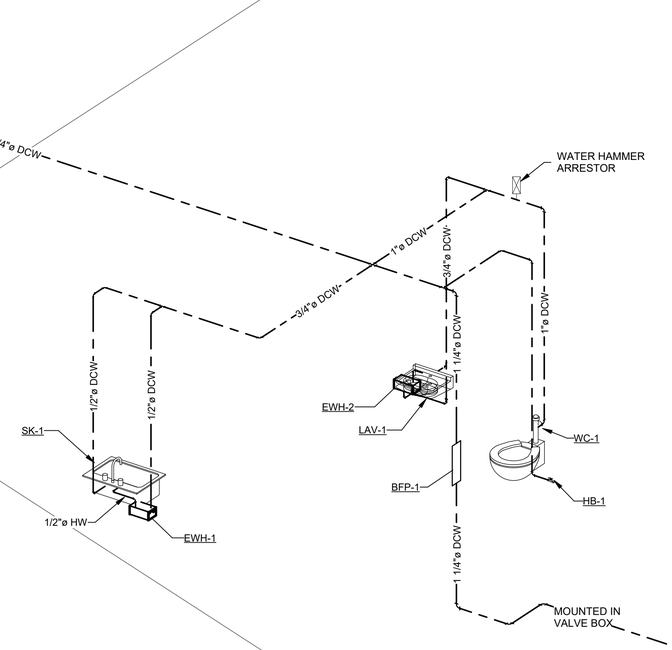


SANITARY ISOMETRIC

SCALE:NTS



PRESSURE PIPING ISOMETRIC

SCALE: NTS

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ISOMETRICS

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SPECIFICATIONS

STRUCTURAL STEEL FRAMING - SECTION 05 12 00

ALL WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION AND AISC 360.

STEEL MEMBERS ARE EQUALLY SPACED BETWEEN DIMENSION POINTS UNLESS NOTED OTHERWISE.

FABRICATORS AND INSTALLERS SHALL BE DESIGNATED AS AN AISC-CERTIFIED PLANT, CATEGORY BU OR ACCREDITED BY THE IAS FABRICATOR INSPECTION PROGRAM FOR STRUCTURAL STEEL. PRIOR TO FABRICATION, THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ENGINEER REVIEW THAT INCLUDE: MEMBER SIZE AND LOCATION, ATTACHMENTS, MATERIALS, FINISHES, CONNECTIONS, AND DIMENSIONS.

UNLESS GALVANIZED, ALL STEEL EXPOSED TO WEATHER SHALL BE SHOP PAINTED AND SATISFY AISC REQUIREMENTS FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL UNLESS WAIVED IN WRITING BY ARCHITECT. STEEL WITHIN ENCLOSED SPACES IS NOT REQUIRED TO BE PAINTED OR PRIMED UNLESS EXPOSED TO CORROSIVE MATERIALS OR TO HUMIDITY LEVELS ABOVE 70%. DO NOT PAINT ELEMENTS AT AREAS TO RECEIVE FIELD WELDING.

MATERIAL PROPERTIES

WIDE FLANGE SECTIONS:	ASTM A992 (F_y = 50 KSI)
CHANNEL SECTIONS:	ASTM A36 (F_y = 36 KSI)
ANGLE SECTIONS	ASTM A36 (F_y = 36 KSI)
STEEL STRUCTURAL TUBING:	ASTM A500, GRADE C, (F_y = 50 KSI)
STRUCTURAL STEEL PIPES:	ASTM A53, GRADE B, TYPE E or S (F_y = 35 KSI)
OTHER SHAPES AND PLATES:	ASTM A36 (F_y = 36 KSI)
STRUCTURAL BOLTS:	ASTM A307, GRADE A
HIGH-STRENGTH BOLTS:	ASTM F3125, A325 UNO ON DRAWINGS
ANCHOR BOLTS (AB):	ASTM F1554, GRADE 36, CLASS 2A
HIGH STRENGTH ANCHOR BOLTS (ABH):	
UP TO 1" DIAM:	ASTM A449 (F_u = 120 KSI)
1-1/8" TO 2-1/2" DIAM:	ASTM A193 B7 or F1554 GRADE 105 (F_u = 125 KSI)

* FOR A325 AND A449 BOLTS: TYPE 3 WHERE CORROSION RESISTANCE IS REQUIRED

STUDS

STUDS SHALL BE AS SPECIFIED IN AWS D1.1 CLAUSE 9, WITH MATERIAL AS REQUIRED IN CLAUSE 9.2.6. TYPE A (F_y = 49 ksi, F_u = 61 ksi) ARE ALLOWED FOR STEEL TO WOOD CONNECTIONS. TYPE B (F_y = 51 ksi, F_u = 65 ksi) SHALL BE USED IN ALL OTHER CONNECTIONS AND ARE ACCEPTABLE FOR WOOD CONNECTIONS.

ALL STUDS SHALL BE DRAWN ARC WELDED.

FABRICATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS AND JOINT PREPARATIONS THAT INCLUDE BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES, AND OTHER AIDES, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, WELD EXTENSION TABS, COPES, SURFACE ROUGHNESS VALUES AND TAPERS OF UNEQUAL PARTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE WITH ALL CURRENT OSHA REQUIREMENTS. ALL BOLTS SHALL HAVE A MINIMUM OF 3 THREADS PROJECTING BEYOND THE NUT.

HOLES, COPES, OR OTHER CUTS OR MODIFICATIONS OF THE STRUCTURAL STEEL MEMBERS SHALL NOT BE MADE IN THE FIELD WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER. BOLT HOLES SHALL BE STANDARD SIZE RELATIVE TO THE BOLT PER THE AISC UNLESS SPECIFICALLY ALLOWED OVERSIZED.

WELDING

QUALITY PROCEDURES AND PERSONNEL SHALL BE IN ACCORDANCE AND CERTIFIED WITH AWS D1.1/D1.1M FOR FRAMING AND STUD WELDING AND AWS D1.2/D1.3M FOR SHEET STEEL. IF WELDERS ARE NOT CERTIFIED, CONTRACTOR SHALL PAY FOR ANY INSPECTIONS BY TESTING AGENCY THAT WOULD NOT HAVE BEEN REQUIRED IF SHOP WAS CERTIFIED. WITHOUT CERTIFICATION, ALL WELDS SHALL BE CONSIDERED FIELD WELDS.

WELD TABS (ALSO KNOWN AS WELD "EXTENSION" TABS OR "RUN OFF" TABS) SHALL BE USED. AFTER THE WELD HAS BEEN COMPLETED THE WELD TABS SHALL BE REMOVED AND THE WELD END GROUND TO A SMOOTH CONTOUR. WELD "DAMS" OR "END DAMS" SHALL NOT BE USED.

THE PROCESS CONSUMABLES FOR ALL WELD FILLER METAL INCLUDING TACK WELDS, ROOT PASS, AND SUBSEQUENT PASSES DEPOSITED IN A JOINT SHALL BE COMPATIBLE.

WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. USE E70XX ELECTRODES UNLESS NOTED OTHERWISE.

ALL WELD FILLER METAL AND WELD PROCESS SHALL PROVIDE CHARPY V-NOTCH TOUGHNESS RATING PER LATEST EDITION OF AISC 341.

LIGHT GAGE/COLD FORMED STEEL - SECTION 05 40 00

MEMBERS SHALL BE ASTM A653 WITH A MINIMUM METALLIC COATING DESIGNATION OF G60 (OR G90 FOR CORROSIVE ENVIRONMENTS). MEMBERS SHALL BE IN ACCORDANCE WITH AISI "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS" AND BE COVERED BY EVALUATION REPORTS OF THE INTERNATIONAL CODE COUNCIL (ICC) VERIFYING ALL SECTION AND STRENGTH PROPERTIES NECESSARY FOR DESIGN. INSTALL ALL MEMBERS AND FASTENERS IN ACCORDANCE WITH AISI STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

STEEL STUDS: MANUFACTURER'S STANDARD C-SHAPED STEEL STUD, PUNCHED, WITH STIFFENED FLANGES.

TRACKS, INCLUDING LEDGER TRACKS: MANUFACTURER'S STANDARD U-SHAPED TRACK, UNPUNCHED, WITH UNSTIFFENED FLANGES. ALL TRACKS SHALL BE OF THE SAME WIDTH AND GAGE AS STUDS. UNLESS NOTED OTHERWISE, STUDS SHALL BE ERECTED WITH BOTH ENDS SEATED AGAINST TRACK WEB.

DEFLECTION TRACK: MANUFACTURER'S DEEP-LEG, U-SHAPED TRACK, UNPUNCHED, WITH UNSTIFFENED FLANGES. DEPTH OF WEB TO CONTAIN STUDS WHILE ALLOWING FREE VERTICAL MOVEMENT.

FLOOR JOISTS AND ROOF RAFTERS: MANUFACTURER'S STANDARD C-SHAPED STEEL STUD, UNPUNCHED (UNO), WITH STIFFENED FLANGES. PROVIDE REINFORCEMENT OF THE MEMBER WHEN PUNCHOUT IS LOCATED WITHIN 12" FROM THE SUPPORT.

HEADERS, JAMBS AND COLUMNS: MANUFACTURER'S PROPRIETARY SHAPES OR BUILT-UP C-SHAPES, UNPUNCHED, WITH STIFFENED FLANGES.

FRAMING ACCESSORIES SHALL BE OF THE SAME GRADE AND COATING DESIGNATION AS THE FRAMING MEMBERS BEING ATTACHED TO.

CONNECTIONS

SCREWS: SCREWS SHALL BE SNUG WITH THE STEEL SURFACE, SHALL PENETRATE INTO STEEL STUDS BY A MINIMUM OF THREE EXPOSED THREADS AND INSTALLED A MINIMUM OF 3/8" FROM STEEL EDGES. UNO, USE #12 x 2-1/2" PLYMETAL TEKS/TRAX-SELF DRILLED SCREWS BY ITW BUILDEX (OR APPROVED EQUIVALENT) AT SPACING SHOWN ON PLAN OR DETAILS FOR ATTACHING GYPSUM WALLBOARD AND PLYWOOD TO TOP TRACK, BOTTOM TRACK, STUDS, BLOCKING, ETC.

POWDER-ACTUATED FASTENERS: UNO ALL PAFs SHALL HAVE A MINIMUM SHANK DIAMETER AND PENETRATION OF 0.157" AND 0.46", RESPECTIVELY.

FOR ALL NONSTRUCTURAL WALLS, ATTACH BOTTOM TRACK TO CONCRETE WITH MINIMUM 0.157" SHANK DIAM PAF AND WASHERS AT 12" OC, MAX UNO, WITH A 3/4" MINIMUM PENETRATION INTO CONCRETE AND A MINIMUM OF 3" FROM CONCRETE EDGES. THE BASE MATERIAL THICKNESS SHOULD BE A LEAST THREE TIMES THE FASTENER EMBEDMENT PENETRATION.

UNO, BOTH FACES OF WALLS SHALL BE SHEATHED FULL HEIGHT WITH GYPSUM WALLBOARD OR PLYWOOD IN ACCORDANCE WITH THE PLANS AND NOTES.

WELDERS SHALL BE EXPERIENCED WITH LIGHT GAGE STEEL CONSTRUCTION, SHALL BE CERTIFIED, AND SHALL COMPLY WITH THE REQUIREMENTS OF AWS D1.3.

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Date: 08/08/2025
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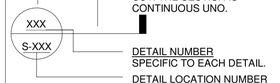
PLANS & DETAILS LEGEND

DETAIL CALL OUT DESCRIPTION



DETAIL BUBBLE
LOCATION OF STRUCTURAL DETAIL OR SECTION

DETAIL CUT LINE
DETAIL CUT LOOKING IN THE DIRECTION OF THE SECTION CUT. THE SECTION IS CONTINUOUS UNO.

DETAIL NUMBER
SPECIFIC TO EACH DETAIL.

DETAIL LOCATION NUMBER
SHEET LOCATION. SEE SHEET NUMBER DESCRIPTION

ABBREVIATIONS

AB	- ANCHOR BOLT	LL	- LIVE LOAD
ABV	- ABOVE	LLV	- LONG LEG VERTICAL
ADDL	- ADDITIONAL	LLH	- LONG LEG HORIZONTAL
ADJ	- ADJACENT	LSL	- LAMINATED STRAND LUMBER
ARCH	- ARCHITECTURAL	LVL	- LAMINATED VENEER LUMBER
AYC	- ALASKAN YELLOW CEDAR	LWT	- LIGHTWEIGHT
BLKG	- BLOCKING	MAX	- MAXIMUM
BLW	- BELOW	MECH	- MECHANICAL
BN	- BOUNDARY NAILS	MFR	- MANUFACTURER
BOS	- BOTTOM OF SHEATHING	MIN	- MINIMUM
BTWN	- BETWEEN	MISC	- MISCELLANEOUS
CBC	- CALIFORNIA BUILDING CODE	N	- NEW
CJ	- CONSTRUCTION JOINT	NS	- NEAR SIDE
CL	- CENTERLINE	OC	- ON CENTER
COL	- COLUMN	OCEW	- ON CENTER EACH WAY
CONC	- CONCRETE	OF	- OUTER FACE
CONT	- CONTINUOUS	OH	- OPPOSITE HAND
CVG	- CONTINUOUS VERTICAL GRAIN	OPNG	- OPENING
DIAM	- DIAMETER	PARA	- PARALLEL
DF	- DOUGLAS FIR	PERP	- PERPENDICULAR
DFPT	- DOUGLAS FIR PRESSURE TREATED	PL	- PLATE
DL	- DEAD LOAD	PLF	- POUNDS PER LINEAR FOOT
DN	- DOWN	PSF	- POUNDS PER SQUARE FOOT
E	- EXISTING	PSL	- PARALLEL STRAND LUMBER
EA	- EACH	PT	- PRESSURE TREATED
ELECT	- ELECTRICAL	PW	- PLYWOOD
EN	- EDGE NAIL	REINF	- REINFORCEMENT
ENGR	- ENGINEER	REQ	- REQUIRED
ES	- EACH SIDE	SCHED	- SCHEDULE
EW	- EACH WAY	SHTG	- SHEATHING
FDN	- FOUNDATION	SIM	- SIMILAR
FF	- FINISH FLOOR	SMS	- SHEET METAL SCREW
FOHC	- FREE OF HEART CORE	SOG	- SLAB ON GRADE
FOS	- FACE OF STUD	STAG	- STAGGERED
FRMG	- FRAMING	STD HK	- STANDARD HOOK
FS	- FAR SIDE	STIFF	- STIFFENER
GA	- GAGE	STL	- STEEL
GALV	- GALVANIZED	SW	- SHEARWALL
GC	- GENERAL CONTRACTOR	SYM	- SYMMETRICAL
GLB	- GLUED LAMINATED BEAM	T&B	- TOP & BOTTOM
GYP	- GYPSUM BOARD	T&G	- TONGUE AND GROOVED
HD	- HOLDOWN	THRU	- THROUGH
HORIZ	- HORIZONTAL	TN	- TOE NAIL
HSS	- HOLLOW STRUCTURAL SECTION	TS	- TUBE STEEL
IBC	- INTERNATIONAL BUILDING CODE	TYP	- TYPICAL
INTR	- INTERMEDIATE	UNO	- UNLESS NOTED OTHERWISE
INV	- INVERTED	VERT	- VERTICAL
K	- KIPS	VIF	- VERIFY IN FIELD
KP	- KING POST	w/	- WITH
KS	- KING STUD	WWF	- WELDED WIRE FABRIC

NO STRUCTURAL OBSERVATION

COORDINATION NOTES

ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THESE GENERAL NOTES, AND THE SITE CONDITIONS SHALL BE REPORTED TO THE COUNTY, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK. THE GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION. THE STRUCTURE HAS BEEN DESIGNED TO RESIST CODE REQUIRED VERTICAL AND LATERAL FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY; ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY SHORING, FORMWORK, AND BRACING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES. PROVIDE ADEQUATE RESISTANCE TO LOADS ON THE STRUCTURES DURING CONSTRUCTION PER SEI/ASCE STANDARD NO. 37 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION." CONSTRUCTION OBSERVATION BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH DESIGN ASPECTS ONLY AND IS NOT INTENDED IN ANY WAY TO REVIEW THE CONTRACTOR'S CONSTRUCTION PROCEDURES.

STANDARDS
ALL METHODS, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE (CBC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION.

CONTRACT DRAWINGS / DIMENSIONS

ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. CONSULTANT DRAWINGS BY OTHER DISCIPLINES ARE SUPPLEMENTARY TO ARCHITECTURAL DRAWINGS. REPORT DIMENSIONAL OMISSIONS OR DISCREPANCIES BETWEEN ARCHITECTURAL DRAWINGS AND STRUCTURAL, MECHANICAL, ELECTRICAL OR CIVIL DRAWINGS TO ARCHITECT PRIOR TO PROCEEDING WITH WORK.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS. PRIMARY STRUCTURAL ELEMENTS ARE DIMENSIONED ON STRUCTURAL PLANS AND DETAILS AND OVERALL LAYOUT OF STRUCTURAL PORTION OF WORK. SOME SECONDARY ELEMENTS ARE NOT DIMENSIONED SUCH AS: WALL CONFIGURATIONS (INCLUDING EXACT DOOR AND WINDOW LOCATIONS), ALCOVES, SLAB SLOPES AND DEPRESSIONS, CURBS, ETC. VERTICAL DIMENSIONAL CONTROL IS DEFINED BY ARCHITECTURAL WALL SECTIONS AND BUILDING SECTIONS. STRUCTURAL DETAILS SHOW DIMENSIONAL RELATIONSHIPS TO CONTROL DIMENSIONS DEFINED BY ARCHITECTURAL DRAWINGS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

DESIGN CRITERIA

RISK CATEGORY: II - TABLE 1604.5

VERTICAL LOADS

AREA	DESIGN DEAD LOAD	LIVE LOAD	CONCENTRATED LOADS
ROOF	15 PSF	20 PSF	--

LATERAL FORCES
WIND:
- EXPOSURE CATEGORY = C
- RISK CATEGORY = II
- BASIC WIND SPEED, V = 90 MPH

SEISMIC:
$V = C_sW$
$S_s = S_{MS}/B_1$
- HAZARD LEVEL = BSE-2E
- SPECTRAL RESPONSE ACCELERATION S_s = 1.476, S_1 = 0.58
- SITE CLASS PER TABLE 20-3.1 OF ASCE 7-16 = D-DEFAULT
- SPECTRAL RESPONSE COEFFICIENTS: S_{ss} = 1.476, S_{x1} = 0.87
- SEISMIC DESIGN CATEGORY = D
- ANALYSIS PROCEDURE USED = TIER 1 SCREENING & TIER 2 ANALYSIS DEFICIENCY-BASED EVALUATION AND RETROFIT
- DESIGN BASE SHEAR, V = 676 KIPS (ULTIMATE)

SPECIAL INSPECTION SCHEDULE

AREAS REQUIRING SPECIAL INSPECTION:	FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
FABRICATORS (CBC 1704.2.5)	X		IF FABRICATOR IS APPROVED, ON-SITE INSPECTION IS NOT REQUIRED BUT A CERTIFICATE OF COMPLETION MUST BE PROVIDED TO THE B.O. (CBC 1704.2.5.1)
STRUCTURAL STEEL CONSTRUCTION (CBC 1705.2, 1705.11, AND 1705.12)			
PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10):			
VERIFY WELDING PROCEDURES	X		
MATERIAL IDENTIFICATION		X	VERIFY TYPE AND GRADE OF MATERIAL
WELDER IDENTIFICATION		X	VERIFY THERE IS A SYSTEM IN PLACE TO IDENTIFY THE WELDER WHO HAS WELDED A JOINT OR MEMBER.
FIT-UP GROOVE WELDS		X	VERIFY JOINT PREPARATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING
ACCESS HOLES		X	VERIFY CONFIGURATION AND FINISH
FIT-UP FILLET WELDS		X	VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OR STEEL SURFACES, TACK WELD QUALITY, AND LOCATION
DURING WELDING (TABLE N5.4-2, AISC 360-10):			
USE OF QUALIFIED INSPECTORS		X	VERIFY THAT WELDERS ARE APPROPRIATELY QUALIFIED
CONTROL AND HANDLING OF WELDING CONSUMABLES		X	VERIFY PACKAGING AND EXPOSURE CONTROL
CRACKED TACK WELDS		X	VERIFY WELDING IS NOT OVER A CRACKED TACK WELD
ENVIRONMENTAL CONDITIONS		X	VERIFY WIND SPEED IS WITHIN LIMITS AS WELL AS PRECIPITATION AND TEMPERATURE
WPS FOLLOWED		X	VERIFY ITEMS SUCH AS WELDING EQUIPMENT SETTINGS, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION
WELDING TECHNIQUES		X	VERIFY INTERPASS AND FINAL CLEANING; EACH PASS IS WITHIN PROFILE LIMITATIONS, AND QUALITY OF EACH PASS
AFTER WELDING (TABLE N5.4-3, AISC 360-10):			
WELDS CLEANED		X	VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED
SIZE, LENGTH, AND LOCATION OF WELDS	X		
WELDS MEET VISUAL ACCPETANCE CRITERIA	X		
ARC STRIKES	X		
K-AREA	X		
BACKING AND WELDING TABS REMOVED	X		
REPAIR ACTIVITIES	X		
DOCUMENT ACCEPTANCE/REJECTION OF WELD	X		
INSPECTION OF HIGH-STRENGTH BOLTING (SECTION N5.6, AISC 360-10)			
VERIFY MATERIAL CERTIFICATION FOR FASTENERS	X		PRIOR TO BOLTING
INSTALLATION OF BOLTS		X	
DOCUMENT ACCEPTANCE/REJECTION OF BOLTS	X		

STATEMENT OF SPECIAL INSPECTIONS

SPECIAL INSPECTIONS AND STRUCTURAL TESTING SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED BY THE OWNER FOR THE ITEMS IDENTIFIED IN THIS SECTION AND IN OTHER AREAS OF THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS, UNLESS WAIVED BY THE BUILDING OFFICIAL (SEE CBC CHAPTER 17).

THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL.

DUTIES OF THE SPECIAL INSPECTOR:
a. THE SPECIAL INSPECTOR SHALL REVIEW ALL WORK LISTED BELOW FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AND THE 2019 CBC.
b. THE SPECIAL INSPECTOR SHALL FURNISH SPECIAL INSPECTION REPORTS TO THE EOR, CONTRACTOR, OWNER AND BUILDING OFFICIAL ON A WEEKLY BASIS, OR MORE FREQUENTLY AS REQUIRED BY THE BUILDING OFFICIAL. ALL ITEMS NOT IN COMPLIANCE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND IF UNCORRECTED, TO THE EOR AND THE BUILDING OFFICIAL.
c. ONCE CORRECTIONS HAVE BEEN MADE BY THE CONTRACTOR, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AS WELL AS THE APPLICABLE WORKMANSHIP PROVISIONS OF THE 2019 CBC.

DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR:
a. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE OWNER AND THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK. IN ACCORDANCE WITH CBC 1704.4, THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED WITHIN THIS "STATEMENT OF SPECIAL INSPECTIONS".
b. THE CONTRACTOR SHALL NOTIFY THE RESPONSIBLE SPECIAL INSPECTOR THAT WORK IS READY FOR INSPECTION AT LEAST ONE WORKING DAY (24 HOURS MINIMUM) BEFORE SUCH INSPECTION IS REQUIRED.
c. ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED BY THE SPECIAL INSPECTOR.

PLEASE SEE THE "SPECIAL INSPECTION SCHEDULE" FOR THE TYPES, EXTENTS AND FREQUENCY OF SPECIFIC ITEMS REQUIRING SPECIAL INSPECTIONS AND STRUCTURAL TESTS AS PART OF THIS PROJECT.

GENERAL NOTES

1. UNLESS EXPLICITLY STATED IN THESE CONSTRUCTION DOCUMENTS, BY NOTE OR CLARIFICATION LETTER, THE ENTIRE SCOPE OF WORK REPRESENTED BY THESE DOCUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

2. THESE CONSTRUCTION DOCUMENTS REPRESENT THE DESIGN INTENT OF THE DESIGN TEAM BASED ON DIMENSIONS OF EXISTING SITE AND/OR FIELD CONDITIONS. ACTUAL CONDITIONS MAY REQUIRE MODIFICATIONS OF THE CONSTRUCTION DETAILS TO ACHIEVE THE DESIGN INTENT. CONTRACTOR SHALL NOTIFY DESIGN TEAM IN WRITING OF ANY DISCREPANCIES RELATED TO EXISTING SITE AND/OR FIELD CONDITIONS PRIOR TO CONTINUING ANY WORK.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RECORD ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DOCUMENTS AND TO BRING THEM TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO COMMENCING ANY WORK. ANY DEVIATION FROM THE CONDITIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS SHALL REQUIRE WRITTEN APPROVAL FROM THE DESIGN TEAM.

4. DO NOT SCALE THE DRAWINGS. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO COMMENCING ANY WORK.

5. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY. WORK REQUIRED TO BE DONE BY ONE DOCUMENT AND NOT BY OTHERS SHALL BE DONE AS IF REQUIRED BY ALL.

6. THE CONTRACTOR AND SUBCONTRACTOR SHALL MAKE NO STRUCTURAL SUBSTITUTIONS, CHANGES, OR MODIFICATIONS WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

7. CONTRACTORS AND SUBCONTRACTORS SHALL ENSURE THAT ALL WORK IS PERFORMED IN A PROFESSIONAL AND WORKMANLIKE MANNER BY SKILLED MECHANICS OF THE TRADE. SUBCONTRACTORS AND SUPPLIERS ARE HEREBY NOTIFIED THAT THEY ARE TO CONFER AND COOPERATE FULLY WITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK IN A TIMELY MANNER.

8. UNLESS SPECIFICALLY SHOWN OR NOTED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, BORED, OR OTHERWISE WEAKENED WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.

9. BUILDER'S SET: THIS SET OF DRAWINGS HAS BEEN PREPARED SUFFICIENT TO OBTAIN A BUILDING PERMIT. ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED IN THIS "BUILDER'S SET". THE IMPLEMENTATION OF THE DRAWINGS REQUIRES THE CONTRACTOR OR BUILDER TO BE THOROUGHLY KNOWLEDGEABLE WITH THE APPLICATIONS OF CODES AND THE METHODS OF CONSTRUCTION SPECIFIC TO THIS PROJECT AND TYPE OF CONSTRUCTION.

10. ALL WATERPROOFING, FLASHING, AND DRAINAGE ARE TO BE DESIGNED AND PROVIDED BY THE BUILDER.

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REGISTERED PROFESSIONAL ENGINEER
DOUGLAS L. GLADEN
S 5096
STRUCTURAL
STATE OF CALIFORNIA
12/30/2024

REVISIONS

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BEN LOMOND TRANSFER STATION

9835 NEWELL CREEK RD
BEN LOMOND, CA

DESIGNED BY DLG
DRAFTED BY DLG

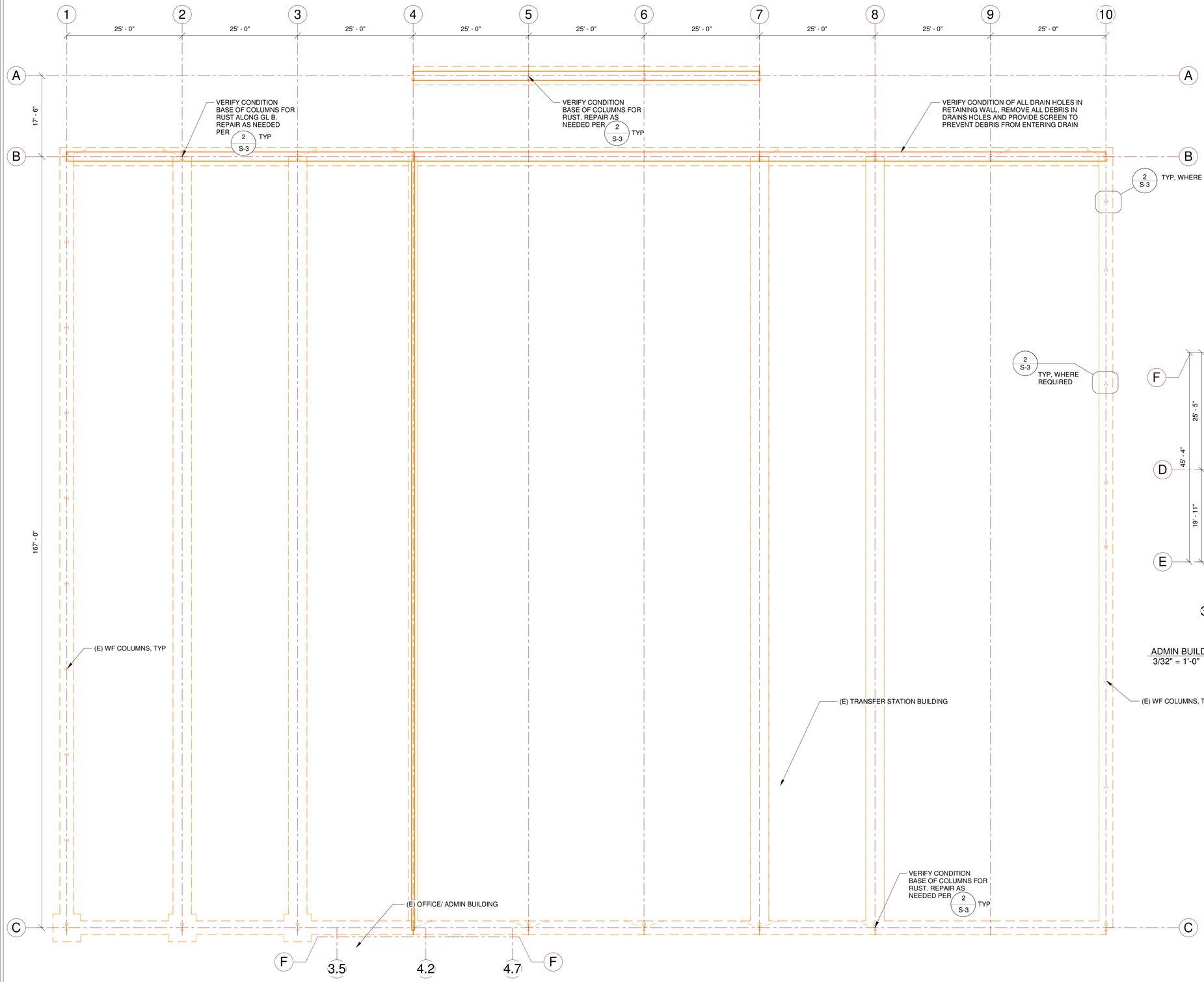
CLIENT INFORMATION
TETRA TECH CAS, INC
21700 COPLEY DRIVE, #200
DIAMOND BAR, CALIFORNIA

PROJECT# 20-209

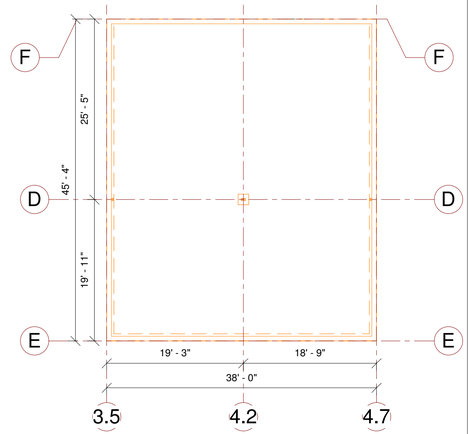
ISSUE DATE 12/30/2024
SCALE As indicated

SPECIFICATIONS, NOTES, SPECIAL INSPECTION

S-0



TRANSFER STATION FOUNDATION PLAN
3/32" = 1'-0"



ADMIN BUILDING FOUNDATION PLAN
3/32" = 1'-0"

FOUNDATION NOTES

1) CONTRACTOR TO VERIFY CONDITION OF ALL FRAME COLUMN BASES AND RETAINING WALL DRAINS

FOUNDATION & FLOOR FRAMING LEGEND

NEW FOOTING

EXISTING FOOTING

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21700 COPLEY DRIVE, #200
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PROJECT# 20-209

ISSUE DATE 12/30/2024

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FOUNDATION PLAN

S-1

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

ROOF FRAMING NOTES

1) ALL Z PURLINS TO BE INSPECTED FOR SEVERE RUST. PURLINS SHALL BE REPLACED IN KIND WHERE RUST SEVER RUST HAS OCCURED

2) ALL CONNECTIONS TO INSPECTED FOR MISSING BOLTS. MISSING BOLTS TO BE REPLACED IN KIND.

3) ROOFING TO REPAIRED TO PREVEN LEAKS INTO MAIN BUILDING.

FRAMING LEGEND

STEEL BEAM

Z PURLIN

VERIFY CONDITION OF EXISTING FLANGE BRACING EA SIDE OF COLUMN. REMOVE AND REPLACE IN KIND ALL BENT, BROKEN, OR RUSTED BRACES. REPLACE MISSING COLUMN BRACES TO MATCH EXISTING. TYP

REPLACE Z-PURLINS IN KIND

(E) MOMENT FRAME BEAM, VERIFY CONDITION OF ALL BOLTED CONNECTIONS IN BEAM. REPLACE MISSING BOLTS. REMOVE AND REPLACE SEVERELY RUSTED BOLTS, TYP AT ALL BEAMS

(E) WF COLUMNS, TYP

(E) MOMENT FRAME BEAMS. VERIFY CONDITION OF ALL BOLTED CONNECTIONS IN BEAM. REPLACE MISSING BOLTS. REMOVE AND REPLACE SEVERLY RUSTED BOLTS, TYP AT ALL BEAMS

(E) Z PURLINS AT 8'-0" OC. VERIFY CONDITION OF ALL PURLINS. REMOVE AND REPLACE ALL PURLINS WITH SEVERE RUST IN KIND. TYP OF ALL BAYS

REPLACE MISSING BOLTS

(E) GRAVITY BEAM, VERIFY CONDITION OF ALL BOLTED CONNECTIONS IN BEAM. REPLACE MISSING BOLTS. REMOVE AND REPLACE SEVERELY RUSTED BOLTS, TYP AT ALL BEAMS

VERIFY CONDITION OF EXISTING FLANGE BRACING EA SIDE OF COLUMN. REMOVE AND REPLACE IN KIND ALL BENT, BROKEN, OR RUSTED BRACES. REPLACE MISSING COLUMN BRACES TO MATCH EXISTING. TYP

(E) GRAVITY BEAMS VERIFY CONDITION OF ALL BOLTED CONNECTIONS IN BEAM. REPLACE MISSING BOLTS. REMOVE AND REPLACE SEVERELY RUSTED BOLTS, TYP AT ALL BEAMS

(E) MOMENT FRAME BEAMS VERIFY CONDITION OF ALL BOLTED CONNECTIONS IN BEAM. REPLACE MISSING BOLTS. REMOVE AND REPLACE SEVERELY RUSTED BOLTS, TYP AT ALL BEAMS

TRANSFER STATION ROOF FRAMING PLAN
3/32" = 1'-0"

ADDED BLOCKING TO AND STRAPS TO EXISTING WALL ANCHOR PER 3 S-3 AT GRID 3.5 & 4.7

OFFICE/ ADMIN BUILDING ROOF FRAMING PLAN
3/32" = 1'-0"

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BEN LOMOND TRANSFER STATION

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DESIGNED BY DLG

DRAFTED BY DLG

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ROOF FRAMING PLAN

S-2

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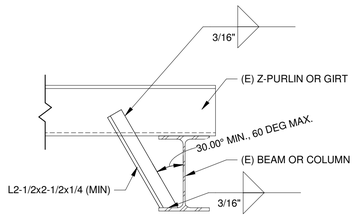
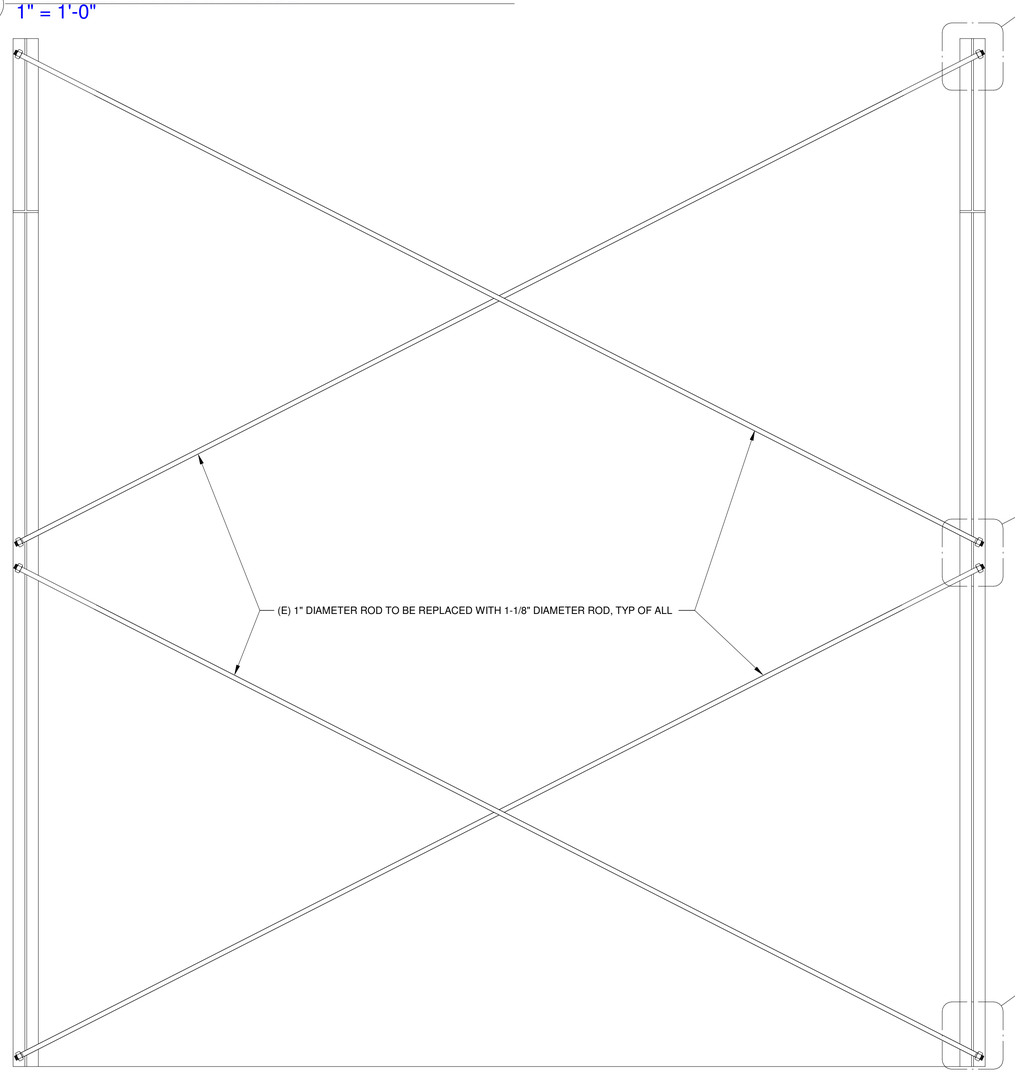
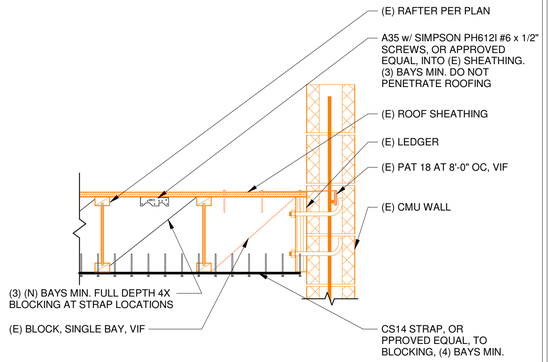


NOTES:
1) DETAIL IS "PLAN VIEW" AT COLUMN & "ELEVATION VIEW" AT BEAMS
2) INSTALL AT GIRTS FOR COLUMN & 1ST AVAILABLE & 3RD PURLINS FOR BEAMS
3) INSTALL THIS ONE SIDED DETAIL WHERE:
   A) A BRACE IS MISSING OR DAMAGED
   B) REPLACING (E) BRACES AT LAST BENTS, OPENINGS, & WHEREVER ELSE TWO SIDED BRACING WAS NOT INSTALLED

5 ONE-SIDED BRACE UPGRADE
1" = 1'-0"

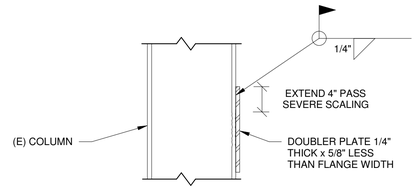


4 VERTICAL BRACE REPAIR
1/2" = 1'-0"

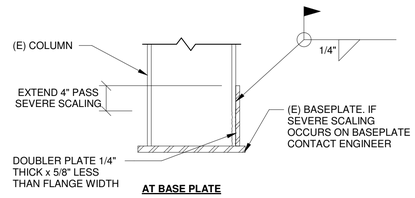


FRAMING PARA. TO WALL

3 LEDGER TO CMU WALL
1" = 1'-0"



TYPICAL CONDITION



AT BASE PLATE

NOTES
1) ALL SCALING MECHANICALLY REMOVED. AFTER REMOVAL, EXISTING STEEL TO BE EVALUATED. IF COLUMN FLANGE THICKNESS HAS LOST GREATER THAN 1/16 OF AN INCH, DOUBLER PLATES SHALL BE APPLIED OVER AFFECTED AREA.
2) IF COLUMN FLANGE THICKNESS LOST IS GREATER THAN 1/4", CONTACT ENGINEER
3) AFTER REPAIR APPLY CORROSION INHIBITING PRIMER AND PAINT.

2 COLUMN SCALING REPAIR
1" = 1'-0"

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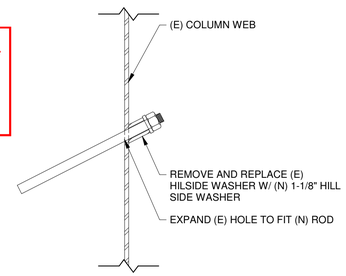

1 BRACE ANCHOR
1" = 1'-0"

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CLIENT INFORMATION
TETRA TECH CAS, INC
21700 COPLEY DRIVE, #200
DIAMOND BAR, CALIFORNIA

PROJECT#	20-209
ISSUE DATE	12/30/2024
SCALE	As indicated

STRUCTURAL DETAILS

S-3

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Survey

Intentionally Blank

Roads / Encroachments

Intentionally Blank

Sanitation

Intentionally Blank

Stormwater Management

Intentionally Blank

Environmental Health

Intentionally Blank

Environmental Planning

Intentionally Blank

Zoning

Intentionally Blank

General / Inspections

General

Santa Cruz County Holidays
www.santacruzcountyca.gov/Home/HolidaySchedule.aspx

Permit Status & History
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Check Permit Status & History

Permit Expirations & Extensions
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Manage>Extend a Permit's Expiration
If final inspection has not been secured, a building permit will expire either 12 months from the date it was issued or 180 days from the date of the last inspection approval. If your building permit is about to expire you should make a request to extend your building permit. If approved, another 180 days will be added to the original expiration date.

Project Holds
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Manage>Holds
When requirements enforced by an agency must be met prior to the completion of the project, the agency places a Hold on the permit. Please note that the permit is not finaled until all Holds are released. Holds are shown on the Building Permit and online at Permit Status & History. Additional information is available online.

Deferred Submittals
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Apply>Deferred Submittals
Deferred Submittals are defined as portions of the design that are not submitted for review at the time of the initial permit application. Common deferred submittals include solar photovoltaic systems, prefabricated roof trusses, prefabricated stairs, and mechanical duct layout. Please note that solar photovoltaic systems must be processed independently.

Construction Change Documents
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Apply>Changes to Issued Permits
Changes to issued permits are processed as a Construction Change Document (CCD) and are limited to changes that are within the original scope of work. Changes exceeding the original scope require a new permit.
***Examples**: Changing conventional roof framing to trusses would be within the original scope of work and are processed as a CCD. Expanding the building footprint, adding a deck, or similar exceed the original scope of work and are processed as a new permit.*

Smoke & Carbon Monoxide Affidavit PLG-260
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Forms & Publications
State law requires verification of proper installation of smoke alarms and carbon monoxide alarms whenever a building permit is obtained for any alteration on a residential property. This form enables a property owner or licensed contractor to self-certify that requirements for these alarms have been met when the building permit is for a project that does not require a building inspector to enter the dwelling to conduct a final inspection or if otherwise approved by the inspector for use.
***Examples**: Examples of such projects are reroof projects, solar installations, water heater replacements in a garage, and other similar minor improvements that do not require an interior inspection by a County of Santa Cruz inspector.*

Building Inspection Scheduling
Visit the CDI Website then click Unified Permit Center>
Building Permit Information>Inspections
Inspectors may require additional plans and analysis if in their judgment the work done exceeds the scope of the permit and/or conventional construction practices. Prior to commencing construction beyond the approved scope, please obtain necessary approvals. Construction not included in the approved scope may trigger additional requirements, including but not limited to fire sprinklers, geotechnical reports, FEMA flood upgrades, allowable percentage of construction modifications over a period of years, discretionary reviews, accessibility requirements, or otherwise.

Notice to Builders

Property line setbacks will be checked during the foundation inspection. A survey may be required when the proposed structure is designed to meet minimum setbacks or may not otherwise meet minimum setback requirements.

Building Inspection Scheduling

Inspections shall be scheduled ***by 3:00pm,*** at least one Santa Cruz County Government business day prior to the requested inspection date. *Holidays & weekends are excluded for scheduling next day requests, prior to scheduling, verify the County Holiday Schedule (weblink above).*

Inspection requests may be scheduled for all inspection districts for the following days:
Monday through Friday. Friday inspections are limited to AM only and as noted below.

The following ***shall not be*** scheduled for ***Fridays:*** *final inspections or complex inspections.* When uncertain about whether your inspection may be scheduled for a Friday, prior to scheduling, contact Raison Dean, Supervising Building Inspector at Raison.Dean@santacruzcountyca.gov.

To cancel building inspection requests, contact Rai Dean prior to the requested inspection date.

Once you have completed the online inspection request form, a confirmation email will indicate your request has been received and scheduled. If you do not receive a confirmation, the form was not completed. Requests with incomplete or inaccurate information will **not** result in a scheduled inspection.

Due to the high volume of inspections and the uncertain length of each inspection, we do not accept time preferences for inspections. Your inspector will call the contact numbers provided on the morning of the requested inspection between ***8:00 and 9:00am*** to verify the inspection time frame, typically a two-to-three-hour window. ***Do not call before 9:00am the day of the inspection.***

Inspection Districts & Building Inspector Contact Information *(subject to change)*

Aptos	**Anthony Malich**	Anthony.Malich@santacruzcountyca.gov	(831) 454-2297
Boulder Creek	**Tom Andersen**	Thomas.Andersen@santacruzcountyca.gov	(831) 454-3130
Felton	**Nicholas Todisco**	Nicholas.Todisco@santacruzcountyca.gov	(831) 454-3214
Live Oak	**Stefan Hayward**	Stefan.Hayward@santacruzcountyca.gov	(831) 454-2826
Watsonville	**Cat Thrasher**	Cat.Thrasher@santacruzcountyca.gov	(831) 454-2859
Floater	**Tai Dean**	Taichi.Dean@santacruzcountyca.gov	(831) 454-2716
Supervising Building Inspector	**Rai Dean**	Raison.Dean@santacruzcountyca.gov	(831) 454-3191

Santa Cruz County
Community Development & Infrastructure
701 Ocean Street 4th Floor
Santa Cruz, CA 95060

Planning
(831) 454-2580

Public Works
(831) 454-2160

CDI Website
www.cdi.santacruzcountyca.gov

Santa Cruz County 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

*Permit List Below (*if applicable)*

B-251911
B-251912
B-251913

List Permits if APP

Santa Cruz County Notes

Sheet Number

SCC

REV 10/30/2024