

# PORT OF TACOMA

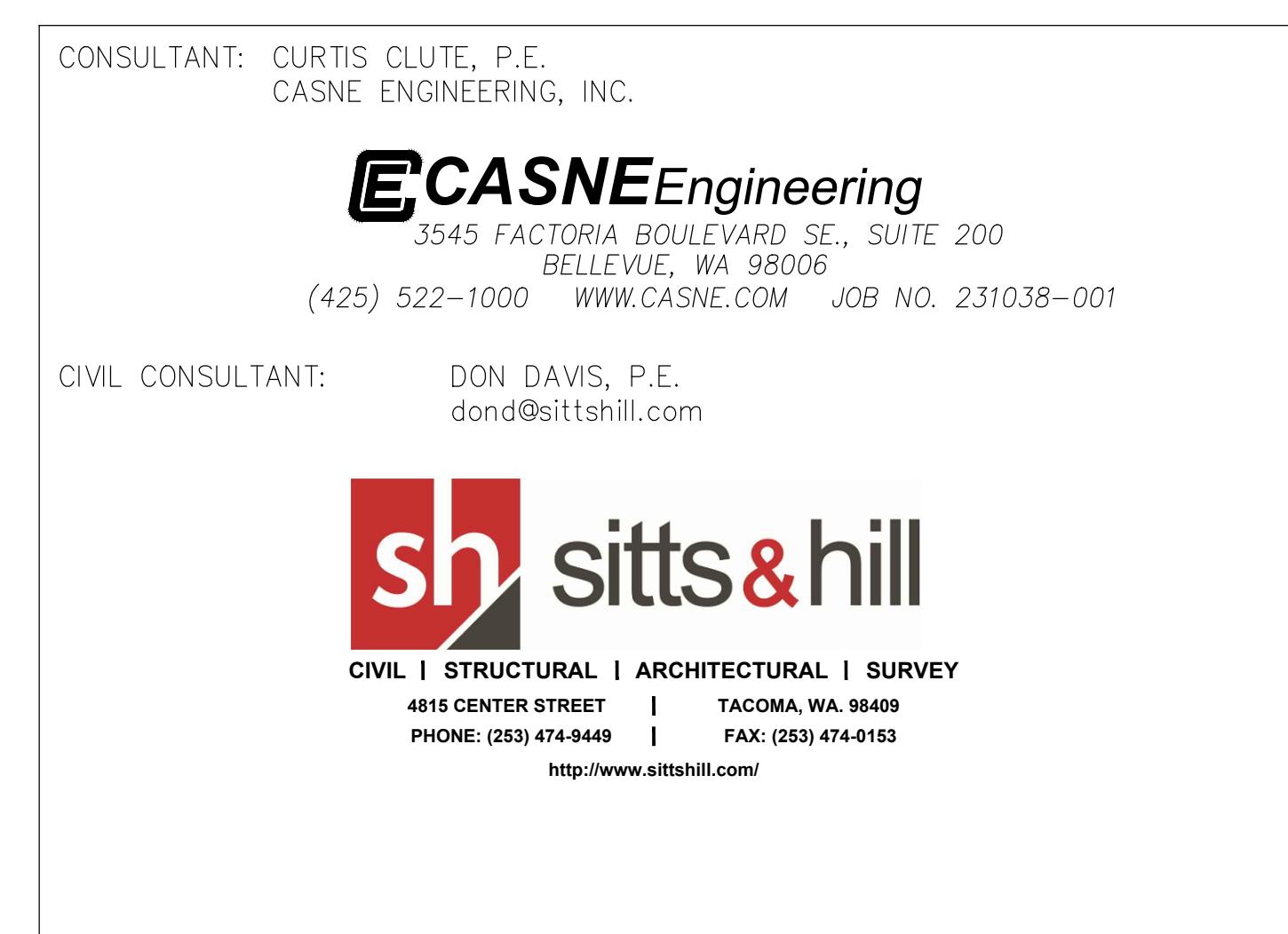
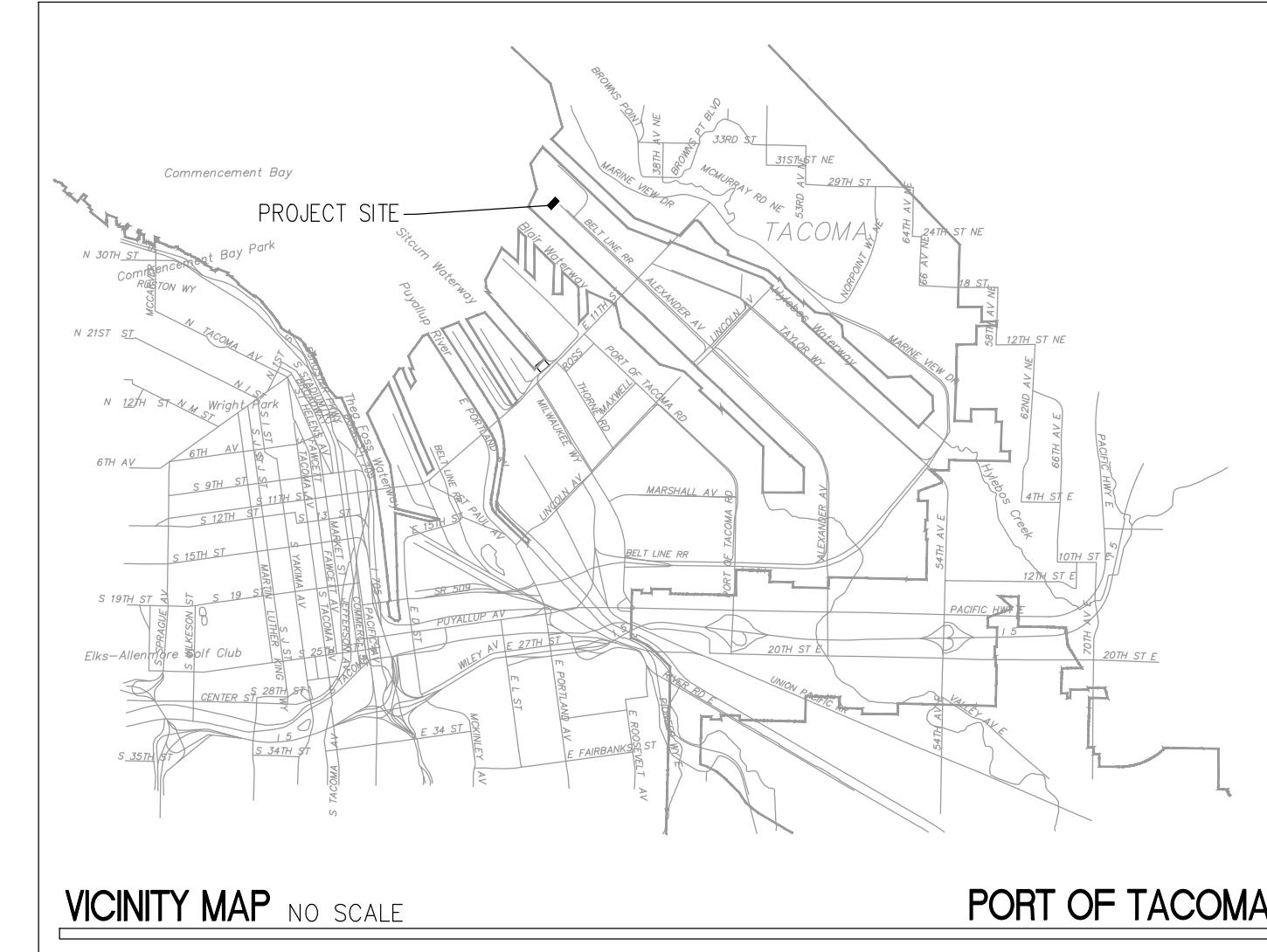
## EBC MOTIVE TEMPORARY POWER PROJECT ID # 101686.01 PURCHASE AGREEMENT # POT-PA-000000068

### PORT COMMISSIONERS:

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DON MEYER  
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Port of Tacoma Executive Director  
  
THAIS HOWARD, P.E.  
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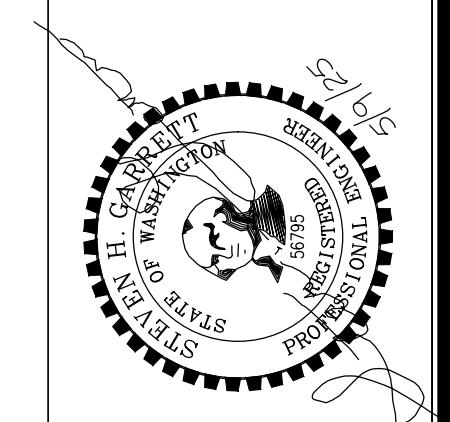


DRAWING LIST			
SHEET DESIGNATION	SHEET #	SHEET TITLE	REVISION
1	G01	COVER SHEET	IFB
2	G02	SITE PLAN	IFB
3	C0.1	GENERAL NOTES	IFB
4	C1.0	DEMOLITION AND TESC PLAN	IFB
5	C2.0	SURFACING PLAN	IFB
6	C3.0	CIVIL DETAILS	IFB
7	C4.0	CIVIL DETAILS	IFB
8	E0.0	ELECTRICAL LEGENDS & SYMBOLS	IFB
9	E1.0TR	TEMPORARY POWER SITE PLAN - REMOVAL	IFB
10	E1.0T	TEMPORARY POWER SITE PLAN	IFB
11	E4.0T	MOTIVE MARINE SERVICE BLDG. ENLARGED PLAN	IFB
12	E10.0T	TEMPORARY ELECTRICAL ONE-LINE DIAGRAM	IFB
13	E10.2	MM-DP-1 PANEL SCHEDULE	IFB
14	E10.4T	TEMPORARY EQUIPMENT RACK ELEVATION	IFB
15	E10.5T	ENLARGED TEMPORARY POWER SITE PLAN	IFB
16	E11.1T	DUCT BANK DETAILS	IFB
17	E11.2T	VAULT DETAILS	IFB
18	E11.3T	DETAILS	IFB
19	E11.4T	TPU TRANSFORMER VAULT STANDARDS	IFB

### PROJECT INFORMATION:

SITE ADDRESS: 401 TAYLOR WAY, TACOMA, WA 98421  
SITE PARCEL: PORT PARCEL 1B (2,073,538.15 SF; 47.60 ACRES)  
PROPERTY OWNER: PORT OF TACOMA  
902 PORT OF TACOMA ROAD  
TACOMA, WA  
  
ZONING: PMI; PORT MARITIME & INDUSTRIAL DISTRICT  
SCOPE OF WORK: CONSTRUCT NEW POWER FOR TEMPORARY USE BY MOTIVE MARINE.  
NEW IMPERVIOUS SURFACE: 0 S.F.  
REPLACED IMPERVIOUS SURFACE: 3,230 S.F.  
ESTIMATED EARTHWORK: 480± CY CUT/FILL (0± NET)

ISSUE FOR BID	
MAY 9, 2025	
<b>CASNEEngineering</b> 3545 FACTORIA BOULEVARD SE., SUITE 200 BELLEVUE, WA 98006 (425) 522-1000 WWW.CASNE.COM JOB NO. 241038-005 PO BOX 1817 TACOMA, WA 98404 (253) 535-3441	
MARK:	REVISION:
0 - ISSUE FOR BID	BY: SHG
APPR:	DATE: CEC



EBC MOTIVE TEMPORARY POWER	
COVER SHEET	
SH # 1 OF 19	TOWNSHIP: 21
PROJ. ID: 101686.01	RANGE: 03
PHASE: ISSUE FOR BID	VER: M.L.W. 1983-2001 EPOCH
PARCEL: PORT PARCEL 1B DRAWING SCALE: AS NOTED	
6709 G01	





## PROJECT NOTES

- BACKGROUND INFORMATION PROVIDED BY PORT OF TACOMA. THE HORIZONTAL DATUM USED FOR THESE PLANS IS WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD 83/11. THE VERTICAL DATUM USED FOR THESE PLANS IS MLLW, 1983-2001 EPOCH.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ON-SITE AND SHALL COORDINATE HIS ACTIVITIES WITH THE OWNER AND ENGINEER A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF THE BEGINNING OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL SIGNS, SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION. SHUTDOWN OF OWNER OPERATION OR ACCESS WILL NOT BE PERMITTED. A MINIMUM OF ONE LANE SHALL REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION.
- THE BURIED UTILITIES ON THIS PROJECT ARE SHOWN IN THEIR APPROXIMATE LOCATION WHERE KNOWN. OTHER EXISTING BURIED UTILITIES MAY NOT BE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND HAVE THEIR LOCATION MARKED ON THE GROUND PRIOR TO CONSTRUCTION. THE CONTRACTOR WILL PROTECT, OR IMMEDIATELY REPAIR, ANY DAMAGED UTILITY "DISCOVERED" ON THIS PROJECT WITHOUT ADDITIONAL COSTS.
- CALL THE UNDERGROUND LOCATE LINE 1-800-424-5555, AND A PRIVATE UTILITY LOCATE, A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATIONS.
- WHERE CONFLICTS OCCUR BETWEEN EXISTING FEATURES AND THE PLACEMENT OF NEW FACILITIES, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE CONTRACTOR, AND WILL BE RESOLVED BY THE ENGINEER.
- THE CONTRACTOR FOR THIS PROJECT SHALL MAINTAIN A CLEAN, LEGIBLE SET OF THESE PLANS AND NOTE ALL DEVIATIONS THEREON. UPON COMPLETION OF CONSTRUCTION, THESE DRAWINGS SHALL BE DELIVERED TO THE ENGINEER FOR THE PREPARATION OF RECORD DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT TO PREVENT UTILITY INTERRUPTION INCLUDING, BUT NOT LIMITED TO, PORTABLE GENERATORS, DOMESTIC WATER PIPING, AND SEWAGE CONVEYANCE. NOTIFY THE PORT OF TACOMA ONE WEEK IN ADVANCE OF EACH UTILITY CONNECTION.
- PRIOR TO BIDDING, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL NECESSARY SITE INSPECTIONS AND DETERMINATIONS OF ITEMS AND QUANTITIES OF WORK TO ENSURE THAT ALL ITEMS OF WORK NECESSARY TO PERFORM A COMPLETE AND ACCEPTABLE JOB HAVE BEEN TAKEN INTO CONSIDERATION.

## PLASTIC COVERING NOTES

- PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MILS AND SHALL MEET THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- COVERING SHALL BE INSTALLED AND MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10-FOOT GRID SPACING IN ALL DIRECTIONS. ALL SEAMS SHALL BE TAPE OR WEIGHTED DOWN FULL LENGTH AND THERE SHALL BE AT LEAST A 12-INCH OVERLAP OF ALL SEAMS.
- CLEAR PLASTIC COVERING SHALL BE INSTALLED IMMEDIATELY ON AREAS SEEDED BETWEEN NOVEMBER 1 AND MARCH 31 AND REMAIN UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- WHEN THE COVERING IS USED ON UN-SEEDED SLOPES, IT SHALL BE KEPT IN PLACE UNTIL THE NEXT SEEDING PERIOD.
- PLASTIC COVERING SHEETS SHALL BE BURIED TWO FEET AT THE TOP OF SLOPES IN ORDER TO PREVENT SURFACE WATER FLOW BENEATH SHEETS.
- PROPER MAINTENANCE INCLUDES REGULAR CHECKS FOR RIPS AND DISLODGED ENDS.

## STOCKPILE NOTES

- PLACE STOCKPILES ON LAYERED PLASTIC SHEETS WITH A COMBINED THICKNESS OF NO LESS THAN 10 MILS.
- STOCKPILES SHALL BE STABILIZED (WITH PLASTIC COVERING OR OTHER APPROVED DEVICE) DAILY.
- IN ANY SEASON, SEDIMENT LEACHING FROM STOCK PILES MUST BE PREVENTED.
- TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET OR WHEN CONDITIONS EXIST THAT MAY OTHERWISE BE DETERIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING.
- PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLAN.

## SEASONAL LIMITATIONS ON CONSTRUCTION ACTIVITIES

THE FOLLOWING SHALL BE ADHERED TO ON ALL CONSTRUCTION SITES WITH EROSION SOILS AND/OR A GRADIENT OF GREATER THAN TWO PERCENT FOR LIMITING EXPOSED SOILS TO EROSION PROCESSES.

## MAY 1ST TO SEPTEMBER 30TH (DRY SEASON)

THE CLEARING OF LAND, INCLUDING THE REMOVAL OF EXISTING VEGETATION OR OTHER GROUND COVER, MUST BE LIMITED TO ONLY AS MUCH LAND AREA AS CAN RECEIVE APPROPRIATE PROTECTIVE COVER OR BE OTHERWISE STABILIZED AFTER HAVING BEEN CLEARED OR OTHERWISE DISTURBED BY NO LATER THAN SEPTEMBER 30TH OF A GIVEN YEAR. UNLESS IMMEDIATE STABILIZATION IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, ALL AREAS CLEARED OR OTHERWISE DISTURBED MUST BE APPROPRIATELY STABILIZED THROUGH THE USE OF MULCHING, NETTING, PLASTIC SHEETING, EROSION BLANKETS, FREE DRAINING MATERIALS, ETC.

IN THE EVENT THAT CONSTRUCTION ACTIVITIES OR OTHER SITE DEVELOPMENT ACTIVITIES ARE DISCONTINUED FOR FOUR CONSECUTIVE DAYS OR MORE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES IMMEDIATELY AFTER STORM EVENTS AND AT LEAST ONCE EVERY WEEK. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE MAINTENANCE AND REPAIR OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES.

THE CONTRACTOR SHALL PROVIDE MATERIALS ON-SITE READILY AVAILABLE TO IMMEDIATELY STABILIZE DENUDED AREAS DURING PERIODS OF INCLEMENT WEATHER WHICH RESULT IN EROSION AND SEDIMENT TRANSPORT OFF-SITE.

THE CONTRACTOR SHALL ENSURE THE PROPER CONTINUED FUNCTIONING OF THE ESC FACILITIES BY PROMPT CLEANING AND MAINTENANCE AFTER EACH EROSION AND SEDIMENT PRODUCING RAINFALL EVENT.

## OCTOBER 1ST TO APRIL 30TH (WET SEASON)

ON SITES WHERE UNINTERRUPTED CONSTRUCTION ACTIVITY IS IN PROGRESS, THE CLEARING OF LAND, INCLUDING THE REMOVAL OF EXISTING VEGETATION OR OTHER GROUND COVER, SHALL BE LIMITED TO ONLY AS MUCH LAND AREA AS CAN BE COVERED OR STABILIZED WITHIN 24 HOURS IN THE EVENT A MAJOR STORM IS PREDICTED AND/OR EROSION/SEDIMENT TRANSPORT OFF-SITE IS OBSERVED.

ADDITIONALLY, ALL CLEARED OR DISTURBED AREAS WILL RECEIVE APPROPRIATE PROTECTIVE COVER OR BE OTHERWISE STABILIZED (SUCH AS MULCHING, NETTING, PLASTIC SHEETING, EROSION BLANKETS, FREE DRAINING MATERIAL, ETC.) WITHIN FIVE DAYS AFTER HAVING BEEN CLEARED OR OTHERWISE DISTURBED IF NOT BEING ACTIVELY WORKED. FILTER FABRIC, FENCING, SEDIMENT TRAPS, SEDIMENT PONDS, ETC., WILL NOT BE VIEWED AS ADEQUATE COVER IN AND OF THEMSELVES. IN THE EVENT THAT ANY LAND AREA NOT BEING ACTIVELY WORKED REMAINS UNPROTECTED OR HAS NOT BEEN APPROPRIATELY STABILIZED FIVE DAYS AFTER HAVING BEEN CLEARED, ALL CONSTRUCTION ACTIVITY ON THE SITE, EXCEPT FOR APPROVED EROSION AND SEDIMENTATION CONTROL ACTIVITY, SHALL IMMEDIATELY CEASE UNTIL SUCH A TIME AS SAID LAND HAS BEEN APPROPRIATELY PROTECTED OR STABILIZED.

THE CONTRACTOR SHALL AT ALL TIMES HAVE AVAILABLE FOR THE PROJECT SUFFICIENT QUANTITIES OF PROTECTIVE COVERING MATERIALS TO IMMEDIATELY STABILIZE ALL DISTURBED AREAS IN CASE THE PROJECT ENGINEER OR CITY DIRECTS THEM TO COVER DUE TO OBSERVED MIGRATION OF SOILS OR INCLEMENT WEATHER.

## POLLUTION PREVENTION NOTES

- EQUIPMENT LUBRICATION AND FUELING OPERATIONS SHALL OCCUR AT THE DESIGNATED FUELING AREA OR AN APPROVED OFF-SITE LOCATION.
- PREVENT OILS AND FUELS FROM ENTERING THE STORM DRAINAGE SYSTEM AND WATERWAYS WITH PROPER CONTAINMENT DEVICES.
- ACCESS TO CONSTRUCTION IS VIA ADJACENT EXISTING PAVED STREETS OR THE PROPOSED CONSTRUCTION ENTRANCE. SWEEP DIRT FROM PAVING DAILY OR AS NEEDED. THE INTENT IS TO PREVENT DIRT AND DEBRIS FROM VEHICLES AND EQUIPMENT FROM BEING DEPOSITED ON PUBLIC STREET PAVEMENT.
- SPILL CLEANUP PROCEDURES SHALL BE POSTED ON-SITE. IN CASE OF A SPILL THAT MAY ENTER GROUNDWATER, SURFACE WATER, OR STORM DRAIN SYSTEM, CONTACT THE DIVISION OF EMERGENCY MANAGEMENT AT (800) 258-5990. SPILLS SHALL BE CLEANED UP IMMEDIATELY AND CONTAMINATED MATERIAL DISPOSED OF PROPERLY.
- THE CONTRACTOR SHALL PREVENT ALL MATERIAL USED OR GENERATED ON-SITE FROM ENTERING THE STORM DRAINAGE SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE CONTAINMENT/SEPARATION AT ALL TIMES. ALL STORMWATER POLLUTION PREVENTION MEASURES SHALL BE COORDINATED WITH ENGINEER TO ENSURE COMPLIANCE WITH APPLICABLE STORMWATER PERMITS. CONTACT PORT OF TACOMA A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT DOCUMENTATION SUPPORTING THE CURRENT CERTIFICATION OF THE CONTRACTOR'S DESIGNATED CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL). THE DOCUMENT SHALL CONTAIN AT A MINIMUM THE FOLLOWING INFORMATION: NAME, CESCL NUMBER, AND EXPIRATION DATE.
- THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A SAMPLE OF THE SITE LOG BOOK TO BE USED ON THE PROJECT FOR MAINTAINING EROSION CONTROL INSPECTION, OBSERVATION, CHECKLIST, AND CORRECTION REPORTS. UPON APPROVAL THE CONTRACTOR SHALL KEEP AND MAINTAIN THE SITE LOG BOOK ON-SITE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLETE AN EROSION CONTROL CHECKLIST, CAREFULLY REVIEW, AND MAINTAIN ALL STORMWATER POLLUTION PREVENTION MEASURES DAILY BETWEEN NOVEMBER 1 AND MARCH 31 AND WEEKLY DURING ALL OTHER CONSTRUCTION SEASONS. SCOPE OF DAILY INSPECTION SHALL BE COORDINATED WITH SITE ENVIRONMENTAL ENGINEERING.
- CHECKLISTS AND MAINTENANCE INFORMATION SHALL BE KEPT IN THE SITE LOG BOOK (MAINTAINED BY THE CESCL DESIGNATED BY THE CONTRACTOR) AND BE AVAILABLE FOR REVIEW BY THE OWNER, ENGINEER, AND/OR GOVERNING AGENCY.
- MONTHLY DURING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A COPY OF ALL RECENT INSPECTION, OBSERVATION, CHECKLIST, AND CORRECTION REPORTS TO THE OWNER AND ENGINEER.

## DEMOLITION NOTES

- REMOVE ALL DELETERIOUS MATERIAL FOUND ON-SITE INCLUDING VEGETATION, SCRAP WOOD, TRASH, ETC. AND DISPOSE OF AT AN APPROVED OFF-SITE LOCATION.
- AT ALL TIMES THE CONTRACTOR SHALL MAINTAIN SIGNS, BARRICADES, FENCING, OR OTHER MEASURES TO ENSURE CONTINUOUS PROTECTION OF THE PUBLIC AND TO PREVENT UNAUTHORIZED ENTRY TO THE CONSTRUCTION AREA. AT A MINIMUM FENCING SHALL BE 6.0 FEET HIGH. COORDINATE SAFETY AND SECURITY MEASURES WITH PORT OF TACOMA.
- DAMAGE TO ANY PROPERTY, INCLUDING BUT NOT LIMITED TO, BUILDINGS, UTILITIES, VEHICLES, FENCING, OR LANDSCAPING AS A RESULT OF CONTRACTOR'S ACTIVITIES WILL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR THE MAINTENANCE AND/OR REPAIR OF OFF-SITE AND ON-SITE PAVED SURFACES WHERE DAMAGE HAS BEEN SUSTAINED DUE TO THE DEVELOPMENT'S CONSTRUCTION TRAFFIC.

## EXCAVATION NOTES

- EXCAVATE TO ELEVATIONS, LINES AND GRADES INDICATED TO NOT MORE THAN 1/2-INCH ABOVE OR BELOW THAT REQUIRED.
- SLOPE SIDES OF EXCAVATION AS INDICATED OR COMPLY WITH LOCAL CODES AND ORDINANCES HAVING JURISDICTION, WHICHEVER IS MORE STRINGENT. SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED.
- STOCKPILE SATISFACTORY EXCAVATED MATERIALS UNTIL REQUIRED FOR BACKFILL OR FILL. PLACE, GRADE AND SHAPE STOCKPILES FOR PROPER DRAINAGE. LOCATE AND RETAIN SOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS.
- DISPOSE OF EXCESS SOIL AND UNSUITABLE SOIL MATERIAL OFF-SITE AS DIRECTED.
- DEWATERING WILL LIKELY BE REQUIRED DURING EXCAVATION AND CONSTRUCTION. SEE CO.1 FOR DEWATERING NOTES.

## DEWATERING NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ALL EXCAVATIONS. ALL WATER GENERATED FROM DEWATERING OPERATIONS SHALL BE DISPOSED OF IN A MANNER AND LOCATION APPROVED BY THE TESC PLAN, CITY OF TACOMA, AND PORT OF TACOMA. CONTRACTOR SHALL PREPARE AND SUBMIT A DEWATERING PLAN PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR TO ANTICIPATE GROUNDWATER AND PROVIDE ALL EQUIPMENT NECESSARY TO DEWATER EXCAVATIONS. COORDINATE DISCHARGE WITH OWNER NEAR OPERATIONAL FACILITIES (I.E. SURFACE PIPING IS NOT ACCEPTABLE WITHOUT APPROPRIATE, APPROVED TRAFFIC CONTROL MEASURES).
- ALL GROUNDWATER OR INCIDENTAL SURFACE RUNOFF COLLECTED SHALL BE DISCHARGED TO THE ON-SITE STORMWATER SYSTEM FOLLOWING APPROPRIATE TREATMENT UNTIL CONSTRUCTION IS COMPLETE.
- NO SEDIMENT, TURBID WATER, OR OTHER POLLUTANTS (HEAVY METALS, OIL SHEEN, ETC.) SHALL BE DISCHARGED TO THE ON-SITE STORMWATER SYSTEM. ANY TREATMENT OF COLLECTED WATER SHALL BE APPROVED BY PORT OF TACOMA AND THEIR ENGINEERING CONSULTANT REPRESENTATIVES PRIOR TO DISCHARGE.
- A LOG OF ALL DISCHARGED STORMWATER SHALL BE KEPT ON-SITE AT ALL TIMES DURING CONSTRUCTION. AT A MINIMUM, THE LOG SHALL CONTAIN THE FOLLOWING ITEMS:
  - DATE DISCHARGED
  - SOURCE OF WATER (VAULT, PIPE, ETC.)
  - TYPE OF WATER DISCHARGED (GROUNDWATER, STORMWATER, ETC.)
  - METHOD OF COLLECTION (PUMP TO TANK, ETC.)
  - METHOD OF DISCHARGE (DRAIN FROM TANK, PUMPED DISCHARGE, ETC.)
  - VOLUME OF WATER DISCHARGED
  - DISCHARGE LOCATION
  - RECEIVING SYSTEM (ON-SITE STORM SYSTEM, SEWER, OFF-SITE FACILITY, ETC.)
  - DURATION OF DISCHARGE
- ANY STORMWATER COLLECTED INTO A TRUCK SHALL NOT BE DISCHARGED TO THE STORMWATER SYSTEM.
- THE CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM PORT OF TACOMA AND THEIR ENGINEERING CONSULTANT REPRESENTATIVES FOR ANY OFF-SITE DISPOSAL OF WATER, SEDIMENT, OR DEBRIS.

## UTILITY NOTES

- DETECTABLE MARKING TAPE SHALL BE INSTALLED ALONG THE FULL LENGTH OF EACH PROPOSED UTILITY. DETECTION TAPE SHALL BE 2-INCH WIDTH (MINIMUM) CONTAIN A 0.35 MIL SOLID ALUMINUM CORE, BE A MINIMUM OF 5.0 MIL OVERALL THICKNESS, AND BE SUITABLE FOR DIRECT BURY. THE TAPE SHALL BE COLOR CODED ACCORDING TO AWWA AND CONTINUOUSLY IMPRINTED WITH THE TYPE OF UTILITY FOR EACH UTILITY SHOWN.
- ADJUST RIM OF ALL EXISTING UTILITIES WITHIN DISTURBED AREAS TO MATCH FINISH GRADE.
- DISCOVERED ABANDONED UTILITIES SHALL BE REMOVED WHERE IN CONFLICT WITH NEW CONSTRUCTION. IF NOT IN CONFLICT WITH NEW CONSTRUCTION, UTILITIES MAY BE ABANDONED IN PLACE, AS APPROVED BY THE OWNER, IF THE FOLLOWING IS PROVIDED:
  1. UTILITY IS DEEPER THAN 3.5' FROM TOP TO FINISH GRADE AND,
  2. PIPE >8" DIAMETER IS FILLED WITH LOW STRENGTH LEAN CONCRETE (GCF) AND CAPPED AT EXPOSED END (FOR STRUCTURE ABANDONMENT, CONFORM WITH WSDOT STANDARD SPECIFICATION 7-05.3(2)) AND,
  3. AS-BUILT MEASUREMENTS ARE TAKEN TO DENOTE THE KNOWN TYPE, SIZE, AND EXTENT OF THE ABANDONED UTILITY AND REDLINED ON THE RECORD DRAWINGS.

SDEV25-0024



EBC MOTIVE TEMPORARY POWER

CO.1

APPROVED:	DDC	11/22/24	DATE
DIRECTOR ENG. DATE	PROJ. ENGR. DATE	PRINTED BY:	PORT ADDRESS:
DKM	DKM	DonDavis May 08, 2025	802 PORT CENTER ROAD
GENERAL NOTES	SECTION: 31	GENERAL NOTES	TACOMA, WA 98421
PA: POT-PA-000000068	TOWNSHIP: 21	PA: POT-PA-000000068	PA: POT-PA-000000068
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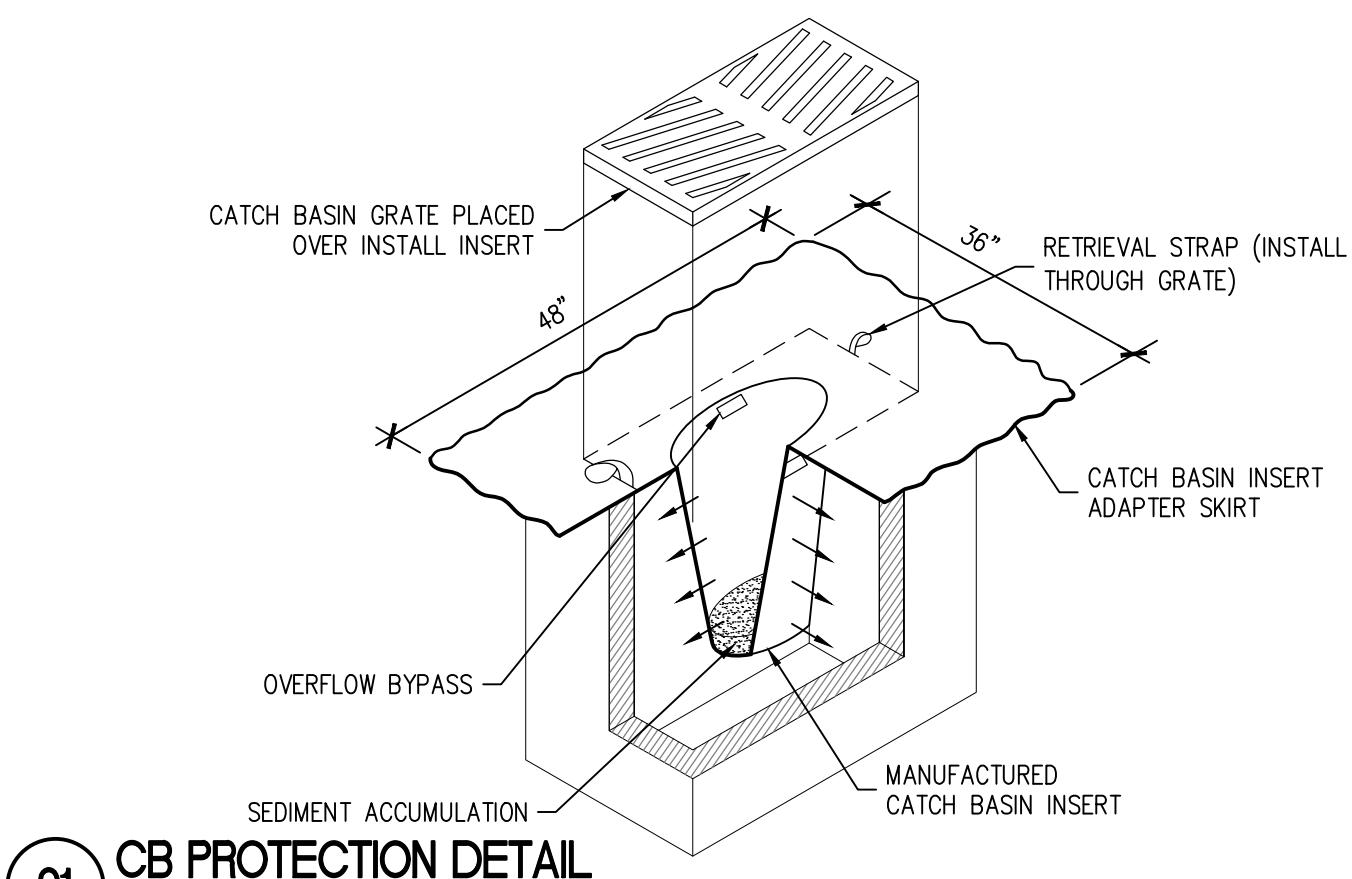
sitts&amp;hill

CIVIL   STRUCTURAL   ARCHITECTURAL   SURVEY	4816 CENTER STREET	TACOMA, WA 98409
PHONE: (253) 474-9449		www.sittshill.com
Project No.: 20,757	Project Mgr.: DDC	
Proj. Engineer: DKM	Proj. Drafter: DKM	

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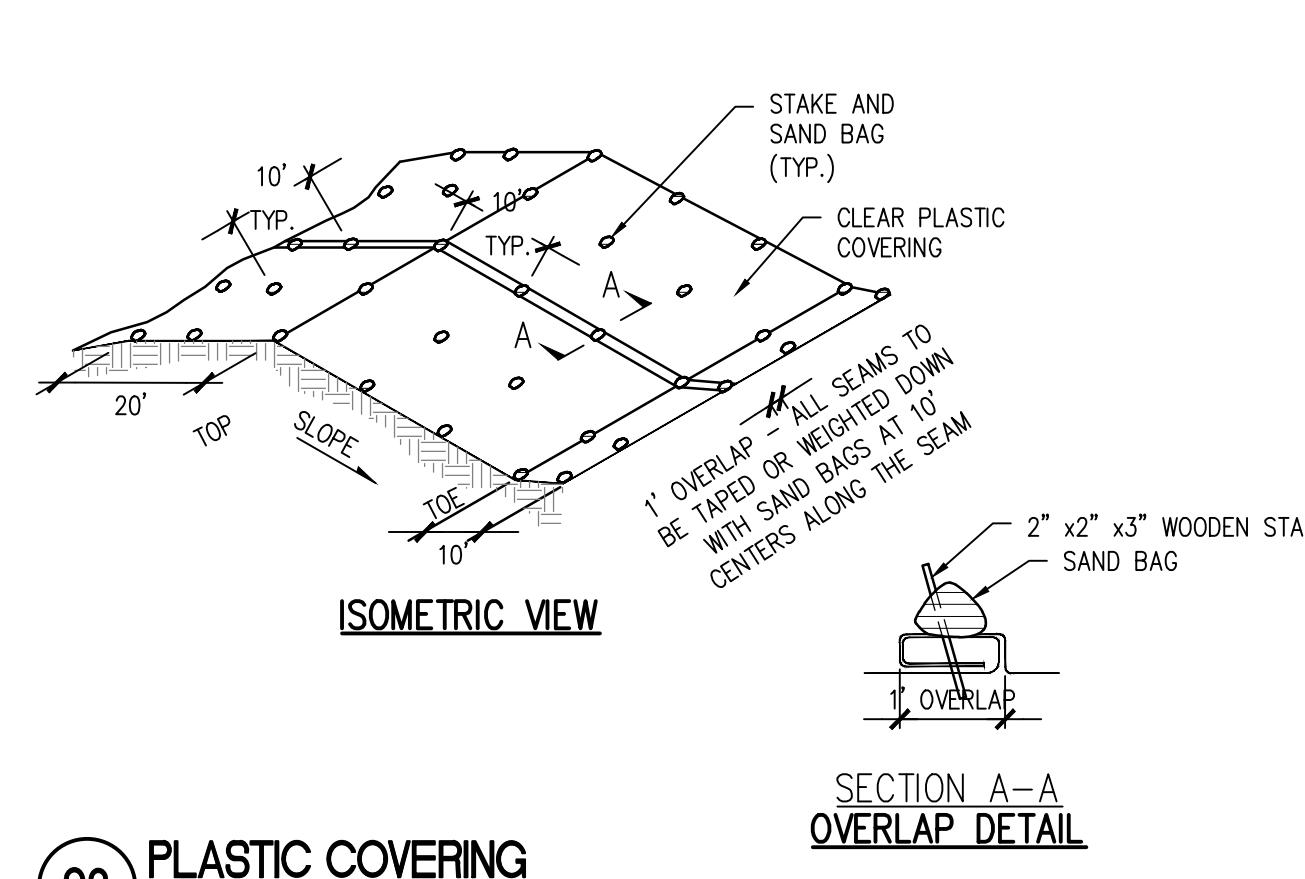






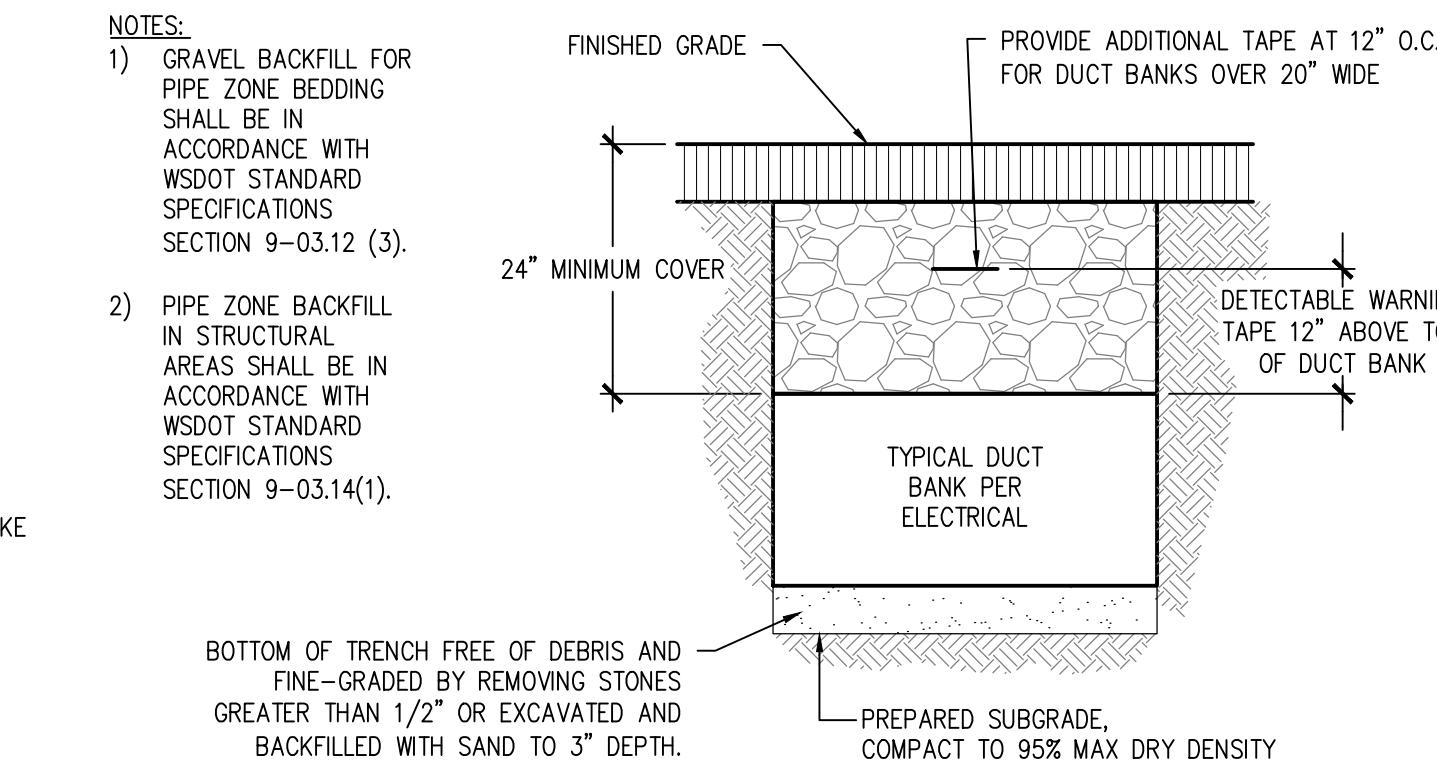
01 CB PROTECTION DETAIL

SCALE: N.T.S.



02 PLASTIC COVERING

SCALE: N.T.S.



03 DUCT BANK BEDDING AND BACKFILL

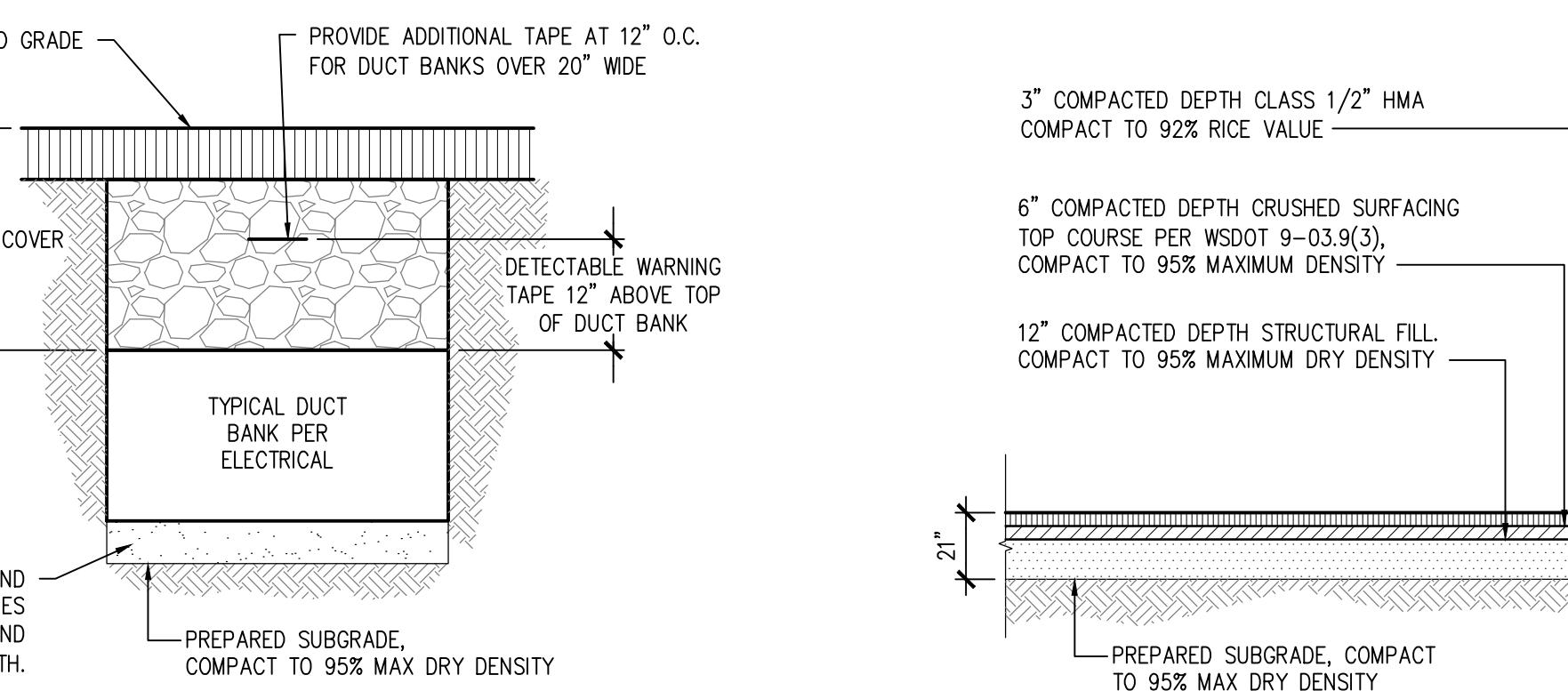
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NOTES:

1. THE CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK. ANY UTILITIES DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
2. SANITARY SEWER & WATER UTILITY WORK SHALL CONFORM TO CITY OF TACOMA STANDARDS.
3. SHOULD THE BOTTOM OF TRENCH NOT COMPACT TO 95% MAX. DENSITY, OVER-EXCAVATE PER ENGINEER'S FIELD RECOMMENDATIONS. INSTALL STRUCTURAL FILL & COMPACT IN 6" LIFTS TO ESTABLISH SUITABLE BOTTOM OF TRENCH.

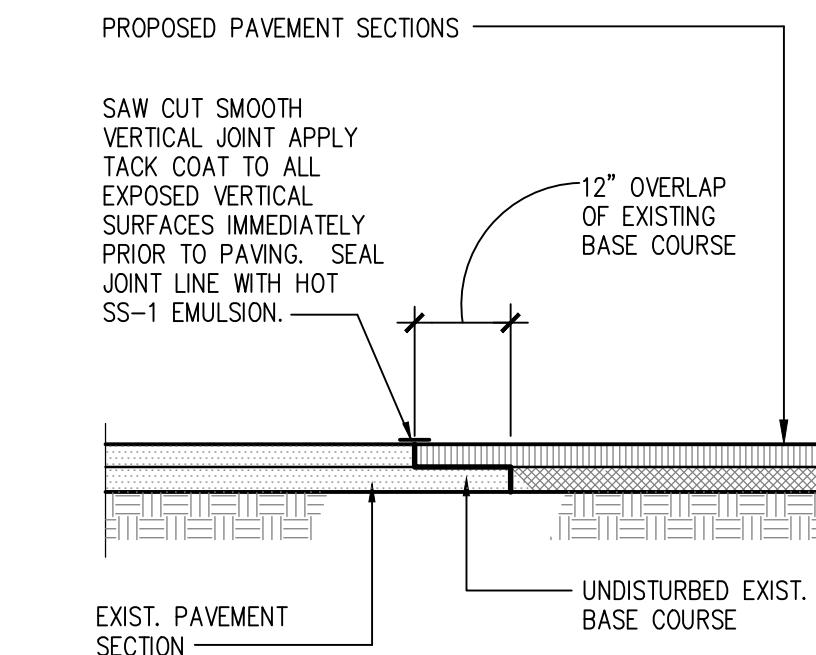
04 ASPHALT PAVEMENT SECTION

SCALE: N.T.S.



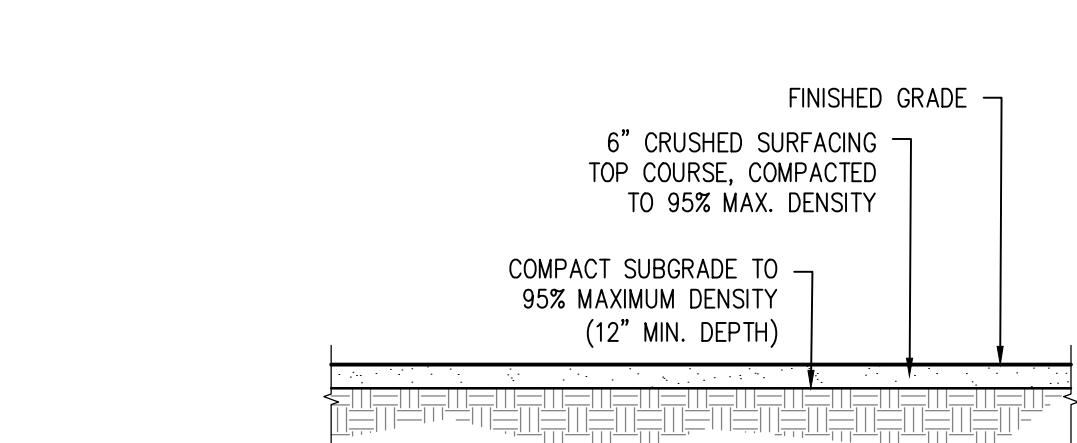
05 ASPHALT PAVEMENT JOINT SECTION

SCALE: N.T.S.



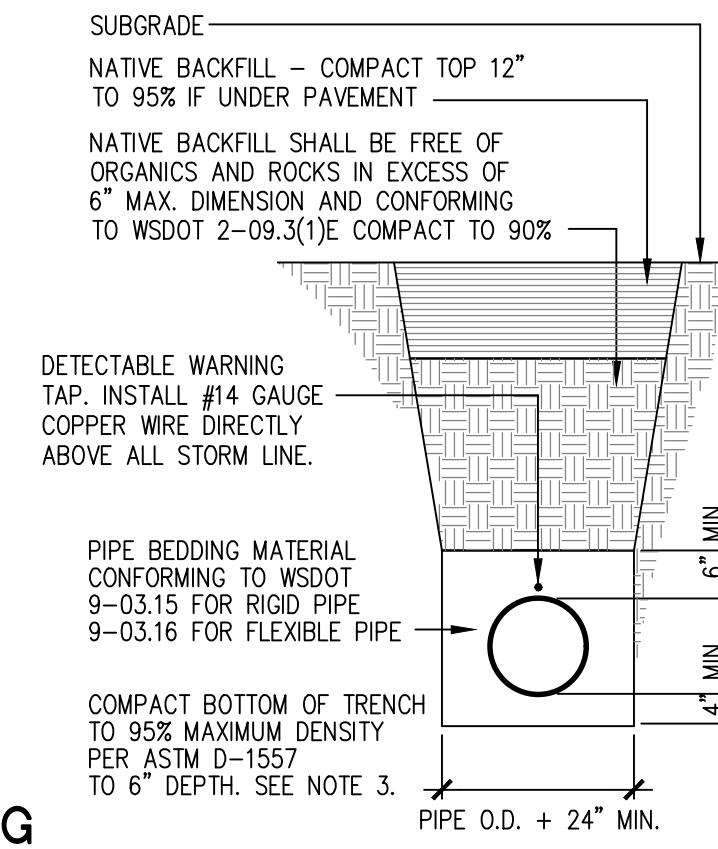
06 CRUSHED SURFACING TOP COURSE

SCALE: N.T.S.



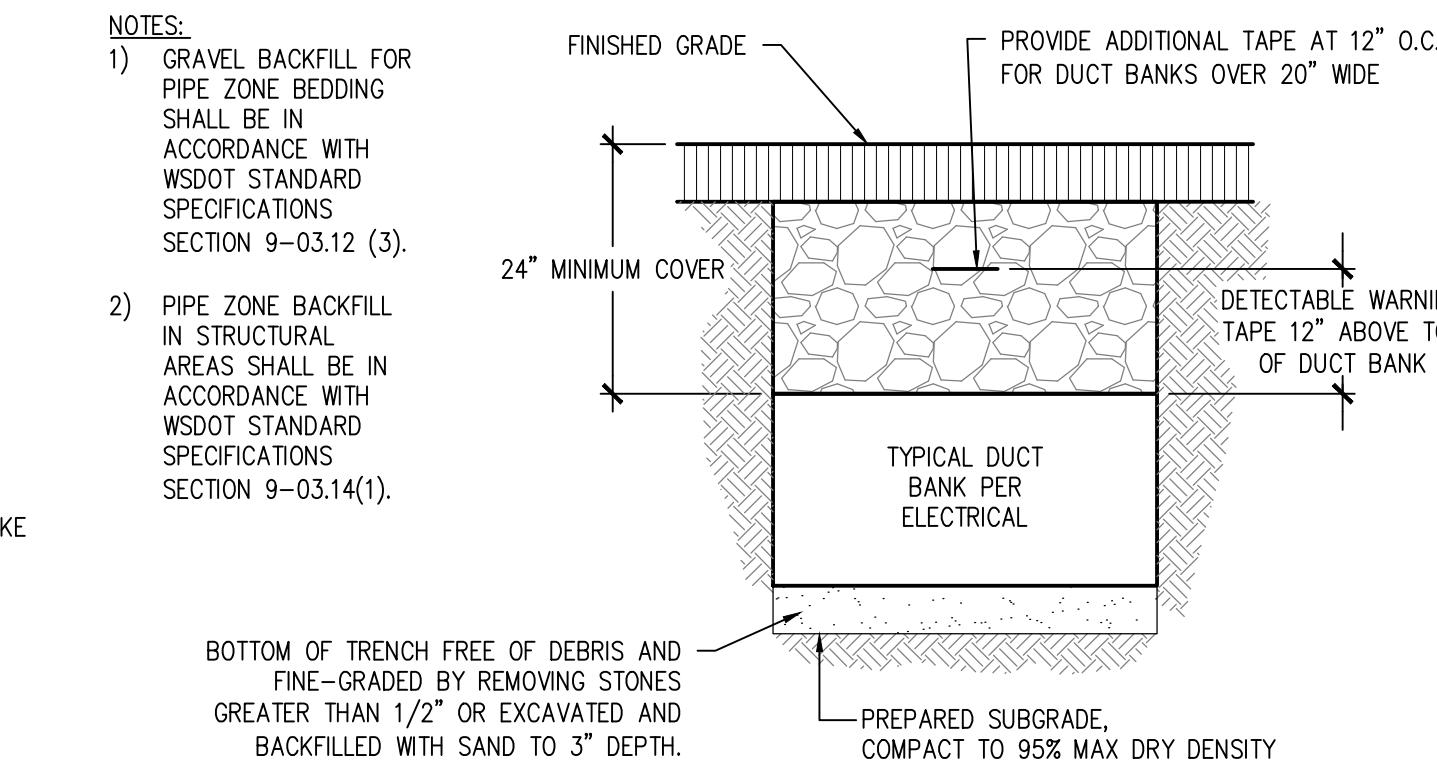
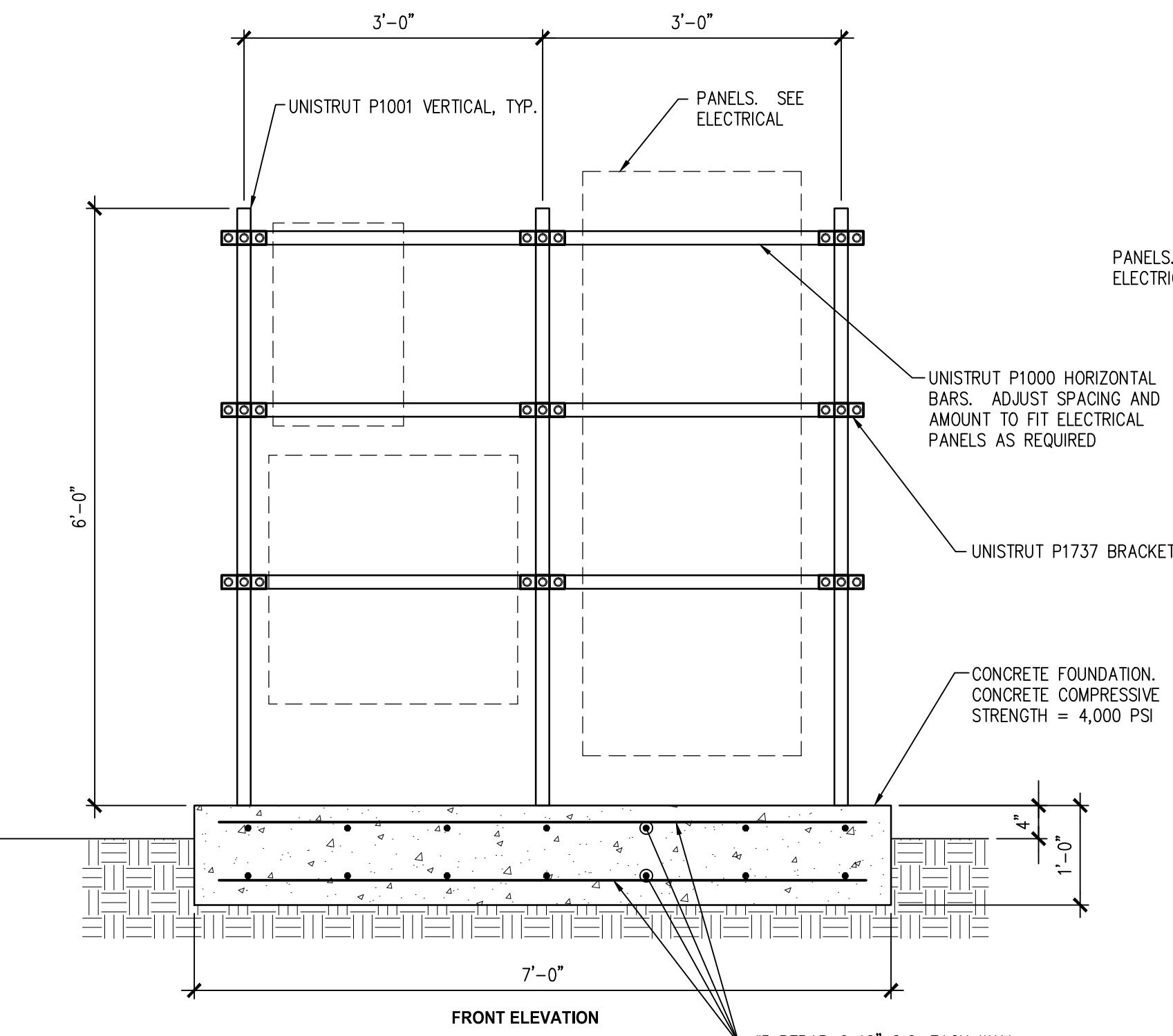
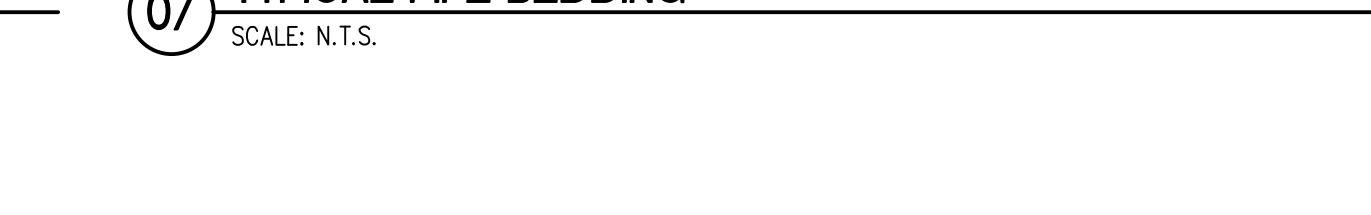
07 TYPICAL PIPE BEDDING

SCALE: N.T.S.



08 TYPICAL UTILITY STRUCTURE EXCAVATION, FOUNDATION, BEDDING AND BACKFILL DETAIL

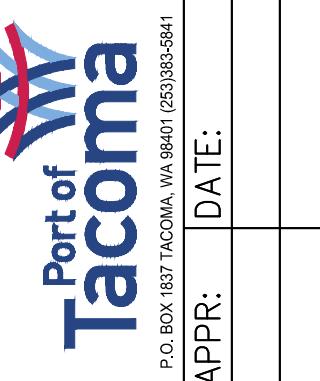
SCALE: N.T.S.



09 TEMPORARY SERVICE MOUNT FOUNDATION

SCALE: N.T.S.

SDEV25-0024

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		PA: POT-PA-000000068	TOWNSHIP: 21	RANGE: 03
PROJ ID: 1016866.01	MLW: 1983-2001 EPOCH	VERT: DAT-HRZ: NAD83	PRINTED BY: DonDavis May 08, 2025	PORT ADDRESS: 802 PORT CENTER ROAD TACOMA, WA 98421
PHASE: ISSUED FOR CONST. PARCEL: PORT PACE 1B DRAWING SCALE: AS NOTED				
THIS DRAWING IS THE PROPERTY OF THE PORT OF TACOMA AND SHALL NOT BE USED ON OTHER WORK, DISCLOSED, COPIED, IN WHOLE OR IN PART, WITHOUT WRITTEN PERMISSION				

ISSUED FOR BID  
MAY 8, 2025

  
**C3.0**  
SH # 6 OF 19

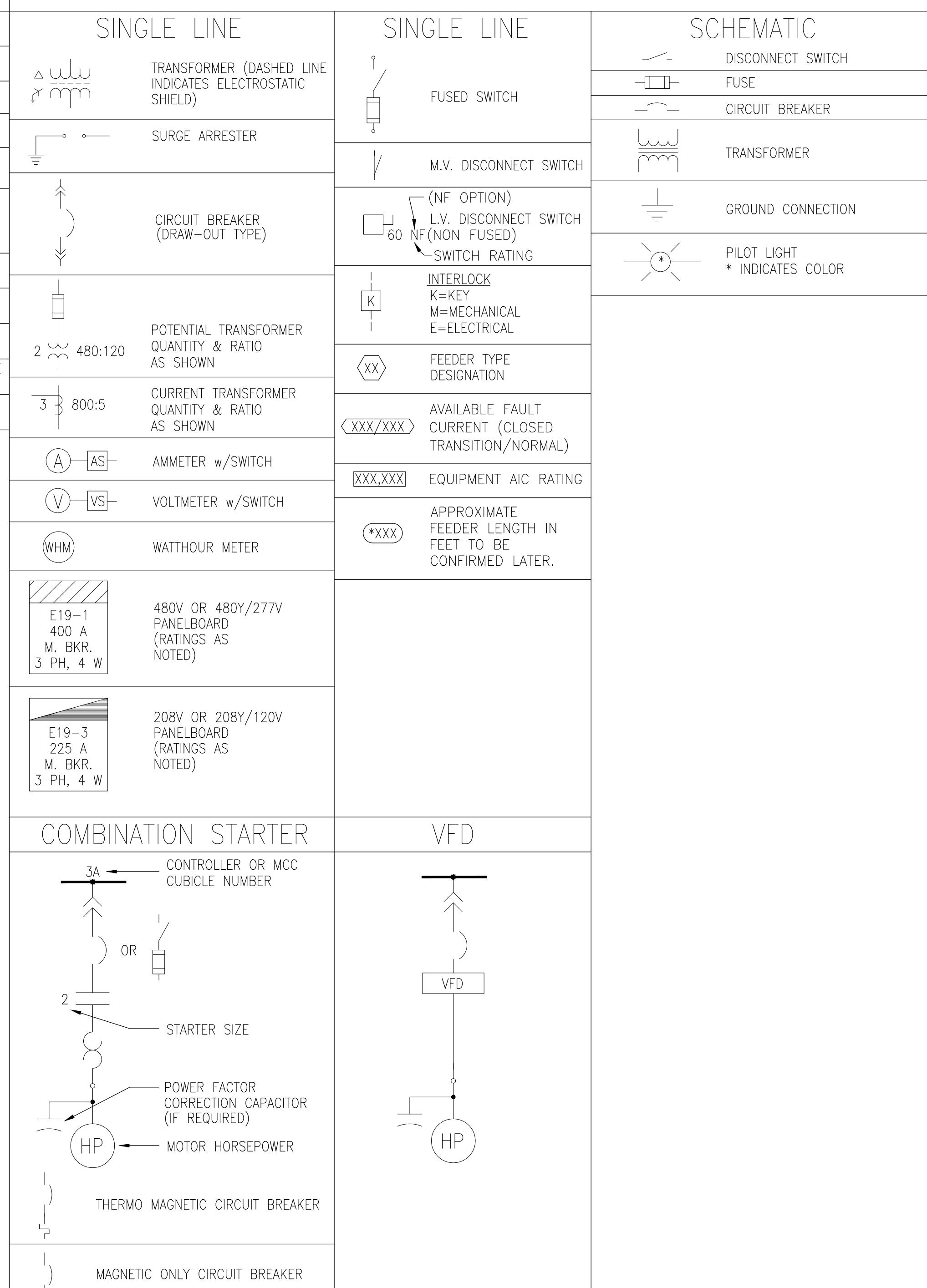
Project No.: 20757	Project Mgr.: DCD
Proj. Engineer: DKM	Proj. Drafter: DKM



## PLAN SYMBOLS

GROUNDING		CONDUIT & WIRE CONT'D	
	GROUND CABLE CONNECTION		CONDUIT TURNS DOWN
	GROUND ROD CONNECTION		CONDUIT TURNS UP
	GROUND CABLE PIGTAIL		CONDUIT SEAL
	GROUND CABLE (UNDERGROUND)		CABLE TRAY
	EQUIPMENT/STRUCTURAL GROUND CONNECTION		
POWER		POWER RECEPTACLES	
	PANELBOARD, 208Y/120V, 3 PHASE		120V, 15A, 1 PHASE, 2 POLE, 3 WIRE RECEPTACLE, NEMA 5-15R
	PANELBOARD, 480V OR 480Y/277V, 3 PHASE		20A 120V, 20A, 1 PHASE, 2 POLE, 3 WIRE, RECEPTACLE, NEMA 5-20R
	EQUIPMENT IDENTIFICATION "X" DENOTES EQUIPMENT NUMBER "Y" DENOTES HP OR AMPS		15A, 125V, DUPLEX IN A WEATHERPROOF ENCLOSURE (NEMA 3R RAILTIGHT)
	SPECIAL PANELBOARD/ENCLOSURE (TYPE AS NOTED)		15A, 125V, DUPLEX WITH BUILT IN GROUND CIRCUIT INTERRUPTER, HUBBELL GF5262I
	ENCLOSED CIRCUIT BREAKER DISCONNECT (SIZE AS NOTED)		
	VARIABLE SPEED MOTOR STARTER		
	SOLID STATE MOTOR STARTER		
	DISCONNECT SWITCH (FUSED OR UNFUSED) SWITCH RATING/FUSE RATING		
	MAGNETIC MOTOR STARTER (COMBINATION)		
	TRANSFORMER (SIZE AS SHOWN, IN KVA)		
	JUNCTION BOX		
	ESTOP SWITCH - MAINTAINED		
	VAULT		
	PULL BOX		
	HAND HOLE		
	MAN HOLE		
	OFF/ON SELECTOR SWITCH CONTROL STATION		
	STOP-START PUSHBUTTON CONTROL STATION		
	460 VOLT MOTOR (SIZE AS NOTED)		
	208 VOLT OR 240 V MOTOR (SIZE AS NOTED)		
	115 VOLT MOTOR (SIZE AS NOTED)		
CONDUIT & WIRE		CONDUIT & WIRE	
	CONDUIT SURFACE MOUNTED OR CONCEALED.		
	CONDUIT SURFACE MOUNTED OR CONCEALED. "E" INDICATES EMERGENCY CIRCUIT.		
	CONDUIT UNDERGROUND, UNDER FLOOR SLAB, OR IN CEILING SPACE OF FLOOR BELOW WITH CONDUCTORS AS ABOVE.		
	CONDUIT ONLY. C.O.		
	FLEXIBLE METAL CONDUIT. PROVIDE CIRCUIT CONDUCTORS REQUIRED BASED ON 60 DEGREE CELCIUS CONDUCTOR RATING.		
	INDICATES PHASE CONDUCTOR (#12 OR SIZE AS NOTED) INDICATES NEUTRAL CONDUCTOR (#12 OR SIZE AS NOTED) INDICATES GROUND CONDUCTOR (#12 OR SIZE AS NOTED) INDICATES ISOLATED GREEN GROUND CONDUCTOR (#12 OR SIZE AS NOTED)		
	#10 HOMERUN W/ #10 SHOWING CIRCUIT 1D6-1/1,3,5,7 SOURCE (PANEL/PANEL POSITION)		
	HOMERUN W/ CIRCUIT SOURCE & CONDUIT & 1B2-8/1,3,5 WIRE SIZE NOTED 1-1/2" C, 3#2+#2/ON+2#8G		

## WIRING DIAGRAM SYMBOLS

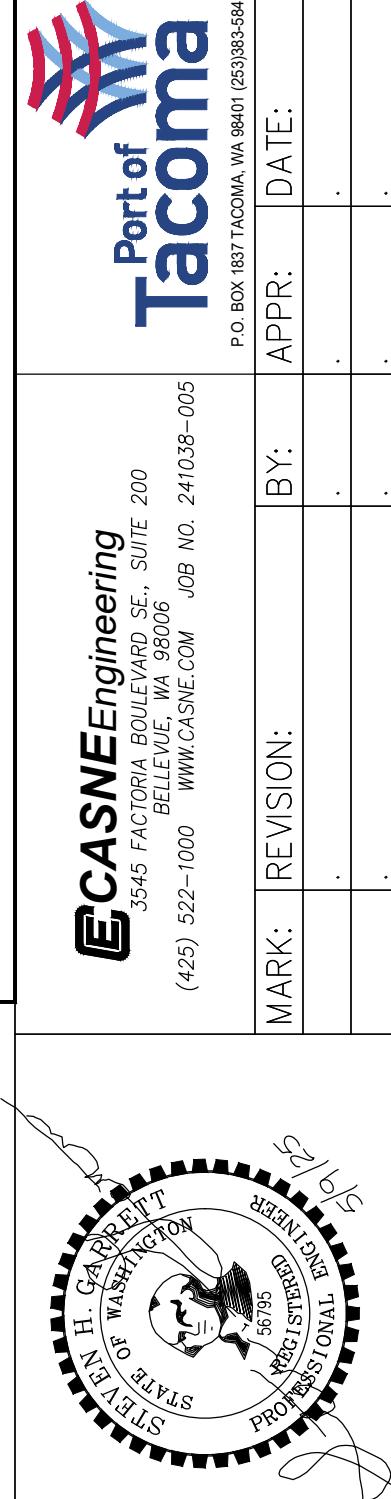


## ABBREVIATIONS

AF	FRAME RATING IN AMPS
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ALUMINUM
AT	TRIP RATING IN AMPS
AWG	AMERICAN WIRE GAUGE
BKR	CIRCUIT BREAKER
C	CONDUIT
CMCS	CENTRAL MANAGEMENT CONTROL SYSTEM
CO	CONDUIT ONLY
CT	CURRENT TRANSFORMER
CU	COPPER
DED	DEDICATED
DWG	DRAWING
EF	EXHAUST FAN
EMT	ELECTRICAL METALLIC TUBING
EUSERC	ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE
FVNR	FULL VOLTAGE, NON-REVERSING
GFCI	GROUND FAULT INTERRUPTER
GND	GROUND
GRC	GALVANIZED RIGID (CONDUIT)
HP	HORSEPOWER
IMC	INTERMEDIATE METAL CONDUIT
kcMIL	THOUSAND CIRCULAR MILS
LV	LOW VOLTAGE
M.BKR.	MAIN BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
PH	PHASE
PNL	PANEL
PT	POTENTIAL (VOLTAGE) TRANSFORMER
PVC	POLY-VINYL CHLORIDE (CONDUIT)
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
ST	SHUNT TRIP
TBD	TO BE DETERMINED
THHN	WIRE INSULATION TYPE REFER TO N.E.C.
THWN	WIRE INSULATION TYPE REFER TO N.E.C.
TP	TACOMA POWER
TPU	TACOMA PUBLIC UTILITIES
T/S	TWISTED & SHIELDED
UG	UNDERGROUND
VFD	VARIABLE FREQUENCY DRIVE
WP	WEATHER PROTECTED
XFMR	TRANSFORMER
XHHW	WIRE INSULATION TYPE REFER TO N.E.C.
XP	EXPLOSION-PROOF

## ISSUE FOR BID

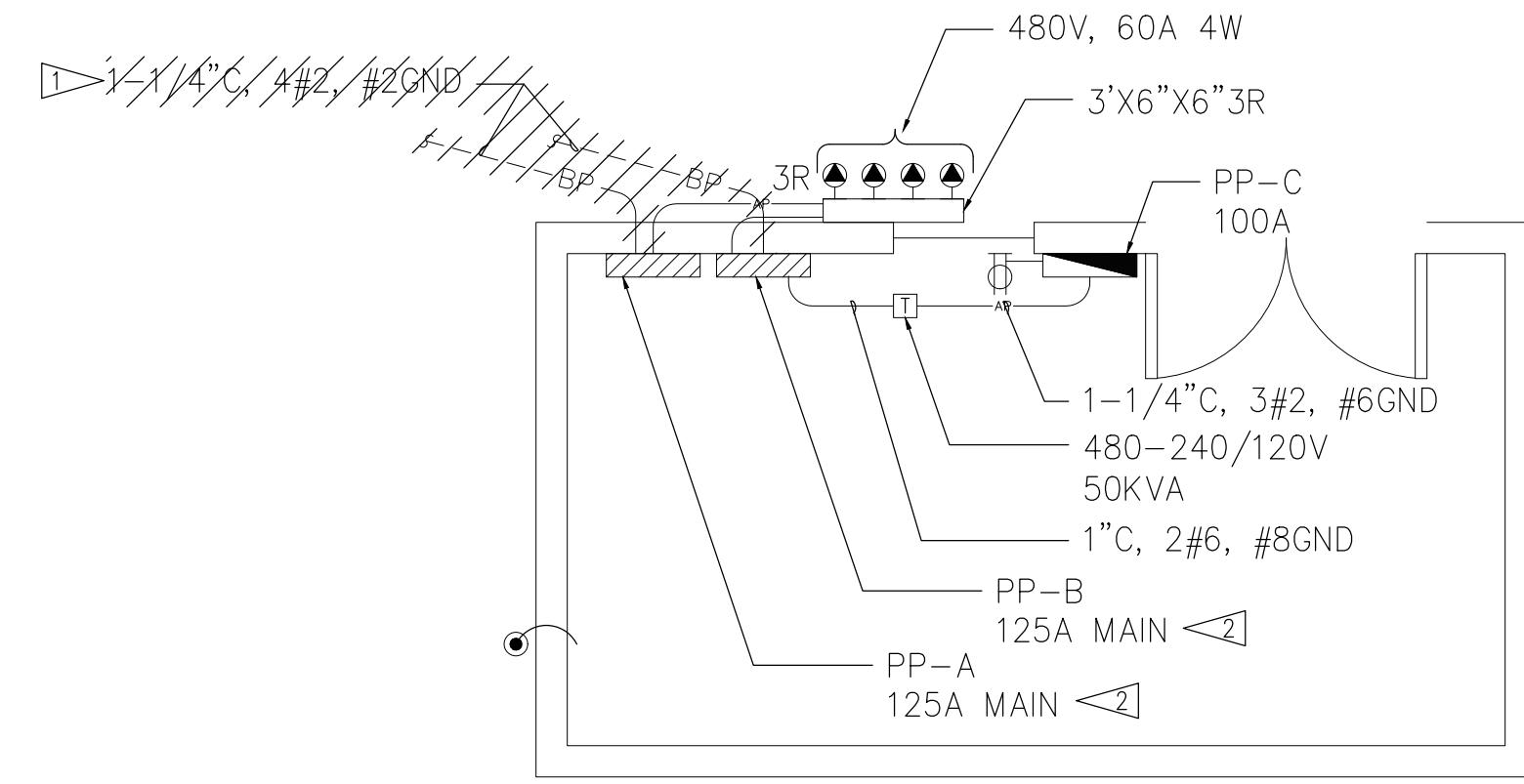
ISSUE FOR BILL  
MAY 9 2025



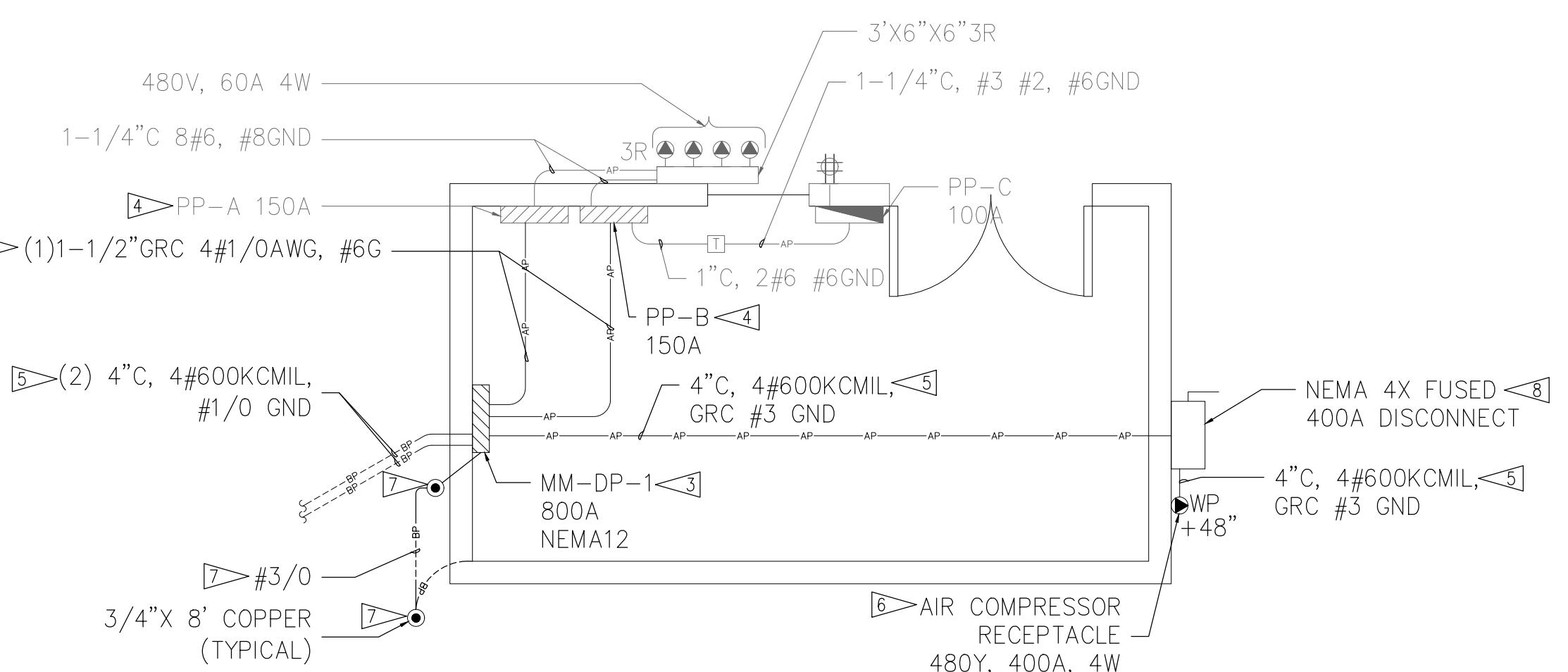
<b>6709</b> <b>EO.0</b> <b>SH# 0F19</b>		<b>EBC MOTIVE TEMPORARY POWER</b> <b>ELECTRICAL LEGENDS &amp; SYMBOLS</b>	
APPROVED:	CEC 04/8/25	CHECKED BY DATE	DATE
.	AA 04/8/25	DIRECTOR ENG. DATE	PROJ. ENGR DATE
MARK:	REVISION:	BY:	APPR: DATE:
		P.O. BOX 1837 TACOMA, WA 98401 (253)383-5641	
<b>CASNEEngineering</b> 3545 FACTORIA BOULEVARD SE., SUITE 200 BELLEVUE, WA 98006 (425) 522-1000 <a href="http://WWW.CASNE.COM">WWW.CASNE.COM</a>		P.O. BOX 1837 TACOMA, WA 98401 (253)383-5641	
<b>Port of Tacoma</b>		P.O. BOX 1837 TACOMA, WA 98401 (253)383-5641	







1 SERVICE BUILDING 480V PLAN-REMOVAL  
E4.0T SCALE: 1/4" = 1'-0"



2 SERVICE BUILDING 480V PLAN  
E4.0T SCALE: 1/4" = 1'-0"

#### LEGEND:

- 1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS
- 480V 30 PANELBOARD
- 240/120V 10 PANEL
- TRANSFORMER
- 480V SPECIALTY RECEPTACLE
- 120V DUPLEX RECEPTACLE
- 120V QUADPLEX RECEPTACLE
- GROUNDING ROD

#### GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. REFER TO DRAWINGS E1.0TR FOR SITE PLAN REMOVAL AND E1.0T FOR SITE PLAN.
3. "PORT CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE PORT OF TACOMA CONTRACT.
4. "MOTIVE CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE MOTIVE MARINE CONTRACT.

#### PORT CONSTRUCTION NOTES:

1. NO WORK SHOWN.

#### MOTIVE CONSTRUCTION NOTES:

- 1 REMOVE ELECTRICAL FEEDERS TO BUILDING ONCE NEW 800A SERVICE MM-DP-1 IS ENERGIZED.
- 2 REMOVE 125A MAIN BREAKER TO MAKE SPACE FOR 150A MAIN BREAKER.
- 3 PROVIDE AND INSTALL PANEL MM-DP-1.
- 4 PROVIDE AND INSTALL NEW 150A MAIN BREAKERS AT PP-A AND PP-B.
- 5 PROVIDE AND INSTALL CONDUIT, BOXES, FITTINGS, SUPPORTS AND CONDUCTORS.
- 6 PROVIDE 400A 480V 4W RECEPTACLE FOR AIR COMPRESSOR.
- 7 PROVIDE SUPPLEMENTAL GROUND ROD AND #3/0 GROUND ELECTRODE AT BUILDING SERVICE.
- 8 PROVIDE NEMA 4X FUSED DISCONNECT SIZED AS SHOWN.

**E4.0T**

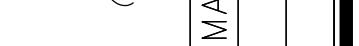
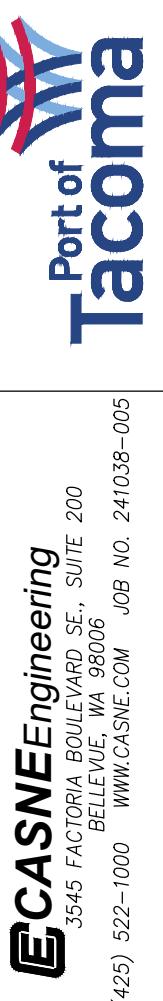
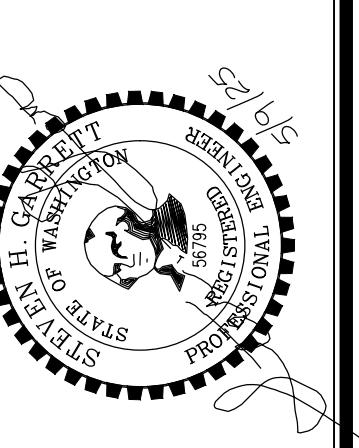
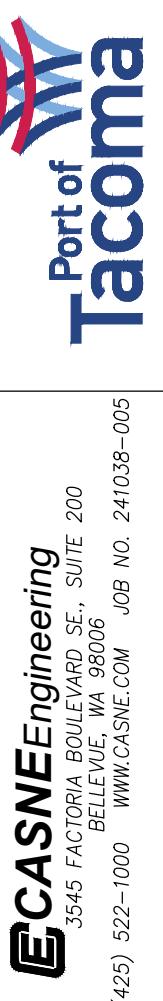
#### EBC MOTIVE TEMPORARY POWER

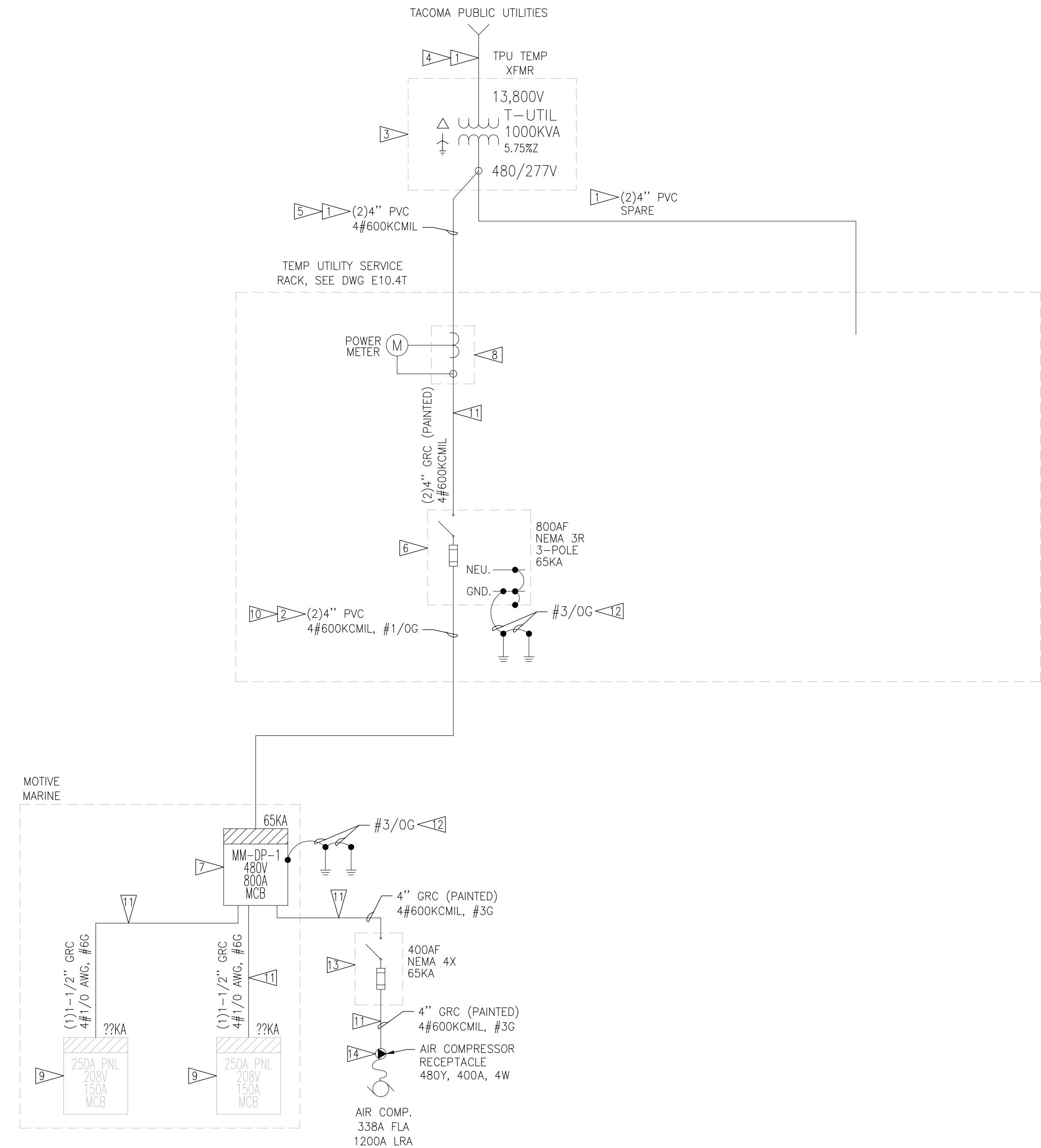
#### MOTIVE MARINE SERVICE BLDG. ENLARGED PLAN

SH# 11 OF 19	SECTION: 27	DATE: 04/08/25
PA: P01-PA-000000068	RANGE: 03	PROJ. ENGR: AA 04/08/25
PROJ. ID: 101686.01	VERT: MLW, 1983-2001 EPOCH	PRINTED BY: steven.garrett May 09, 2025
PHASE: ISSUE FOR BID	PARCEL: -	PORT ADDRESS: 401 East Alexander Ave TACOMA, WA 98421
PHASE: -	DRAWING SCALE: AS NOTED	DATE: -

ISSUE FOR BID

MAY 9, 2025





# 1 TEMPORARY ONE-LINE DIAGRAM

E10.0T SCALE: NONE

## LEGEND:

- REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS.

## **GENERAL NOTES:**

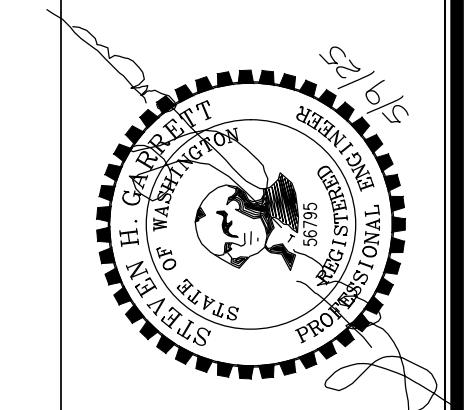
- REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
- "PORT CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE PORT OF TACOMA CONTRACT.
- "MOTIVE CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE MOTIVE MARINE CONTRACT.

## **PORT CONSTRUCTION NOTES:**

- PROVIDE SERVICE CONDUIT PER TACOMA PUBLIC UTILITY STANDARDS. COORDINATE INSTALLATION WITH TACOMA PUBLIC UTILITIES.
- PROVIDE CONDUIT ONLY. CONDUCTORS PROVIDED BY OTHERS.
- COORDINATE INSTALLATION OF TRANSFORMER WITH TACOMA POWER.
- CONDUCTORS PROVIDED BY TACOMA POWER.

## **NOTIVE CONSTRUCTION NOTES:**

- 1> PROVIDE CONDUCTORS IN CONDUIT PER TACOMA PUBLIC UTILITY STANDARDS. COORDINATE INSTALLATION WITH TACOMA PUBLIC UTILITIES.
- 2> PROVIDE NEMA 3R SERVICE ENTRANCE RATED FUSED DISCONNECT WITH CLASS L 800A FUSES.
- 3> PROVIDE PANELBOARD WITH RATINGS AS SHOWN, PER SPECIFICATION 26-24-16. SEE PANEL SCHEDULE ON E10.2 FOR DETAILS.
- 4> PROVIDE UTILITY INSTRUMENT METERING SOCKET AND 800A CT ENCLOSURE PER TACOMA PUBLIC UTILITIES STANDARD.
- 5> EXISTING PANEL TO BE RE-FED FROM NEW SOURCE. PROVIDE 150A MAIN BREAKER IN PLACE OF EXISTING 125A.
- 6> PROVIDE CONDUCTORS AS SHOWN. CONDUIT PROVIDED BY OTHERS.
- 7> PROVIDE CONDUCTORS, CONDUITS, FITTINGS, SUPPORTS AND ANCILLARY HARDWARE.
- 8> PROVIDE SERVICE GROUND RODS, GROUNDING ELECTRODE CONDUCTOR, AND BONDING HARDWARE.
- 9> PROVIDE NEMA 4X FUSED DISCONNECT WITH RATINGS AS SHOWN.
- 10> PROVIDE 400A RECEPTACLE. COORDINATE RECEPTACLE TYPE WITH MOTIVE POWER MARINE.



# ISSUE FOR BID

# MAY 9, 2025

# EBC MOTIVE TEMPORARY POWER

## TEMPORARY ELECTRICAL ONE-LINE DIAGRAM

PHASE: ISSUE FOR BID	PARCEL: PORT PARCEL 1B	DRAWING SCALE: AS NOTED	PRINTED BY: steven.garrett May 09, 2025
PROJ. ID: 101686.01	DAT-HRZ: . NAD83	VERT: MLW, 1983-2001 EPOCH	PORT ADDRESS: 401 East Alexander Ave
PA: F00-PA-000068	TOWNSHIP: 21	RANGE: 03	SECTION: 27
MARK: REVISION: <u>15</u>			
APP'R: DATE: <u>15</u>			

MM-DP-1									
VOLTS: 480/277V			MAIN BREAKER: 800A 100% Rtd			FEEDER CONDUCTORS: (2) sets 4 #600, 1/0 G			INSTALL DATE: TBD
PH & WIRE: 3Ø, 4W			PANEL AIC RATING: 65 kA			MOUNTING: SURFACE			REV. VERSION: ORIGINAL
BUS RATING: 800 Amp			FED FROM: MDS-1			ENCLOSURE: NEMA 12			REV. DATE: 10/8/2024
CKT. #	BKR. AMPS	BKR. POLES	WIRE SIZE	CIRCUIT DESCRIPTION	LOAD TYPE	LOAD (KVA)	NOTES	CKT. #	CIRCUIT PHASE
1	150	3		Power Skid - (2) 45KVA 3ph & (1) 5KVA 1ph	1	26.5		1	A
3	/	/			1	26.5		3	B
5	/	/			1	24		5	C
7	150	3		Power Skid - (3) 45KVA XFMRS	1	36		7	
9	/	/			1	36		9	
11	/	/			1	36		11	
13	400	3		COMPRESSOR - 270HP	1	99	1	13	
15	/	/			1	99	1	15	
17	/	/			1	99	1	17	
19	200	3		SPARE	G			19	
21	/	/			G			21	
23	/	/			G			23	
NOTES:									
1) SOLID STATE TRIP UNIT WITH ADJUSTABLE LT, ST, AND INST PROTECTION.									
Available Fault Current: _____ Date of Calculation: _____									

CIRCUIT DESCRIPTION

LOAD TYPE

LOAD (KVA)

NOTES

CKT. #

BKR. AMPS

POLES

WIRE SIZE

CIRCUIT DESCRIPTION

LOAD TYPE

LOAD (KVA)

NOTES

CKT. #

BKR. AMPS

POLES

WIRE SIZE

CIRCUIT DESCRIPTION

LOAD TYPE

LOAD (KVA)

NOTES

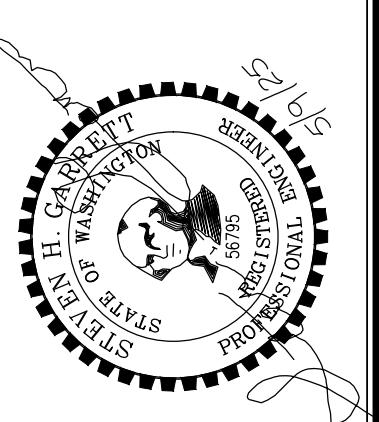
CKT. #

**LEGEND:**  
1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

**GENERAL NOTES:**  
1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.

ISSUE FOR BID  
MAY 9, 2025

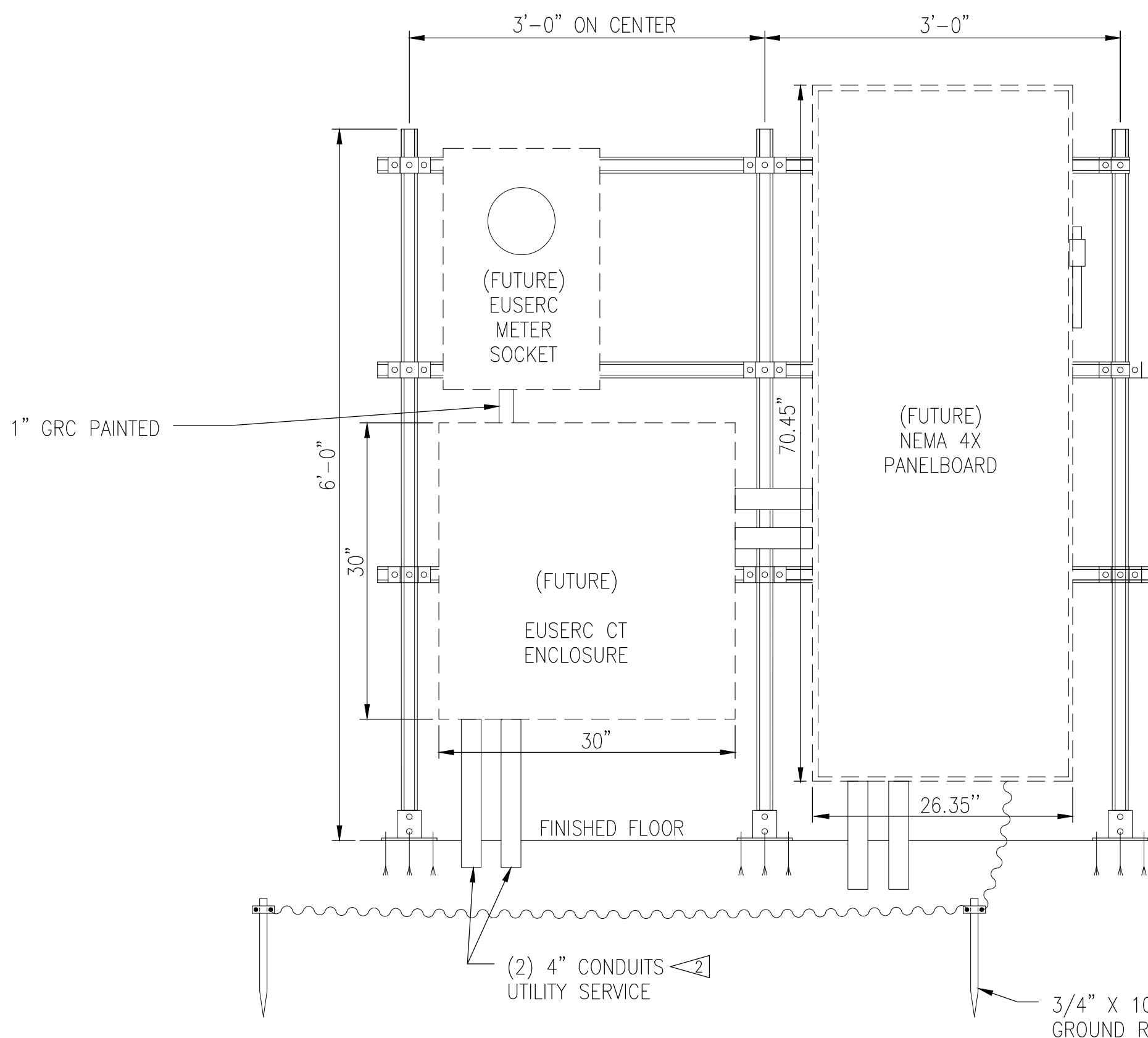
<b>ECASNE</b> Engineering		3545 FACTORIA BELLWOOD SE., SUITE 200 (425) 522-1000 BELLEVUE, WA 98006 WWW.CASNE.COM	JOB NO. 241038-005
MARK:	REVISION:	BY:	APPR:
.	.	.	.
DATE: _____			



APPROVED:	CEC 04/8/25	DATE:
CHECKED BY:	AA 04/8/25	DATE:
DIRECTOR ENG. DATE:	PROJ. ENGR DATE:	PRINTED BY:
PROJ. ID: 101656.01	SECTION: 27	steven.garrett May 09, 2025
PHASE: ISSUE FOR BID	DATE: 04/09/2025	PORT ADDRESS: 401 East Alexander Ave
PARCEL: 1B	VERT: M.L.W. 1983-2001 EPOCH	TACOMA, WA 98421
SH# 13 OF 19	SECTION: 27	DRAWING SCALE: AS NOTED

<b>E10.2</b>	<b>EBC MOTIVE TEMPORARY POWER</b>		
<b>MM-DP-1 PANEL SCHEDULE</b>			
PROJ. ID: 101656.01	TOWNSHIP: 21	RANGE: 03	SECTION: 27
PHASE: ISSUE FOR BID	PARCEL: 1B	VERT: M.L.W. 1983-2001 EPOCH	DRAWING SCALE: AS NOTED

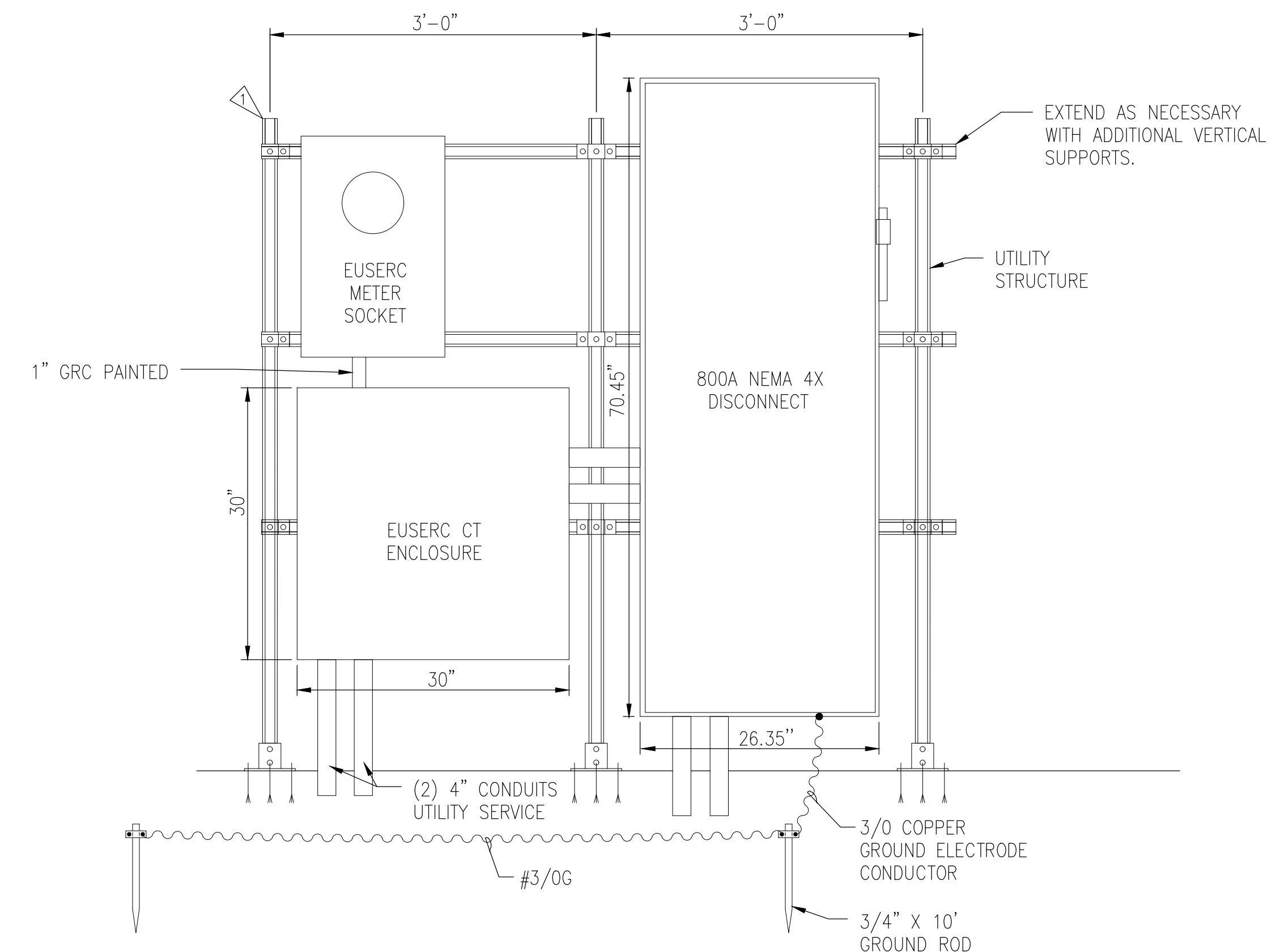
6709	E10.2	APPROVED: CEC 04/8/25	DATE: AA 04/8/25
SH# 13 OF 19	TOWNSHIP: 21	RANGE: 03	SECTION: 27
PROJ. ID: 101656.01	PARCEL: 1B	VERT: M.L.W. 1983-2001 EPOCH	DRAWING SCALE: AS NOTED
PHASE: ISSUE FOR BID	PARCEL: 1B	VERT: M.L.W. 1983-2001 EPOCH	DRAWING SCALE: AS NOTED



FUTURE TEMPORARY SERVICE  
MOUNTING DETAIL

SCALE: 1'=1'-0

1  
E10.4T



MOTIVE TEMPORARY SERVICE  
MOUNTING DETAIL

SCALE: 1'=1'-0

2  
E10.4T

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

**LEGEND:**

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

**GENERAL NOTES:**

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.

2. "PORT CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE PORT OF TACOMA CONTRACT.

3. "MOTIVE CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE MOTIVE MARINE CONTRACT.

**MOTIVE CONSTRUCTION NOTES:**

1 PROVIDE GREEN PAINTED C-CHANNEL STRUT RACK WITH EQUIPMENT AS SHOWN. REFER TO ONE-LINE DIAGRAM E10.0T FOR EQUIPMENT DETAILS. REFER TO CIVIL DRAWINGS FOR RACK DETAILS.

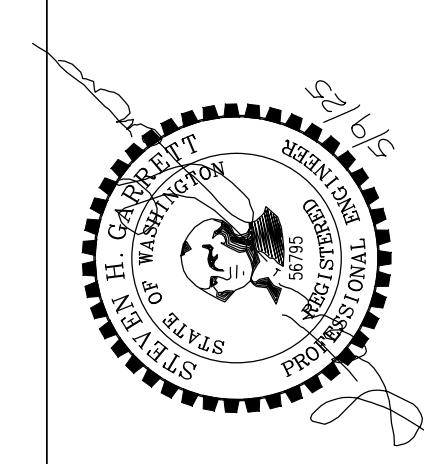
2 PROVIDE CONDUIT ONLY FOR FUTURE SERVICE.

**E10.4T**  
Sh# 14 OF 9

**EBC MOTIVE TEMPORARY POWER**  
TEMPORARY EQUIPMENT RACK ELEVATION

APPROVED: CEC 04/8/25  
CHECKED BY AA 04/8/25  
DIRECTOR ENG. DATE PROJ. ENGR. DATE  
PRINTED BY: steven.garrett May 09, 2025  
PORT ADDRESS: 401 East Alexander Ave  
TACOMA, WA 98421

**ECASNE Engineering**  
3545 FACTORIA BOULEVARD SE, SUITE 200  
BELLEVUE, WA 98006  
JOB NO. 241038-005  
(425) 522-1000 WWW.CASNE.COM  
P.O. BOX 1851 TACOMA, WA 98440 (253) 533-3441

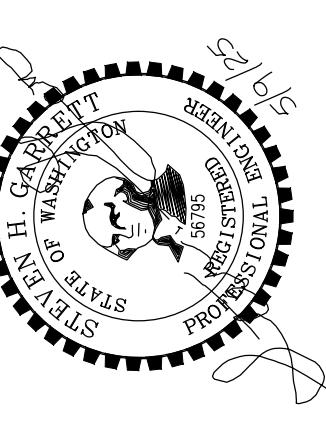


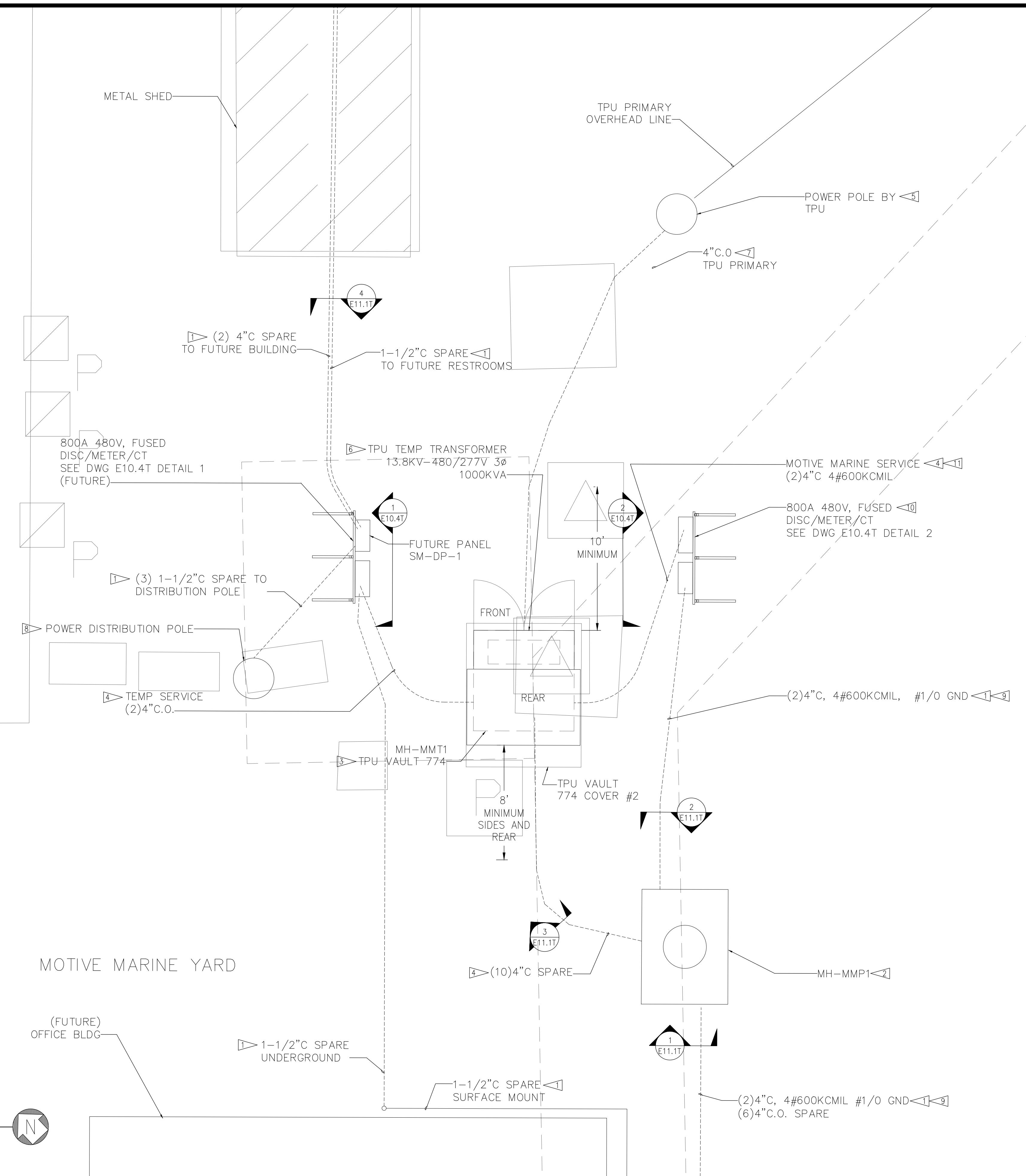
ISSUE FOR BID

MAY 9, 2025

**Port of Tacoma**

3545 FACTORIA BOULEVARD SE, SUITE 200  
BELLEVUE, WA 98006  
JOB NO. 241038-005  
(425) 522-1000 WWW.CASNE.COM  
P.O. BOX 1851 TACOMA, WA 98440 (253) 533-3441





## LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS.

## **GENERAL NOTES:**

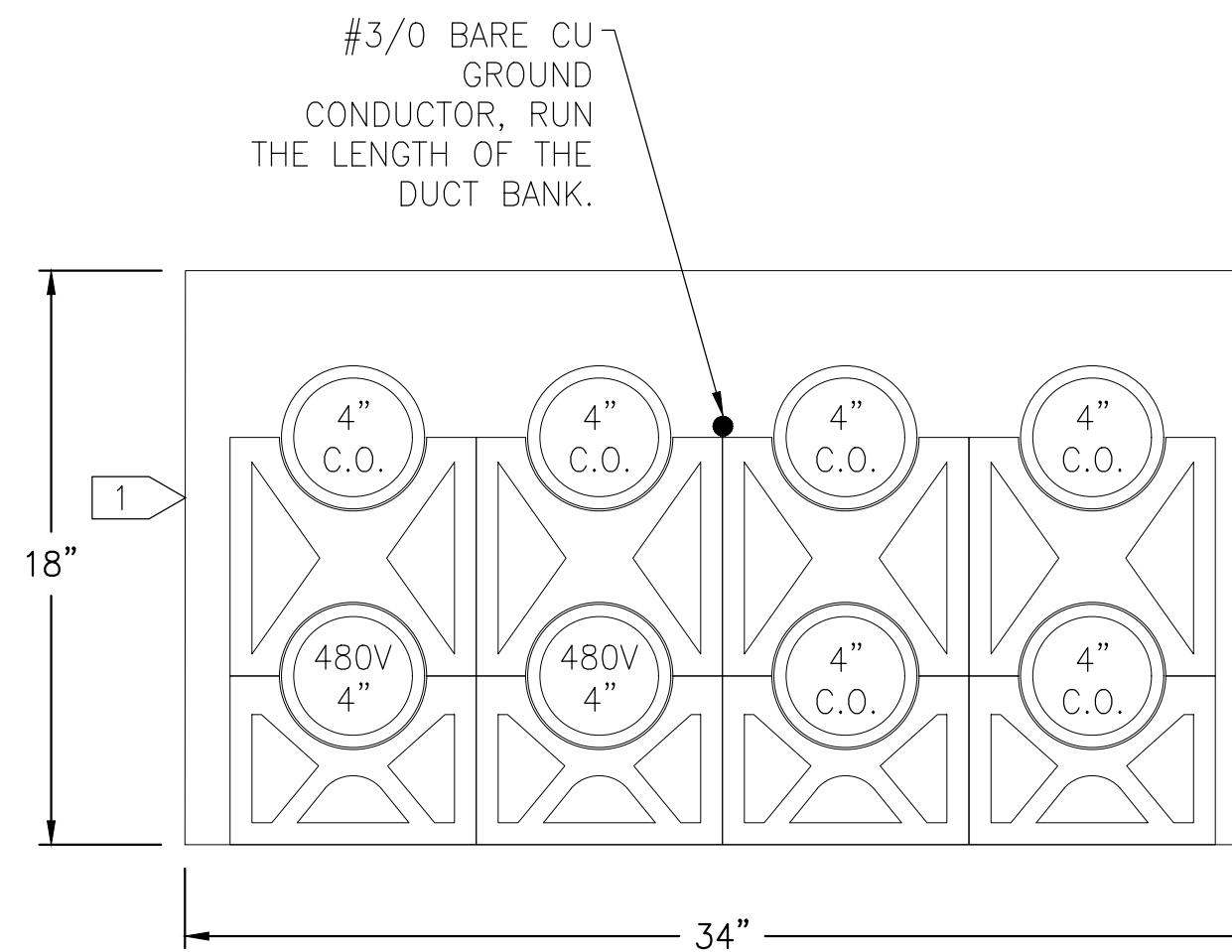
1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. COORDINATE ALL SHUT-DOWN AND REMOVAL WORK WITH THE PORT OF TACOMA.
3. WORK IDENTIFIED UNDER "PORT CONSTRUCTION NOTES" TO BE PERFORMED UNDER PORT OF TACOMA CONTRACT. WORK IDENTIFIED UNDER "MOTIVE CONSTRUCTION NOTES" TO BE PERFORMED UNDER MOTIVE MARINE CONTRACT.

## **PORT CONSTRUCTION NOTES:**

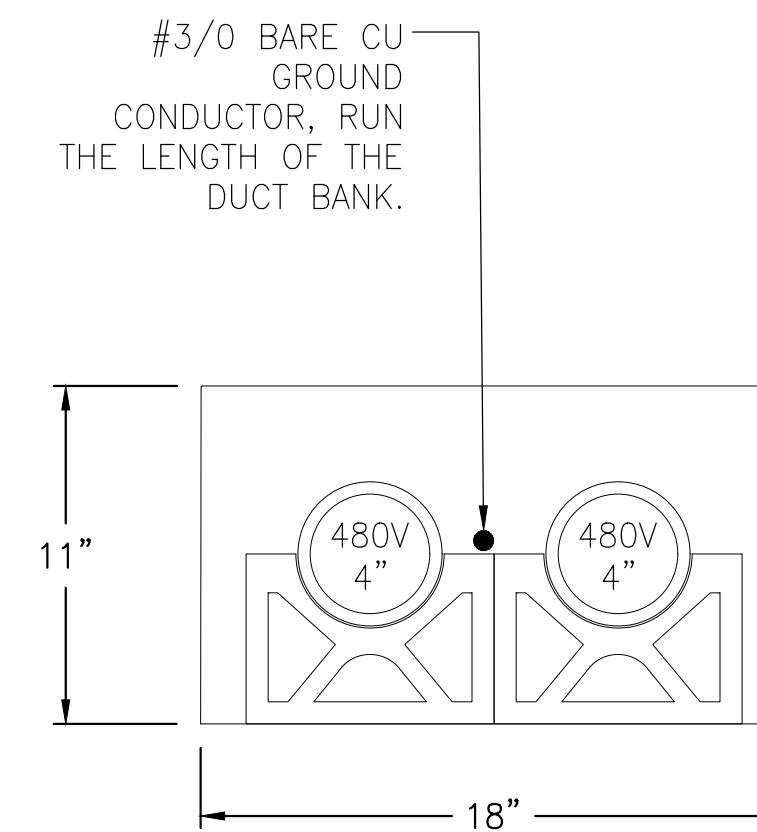
- 1 PROVIDE AND INSTALL UNDERGROUND CONDUIT FITTINGS, AND SUPPORTS. CONDUCTORS PROVIDED BY OTHERS.
- 2 PROVIDE AND INSTALL UTILITY VAULT. REFER TO DRAWING E11.2T FOR DETAILS.
- 3 PROVIDE TPU 774 VAULT WITH COVER#2 FOR TEMPORARY TPU TRANSFORMER. COORDINATE SIZE, LOCATION AND INSTALLATION OF LID AND TRANSFORMER WITH TPU. REFER TO DRAWING E11.4T FOR TPU STANDARDS.
- 4 PROVIDE SERVICE CONDUIT ONLY, INSTALLED PER TACOMA POWER STANDARD C-UG-1100. COORDINATE INSTALLATION WITH UTILITY.
- 5 POLE TO BE PROVIDED BY TPU. PROVIDE RISER CONDUIT UP POLE, EXTENDING UNDERGROUND CONDUIT TO TRANSFORMER VAULT. REFER TO DRAWING E11.3T DETAIL 4.
- 6 TRANSFORMER PROVIDED AND INSTALLED BY TACOMA PUBLIC UTILITIES.
- 7 PROVIDE AND INSTALL 4" CONDUIT PER TACOMA PUBLIC UTILITY STANDARD FOR MEDIUM VOLTAGE TRANSFORMER PRIMARY
- 8 PROVIDE AND INSTALL DISTRIBUTION POLE.

## MOTIVE CONSTRUCTION NOTES:

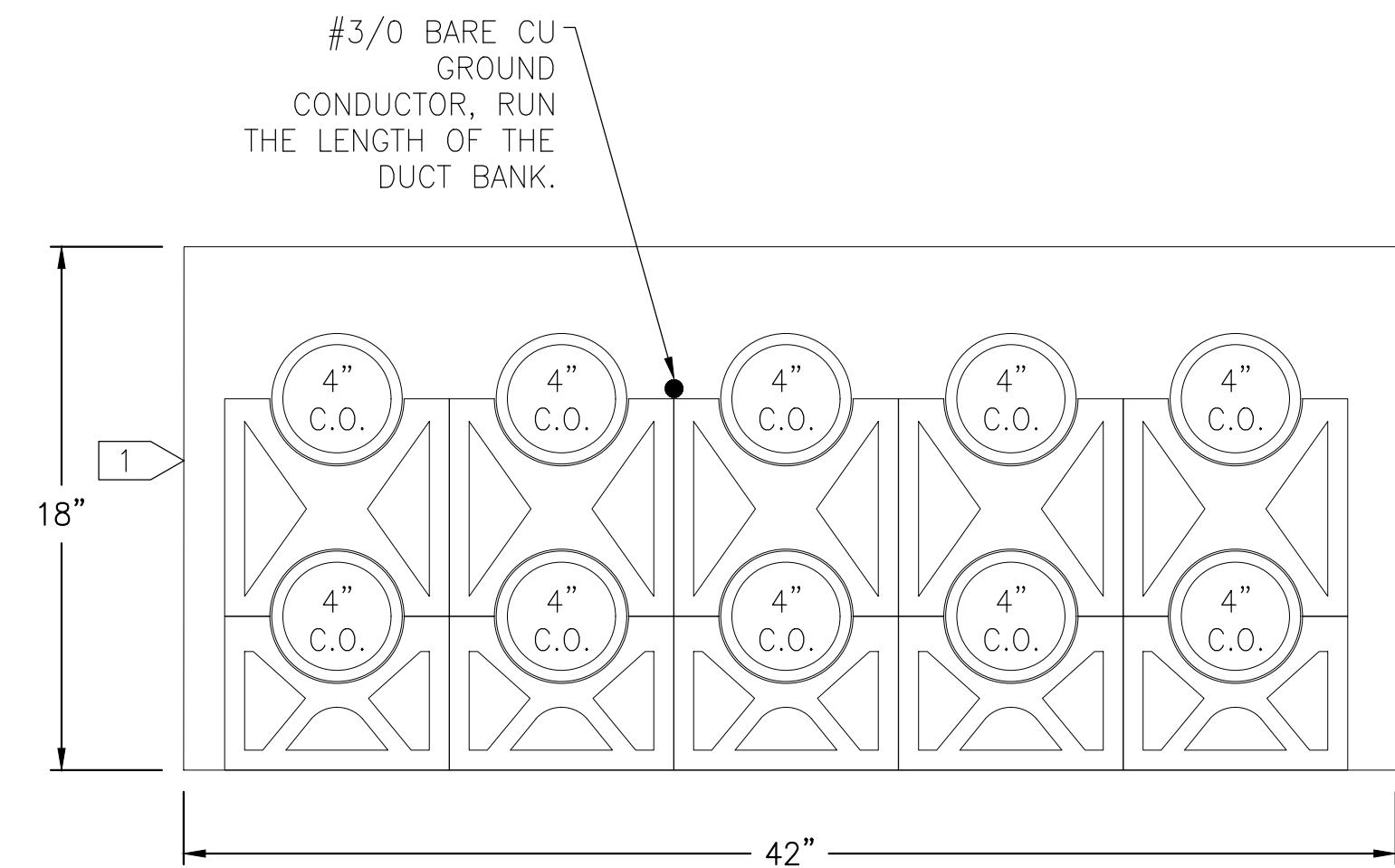
- 9 PROVIDE CONDUCTORS IN UNDERGROUND CONDUIT. CONDUIT PROVIDED BY OTHERS.
- 10 PROVIDE AND INSTALL 480V TEMPORARY SERVICE CT ENCLOSURE, METER BASE AND FUSED DISCONNECT ON UTILITY RACK. SEE DRAWING E10.4T FOR UTILITY RACK DETAIL.
- 11 PROVIDE SERVICE CONDUCTORS IN CONDUIT, INSTALLED PER TACOMA POWER STANDARD. COORDINATE INSTALLATION WITH UTILITY.



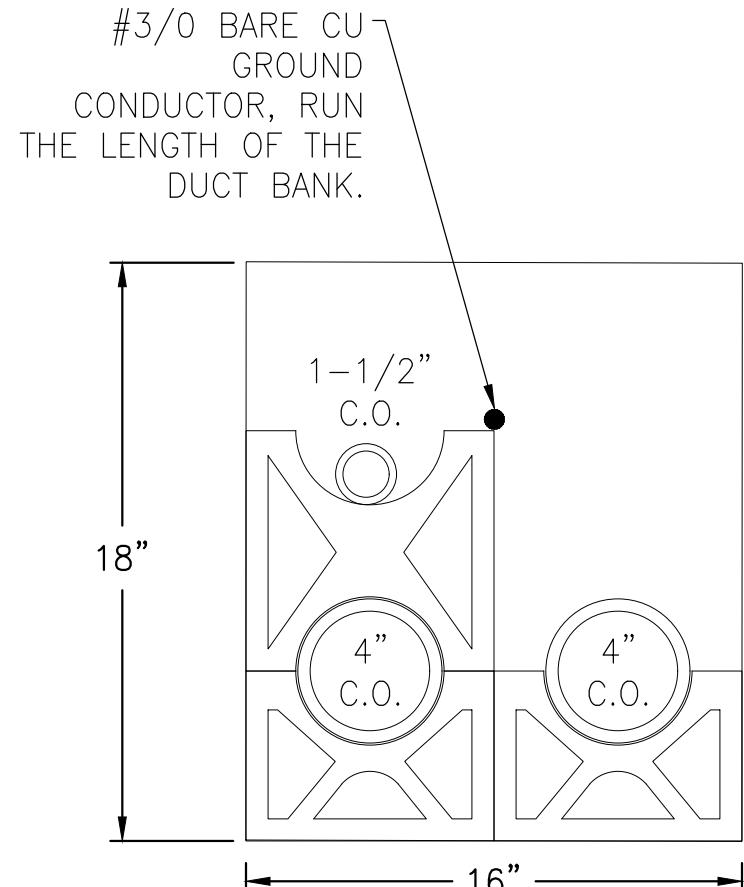
**1** 480V DUCT BANK SECTION  
E11.1T SCALE: 2" = 1'-0"



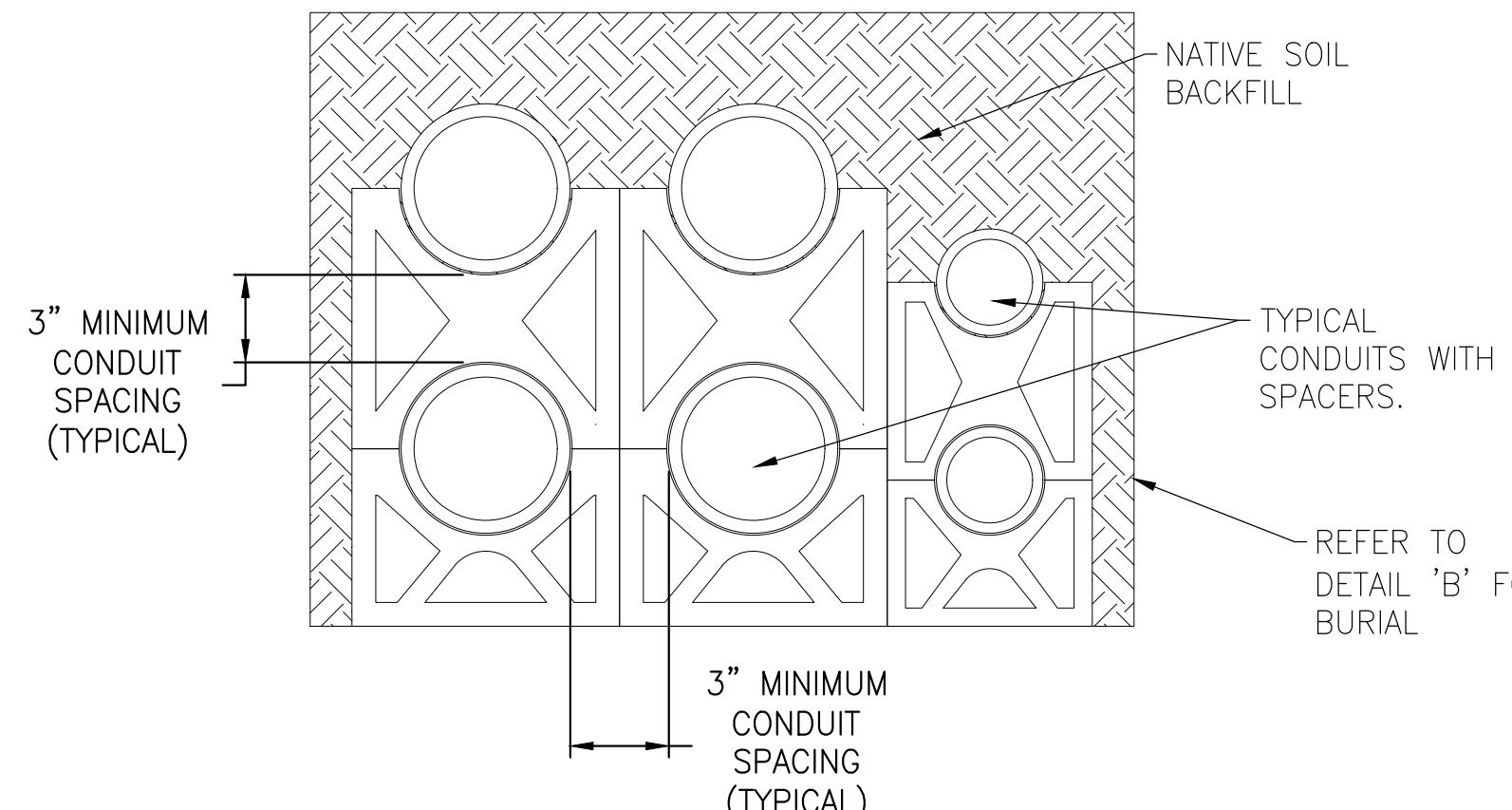
**2** 480V DUCT BANK SECTION  
E11.1T SCALE: 2" = 1'-0"



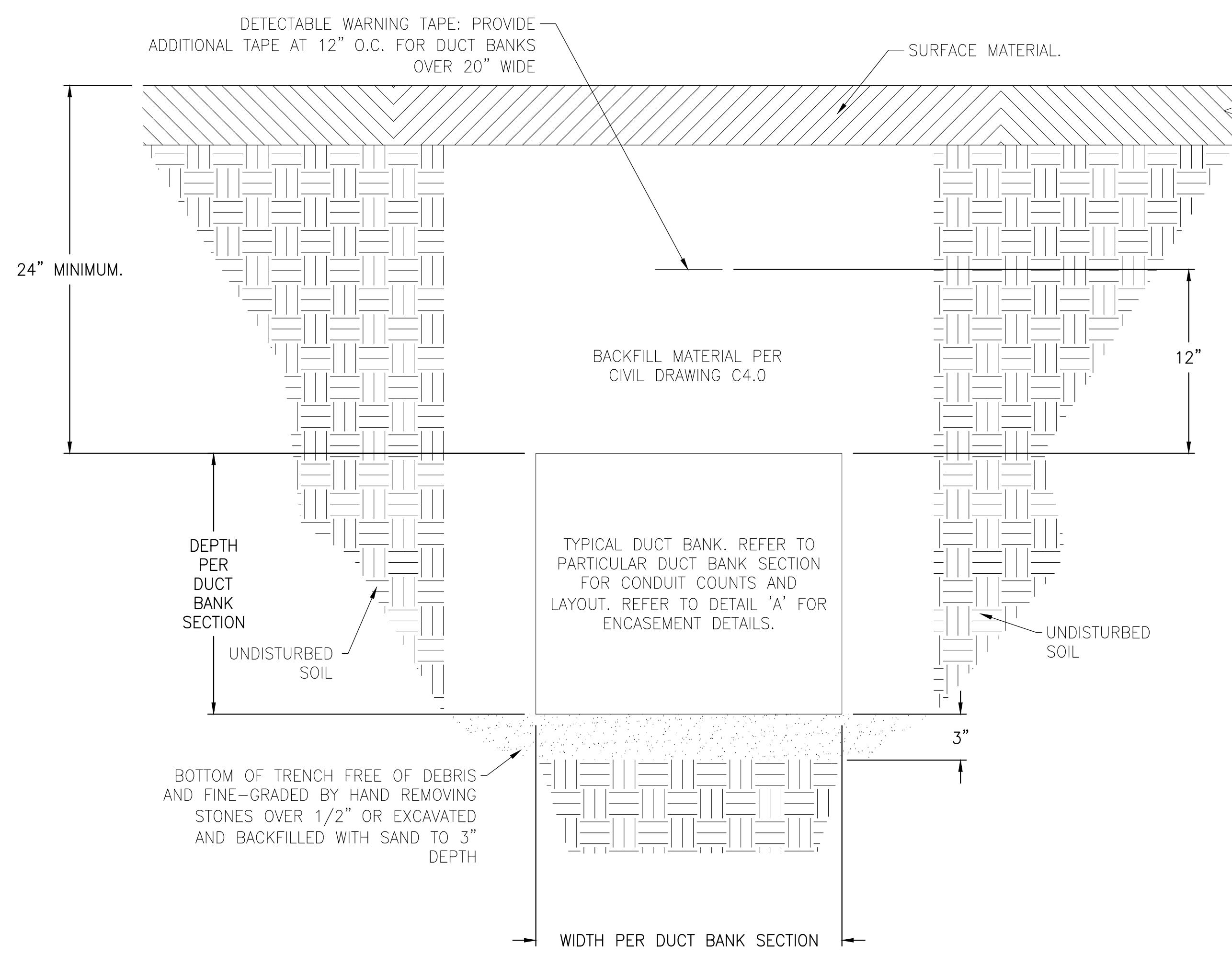
**3** SPARE DUCT BANK SECTION  
E11.1T SCALE: 2" = 1'-0"



**4** SPARE DUCT BANK SECTION  
E11.1T SCALE: 2" = 1'-0"



**A** TYPICAL DUCT BANK CONCRETE ENCASEMENT DETAIL  
E11.1T SCALE: 2" = 1'-0"



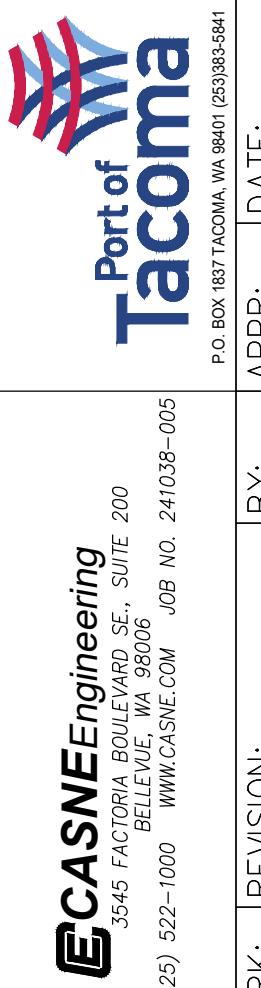
**B** SERVICE BUILDING 480V PLAN-REMOVAL  
E11.1T SCALE: 2" = 1'-0"

**LEGEND:**

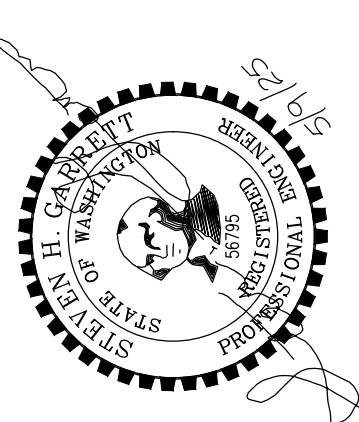
1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

**GENERAL NOTES:**

- DUCT BANK SECTION SHOWN SHALL BE INSTALLED PER DETAILS A AND B (THIS DRAWING).
- CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL EXISTING UNDERGROUND INTERFERENCES INCLUDING MECHANICAL, ELECTRICAL AND CIVIL INSTALLATIONS WHICH MAY NOT BE SHOWN BUT MAY OVERLAP WITH FINAL ROUTING OF DUCT BANKS AND/OR LOCATION OF MANHOLES. ANY DAMAGE TO SUCH EXISTING INSTALLATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- BASE AND INTERMEDIATE DUCT SPACERS SHALL BE PLACED 12" FROM EACH JOINT AND ON 5'-0" CENTERS THROUGHOUT THE DUCT RUN.
- ANCHOR CONDUIT SPACERS TO PAVERS OR BRICKS AS REQUIRED TO PREVENT FLOTATION DUE TO HIGH WATER TABLE DURING CONSTRUCTION OR CONCRETE POURING. ALLOW HORIZONTAL MOVEMENT DUE TO TEMPERATURE FLUCTUATIONS.
- MAINTAIN 12" MINIMUM EDGE-TO-EDGE SEPARATION BETWEEN POWER CONDUIT AND COMMUNICATION CONDUIT IN CONCRETE OR IN EARTH.
- MAINTAIN MINIMUM 12" SEPARATION BETWEEN DUCT BANK AND UTILIDOR OR EXPOSED MECHANICAL PIPING UNLESS OTHERWISE NOTED.
- ALL PROJECT RELATED CONDUITS, EXISTING OR NEW SHALL BE PROVEN SUITABLE FOR CABLE PLACEMENT BY PULLING THROUGH THE FOLLOWING MANDRELS IN THE ORDER DEFINED:
  1. A WOODEN OR ALUMINUM TEST MANDREL TO VERIFY CONDUITS ARE NOT CRUSHED.
  2. A POLYURETHANE, NEOPRENE OR LEATHER MANDREL FOR CLEANING DEBRIS.
  3. A LUBRICATION SPREADING MANDREL TO PREPARE FOR CABLE PULLING (WHERE APPLICABLE).
- ALL SPARE OR EMPTY CONDUITS SHALL BE EQUIPPED WITH 1/2" MULTEAPE OR EQUIVALENT, RATED AT MINIMUM 1,500 POUNDS PULLING STRENGTH.
- USE MINIMUM 25' BENDING RADIUS FOR ALL HORIZONTAL BENDS EXCEPT WHERE PLANS INDICATE OTHERWISE.
- USE MINIMUM 3' BENDING RADIUS FOR ALL CONDUIT STUB-UPS.
- SEE SPECIFICATION 26 05 43 FOR ADDITIONAL REQUIREMENTS.
- REFER TO DRAWING E1.0T FOR SECTION CUT LOCATIONS.



**ISSUE FOR BID**  
**MAY 9, 2025**

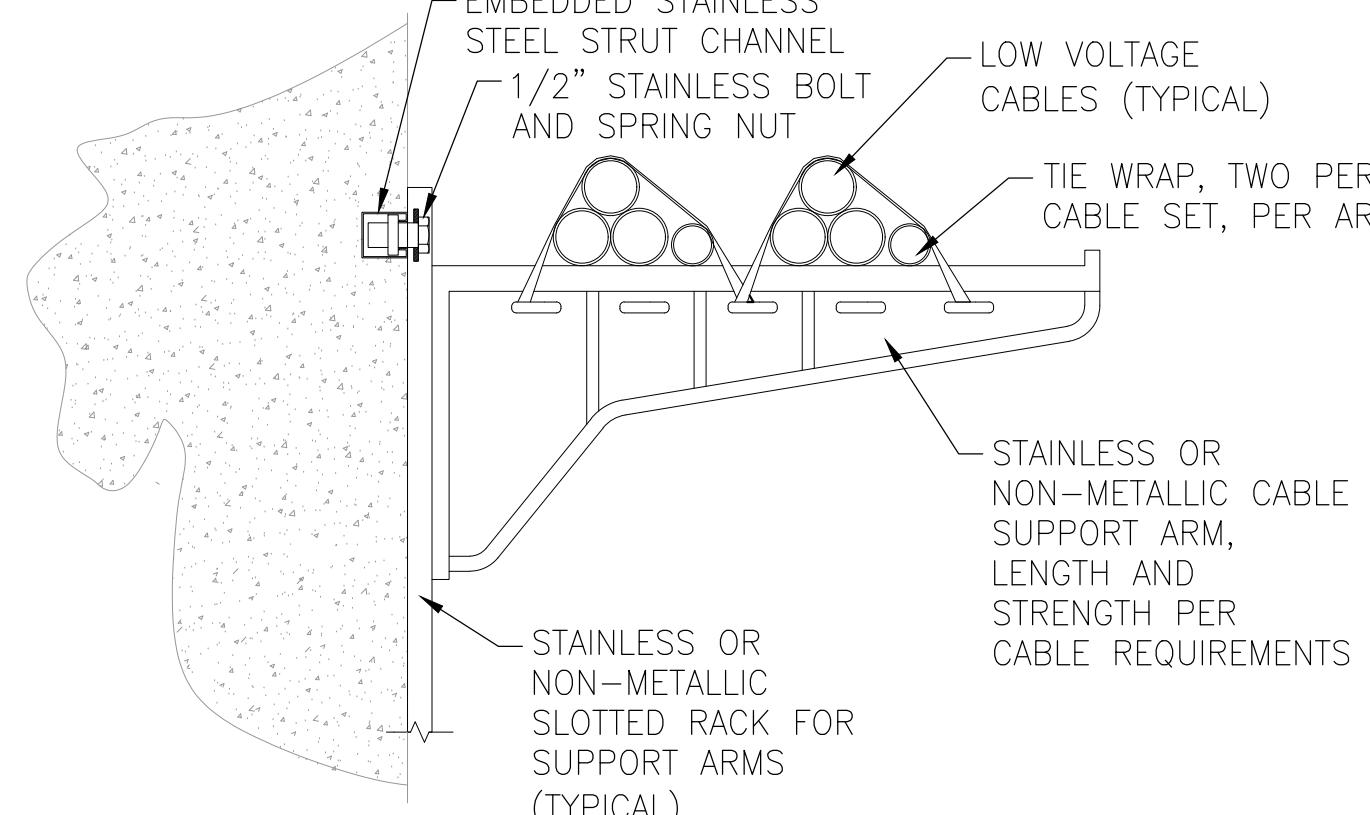


E11.1T	EBC MOTIVE TEMPORARY POWER		
	APPROVED:	CEC 04/8/25 CHECKED BY	DATE
6709	DUCT BANK DETAILS		
SH# 16 OF 19	TOWNSHIP: 21 NORTH RANGE: 3 EAST SECTION: 27 MLW 1983-2001 EPOCH PARCEL: 101686.01 PROJ. ID: 101686.01 PHASE: ISSUE FOR BID	PRINTED BY: steven.garrett May 09, 2025 PORT ADDRESS: 401 EAST ALEXANDER AVE TACOMA, WA 98421	



# 1 TYPICAL ELECTRICAL VAULT DETAI

E11.3T SCALE: N/A



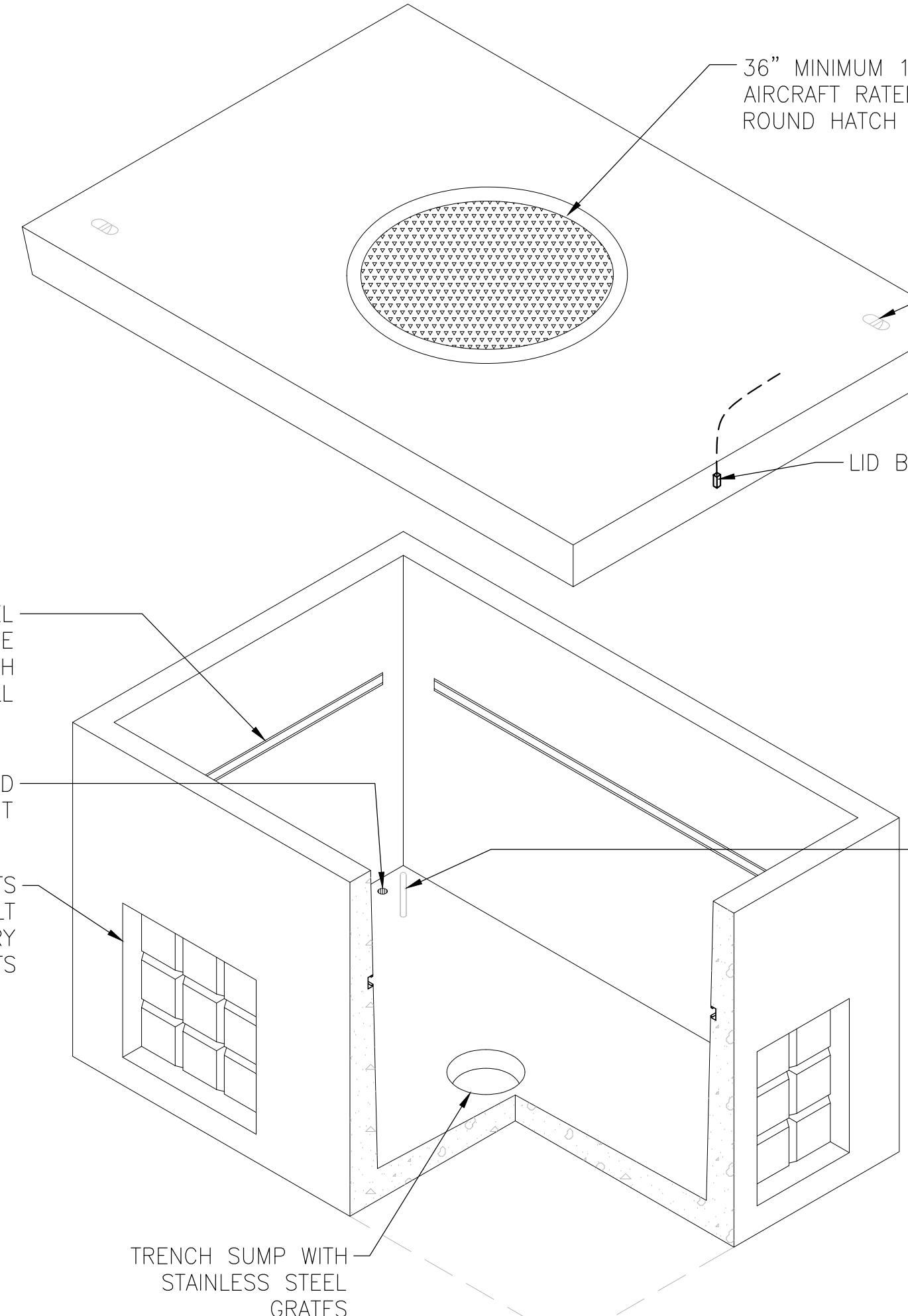
## 3 CABLE SUPPORT DETAIL

E11.3T SCALE: N/A

3D isometric diagram of a concrete vault structure. The diagram shows a rectangular concrete wall with a central vertical column. Labels with arrows point to specific features:

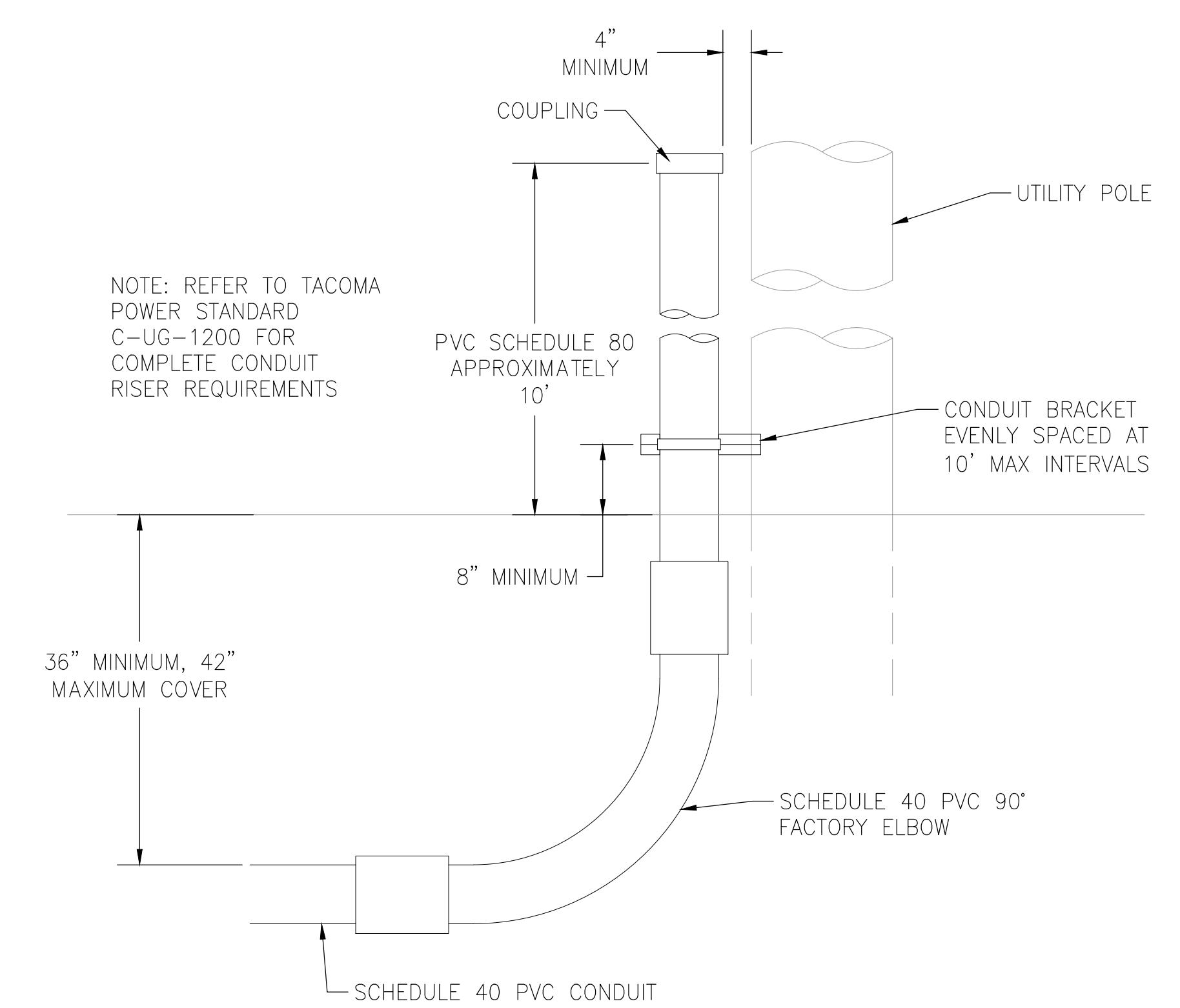
- STAINLESS C-CHANNEL EMBEDDED IN CONCRETE. ONE PER SIDE, LENGTH 60% OF INTERIOR WALL
- GROUND ROD KNOCKOUT
- TYPICAL KNOCKOUTS ARRANGED PER VAULT CONDUIT ENTRY REQUIREMENTS
- STAINLESS PULL/IRON, ONE EACH CORNER
- TRENCH SUMP WITH STAINLESS STEEL GRATES

## 1 TYPICAL



# TYPICAL ELECTRICAL VAULT SUPPORT AND GROUNDING DETAIL

T) SCALE:NONE



## CONDUIT RISER DETAIL

T) SCALE: NONE

## LEGEND:

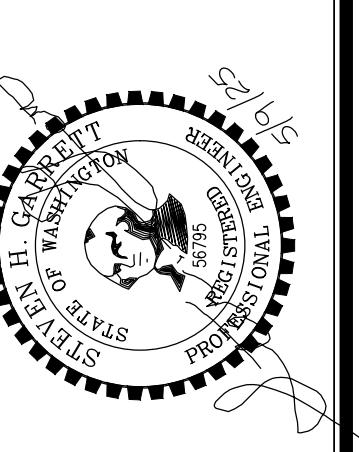
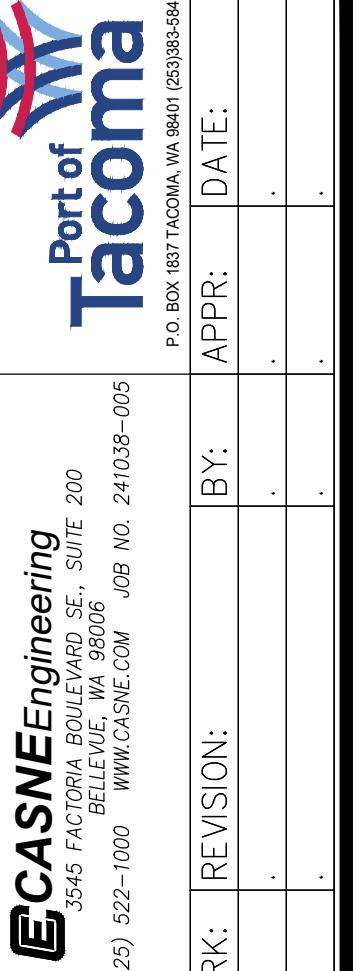
1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

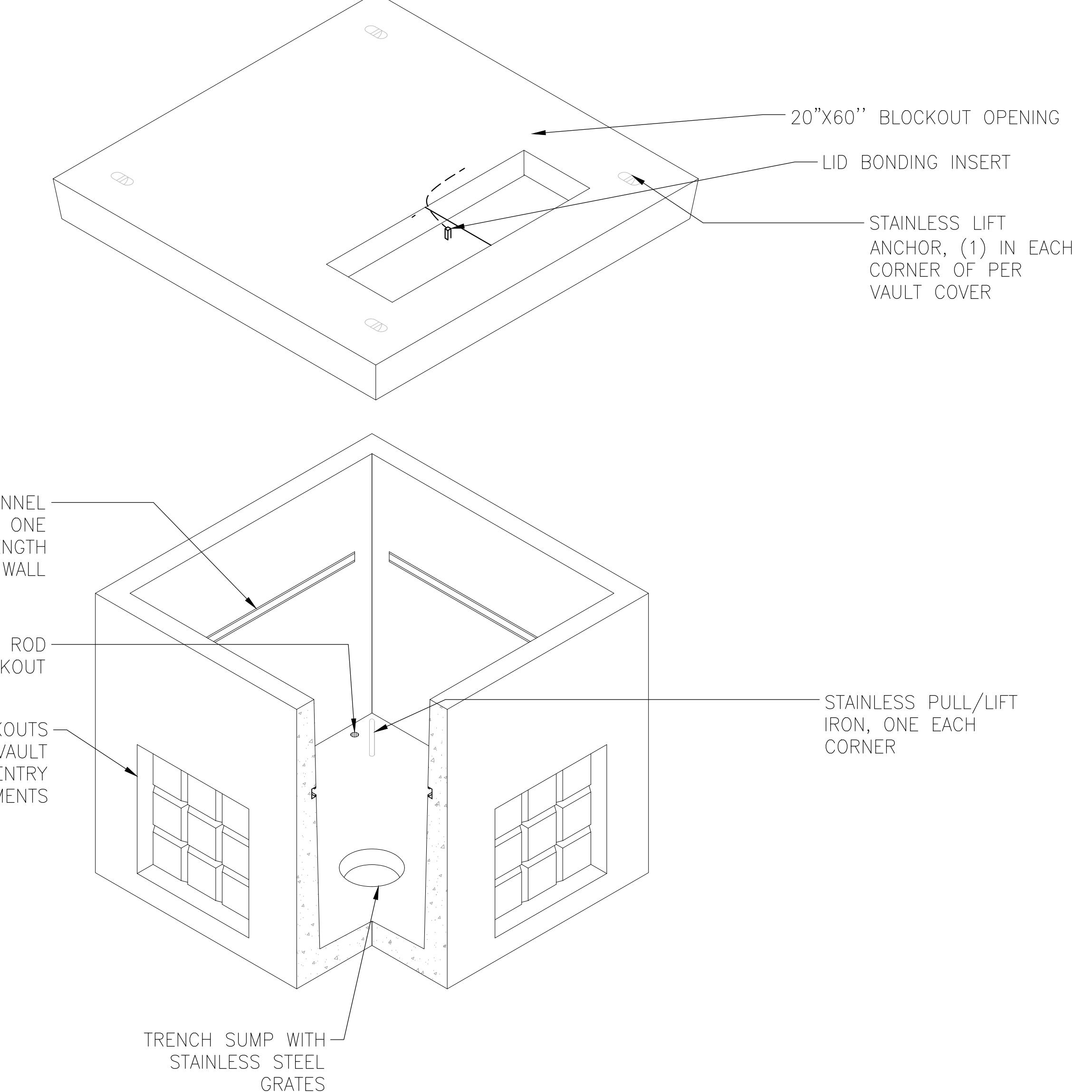
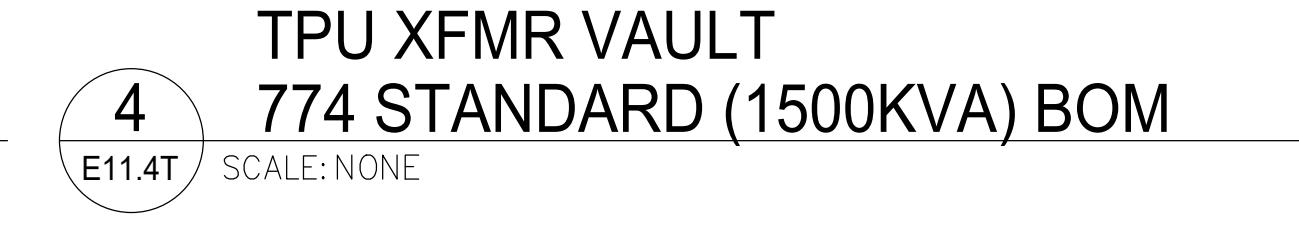
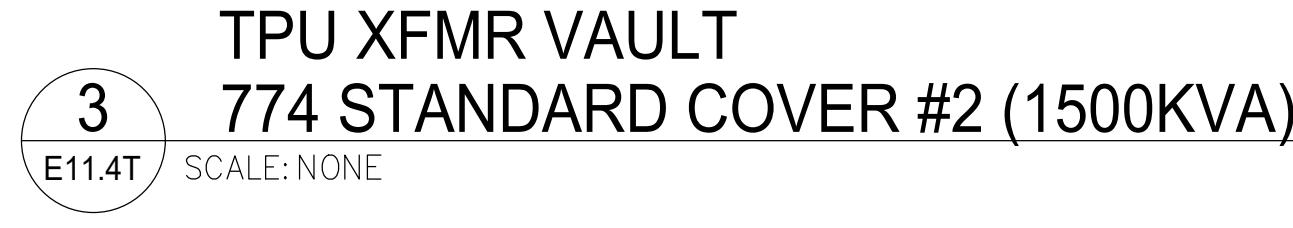
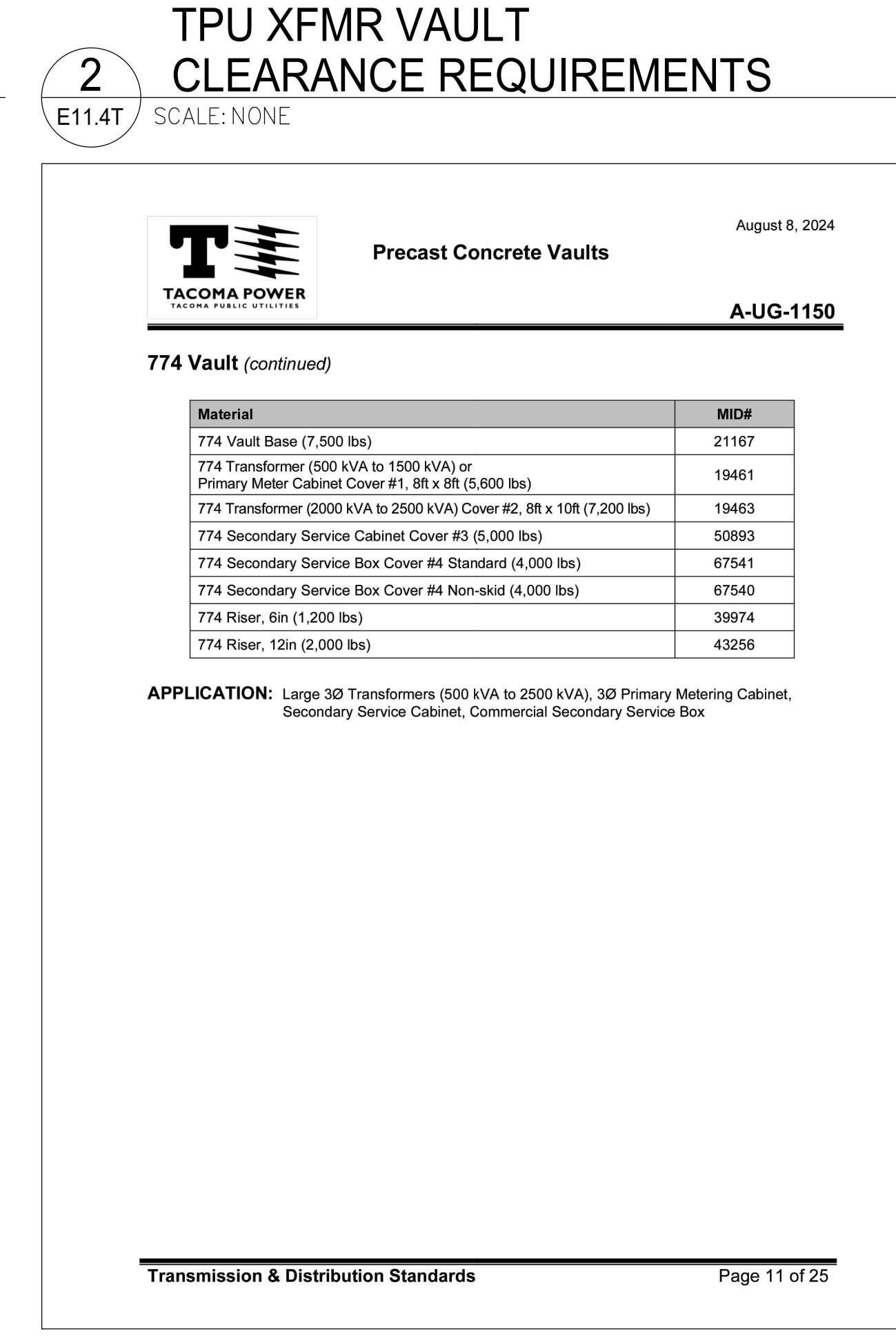
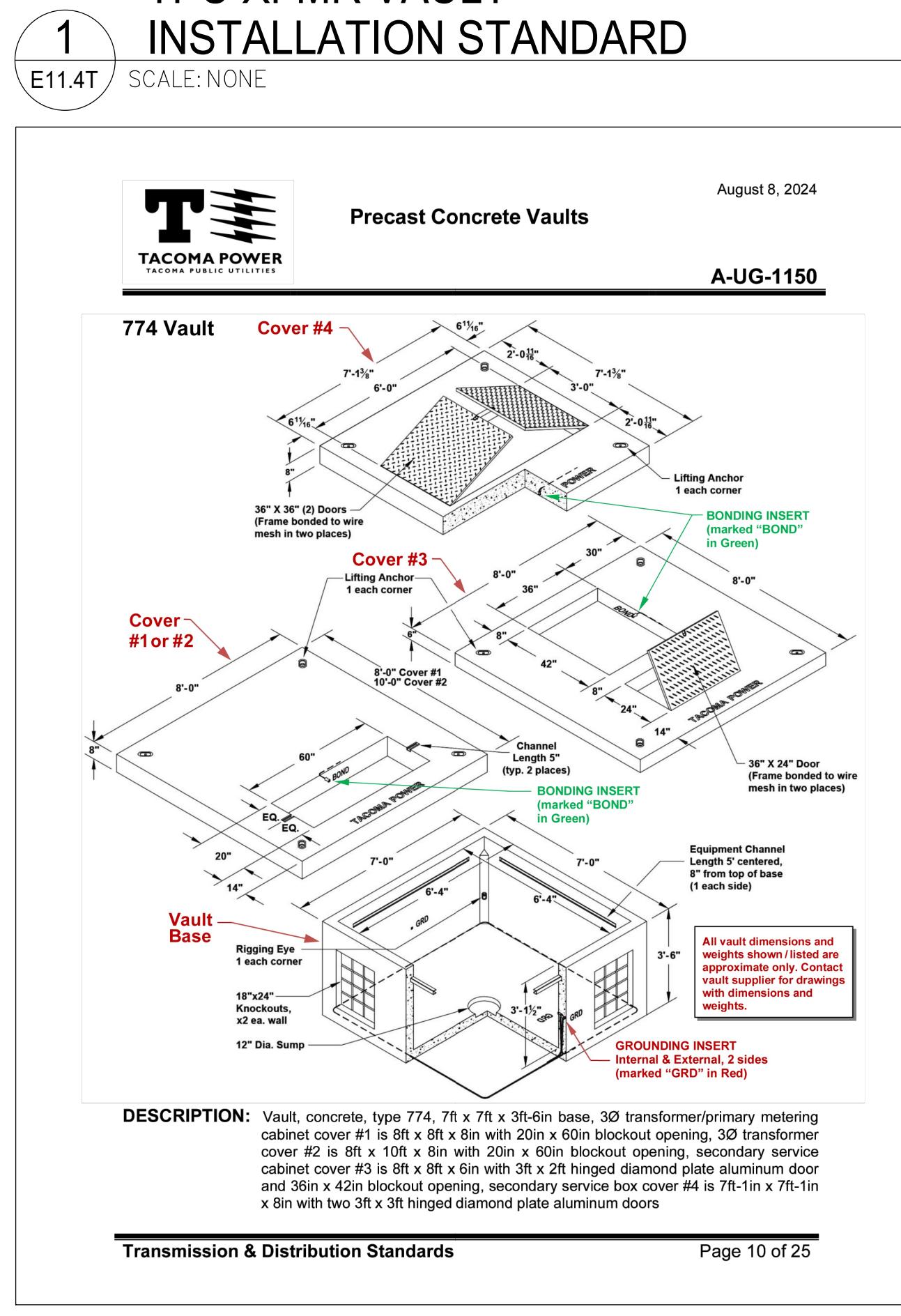
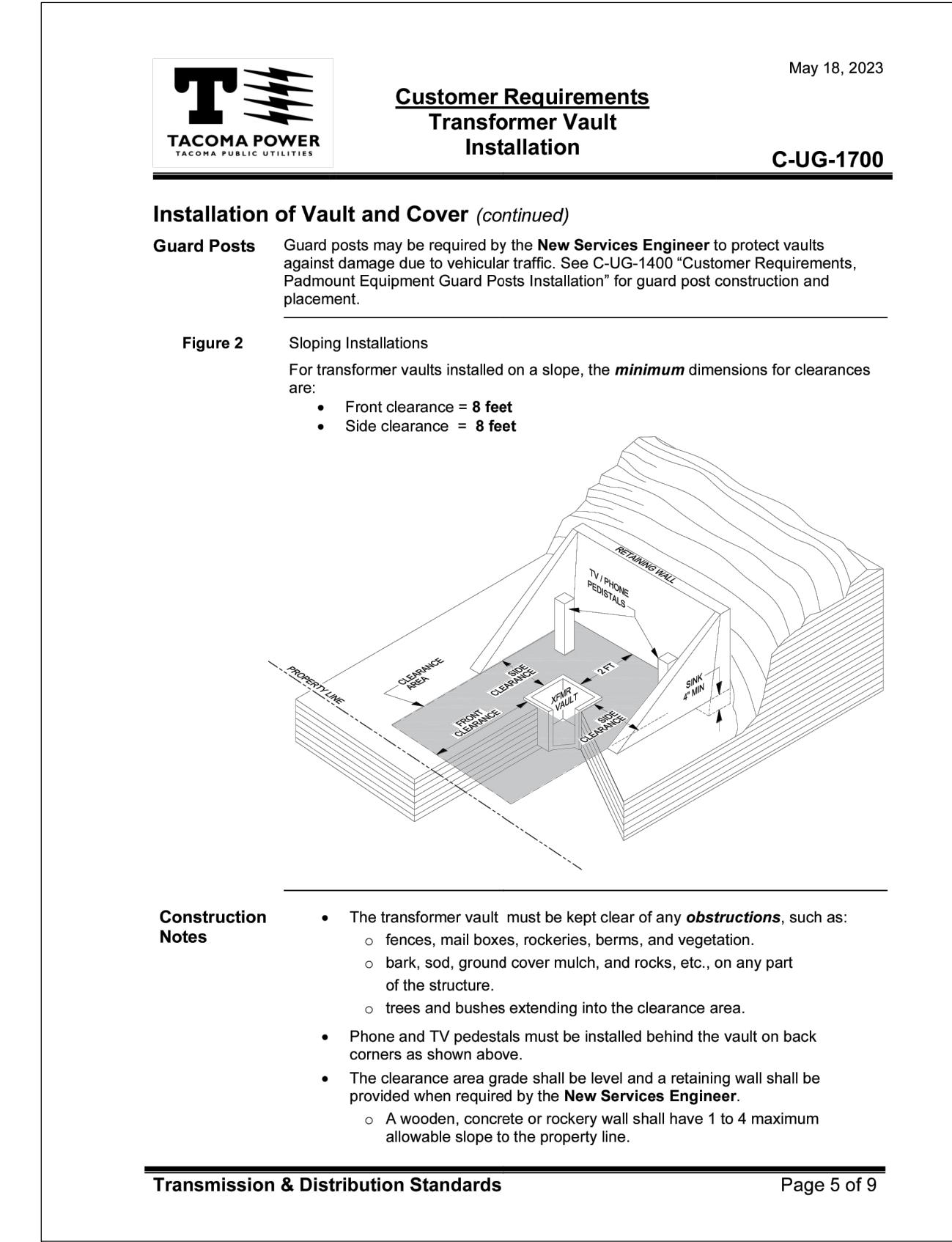
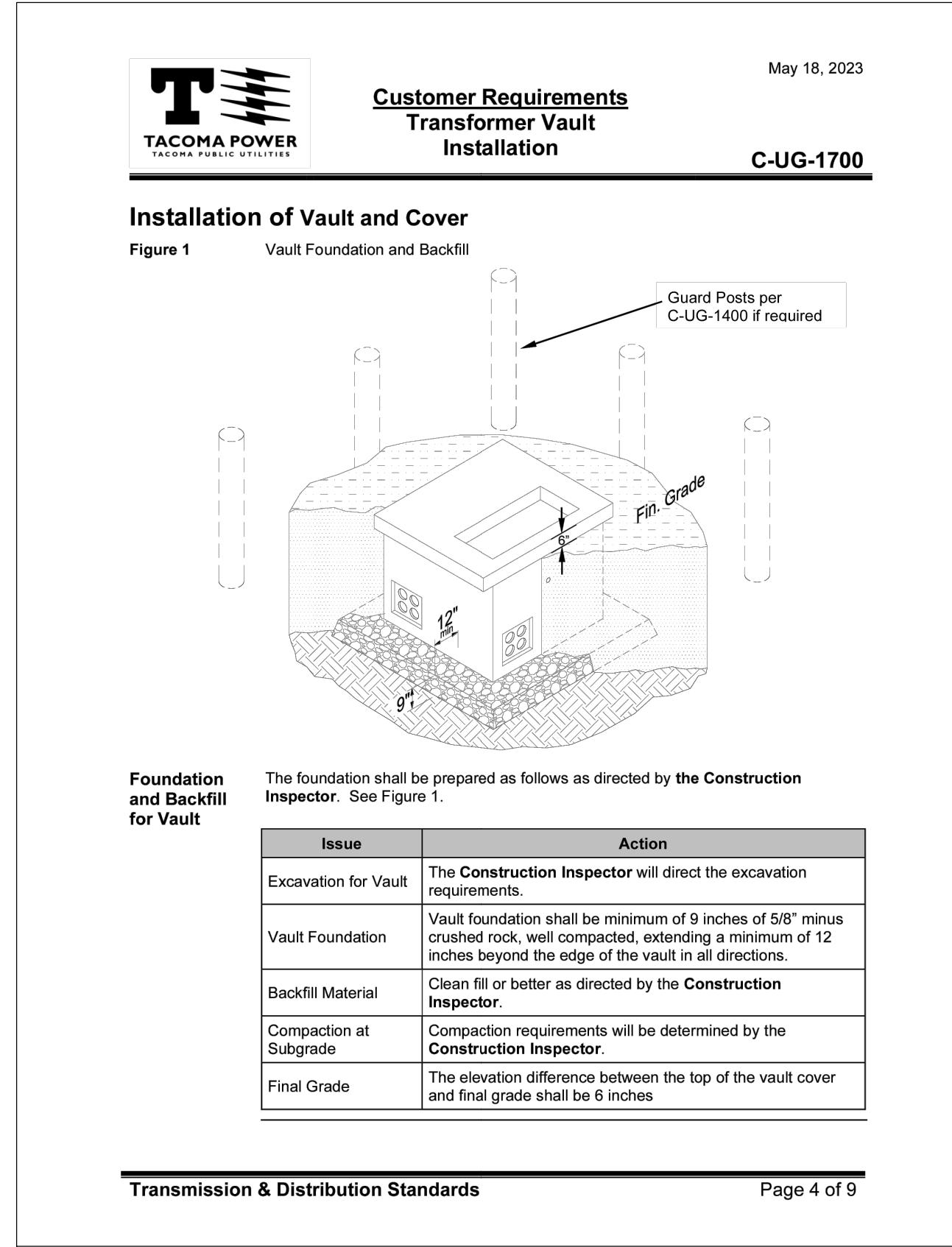
## GENERAL NOTES:

## GENERAL NOTES

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MAY 9, 2025





**LEGEND:**

- REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

**GENERAL NOTES:**

- REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
- THE TACOMA PUBLIC UTILITIES STANDARDS PROVIDED ON THIS DRAWING ARE INCLUDED FOR REFERENCE ONLY. COORDINATE ALL TACOMA PUBLIC UTILITIES INFRASTRUCTURE INSTALLATION WITH TACOMA PUBLIC UTILITIES.

