DEL NORTE COUNTY
SERVICE AREA NO. 1
PROJECT # 2007
ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS
PHASE 1

JULY 2024

DEL NORTE COUNTY
BUILDING DEPARTMENT
981 H STREET, SUITE 110
CRESCENT CITY, CA 95531
(707) 464-7253

BUILDING INSPECTOR GENERAL NOTES:

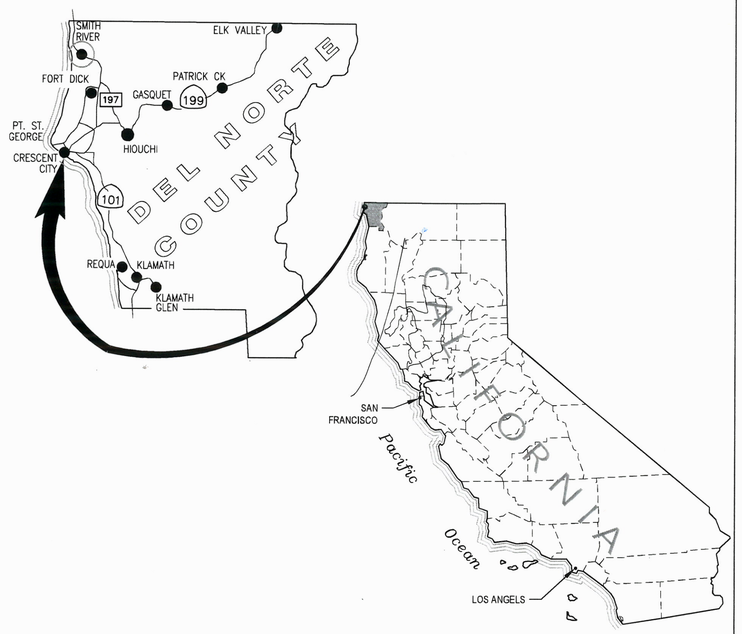
1. THIS SET OF APPROVED PLANS, SPECIFICATIONS AND BUILDING PERMIT OR COPY SHALL BE KEPT ON THE PROJECT SITE AND MADE AVAILABLE UNTIL THE COMPLETION OF THE PROJECT.

2. APPROVED PLANS AND SPECIFICATIONS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION FROM THE COUNTY BUILDING DEPARTMENT.

3. CONSTRUCTION MUST COMPLY WITH ALL CURRENT CALIFORNIA BUILDING, RESIDENTIAL, ELECTRICAL, PLUMBING, MECHANICAL, GREEN BUILDINGS, ENERGY AND FIRE CODES, LOCAL ORDINANCES AND TITLE 24 ENERGY COMPLIANCE REPORT.

4. THE APPROVAL OF PLANS AND THE ISSUANCE OF A PERMIT SHALL NOT BE CONSTRUED AS PERMITTING THE VIOLATION OF ANY SECTION OF THE BUILDING CODE OR ANY OTHER LAW OR ORDINANCE NOR SHALL THE COUNTY ASSUME THE RESPONSIBILITY OF THE PERSON OWNING OR CONTROLLING ANY BUILDING OR STRUCTURE FOR ANY DAMAGES TO PERSONS OR PROPERTY CAUSED BY DEFECTS IN THE BUILDING OR ITS CONSTRUCTION. FURTHERMORE, THE PERSON WHO OBTAINS THE PERMIT IS RESPONSIBLE FOR THE ACCURACY OF THE PLANS AND COMPLIANCE WITH THE BUILDING CODE.

AREA MAP



LOCATION MAP

ALL COUNTY LIFT STATIONS SHOWN

APPROVALS

DEL NORTE COUNTY: BUILDING INSPECTOR
SCOTT HUFFMAN
SIGNED — 7/19/2024 DATE

STRUCTURAL ENGINEER: GHD INC.
GONZALO CERVANTES, PE
SIGNED — 7/19/2024 DATE

ELECTRICAL ENGINEER: GHD INC.
ERICK OSORNO, PE
SIGNED — 7/19/2024 DATE

CIVIL ENGINEER: GHD INC.
STEVE MCHANEY, PE
SIGNED — 5/9/2024 DATE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author C. COOK | Drafting Check M.DAVIDSON | Project Manager M. DAVIDSON
Designer C. COOK | Design Check S. MCHANEY | Project Director S. ALLEN

Bar is one inch on original size sheet
0 — 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project: PROJECT # 2007 ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1
Title: COVER SHEET
Size: ANSI D
Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN
Sheet No. G-001 | Sheet 1 of 31

Plot Date: 19 July 2024 - 6:26 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-GN-0001.dwg

LIFT STATION OVERVIEW MAP

1" = 1000'

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SHEET INDEX

SITE NUMBER	SHEET	SHEET NO.	SHEET TITLE	GENERATOR STRUCTURE TYPE
			GENERAL	
--	1	G-001	COVER SHEET	--
--	2	G-002	LIFT STATION OVERVIEW MAP	--
			CIVIL	
--	3	C-001	CIVIL NOTES, ABBREVIATIONS, AND SYMBOLS	--
1	4	C-101	PEBBLE BEACH LIFT STATION GENERATOR CIVIL PLAN	TYPE 2
2	5	C-102	MODOC LIFT STATION GENERATOR CIVIL PLAN	TYPE 1
3	6	C-103	PACIFIC LIFT STATION GENERATOR CIVIL PLAN	TYPE 1
9	7	C-104	BURTSCHELL LIFT STATION GENERATOR CIVIL PLAN	TYPE 2
12	8	C-105	CSA STORAGE BUILDING CIVIL PLAN	TYPE 3
--	9	C-501	CIVIL DETAILS 1	--
--	10	C-502	CIVIL DETAILS 2	--
--	11	C-503	CIVIL DETAILS 3	--
			STRUCTURAL	
--	12	S-001	STRUCTURAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES	--
--	13	S-002	STRUCTURAL GENERAL NOTES	--
--	14	S-101	TYPE 2 STRUCTURE FOUNDATION AND ROOF PLAN	--
--	15	S-102	TYPE 2 STRUCTURE ELEVATIONS	--
--	16	S-103	TYPE 2 STRUCTURE SECTIONS	--
--	17	S-104	TYPE 1 PLAN, SECTION, AND DETAILS	--
--	18	S-501	TYPICAL STRUCTURAL DETAILS 1 of 2	--
--	19	S-502	TYPICAL STRUCTURAL DETAILS 2 of 2	--
			ELECTRICAL	
--	20	E-001	ELECTRICAL SYMBOLS, LEGEND, ABBREVIATIONS & GENERAL NOTES	--
1	21	E-101	PEBBLE BEACH LIFT STATION & GENERATOR ELECTRICAL PLAN	TYPE 2
2	22	E-102	MODOC LIFT STATION & GENERATOR ELECTRICAL PLAN	TYPE 1
3	23	E-103	PACIFIC LIFT STATION & GENERATOR ELECTRICAL PLAN	TYPE 1
9	24	E-104	BURTSCHELL LIFT STATION & GENERATOR ELECTRICAL PLAN	TYPE 2
12	25	E-105	CSA STORAGE BUILDING ELECTRICAL PLAN	TYPE 3
--	26	E-501	ELECTRICAL DETAILS	--
--	27	E-701	CSA STORAGE BUILDING T24 DOCUMENTS	--
--	28	E-702	CSA STORAGE BUILDING T24 DOCUMENTS	--
--	29	E-703	CSA STORAGE BUILDING T24 DOCUMENTS	--
--	30	E-704	CSA STORAGE BUILDING T24 DOCUMENTS	--
			MECHANICAL	
--	31	M-501	SINGLE-LINE LIQUID PROPANE DIAGRAMS	--

DRAWING DESIGNATION

C - 1 0 1
- C: DESIGNATION
- 1 0 1: INDIVIDUAL DRAWING NUMBER

DESIGNATION	DISCIPLINE
G	GENERAL
C	CIVIL
S	STRUCTURAL
E	ELECTRICAL
M	MECHANICAL

NUMBER	SHEET TYPE
000	GENERAL
100	PLANS
200	ELEVATIONS
300	SECTIONS
500	DETAILS
600	SCHEDULES AND DIAGRAMS

NOTE: ALL COUNTY SERVICE AREA NO. 1 LIFT STATIONS SHOWN FOR REFERENCE. ONLY PHASE1 LIFT STATIONS ARE INCLUDED IN THIS CONTRACT. PHASE 2 AND 3 ARE NOT IN CONTRACT.

GENERATOR STRUCTURE TYPE LEGEND

STRUCTURE TYPE	STRUCTURE DESCRIPTION
TYPE 1	STRUCTURAL SLAB WITH ENCLOSED CHAIN LINK FENCE AND ROOF
TYPE 1A	STRUCTURAL SLAB WITH ROOF (NOT USED)
TYPE 1B	STRUCTURAL SLAB (NOT USED)
TYPE 2	STRUCTURAL SLAB WITH CMU BLOCK BUILDING AND ROOF
TYPE 3	STRUCTURAL SLAB WITH METAL BUILDING AND ROOF

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REGISTERED PROFESSIONAL ENGINEER STEVEN X. MCHANEY C47595 CIVIL STATE OF CALIFORNIA

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
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Title: LIFT STATION OVERVIEW MAP

Size: ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. G-002 | Sheet 2 of 31

Plot Date: 19 July 2024 - 4:48 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-GN-0002.dwg

GENERAL SITE NOTES

1. ALL WORKMANSHIP, MATERIALS, AND CONSTRUCTION SHALL CONFORM TO DEL NORTE COUNTY CODE AND STANDARDS (AND PRACTICES) OF THE, DEL NORTE COUNTY SERVICE AREA NO. 1 AND DEL NORTE COUNTY COMMUNITY DEVELOPMENT DEPARTMENT.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK. ANY DISCREPANCY DISCOVERED BY CONTRACTOR IN THESE PLANS OR ANY FIELD CONDITIONS DISCOVERED BY CONTRACTOR THAT MAY DELAY OR OBSTRUCT THE PROPER COMPLETION OF THE WORK PER THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY UPON DISCOVERY. SAID NOTIFICATION SHALL BE IN WRITING.
3. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONTRACTOR FURTHER AGREES TO HOLD HARMLESS, INDEMNIFY AND DEFEND THE ENGINEER AND HIS/HER CONSULTANTS, AND THE COUNTY OF DEL NORTE, AND EACH OF THEIR OFFICERS, EMPLOYEES AND AGENTS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION, INCLUDING CONFINED SPACE ENTRY AND ALL OTHER CALOSHA REQUIREMENTS.
4. THE CONTRACTOR SHALL MAINTAIN REASONABLE ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.
5. CONTRACTOR SHALL NOT BEGIN EXCAVATION UNTIL ALL EXISTING UTILITIES HAVE BEEN MARKED IN THE FIELD BY THE UTILITY OWNER RESPONSIBLE FOR THAT UTILITY. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER AT LEAST 48 HOURS BEFORE STARTING WORK.
6. UNDERGROUND SERVICE ALERT: CALL TOLL FREE (800) 642-2444 OR 811 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
7. UNDERGROUND OBSTRUCTIONS, NOT SHOWN ON THESE PLANS, MAY BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE AND THE CONTRACTOR IS CAUTIONED THAT THE OWNER, THE ENGINEERS, AND DISTRICT ASSUME NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY COMPANIES WORKING WITHIN THE LIMITS OF THIS PROJECT.
8. ALL UNDERGROUND IMPROVEMENTS SHALL BE INSTALLED, INSPECTED AND APPROVED PRIOR TO BACKFILLING TRENCHES AND EXCAVATIONS.
9. EXISTING UTILITIES SHOWN ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, SIZE, TYPE, AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. THE OWNER MAY ADJUST THE IMPROVEMENTS ACCORDINGLY UPON REQUEST AND UPON THE DISCOVERY OF UNIDENTIFIED OR IMPROPERLY LOCATED UTILITIES.
10. IF AN UNMARKED UTILITY IS ENCOUNTERED OR IF CONTRACTOR IS UNABLE TO LOCATE A MARKED UTILITY AFTER EXCAVATING TO THE LIMITS SPECIFIED BY U.S.A. LAWS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THAT UTILITY AND THE COUNTY.
11. ANY DAMAGES TO THE COUNTY OR OTHER UTILITIES CAUSED BY PROJECT OPERATIONS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
12. CONTRACTOR SHALL ONLY REMOVE EXISTING TREES OR SHRUBS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE COUNTY.
13. CONTRACTOR SHALL EXERCISE CAUTION WHEN DIGGING WITHIN THE DRIPLINE OF TREES DESIGNATED TO REMAIN. ROOTS LARGER THAN 2 INCHES SHALL NOT BE CUT WITHOUT PERMISSION FROM THE ENGINEER. IN THE EVENT THAT A ROOT LARGER THAN 2 INCHES NEEDS TO BE REMOVED, THE ROOT SHALL BE CUT CLEAN WITH A SAW APPROPRIATE FOR THE SIZE OF THE ROOT TO BE CUT. AFTER THE CUT THERE SHALL BE NO TORN BARK OR SPLINTERED WOOD REMAINING ON THE ROOT. ACTUAL CUTTING OF ROOTS SHALL BE DONE WITH A HAND SAW, RECIPROCATING SAW, CUT-OFF SAW OR OTHER SUITABLE HAND OR POWER EQUIPMENT TO OBTAIN A CLEAN CUT. ANY PRUNED ROOTS THAT ARE TO REMAIN EXPOSED TO AIR FOR MORE THAN 24 HOURS MUST BE TEMPORARILY PROTECTED FROM DESICCATION UNTIL BACKFILLING OCCURS AND ROOTS ARE COVERED. ROOTS MUST BE COVERED WITH FABRIC WHILE EXPOSED, AND FABRIC MUST REMAIN WET AT ALL TIMES. REMOVE FABRIC PRIOR TO BACKFILLING.
14. ALL LANDSCAPING AND UTILITIES OR OTHER COUNTY OWNED OR PRIVATE IMPROVEMENTS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED IN KIND OR AS DIRECTED BY THE COUNTY OR ENGINEER.
15. ALL DISTANCES SHOWN ON THE DRAWINGS ARE BASED ON HORIZONTAL AND VERTICAL MEASUREMENTS.
16. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
17. CONTRACTOR SHALL PREPARE AN EROSION AND SEDIMENT CONTROL PLAN (SCP) FOLLOWING THE PROCEDURES OUTLINED BY THE COUNTY OF DEL NORTE.
18. THE CONTRACTOR SHALL ADHERE TO BMP'S (BEST MANAGEMENT PRACTICES) FOR THE PROJECT SITE APPROPRIATE TO THE PHASE OF CONSTRUCTION AND THE TIME OF YEAR.
19. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE PHOTO AND VIDEO DOCUMENTATION OF THE EXISTING CONDITIONS OF EACH SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONSTRUCTION RELATED DAMAGE, AND SHALL RESTORE SITE TO PRE-CONSTRUCTION CONDITIONS IN ACCORDANCE WITH COUNTY STANDARDS. SEE PROJECT SPECIFICATIONS FOR MORE DETAILS
20. CONTRACTOR SHALL PROPERLY ADJUST THE VOLUMETRIC QUANTITIES OF CONCRETE DELIVERIES TO AVOID SPILLAGE ON STEEP SLOPES. ALL SPILLS SHALL BE REMOVED AND CLEANED IMMEDIATELY.
21. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION WILL BE ENFORCED IN ACCORDANCE WITH THE MOST RECENT CBC AND CFC CHAPTER 33.
22. IF CONTAMINATED SOIL IS ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL NOTIFY THE COUNTY. AFTER CONTAMINATED SOIL IS ENCOUNTERED (OIL, PETROLEUM, HYDROCARBONS, SMELLS OR ODORS, OIL SHEET AT THE SURFACE). ALL CONTAMINATED SOILS WILL BE STOCKPILED ON AND COVERED WITH 10 MIL PLASTIC SHEETING.
23. ALL EXCESS MATERIAL FROM THE PROJECT SHALL BE DISPOSED OF AT A LOCATION APPROVED BY THE COUNTY.
24. CONTRACTOR SHALL RESTORE OR REPLACE ANY DAMAGED SURVEY MONUMENTS RESULTING FROM OPERATION AND SHALL BEAR ALL COSTS OF SUCH REPLACEMENT.
25. UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.
26. LOCATION OF (E) UTILITIES AND STRUCTURES ARE FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT (800)642-2444 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE FOR EXACT LOCATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.
27. PROVIDE TEMPORARY CONSTRUCTION FENCING THROUGHOUT CONSTRUCTION TO MAINTAIN SITE SECURITY AND OPERATION.

GENERAL SITE NOTES (CONTINUED)

28. (E) UTILITIES NOT DESIGNATED FOR REMOVAL MUST BE PROTECTED AND CONTINUOUS SERVICE MAINTAINED DURING ALL OPERATIONS UNDER THE CONTRACT. ANY TEMPORARY SHUT-DOWNS MUST BE ARRANGED WITH THE COUNTY TO THE SATISFACTION OF THE ENGINEER.
29. CONTRACTOR RESPONSIBLE FOR PROPER DISPOSAL OF ALL DEMOLISHED MATERIALS, WASTE PRODUCTS, AND OTHER DEBRIS ENCOUNTERED DURING CONSTRUCTION.
30. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES DURING THE COURSE OF CONSTRUCTION.
31. CONTRACTOR SHALL RESTORE STAGING AREAS LOCATED OUTSIDE OF CONSTRUCTION LIMITS TO PRE-CONSTRUCTION CONDITIONS.
32. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL FINISHED GRADES. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTION.
33. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING. STAKING WILL BE REVIEWED BY OWNER FOR CONFIRMATION TO DESIGN PRIOR TO CONSTRUCTION.
34. ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING WALLS AND DOORS.
35. ALL CONSTRUCTED FLATWORK SHALL BE FLUSH WITH EXISTING FLATWORK OR FEATHERED AT THE GRADES SPECIFIED TO MATCH EXISTING. ALL CONSTRUCTED PADS WILL BE LEVEL AND SMOOTHED AND MATCH THE DETAILS PER THE PLANS. ALL LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH, HYDROSEEDED (AS NECESSARY) AND RETURNED TO ORIGINAL CONDITIONS.
36. ALL DITCHES, SWALES, GUTTERS, ETC. SHOULD BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OTHERWISE INDICATED. CONTRACTOR IS RESPONSIBLE FOR ADDRESSING STORM WATER DRAINAGE AND DEWATERING OF WORK AREAS DURING CONSTRUCTION.

EROSION CONTROL NOTES

1. AT A MINIMUM, THE CONTRACTOR SHALL EMPLOY THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) AND WATER POLLUTION CONTROL MEASURES AS DESCRIBED IN THE CURRENT CALTRANS STANDARD DRAWINGS AND SPECIFICATIONS:

T-51	TEMPORARY SILT FENCE
T-52	TEMPORARY STRAW BALE BARRIER
T-53	TEMPORARY COVER
T-54	TEMPORARY EROSION CONTROL BLANKET
T-55	TEMPORARY EROSION CONTROL BLANKET
T-56	TEMPORARY FIBER ROLL
T-57	TEMPORARY CHECK DAM
T-58	TEMPORARY CONSTRUCTION ENTRANCE
T-59	TEMPORARY CONCRETE WASHOUT FACILITY
T-60	TEMPORARY REINFORCED SILT FENCE
T-61	TEMPORARY DRAINAGE INLET PROTECTION
T-62	TEMPORARY DRAINAGE INLET PROTECTION
T-63	TEMPORARY DRAINAGE INLET PROTECTION
T-64	TEMPORARY DRAINAGE INLET PROTECTION
T-65	TEMPORARY HIGH-VISIBILITY FENCE
T-66	TEMPORARY LARGE SEDIMENT BARRIER
T-67	TEMPORARY CONSTRUCTION ROADWAY

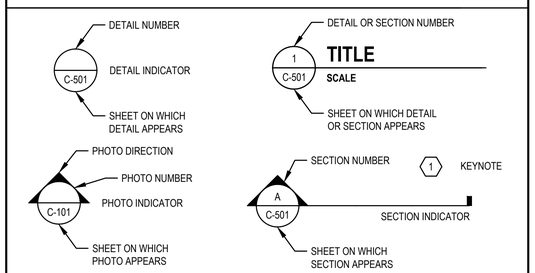
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MINIMIZE EROSION AND PREVENT THE TRANSPORT OF SEDIMENT TO SENSITIVE AREAS.
3. SUFFICIENT EROSION CONTROL SUPPLIES SHALL BE AVAILABLE ON-SITE AT ALL TIMES TO DEAL WITH AREAS SUSCEPTIBLE TO EROSION DURING RAIN EVENTS.
4. MINIMIZE DISTURBANCE OF EXISTING VEGETATION TO THAT NECESSARY TO COMPLETE THE WORK.
5. THE CONTRACTOR SHALL MAKE ADEQUATE PREPARATIONS, INCLUDING TRAINING & EQUIPMENT, TO CONTAIN SPILLS OF OIL AND OTHER HAZARDOUS MATERIALS.
6. ACTIVITIES SUCH AS VEHICLE WASHING ARE TO BE CARRIED OUT AT AN OFF-SITE FACILITY.
7. THE CONTRACTOR SHALL PROVIDE COVERED WASTE RECEPTACLE FOR COMMON SOLID WASTES AT CONVENIENT LOCATIONS ON THE JOB SITE AND PROVIDE REGULAR COLLECTION OF WASTES.
8. THE CONTRACTOR SHALL PROVIDE SANITARY FACILITIES OF SUFFICIENT NUMBER AND SIZE TO ACCOMMODATE CONSTRUCTION CREWS AND ENSURE ADEQUATE ANCHORAGE OF SUCH FACILITIES TO PREVENT THEM FROM BEING TIPPED BY THE WEATHER OR VANDALISM.
9. APPROPRIATE STORAGE AND DISPOSAL OF WATER FROM DEWATERING OPERATIONS SHALL BE EXERCISED IN THE EVENT THAT ACCUMULATED WATER MUST BE REMOVED FROM A WORK LOCATION.
10. COVERED AND SECURED STORAGE AREAS FOR POTENTIALLY TOXIC MATERIALS SHALL BE PROVIDED. ALL HAZARDOUS MATERIAL CONTAINERS SHOULD BE PLACED IN SECONDARY CONTAINMENT.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND MAINTAINING A WPCP ONSITE WHEN REQUIRED AND SHALL HAVE READY A COPY OF THIS PLAN WHEN REQUESTED.
12. VEHICLE AND EQUIPMENT & MAINTENANCE SHOULD BE PERFORMED OFF-SITE WHENEVER PRACTICAL.
13. SOIL STOCKPILES SHALL BE COVERED, AND LOCATED AT LEAST 50 FEET AWAY FROM DRAINAGE CHANNELS AND STORMWATER SYSTEMS.
14. CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM.
15. ALL SEDIMENT DEPOSITED ON PAVED SURFACES SHALL BE SWEPT AT THE END OF EACH WORKING DAY, AS NECESSARY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. A STABILIZED CONSTRUCTION ENTRANCE MAY BE REQUIRED TO PREVENT SEDIMENT FROM BEING DEPOSITED ON PAVED ROADWAYS.
16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE TO THEIR RESPECTIVE BMP FACT SHEET UNTIL DISTURBED AREAS ARE STABILIZED.
17. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE.
18. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIX ANY DEFICIENCIES INDICATED BY THE OWNER'S REPRESENTATIVE TO PREVENT EROSION AND CONTROL SEDIMENT.
19. PRIOR TO FINAL ACCEPTANCE ALL DISTURBED AREAS OF THE SITE SHALL BE PERMANENTLY STABILIZED WITH APPROVED SEED MIX BY CONTRACTOR AND TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED AS DIRECTED.

LEGEND

EXISTING	PROPOSED	
5 / A-21-001		SURVEY CONTROL POINT
		BORING LOCATION
		PROPERTY LINE
		EASEMENT LINE
		CENTERLINE
		REMOVE OR ABANDON (E) UTILITY
150		CONTOUR LINE
x465.12		SPOT ELEVATION
		DRIVEWAY
E		UNDERGROUND ELECTRIC LINE
x	x	FENCE LINE
		GUY WIRE
OHE		OVERHEAD POWER LINE (WITH CLERANCES)
T		COMMUNICATION LINE
W		WATER LINE & VALVE
SS	SS	SANITARY SEWER (GRAVITY)
SSFM	SSFM	SANITARY SEWER (PRESSURIZED)
SD	SD	STORM DRAIN
Ⓢ	Ⓢ	SANITARY SEWER MANHOLE
		FENCE REMOVAL
		TRAFFIC SIGN
		TREE
T		TRANSFORMER
		BOLLARD
		SELECT FILL
ELEC		ELECTRICAL VAULT
		PROPANE TANK AND PAD
		ELECTRICAL BUILDING PAD, BUILDING TYPE PER PLAN
		CONCRETE
		UTILITY POLE
		BUILDING
S		SANITARY SEWER WETWELL/DRYWELL
		ASPHALT PAVEMENT
		EDGE OF PAVEMENT
		VEGETATION REMOVAL

NOTE: NOT ALL ITEMS ON LEGEND ARE SHOWN, REFER TO ELECTRICAL SHEETS FOR ELECTRICAL LEGEND

GENERAL SHEET SYMBOLS



ABBREVIATIONS

A B	ANCHOR BOLT
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
AGG	AGGREGATE
ARV	AIR VACUUM RELEASE VALVE
AVE	AVENUE
AWWA	AMERICAN WATER WORKS ASSOCIATION
B-	BORING
BC	BEGIN CURVE
BF	BLIND FLANGE
BFP	BACK FLOW PREVENTER
BM	BENCH MARK
BLDG	BUILDING
BLVD	BOULEVARD
BO	BLOW OFF
BOT	BOTTOM
BVC	BEGIN VERTICAL CURVE
C	CONDUIT
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
CI	CAST IRON
CL	CENTERLINE
CLR	CLEAR, CLEARANCE
CO	CLEAN OUT
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONT	CONTINUOUS
CONT'D	CONTINUED
COR	CORNER
CU	CUBIC
CV	CHECK VALVE
(D)	DEMOLISH
d	PENNY (NAIL SIZE)
DIA, Ø	DIAMETER
DTL	DETAIL
DI	DROP (DRAINAGE) INLET, OR DUCTILE IRON
DF	DOUGLAS FIR
DR	DRIVE
DW	DOMESTIC WATER LINE
DWG	DRAWING
(E)	EXISTING
E	EAST, OR EASTING
EA	EACH
EC	END CURVE
EF	EACH FACE
EP	EDGE PAVEMENT
EQ	EQUAL
ER	EDGE ROAD
EL/ELEV	ELEVATION
ELEC	ELECTRIC, OR ELECTRICAL
ENGR	ENGINEER
EVC	END VERTICAL CURVE
EW	EACH WAY
(F)	FUTURE
FDC	FIRE DEPARTMENT CONNECTION
FIN	FINISH
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
FLR	FLOOR
FM	FORCE MAIN
FO	FIBER OPTIC
FP	FIRE PROTECTION
FS	FINISHED SURFACE
FT	FOOT, OR FEET
FTG	FOOTING
G	GAS LINE
GAL	GALLON
GALV	GALVANIZED
GR	GRADE
GRD	GROUND
GV	GATE VALVE
HB	HOSE BIBB
HCSB	HUMBOLDT COMMUNITY SERVICES DISTRICT
HDD	HORIZONTAL DIRECTIONAL DRILLING
HDPE	HIGH-DENSITY POLYETHYLENE
HORZ	HORIZONTAL
HPG	HIGH PRESSURE GAS
HPNS	HIGH PRESSURE NATURAL GAS
HPS	HIGH PRESSURE SODIUM
HWY	HIGHWAY
IE	INVERT ELEVATION
INV	INVERT
IP	IRON PIPE
IRR	IRRIGATION
JCT	JUNCTION
JP	JUNCTION POLE (UTILITY)
L	LENGTH
LAT	LATERAL
LF	LINEAR FEET
LS	LIFT STATION
LT	LEFT
M	METER
MAX	MAXIMUM
MFR	MANUFACTURER
MG	MILLION GALLON
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MPG	MEDIUM PRESSURE GAS
MISC	MISCELLANEOUS
(N)	NEW
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTERS
OPNG	OPENING
PC	POINT OF CURVATURE
PCC	PORTLAND CONCRETE CEMENT
PE	POLYETHYLENE
PI	POINT OF INTERSECTION
PL	PLATE, OR PROPERTY LINE
PLCS	PLACES
PLWD	PLYWOOD
POC	POINT OF CONNECTION
PP	POWER POLE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	POINT, POINT OF TANGENCY, OR PRESSURE TREATED
PVC	POLYVINYL CHLORIDE PLASTIC PIPE
R	RADIUS
RC	RELATIVE COMPACTION
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWD	REDWOOD
REQ'D	REQUIRED
REQ'T	REQUIREMENT
RPP	REDUCED PRESSURE PRINCIPAL
RT	RIGHT
R/W	RIGHT OF WAY
S	SLOPE
SAT	SATURATED
SCH, OR	
SCHED	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDCB	STORM DRAIN CATCH BASIN
SHT	SHEET
SIM	SIMILAR
SO	SOUTH
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSMH	SANITARY SEWER MANHOLE
SSTL	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
TC	TOP OF CURB
T, OR	
TEL	TELEPHONE
THK	THICK
TG	TOP OF GRATE
TP	TEST PIT, SEE GEOTECHNICAL DOCUMENTATION
TS	TOP OF SLAB
TW	TOP OF WALL
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNO	UNLESS NOTED OTHERWISE
UP	UTILITY POLE
V	VOLT(S)
VERT	VERTICAL
W/	WITH
W	WATER
WD	WIDE
WWTP	WASTEWATER TREATMENT PLANT
XING	CROSSING
YD	YARD
&	AND
@	AT
°	DEGREE
Ø	DIAMETER
'	FEET
"	INCHES
#	NUMBER
±	PLUS OR MINUS

NOTE:
CONTACT ENGINEER FOR ABBREVIATIONS NOT LISTED.

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

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COUNTY OF DEL NORTE EST 1857

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0 1"

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title CIVIL NOTES, ABBREVIATIONS, AND SYMBOLS

Size ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	C-001	3 of 31

Plot Date: 19 July 2024 - 4:49 PM
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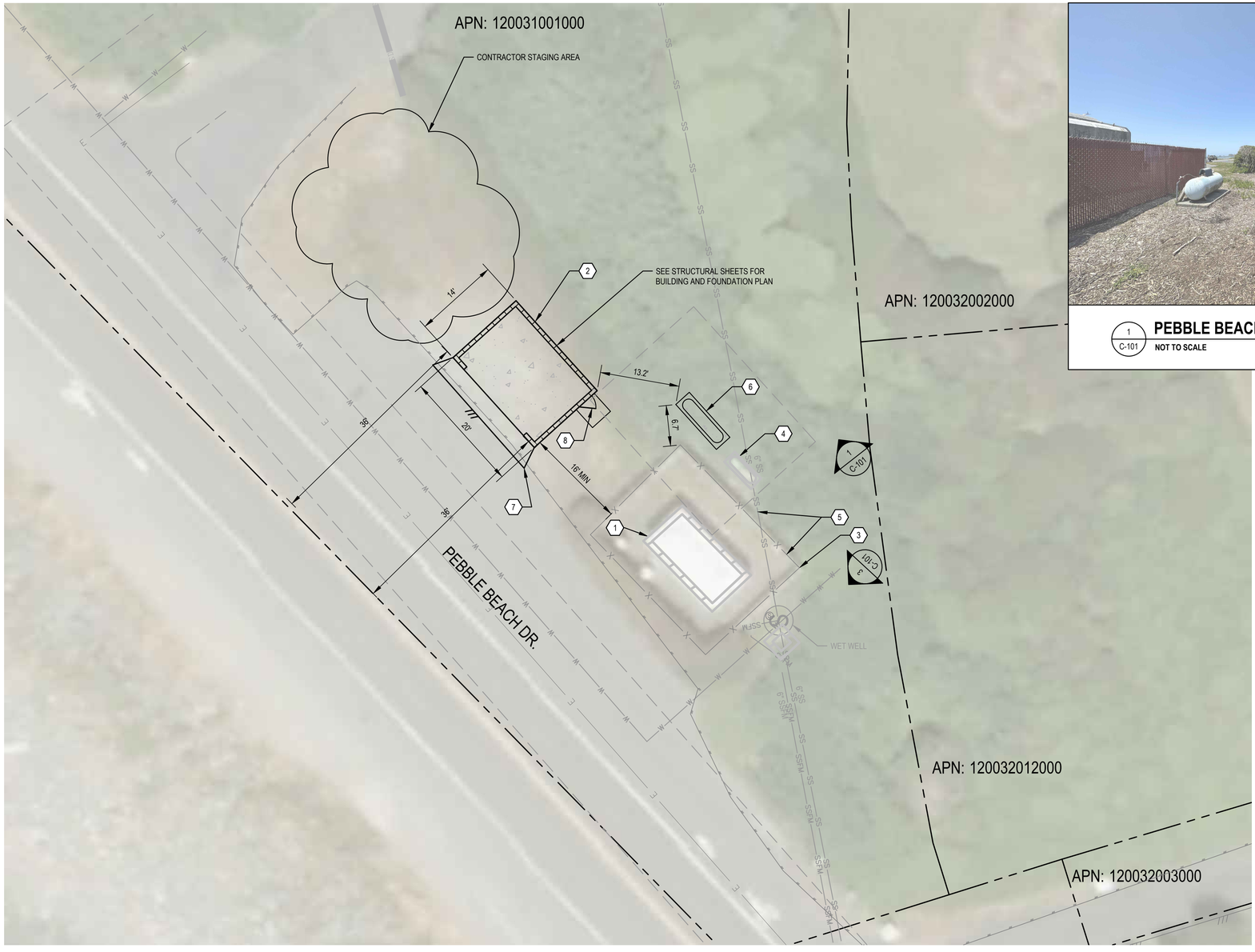

1 PEBBLE BEACH GENERATOR CIVIL PLAN - SITE 1
1" = 10'

0 10' 20'

N

1 C-101 PEBBLE BEACH LIFT STATION PHOTO 1
NOT TO SCALE

SHEET GENERAL NOTES

1. LOCATION OF (E) UTILITIES AND STRUCTURES ARE FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT (800)642-2444 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE FOR EXACT LOCATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.
2. FIELD LOCATE GENERATOR ENCLOSURE WITH OWNERS REPRESENTATIVE.
3. SEE SHEET E-101 TO FOR ELECTRICAL IMPROVEMENTS.

KEYNOTES

1. (E) PEBBLE BEACH LIFT STATION - SITE 1,
2. (N) TYPE 2 GENERATOR ENCLOSURE, SEE SLAB PER DETAIL 1, SHEET S-101, SET FF 0.25' ABOVE (E) ASPHALT APRON
3. (E) SITE FENCING TO REMAIN
4. COORDINATE REMOVE OF (E) TANK WITH TANK OWNER BLUE STAR GAS. AFTER TANK IS REMOVED, DEMOLISH EXISTING CONCRETE PAD AND APPURTENANCES.
5. (E) FACILITIES & APPURTENANCES TO REMAIN AND BE PROTECTED. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND FACILITIES IN FIELD
6. (N) PROPANE TANK AND SLAB PER DETAIL 1, SHEET C-501
7. (N) ASPHALT SECTION PER DETAIL 7, SHEET C-503
8. (N) ACCESS DOOR AND CONCRETE PAD. SEE STRUCTURAL PLANS.

2 C-101 PEBBLE BEACH LIFT STATION PHOTO 2
NOT TO SCALE

No.	Issue	Checked	Approved	Date
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Designer C. COOK | Design Check S. MCHANEY | Project Director S. ALLEN

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title PEBBLE BEACH LIFT STATION GENERATOR CIVIL PLAN

Size ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. C-101 | Sheet 4 of 31

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SHEET GENERAL NOTES

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2. FIELD LOCATE GENERATOR ENCLOSURE WITH OWNERS REPRESENTATIVE.
3. SEE SHEET E-102 FOR ELECTRICAL IMPROVEMENTS.

KEYNOTES

1. (E) MODOC LIFT STATION - SITE 2 - PROTECT IN PLACE.
2. ((N) TYPE 1 GENERATOR ENCLOSURE, SEE SLAB PER DETAIL 1, SHEET S-104.
3. CLEAR AND GRUB EXISTING VEGETATION AND TRIM TREES AS REQUIRED TO CLEAR SITE IMPROVEMENTS.
4. (E) FACILITIES & APPURTENANCES TO REMAIN AND BE PROTECTED. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND FACILITIES IN FIELD.
5. (N) CHAIN LINK FENCE WITHOUT BARBED WIRE AND EXTENSION ARMS PER DETAIL 3, SHEET C-503.
6. (N) PROPANE TANK PAD W/ 10 FT CLEARANCE SETBACK PER DETAIL 1, SHEET C-501.
7. (N) CHAIN LINK SWING GATE WITHOUT BARBED WIRE PER DETAIL 1, SHEET C-503.
8. FILL & LEVEL FOR (N) PAD(S) PER SPECIFICATIONS.
9. (N) BOLLARD PER DETAIL 1, SHEET C-502.

2 **MODOC GENERATOR CIVIL PLAN - SITE 2**
1" = 10'

0 10' 20'

N

1 C-102 **MODOC LIFT STATION PHOTO 1**
NOT TO SCALE

No.	Issue	Drafting Check	Checked	Approved	Date
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Project: PROJECT # 2007 ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: MODOC LIFT STATION GENERATOR CIVIL PLAN

Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	C-102	5 of 31

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SHEET GENERAL NOTES

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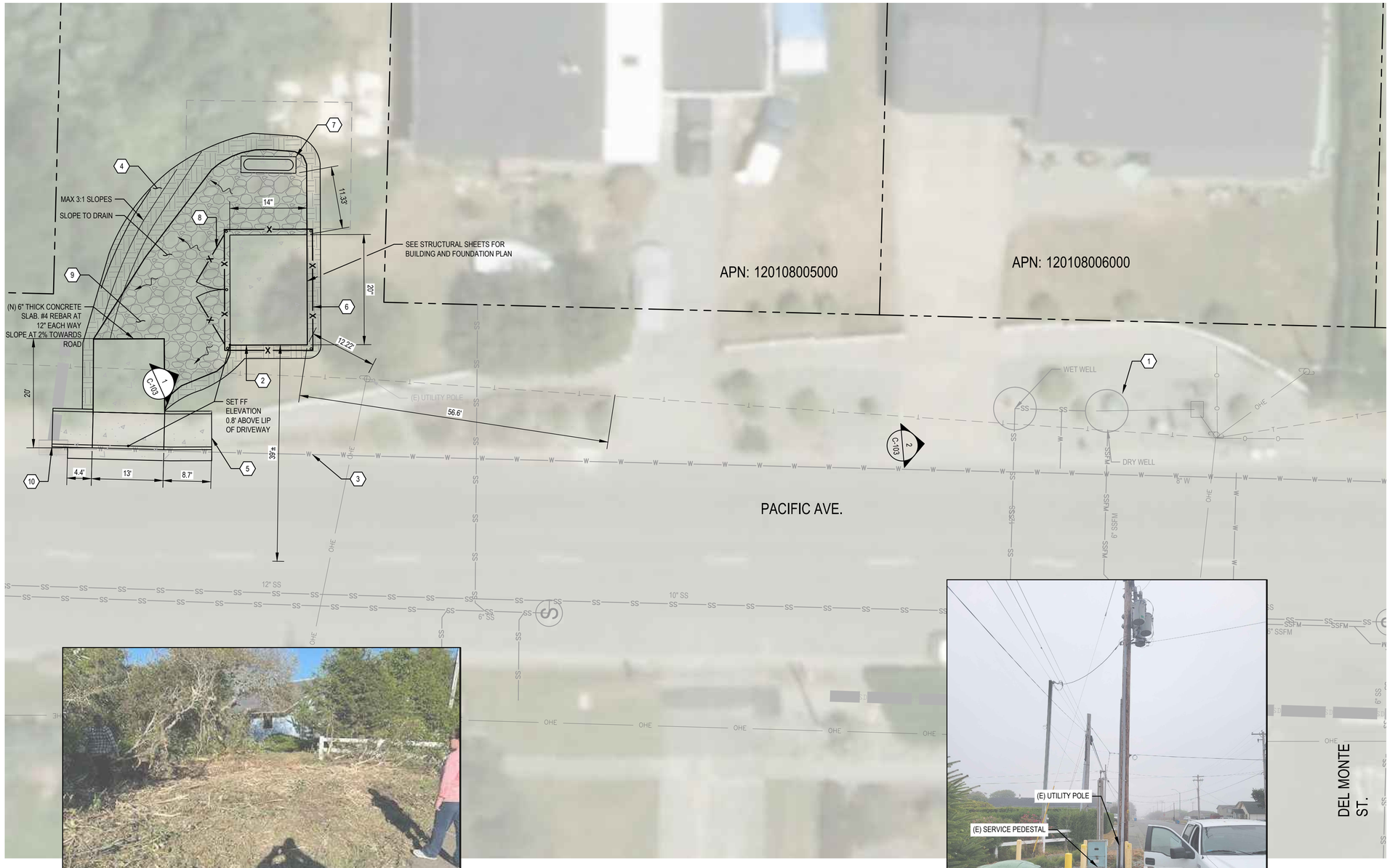
2. FIELD LOCATE GENERATOR ENCLOSURE WITH OWNERS REPRESENTATIVE.
3. SEE SHEET E-103 FOR ELECTRICAL IMPROVEMENTS.

KEYNOTES

1. (E) PACIFIC LIFT STATION - SITE 3 - PROTECT IN PLACE.
2. (N) TYPE 1 GENERATOR ENCLOSURE, SEE SLAB PER DETAIL 1, SHEET S-104.
3. (E) FACILITIES & APPURTENANCES TO REMAIN AND BE PROTECTED. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND FACILITIES IN FIELD.
4. CLEAR VEGETATION AS REQUIRED.
5. (N) DRIVEWAY PER DETAIL 2, SHEET C-502. PERFORM DEMOLITIONS AND GRADING AS REQUIRED.
6. (N) CHAIN LINK FENCE WITHOUT BARBED WIRE AND EXTENSION ARMS PER DETAIL 3, SHEET C-503.
7. (N) PROPANE TANK AND SLAB W/ 10 FT CLEARANCE SETBACK PER DETAIL 1, SHEET C-501.
8. (N) CHAIN LINK SWING GATE WITHOUT BARBED WIRE PER DETAIL 1, SHEET C-503.
9. (N) AGGREGATE BASE VEHICULAR ACCESS PATH - FILL AND COMPACTION PER SPECIFICATIONS.
10. PROTECT IN PLACE (E) STORM DRAIN INLET.



1 C-103 **PACIFIC LIFT STATION PHOTO 1**
NOT TO SCALE

3 **PACIFIC GENERATOR CIVIL PLAN - SITE 3**
1" = 10'
0 10' 20'

N

2 C-103 **PACIFIC LIFT STATION PHOTO 2**
NOT TO SCALE

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Project PROJECT # 2007 ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title PACIFIC LIFT STATION GENERATOR CIVIL PLAN

Size ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. C-103 | Sheet 6 of 31

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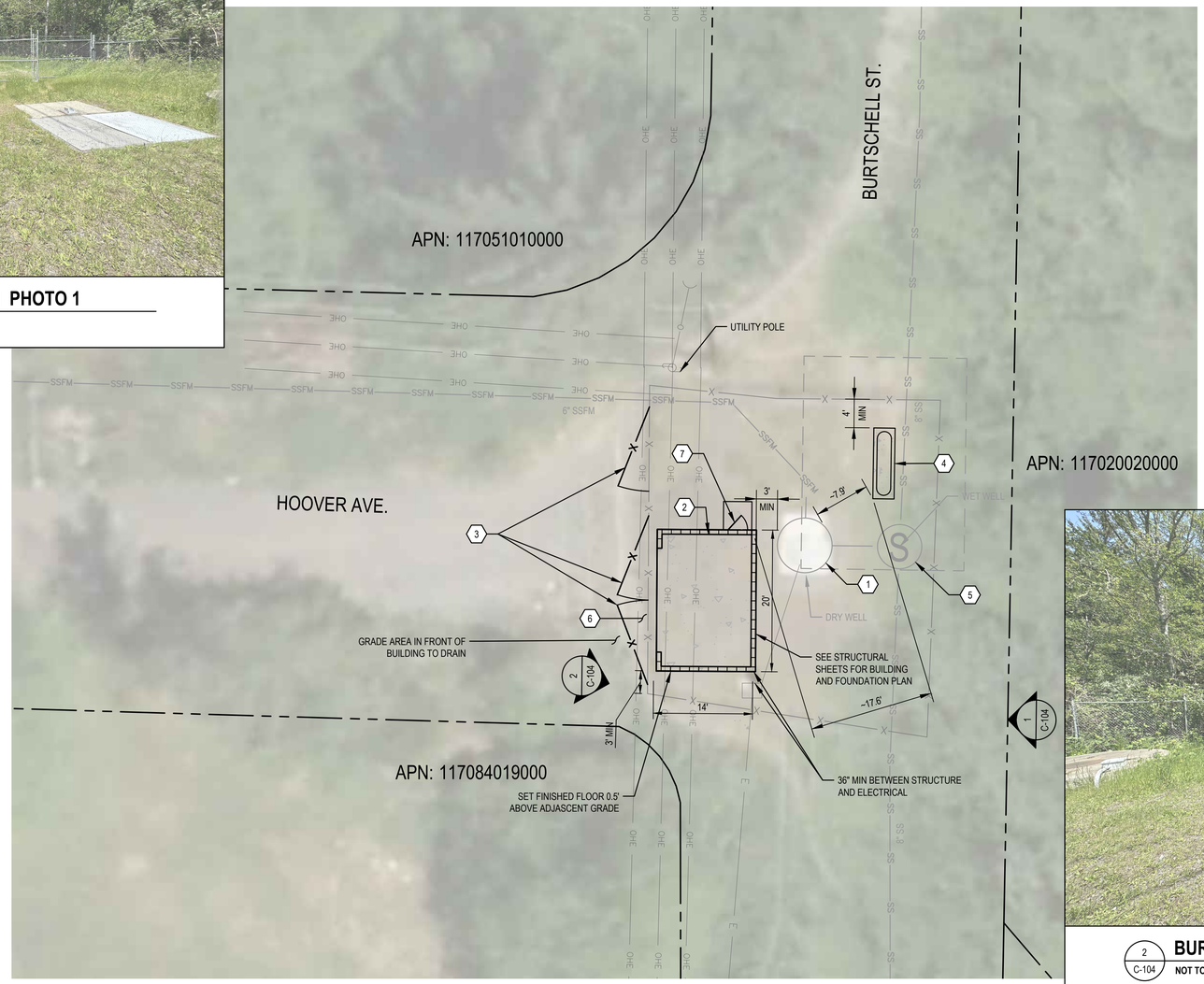
1 C-104
BURSTCHELL LIFT STATION PHOTO 1
NOT TO SCALE

SHEET GENERAL NOTES

1. LOCATION OF (E) UTILITIES AND STRUCTURES ARE FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT (800)642-2444 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE FOR EXACT LOCATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.
2. FIELD LOCATE GENERATOR ENCLOSURE WITH OWNER'S REPRESENTATIVE.
3. SEE SHEET E-104 FOR ELECTRICAL IMPROVEMENTS

KEYNOTES

1. (E) BURTSCHELL LIFT STATION - SITE 9 - PROTECT IN PLACE.
2. (N) TYPE 2 GENERATOR ENCLOSURE, SEE SLAB PER DETAIL 1, SHEET C-501.
3. MODIFY (E) FENCING AND INSTALL (N) 12" GATES W/ BARBED WIRE PER DETAIL 1, SEE SHEET C-503.
4. (N) PROPANE TANK AND SLAB W/ 10 FT CLEARANCE SETBACK PER DETAIL 1, SHEET C-501.
5. (E) WET WELL TO BE PROTECTED IN PLACE.
6. SPREAD AND COMPACT 10 CY OF GRAVEL IN FRONT OF DOORS AS DIRECTED IN THE FIELD.
7. (N) ACCESS DOOR AND PAD. SEE STRUCTURAL PLANS.



2 C-104
BURSTCHELL LIFT STATION - PHOTO 2
NOT TO SCALE

9
BURTSCHELL GENERATOR CIVIL PLAN - SITE 9
1" = 10'

0 10' 20'

N

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Designer C. COOK	Design Check S. MCHANEY	Project Director S. ALLEN	

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PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title BURTSCHELL LIFT STATION GENERATOR CIVIL PLAN

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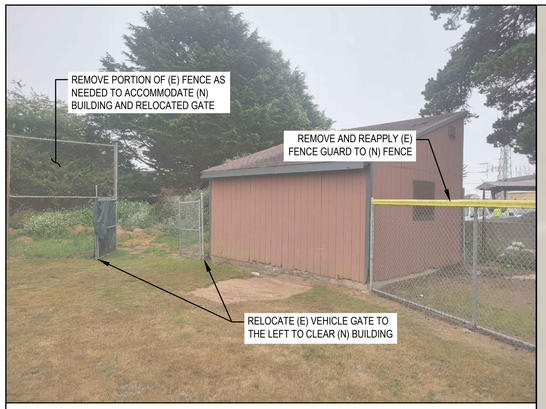
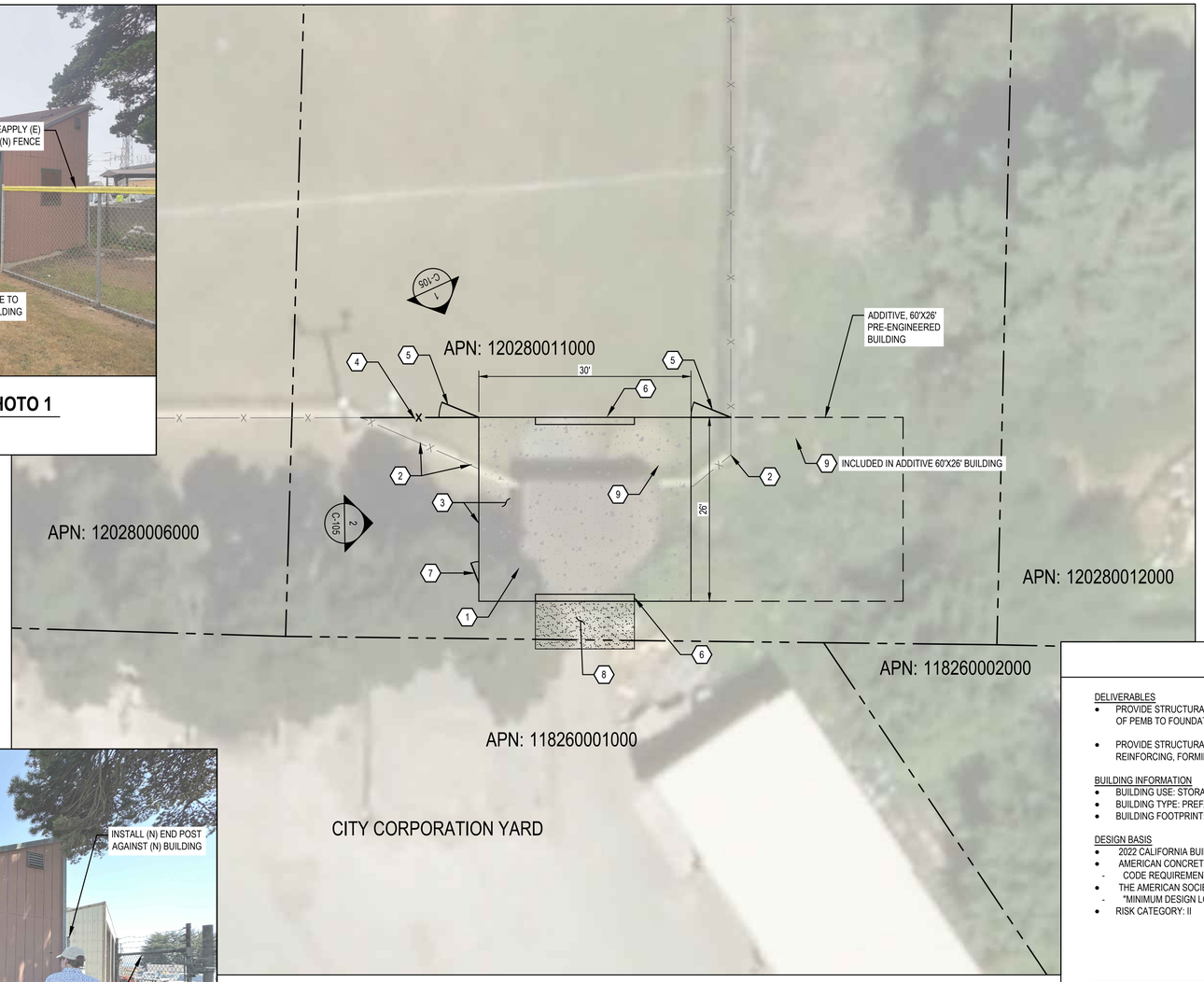


1 C-105 **CSA STORAGE BUILDING PHOTO 1**

NOT TO SCALE



12 **CSA STORAGE BUILDING CIVIL PLAN - SITE 12**

1" = 10'

0 10' 20'

N

2 C-105 **CSA STORAGE BUILDING PHOTO 2**

NOT TO SCALE

SHEET GENERAL NOTES

1. LOCATION OF (E) UTILITIES AND STRUCTURES ARE FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT (800)642-2444 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE FOR EXACT LOCATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.
2. FIELD LOCATE GENERATOR ENCLOSURE WITH OWNERS REPRESENTATIVE.
3. SEE SHEET E-105 FOR ELECTRICAL IMPROVEMENTS.

KEYNOTES

1. DEMOLISH (E) CSA STORAGE BUILDING, ELECTRICAL AND SLAB - SITE 12.
2. REMOVE A PORTION OF FENCE TO ACCOMMODATE (N) STORAGE BUILDING.
3. INSTALL (N) PRE-ENGINEERED METAL BUILDING ON (N) SLAB SET TO (E) SLAB GRADE. (N) BUILDING TO HAVE 10' MIN WALL HEIGHT AND STANDARD METAL ROOF PITCH WITH 2' OVERHANGS. PROVIDE LOUVERS AND NATURAL VENTILATION IN COMPLIANCE WITH THE INTERNATIONAL MECHANICAL CODE. SEE SHEET C-501 FOR SLAB DETAIL.
4. INSTALL (N) FENCING WITHOUT VINYL COATING TO MATCH EXISTING. SEE DETAIL 3, SHEET C-503 .
5. INSTALL (N) (SINGLE SWING) GATE, SIMILAR TO DETAIL 1, SHEET C-503.
6. (N) 14' WIDE ROLLUP DOOR, MIN 8' HEIGHT.
7. (N) 36" WALK THROUGH DOOR.
8. REMOVE (E) ASPHALT APPROACH TO (E) BUILDING AND REPAVE AT END OF CONSTRUCTION
9. (N) OPAQUE SKYLIGHT PANELS ACHIEVING 25% COVERAGE OF (N) PRE-ENGINEERED BUILDING ROOF SURFACE.
10. ACCESS FROM MACKEN AVENUE IS GUARANTEED. ACCESS THROUGH CITY YARD MAY BE COORDINATED WITH CITY.
11. IMMEDIATELY RESTORE ANY DAMAGE TO BALL FIELD PROPERTY RESULTING FROM CONSTRUCTION ACTIVITIES TO PRE-CONSTRUCTION OR BETTER CONDITIONS. CONSTRUCTION SHALL NOT HINDER SCHEDULED BALL FIELD ACTIVITIES.
12. COORDINATE TEMPORARY SECURITY MEASURES WITH CITY. CSA-1 STORAGE BUILDING ACTIVITIES SHALL NOT OBSTRUCT ACCESS TO CITY YARD.

PREFAB METAL BUILDING FOUNDATION DESIGN CRITERIA

DELIVERABLES
- PROVIDE STRUCTURAL FOUNDATION PLAN AND ANCHORAGE CONNECTION DETAILS OF PEMB TO FOUNDATION STAMPED BY A LICENSED PROFESSIONAL ENGINEER
- PROVIDE STRUCTURAL SPECIFICATIONS FOR CAST-IN-PLACE CONCRETE (CONCRETE REINFORCING, FORMING, CURING, FINISHING, AND MAINTENANCE).

BUILDING INFORMATION
- BUILDING USE: STORAGE & INTERMITTENT MOBILE GENERATORS STORAGE
- BUILDING TYPE: PREFABRICATED ENGINEERED METAL BUILDING (PEMB)
- BUILDING FOOTPRINT: PER PLAN

DESIGN BASIS
- 2022 CALIFORNIA BUILDING CODE (CBC)
- AMERICAN CONCRETE INSTITUTE (ACI):
  - CODE REQUIREMENT FOR REINFORCED CONCRETE (ACI 318-19)
- THE AMERICAN SOCIETY OF CIVIL ENGINEERS SEI/ASCE 7-16:
  - "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"
- RISK CATEGORY: II
- STRUCTURE DESIGNED FOR THE FOLLOWING WIND LOADS PARAMETERS:
  - BASIC WIND SPEED, V = 92 MPH
  - EXPOSURE = C
- STRUCTURE DESIGNED FOR THE FOLLOWING SEISMIC LOAD PARAMETERS:
  - SITE CLASS = D (DEFAULT)
  - SS = 2.036
  - SDS = 1.629
  - S1 = 0.97
  - SD1 = 1.099
  - PGA = 1.209
  - SEISMIC IMPORTANCE FACTOR (IE) = 1.0
  - SEISMIC DESIGN CATEGORY = E
  - RESPONSE MODIFICATION FACTOR, R = TO BE COORDINATED WITH PEMB MANUF.

LOADS
- LIVE LOADS = PER ASCE 7-16
- DEAD LOADS = TO BE COORDINATED WITH PEMB MANUF.

FOUNDATION DESIGN
- FOUNDATION DESIGN TO BE COORDINATED WITH PEMB MANUF.
- DESIGN OF FOUNDATION PER CHAPTER 18 ("SOILS AND FOUNDATIONS") CBC 2022
- USE PRESUMPTIVE LOAD-BEARING VALUES PER TABLE 1806.2 CBC 202

TABLE 1806.2: PRESUMPTIVE LOAD-BEARING VALUES

CLASS OF MATERIALS	VERTICAL FOUNDATION PRESSURE (PSF)	LATERAL BEARING PRESSURE (PSF/FT BELOW NATURAL GRADE)	LATERAL SLIDING RESISTANCE	
			COEFFICIENT OF FRICTION*	COHESION (PSF)**
1. CRYSTALLINE BEDROCK	12,000	1,200	0.70	---
2. SEDIMENTARY AND FOLIATED ROCK	4,000	400.00	0.35	---
3. SANDY GRAVEL AND GRAVEL (GW AND GP)	3,000	200.00	0.35	---
4. SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL (SW, SP, SM, SC, GM AND GC)	2,000	150.00	0.25	---
5. CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT (CL, ML, MH, AND CH)	1,500	100.00	---	130.00

FOR SI: 1LB PER SF = 0.0479KPS, 1LB PER SF PER FT = 0.157KPA/M
* COEFFICIENT TO BE MULTIPLIED BY THE DEAD LOAD
** COHESION VALUE TO BE MULTIPLIED BY THE CONTACT AREA, AS LIMITED BY SECTION 1806.3.2

No.	Issue	Checked	Approved	Date
-	-	-	-	-
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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
Project PROJECT # 2007
ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title **CSA STORAGE BUILDING CIVIL PLAN**

Size ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	C-105	8 of 31

Plot Date: 19 July 2024 - 5:29 PM
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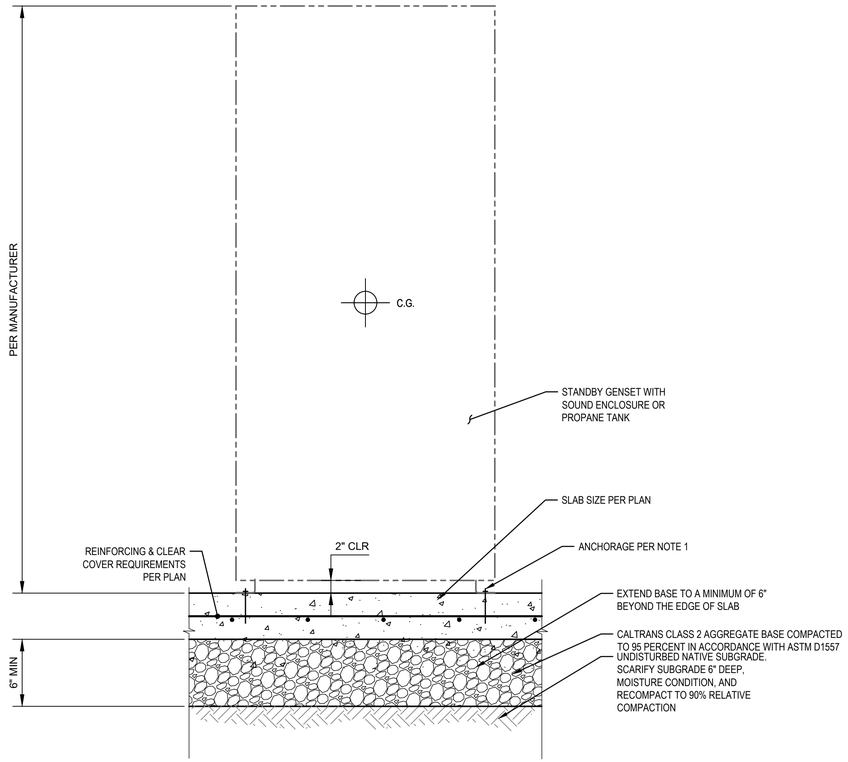
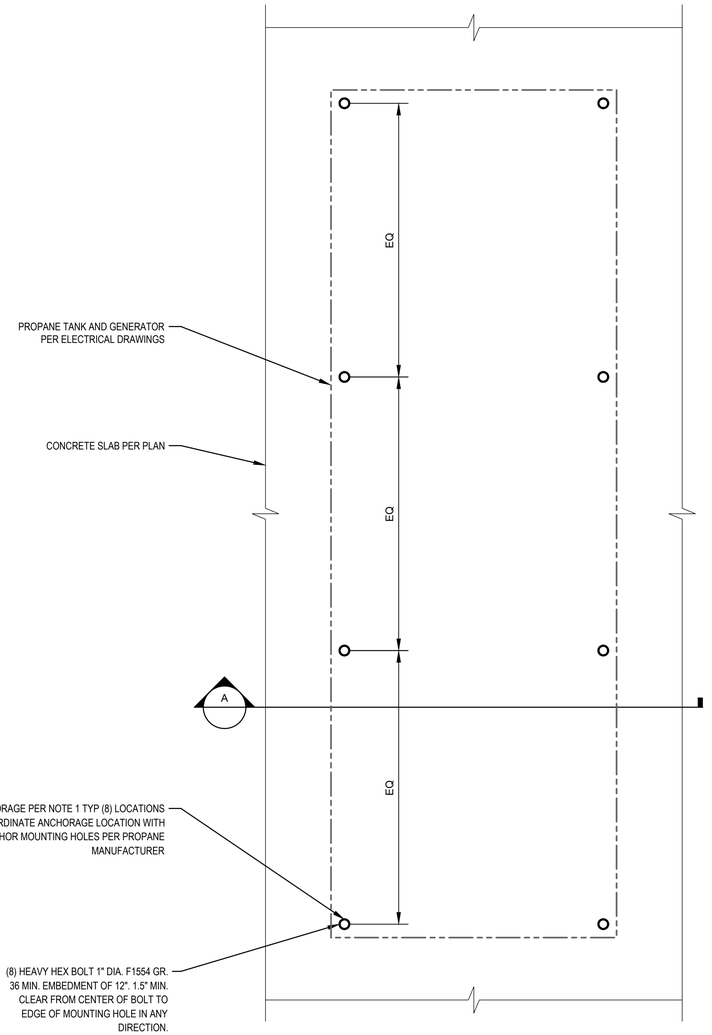


NOTE:

1. ANCHORAGE PER MANUFACTURER RECOMMENDATIONS.
2. PRIOR TO CONSTRUCTION OF THE PROPANE TANK PAD, CONTRACTOR TO VERIFY PAD IS ACCEPTABLE TO BLUE STAR GAS.

A CONCRETE PAD



NOTES:

1. CONTRACTOR TO VERIFY ACTUAL EQUIPMENT DIMENSIONS WITH EQUIPMENT MANUFACTURER AND INCREASE SIZES AS NEEDED.
2. LOCATE PAD PER CIVIL PLANS.

1 / C-501 CONCRETE PAD PLAN VIEW

NOT TO SCALE

No.	Issue	Checked	Approved	Date
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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: CIVIL DETAILS 1

Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	C-501	9 of 31

Plot Date: 19 July 2024 - 5:30 PM
Plotted By: Michelle Davidson
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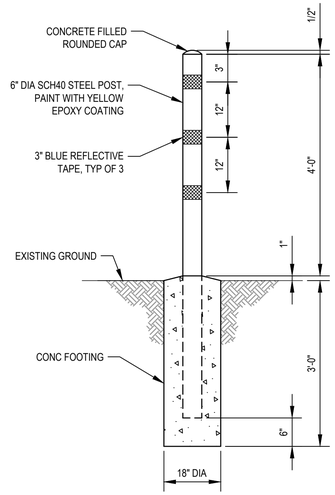

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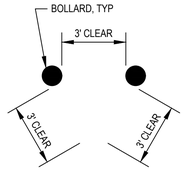
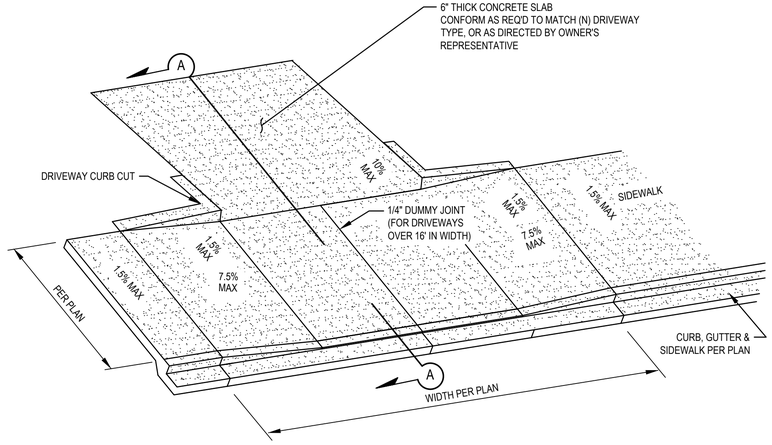
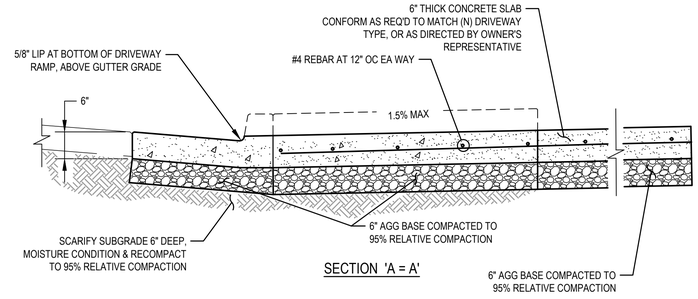


PLACEMENT PLAN FOR PROPANE TANK PROTECTION

1 C-502 TYPICAL BOLLARD INSTALLATION DETAIL

NOT TO SCALE

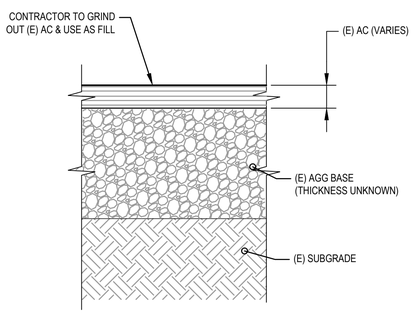


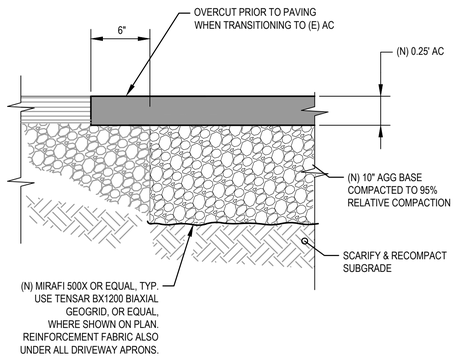


SECTION 'A = A'

2 C-502 TYPICAL DRIVEWAY DETAIL

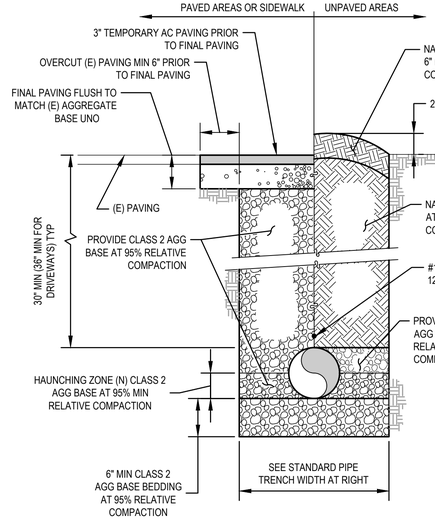
NOT TO SCALE

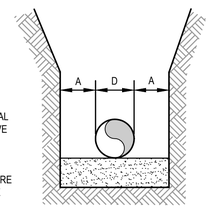




3 C-502 TYPICAL REMOVE & REPLACE AC SURFACING DETAIL

NOT TO SCALE





PIPE DIA "D"	MINIMUM "A"	MAXIMUM "A"
< 4"	3"	6"
4" TO 6"	6"	12"
6" TO 15"	8"	14"
16" TO 21"	10"	16"
24" TO 30"	12"	18"
33" TO 42"	15"	21"
48" & LARGER	18"	24"

NOTES:

1. WIDER TRENCHES MAY REQUIRE HIGHER STRENGTH PIPE AND/OR SPECIAL BEDDING.
2. FOR MULTIPLE PIPE TRENCHES SEPARATE PIPES BY 12". FOR CONDUITS IN PIPE TRENCH SEPARATE BY 6".
3. DIFFERING TRENCH WIDTHS REQUIRE PRIOR APPROVAL OF ENGINEER.
4. IN UNSTABLE SOILS INCREASE THE TRENCH WIDTH TO 5 PIPE DIAMETERS FOR PVC PIPE.
5. IN MAKING EXCAVATIONS FOR THIS PROJECT, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROVIDING & INSTALLING ADEQUATE SHEETING, SHORING & BRACING AS MAY BE NECESSARY AS A PRECAUTION AGAINST SLIDES OR CAVE-INS, AND TO PROTECT ALL EXISTING IMPROVEMENTS OF ANY KIND, EITHER ON PUBLIC OR PRIVATE PROPERTY, FULLY FROM DAMAGE.
6. CONTRACTOR TO PROVIDE & PLACE MINOR CONCRETE BACKFILL IN TRENCH WHEN MINIMUM PIPE COVER NOT POSSIBLE PER CALTRANS STANDARD SPECIFICATIONS SECTION 62-4.02.
7. NATIVE TOPSOIL SHALL BE STOCKPILED SEPARATELY FROM NATIVE SUBSOIL.

4 C-502 TYPICAL TRENCH DETAIL

NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author **C. COOK** Drafting Check **M. DAVIDSON** Project Manager **M. DAVIDSON**

Designer **C. COOK** Design Check **S. MCHANEY** Project Director **S. ALLEN**

Bar is one inch on original size sheet

0 1"

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Client **DEL NORTE COUNTY - SERVICE AREA NO. 1**

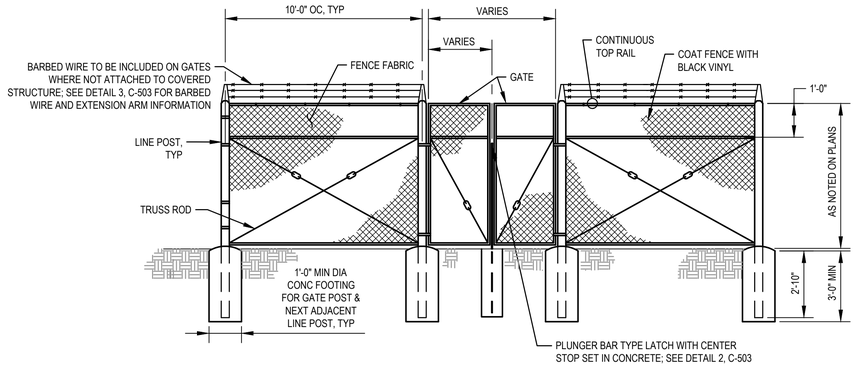
Project **PROJECT # 2007**
ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title **CIVIL DETAILS 2**

Size **ANSI D**

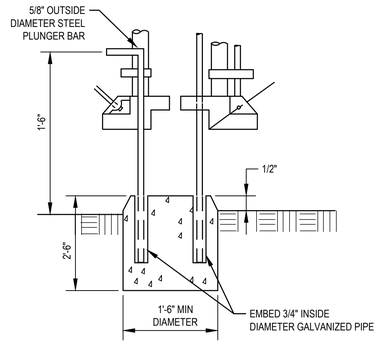
Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	C-502	10 of 31

Plot Date: 19 July 2024 - 5:32 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-CI-0502.dwg



NOTES:
1. LATCHES SHALL BE ARRANGED FOR LOCKING. ALL GATES SHALL HAVE KEEPERS CONSISTING OF A MECHANICAL DEVICE FOR SECURING THE FREE END OF THE GATE WHEN IT IS IN FULL OPEN POSITION.
2. CHAIN LINK FABRIC SHALL BE: 9 GA GALVINIZED.

1 C-503 DOUBLE SWING GATE
SCALE: NTS

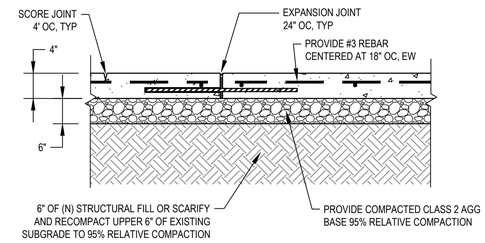


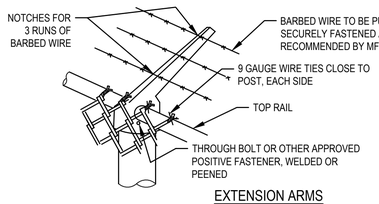
NOTES:
1. PROVIDE FOOTING & 3/4" INSIDE DIAMETER GALVANIZED PIPE FOR PLUNGER BAR TO SECURE GATE IN OPEN POSITION.

2 C-503 PLUNGER BAR DETAIL
SCALE: NTS

CONCRETE JOINT NOTES:

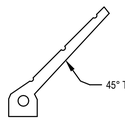
1. LOCATE EXPANSION JOINTS AT INTERVALS OF 20 FEET.
2. LOCATE TOOLED SCORE JOINT SECTIONS AT INTERVALS OF 4 FEET.
3. EXPANSION JOINT MATERIAL TO BE 1/4" THICK PREMOLDED JOINT FILLER FULL THICKNESS OF CONCRETE. EXPANSION JOINTS TO ALIGN WITH EXPANSION JOINTS IN CURB & GUTTER.

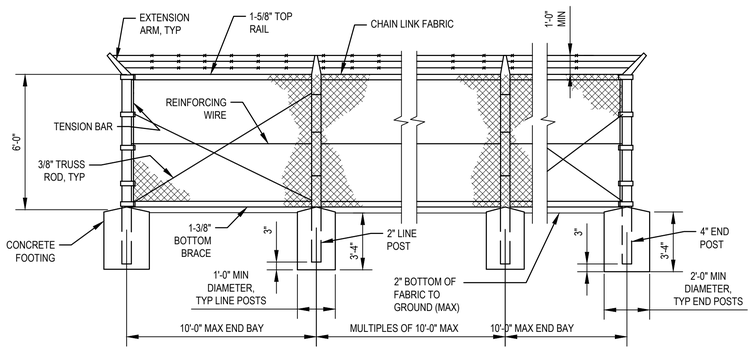




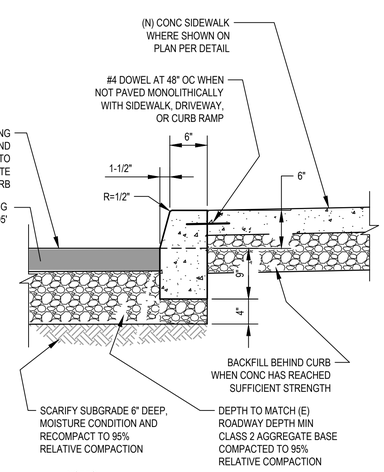
EXTENSION ARMS

NOTES:
1. ALL FENCE HARDWARE SHALL BE GALV STEEL PER SPECIFICATIONS, UNO.
2. INCLUDE BARBED WIRE AND EXTENSION ARMS AS INDICATED IN THE PLANS



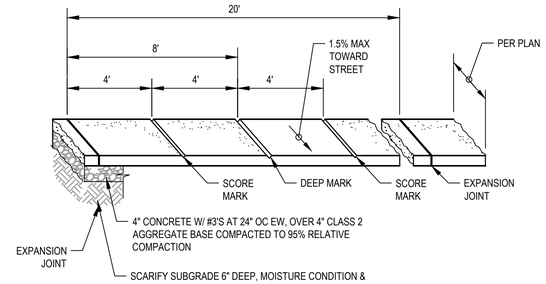


3 C-503 CHAINLINK FENCE DETAIL
SCALE: NTS



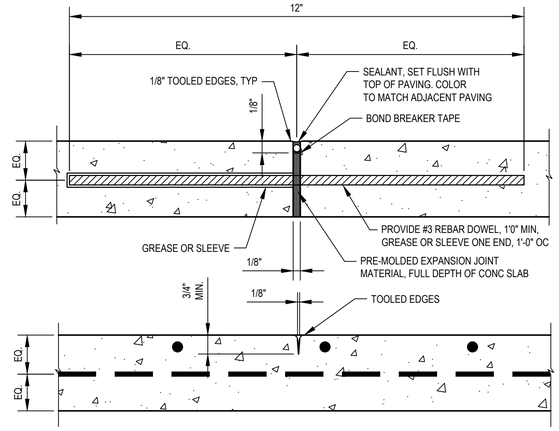
NOTES:
1. NEW CURB ELEVATIONS TO BE SET ACCORDING TO OVERLAY AND/OR AS DIRECTED BY THE ENGINEER.
2. DRILL AND DOWEL #4" INTO EXISTING CURBS. METHODS AND INSTALLATION SUBJECT TO REVIEW AND APPROVAL AS DIRECTED BY THE ENGINEER

4 C-503 TYPICAL CURB DETAIL - A1-6
SCALE: NTS

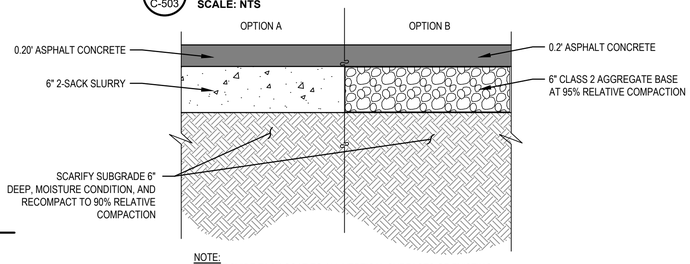


NOTES:
1. DEEP SCORE MARK OR WEAKENED PLANE-DEPTH EQUAL TO 3/4".
2. PROVIDE JOINTS PER DETAIL 5, SHEET C501.
3. SIDEWALK SHALL BE BROOM FINISHED PERPENDICULAR TO DIRECTION OF TRAVEL.
4. CONTRACTOR TO DRILL AND DOWEL #4'S AT 24" O.C. INTO EXISTING SIDEWALK AT JUNCTIONS TO EXISTING SIDEWALK, CURB, AND / OR GUTTER.
5. 6" HIGH WARNING CURB REQUIRED WHEN VERTICAL DROP ADJACENT TO SIDEWALK EXCEEDS 4".
6. 6" HIGH RETAINING CURB SHALL BE USED AS FIELD CONDITIONS WARRANT.
7. SIDEWALKS SHALL CONFORM TO THE CURRENT EDITION OF THE CBC.

5 C-503 TYPICAL SIDEWALK INSTALLATION
SCALE: NTS



6 C-503 TYPICAL CONCRETE JOINT DETAIL
SCALE: NTS



NOTE:
1. PROVIDE TACK COAT TO ALL VERTICAL SURFACES OF EXISTING PAVEMENT, CURBS, GUTTERS AND CONSTRUCTION JOINTS IN THE SURFACING AGAINST WHICH NEW ASPHALT CONCRETE PAVING IS PLACED.

7 C-503 TYPICAL ASPHALT PAVING SECTION
SCALE: NTS

No.	Issue	Checked	Approved	Date
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Author C. COOK	Drafting Check M. DAVIDSON	Project Manager M. DAVIDSON	
Designer C. COOK	Design Check S. MCHANEY	Project Director S. ALLEN	

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project # 2007
Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: CIVIL DETAILS 3

Size: ANSI D

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12578211	07/22/2024	AS SHOWN	C-503	11 of 31

Plot Date: 19 July 2024 - 5:32 PM
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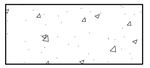
Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-CI-0503.dwg

ABBREVIATIONS

AB	ANCHOR BOLT
ABC	AGGREGATE BASE COURSE
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
ADD'L	ADDITIONAL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ARCH	ARCHITECT/ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
&	AND
@	AT
B, BOT	BOTTOM
B/	BOTTOM OF
BB	BOTTOM BARS
BO	BOND
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAIL
BRG	BEARING
BS	BOTH SIDES
BTWN	BETWEEN
C	CHANNEL
C/C	CENTER TO CENTER
CANT	CANTILEVER
CAP	CAPACITY
CBC	CALIFORNIA BUILDING CODE
CF	CONTRACTOR FURNISHED
CI	CONTRACTOR INSTALLED
CJ	CONTRACTION/CONTROL JOINT
CL	CENTERLINE
CLR	CLEAR
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
CTR/CTR'D	CENTER/CENTERED
d	PENNY (NAIL SIZE)
DBL	DOUBLE
DET	DETAIL
DF	DOUGLAS FIR
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISCONT	DISCONTINUE
DL	DEAD LOAD
DN	DOWN
Do	DITTO
DP	DEEP
DWG	DRAWING
DWL	DOWEL
E	EXISTING
EA	EACH
EF	EACH FACE
EG	EXISTING GROUND, EXAMPLE
EL, ELEV	ELEVATION
EMBED	EMBEDMENT
EN	EDGE NAIL
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ETC	ET CETERA
EW	EACH WAY
EWEF	EACH WAY EACH FACE
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FULL HEIGHT
FIN	FINISH
FL	FLOOR
FLG	FLANGE
FN	FACE NAIL
FND	FOUNDATION
FO	FACE OF
FOM	FACE OF MASONRY
FOW	FACE OF WALL
FRMG	FRAMING
FS	FAR SIDE
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GF	GOVERNMENT FURNISHED
GRT	GROUT
GSN	GENERAL STRUCTURAL NOTES
GYP	GYPSUM
HAS	HEADED ANCHOR STUDS
HD	HAND
HDG	HOT DIP GALVANIZED
HEF	HORIZONTAL EACH FACE
HIF	HORIZONTAL INSIDE FACE
HK	HOOK
HM	HOLLOW METAL
HOF	HORIZONTAL OUTSIDE FACE
HORIZ	HORIZONTAL
HP	HIGH POINT
HSS	HOLLOW STRUCTURAL STEEL
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IE	FOR EXAMPLE
INFO	INFORMATION
INT	INTERIOR
INTERMED	INTERMEDIATE
INTERSECT	INTERSECTION
INV	INVERT
JST	JOIST
JT	JOINT
L	ANGLE
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONGIT	LONGITUDINAL
LP	LOW POINT
LT	LEFT
MACH	MACHINE
MAINT	MAINTENANCE
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BELT
MC	CHANNEL
MCJT	MASONRY CONTROL JOINT
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MNTG	MOUNTING
MO	MASONRY OPENING
MOD	MODIFIED
MTL	METAL
N	NEW
NIC	NOT IN CONTRACT
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
#	NUMBER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPG	OPENING
OPP	OPPOSITE
OWSJ	OPEN WEB STEEL JOIST
PEB	PRE ENGINEERED BUILDING
PEMB	PRE ENGINEERED METAL BLDG
PL	PLATE
PLCS	PLACES
PLYWD	PLYWOOD
PNL	PANEL
PREFAB	PREFABRICATED
PT	POINT, PRESSURE TREATED
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
REF	REFERENCE
REINF	REINFORCING
REQD	REQUIRED
RF	ROOF
RGF	RECIRCULATING GRAVEL FILTER
RM	ROOM
SCHED	SCHEDULE
SHT	SHEET
SIM	SIMILAR
SMS	SHEET METAL SCREW
SP	SPACE/SPACES
SPC'G	SPACING
SPEC	SPECIFICATIONS
SST	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
SYMM	SYMMETRICAL
T	TOP
T/	TOP OF
T & B	TOP AND BOTTOM
TB	TOP OF BAR
THK	THICK
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TS	TOP OF SLAB, TUBE STEEL
TW	TOP OF WALL
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
VEF	VERTICAL EACH FACE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VOF	VERTICAL OUTSIDE FACE
W/	WITH
W OR WF	WIDE FLANGE (BEAM)
W/O	WITHOUT
WP	WORK POINT
WS	WATERSTOP
WT	WEIGHT

STRUCTURAL SYMBOLS LEGEND

MATERIALS



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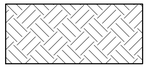
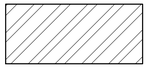


EARTH IN SECTION

GROUT IN SECTION



STEEL IN SECTION

ANNOTATION

GENERAL NOTES

1. ABBREVIATIONS ON THIS SHEET APPLY ONLY TO THE STRUCTURAL DRAWINGS, REFER TO OTHER DISCIPLINES FOR APPLICABLE SYMBOLS NOT PROVIDED HERE.
2. THIS IS A STANDARD ABBREVIATIONS SHEET, THEREFORE, SOME ABBREVIATIONS MAY APPEAR ON THIS SHEET AND MAY NOT BE UTILIZED ON THIS PROJECT.

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author R. RIOS | Drafting Check M. DAVIDSON | Project Manager M. DAVIDSON
Designer R. RIOS | Design Check S. MCHANEY | Project Director S. ALLEN

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Title STRUCTURAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES

Size ANSI D

Sheet No. S-001 | Sheet 12 of 27

Plot Date: 19 July 2024 - 5:33 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-ST-0001.dwg

SHEET GENERAL NOTES

1. DESIGN CRITERIA:

   2022 CALIFORNIA BUILDING CODE (CBC).

   AMERICAN CONCRETE INSTITUTE (ACI):

   CODE REQUIREMENTS FOR REINFORCED CONCRETE (AC1 318-19)

2. LOADS:
   RISK CATEGORY = II

   STRUCTURE DESIGNED FOR WIND LOADS BASED ON THE FOLLOWING PARAMETERS:
   BASIC WIND SPEED, V =92 MPH (3 SEC. GUST)
   INTERNAL PRESSURE COEFFICIENT, GCPI = +/- 0.18
   EXPOSURE CATEGORY: C

   STRUCTURE DESIGNED FOR SEISMIC LOADS BASED ON THE FOLLOWING PARAMETERS:
   SITE CLASS = D (DEFAULT)
   S_S = 2.036g S_{DS} = 1.629g
   S_1 = 0.97g S_{D1} = 1.099g
   IMPORTANCE FACTOR, I = 1.0
   SEISMIC DESIGN CATEGORY = E

   (N) TYPE 1 GENERATOR ENCLOSURE (STEEL)
   BASIC SEISMIC-FORCE-RESISTING SYSTEM = SPECIAL STEEL CANTILEVER COLUMNS
   RESPONSE MODIFICATION FACTOR, R = 2.5
   METHOD OF ANALYSIS: EQUIVALENT LATERAL FORCE PROCEDURE
   SEISMIC RESPONSE COEFFICIENT, CS= 0.65
   DESIGN BASE SHEAR, V = 5.5 KIPS

   (N) TYPE 2 GENERATOR ENCLOSURE (CMU)

   BASIC SEISMIC-FORCE-RESISTING SYSTEM = SPECIALLY REINFORCED CMU SHEAR WALLS
   RESPONSE MODIFICATION FACTOR, R = 5
   METHOD OF ANALYSIS: EQUIVALENT LATERAL FORCE PROCEDURE
   SEISMIC RESPONSE COEFFICIENT, CS= 0.32
   DESIGN BASE SHEAR, V = 29.5 KIPS

   ROOF LIVE LOAD: 20 PSF
   ROOF GROUND SNOW LOAD Pg=5 PSF

3. UNLESS NOTED OTHERWISE, REFER TO DRAWINGS OTHER THAN STRUCTURAL FOR FINISHES, SLOPES, DEPRESSIONS, OPENINGS CURBS, STAIRS, RAMPS, TRENCHES, EQUIPMENT AND LOCATIONS AND EXTENT OF SUCH CONDITIONS.

4. CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.

5. DETAILS OR CONDITIONS NOT FULLY DEVELOPED ON STRUCTURAL DOCUMENTS ARE SIMILAR TO DEVELOPED DETAILS.

6. ALL BUILDING FOUNDATION PLANS TO BE COORDINATED WITH GENERAL NOTES AND TYPICAL DETAILS AS APPLICABLE.

7. THE STRUCTURES HAVE BEEN DESIGNED TO BE STABLE AND SELF SUPPORTING AFTER THE CONSTRUCTION IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY FOR THE STRUCTURE'S STABILITY DURING CONSTRUCTION. THIS RESPONSIBILITY ALSO INCLUDES BUT IS NOT LIMITED TO METHOD AND SEQUENCE OF ERECTION, TEMPORARY SHORING AND TEMPORARY BRACING.

8. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

FOUNDATIONS

1. GEOTECHNICAL INFORMATION AND FOUNDATION DESIGN IS BASED ON MINIMUM PRESUMPTIVE LOAD-BEARING VALUES PER CODE (CBC 2022 TABLE 1806A.2).

2. SPREAD OR CONTINUOUS FOOTINGS:

ANTICIPATED BEARING MATERIAL	ALLOWABLE BEARING CAPACITY (PSF)[A]	ALLOWABLE LATERAL RESISTANCE	
		PASSIVE RESISTANCE (PSF)[A,C]	FRICTION RESISTANCE
COMPETENT FORMATION	1500	100	0.25

CRITERIA FOR CONTRACTOR DESIGNED ELEMENTS

1. DESIGN OF SHOP FABRICATED WOOD TRUSSES, ANCHORAGE OF MECHANICAL AND ELECTRICAL EQUIPMENT; WIND AND SEISMIC DESIGN OF TANKS AND TANK ANCHORAGE; AND OTHER STRUCTURES OR ITEMS AS SPECIFIED OR INDICATED ON THE DRAWINGS TO BE DESIGNED BY THE CONTRACTOR'S ENGINEER SHALL MEET THE FOLLOWING CRITERIA:

   DESIGN IN ACCORDANCE WITH THE FOLLOWING STANDARD:
   2022 CBC
   AMERICAN SOCIETY OF CIVIL ENGINEERS "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ASCE 7-16)

   COMPONENT AMPLIFICATION FACTOR "ap" AND THE COMPONENT RESPONSE MODIFICATION FACTOR "Rp" SHALL BE TAKEN FROM ASCE 7-16 TABLES 13.5-1 OR 13.6-1.

   WIND DESIGN CRITERIA PER 2022 CBC
   SEE DESIGN CRITERIA GENERAL NOTES

   SEISMIC LOADS:
   SEE DESIGN CRITERIA GENERAL NOTES

2. WHEN USING ALLOWABLE STRESS DESIGN LOAD COMBINATIONS PER THE 2022 CBC SECTION 1605A.3.1 DO NOT USE MORE THAN 60 PERCENT OF THE WEIGHT OF MECHANICAL AND ELECTRICAL EQUIPMENT OR TANKS FOR DESIGNING ANCHORS FOR RESISTING OVERTURNING DUE TO DESIGN FORCES. WHEN USING FACTORED LOADS FOR STRENGTH DESIGN PER THE 2022 CBC SECTION 1605A.2.1 DO NOT USE MORE THAN 90 PERCENT OF THE WEIGHT OF MECHANICAL AND ELECTRICAL EQUIPMENT OR TANKS FOR DESIGNING ANCHORS FOR RESISTING OVERTURNING DUE TO DESIGN FORCES.

3. USE CAST-IN-PLACE OR POST-INSTALLED ANCHOR BOLTS, BOLTS, OR WELDED STUDS FOR ANCHORS FOR RESISTING DESIGN FORCES. ANCHOR BOLTS USED TO RESIST DESIGN FORCES SHALL HAVE A STANDARD HEX BOLT HEAD. DO NOT USE ANCHOR BOLTS FABRICATED FROM ROD STOCK WITH AN L OR J SHAPE. DRILLED-IN EXPANSION ANCHORS SHALL NOT BE USE TO ANCHOR VIBRATING EQUIPMENT TO CONCRETE. ANCHORS MUST BE APPROVED FOR EXTERIOR EXPOSURE / DAMP ENVIRONMENTS.

4. ALL ANCHORAGE INTO CONCRETE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

5. DESIGN FORCES MUST BE RESISTED BY DIRECT BEARING ON THE FASTENERS USED TO RESIST THOSE FORCES. DO NOT USE CONNECTIONS, WHICH USE FRICTION TO RESIST SEISMIC FORCES INCLUDING DRILLED-IN EXPANSION ANCHORS.

6. SUBMIT COMPLETE SHOP DRAWINGS AND CALCULATIONS FOR ALL ITEMS DESIGNED BY CONTRACTOR'S ENGINEERS AND OBTAIN APPROVAL FROM ENGINEER OF RECORD.

7. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND STAMPED BY A CIVIL OR STRUCTURAL PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF CALIFORNIA.

8. STRUCTURE ACCESS HATCHES SHALL BE MANUFACTURED BY THE BILCO COMPANY, MODEL J-AL, ALUMINUM, WATER AND ODOR TIGHT, AND RATED FOR LIVE LOAD OF 300 PSF, OR APPROVED EQUAL.

9. STRUCTURE ACCESS HATCHES CALLED OUT ON THE PLANS TO INCLUDE "FALL PROTECTION GRATING" SHALL INCLUDE FACTORY INSTALLED GRATING, TYPE FPG, BY THE BILCO COMPANY.

10. SHOP FABRICATED WOOD TRUSSES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND CBC SECTION 2303.4.

MASONRY

1. ALL WORK TO CONFORM TO THE REQUIREMENTS OF THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES DESIGNATED AS TMS 402-16 (AND FORMERLY DESIGNATED AS TMS 402/ACI 530/ASCE 5) AND SPECIFICATION FOR MASONRY STRUCTURES DESIGNATED AS TMS 602-16 (AND FORMERLY DESIGNATED AS TMS 602/ACI 530.1/ASCE 6).

2. MINIMUM NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY GROUT: F'G = 2000 PSI AT 28 DAYS.

3. MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY UNIT: F'M = 2000 PSI

4. MINIMUM NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY MORTAR = 2000 PSI (TYPE S IN ACCORDANCE WITH ASTM C270).

5. ALL GROUT FOR CONCRETE MASONRY WALLS AND LINTELS SHALL BE PROPORTIONED AND MIXED IN ACCORDANCE WITH ASTM C476.

6. ALL CONCRETE MASONRY WALLS SHALL BE REINFORCED AS SHOWN. SEE TYPICAL DETAILS VERTICAL AND HORIZONTAL BARS AT CORNERS, CONTROL JOINTS, AND MASONRY OPENINGS AS SHOWN IN DETAILS.

7. ALL CELLS OF MASONRY UNITS TO BE GROUTED SOLID.

8. GROUTING OF MASONRY UNITS MAY BE DONE BY EITHER THE LOW-LIFT OR HIGH-LIFT METHODS OF GROUTING:

   LOW-LIFT GROUTING - MAXIMUM GROUT POUR HEIGHT SHALL NOT EXCEED FIVE FEET.

   HIGH-LIFT GROUTING - MAXIMUM GROUT POUR HEIGHT SHALL NOT EXCEED 12 FEET WITHOUT PRIOR APPROVAL; PLACE AND CONSOLIDATE GROUT IN LIFTS NOT EXCEEDING 5 FEET. IN ADDITION, CLEANOUT OPENINGS OF SUFFICIENT SIZE SHALL BE PROVIDED AT THE BOTTOM OF ALL VERTICAL CAVITIES CONTAINING REINFORCEMENT.

   GROUT POURS EXCEEDING 12 INCHES IN HEIGHT ARE TO BE CONSOLIDATED AND RECONSOLIDATED BY MECHANICAL VIBRATION PER ACI 530.1/ASCE 6.

9. ALL BAR REINFORCING FOR MASONRY SHALL CONFORM TO ASTM A 615 GRADE 60 (DEFORMED).

10. LAP ALL BAR REINFORCING FOR MASONRY WALLS IN ACCORDANCE WITH THE SCHEDULE ON SHEET S-502, UNLESS OTHERWISE NOTED. BOND BEAM REINFORCING STEEL TO RUN CONTINUOUS THROUGH CONTROL JOINTS.

11. ALL VERTICAL REINFORCING BARS IN MASONRY WALLS TO BE PLACED IN CENTER OF WALLS USING VERTICAL BAR POSITIONERS SPACED AT INTERVALS NOT EXCEEDING 200 BAR DIAMETERS.

12. PROVIDE GALVANIZED TRUSS OR LADDER DESIGN JOINT REINFORCING WITH ONE 0.188 INCH (MINIMUM) DIAMETER SIDE ROD AT EACH FACE SHELL. JOINT REINFORCING SHALL BE SPACED 16" O.C., UNLESS OTHERWISE NOTED.

13. AT REINFORCED MASONRY LINTELS, PROVIDE TEMPORARY SHORING TO SUPPORT MASONRY OVER OPENINGS. SHORING IS TO REMAIN IN PLACE A MINIMUM OF 14 DAYS (28 DAYS FOR OPENINGS OVER 5'-0").

14. CMU BLOCK FINISH SHALL BE SPLIT FACE, REFERENCE SPECIFICATIONS.

CONCRETE

1. ALL CONCRETE SHALL BE NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS.

2. CONCRETE REINFORCING COVER SHALL BE AS FOLLOWS:

   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3 INCHES
   CONCRETE EXPOSED TO EARTH OR WEATHER .....2 INCHES

3. ALL CONCRETE DIMENSIONS SHOWN ARE MINIMUM DIMENSIONS. CONTRACTOR TO REVIEW FORMING, REINFORCING DETAILS AND ANY EMBEDDED ITEMS AND DETERMINE PRIOR TO FABRICATION OF ANY REINFORCING, PLACEMENT REQUIREMENTS AND CLEARANCES.

4. ALL WALLS AND SLABS HAVE BEEN DESIGNED WITH REBAR NECESSARY TO PREVENT SHRINKAGE, THEREFORE EXPANSION JOINTS ARE NOT REQUIRED, UNO.

5. CONTRACTOR TO SUBMIT CONSTRUCTION POUR SEQUENCE PLAN, INDICATING ALL PLANNED CONSTRUCTION JOINTS.

6. WATERSTOPS TO BE INSTALLED AT ALL CONCRETE JOINTS.

7. EPOXY ANCHORS SHALL BE ONE OF THE FOLLOWING, UNO:

   HILTI HIT-HY 200 (ICC-ES REPORT ESR-3187)

   HILT HIT-RE 500 (ICC-ES REPORT ESR-2322)

   SIMPSON SET-3G (ICC-ES REPORT ESR-4057)

REINFORCING

1. ALL CONCRETE REINFORCING SHALL BE ASTM A615, Fy = 60 KSI., UNLESS NOTED OTHERWISE.

2. REINFORCING SHALL EXTEND CONTINUOUS FOR THE DIMENSION SHOWN.

3. NO WELDING OF ANY REINFORCING IS PERMITTED, UNLESS SPECIFICALLY STATED ON THE PLANS. REINFORCEMENT TO BE WELDED TO MEET THE REQUIREMENTS OF ASTM A706.

4. LOCATE ALL REINFORCING AS SHOWN ON DRAWINGS AND FASTEN SECURELY.

5. LAP SPLICES AND DEVELOPMENT LENGTHS PER DETAIL ON DRAWING S-501.

6. REINFORCEMENT SHALL BE PLACED SO AS NOT TO COME IN CONTRACT WITH METALLIC CONCRETE PENETRATIONS.

7. ALL REINFORCING TO TERMINATE WITH STANDARD HOOKS AS SHOWN ON PLANS. ALL STIRRUPS AND TIES TO BE CLOSED WITH 135° BENDS.

8. IN WALL ELEMENTS, VERTICAL BARS SHALL BE LOCATED ON OUTERMOST LAYER UNLESS SPECIFICALLY NOTED OTHERWISE.

WOOD NOTES

1. ALL WORK TO CONFORM TO THE REQUIREMENTS OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (ANSI/NFOPA NDS-2012) AS RECOMMENDED BY THE AMERICAN FOREST & PAPER ASSOCIATION.

2. THE STANDARD WOOD DETAILS AND THE NAILING, ETC., CALLED FOR IN THESE NOTES ARE MINIMUM REQUIREMENTS AND WILL APPLY TO ALL WORK EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE SHOWN ELSEWHERE. ALL WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 23 OF THE 2022 CBC.

3. FRAMING LUMBER SHALL BE COAST DOUGLAS FIR OR REDWOOD GRADED AS FOLLOWS: ANY MEMBER WHICH FALLS BELOW GRADE OR HAS DEFECTS WHICH AFFECTS SERVICEABILITY SHALL BE REJECTED. ALL STRUCTURAL FRAMING SHALL BE SURFACED DRY WITH 19% OR LESS MOISTURE.
   BEAMS & JOISTS SHALL BE DF-L#1
   POSTS, HEADERS, AND STIFFENERS (4x OR LESS) SHALL BE DF-L#1

4. ROOF PLYWOOD PANELS SHALL BE APA RATED STRUCTURAL 1, 32/16, EXTERIOR. MINIMUM PANEL WIDTH 24". THICKNESS AS SHOWN ON PLANS OR ⅜" MIN.

5. THE MINIMUM REQUIREMENTS FOR DETAILS NOT SHOWN WILL BE PER 2022 CBC CHAPTER 23, INCLUDING NAILING PER TABLE 2304.9.1.

6. BOLTS SHALL BE ¾ INCH DIAMETER A307 UNO. ALL BOLTS IN BEARING CONTACT WITH WOOD SHALL HAVE A MALLEABLE IRON WASHER ON CONTACT SURFACE. USE CUT WASHERS ONLY WHERE DETAILED.

7. FOR CONVENIENCE FRAMING CONNECTIONS BY THE SIMPSON COMPANY, PLEASANTON, CA, ARE CALLED OUT ON THE DRAWINGS. EQUIVALENT CONNECTIONS OF OTHER MANUFACTURERS HAVING THE SAME OR BETTER CAPACITY AND HAVING APPROVED TEST REPORTS MAY BE USED. PROVIDE FULL NAILING OR BOLTING OF CONNECTIONS AS PUNCHED USING MANUFACTURER'S NAILS, SCREWS OR SPECIFIED BOLTS.

8. ALL BEAM TO POST CONNECTIONS SHALL BE SUPPORTED BY APPROPRIATELY SIZED SIMPSON CCO COLUMN CAPS.

9. NAILS WILL BE COMMON WIRE TYPE UNO, GALVANIZED IN EXTERIOR LOCATIONS & AT PT SILL. PRE-DRILL NAIL HOLES IN SEASONED DRY WOOD AS REQUIRED TO PREVENT SLITTING. WOOD SPLIT BY CONTRACTOR SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.

10. UPSET THREADS ON ANCHOR BOLTS ARE NOT ALLOWED.

11. RE-TIGHTEN ALL BOLTS PRIOR TO CLOSING UP WALLS.

12. EPOXY ANCHORS AND DOWELS

12.1. EPOXY SHALL BE ONE OF THE FOLLOWING, UNO

   HILT HIT-RE 500V3 (ICC-ES REPORT ESR-3814)

12.2. RODS EMBEDDED IN EPOXY SHALL BE CARBON STEEL THREADED RODS PER THE EPOXY MANUFACTURER'S TEST REPORT

12.3. REINFORCING STEEL BARS EMBEDDED IN EPOXY SHALL BE ASTM A615, GRADE 60, UNO

STEEL

1. DETAIL, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (LATEST EDITION AND SUPPLEMENTS).

2. ALL STEEL AND STRUCTURAL CONNECTIONS LOCATED INSIDE THE SEPTIC TANK AND RECIRCULATION TANK SHALL BE STAINLESS STEEL, GRADE 316, UNLESS NOTED OTHERWISE.

3. ALL THREADED RODS AND ANCHORS: STAINLESS STEEL, ASTM F593, GRADE 316, 65 KSI MIN YIELD. THIS INCLUDES THREADED ROD USED WITH EPOXY ANCHORAGE.

4. BOLTED CONNECTIONS, UNLESS NOTED OTHERWISE: 3/4-INCH DIAMETER (UNO) ASTM F593, GRADE 316, 65 KSI MIN YIELD.

5. PROVIDE BEVELED WASHERS ON ALL CONNECTION TO SLOPING FLANGES OF W SECTIONS AND CHANNELS WHERE SLOPE EXCEEDS 1:20.

6. ANCHOR RODS SHALL BE THREADED ANCHOR RODS WITH NUT. THE EMBEDDED NUT SHALL BE TACK WELDED TO THE ANCHOR ROD TO PREVENT ROTATION DURING TIGHTENING.

7. BOLT HOLES IN STEEL SHALL BE "STANDARD" (1/16-INCH LARGER IN DIAMETER THAN THE NOMINAL BOLT SIZE, UNLESS OTHERWISE NOTED).

8. WELDING ELECTRODES (FILLER METAL): E70XX (70 KSI), WITH EXACT FILLER METAL SELECTED BY THE FABRICATOR.

9. WELD LENGTHS CALLED FOR ON THE PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE LENGTH OF WELD IS NOT SHOWN IT SHALL BE THE FULL LENGTH OF THE JOINT.

10. COMPLETE PENETRATION WELDS SHALL BE MADE WITH PROPER BACKING WHEREVER POSSIBLE. AFTER WELDING REMOVE BACKING BARS AND GRIND SMOOTH. FULL PENETRATION WELDS MADE WITHOUT PROPER BACKING SHALL HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OTHER SIDE EXCEPT AS PROVIDED IN AWS D1.1.

11. ALL BUTT AND GROOVE WELDS SHALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE.

12. ALL SPLICING OF MEMBERS SHALL BE AS SHOWN ON THE DRAWINGS. ANY SPLICING OF THE STEEL MEMBERS PROPOSED BY THE STEEL FABRICATOR SHALL BE SHOWN ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION.

13. ALL ANCHOR BOLTS SHALL BE EMBEDDED AS SHOWN ON THE DRAWINGS.

14. MINIMUM PLATE THICKNESS IS 3/8 INCH UNLESS OTHERWISE NOTED. MINIMUM WELD IS 1/4 INCH UNLESS OTHERWISE NOTED.

15. ALL STEEL FABRICATION AND DETAILS TO COMPLY WITH MOST STRINGENT OF THE LATEST EDITION OF: AISC CODE, AWS CODE, AND THE 2022 CBC.

16. ALL WELDING TO BE BY AWS CERTIFIED WELDERS AND SHALL CONFORM TO ALL 2022 CBC AND AWS REQUIREMENTS. ALL WELDERS SHALL BE PRE-QUALIFIED BY THE PROJECT WELDING INSPECTOR FOR THE WELD TYPES AND POSITIONS USED IN THE PROCEDURES THEY WILL BE PERFORMING.

17. ALL STEEL EXPOSED TO WEATHER OR INSIDE MAINTENANCE BUILDING SHALL BE HOT DIP GALVANIZED.

SPECIAL INSPECTIONS

1. INSPECTIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND THE 2022 CALIFORNIA BUILDING CODE CHAPTER 17 AS REQUIRED ON THE FOLLOWING PORTIONS OF THE WORK:

   CONCRETE
   REINFORCING STEEL
   SOILS
   STRUCTURAL STEEL
   MASONRY

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author R. RIOS | Drafting Check M. DAVIDSON | Project Manager M. DAVIDSON
Designer R. RIOS | Design Check S. MCHANEY | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

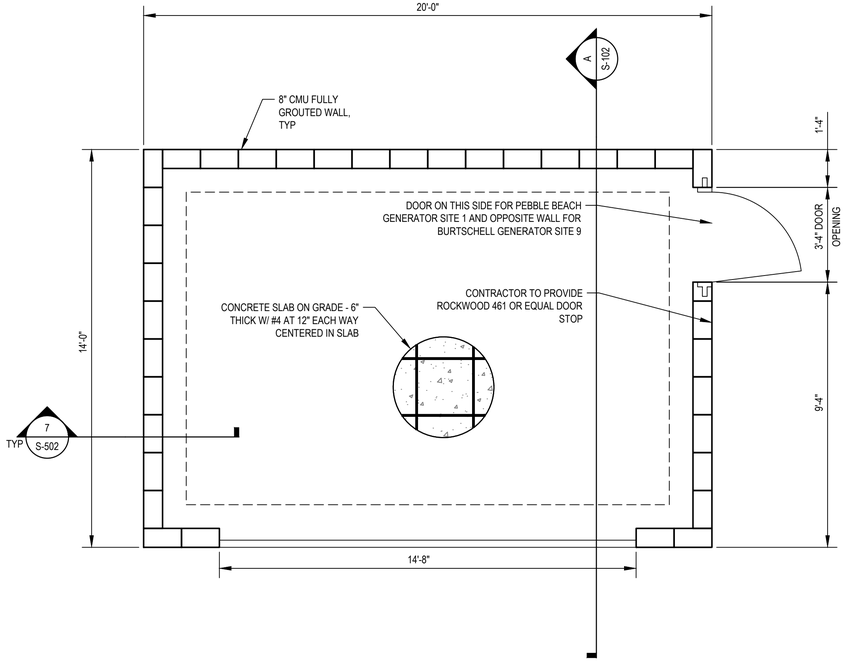
Title STRUCTURAL GENERAL NOTES

Size ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. S-002 | Sheet 13 of 31

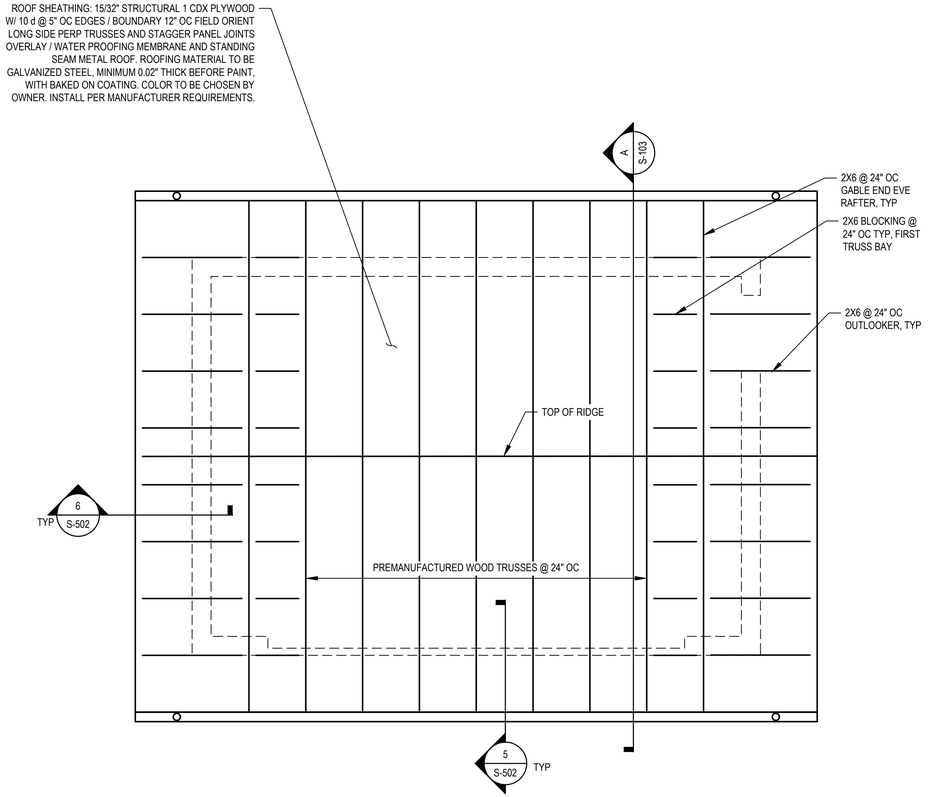
Plot Date: 19 July 2024 - 5:33 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-ST-0001.dwg



FOUNDATION PLAN

SCALE 3/8" = 1'-0"

0 2' 4' 6'



ROOF PLAN

SCALE 3/8" = 1'-0"

0 2' 4' 6'

0	ISSUE FOR BID		MD	SXM	07/22/2024
No.	Issue		Checked	Approved	Date

Author R. RIOS | Drafting Check M. DAVIDSON | Project Manager M. DAVIDSON

Designer R. RIOS | Design Check S. MCHANEY | Project Director S. ALLEN

Bar is one inch on original size sheet

0 1"

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Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

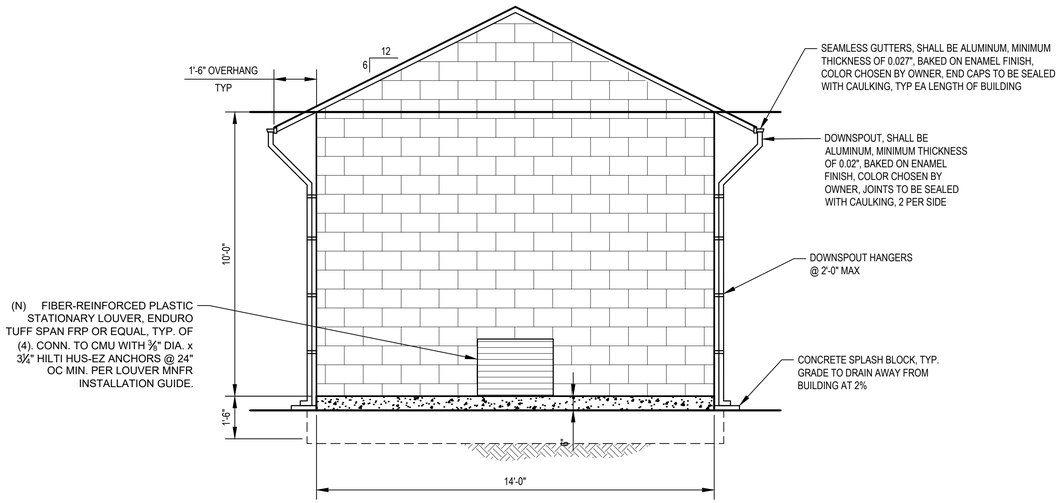
Title: TYPE 2 STRUCTURE FOUNDATION AND ROOF PLAN

Size: ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. S-101 | Sheet 14 of 31

Plot Date: 19 July 2024 - 5:34 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-S-0101.dwg



A LEFT SIDE ELEVATION

SCALE 3/8" = 1'-0"

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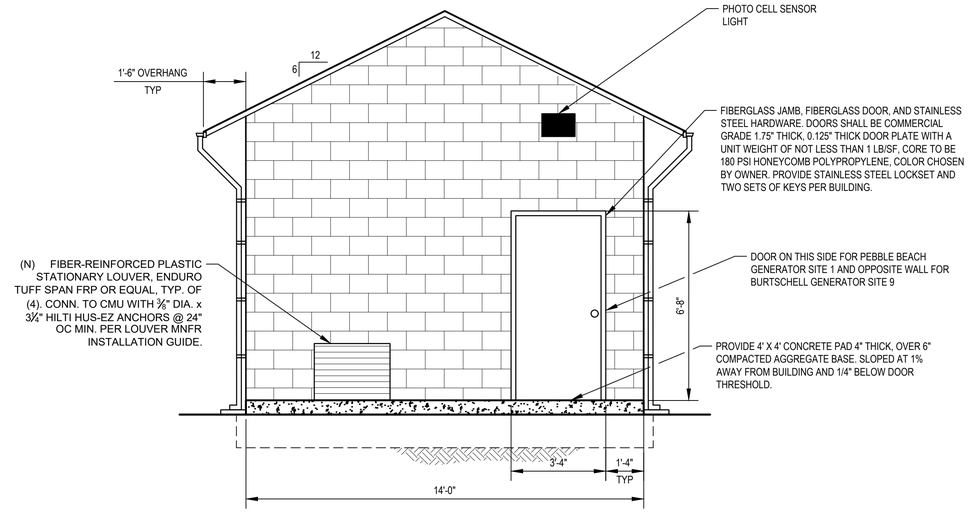

B RIGHT SIDE ELEVATION

SCALE 3/8" = 1'-0"

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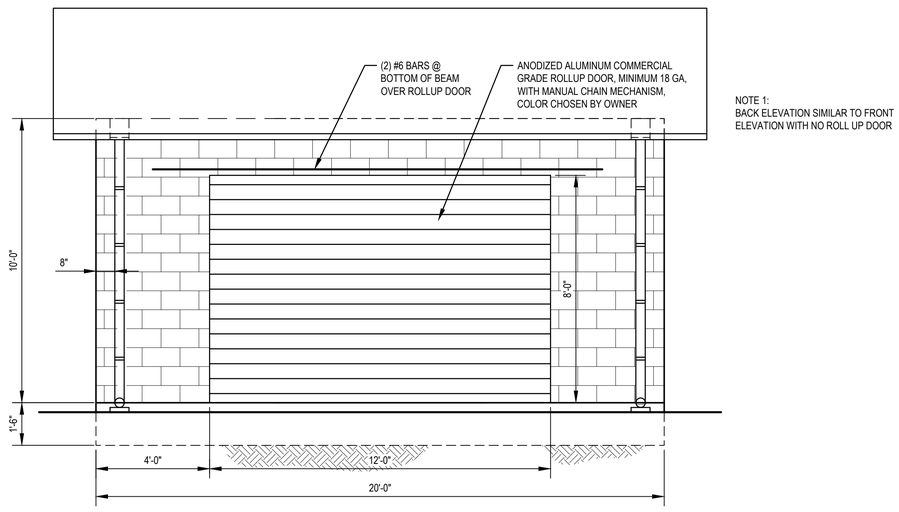

NOTE 1:
BACK ELEVATION SIMILAR TO FRONT ELEVATION WITH NO ROLL UP DOOR

C FRONT ELEVATION

SCALE 3/8" = 1'-0"

0 2' 4' 6'

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

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Designer R. RIOS | Design Check S. MCHANEY | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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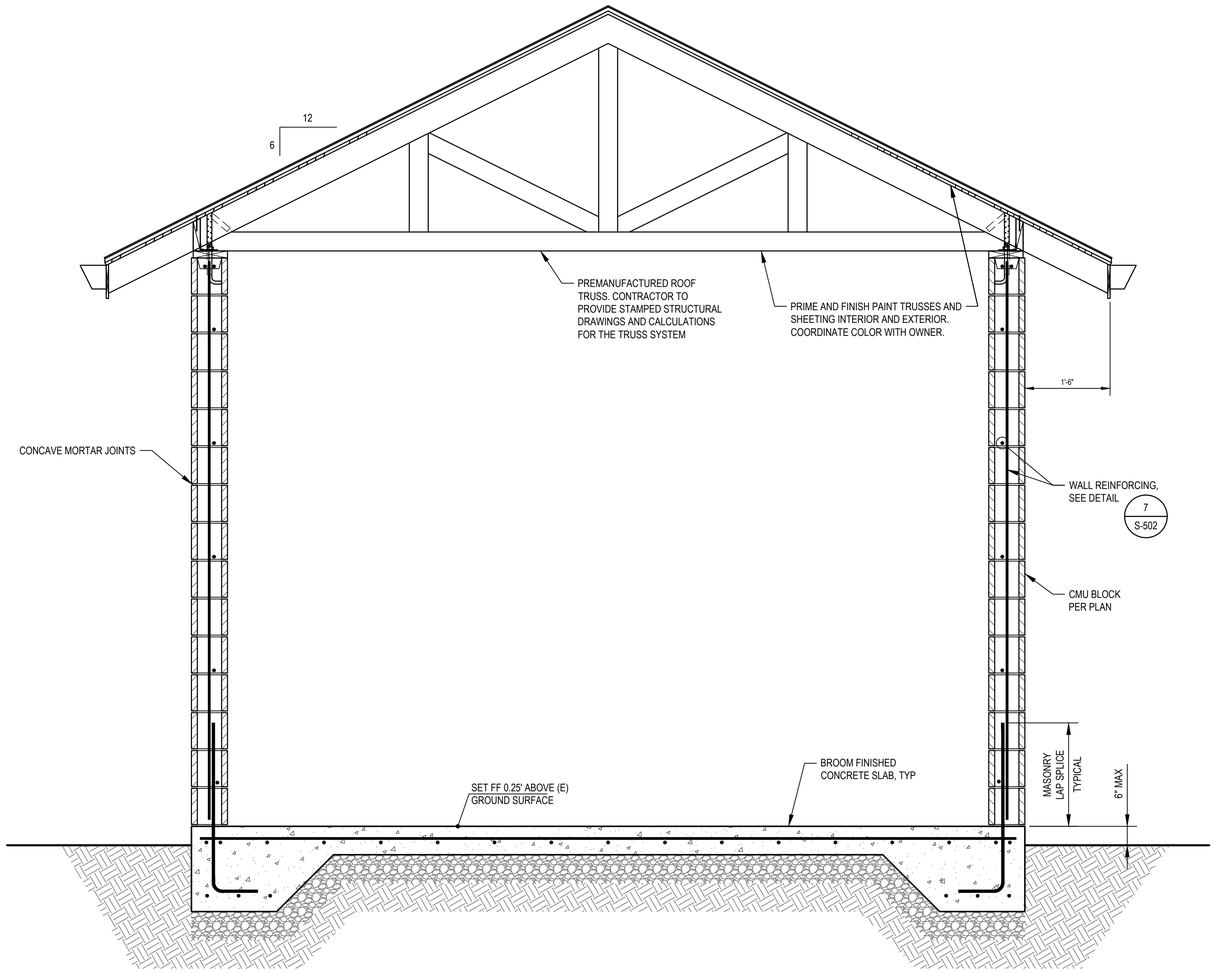
Title TYPE 2 STRUCTURE ELEVATIONS

Size ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. S-102 | Sheet 15 of 31

Plot Date: 19 July 2024 - 5:34 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-S-0101.dwg



A S-101 **SECTION**

SCALE 3/4" = 1'-0"

0 1' 2' 3'

PRELIMINARY

No.	Issue		Checked	Approved	Date
0	ISSUE FOR BID		MD	SXM	07/22/2024
Author	R. RIOS	Drafting Check	M. DAVIDSON	Project Manager	M. DAVIDSON
Designer	R. RIOS	Design Check	S. MCHANEY	Project Director	S. ALLEN

Bar is one inch on original size sheet

0 1"

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PROJECT # 2007

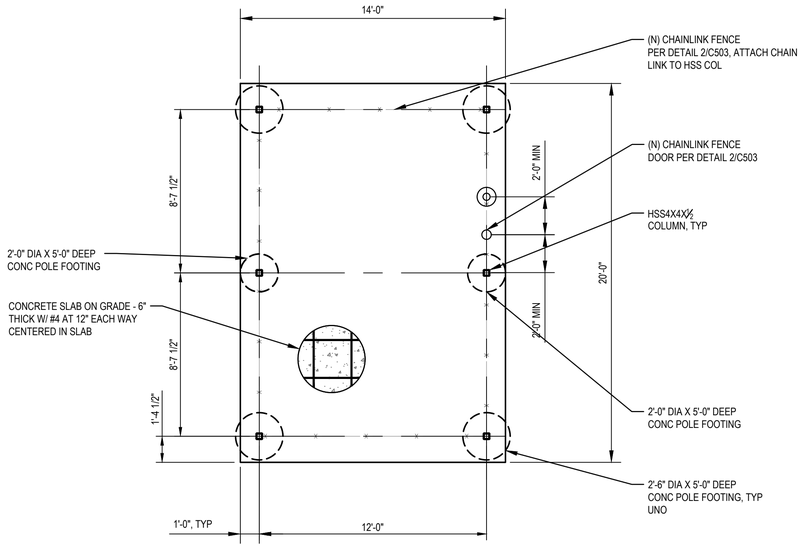
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title TYPE 2 STRUCTURE SECTIONS

Size ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	S-103	16 of 19

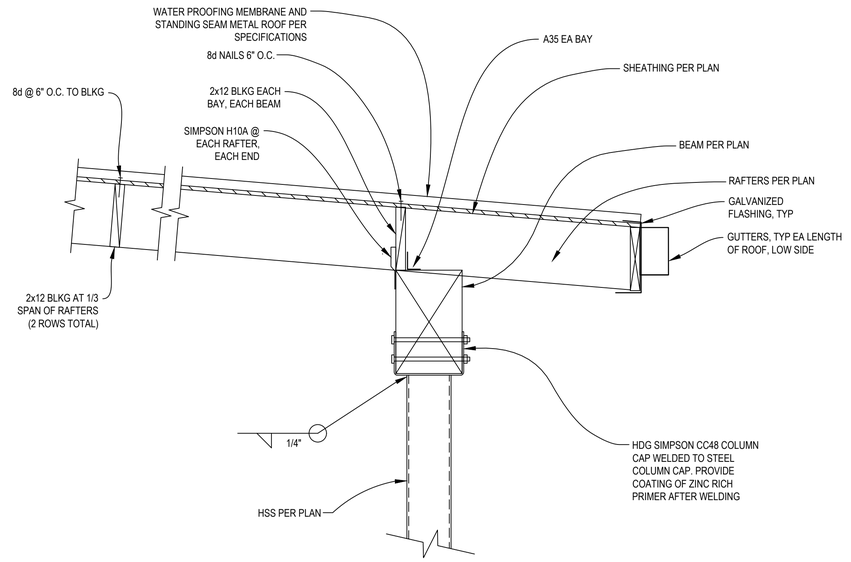
Plot Date: 19 July 2024 - 5:34 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-S-0101.dwg



1 FOUNDATION PLAN

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

0 2' 4' 8'



2 ROOF FRAMING

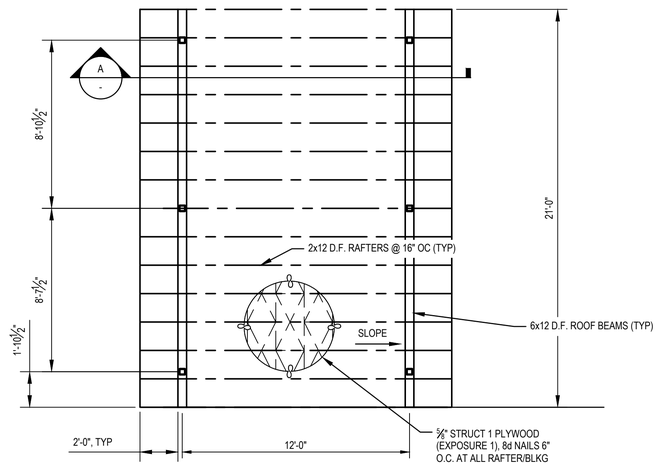
SCALE: NOT TO SCALE

SHEET GENERAL NOTES

1. LOCATION OF (E) UTILITIES APPROXIMATE. SEE NOTES TO CONTRACTOR BELOW.
2. POSTS, COLUMN CAPS, BASE PLATES, AND ANCHOR BOLTS TO BE HOT DIPPED GALVANIZED.

NOTES TO CONTRACTOR:

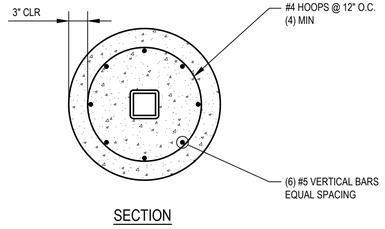
1. EXISTING IN-GROUND UTILITIES MAY BE PRESENT ON SITE. CONSTRUCTOR SHALL COORDINATE WITH THE COUNTY TO LOCATE ALL UTILITIES, INCLUDING POTHOLING AS NECESSARY, PRIOR TO COMMENCING EXCAVATION OF POLE FOUNDATIONS.



2 ROOF PLAN

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

0 2' 4' 8'

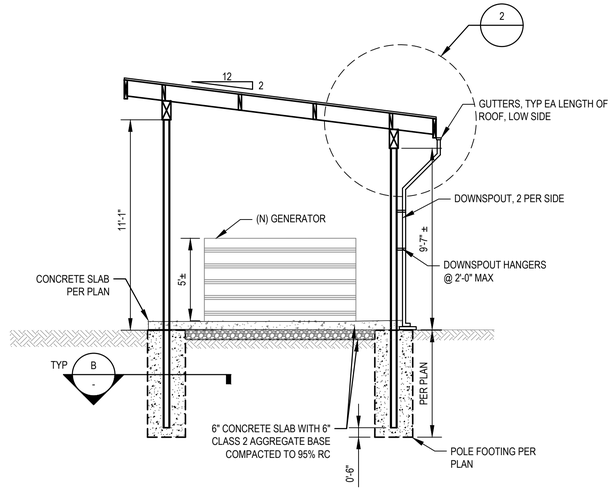


SECTION

B POLE FOOTING SECTION

SCALE: 1" = 1'-0"

0 1/2' 1' 2'



A SECTION

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

0 2' 4' 8'

0	ISSUE FOR BID		MD	SXM	07/22/2024
No.	Issue		Checked	Approved	Date
Author	R. RIOS	Drafting Check	M. DAVIDSON	Project Manager	M. DAVIDSON
Designer	R. RIOS	Design Check	S. MCHANEY	Project Director	S. ALLEN

Bar is one inch on original size sheet

0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007

Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: TYPE 1 PLAN, SECTION, AND DETAILS

Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/22/2024	AS SHOWN	S-104	17 of 31

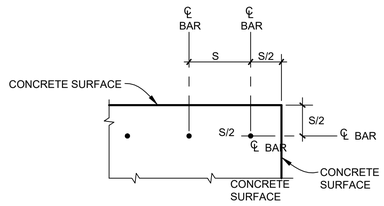
Plot Date: 19 July 2024 - 5:36 PM
Plotted By: Michelle Davidson
Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-S-0102.dwg

BAR SIZE	DEVELOPMENT LENGTH (ℓ_d) 3000 PSI CONC (f'c)				4000 PSI CONC (f'c)				5000 PSI CONC (f'c)			
	TOP		OTHER		TOP		OTHER		TOP		OTHER	
	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"
#3	13	22	12	17	12	19	12	15	12	17	12	13
#4	18	29	14	22	15	25	12	19	14	23	12	17
#5	22	36	17	28	19	31	15	24	17	28	13	22
#6	26	43	20	33	23	37	18	29	20	34	16	26
#7	38	63	29	48	33	54	25	42	29	49	23	38
#8	43	72	33	55	37	62	29	48	34	56	26	43
#9	49	81	37	62	42	70	33	54	38	63	29	48
#10	56	89	43	69	49	78	38	60	44	69	34	54
#11	68	98	52	76	59	85	45	66	53	76	41	59

BAR SIZE	TENSION LAP SPLICE LENGTH (CLASS 'B' SPLICE) 3000 PSI CONC (f'c)				4000 PSI CONC (f'c)				5000 PSI CONC (f'c)			
	TOP		OTHER		TOP		OTHER		TOP		OTHER	
	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"	s ≥ 6"	s < 6"
#3	17	28	16	22	16	25	16	19	16	22	16	17
#4	23	38	18	29	20	33	16	25	18	29	16	23
#5	28	47	22	36	25	41	19	31	22	36	17	28
#6	34	56	26	43	29	49	23	38	26	44	20	34
#7	49	82	38	63	43	71	33	55	38	63	30	49
#8	56	93	43	72	49	81	38	62	44	72	34	56
#9	63	105	49	81	55	91	42	70	49	81	38	63
#10	73	116	56	90	63	101	49	78	57	90	44	70
#11	88	128	68	99	76	111	59	85	68	99	53	76

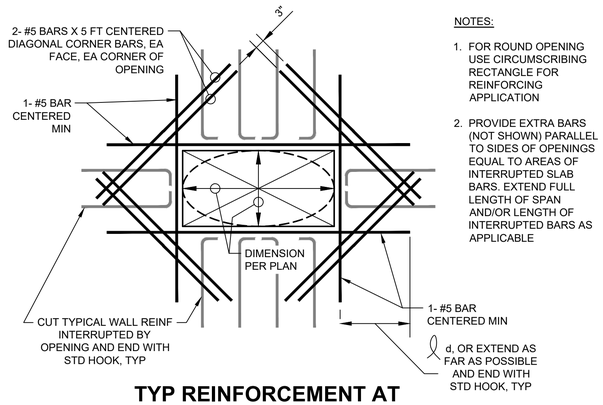
NOTES:

1. LENGTHS SHOWN ARE FOR GRADE 60 UNCOATED BARS.
2. LENGTHS SHOWN ARE IN INCHES.
3. INCREASE LENGTHS 30% FOR LIGHT WEIGHT CONCRETE
4. TOP BARS: HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW THEM.
5. THE QUANTITY 's' IS DEFINED AS FOLLOWS:



BAR DEVELOPMENT LENGTHS AND LAP SPLICE LENGTHS FOR CONCRETE

1 / - SCALE: NTS

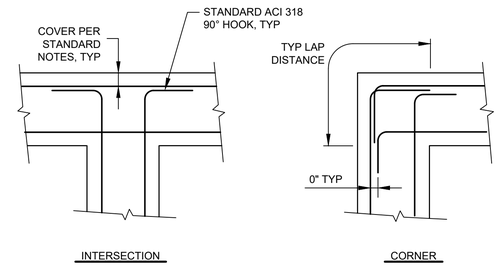


NOTES:

1. FOR ROUND OPENING USE CIRCUMSCRIBING RECTANGLE FOR REINFORCING APPLICATION
2. PROVIDE EXTRA BARS (NOT SHOWN) PARALLEL TO SIDES OF OPENINGS EQUAL TO AREAS OF INTERRUPTED SLAB BARS. EXTEND FULL LENGTH OF SPAN AND/OR LENGTH OF INTERRUPTED BARS AS APPLICABLE

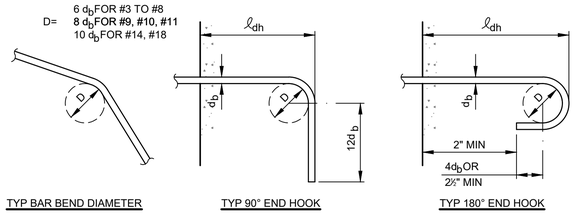
TYP REINFORCEMENT AT WALL & SLAB OPENINGS

2 / S-106 SCALE: NTS



TYP REINFORCEMENT AT INTERSECTIONS AND CORNERS

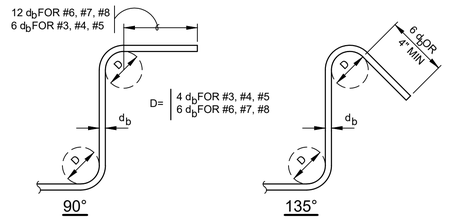
3 / - SCALE: NTS



BAR SIZE	MINIMUM TENSION EMBEDMENT LENGTHS ℓ_{dh} (IN.) FOR STANDARD END HOOKS ON REINFORCING BARS NORMAL WEIGHT CONCRETE, f'c, PSI 3000	4000	5000	6000
#3	6	6	6	6
#4	8	7	6	6
#5	10	9	8	7
#6	12	10	9	9
#7	14	12	11	10
#8	16	14	12	11
#9	18	15	14	13
#10	20	17	16	14
#11	22	19	17	16
#14	38	33	29	27
#18	50	43	39	35

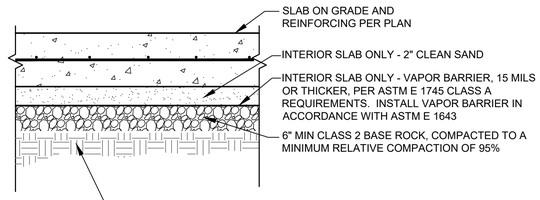
REINFORCING BAR ENDS AND BAR HOOKS

4 / - SCALE: NTS



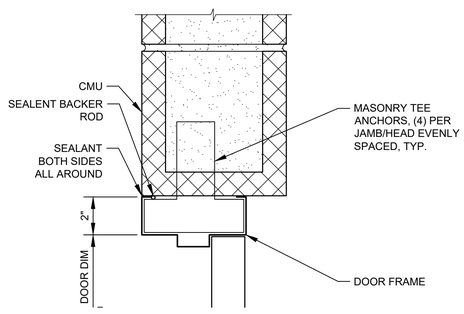
STIRRUP AND TIE HOOKS

5 / - SCALE: NTS



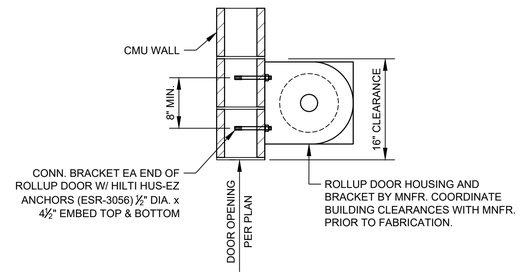
SLAB ON GRADE

6 / S-502



CMU DOOR JAMB/HEAD ANCHORAGE

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



ROLLUP DOOR BRACKET CONNECTION

8 / - SCALE: NTS

No.	Issue	Checked	Approved	Date
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Author R. RIOS | Drafting Check M. DAVIDSON | Project Manager M. DAVIDSON
Designer R. RIOS | Design Check S. MCHANEY | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
Project PROJECT # 2007 ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title TYPICAL STRUCTURAL DETAILS 1 OF 2

Size ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. S-501 | Sheet 18 of 31

Plot Date: 19 July 2024 - 5:37 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-ST-0501.dwg

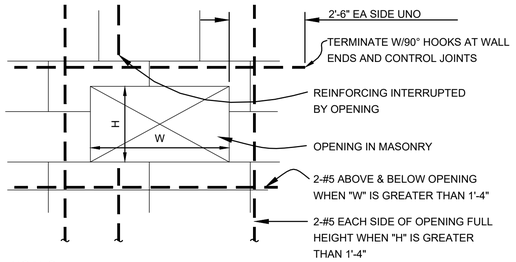
DEVELOPMENT AND LAP SPLICE LENGTH FOR MASONRY						
BAR SIZE	COVER					
	2 (IN)		4 (IN)		6 (IN)	
	K (IN)	ld (IN)	K (IN)	ld (IN)	K (IN)	ld (IN)
#3	1.88	18	1.88	18	1.88	18
#4	2.00	25	2.50	24	2.50	24
#5	2.00	39	3.13	30	3.13	30
#6	2.00	54	3.75	39	3.75	39
#7	2.00	63	4.00	50	4.38	46
#8	2.00	72	4.00	72	5.00	60

NOTES:

1. K IS THE LESSER OF THE MASONRY COVER, CLEAR SPACING BETWEEN ADJACENT BARS, OR 5 TIMES THE BAR DIAMETER

1 - MASONRY DEVELOPMENT AND LAP SPLICE

SCALE: NTS

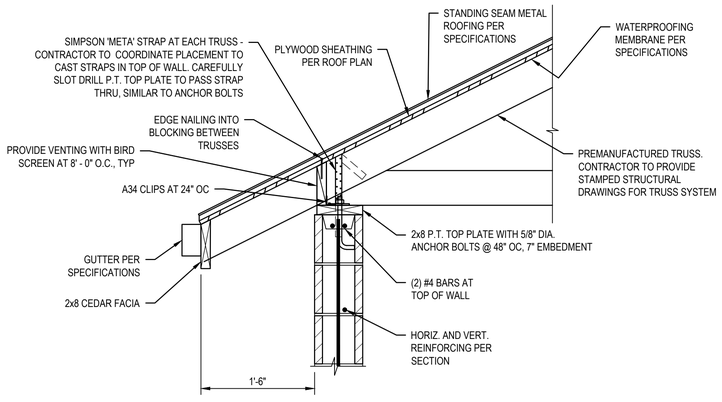


NOTES:

1. TYPICAL FOR "H" AND/OR "W" WHEN ARE LESS THAN 1'-4"

2 - CMU OPENING REINFORCING

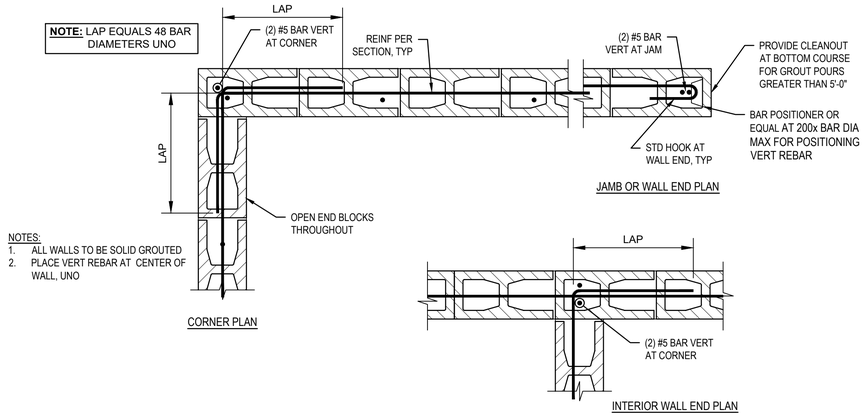
SCALE: NTS



5 - TRUSS AT CMU WALL DETAIL

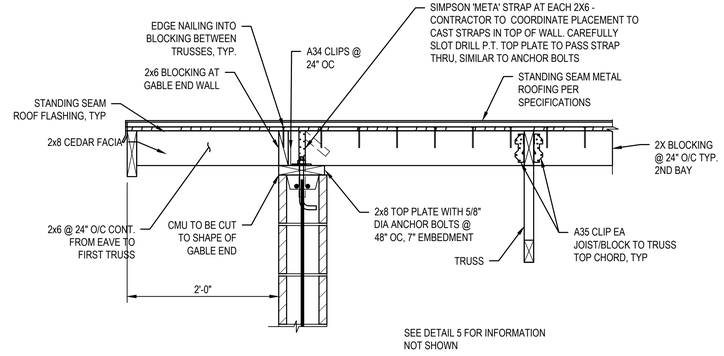
S-301

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



3 - TYPICAL CMU WALL ENDS AND CORNERS

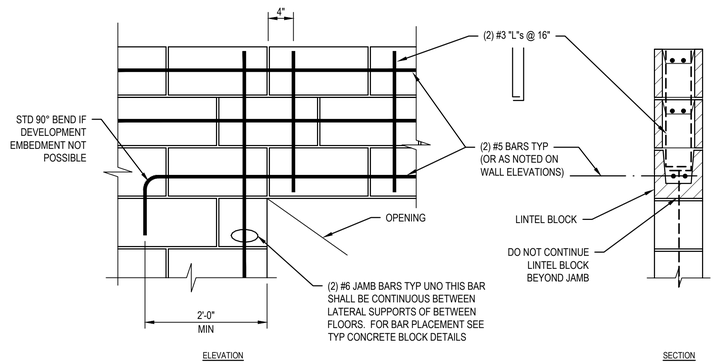
1"=1'-0" 0 1/2' 1' 2'



6 - GABLE END DETAIL

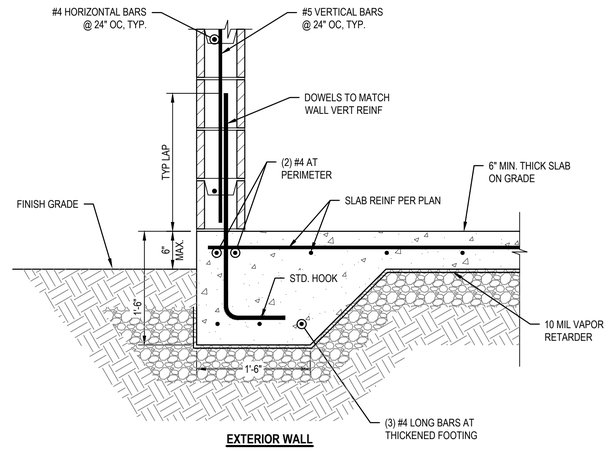
S-201

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



4 - TYPICAL REBAR AT CMU WALL OPENING

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



7 - CMU WALL AT SLAB ON GRADE/FOOTING

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

0	ISSUE FOR BID	MD	SXM	07/22/2024
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Author R. RIOS | Drafting Check M. DAVIDSON | Project Manager M. DAVIDSON

Designer R. RIOS | Design Check S. MCHANEY | Project Director S. ALLEN

Bar is one inch on original size sheet

0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1

Project: PROJECT # 2007 ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: TYPICAL STRUCTURAL DETAILS 2 OF 2

Size: ANSI D

Project No. 12578211 | Date 07/22/2024 | Scale AS SHOWN

Sheet No. S-502 | Sheet 19 of 31

Plot Date: 19 July 2024 - 5:37 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\STRUCTURAL\12578211-GHD-0001-DWG-ST-0501.dwg

ABBREVIATIONS

(D)	DEMOLISH
(E)	EXISTING
(F)	FUTURE
(N)	NEW
A	AMPERES
AC	ALTERNATING CURRENT
AF	AMP FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPS INTERRUPTING CAPACITY
ANN	ANNUNCIATOR
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BAT	BATTERY
BFG	BELOW FINISH GRADE
CATV	CABLE TELEVISION
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CO	CONDUIT ONLY
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
EGU	ENGINE GENERATOR UNIT
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NON-METALLIC TUBING
EP	EXPLOSION PROOF
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PA
FU	FUSE
GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GFR	GROUND FAULT RELAY
HID	HIGH INTENSITY DISCHARGE
HOA	"HAND-OFF-AUTO" SWITCH
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HMI	HUMAN-MACHINE INTERFACE
HVAC	HEATING, VENTILATION & AIR-CONDITIONING
IG	ISOLATED GROUND
JB	JUNCTION BOX
KAIC	KILO-AMPS INTERRUPTING CAPACITY
KVA	KILOVOLT-AMP
KW	KILOWATT
KWH	KILOWATT-HOUR
LSH	LEVEL SWITCH - HIGH
LSHH	LEVEL SWITCH - HIGH-HIGH
LSL	LEVEL SWITCH - LOW
LSLL	LEVEL SWITCH - LOW-LOW
LV	LOW VOLTAGE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MLO	MAIN LUGS ONLY
MTS	MANUAL TRANSFER SWITCH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
PA	PUBLIC ADDRESS
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PB	PULL BOX, ELECTRICAL
PLC	PROGRAMMABLE LOGIC CONTROLLER
RECPT	RECEPTACLE, OUTLET
RGS	RIGID GALVANIZED STEEL (CONDUIT)
RVSS	REDUCED VOLTAGE SOFT START
RTU	REMOTE TERMINAL UNIT
SPD	SURGE PROTECTION DEVICE
SSRV	SOLID STATE REDUCE VOLTAGE
SSTL	STAINLESS STEEL
SR	RECEPTACLE
TV	TELEVISION MONITOR (SET)
UF	UNDER FLOOR
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
VA	VOLT-AMP
VFD	VARIABLE FREQUENCY DRIVE
WP	WEATHERPROOF
WPI	WEATHERPROOF IN USE
XFMR	TRANSFORMER

ANNOTATION

1 — KEYNOTE

10 — RACEWAY, FEEDER OR CIRCUIT DESIGNATION (SEE SCHEDULE)

DETAIL NUMBER / DETAIL INDICATOR (1 / E-501) — SHEET NUMBER ON WHICH DETAIL APPEARS

SECTION LETTER / SECTION INDICATOR (A / E-301) — SHEET NUMBER ON WHICH SECTION APPEARS

WH 1 — MECHANICAL EQUIPMENT DESIGNATION (SEE SCHEDULE)

OBJECT LINES

NEW OBJECTS
(HEAVY CONTINUOUS LINES, UNDERGROUND CONDUIT HEAVY DASHED LINES)

EXISTING OBJECTS TO REMAIN. MAY INCLUDE NEW CIRCUITING ETC.
(FINE CONTINUOUS LINES, UNDERGROUND CONDUIT FINE DASHED LINES)

EXISTING OBJECTS TO BE DEMOLISHED
(EXTRA FINE DASHED LINES, SCREENED)

ELECTRICAL SYMBOLS LEGEND

DIAGRAM

ALARM, INDICATING LIGHT, SIGNAL LIGHT OR STROBE

AT / AF — CIRCUIT BREAKER - SIZE AND TYPE AS INDICATED

XXX/X NEMA XX — CIRCUIT BREAKER IN NEMA ENCLOSURE SIZE AND TYPE AS INDICATED

TRANSFER SWITCH, ATS: AUTOMATIC, MTS: MANUAL

G — GENERATOR UNIT - RATED AS INDICATED

TRANSFORMER, PAD MOUNT

TRANSFORMER, DRY TYPE

GROUNDING ELECTRODE OR CONNECTION

POWER

+46" — DENOTES HEIGHT IN INCHES AFF (INTERIOR) AFG (EXTERIOR) — DUPLEX RECEPTACLE, 20A 125V 2P 3W, GROUNDING TYPE, MOUNTING HEIGHT: +18" AFF UON

J OR J — JUNCTION BOX, CODE SIZED UON

DISCONNECT SWITCH - FUSED WHERE APPLICABLE

MOTOR STARTER, COMBINATION WITH DISCONNECT SWITCH

MOTOR STARTER OR CONTROLLER

P — POWER POLE: P=POWER, T=TELEPHONE, D=DATA, C=COMBINATION

TEST PORT

OR — GROUND ROD

GUY WIRE AND ANCHOR

SPECIAL RECEPTACLE

CONDUIT

CONDUIT INSTALLED ABOVE GRADE

CONDUIT INSTALLED UNDERGROUND OR UNDER SLAB

CONDUIT STUB-OUT WITH CAP

FLEXIBLE CONDUIT WHIP TO LIGHT FIXTURE OR EQUIPMENT

INDICATES CIRCUIT BREAKER I.D.
L1-4
INDICATES BRANCH PANEL
CONDUIT HOME RUN TO DESIGNATED PANEL, TERMINAL, OR CONTROL CABINET
EXAMPLES:
L1-6,8 — COMMA INDICATES MULTIPLE SINGLE POLE CIRCUITS
L1-10/12 — SLASH INDICATES MULTI-POLE CIRCUIT

NOTE FOR CONDUIT: THE TIC MARKS INDICATE THE QUANTITY OF #12 AWG WIRES OR, IF INDICATED, THE QUANTITY OF OTHER SIZE WIRE OR CABLES.

SEE THE SINGLE LINE DIAGRAM FOR FEEDER SIZES.
EXAMPLES: /// = (3) #12 ; // #10 = (2) #10 ; / F1 = (1) TYPE F1 CABLE. SEE CABLE SCHEDULE.

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE CALIFORNIA ELECTRICAL CODE (CEC) AND CALIFORNIA BUILDING CODE (CBC).
2. THE CONTRACTOR SHALL MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORK PERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED TO MAINTAIN SAFETY.
3. PRIOR TO COMMENCING WORK ON EXISTING SYSTEMS OR WHERE EXISTING SYSTEMS REQUIRE TEMPORARY SHUT DOWNS, COORDINATE WITH OWNERS REPRESENTATIVE. WHERE DISCONNECTING, MODIFYING OR WORKING ON EXISTING EQUIPMENT OR SYSTEMS, PROVIDE A WRITTEN METHOD OF PROCEDURE OUTLINING DATES, TIMES, DURATION AND DESCRIPTION OF PROPOSED WORK FOR APPROVAL PRIOR TO COMMENCING WORK . WORK ON EXISTING EQUIPMENT SHALL NOT COMMENCE UNTIL WRITTEN AUTHORIZATION IS GIVEN BY THE OWNERS REPRESENTATIVE.
4. ALL EQUIPMENT SHALL BE LISTED AND LABELED PER RECOGNIZED ELECTRICAL TESTING LABORATORY AND INSTALLED PER THE LISTING REQUIREMENTS AND THE MANUFACTURERS INSTRUCTIONS.
5. ALL EQUIPMENT SHALL BE GROUNDED PER THE REQUIREMENTS OF CEC ARTICLE 250. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED IN ALL POWER SYSTEM RACEWAYS.
6. CONTRACTOR RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS PRIOR TO CONSTRUCTION.
7. ALL WORK ON OR AROUND UTILITY EQUIPMENT AND FEEDERS SHALL BE COORDINATED WITH THAT UTILITY. ALL WORK ON UTILITY EQUIPMENT SHALL BE TO UTILITY STANDARDS AND REQUIREMENTS.

GENERATOR LOCATIONS

SHEET TITLE	NEARBY STREET ADDRESS
PEBBLE BEACH LIFT STATION & GENERATOR PLANS	899 HUMBOLDT RD.
MODOC LIFT STATION & GENERATOR PLANS	770 MODOC ST.
PACIFIC LIFT STATION & GENERATOR PLANS	1098 PACIFIC AVE.
BURTSCHELL LIFT STATION & GENERATOR PLANS	1488 BURTSCHELL ST.
CSA STORAGE BUILDING LIFT STATION	300 E. MACKEN AVE.

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author F. YLLESCAS | Drafting Check E. OSORNO | Project Manager M. DAVIDSON
Designer E. OSORNO | Design Check C. RICHARDS | Project Director S. ALLEN

Bar is one inch on original size sheet
0 — 1"

REGISTERED PROFESSIONAL ENGINEER — ERICK A. OSORNO — No. E23651 — ELECTRICAL — STATE OF CALIFORNIA

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project # 2007
Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

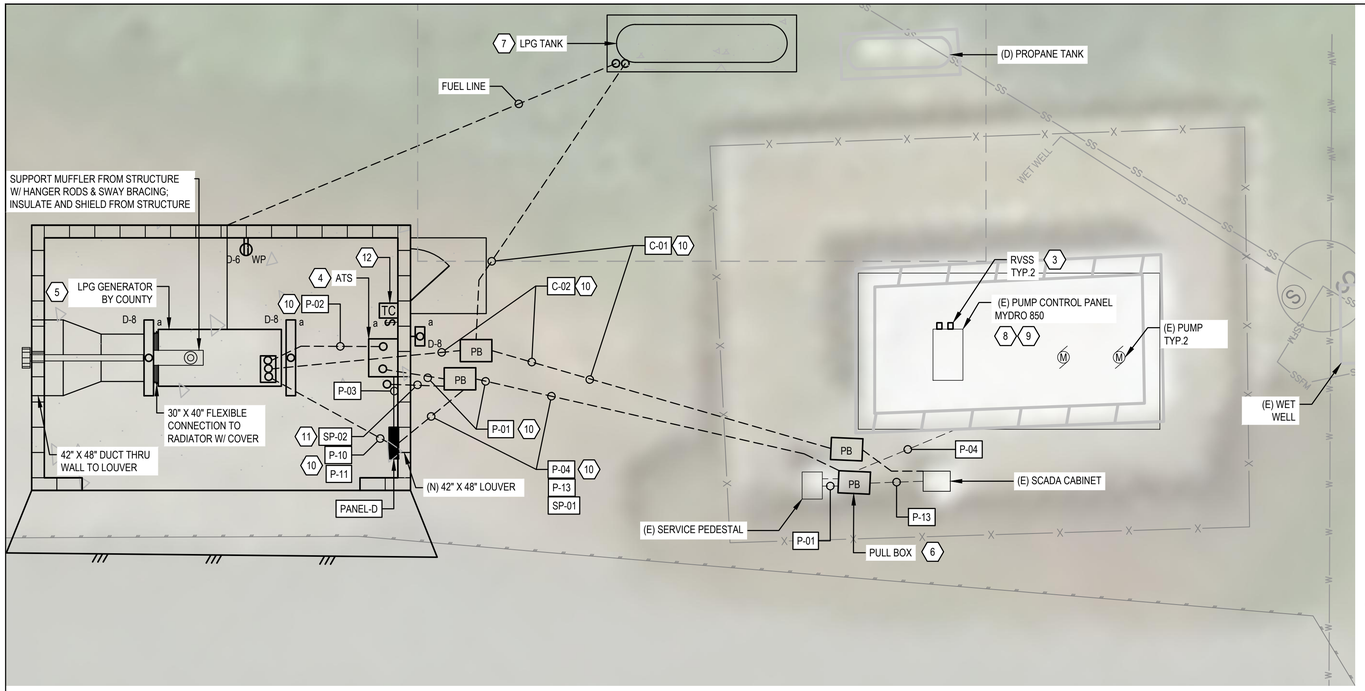
Title: ELECTRICAL SYMBOLS, LEGEND, ABBREVIATIONS & GENERAL NOTES

Size: ANSI D

Project No. 12578211 | Date 07/19/2024 | Scale AS SHOWN

Sheet No. E-001 | Sheet 20 of 31

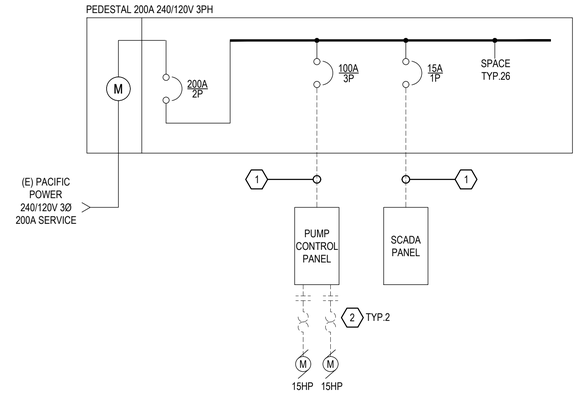
Plot Date: 19 July 2024 - 5:38 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0001.dwg



1 PEBBLE BEACH GENERATOR

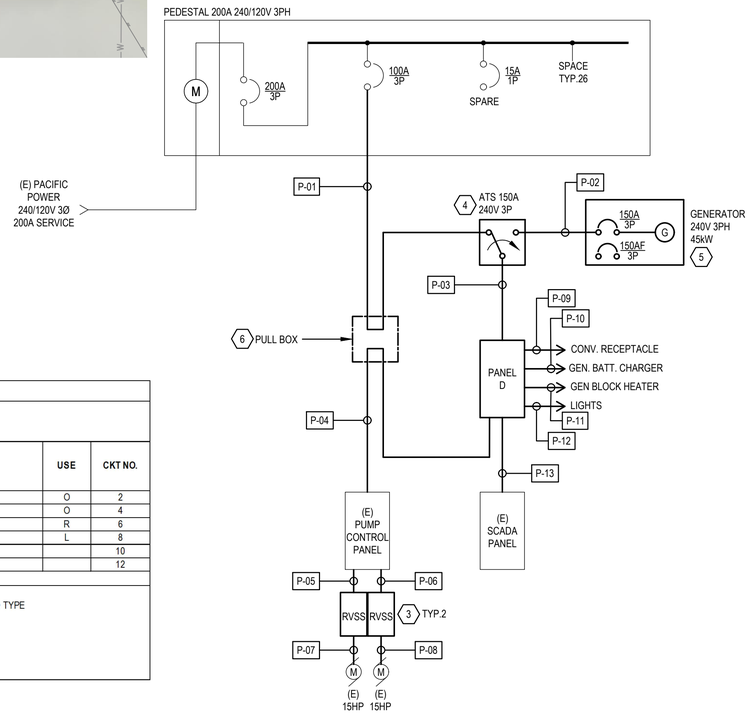
1/4" = 1'

0 2' 4' 8'



2 SINGLE LINE DIAGRAM - EXISTING

NO SCALE



3 SINGLE LINE DIAGRAM - NEW

NO SCALE

SHEET GENERAL NOTES

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. AFTER DEMOLITION OF (E) STARTERS, RVSS MAY BE INSTALLED WITHIN THE CONTROL ENCLOSURE IF THERE IS SUFFICIENT SPACE IN LIEU OF MOUNTING THEM IN SEPARATE ENCLOSURES MOUNTED EXTERNAL TO THE CONTROL ENCLOSURE.
3. ALL OUTDOOR ENCLOSURES AND EQUIPMENT SHALL BE NEMA 4X.
4. EXPOSED MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
5. BELOW GRADE CONDUIT SHALL BE SCHED-40 PVC WITH METAL ELBOWS FOR STUB UPS. STUB UPS SHALL BE TAPE WRAPPED FOR CORROSION RESISTANCE.
6. ABOVE GRADE CONDUIT AND SHALL BE PLASTIC COATED RIGID METAL OR STAINLESS STEEL.
7. TYPICAL POWER CIRCUIT CONSISTS OF (2) #12 AWG, #12 GND, IN 3/4" CONDUIT.
8. CONTRACTOR TO VERIFY AND COORDINATE DIMENSIONS OF GENERATOR AS SHIPPED WITH GENERATOR MANUFACTURER PRIOR TO CONSTRUCTION OF BUILDING. PROVIDE CONCRETE PAD AND ENCLOSURE AS NEEDED TO MAINTAIN CLEARANCES AROUND FINAL GENERATOR DIMENSIONS.
9. PROVIDE FUELING AND EXHAUST SYSTEMS PER DETAILS ON SHEET M-501.

SHEET KEYNOTES

1. DISCONNECT INDICATED EQUIPMENT FEEDER , PULL BACK TO SERVICE PEDESTAL AND PREPARE TO SPLICE AND EXTEND AT (N) PULL BOX.
2. LOCATE EXISTING PUMP STARTERS DISCONNECT AND REMOVE.
3. PROVIDE 15HP REDUCED VOLTAGE SOFT STARTER. MOUNT AT (E) CONTROL PANEL IN DRY WELL.
4. INSTALL ATS. ATS PROVIDED BY COUNTY.
5. INSTALL LPG GENERATOR. GENERATOR PROVIDED BY COUNTY.
6. LOCATE AND INTERCEPT EXISTING POWER CONDUITS FROM SERVICE PEDESTAL. SPLICE AND EXTEND (E) POWER FEEDERS, AND PROVIDE NEW FEEDERS AS NOTED IN THE SINGLE LINE DIAGRAM.
7. COORDINATE PROVISION OF A 1000-GALLON LPG TANK AND MOUNTING ON THE SLAB AS DETAILED IN THE CIVIL DRAWINGS. PROVIDE FUEL LINES BETWEEN TANK AND GENERATOR PER TANK AND GENERATOR MANUFACTURER REQUIREMENTS. PROVIDE MANUFACTURER RECOMMENDED LEVEL SENSOR WITH ANALOG OUTPUT SIGNAL.
8. PROVIDE FUEL LEVEL SIGNAL. CONNECT AND ROUTE VIA (E) JUNCTION BOX. ROUTE WIRES VIA EXISTING AND NEW CONDUIT TO CONTROL PANEL. CONNECT WIRES TO MYDRO 850 ANALOG SPARE INPUT FOR FUEL LEVEL MONITORING.
9. PROVIDE GEN STATUS SIGNAL. PROVIDE PENETRATION IN DRY WELL WALL. CONNECT SIGNAL WIRES TO MYDRO 850 DIGITAL SPARE INPUT FOR GENERATOR RUN SIGNAL.
10. PROVIDE CONDUIT IN TRENCH PER DETAIL 2 ON SHEET E-502.
11. PROVIDE CONDUIT STUB UPS THROUGH SLAB AND MARK ENDS OF CONDUIT AND TAPE OFF.
12. PROVIDE 4 RELAY ASTRONOMICAL TIME CLOCK , TORK ELC74 OR APPROVED EQUAL. ROUTE EXTERIOR LIGHT VIA TIME CLOCK RELAY.

SHEET SPECIAL SYMBOLS

- PROVIDE SURFACE MOUNT PANELBOARD WITH FEATURES AS SHOWN ON PANEL SCHEDULE
- PB — PROVIDE 11" x 17" CONCRETE PULL BOX AND COVER PER DETAIL 3 ON SHEET E-502
- PROVIDE 20A GFCI CONVENIENCE RECEPTACLE WITH BACK BOX, AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- $ — PROVIDE SINGLE POLE LIGHT SWITCH WITH BACK BOX AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- PROVIDE EXTERIOR LIGHT FIXTURE LITHONIA TWPX1 LED-P1-30K-MVOLT-PEDBLXD WITH PHOTOCELL SHIELD (543982 RK1 PEB SHLD U) OR APPROVED EQUAL LIGHT FIXTURE AND PHOTOCELL
- PROVIDE H.E. WILLIAMS 96-4-L40-8-35-HIAFR-DIM-120 LUMINAIRE WITH SSTL HARDWARE OR APPROVED EQUAL.

PEBBLE BEACH-CONDUIT AND CABLE SCHEDULE

TAG	FEEDER	FROM	TO	WIRE SIZE	CONDUIT*
P-01	100 A	PEDESTAL	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-02	150 A	GENERATOR	ATS	(4) #1/0 AWG, #6 GND	1-1/2"
P-03	100 A	PANEL-D	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-04	100 A	PANEL-D	PUMP PANEL	(4) #1 AWG, #8 GND	1-1/2"
P-05	60 A	RVSS-1	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-06	60 A	RVSS-2	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-07	60 A	RVSS-1	PUMP-1	(4) #6 AWG, #10 GND	1"
P-08	60 A	RVSS-2	PUMP-2	(4) #6 AWG, #10 GND	1"
P-09	120V	PANEL-D	RECEPT.	SEE PANEL SCHEDULE	3/4"
P-10	120V	PANEL-D	GEN CHARGER	SEE PANEL SCHEDULE	3/4"
P-11	120V	PANEL-D	GEN HEATER	SEE PANEL SCHEDULE	3/4"
P-12	120V	PANEL-D	LIGHTS	SEE PANEL SCHEDULE	3/4"
P-13	120V	PANEL-D	SCADA	SEE PANEL SCHEDULE	3/4"
SP-1	SPARE	SEE PLANS		PULL STRING	2"
SP-2	SPARE	SEE PLANS		PULL STRING	(2) 4"
C-01	LEVEL	MYDRO 850	FUEL LEVEL	(1) #18 TSP (2) #16 TSP	1"
C-02	STATUS	MYDRO 850	GENERATOR	(6) #14 AWG	1"

*PROVIDE MIN 2" CONDUIT FOR BELOW GRADE CIRCUITS

PANEL SCHEDULE

PANEL NAME: D — VOLTAGE: 240/120 — NEMA RATING: 1 — MOUNTING: SURFACE — NOTES:
MAINS RATING: 100 A MCB — PHASE: 3 — AIC RATING: 22K — LOCATION: OUTDOOR
BUS RATING: 100 A — WIRE: 4 — DEMAND FACTOR: STD

CKT NO.	USE	DESCRIPTION	BKR SIZE	CKT KVA	CKT AMPS	WIRE SIZE	WIRE LENGTH (FT)	VOLTAGE DROP %	PHASE	VOLTAGE DROP %	WIRE LENGTH (FT)	WIRE SIZE	CKT AMPS	CKT KVA	BKR SIZE	DESCRIPTION	USE	CKT NO.
1	P	PUMP CONTROL PANEL	100/3	8.50	70.83	1	50	0.42	A	0.29	10	12	10.00	1.20	20/1	GEN. BATTERY CHARGER	O	2
3	P		100/3	8.50	70.83	1	50	0.42	B	0.02	10	12	0.83	0.10	20/1	GEN. BLOCK HEATER	O	4
5	P		100/3	8.50	70.83	1	50	0.42	C	0.06	15	12	1.50	0.18	20/1	CONV. RECEPTACLE	R	6
7	P	SCADA	15/1	0.50	4.17	12	70	0.84	A	0.04	30	12	0.50	0.06	20/1	LIGHTING	L	8
9		SPARE	20/1						B						20/1	SPARE		10
11		SPARE	20/1						C						20/1	SPARE		12

CONNECTED KVA		DEMAND KVA		DEMAND AMPS
PHASE A:	10.3	10.3		Check Voltage
PHASE B:	8.6	8.6		Check Voltage
PHASE C:	8.7	8.7		Check Voltage

STD DEMAND LOAD BASED ON 125% OF THE LARGEST MOTOR AND 100% OF THE REMAINING MOTORS, 125% OF CONTINUOUS LOADS, 100% OF NONCONTINUOUS LOADS, AND 50% OF RECEPTACLE LOADS BEYOND THE FIRST 10KVA

USE LEGEND

ID	LOAD TYPE	ASSUMED PF
H	HVAC	0.85
L	LIGHTING	0.80
M	MOTOR	0.85
R	RECEPTACLE	0.80
P	PANEL	0.85
O	OTHER	0.85

VOLTAGE DROP CALCULATION

VOLTAGE DROP IS BASED ON THE IEEE RED BOOK AND 2022 NEC CHAPTER 9 TABLE 9 FORMULA:
VD = I * (R * PF + X * SIN(ACOS(PF)) * L
WITH AN ADDITIONAL MULTIPLIER OF 2 FOR SINGLE PHASE AND 1.732 FOR 3-PHASE LOADS

R AND X VALUES ARE TAKEN FROM 2022 NEC CHAPTER 9 TABLE 9.

ASSUMPTIONS:

POWER FACTOR	VARIED BY LOAD TYPE
CONDUIT TYPE	RGS
WIRE MATERIAL	CU

4 PANEL SCHEDULE

NO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author F. YLLESCAS — Drafting Check E. OSORNO — Project Manager M. DAVIDSON
Designer E. OSORNO — Design Check C. RICHARDS — Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project # 2007
Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

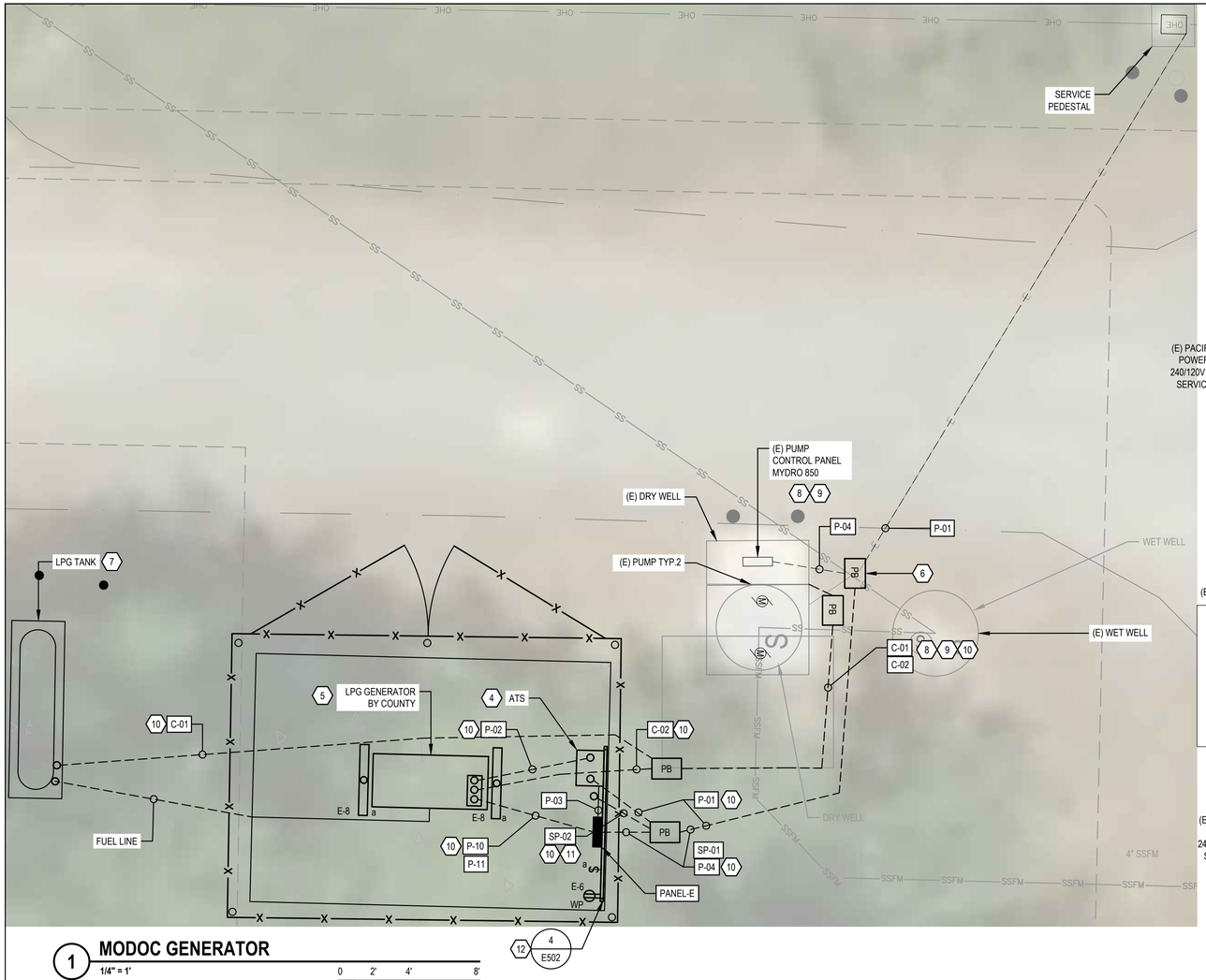
Title: PEBBLE BEACH LIFT STATION & GENERATOR ELECTRICAL PLAN

Size: ANSI D

Project No. 12578211 — Date 07/19/2024 — Scale AS SHOWN

Sheet No. E-101 — Sheet 21 of 31

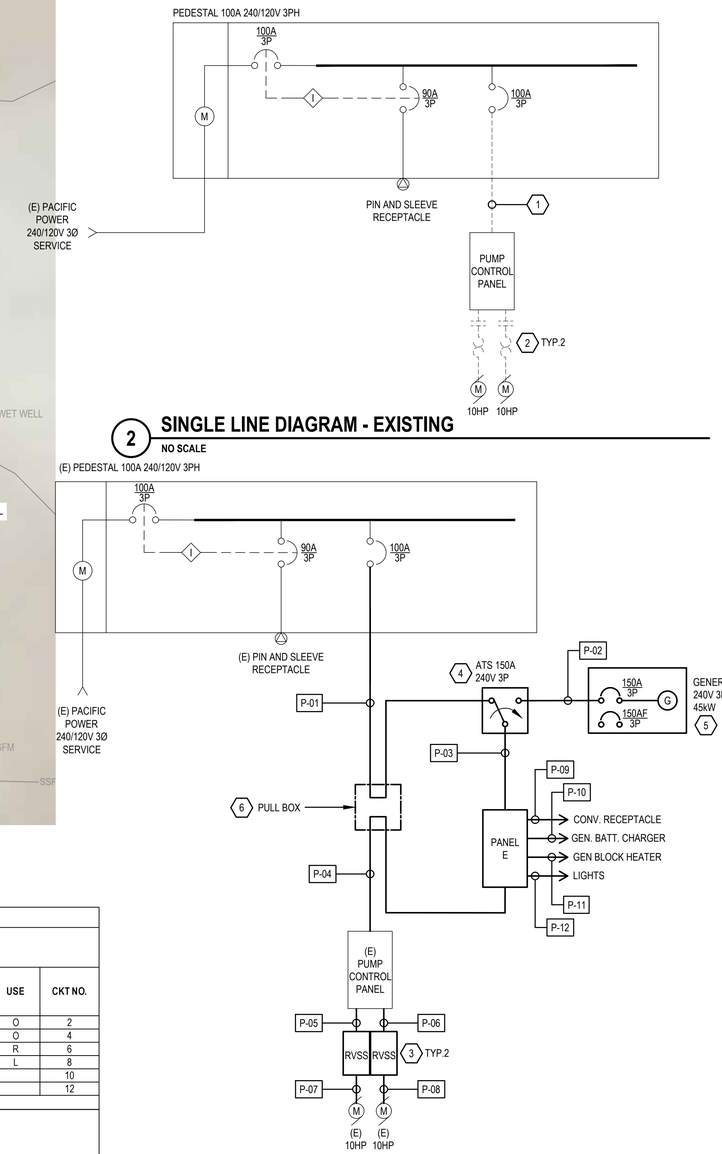
Plot Date: 19 July 2024 - 5:40 PM — Plotted By: Michelle Davidson — Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0101.dwg



1 MODOC GENERATOR

1/4" = 1'

0 2' 4' 8'



2 SINGLE LINE DIAGRAM - EXISTING

NO SCALE

3 SINGLE LINE DIAGRAM - NEW

NO SCALE

PANEL SCHEDULE

PANEL NAME: E
MAINS RATING: 100 A MCB
BUS RATING: 100 A
VOLTAGE: 240/120
PHASE: 3
WIRE: 4
NEMA RATING: 4X
AIC RATING: 22K
DEMAND FACTOR: STD
MOUNTING: SURFACE
LOCATION: OUTDOOR
NOTES:

CKT NO.	USE	DESCRIPTION	BKR SIZE	CKT KVA	CKT AMPS	WIRE SIZE	WIRE LENGTH (FT)	VOLTAGE DROP %	PHASE	VOLTAGE DROP %	WIRE LENGTH (FT)	WIRE SIZE	CKT AMPS	CKT KVA	BKR SIZE	DESCRIPTION	USE	CKT NO.
1	P	PUMP CONTROL PANEL	100/3	8.50	70.83	1	50	0.42	A	0.29	10	12	10.00	1.20	20/1	GEN. BATTERY CHARGER	O	2
3	P		100/3	8.50	70.83	1	50	0.42	B	0.02	10	12	0.83	0.10	20/1	GEN. BLOCK HEATER	O	4
5	P		100/3	8.50	70.83	1	50	0.42	C	0.06	15	12	1.50	0.18	20/1	CONV. RECEPTACLE	R	6
7		SPARE	20/1						A	0.04	30	12	0.50	0.06	20/1	LIGHTING	L	8
9		SPARE	20/1						B						20/1	SPARE		10
11		SPARE	20/1						C						20/1	SPARE		12

CONNECTED KVA		DEMAND KVA	DEMAND AMPS
PHASE A:	9.8	9.8	Check Voltage
PHASE B:	8.6	8.6	Check Voltage
PHASE C:	8.7	8.7	Check Voltage

STD DEMAND LOAD BASED ON 125% OF THE LARGEST MOTOR AND 100% OF THE REMAINING MOTORS, 125% OF CONTINUOUS LOADS, 100% OF NONCONTINUOUS LOADS, AND 50% OF RECEPTACLE LOADS BEYOND THE FIRST 10KVA

USE LEGEND

ID	LOAD TYPE	ASSUMED PF
H	HVAC	0.85
L	LIGHTING	0.80
M	MOTOR	0.85
R	RECEPTACLE	0.80
P	PANEL	0.85
O	OTHER	0.85

VOLTAGE DROP CALCULATION

VOLTAGE DROP IS BASED ON THE IEEE RED BOOK AND 2022 NEC CHAPTER 9 TABLE 9 FORMULA:
VD = I * (R * PF + X * SIN(ACOS(PF)) * L
WITH AN ADDITIONAL MULTIPLIER OF 2 FOR SINGLE PHASE AND 1.732 FOR 3-PHASE LOADS

R AND X VALUES ARE TAKEN FROM 2022 NEC CHAPTER 9 TABLE 9.

ASSUMPTIONS:

POWER FACTOR	VARIED BY LOAD TYPE
CONDUIT TYPE	RGS
WIRE MATERIAL	CU

4 PANEL SCHEDULE

NO SCALE

SHEET GENERAL NOTES

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. AFTER DEMOLITION OF (E) STARTERS, RVSS MAY BE INSTALLED WITHIN THE CONTROL ENCLOSURE IF THERE IS SUFFICIENT SPACE IN LIEU OF MOUNTING THEM IN SEPARATE ENCLOSURES MOUNTED EXTERNAL TO THE CONTROL ENCLOSURE.
3. ALL ENCLOSURES AND EQUIPMENT SHALL BE NEMA 4X.
4. EXPOSED MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
5. BELOW GRADE CONDUIT SHALL BE SCHED-40 PVC WITH METAL ELBOWS FOR STUB UPS. STUB UPS SHALL BE TAPE WRAPPED FOR CORROSION RESISTANCE.
6. ABOVE GRADE CONDUIT AND SHALL BE PLASTIC COATED RIGID METAL OR STAINLESS STEEL.
7. TYPICAL POWER CIRCUIT CONSISTS OF (2) #12 AWG, #12 GND, IN 3/4" CONDUIT.
8. CONTRACTOR TO VERIFY AND COORDINATE DIMENSIONS OF GENERATOR AS SHIPPED WITH GENERATOR MANUFACTURER PRIOR TO CONSTRUCTION OF CONCRETE PAD AND ENCLOSURE. PROVIDE CONCRETE PAD AND ENCLOSURE AS NEEDED TO MAINTAIN CLEARANCES AROUND FINAL GENERATOR DIMENSIONS.
9. PROVIDE FUELING SYSTEM PER DETAILS ON SHEET M-501.

SHEET KEYNOTES

1. DISCONNECT INDICATED EQUIPMENT FEEDER , PULL BACK TO SERVICE PEDESTAL AND PREPARE TO SPLICE AND EXTEND AT (N) PULL BOX.
2. LOCATE EXISTING PUMP STARTERS DISCONNECT AND REMOVE.
3. PROVIDE 10HP REDUCED VOLTAGE SOFT STARTER. MOUNT AT (E) CONTROL PANEL IN DRY WELL.
4. INSTALL ATS. ATS PROVIDED BY COUNTY.
5. INSTALL LPG GENERATOR WITH SOUND ATTENUATING ENCLOSURE GENERATOR PROVIDED BY COUNTY.
6. LOCATE AND INTERCEPT EXISTING POWER CONDUITS FROM SERVICE PEDESTAL. SPLICE AND EXTEND (E) POWER FEEDERS, AND PROVIDE NEW FEEDERS AS NOTED IN THE SINGLE LINE DIAGRAM.
7. COORDINATE PROVISION OF A 1000-GALLON LPG TANK AND MOUNTING ON THE SLAB AS DETAILED IN THE CIVIL DRAWINGS. PROVIDE FUEL LINES BETWEEN TANK AND GENERATOR PER TANK AND GENERATOR MANUFACTURER REQUIREMENTS. PROVIDE MANUFACTURER RECOMMENDED LEVEL SENSOR WITH ANALOG OUTPUT SIGNAL.
8. PROVIDE FUEL LEVEL SIGNAL. CONNECT AND ROUTE VIA (E) JUNCTION BOX. ROUTE WIRES VIA EXISTING AND NEW CONDUIT TO CONTROL PANEL. CONNECT WIRES TO MYDRO 850 ANALOG SPARE INPUT FOR FUEL LEVEL MONITORING.
9. PROVIDE GEN STATUS SIGNAL. PROVIDE PENETRATION IN DRY WELL WALL. CONNECT SIGNAL WIRES TO MYDRO 850 DIGITAL SPARE INPUT FOR GENERATOR RUN SIGNAL.
10. PROVIDE CONDUIT IN TRENCH PER DETAIL 2 ON SHEET E-502.
11. PROVIDE CONDUIT STUB UPS THROUGH SLAB AND MARK ENDS OF CONDUIT AND TAPE OFF.
12. PROVIDE SSTL UNISTRUT MOUNTING FRAME PER INDICATED DETAIL.

SHEET SPECIAL SYMBOLS

- PROVIDE SURFACE MOUNT PANELBOARD WITH FEATURES AS SHOWN ON PANEL SCHEDULE
- PB — PROVIDE 11" x 17" CONCRETE PULL BOX AND COVER PER DETAIL 3 ON SHEET E-502
- PROVIDE 20A GFCI CONVENIENCE RECEPTACLE WITH BACK BOX, AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- $ — PROVIDE SINGLE POLE LIGHT SWITCH WITH BACK BOX AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- PROVIDE EXTERIOR LIGHT FIXTURE LITHONIA TWPX1 LED-P1-30K-MVOLT-PEDBLXD WITH PHOTOCELL SHIELD (543982 RK1 PEB SHLD U) OR APPROVED EQUAL LIGHT FIXTURE AND PHOTOCELL
- PROVIDE H.E. WILLIAMS 96-4-L40-8-35-HIAFR-DIM-120 LUMINAIRE WITH SSTL HARDWARE OR APPROVED EQUAL.

MODOC-CONDUIT AND CABLE SCHEDULE

TAG	FEEDER	FROM	TO	WIRE SIZE	CONDUIT*
P-01	100 A	PEDESTAL	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-02	150 A	GENERATOR	ATS	(4) #1/0 AWG, #6 GND	1-1/2"
P-03	100 A	PANEL-E	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-04	100 A	PANEL-E	PUMP PANEL	(4) #1 AWG, #8 GND	1-1/2"
P-05	60 A	RVSS-1	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-06	60 A	RVSS-2	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-07	60 A	RVSS-1	PUMP-1	(4) #6 AWG, #10 GND	1"
P-08	60 A	RVSS-2	PUMP-2	(4) #6 AWG, #10 GND	1"
P-09	120V	PANEL-E	RECEPT.	SEE PANEL SCHEDULE	3/4"
P-10	120V	PANEL-E	GEN CHARGER	SEE PANEL SCHEDULE	3/4"
P-11	120V	PANEL-E	GEN HEATER	SEE PANEL SCHEDULE	3/4"
P-12	120V	PANEL-E	LIGHTS	SEE PANEL SCHEDULE	3/4"
SP-1	SPARE	SEE PLANS		PULL STRING	2"
SP-2	SPARE	SEE PLANS		PULL STRING	(2) 4"
C-01	LEVEL	MYDRO 850	FUEL LEVEL	(1) #18 TSP (2) #16 TSP	1"
C-02	STATUS	MYDRO 850	GENERATOR	(6) #14 AWG	1"

*PROVIDE MIN 2" CONDUIT FOR BELOW GRADE CIRCUITS

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author F. YLLESCAS | Drafting Check E. OSORNO | Project Manager M. DAVIDSON
Designer E. OSORNO | Design Check C. RICHARDS | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project # 2007
Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: MODOC LIFT STATION & GENERATOR ELECTRICAL PLAN

Size: ANSI D

Project No. 12578211 | Date 07/19/2024 | Scale AS SHOWN

Sheet No. E-102 | Sheet 22 of 31

Plot Date: 19 July 2024 - 5:45 PM
Plotted By: Michelle Davidson
Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0102.dwg

PANEL SCHEDULE

PANEL NAME: B | VOLTAGE: 240/120 | NEMA RATING: 4X | MOUNTING: SURFACE | NOTES:
MAINS RATING: 100 A MCB | PHASE: 3 | AIC RATING: 22K | LOCATION: OUTDOOR
BUS RATING: 100 A | WIRE: 4 | DEMAND FACTOR: STD

CKT NO.	USE	DESCRIPTION	BKR SIZE	CKT KVA	CKT AMPS	WIRE SIZE	WIRE LENGTH (FT)	VOLTAGE DROP %	PHASE	VOLTAGE DROP %	WIRE LENGTH (FT)	WIRE SIZE	CKT AMPS	CKT KVA	BKR SIZE	DESCRIPTION	USE	CKT NO.
1	P	PUMP CONTROL PANEL	100/3	8.50	70.83	1/0	200	1.34	A	0.29	10	12	10.00	1.20	20/1	GEN. BATTERY CHARGER	O	2
3	P		100/3	8.50	70.83	1/0	200	1.34	B	0.02	10	12	0.83	0.10	20/1	GEN. BLOCK HEATER	O	4
5	P		100/3	8.50	70.83	1/0	200	1.34	C	0.06	15	12	1.50	0.18	20/1	CONV. RECEPTACLE	R	6
7		SPARE	20/1	1.00					A	0.04	30	12	0.50	0.06	20/1	LIGHTING	L	8
9		SPARE	20/1	1.50					B						20/1	SPARE		10
11		SPARE	20/1	1.50					C						20/1	SPARE		12

CONNECTED KVA		DEMAND KVA	DEMAND AMPS
PHASE A:	10.8	10.8	Check Voltage
PHASE B:	10.1	10.1	Check Voltage
PHASE C:	10.2	10.2	Check Voltage

STD DEMAND LOAD BASED ON 125% OF THE LARGEST MOTOR AND 100% OF THE REMAINING MOTORS, 125% OF CONTINUOUS LOADS, 100% OF NONCONTINUOUS LOADS, AND 50% OF RECEPTACLE LOADS BEYOND THE FIRST 10KVA

USE LEGEND

ID	LOAD TYPE	ASSUMED PF
H	HVAC	0.85
L	LIGHTING	0.80
M	MOTOR	0.85
R	RECEPTACLE	0.80
P	PANEL	0.85
O	OTHER	0.85

VOLTAGE DROP CALCULATION

VOLTAGE DROP IS BASED ON THE IEEE RED BOOK AND 2022 NEC CHAPTER 9 TABLE 9 FORMULA:

VD = I * (R * PF + X * SIN(ACOS(PF)) * L

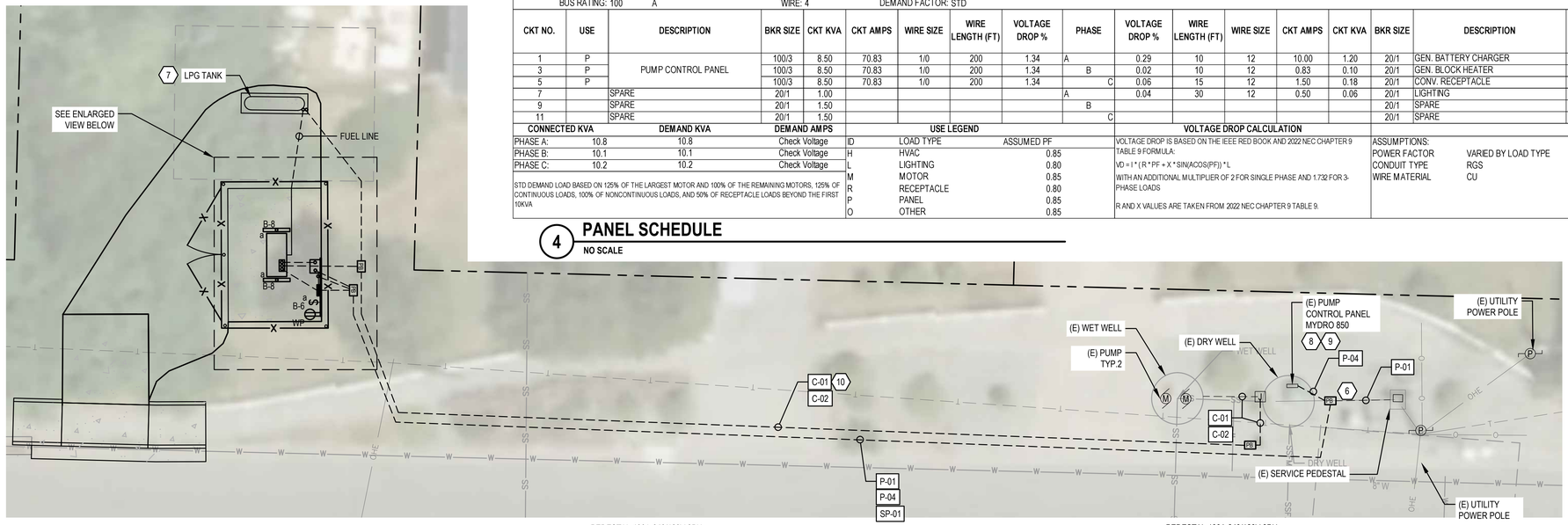
WITH AN ADDITIONAL MULTIPLIER OF 2 FOR SINGLE PHASE AND 1.732 FOR 3-PHASE LOADS

R AND X VALUES ARE TAKEN FROM 2022 NEC CHAPTER 9 TABLE 9.

ASSUMPTIONS:

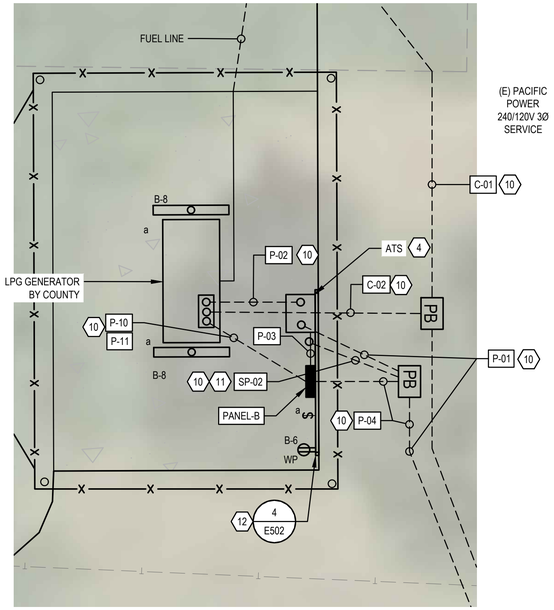
POWER FACTOR	VARIED BY LOAD TYPE
CONDUIT TYPE	RGS
WIRE MATERIAL	CU

4 PANEL SCHEDULE
NO SCALE



1 PACIFIC GENERATOR
1" = 10'

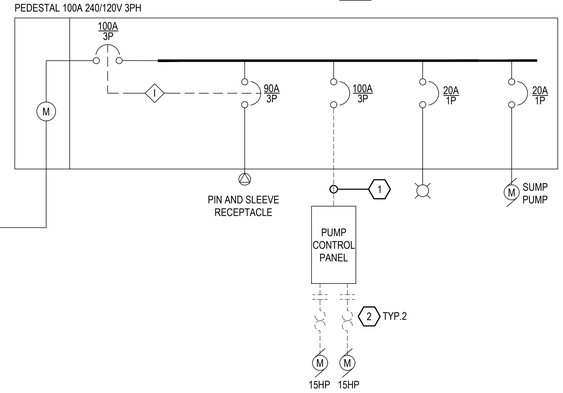
0 10' 20'



4 ENLARGED VIEW
1/4"=1'

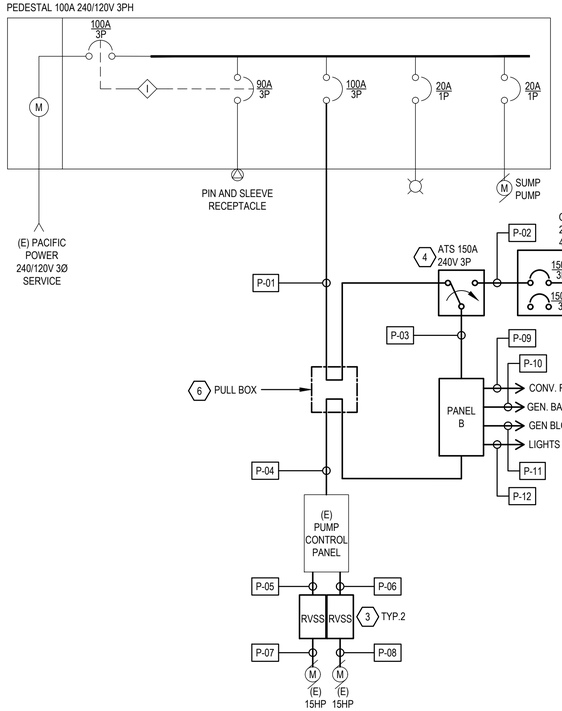
0 2' 4' 8'

PEDESTAL 100A 240/120V 3PH



2 SINGLE LINE DIAGRAM - EXISTING
NO SCALE

PEDESTAL 100A 240/120V 3PH



3 SINGLE LINE DIAGRAM - NEW
NO SCALE

SHEET GENERAL NOTES

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. AFTER DEMOLITION OF (E) STARTERS, RVSS MAY BE INSTALLED WITHIN THE CONTROL ENCLOSURE IF THERE IS SUFFICIENT SPACE IN LIEU OF MOUNTING THEM IN SEPARATE ENCLOSURES MOUNTED EXTERNAL TO THE CONTROL ENCLOSURE.
3. ALL ENCLOSURES AND EQUIPMENT SHALL BE NEMA 4X.
4. EXPOSED MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
5. BELOW GRADE CONDUIT SHALL BE SCHED-40 PVC WITH METAL ELBOWS FOR STUB UPS. STUB UPS SHALL BE TAPE WRAPPED FOR CORROSION RESISTANCE.
6. ABOVE GRADE CONDUIT AND SHALL BE PLASTIC COATED RIGID METAL OR STAINLESS STEEL.
7. TYPICAL POWER CIRCUIT CONSISTS OF (2) #12 AWG, #12 GND, IN 3/4" CONDUIT.
8. CONTRACTOR TO VERIFY AND COORDINATE DIMENSIONS OF GENERATOR AS SHIPPED WITH GENERATOR MANUFACTURER PRIOR TO CONSTRUCTION OF CONCRETE PAD AND ENCLOSURE. PROVIDE CONCRETE PAD AND ENCLOSURE AS NEEDED TO MAINTAIN CLEARANCES AROUND FINAL.
9. PROVIDE FUELING SYSTEM PER DETAILS ON SHEET M-501.

SHEET KEYNOTES

1. DISCONNECT INDICATED EQUIPMENT FEEDER , PULL BACK TO SERVICE PEDESTAL AND PREPARE TO SPLICE AND EXTEND AT (N) PULL BOX.
2. LOCATE EXISTING PUMP STARTERS DISCONNECT AND REMOVE.
3. PROVIDE 15HP REDUCED VOLTAGE SOFT STARTER. MOUNT AT (E) CONTROL PANEL IN DRY WELL.
4. INSTALL ATS. ATS PROVIDED BY COUNTY.
5. INSTALL LPG GENERATOR WITH SOUND ATTENUATING ENCLOSURE GENERATOR PROVIDED BY COUNTY.
6. LOCATE AND INTERCEPT EXISTING POWER CONDUITS FROM SERVICE PEDESTAL. SPLICE AND EXTEND (E) POWER FEEDERS, AND PROVIDE NEW FEEDERS AS NOTED IN THE SINGLE LINE DIAGRAM.
7. COORDINATE PROVISION OF A 1000-GALLON LPG TANK AND MOUNTING ON THE SLAB AS DETAILED IN THE CIVIL DRAWINGS. PROVIDE FUEL LINES BETWEEN TANK AND GENERATOR PER TANK AND GENERATOR MANUFACTURER REQUIREMENTS. PROVIDE MANUFACTURER RECOMMENDED LEVEL SENSOR WITH ANALOG OUTPUT SIGNAL.
8. PROVIDE FUEL LEVEL SIGNAL. CONNECT AND ROUTE VIA (E) JUNCTION BOX. ROUTE WIRES VIA EXISTING AND NEW CONDUIT TO CONTROL PANEL. CONNECT WIRES TO MYDRO 850 ANALOG SPARE INPUT FOR FUEL LEVEL MONITORING.
9. PROVIDE GEN STATUS SIGNAL. PROVIDE PENETRATION IN DRY WELL WALL. CONNECT SIGNAL WIRES TO MYDRO 850 DIGITAL SPARE INPUT FOR GENERATOR RUN SIGNAL.
10. PROVIDE CONDUIT IN TRENCH PER DETAIL 2 ON SHEET E-502.
11. PROVIDE CONDUIT STUB UPS THROUGH SLAB AND MARK ENDS OF CONDUIT AND TAPE OFF.
12. PROVIDE SSTL UNISTRUT MOUNTING FRAME PER INDICATED DETAIL.

SHEET SPECIAL SYMBOLS

- PROVIDE SURFACE MOUNT PANELBOARD WITH FEATURES AS SHOWN ON PANEL SCHEDULE
- PB — PROVIDE 11" x 17" CONCRETE PULL BOX AND COVER PER DETAIL 3 ON SHEET E-502
- PROVIDE 20A GFCI CONVENIENCE RECEPTACLE WITH BACK BOX, AND WEATHERPROOF ENCLOSURE. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- $ — PROVIDE SINGLE POLE LIGHT SWITCH WITH BACK BOX AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- PROVIDE EXTERIOR LIGHT FIXTURE LITHONIA TWPX1 LED-P1-30K-MVOLT-PEDBLXD WITH PHOTOCELL SHIELD (543982 RK1 PEB SHLD U) OR APPROVED EQUAL LIGHT FIXTURE AND PHOTOCELL
- PROVIDE H.E. WILLIAMS 96-4-L40-8-35-HIAFR-DIM-120 LUMINAIRE WITH SSTL HARDWARE OR APPROVED EQUAL.

PACIFIC-CONDUIT AND CABLE SCHEDULE

TAG	FEEDER	FROM	TO	WIRE SIZE	CONDUIT*
P-01	100 A	PEDESTAL	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-02	150 A	GENERATOR	ATS	(4) #1/0 AWG, #8 GND	1-1/2"
P-03	100 A	PANEL-B	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-04	**100 A	PANEL-B	PUMP PANEL	(4) #1/0 AWG, #6 GND	1-1/2"
P-05	60 A	RVSS-1	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-06	60 A	RVSS-2	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-07	60 A	RVSS-1	PUMP-1	(4) #6 AWG, #10 GND	1"
P-08	60 A	RVSS-2	PUMP-2	(4) #6 AWG, #10 GND	1"
P-09	120V	PANEL-B	RECEPT.	SEE PANEL SCHEDULE	3/4"
P-10	120V	PANEL-B	GEN CHARGER	SEE PANEL SCHEDULE	3/4"
P-11	120V	PANEL-B	GEN HEATER	SEE PANEL SCHEDULE	3/4"
P-12	120V	PANEL-B	LIGHTS	SEE PANEL SCHEDULE	3/4"
SP-1	SPARE	SEE PLANS		PULL STRING	2"
SP-2	SPARE	SEE PLANS		PULL STRING	(2) 4"
C-01	LEVEL	MYDRO 850	FUEL LEVEL	(1) #18 TSP (2) #16 TSP	1"
C-02	STATUS	MYDRO 850	GENERATOR	(6) #14 AWG	1"

*PROVIDE MIN 2" CONDUIT FOR BELOW GRADE CIRCUITS
**FEEDER UPSIZED FOR VOLTAGE DROP

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author F. YLLESCAS | Drafting Check E. OSORNO | Project Manager M. DAVIDSON
Designer E. OSORNO | Design Check C. RICHARDS | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

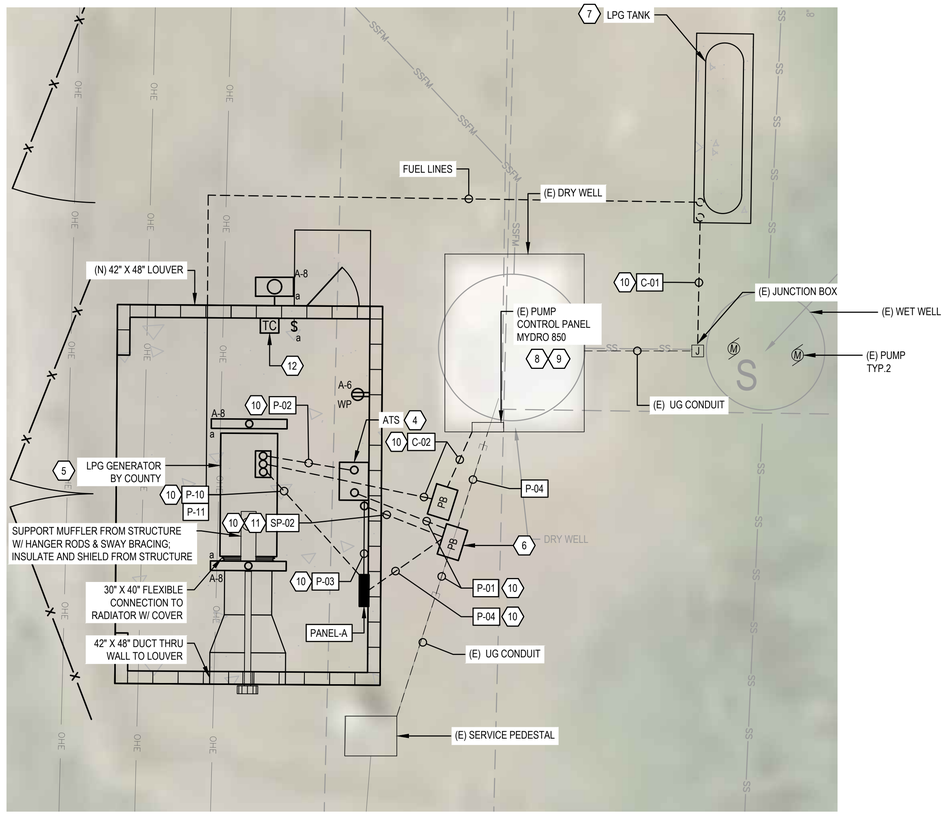
Title PACIFIC LIFT STATION & GENERATOR ELECTRICAL PLAN

Size ANSI D

Project No. 12578211 | Date 07/19/2024 | Scale AS SHOWN

Sheet No. E-103 | Sheet 23 of 31

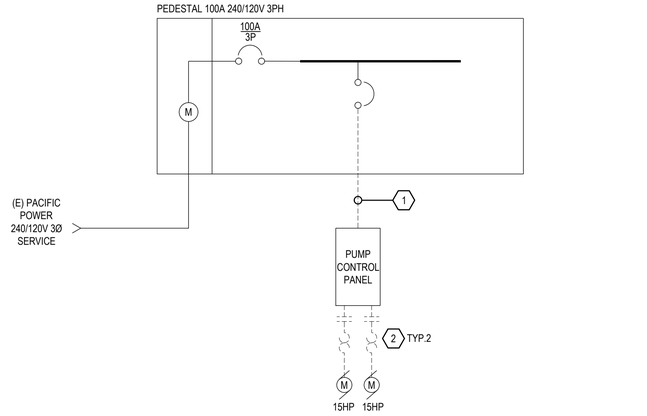
Plot Date: 19 July 2024 - 5:55 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0103.dwg



1 BURSTCHELL GENERATOR

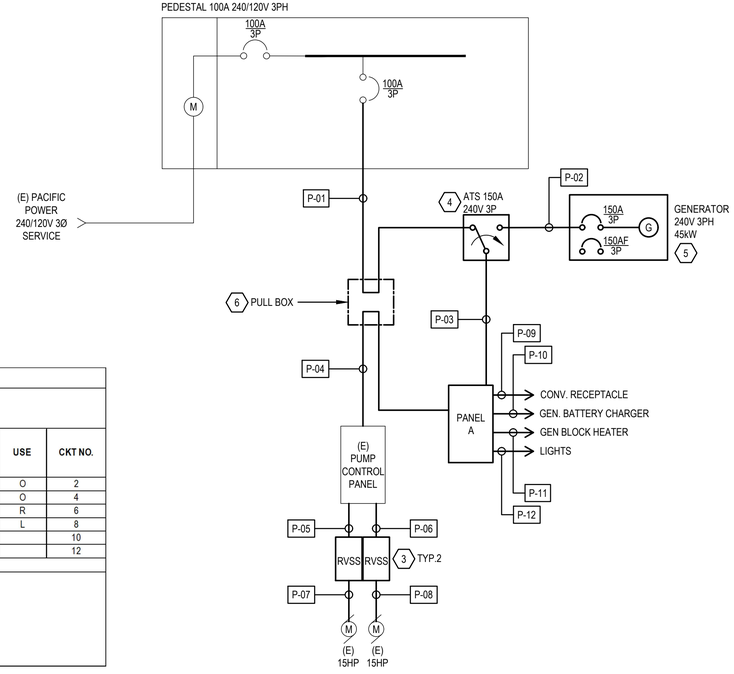
1/4" = 1'

0 2' 4' 8'



2 SINGLE LINE DIAGRAM - EXISTING

NO SCALE



3 SINGLE LINE DIAGRAM - NEW

NO SCALE

PANEL SCHEDULE

PANEL NAME: A | VOLTAGE: 240/120 | NEMA RATING: 1 | MOUNTING: SURFACE | NOTES:
MAINS RATING: 100 A MCB | PHASE: 3 | AIC RATING: 22K | LOCATION: OUTDOOR
BUS RATING: 100 A | WIRE: 4 | DEMAND FACTOR: STD

CKT NO.	USE	DESCRIPTION	BKR SIZE	CKT KVA	CKT AMPS	WIRE SIZE	WIRE LENGTH (FT)	VOLTAGE DROP %	PHASE	VOLTAGE DROP %	WIRE LENGTH (FT)	WIRE SIZE	CKT AMPS	CKT KVA	BKR SIZE	DESCRIPTION	USE	CKT NO.
1	P	PUMP CONTROL PANEL	100/3	8.50	70.83	1	50	0.42	A	0.29	10	12	10.00	1.20	20/1	GEN. BATTERY CHARGER	O	2
3	P		100/3	8.50	70.83	1	50	0.42	B	0.02	10	12	0.83	0.10	20/1	GEN. BLOCK HEATER	O	4
5	P		100/3	8.50	70.83	1	50	0.42	C	0.06	15	12	1.50	0.18	20/1	CONV. RECEPTACLE	R	6
7									A	0.04	30	12	0.50	0.06	20/1	LIGHTING	L	8
9									B						20/1	SPARE		10
11									C						20/1	SPARE		12

CONNECTED KVA	DEMAND KVA	DEMAND AMPS
PHASE A: 9.8	9.8	Check Voltage
PHASE B: 8.6	8.6	Check Voltage
PHASE C: 8.7	8.7	Check Voltage

STD DEMAND LOAD BASED ON 125% OF THE LARGEST MOTOR AND 100% OF THE REMAINING MOTORS, 125% OF CONTINUOUS LOADS, 100% OF NONCONTINUOUS LOADS, AND 50% OF RECEPTACLE LOADS BEYOND THE FIRST 10KVA

ID	USE LEGEND	ASSUMED PF
H	HVAC	0.85
L	LIGHTING	0.80
M	MOTOR	0.85
R	RECEPTACLE	0.80
P	PANEL	0.85
O	OTHER	0.85

VOLTAGE DROP CALCULATION

VOLTAGE DROP IS BASED ON THE IEEE RED BOOK AND 2022 NEC CHAPTER 9 TABLE 9 FORMULA:
VD = I * (R * PF + X * SIN(ACOS(PF)) * L
WITH AN ADDITIONAL MULTIPLIER OF 2 FOR SINGLE PHASE AND 1.732 FOR 3-PHASE LOADS
R AND X VALUES ARE TAKEN FROM 2022 NEC CHAPTER 9 TABLE 9.

ASSUMPTIONS:
POWER FACTOR: VARIED BY LOAD TYPE
CONDUIT TYPE: RGS
WIRE MATERIAL: CU

4 PANEL SCHEDULE

NO SCALE

SHEET GENERAL NOTES

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. AFTER DEMOLITION OF (E) STARTERS, RVSS MAY BE INSTALLED WITHIN THE CONTROL ENCLOSURE IF THERE IS SUFFICIENT SPACE IN LIEU OF MOUNTING THEM IN SEPARATE ENCLOSURES MOUNTED EXTERNAL TO THE CONTROL ENCLOSURE.
3. ALL OUTDOOR ENCLOSURES AND EQUIPMENT SHALL BE NEMA 4X.
4. EXPOSED MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
5. BELOW GRADE CONDUIT SHALL BE SCHED-40 PVC WITH METAL ELBOWS FOR STUB UPS. STUB UPS SHALL BE TAPE WRAPPED FOR CORROSION RESISTANCE.
6. ABOVE GRADE CONDUIT AND SHALL BE PLASTIC COATED RIGID METAL OR STAINLESS STEEL.
7. TYPICAL POWER CIRCUIT CONSISTS OF (2) #12 AWG, #12 GND, IN 3/4" CONDUIT.
8. CONTRACTOR TO VERIFY AND COORDINATE DIMENSIONS OF GENERATOR AS SHIPPED WITH GENERATOR MANUFACTURER PRIOR TO CONSTRUCTION OF BUILDING. PROVIDE CONCRETE PAD AND ENCLOSURE AS NEEDED TO MAINTAIN CLEARANCES AROUND FINAL GENERATOR DIMENSIONS.
9. PROVIDE FUELING AND EXHAUST SYSTEMS PER DETAILS ON SHEET M-501.

SHEET KEYNOTES

1. DISCONNECT INDICATED EQUIPMENT FEEDER , PULL BACK TO SERVICE PEDESTAL AND PREPARE TO SPLICE AND EXTEND AT (N) PULL BOX.
2. LOCATE EXISTING PUMP STARTERS DISCONNECT AND REMOVE.
3. PROVIDE 15HP REDUCED VOLTAGE SOFT STARTER. MOUNT AT (E) CONTROL PANEL IN DRY WELL.
4. INSTALL ATS. ATS PROVIDED BY COUNTY.
5. INSTALL LPG GENERATOR. GENERATOR PROVIDED BY COUNTY.
6. LOCATE AND INTERCEPT EXISTING POWER CONDUITS FROM SERVICE PEDESTAL. SPLICE AND EXTEND (E) POWER FEEDERS, AND PROVIDE NEW FEEDERS AS NOTED IN THE SINGLE LINE DIAGRAM.
7. COORDINATE PROVISION OF A 1000-GALLON LPG TANK AND MOUNTING ON THE SLAB AS DETAILED IN THE CIVIL DRAWINGS. PROVIDE FUEL LINES BETWEEN TANK AND GENERATOR PER TANK AND GENERATOR MANUFACTURER REQUIREMENTS. PROVIDE MANUFACTURER RECOMMENDED LEVEL SENSOR WITH ANALOG OUTPUT SIGNAL.
8. PROVIDE FUEL LEVEL SIGNAL. CONNECT AND ROUTE VIA (E) JUNCTION BOX. ROUTE WIRES VIA EXISTING AND NEW CONDUIT TO CONTROL PANEL. CONNECT WIRES TO MYDRO 850 ANALOG SPARE INPUT FOR FUEL LEVEL MONITORING.
9. PROVIDE GEN STATUS SIGNAL. PROVIDE PENETRATION IN DRY WELL WALL. CONNECT SIGNAL WIRES TO MYDRO 850 DIGITAL SPARE INPUT FOR GENERATOR RUN SIGNAL.
10. PROVIDE CONDUIT IN TRENCH PER DETAIL 2 ON SHEET E-502.
11. PROVIDE CONDUIT STUB UPS THROUGH SLAB AND MARK ENDS OF CONDUIT AND TAPE OFF.
12. PROVIDE 4 RELAY ASTRONOMICAL TIME CLOCK , TORK ELC74 OR APPROVED EQUAL. ROUTE EXTERIOR LIGHT VIA TIME CLOCK RELAY.

SHEET SPECIAL SYMBOLS

- PROVIDE SURFACE MOUNT PANELBOARD WITH FEATURES AS SHOWN ON PANEL SCHEDULE
- PB — PROVIDE 11" x 17" CONCRETE PULL BOX AND COVER PER DETAIL 3 ON SHEET E-502
- PROVIDE 20A GFCI CONVENIENCE RECEPTACLE WITH BACK BOX, AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- $ — PROVIDE SINGLE POLE LIGHT SWITCH WITH BACK BOX AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- PROVIDE EXTERIOR LIGHT FIXTURE LITHONIA TWPX1 LED-P1-30K-MVOLT-PEDBLXD WITH PHOTOCELL SHIELD (543982 RK1 PEB SHLD U) OR APPROVED EQUAL LIGHT FIXTURE AND PHOTOCELL
- PROVIDE H.E. WILLIAMS 96-4-L40-8-35-HIAFR-DIM-120 LUMINAIRE WITH SSTL HARDWARE OR APPROVED EQUAL.

BURTSHELL-CONDUIT AND CABLE SCHEDULE

TAG	FEEDER	FROM	TO	WIRE SIZE	CONDUIT*
P-01	100 A	PEDESTAL	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-02	150 A	GENERATOR	ATS	(4) #1/0 AWG, #6 GND	1-1/2"
P-03	100 A	PANEL-A	ATS	(4) #1 AWG, #8 GND	1-1/2"
P-04	100 A	PANEL-A	PUMP PANEL	(4) #1 AWG, #8 GND	1-1/2"
P-05	60 A	RVSS-1	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-06	60 A	RVSS-2	PUMP PANEL	(4) #6 AWG, #10 GND	1"
P-07	60 A	RVSS-1	PUMP-1	(4) #6 AWG, #10 GND	1"
P-08	60 A	RVSS-2	PUMP-2	(4) #6 AWG, #10 GND	1"
P-09	120V	PANEL-A	RECEPT.	SEE PANEL SCHEDULE	3/4"
P-10	120V	PANEL-A	GEN CHARGER	SEE PANEL SCHEDULE	3/4"
P-11	120V	PANEL-A	GEN HEATER	SEE PANEL SCHEDULE	3/4"
P-12	120V	PANEL-A	LIGHTS	SEE PANEL SCHEDULE	3/4"
SP-1	SPARE	SEE PLANS		PULL STRING	2"
SP-2	SPARE	SEE PLANS		PULL STRING	(2) 4"
C-01	LEVEL	MYDRO 850	FUEL LEVEL	(1) #18 TSP (2) #16 TSP	1"
C-02	STATUS	MYDRO 850	GENERATOR	(6) #14 AWG	1"

*PROVIDE MIN 2" CONDUIT FOR BELOW GRADE CIRCUITS

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author F. YLLESCAS | Drafting Check E. OSORNO | Project Manager M. DAVIDSON
Designer E. OSORNO | Design Check C. RICHARDS | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project # 2007
Project: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

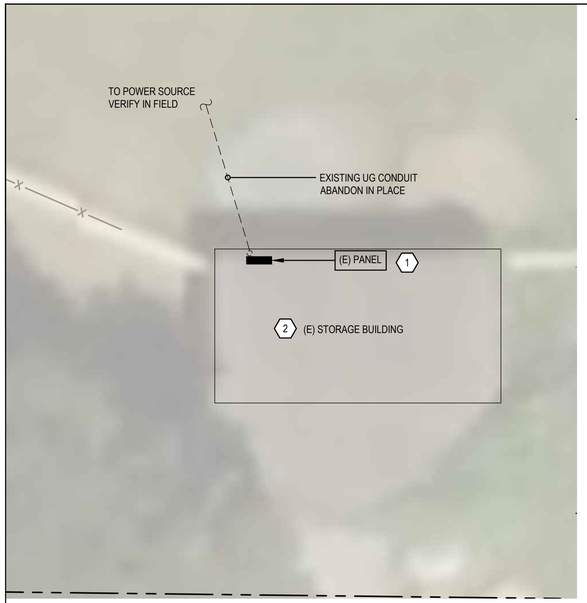
Title: BURTSCHELL LIFT STATION & GENERATOR ELECTRICAL PLAN

Size: ANSI D

Project No. 12578211 | Date 07/19/2024 | Scale AS SHOWN

Sheet No. E-104 | Sheet 24 of 31

Plot Date: 19 July 2024 - 5:59 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0104.dwg



1 CSA STORAGE EXISTING BUILDING

1" = 5'

0 5' 10'

N

PANEL SCHEDULE

PANEL NAME: F
MAINS RATING: 200 A MCB
BUS RATING: 200 A
VOLTAGE: 240/120
PHASE: 1
WIRE: 3
NEMA RATING: 1
AIC RATING: 22K
DEMAND FACTOR: STD
MOUNTING: SURFACE
LOCATION: INDOOR
NOTES: BOTTOM FEED

CKT NO.	USE	DESCRIPTION	BKR SIZE	CKT KVA	CKT AMPS	WIRE SIZE	WIRE LENGTH (FT)	VOLTAGE DROP %	PHASE	VOLTAGE DROP %	WIRE LENGTH (FT)	WIRE SIZE	CKT AMPS	CKT KVA	BKR SIZE	DESCRIPTION	USE	CKT NO.
1	R	RECEPTACLES	20/1	0.90	7.50	12	100	2.05	A	0.33	200	12	0.61	0.40	20/1	LIGHTING	L	2
3	R	RECEPTACLES	20/1	0.72	6.00	12	50	0.82	B						20/1	SPARE		4
5	R	RECEPTACLES	20/1	0.90	7.50	12	100	2.05	A						20/1	SPARE		6
7	R	RECEPTACLES	20/1	0.90	7.50	12	100	2.05	B						20/1	SPARE		8
9		SPARE	20/1						A						20/1	SPARE		10
11		SPARE	20/1						B						20/1	SPARE		12
13		SPARE	20/1						A						20/1	SPARE		14
15		SPARE	20/1						B						20/1	SPARE		16
17		SPARE	20/1						A						20/1	SPARE		18
19		SPACE	20/1						B						20/1	SPACE		20
21		SPACE	20/1						A						20/1	SPACE		22
23		SPACE	20/1						B						20/1	SPACE		24
25		SPACE	20/1						A						20/1	SPACE		26
27		SPACE	20/1						B						20/1	SPACE		28
29		SPACE	20/1						A						20/1	SPACE		30

CONNECTED KVA		DEMAND KVA		DEMAND AMPS
PHASE A:	2.2	2.3		19.2
PHASE B:	1.6	1.6		13.5

STD DEMAND LOAD BASED ON 125% OF THE LARGEST MOTOR AND 100% OF THE REMAINING MOTORS, 125% OF CONTINUOUS LOADS, 100% OF NONCONTINUOUS LOADS, AND 50% OF RECEPTACLE LOADS BEYOND THE FIRST 10KVA

USE LEGEND

ID	LOAD TYPE	ASSUMED PF
H	HVAC	0.85
L	LIGHTING	0.80
M	MOTOR	0.85
R	RECEPTACLE	0.80
P	PANEL	0.85
O	OTHER	0.85

VOLTAGE DROP CALCULATION

VOLTAGE DROP IS BASED ON THE IEEE RED BOOK AND 2022 NEC CHAPTER 9 TABLE 9 FORMULA:
VD = I * (R * PF + X * SIN(ACOS(PF)) * L
WITH AN ADDITIONAL MULTIPLIER OF 2 FOR SINGLE PHASE AND 1.732 FOR 3-PHASE LOADS

R AND X VALUES ARE TAKEN FROM 2022 NEC CHAPTER 9 TABLE 9.

ASSUMPTIONS:

POWER FACTOR	VARIED BY LOAD TYPE
CONDUIT TYPE	RGS
WIRE MATERIAL	CU

2 PANEL SCHEDULE

NO SCALE

SHEET GENERAL NOTES

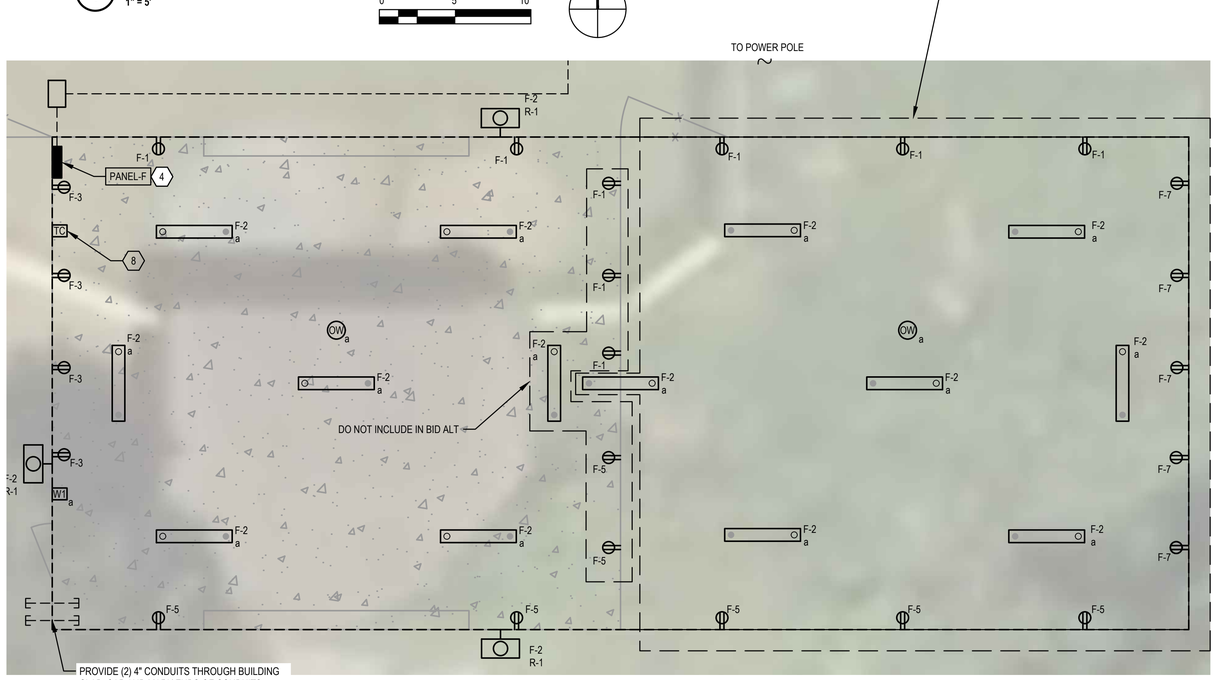
1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF WORK.
2. CONTRACTOR TO VERIFY EXISTING POWER SOURCE TO CSA BUILDING AND UG CONDUIT ROUTING.

SHEET KEYNOTES

1. DISCONNECT AND REMOVE BUILDING MAIN PANEL. REMOVE FEEDERS BACK TO SOURCE.
2. DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES, LIGHTING FIXTURES, EXPOSED CONDUIT AND FEEDERS IN STORAGE BUILDING BACK TO THE SOURCE.
3. PROVIDE 11"X17" CHRISTY B017 PULL BOX AND COVER. PER DETAIL 3 ON SHEET E-501
4. PROVIDE BRANCH CIRCUIT PANEL WITH FEATURES AS SHOWN ON PANEL SCHEDULE.
5. PROVIDE RISER ON UTILITY POWER POLE PER PACIFIC POWER REQUIREMENTS.
6. PROVIDE METER/MAIN ENCLOSURE. MOUNT ON POWER POLE PER PACIFIC POWER REQUIREMENTS.
7. PROVIDE 200 A SERVICE FEEDER CONSISTING OF (3) #4/0 AWG, #6 GND IN 2" SCHEDULE 40 PVC CONDUIT. PROVIDE TRENCH PER PACIFIC POWER MAIN TRENCH DETAIL. LOCATE EXISTING FIELD SPRINKLER SYSTEM AND PIPING AND PROTECT SPRINKLER SYSTEM IN PLACE DURING TRENCH CONSTRUCTION. CONTRACTOR TO ANTICIPATE POTENTIAL UNDERGROUND CONFLICTS WITH BALL FIELD IRRIGATION AND ELECTRICAL, LOCATIONS UNKNOWN. CONTRACTOR TO FIELD VERIFY EXISTING UTILITIES PRIOR TO INSTALLTION OF NEW ELECTRICAL CONDUIT. CONTRACTOR TO INSTALL NEW CONDUIT TO AVOID EXISTING UNDERGROUND UTILITY CONFLICTS.
8. PROVIDE 4 RELAY ASTRONOMICAL TIME CLOCK , TORK ELC74 OR APPROVED EQUAL. ROUTE EXTERIOR LIGHT VIA TIME CLOCK RELAY.

SHEET SPECIAL SYMBOLS

- PROVIDE 20 A GFCI RECEPTACLE WITH BACK BOX AND SSTL COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL. MOUNT 42" AFF.
- PROVIDE LIGHT FIXTURE H.E WILLIAMS 96-4-L40-8-35-HIAFR-DIM-120 WITH SUSPENDED MOUNTING HARDWARE. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- W1 — PROVIDE WALLBOX OCCUPANCY SENSOR AND CONNECT TO OVERHEAD CEILING SENSOR FOR CONTROL OF ROOM LIGHTING WITH SSTL BACK BOX AND COVER. PROVIDE TYPICAL POWER CIRCUIT TO LOCAL PANEL.
- OW — PROVIDE CEILING MOUNT OCCUPANCY SENSOR. PROVIDE ADDITIONAL SENSORS AS NEEDED FOR FULL ROOM COVERAGE.
- PROVIDE EXTERIOR LIGHT FIXTURE LITHUANIA TWPX1 LED-P1-30K-MVOLT-PEDBLXD WITH PHOTOCELL SHIELD (543982 RK1 PEB SHLD U) OR APPROVED EQUAL LIGHT FIXTURE AND PHOTOCELL.

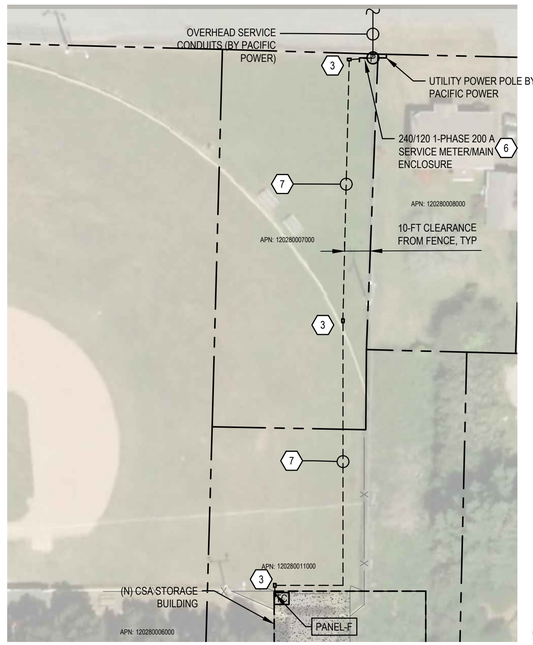


3 CSA STORAGE BUILDING NEW

1/4" = 1'

0 2' 4' 8'

N

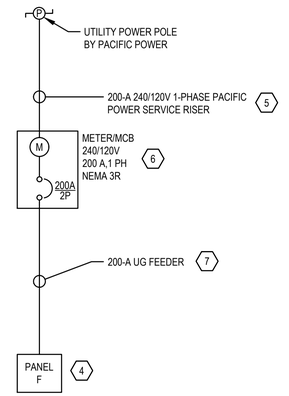


4 CSA STORAGE BUILDING SITE PLAN

1" = 30'

0 30' 60'

N



5 CSA STORAGE BUILDING SINGLE LINE DIAGRAM NEW

NTS

N

No.	Issue		Checked	Approved	Date
0	ISSUE FOR BID		MD	SXM	07/22/2024
Author	F. YLLESCAS	Drafting Check	E. OSORNO	Project Manager	M. DAVIDSON
Designer	E. OSORNO	Design Check	C. RICHARDS	Project Director	S. ALLEN

COUNTY OF DEL NORTE EST 1857

Bar is one inch on original size sheet
0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project: PROJECT # 2007
ONSITE EMERGENCY POWER SUPPLY
FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Project No. 12578211
Date 07/19/2024
Scale AS SHOWN

Title: CSA STORAGE BUILDING ELECTRICAL PLAN

Size: ANSI D
Status Code:
Sheet No. E-105
Sheet 25 of 31

Plot Date: 19 July 2024 - 6:02 PM
Plotted By: Michelle Davidson
Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0105.dwg

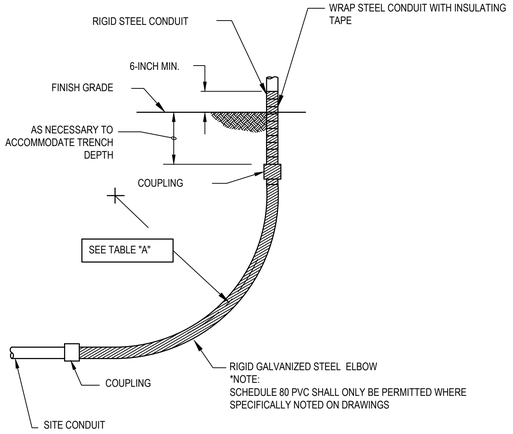
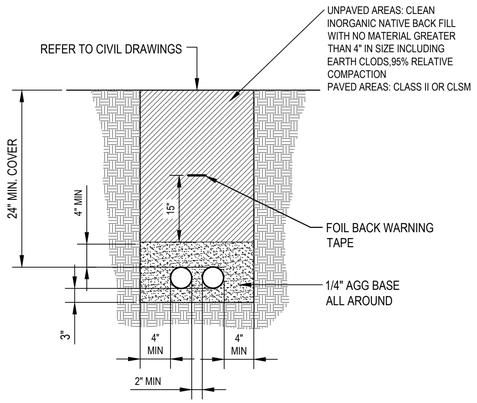
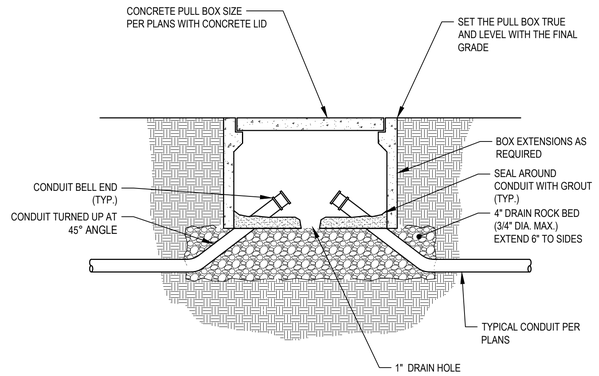


TABLE "A" - RGS		
CONDUIT SIZE	MINIMUM ELBOW RADIUS REQUIREMENTS	
	RUNS 0-100 FEET	RUNS GREATER THAN 101 FEET
1/2-INCH	4-INCH	4-INCH
3/4-INCH	4 1/2-INCH	4 1/2-INCH
1-INCH	5 3/4-INCH	5 3/4-INCH
1 1/4-INCH	7 1/4-INCH	7 1/4-INCH
1 1/2-INCH	8 1/4-INCH	8 1/4-INCH
2-INCH	9 1/2-INCH	9 1/2-INCH
2 1/2-INCH	10 1/2-INCH	11 7/16-INCH
3-INCH	13-INCH	13 3/4-INCH
4-INCH	16-INCH	18 1/4-INCH
5-INCH	24-INCH	-
6-INCH	30-INCH	-

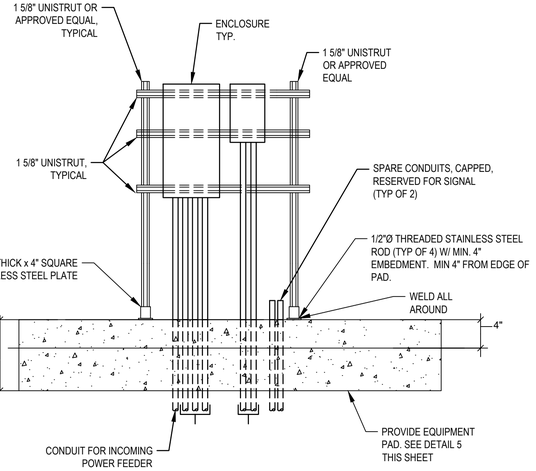
1 E-501 **TYPICAL CONDUIT STUB UP**
NOT TO SCALE



2 E-501 **TYPICAL ELECTRICAL TRENCH**
NOT TO SCALE



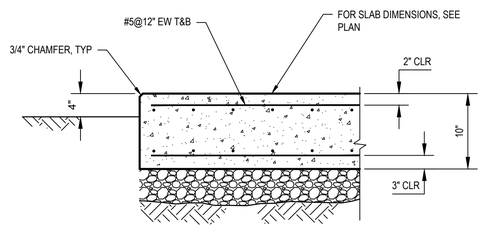
3 E-501 **TYPICAL PULL BOX FOR LOW VOLTAGE POWER**
NOT TO SCALE



NOTES:

1. COORDINATE SIZE OF FRAME AND PAD WITH ACTUAL DIMENSIONS OF ENCLOSURES AS SHIPPED.
2. ALL STRUT, HARDWARE, BOXES, AND ACCESSORIES SHALL BE STAINLESS STEEL.

4 E-501 **UNISTRUT ENCLOSURE/EQUIPMENT SUPPORT**
NOT TO SCALE



NOTES:

1. FOUNDATION MATERIAL UNDER SLAB SHALL INCLUDE 6" OF CLASS 2 AB, MEETING THE REQUIREMENTS OF CALTRANS STANDARD SPECIFICATIONS SECTION 26 FOR 3/4-INCH MAXIMUM GRADING, COMPACTED TO 95% MDD IN ACCORDANCE WITH ASTM D 1557. CONTRACTOR SHALL SUBMIT MATERIAL TO ENGINEER FOR APPROVAL.
2. USE THIS DETAIL FOR TYPICAL EXTERIOR SLAB ON GRADE UNLESS OTHERWISE NOTED.
3. CONTRACTOR TO PROVIDE FIELD DENSITY AND COMPACTION REPORTS. IN CASE COMPACTION TESTS SHOW NONCOMPLIANCE WITH REQUIREMENTS, THE CONTRACTOR SHALL ACCOMPLISH SUCH REMEDY AS MAY BE REQUIRED TO ENSURE COMPLIANCE. SUBSEQUENT TESTING TO SHOW COMPLIANCE SHALL BE BY A TESTING LABORATORY SELECTED BY THE CITY AND SHALL BE AT THE CONTRACTOR'S EXPENSE.
4. DO NOT PLACE SUBGRADE OR FOUNDATION MATERIAL UNDER SLAB DURING PERIODS OF HEAVY RAINFALL WHEN SOIL MOISTURE CONDITIONS WILL NOT PERMIT ACHIEVING REQUIRED COMPACTION.
5. MINIMUM DISTANCE FROM CENTER OF ANCHOR BOLT TO EDGE OF SLAB SHALL BE 6 INCHES.
6. CONTRACTOR TO CONFIRM ALL PAD DIMENSIONS BASED ON ACTUAL EQUIPMENT ORDERED PRIOR TO FABRICATION.

5 E-501 **EXTERIOR SLAB ON GRADE**
NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author	SD	Drafting Check	EAO
Designer	EAO	Design Check	CAR
Project Manager	M. DAVIDSON		
Project Director	S. ALLEN		

Bar is one inch on original size sheet
0 1"

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Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project: PROJECT # 2007
ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: ELECTRICAL DETAILS

Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/19/2024	AS SHOWN	E-501	26 of 31

CERTIFICATE OF COMPLIANCE NRCC-ELC-E

This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 1 of 6)**
Project Address:	300 E. Maken Ave.	**Date Prepared:**	4/4/2024

A. GENERAL INFORMATION

01	Project Location (city)	Cresent City	02	Climate Zone	1
			03	Occupancy Types Within Project:	Warehouse

B. PROJECT SCOPE

This table includes electrical systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[1]	Rating[2] (kVA)	Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Main	New electrical service equipment and meter	50	☐	☐	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	☐

[1] FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.
[2] If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.
[3] Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

CERTIFICATE OF COMPLIANCE NRCC-ELC-E

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 2 of 6)**
		Date Prepared:	4/4/2024

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through J. 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.

01		02		03		04	05	06
Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F)	AND	Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G)	AND	Voltage Drop 130.5(c)/ 160.6(c) (See Table H)	AND	Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I)	Electric Ready 160.9 (See Table J)	**Compliance Results**
Yes	AND	Yes	AND	Yes	AND	Yes	Yes	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.

F. SERVICE ELECTRICAL METERING

This table includes new or replacement electrical service systems OR equipment to demonstrate compliance with 130.5(a) / 160.6(a). For multifamily occupancies, submetered systems that provide power to common use areas must meet the following metering requirements. Submetered systems providing power to dwelling units do not.

01	02	03				04	05	
Electrical Service Designation/ Description	Rating[1] (kVA)	Required Metering Capabilities per Table 130.5-A				Location of Requirements in Construction Documents	Field Inspector	
		Instantaneous Demand (kW)	Historical Peak Demand (kW)	Tracking kWh for user-defined period	kWh per rate period		Pass	Fail
Main	50	☒	☐	☒	☐	E-105	☐	☐

[1] FOOTNOTES: If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.

CERTIFICATE OF COMPLIANCE NRCC-ELC-E

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 3 of 6)**
		Date Prepared:	4/4/2024

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/ 160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	
Load Type per Table 130.5-B[1]	Minimum Required Separation of Load per Table 130.5-B	Compliance Method[2]	Location of Requirements in Construction Documents	Field Inspector	
				Pass	Fail
Main					
Lighting including exit, egress and exterior	not required	Method 1: Switchboards, motor control centers, or panelboard loads disaggregated for each load type	E-Sheets	☐	☐
Plug Loads and appliances less than 25kVA	not required	Method 1: Switchboards, motor control centers, or panelboard loads disaggregated for each load type	E-Sheets	☐	☐

** NOTES: If "Other*" is selected under Compliance Method above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: For each separate load type, up to 10% of the connected load may be of any type.
[2] Method 1: Switchboards/ motor control centers/ panelboard loads disaggregated for each load type.
Method 2: Switchboards/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring.
Method 4: Complete metering system measures and reports loads by type.
See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/ 180.2(b)4Bviic.

01	02	03	04	05

CERTIFICATE OF COMPLIANCE NRCC-ELC-E

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 4 of 6)**
		Date Prepared:	4/4/2024

H. VOLTAGE DROP

Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method				Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
							Pass	Fail
Main	☒	Voltage drop less than 5%	☐	Permitted by CA Elec Code (Exception to 130.5(c))*	Attached	E-105	☐	☐

** NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(d)/ 160.6(d).. Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

01	02	03	04	05	06	07	
Room name or Description	Location/ Type of Controlled Receptacles[1]	Shut-Off Controls	Demand Responsive Controls	Permanent Durable Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector	
						Pass	Fail

** NOTES: If "Other*" is selected under Shut-Off Controls above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: Receptacles dedicated to refrigerators and water dispensers in kitchens, located a minimum of 6ft above the floor specifically for clocks, network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms, circuits rated more than 20 Amps, or connected to a UPS that are intended to be in continuous use and are marked to differentiate them from other receptacles or circuits are excepted from the requirements. .

J. ELECTRIC READY BUILDINGS

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE NRCC-ELC-E

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 5 of 6)**
		Date Prepared:	4/4/2024

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection 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-ELC-E - Must be submitted for all buildings

CERTIFICATE OF COMPLIANCE NRCC-ELC-E

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 6 of 6)**
Project Address:	300 E. Maken Ave.	**Date Prepared:**	4/4/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Aly Young	Documentation Author Signature: Aly Young
Company: GHD Inc	Signature Date: 04/04/2024
Address: 2235 Mercury Way Ste. 150	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Santa Rosa, CA 95407	Phone: (707) 523-1010

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: Erick Osorno	Responsible Designer Signature: Erick Osorno
Company: GHD	Date Signed: 2024-04-04
Address: 2235 Mercury Way Ste 150	License: E23831
City/State/Zip: Santa Rosa CA 95407	Phone: (707) 523-1010

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author **ALY** Drafting Check **EAO** Project Manager **M. DAVIDSON**
Designer **EAO** Design Check **CAR** Project Director **S. ALLEN**

COUNTY OF DEL NORTE EST 1851

Bar is one inch on original size sheet
0 1"

REGISTERED PROFESSIONAL ENGINEER ERICK A. OSORNO No. E23831 ELECTRICAL STATE OF CALIFORNIA

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Client **DEL NORTE COUNTY - SERVICE AREA NO. 1 PROJECT # 2007**
Project **ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1**

Title **CSA STORAGE BUILDING T24 DOCUMENTS - ELECTRICAL POWER DISTRIBUTION**

Size **ANSI D**

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/19/2024	AS SHOWN	E-701	27 of 31

Plot Date: 19 July 2024 - 6:04 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0701.dwg

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: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 1 of 7)**
Project Address: 300 E. Maken Ave.	**Date Prepared:**	4/4/2024

A. GENERAL INFORMATION

01	Project Location (city)	Cresent City	04	Total Conditioned Floor Area (ft²)	1,560
02	Climate Zone	1	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1
● Warehouse					

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	Area Category Method	1560	Area Category Method	0
☐ New Lighting System - Parking Garage				
Total Area of Work (ft²)	1560		0	

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 2 of 7)**
	Date Prepared:	4/4/2024

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		624	0		=	624	≥	390	0	=	390	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.

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 3 of 7)**
	Date Prepared:	4/4/2024

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
B	INTERIOR lIGHT	No	NA	30	Mfr. Spec	13	No	390	☐	☐
							Total Designed Watts: CONDITIONED SPACES	390		

[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	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C		
NA < 4,000W subject to multilevel	Whole Building Auto Time Switch	☐	☐

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 4 of 7)**
	Date Prepared:	4/4/2024

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/Sky lit 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
STORAGE BUILDING	Commercial Industrial Storage Area	Readily Accessible	Dimmer	See Building Level	Included	Included	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
Undefined Zone	Commercial Industrial Warehouse	0.4	1,560	624	No	No
		TOTALS:	1,560	624	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 5 of 7)**
	Date Prepared:	4/4/2024

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.

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 6 of 7)**
	Date Prepared:	4/4/2024

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/attcp/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.	Whole Building Time Switch;
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	STORAGE BUILDING;

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author **ALY** Drafting Check **EAO** Project Manager **M. DAVIDSON**
Designer **EOA** Design Check **CAR** Project Director **S. ALLEN**

Bar is one inch on original size sheet
0 1"

REGISTERED PROFESSIONAL ENGINEER ERICK A. OSORIO No. E26001 ELECTRICAL STATE OF CALIFORNIA

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Client **DEL NORTE COUNTY - SERVICE AREA NO. 1**
PROJECT # 2007
Project **ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1**

Title **CSA STORAGE BUILDING T24 DOCUMENTS - INTERIOR LIGHTING**

Size **ANSI D**

Project No. **12578211** Date **07/19/2024** Scale **AS SHOWN**

Sheet No. **E-702** Sheet **28 of 31**

Plot Date: 19 July 2024 - 6:05 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0702.dwg

STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:** **(Page 7 of 7)**
Project Address:	300 E. Maken Ave.	**Date Prepared:** 4/4/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Aly Young	Documentation Author Signature: *a young*
Company: GHD Inc	Signature Date: 2024-04-04
Address: 2235 Mercury Way Ste. 150	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Santa Rosa, CA 95407	Phone: (707) 523-1010

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: Erick Osorno	Responsible Designer Signature: *Erick Osorno*
Company: GHD	Date Signed: 2024-04-04
Address: 2235 Mercury Way Ste 150	License: E23831
City/State/Zip: Santa Rosa CA 95407	Phone: (707) 523-1010

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author **ALY**	Drafting Check **EAO**	Project Manager **M. DAVIDSON**	
Designer **EAO**	Design Check **CAR**	Project Director **S. ALLEN**	

Bar is one inch on original size sheet

0 1"

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Client **DEL NORTE COUNTY - SERVICE AREA NO. 1**
PROJECT # 2007

Project **ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1**

Title **CSA STORAGE BUILDING T24 DOCUMENTS - INTERIOR LIGHTING CONTINUED**

Size **ANSI D**

Project No.	Date	Scale	Sheet No.	Sheet
12578211	**07/19/2024**	**AS SHOWN**	**E-703**	**29 of 31**

Plot Date: 19 July 2024 - 6:06 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0703.dwg

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:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 1 of 6)**
Project Address:	300 E. Maken Ave.	**Date Prepared:**	4/4/2024

A. GENERAL INFORMATION

01	Project Location (city)	Cresent City	04	Total Illuminated Hardscape Area (ft²)	0
02	Climate Zone	1			
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				
● Warehouse					

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:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 2 of 6)**
		Date Prepared:	4/4/2024

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	+	---	+	---	+	---	+	---	OR	---	=	0	≥	22	DOES NOT COMPLY
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.

Generated Date/Time:
Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4188-0424-0192
Report Generated: 2024-04-04 14:57:46

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-LTO-E**

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 3 of 6)**
		Date Prepared:	4/4/2024

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
A	EXTERIOR LIGHT	☐ Linear	11	Mfr. Spec	2	New	☐	22	NA: < 6200 lumens	☐	☐
							Total Design Watts:		22		

* 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.

Generated Date/Time:
Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4188-0424-0192
Report Generated: 2024-04-04 14:57:46

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-LTO-E**

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 4 of 6)**
		Date Prepared:	4/4/2024

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
STORAGE BUILDING EXTERIOR	Photocontrol	Provided	Provided	☐	☐

[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.

Generated Date/Time:
Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4188-0424-0192
Report Generated: 2024-04-04 14:57:46

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-LTO-E**

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 5 of 6)**
		Date Prepared:	4/4/2024

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 section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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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.	STORAGE BUILDING EXTERIOR;

Generated Date/Time:
Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4188-0424-0192
Report Generated: 2024-04-04 14:57:46

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-LTO-E**

Project Name:	Onsite Emergency Power Supply for Sanitary Sewer Lift Stations	**Report Page:**	**(Page 6 of 6)**
Project Address:	300 E. Maken Ave.	**Date Prepared:**	4/4/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Aly Young	Documentation Author Signature: Aly Young
Company: GHD Inc	Signature Date: 2024-04-04
Address: 2235 Mercury Way Ste. 150	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone: (707) 523-1010

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.
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Responsible Designer Name: Erick Osorno	Responsible Designer Signature: Erick Osorno
Company: GHD	Date Signed: 2024-04-04
Address: 2235 Mercury Way Ste 150	License: E23831
City/State/Zip: Santa Rosa CA 95407	Phone: (707) 523-1010

Generated Date/Time:
Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4188-0424-0192
Report Generated: 2024-04-04 14:57:46

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author ALY	Drafting Check EAO	Project Manager M. DAVIDSON	
Designer EAO	Design Check CAR	Project Director S. ALLEN	

Bar is one inch on original size sheet
0 1"

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GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326
www.ghd.com

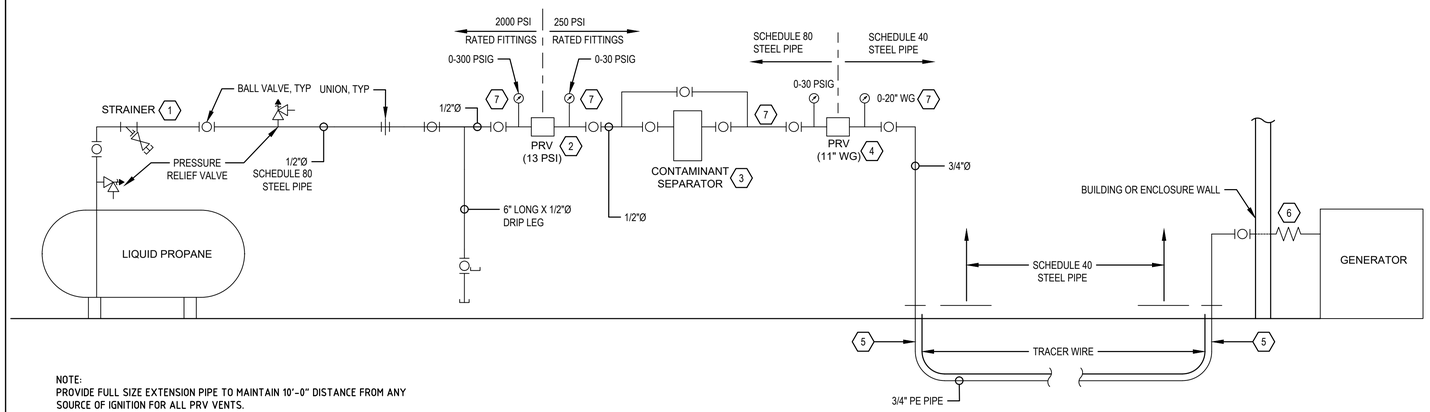
Client: DEL NORTE COUNTY - SERVICE AREA NO. 1
Project: PROJECT # 2007 ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title: CSA STORAGE BUILDING T24 DOCUMENTS - EXTERIOR LIGHTING

Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12578211	07/19/2024	AS SHOWN	E-704	30 of 31

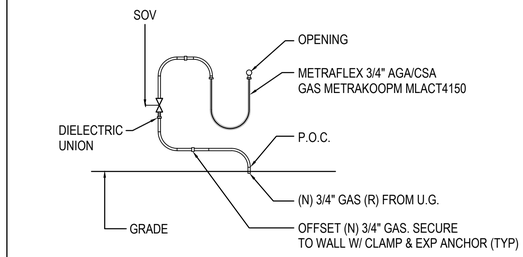
Plot Date: 19 July 2024 - 6:07 PM Plotted By: Michelle Davidson Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-EL-0704.dwg



NOTE:
PROVIDE FULL SIZE EXTENSION PIPE TO MAINTAIN 10'-0" DISTANCE FROM ANY SOURCE OF IGNITION FOR ALL PRV VENTS.

1 PROPANE SYSTEM SCHEMATIC

NOT TO SCALE

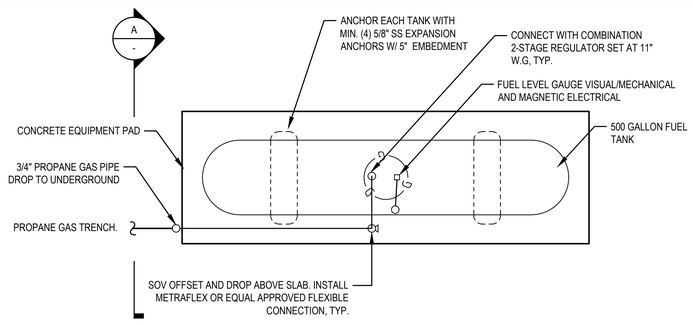


2 PROPANE GAS PIPING

NOT TO SCALE

EQUIPMENT LIST

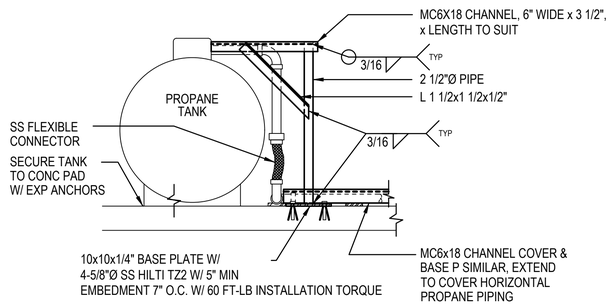
1. STRAINER WITH MAGNET FOR IRON PARTICLES (ALGAS-SDI MODEL# 30655)
2. FIRST STAGE PRESSURE REGULATING VALVE (ALGAS-SDI MODEL# 33725)
3. PROPANE GAS FILTER (ALGAS-SDI MODEL# 20536-ASME(F4))
4. SECOND STAGE PRESSURE REGULATING VALVE
5. ANODE-LESS FUEL GAS RISER
6. FLEXIBLE CONNECTOR
7. PRESSURE GAGES RATED FOR OUTDOOR USE



INSTALLATION OF TANKS AND RELATED PIPING AND SUPPORTS SHALL BE IN ACCORDANCE WITH FIRE DISTRICT WRITTEN INSTRUCTIONS CHAPTER 5 "LIQUEFIED PETROLEUM AND NATURAL GAS INSTALLATIONS" SUPPLIMENT TO THE CFC CHAPTER 38, (NFPA) STANDARD 58 AND 2019 CALIFORNIA PLUMBING CODE (CPC)

3 PROPANE TANK

NOT TO SCALE

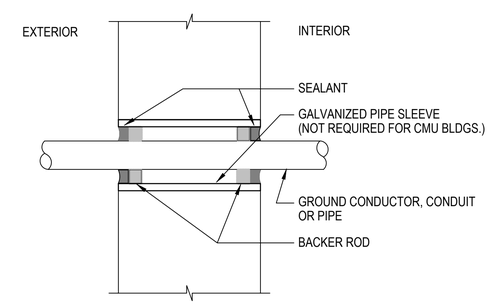


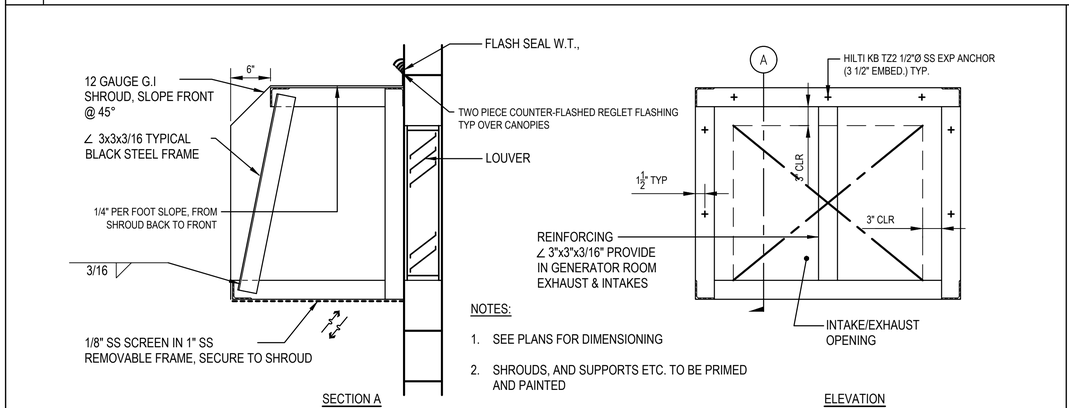
SECTION "A" NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36
2. ROUND OFF EXPOSED EDGES
3. PRIME w/RUST INHIBITOR & PAINT

4 TYPICAL VAULT EXTERIOR WALL PENETRATION

NOT TO SCALE



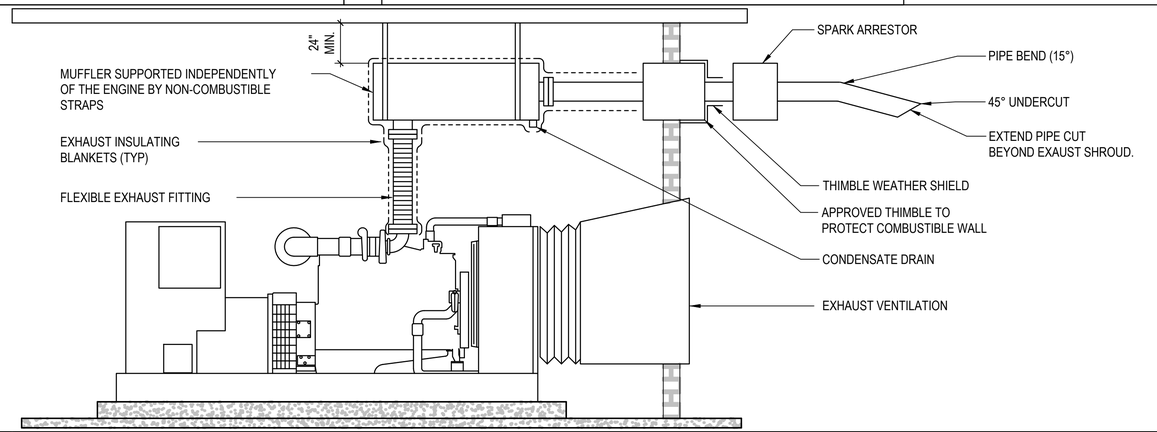


NOTES:

1. SEE PLANS FOR DIMENSIONING
2. SHROUDS, AND SUPPORTS ETC. TO BE PRIMED AND PAINTED

5 INTAKE/EXHAUST WALL SHROUD

NOT TO SCALE



6 INDOOR GENERATOR INSTALLATION

NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	MD	SXM	07/22/2024

Author R. RIOS | Drafting Check M. DAVIDSON | Project Manager M. DAVIDSON
Designer T. WONG | Design Check C. RICHARDS | Project Director S. ALLEN

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Client DEL NORTE COUNTY - SERVICE AREA NO. 1
PROJECT # 2007
Project ONSITE EMERGENCY POWER SUPPLY
FOR SANITARY SEWER LIFT STATIONS - PHASE 1

Title SINGLE-LINE LIQUID PROPANE DIAGRAMS

Size ANSI D

Project No. 12578211 | Date 07/19/2024 | Scale AS SHOWN

Sheet No. M-501 | Sheet 31 of 31

Plot Date: 19 July 2024 - 6:08 PM | Plotted By: Michelle Davidson | Filename: \\ghdnet\ghd\US\Eureka\Projects\56\12578211\Digital_Design\ACAD\Sheets\12578211-GHD-0001-DWG-M-0501.dwg