

# SCHEDULE 74 PROJECT PLAN

Capitol & Trosper conversion

## **Exhibit “A” Project Plan Schedule 74 Underground Conversion**

### **City of Tumwater–I-5/Trosper Road/Capitol Boulevard Reconfiguration Project**

PSE Project Number: 101148207

City of Tumwater Project Number: 2017023

4/18/22

Pursuant to Puget Sound Energy (“PSE”) Rate Schedule 74 and as described in this Project Plan, PSE will convert its existing overhead electrical distribution system of 15,000 volts or less to an equivalent Underground Distribution System. This Project Plan describes the scope of construction work (the “Construction Work”) to be performed by PSE and the City of Tumwater (the “City”) for the conversion of certain PSE electrical distribution system facilities as described herein (the “Conversion Project”). Construction of this Conversion Project is contingent upon and shall commence only after both written acceptance of this Project Plan and written execution of a Schedule 74 Construction Agreement by the City and PSE.

This Project Plan includes and consists of:

- Description of the Construction Work to be performed
- Construction Drawings, Standards, Specifications and Requirements for the Construction Work (attached)
- Operating Rights to be obtained for the Conversion Project (attached)
- Construction Work Schedule
- Construction Costs Estimate Summary (attached)

Revisions to this Project Plan must be mutually approved by the City and PSE.

### **Construction Work**

This Conversion Project will replace PSE’s existing overhead electrical distribution system with an Underground Distribution System within the following area (the “Conversion Areas”): Capitol & Trosper at the new roundabouts. The Conversion Project is approximately 488’ total feet in length, including laterals and road crossings.

The Conversion Project includes modification or replacement of all existing services lines within the Conversion Area to connect to the Underground Distribution System and removal of PSE’s existing overhead electric distribution facilities (including PSE distribution poles and pole mounted street lights) from the Conversion Area.

#### **Capitol Blvd SE**

- Re-frame existing pole, dead end the current OH 3ø feeder and re-anchor & guy at P01

- Install new 50' CL-3 pole w/600/200 amp terms & 4''/6'' risers at P02
- Slack span OH 3ø feeder from P01-P02
- Install two 5106 feeder pull vaults (PV1&2)
- Install two 575 primary pull vaults (PV3&4)
- Install of 600amp term & 6'' riser at P10
- Install new 3ø 120/208V PM transformer on easement behind Dutch Bros. Coffee. (5210)
- Install line extension from existing junction vault behind Dutch Bros. (5210).
- Remove poles and all PSE facilities at P03, P04, P05, & P06.

### **Lee St SW**

- Install new 45' CL-2 pole (P08A), guy & anchor on easement 20' south of P08.
- Dead end existing OH 3ø primary wire at P08A & Slack span P08-P08A.
- Primary line extension from existing TUT vault to P08 (road crossing)
- Remove pole P07

### **5210 CAPITOL BLVD SE – Dutch Bros.**

PSE initiated upgrades included in this project consist of: The shallow burial conduit crossing at 5252 Capitol Blvd over the existing communications duct bank will need rigid conduit and concrete encasement.

The following portions of PSE's existing facilities to be converted are located outside of Public Thoroughfare: 5210 Capitol Blvd, and 301 Lee St SW will need easements on private property.

In conjunction with this Conversion Project, PSE will remove its existing street lighting system from the Conversion Area. Provision of a replacement street lighting system within the Conversion Area is not included in this Project Plan. Replacement street lighting service can be provided by separate arrangement in accordance with applicable PSE Tariff Schedules.

## **Responsibilities of Parties**

### **City Responsibilities**

- At least ten (10) business days prior to the scheduled commencement of Construction Work, hold a pre-construction meeting involving all participants in the Conversion Project to review project design, coordination requirements, work sequencing and related premobilization requirements.
- At least ten (10) business days prior to the scheduled commencement of Construction Work, give PSE written notice to proceed with the Construction Work to allow for delivery of PSE materials to the job site and scheduling of PSE's on-site Inspector.
- Provide written notice to customers within the Conversion Area in advance of Conversion Project Construction Work start. The notice will include contact information for both the City and PSE, the expected Conversion Project schedule, anticipation of service interruptions and work required to be performed by customers.
- Coordinate other utility conversion, removal and relocation from PSE's poles.

- e) Provide all surveying for equipment placement, locations, and establish all grade elevations for the Underground Distribution System within the Conversion Area.
- f) Provide all necessary excavation, bedding, backfill, off-site disposal, site restoration and coordination for installation of the Underground Distribution System. This includes trenching, backfill, and restoration for cut-over and transfer of existing underground system and service lines from the existing overhead distribution system to the new Underground Distribution System.
- g) Coordinate private property trenching, excavation and restoration activity with private property owners affected by this Conversion Project.
- h) Provide flagging and traffic control as required for all work performed by the City.
- i) Install and proof all ducts and vaults for the Underground Distribution System (excluding work in ducts or vaults containing energized cables or equipment – see PSE Responsibilities) in accordance with PSE standards and specifications using ducts and vaults provided by PSE. “Proofing” as used herein is defined as verification using a mandrel that the duct and vault system is free and clear of damage, installed to the proper grade and at the proper location and contains a pulling line.
- j) Provide at least five (5) business days’ notice for scheduled delivery of PSE vaults by PSE’s vault supplier.
- k) Provide secure staging and storage area(s) for duct and vault materials provided by PSE. The City shall be responsible for the security and condition of these materials until they are installed and accepted by PSE or returned to PSE’s custody.
- l) Provide labor and equipment for the off-loading of PSE duct and vault materials delivered to the job site.
- m) Promptly following notice from PSE that the Underground Distribution System has been energized, provide notice to customers within the Conversion Area informing them of their obligation and responsibility to convert their overhead service lines to underground service lines as provided by state law or to modify existing underground service lines for connection to the Underground Distribution System. Affected service lines are listed in the Service Lines section of this Project Plan.
- n) Facilitate weekly (or as otherwise agreed by the City and PSE) construction coordination meetings to include all relevant parties participating in the conversion including PSE and its contractor(s), the City and its contractor(s), and other utilities.
- o) Modify, reroute or replace service lines to City owned facilities to connect to the Underground Distribution System.
- p) Following notification from PSE that Construction Work is complete, provide to PSE any Shared Government Costs as provided for in the Construction Agreement.

### **Puget Sound Energy Responsibilities**

- a) Following notice from the City, deliver or cause to be delivered all duct and vault materials to the designated staging/storage area(s). Acknowledge delivered quantities and condition of duct and vault materials by signing shipping manifests.

- b) Accept delivery of the completed duct and vault system once the new system has been proofed (as described above) by the City. PSE will provide a mandrel to the City to be used in proofing of the duct and vault system.
- c) Provide PSE electrical workers to complete duct installation and proofing when such work is performed at or in any energized vault containing energized cables or equipment.
- d) Install (except for ducts and vaults installed by the City) and energize the Underground Distribution System. Provide written notice to the City when the Underground Distribution System is energized.
- e) Perform cut-over and transfer of existing Underground Distribution System and existing underground service lines from the overhead distribution system to the new Underground Distribution System where applicable (see City Responsibility item “f” concerning trenching responsibility). PSE will notify the City for excavation and the affected customers at least two (2) business days prior to installation, transfer, and connection of underground service lines. Affected service lines are listed in the Service Lines section of this Project Plan.
- f) Install and connect replacement underground service lines to single family residences and connect modified and replacement non-residential underground service lines provided by customers within the Conversion Area pursuant to PSE Tariff Schedule 85. Affected service lines are listed in the Service Lines section of this Project Plan.
- g) Remove the existing overhead electric distribution system including, conductors, equipment, down guys, anchors and poles after all service lines to customers within the Conversion Area are connected to the Underground Distribution System and all other utilities have been removed from PSE’s poles. Holes left following removal of poles will be filled with crushed rock and compacted in accordance with applicable City standards or specifications.
- h) Provide flagging and traffic control as required for all work performed by PSE (except as may otherwise be reasonably provided by the City during installation of ducts and vaults in conjunction with City performed trenching, excavation, back-fill and restoration).
- i) Attend weekly (or as otherwise agreed by the City and PSE) construction coordination meetings facilitated by the City and its contractor during periods of Conversion Project construction.

### **Operating Rights**

The Underground Distribution System will be located within Public Thoroughfare except as described in the Operating Rights Attachment. The Construction Work will not be released by PSE for construction until i) all operating rights necessary for the installation of PSE’s facilities have been obtained and have been verified by PSE, or ii) the City otherwise signs an agreement releasing PSE from any and all financial obligations associated with the location or relocation of PSE facilities resulting from commencement of construction prior to acquisition of all identified necessary operating rights.

## **Construction Work Schedule**

The Construction Work will be performed in accordance with the following Work Schedule, unless this schedule is revised by mutual agreement of the City and PSE or circumstances beyond the reasonable control of the City and/or PSE preclude such performance.

**Installation of ducts and vaults:** Will depend on the amount of trench the contractor is able to excavate and backfill each day while maintaining traffic flow..

**Installation and energization of the Underground Distribution System:** TBD-all wire must be installed before cut over to the new infrastructure.

**Removal of overhead facilities:** Poles will cut at the communication level until the foreign facilities are removed. Lumen has asked that pole P03 is gifted to them after our facilities are removed. PSE will relinquish all responsibility to the pole if the City of Tumwater agrees to let the pole stay.

**Work Schedule Restrictions:** This project will be subject to heavy traffic flow at peak times due to freeway on/off ramps and major intersection. There has been no stated expectation of off hour work restrictions from the City of Tumwater at this time.

## **Construction Cost Estimate**

Estimate Breakdown:				
+	Materials		\$124,030	\$161,239
	Construction		\$144,701	\$188,112
	Engineering & Managemer		\$41,343	\$53,746
	Right of Way		\$0	\$0
	Overhead		\$62,015	\$80,619
	FIT		\$41,343	\$53,746
Total Project Cost Range:			<b>\$413,432</b>	<b>\$483,716</b>
Cost Share:				
PSE Estimated Cost	60.00%		\$248,059	\$290,229
GE Estimated Cost	40.00%		\$165,373	\$193,486

The estimated costs to perform the Construction Work and the allocation of costs between the parties are presented in the attached Construction Costs Estimate Summary. These estimated costs are valid for ninety (90) days from the date shown on the attached Construction Costs Estimate Summary. If this Project Plan and a Schedule 74 Construction Agreement are not fully executed within ninety (90) days from this date, the estimated costs shall be subject to revision.

The scope of work provided for in the previously executed Design Agreement has been completed with written acceptance of this Project Plan by the City and PSE. The Construction Cost Estimate reflects and provides for Construction Work costs commencing with PSE attendance at the required pre-construction meeting and receipt of the City's written notice to proceed with Construction Work. Work performed and/or costs incurred by PSE in response to City request following acceptance of the Project Plan and prior to the pre-construction meeting are not included in the Construction Cost Estimate, and shall be subject to addition to the Construction Cost Estimate by revision as described below.

Estimated Inspection and Service Provider outside Services costs are based on 4/19/2022 contract rates. Costs for Construction Work performed by PSE after 7/15/2022 shall be subject to revision to reflect PSE Service Provider contract rates which become effective after this date.

Changes in Construction Work scope, performance and/or schedule can result in actual Construction Costs that differ from estimated costs shown in the Construction Cost Estimate Summary. In the event performance of the Construction Work cannot or does not proceed substantially as provided in this Project Plan, such changes shall promptly be brought to the attention of PSE and the City when anticipated or known and shall be documented in a revision to the Construction Cost Estimate (a "Cost Estimate Revision") mutually agreed and executed by the City and PSE.

### **Project Assumptions**

The project design, construction plans and cost estimates are based on and reflect the following assumptions. Construction conditions that are not consistent with these assumptions may result in a request for change or an equitable adjustment to project compensation under Section 6 of the Construction Agreement and addressed by a Cost Estimate Revision.

### **Cost Assumptions**

1. The Construction Work will be performed in accordance with the Construction Drawings and Construction Work Schedule.
2. PSE's Project Manager will accept or reject (with written justification) the duct and vault installation work performed by the City within five (5) business days notice of completion from the City. In the event PSE rejects any of the ducts or vaults (with reasonable written justification), the City will perform the necessary remedial work. The City will then re-notify PSE and PSE shall have five (5) business days to accept or reject the remedial work.
3. All PSE cables can be pulled through the ducts and vaults system, including existing ducts and vaults if applicable, to be used for the Conversion Project utilizing normal cable pulling equipment and methods.

4. A City Street Use permit is the only permit necessary for PSE to perform its work for this Conversion Project and will be issued within two (2) weeks of PSE submitting a complete permit application (including any supporting documentation reasonably required by the City). There will be no charge for the permit or inspection fees.
5. The estimated daily productivity rate for PSE duct and vault installation is based on the City's contractor opening a minimum of 250' feet of trench per working day. The daily productivity rate is used to estimate the number of days a PSE Inspector will be required during installation of ducts & vaults. The Inspector will be scheduled in full day increments and in one continuous effort. Changes to a continuous schedule require a minimum of five days advance notice and must be mutually agreed between the City and PSE.
6. Attendance by the PSE Project Manager at scheduled weekly construction coordination meetings is included and reflected in the Construction Cost Estimate during periods when the PSE ducts and vaults are actively being installed and when the PSE line crew is performing installation, energization, cut-over and removal work. Attendance at additional meetings that may be requested/required during other periods will be addressed by a Cost Estimate Revision.
7. Traffic control provided by PSE assumes the use of two flaggers, basic signage and simple channelization. Additional traffic control measures are not included and if requested/required will be addressed by a Cost Estimate Revision.
8. Work to be performed by PSE does not include installation and/or removal of Temporary Service facilities at the request of others during construction.
9. Cut-over and transfer work will be completed during regular working hours except as described in Schedule Assumption #3 below. Changes in the performance of this work will be addressed by a Cost Estimate Revision.
10. New guy anchors shall be installed prior to installation of new ducts in the same area.
11. When Fluidized Thermal Backfill (FTB) is used, associated cost will be allocated 100% to PSE when required for a Company Initiated Upgrade and otherwise 100% to the City.
12. Installation of protective bollards may be necessary at some locations and may not be included in the project design. In the event unplanned bollards are required, associated costs will be a Shared Cost and addressed by a Cost Estimate Revision.

### **Schedule**

1. There will be a total of two (2) PSE crew mobilizations as follows: i) one mobilization of an underground line crew for installation of underground conductors and equipment; and ii) one mobilization of an overhead line crew for removal of the existing overhead facilities. Once mobilized PSE crews will have continuous productive work until all PSE Construction Work is complete.
2. All PSE Construction Work will be performed during regular working hours from 8:00am-4:30pm excluding holidays. In the event that lane closures are necessary for performance of work, PSE shall be limited to working between the hours of 9:00am-3:00pm. PSE and the City will mutually agree to weekly work schedules for the Construction Work. PSE shall be

allowed to perform PSE work as scheduled without changes or interruptions caused by other construction activities.

3. PSE customers within the Conversion Area will experience interruption of electric service during performance of the Construction Work when cutting over and transferring system and customer loads from the overhead distribution system to the Underground Distribution System. Cut-over and transfer work will be performed during the regular working hours specified in Schedule Assumption #2 above except as otherwise provided below. PSE will notify customers at least two (2) business days in advance of scheduled service interruptions.

## **Additional Considerations**

### **Service Lines**

Service lines within the Conversion Area must be modified or replaced to provide underground service from the Underground Distribution System as described in attached Service Lines Replacement & Modification Requirements. Performance of the work and associated costs shall be governed by PSE Tariff Schedule 85.

### **New Service**

Connection of new or increased load for City facilities (such as new traffic signals) under terms of PSE Tariff Schedule 85 will be addressed on a separate work order and work sketch. Additional costs may apply and will be quoted separately.

### **PSE Design & Construction Standards**

This Conversion Project has been designed and will be constructed in accordance with PSE design and construction standards in effect as of the date of this Project Plan. PSE standards applicable to Construction Work to be performed by the City have been provided to the City in PSE's "Electric Distribution Trench/Duct/Vault Construction Standards, 2013". All relevant PSE standard described above are attached to this Project Plan by this reference.

### **Temporary Support (Holding) of PSE Poles**

Whenever any pole(s) are required to be temporarily supported (held) due to excavation in proximity to such poles, the City will coordinate with PSE to provide such support. The need to temporarily support such poles shall be determined by PSE, and if required, such support shall be provided by PSE. As used herein, "temporary support" means supporting one or more poles for a continuous working period of ten hours or less.

### **Adjusting Energized Vaults to Final Grade**

If PSE is required to adjust (newly installed) and energized vault lids to final grade PSE will submit a change order to the City for labor and materials required for final adjustment. This

change order will be 100% City Cost. Any “existing” energized vault’s that require final grade adjustments will be performed by PSE at 100% PSE cost.

## **Acceptance of Project Plan**

The City and PSE mutually agree to and accept this Project Plan as of the date indicated below:

For the City:

For PSE:

By: \_\_\_\_\_

By: *James Lengel*

Its: \_\_\_\_\_

Its: Project Manager

Date: \_\_\_\_\_

Date: 4/19/22

# RAB @ Capitol Blvd & Trospers Rd

## PI - Relocate OH & UG Facilities

### PSE CAPITAL PROJECT

#### GENERAL SPECIFICATIONS

##### Scope of Work

PSE project limits - Relocate PSE Facilities that are in conflict with road widening and new Roundabout Design.

##### General

- All work is to be completed per PSE Standards & Practices. Copies of all PSE Standards are available upon request.
- Work sites shall be kept clear of debris and all construction materials; equipment and packing shall be removed daily.
- Return all unused and removed poles, transformers and hardware to PSE, storeroom. All copper shall be coiled and returned the day it is removed from the poles. Remove all unused pins and insulators.
- **Return all streetlights, area lights and floodlights to Sumner yard.**

##### Preconstruction

- Notify appropriate city, County or DOT authorities 48 to 72 hours, or as required by permitting agency, in advance of starting work in Right-of-way involving a Permit.
- All system switching shall be approved by **System Operations (425-882-4652)** a minimum of 48 hours in advance.
- Notify customers of all outages 48 hours in advance.

##### Work Drawings & Documents

- Field design changes shall be approved by PSE Project Manager or Engineer.
- Mark all field changes, equipment ID numbers and Underground cable information in red on Foreman's copy of worksketch.
- Return one Foreman's copy of worksketch to Project Manager at completion of job.
- When permits are required, a copy shall be available on work site at all times.

##### Safety

- Refer to PSE standards 6275.3000 and 6275.6000 for system ground requirements.
- Refer to PSE standards 6275.9050 for personal protective grounding requirements.
- Refer to PSE standards 6275.9150 for vehicle grounding and barricading requirements.
- Proper line clearances shall be taken at the beginning, and released at the end, of each work day, or as otherwise instructed by the System Operator.
- Provide signs, barricades, and traffic control in conformance with permit regulations.
- Utilize flagging and other vehicle traffic control as necessary and in conformance with local traffic regulations.
- Maintain traffic flow as required by permitting agency.

##### Erosion & Sediment Control

- Refer to PSE standards 0150.3200 for minimum requirements.
- Comply with all requirements of permitting agency.
- Installed erosion & sediment devices shall be maintained until vegetation has been re-established or disturbed soil has been otherwise permanently stabilized.

##### Joint Facilities

- Coordinate with Communication Companies for transfers.

#### OVERHEAD CONSTRUCTION

##### Poles & Structures

- Poles are to be installed or relocated as staked. Unless otherwise noted, all pole location measurements are from the center of the pole.
- All new poles set shall be the class indicated on the sketch, or better. Do not set a lower class pole than specified.
- Install ground plate assembly on all new poles. Install Switch Ground Assembly per standard specification 6014.1000 at new gang operated switch locations.
- Install grid numbers on all new and existing poles as shown on sketch.
- Straighten existing poles as indicated or as necessary.
- Treat all field-drilled poles with copper naphthenate wood preservative.
- Remove old poles after communication companies have transferred off and return to PSE storeroom. Fill and crown pole holes and restore area similar to adjacent landscaping.

##### Conductors & Equipment

- Transfer all overhead and underground primary, secondary and service conductors and guys to new poles set, unless otherwise indicated on this sketch.
- Transfer existing transformers to new poles unless otherwise indicated on this sketch.
- Use stirrups to connect all overhead and underground primary taps, and all transformers. Install at all sites being worked within the scope of the project where they are currently missing.
- Use 397 AAC and Ampact connectors for all bare conductor feeder jumpers and 600 amp switch jumpers. Install tree wire conductor for jumpers on all poles that are double deadended with tree wire.
- Apply grit inhibitor on all Ampact, stirrup, and dead-end connections.
- Connect primary taps and transformers to same phase as existing unless otherwise shown on the drawing.
- All neutral connections to be made with solid compression connectors. Connect all pole grounds to common neutral.
- Use Load-interrupter cutouts (with arc shields) on all primary overhead and underground taps with fused protection above 40T.
- Install Wildlife Protectors on all transformers.

#### UNDERGROUND CONSTRUCTION

##### Excavation

- Trenching outside of the Right-of-way shall be of sufficient depth to provide a minimum of 36" of cover for primary conductors and 24" of cover for secondary conductors.
- Road crossings and all trenches within the Right-of-way shall be of sufficient depth to provide a minimum of 36" of cover for all conductors or as required by the permitting Agency.
- All conductors/conduits shall have a minimum of 3" of bed and 3" of clean sand cover.
- No rocks larger than 6" shall be included in backfill.
- Backfill in road crossings and within the Right-of-way shall be compacted to 95% density or as required by the permitting Agency.
- Restore all excavated areas to original condition.
- **If four or more six inch conduits are installed in a trench, fluidized thermal backfill (FTB) shall be installed around the conduits to a depth of six inches above and to the sides of the conduit, and two inches underneath, per PSE Standard 6790.0140.**

##### Vaults & Handholes

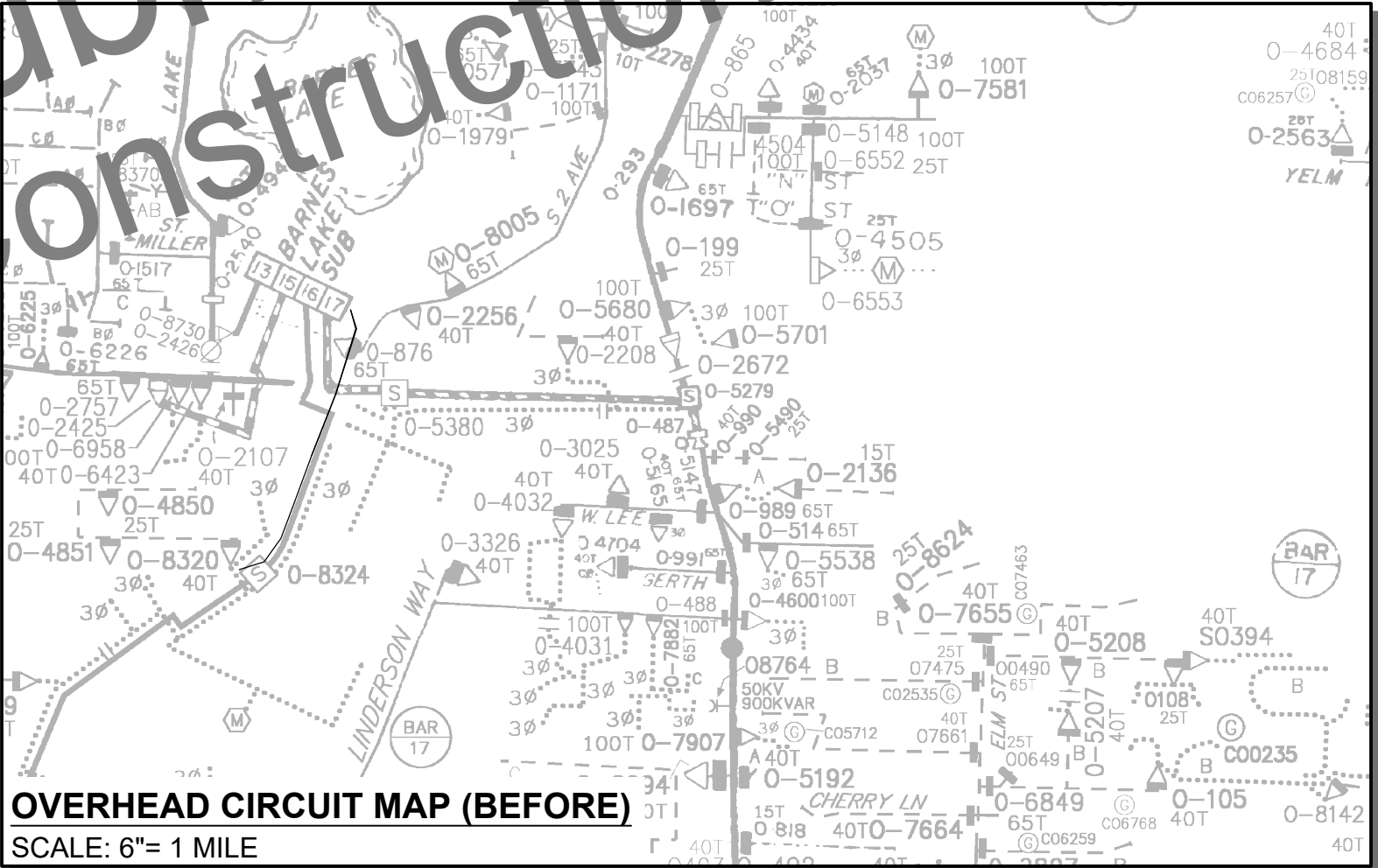
- Refer to PSE standard 6775.0040 "Vault and Handhole Installation"
- Vaults shall be placed level and 2" above final grade in landscaped areas and flush with final grade when placed in hard surface areas.
- A minimum 6" bed of 5/8" crushed rock shall be placed under all vaults.
- All conduit entrances shall be grouted.

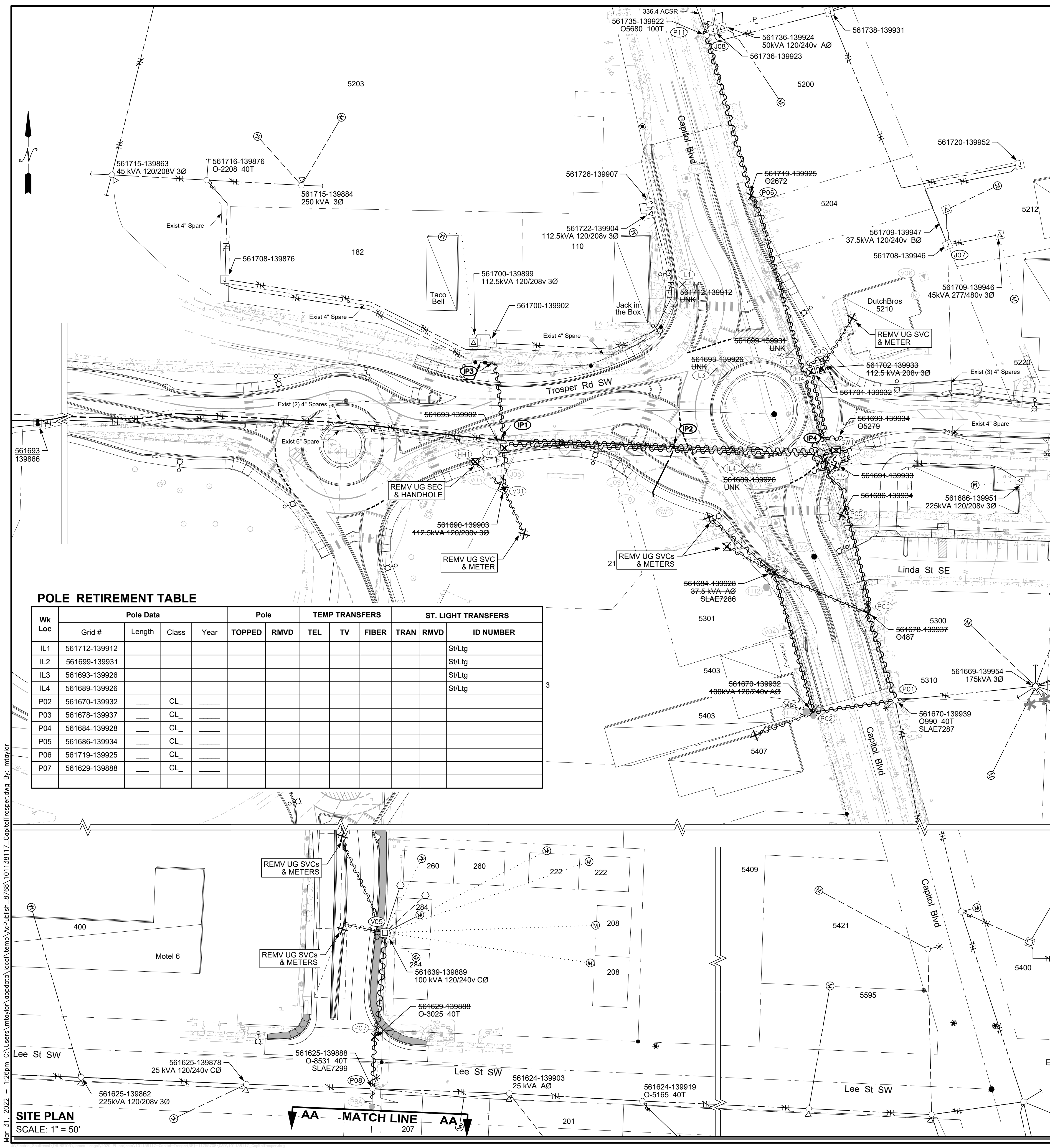
##### Conductors & Conduit

- Refer to PSE standard 6800.6000 "PVC Conduit Installation".
- Unless splices are called for, or otherwise noted or approved, conduit risers shall be plumbed directly to road crossing conduits.
- Install insulating caps on all unused primary bushings.
- All "spare" conduits shall be capped at each end.

#### EROSION & SEDIMENT CONTROL REQUIREMENTS

EROSION & SEDIMENT CONTROL SHALL BE PER PSE STANDARD PRACTICE 0150.3200 TECHNIQUES FOR TEMPORARY EROSION & SEDIMENT CONTROL & ANY ADDITIONAL LOCAL JURISDICTION REQUIREMENTS. (LOCAL JURISDICTIONS MAY HAVE ADDITIONAL REQUIREMENTS INCLUDING NOTES DETAILING WHERE EROSION OR SEDIMENT CONTROL STRUCTURES ARE TO BE INSTALLED, CROSS SECTION DETAILS OF THE TYPICAL EROSION STRUCTURES, & SPECIAL REQUIREMENTS FOR WORK IN SENSITIVE AREAS.)





POLE RETIREMENT TABLE

Wk Loc	Pole Data				Pole		TEMP TRANSFERS				ST. LIGHT TRANSFERS		
	Grid #	Length	Class	Year	TOPPED	RMVD	TEL	TV	FIBER	TRAN	RMVD	ID NUMBER	
IL1	561712-139912											St/Ltg	
IL2	561699-139931											St/Ltg	
IL3	561693-139926											St/Ltg	
IL4	561689-139926											St/Ltg	
P02	561670-139932		CL										
P03	561678-139937		CL										
P04	561684-139928		CL										
P05	561686-139934		CL										
P06	561719-139925		CL										
P07	561629-139888		CL										

SITE PLAN  
SCALE: 1" = 50'

SITE SPECIFIC NOTES

- AT IP1**  
LOCATE 4" CONDUIT CONTAINING CABLE #s A0-20073, B0-20074 & C0-20075  
PULL BACK FROM (J01) AND REDIRECT INTO (J05)  
LOCATE AND REDIRECT (2) SPARE 4" CONDUITS INTO (J05)
- AT IP2**  
LOCATE AND 6" CONDUIT CONTAINING CABLE #s A0-21386, B0-21387 & C0-21388  
LOCATE AND 4" CONDUIT CONTAINING CABLE #s A0-20579, B0-20580 & C0-20581  
LOCATE AND REDIRECT 6" CONDUIT & CABLES INTO (SW2)
- AT IP3**  
LOCATE 4" CONDUIT CONTAINING CABLE #s A0-20073, B0-20074 & C0-20075  
PULL BACK FROM (J01) AND REDIRECT INTO (J06)
- AT IP4**  
LOCATE AND REDIRECT 4" CONDUITS & CABLES INTO (J03)
- AT P01** GRID # 561670-139939 \_\_' CL\_ (19\_)  
REMOV 3Ø OH 336.4 ACSR LINE (N)  
REMOV SGL Ø FG ARM MOUNTED DE (W)
- AT P02** GRID # 561670-139932 \_\_' CL\_ (19\_)  
REMOV ALL DIST HARDWARE  
REMOV \_\_' CL\_ (19\_) POLE
- AT P03** GRID # 561678-139937 \_\_' CL\_ (19\_)  
REMOV OH SEC NW  
REMOV EXIST 600A TERM SW # O487
- AT P04** GRID # 561684-139928 \_\_' CL\_ (19\_)  
REMOV ALL DIST HARDWARE  
REMOV \_\_' CL\_ (19\_) POLE  
REMOV ANCH & CUT 1' BELOW FINAL GRADE
- AT P05** GRID # 561686-139934 \_\_' CL\_ (19\_)  
REMOV ALL DIST HARDWARE  
REMOV \_\_' CL\_ (19\_) POLE  
CUT ANCH 1' BELOW FINAL GRADE
- AT P06** GRID # 561719-139925 \_\_' CL\_ (19\_)  
REMOV OH DIST FACILITIES  
CUT ANCH 1' BELOW FINAL GRADE
- AT P07** GRID # 561629-139888 \_\_' CL\_ (19\_)  
REMOV ALL DIST HARDWARE  
REMOV \_\_' CL\_ (19\_) POLE  
REMOV ANCH & CUT 12" BELOW FINAL GRADE
- AT P08** GRID # 561625-139888 \_\_' CL\_ (19\_)  
REMOV DES (N & S)  
REMOV C/Os (S) O8531
- AT P09** GRID # 561605-139887 \_\_' CL\_ (19\_)  
EXIST POLE TO REMAIN
- AT P10** GRID # 561594-139887 \_\_' CL\_ (19\_)  
EXIST POLE TO REMAIN
- AT P11** GRID # 561735-139922 \_\_' CL\_ (19\_)  
EXIST POLE TO REMAIN

SITE SPECIFIC NOTES - Continued:

- AT J01**  
CUT ELBOWS FROM CABLE #s A0-20073, B0-20074 & C0-20075  
**NOTE:** CABLES WILL BE PULLED BACK TO (IP3) AND REDIRECTED INTO (J06).  
ALL OTHER CABLES WILL BE REMOVED.  
REMOV ALL DIST HARDWARE & VAULT
- AT J02**  
CUT ELBOWS FROM CABLE #s A0-23569, B0-23570 & C0-23571  
**NOTE:** CABLES WILL NOW TERMINATE IN (J03) SEE Pg 03  
REMOV ALL DIST HARDWARE & VAULT
- AT J04** GRID # 561701-139932  
REMOV
- AT V02** GRID # 561702-139933  
REMOV
- AT V05** GRID # 561702-139933  
TOTAL UG XFMR TO REMAIN
- AT SW1** GRID # 561693-139934  
REMOV ALL TERMS AND CUT CABLE AT EDGE OF VAULT  
**NOTE:** CABLE #s A0-21386, B0-21387 & C0-21388 WILL BE PULLED BACK TO (IP2) AND REDIRECTED INTO SW2. ALL OTHER CABLES WILL BE REMOVED.  
REMOV EXIST SWITCH AND VAULT

OH WIRE REMOVAL TABLE

Work Location		Wire Size & Type	Quantity	Length (per conductor)	Remarks
From	To				
P01	P02	PRI & NEUT - #2 ACSR	(1)	85	
P01	P03	PRI - #2 ACSR	(3)	145	
P01	P03	NEUT - #4 ACSR	(1)	145	
P02	P04	PRI - #2 ACSR	(3)	145	
P02	P04	NEUT - #4 ACSR	(1)	145	
P07	P08	PRI & NEUT - #2 ACSR	(2)	55	
P03	P04	SEC - OH TPLX	(1)	100	
P06	P11	PRI - 336.4 ACSR	(3)	165	
P06	P11	NEUT - #4 ACSR	(1)	165	

UG CABLE REMOVAL TABLE

Work Location		Wire Size & Type	Quantity	Length (per conductor)	Remarks
From	To				
J01	V01	1/0 AL JACKETED	(3)	60	
J01	J02	1/0 AL JACKETED	(3)	345	
J02	J04	1/0 AL JACKETED	(3)	115	
J04	V02	1/0 AL JACKETED	(3)	30	

**Project Manager Contact Information:**

Manager: Jim Lengel  
Cell Phone: 425-449-9954  
E-Mail: James.Lengel@pse.com

Developer Locates Req'd Yes  
PSE Locates Req'd Yes  
Outages Req'd Yes  
Flagging Req'd Yes

For contacts below dial 1-888-CALL PSE (225-5773)

**CALL (800) 424-5555  
2 BUSINESS DAYS BEFORE YOU DIG**

THIS SKETCH NOT TO BE RELIED UPON FOR EXACT LOCATION OF EXISTING FACILITIES

REV#	DATE	BY	DESCRIPTION	FUNCTION	CONTACT	PHONE NO	DATE
3				PROJECT MGR	J.Lengel	425-449-9954	07/06/21
2				ENGR - POWER	M.Taylor	85-5970	07/06/21
1				ENGR - GAS			
				DRAWN BY	M.Taylor	85-5970	07/06/21
				CHECKED BY			
				FOREMAN #1			
				FOREMAN #2			
				MAPPING			

UTILITIES	CONTACT	PHONE#

INCIDENT	MAOP
Gas Order	Elect Order
SCALE	PAGE
AS NOTED	02/05

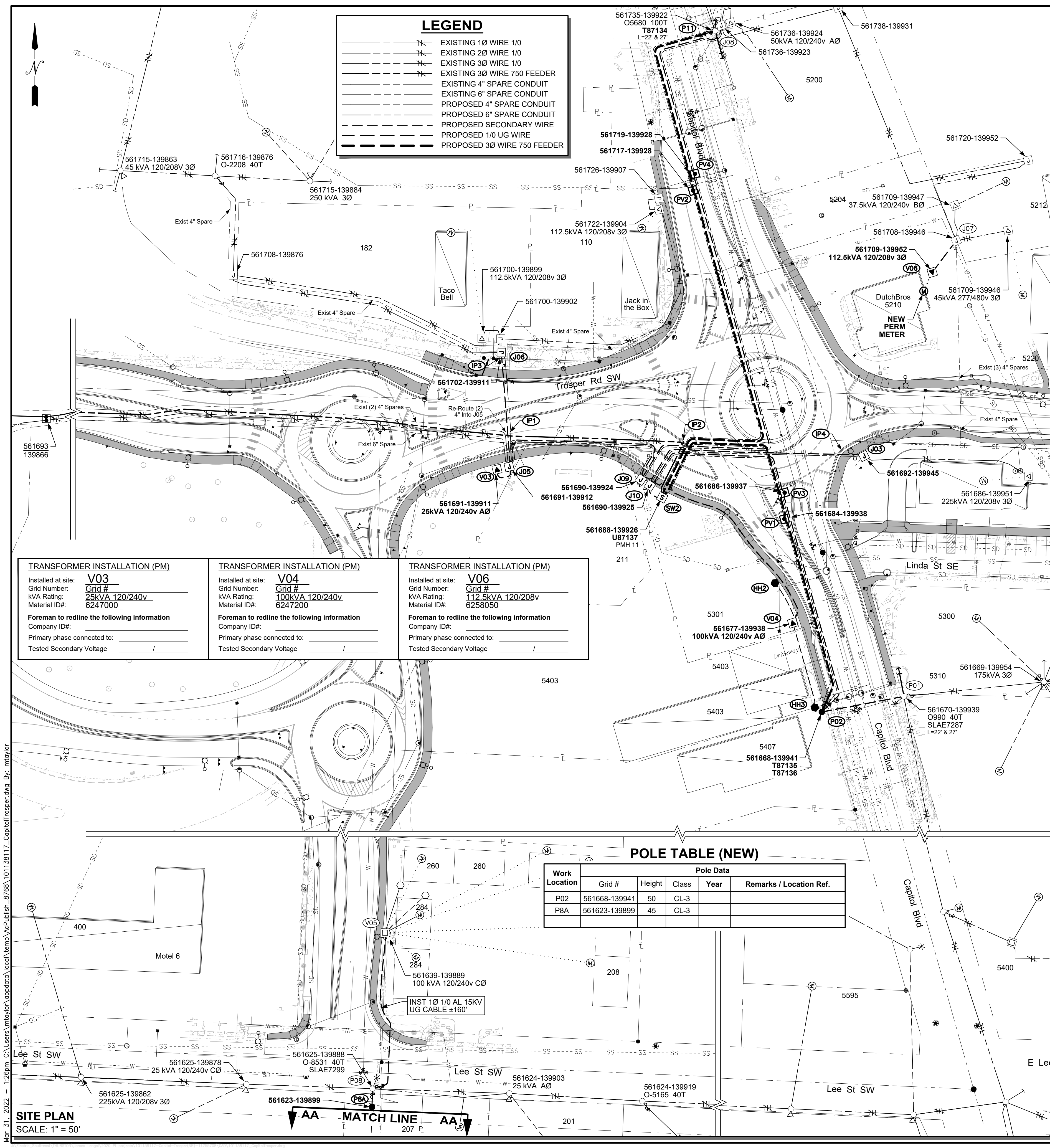
**PSE**  
DESIGNED BY PSE

**PUGET SOUND ENERGY**

PI - RAB @ Capitol Blvd & Trospen Rd  
PI - Relocate OH & UG Facilities  
Trospen Rd SW & Capitol Blvd  
Removal Plan And Notes

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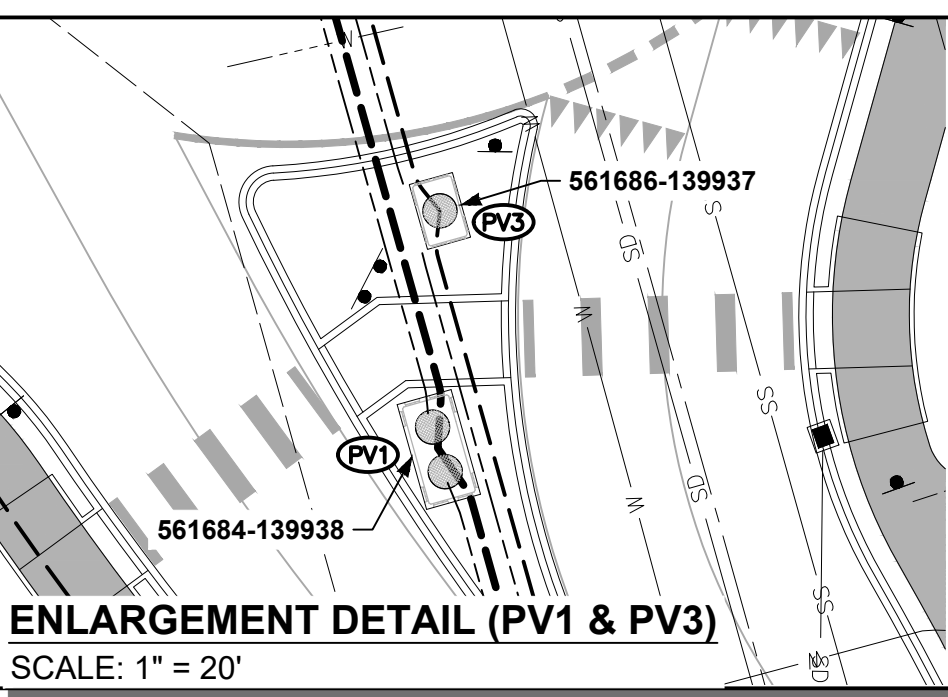
101138117



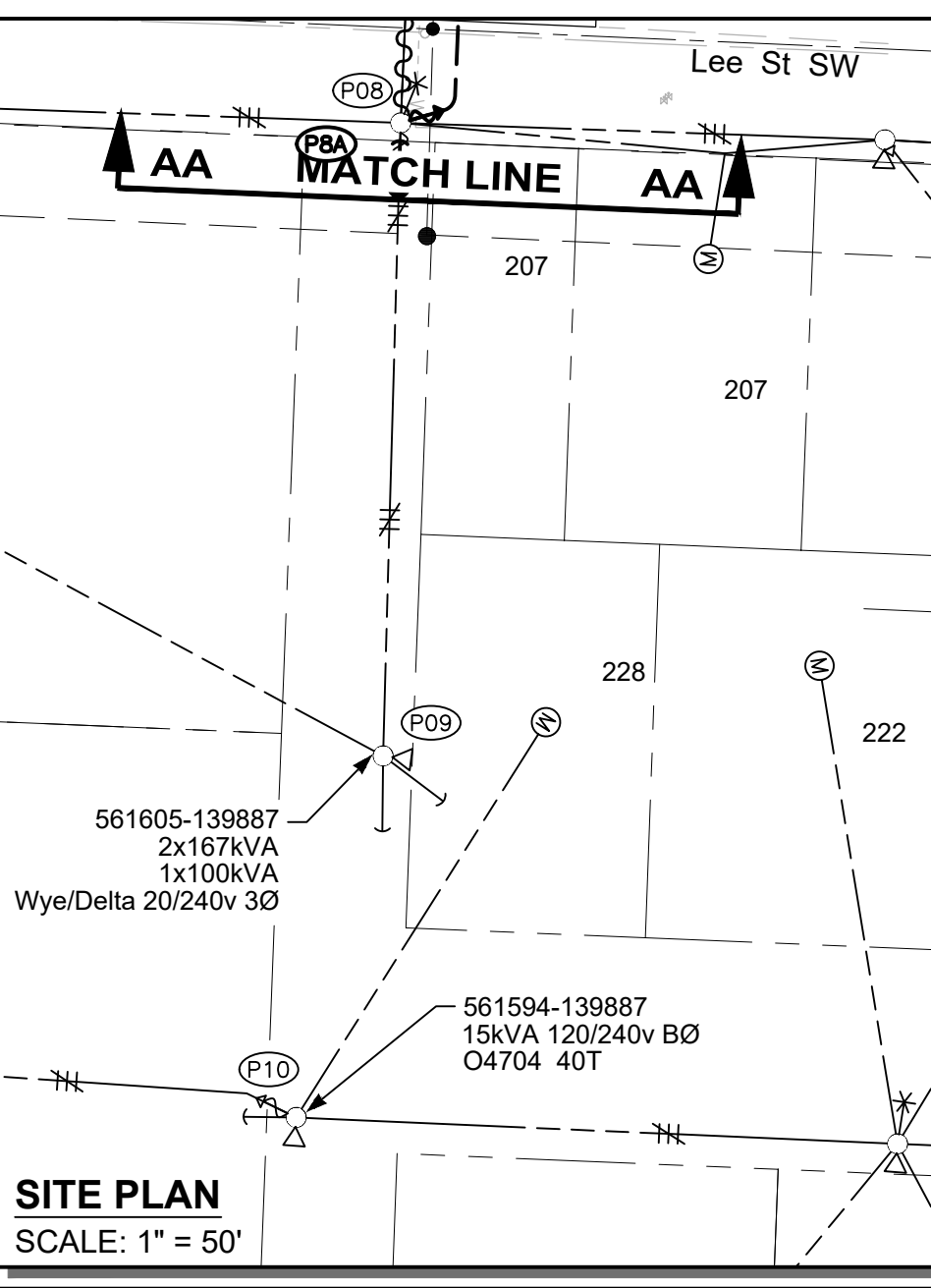
**SITE PLAN**  
SCALE: 1" = 50'

- SITE SPECIFIC NOTES:**
- AT IP1**  
LOCATE AND REDIRECT (2) SPARE 4" CONDUITS INTO (J05)
- AT IP2**  
LOCATE AND REDIRECT 6" CONDUIT & CABLES INTO (SW2)
- AT IP3**  
LOCATE 4" CONDUIT CONTAINING CABLE #s A0-20073, B0-20074 & C0-20075  
PULL BACK FROM (J01) AND REDIRECT INTO (J06)
- AT IP4**  
LOCATE AND REDIRECT 4" CONDUITS & CABLES INTO (J03)
- AT P01** GRID # 561670-139939 \_' CL\_ (19\_)  
INST FG ARM DE (S) - Std 6033-2030 (DEC3315)  
IN BUCK POSITION  
INST SLACK SPAN DE (W) - Std 6033-5010 (SSF6313)  
INST 7/16" PRI DWN GUY (N) TO 24" PLATE ANCH L=27"  
INST 3/8" NEUT DWN GUY (N) TO 20" PLATE ANCH L=22"
- AT P02** GRID # 561670-139932 \_' CL\_ (19\_)  
REPL \_' CL\_ (19\_) POLE W/ 50' CL3 POLE  
INST SLACK SPAN DE (E) - Std 6033-5010 (SSF312DE)  
INST 200A & 600A DBL TERMINATIONS - Std 6043-1022 (TSU6D31)  
INST SW BOARDS # T87136 (200A) & # T87135 (600A)  
INST GRID # 561668-139941
- AT P08** GRID # 561625-139888 \_' CL\_ (19\_)  
REMV DEs (N)  
INST 30' SLACK SPAN DE (S) - Std 6033-5010 (SSD312)
- AT P8A**  
INST 30' SLACK SPAN DE (N) - Std 6033-5010 (SSD312)  
INST 30' DE (S) - Std 6033-1040 (DE2315)  
INST GRID # 561623-139899
- AT P11** GRID # 561735-139922 \_' CL\_ (19\_)  
INST 30' DE (N) - Std 6033-1042 (DE3315)  
INST 7/16" PRI DWN GUY (S) TO 24" PLATE ANCH L=27"  
INST 3/8" NEUT DWN GUY (S) TO 20" PLATE ANCH L=22"  
INST 600A FEEDER TERM - Std 6043-1020 (TSU3DF1)
- AT J03**  
INST 4'-8"x 7" VAULT & COVER  
INST (3) 4POS J-BOX  
INST (6) L/B ELBOWS & (6) INSUL CAPS  
INST GRID # 561692-139945
- AT J05**  
INST 4'-8"x 7" VAULT & COVER  
INST (3) 4POS J-BOX  
INST (10) L/B ELBOWS & (2) INSUL CAPS  
INST GRID # 561691-139912

- SITE SPECIFIC NOTES Continued:**
- AT J06**  
INST 4'-8"x 7" VAULT & COVER  
INST (3) 4POS J-BOX  
INST (6) L/B ELBOWS & (6) INSUL CAPS  
INST GRID # 561702-139911
- AT J07** GRID # 561708-139946 EXIST 30' J-BOX  
INST (3) L/B ELBOWS
- AT J08** GRID # 561736-139923 EXIST 30' J-BOX  
INST (3) L/B ELBOWS
- AT J09**  
INST 4'-8"x 7" VAULT & COVER  
INST (3) 4POS J-BOX  
INST (10) L/B ELBOWS & (2) INSUL CAPS  
INST GRID # 561690-139924
- AT J10**  
INST 4'-8"x 7" VAULT & COVER  
INST (3) 4POS J-BOX  
INST (12) L/B ELBOWS  
INST GRID # 561690-139925
- AT V03**  
INST SML UNISTRUT MP HH & GNDS  
SET 25kVA PM XFMR 120/240V FACING SOUTH  
INST L/B ELBOW & INSUL CAP  
INST (3) 6 HOLE #6-350 MCM SEC CONN BARS WITH 5/8" STUD ADAPTERS  
CONNECT CUST RAN UG SVC ( ) RUNS OF \_ UG TPLX  
INST GRID # 561691-139911
- AT V04**  
INST LRG MP HH & GNDS  
SET 100kVA PM XFMR 120/240V FACING SOUTH  
INST L/B ELBOW & INSUL CAP  
INST (3) 6 HOLE #6-350 MCM SEC CONN BARS WITH 5/8" STUD ADAPTERS  
CONNECT CUST RAN UG SVC ( ) RUNS OF \_ UG TPLX  
INST GRID # 561677-139938
- AT V05**  
INST (3) L/B ELBOWS
- AT V06**  
INST 4'8" SQ VAULT W/4'8"x 5'6" COVER  
SET 112.5kVA 30 PM XFMR 120/208v FACING NORTH  
INST (3) L/B ELBOWS  
INST ( ) 4 POS SEC CONNECTORS  
INST GRID # 561709-139952  
CONNECT & TAG CUST RAN UG SVC LINES ( ) RUNS OF \_ KCM
- AT PV1**  
INST 5106 PULL VAULT WITH TRAFFIC LID - Std 6051-2000 (SVTMHD)  
INST (3) 750 SPLICES - Std 6041-2000 (SPL750)  
INST GRID # 561684-139938
- AT PV2**  
INST 5106 PULL VAULT WITH TRAFFIC LID - Std 6051-2000 (SVTMHD)  
INST (3) 750 SPLICES - Std 6041-2000 (SPL750)  
INST GRID # 561717-139928
- AT PV3**  
INST 575 PULL VAULT WITH TRAFFIC LID - Std 6051-2000 (SV5MHD)  
INST (3) 1/0 SPLICES - Std 6041-2000 (SPL10J)  
INST GRID # 561686-139937
- AT PV4**  
INST 575 PULL VAULT WITH TRAFFIC LID - Std 6051-2000 (SV5MHD)  
INST (3) 1/0 SPLICES - Std 6041-2000 (SPL10J)  
INST GRID # 561719-139928
- AT SW2**  
INST HH 5106 W/ 3'sq & 54"x 60" HOLE (MID # 7906902)  
INST PMH11 PAD MOUNT SWITCH - Std 6056-1000 (PMH115)  
INST SWITCH # U87137  
INST (3) 150E FUSES  
INST (9) TERM 15KV 750 KcMil AL CS LUGs (TER750C)  
INST (3) TERM 15KV 1/0 SOL JACK CS PINS (TER10JC)  
INST GRID # 561693-139934



**ENLARGEMENT DETAIL (PV1 & PV3)**  
SCALE: 1" = 20'



**SITE PLAN**  
SCALE: 1" = 50'

**Project Manager Contact Information:**

Manager: Jim Lengel  
Cell Phone: 425-449-9954  
E-Mail: James.Lengel@pse.com

For contacts below dial 1-888-CALL PSE (225-5773)

Developer Locates Req'd Yes  
PSE Locates Req'd Yes  
Outages Req'd Yes  
Flagging Req'd Yes

City of Tumwater

2 BUSINESS DAYS BEFORE YOU DIG

THIS SKETCH NOT TO BE RELIED UPON FOR EXACT LOCATION OF EXISTING FACILITIES

REV#	DATE	BY	DESCRIPTION
3			
2			
1			

COUNTY	Emer Sect	Gas Wk Ctr	POWER WK CTR	PLAT MAP	OSTHLE
Thurston					

1/4 SEC	SE 1/4, Sect 34, T14S, R02W	OH OKT MAP	UG OKT MAP	CIRCUIT NO	BAR-17
U-MAP NO	1802W136	1702W098	1802W136		

UTILITIES	CONTACT	PHONE#

INCIDENT	MAOP
Gas Order	Elect Order

SCALE	PAGE
AS NOTED	03/05

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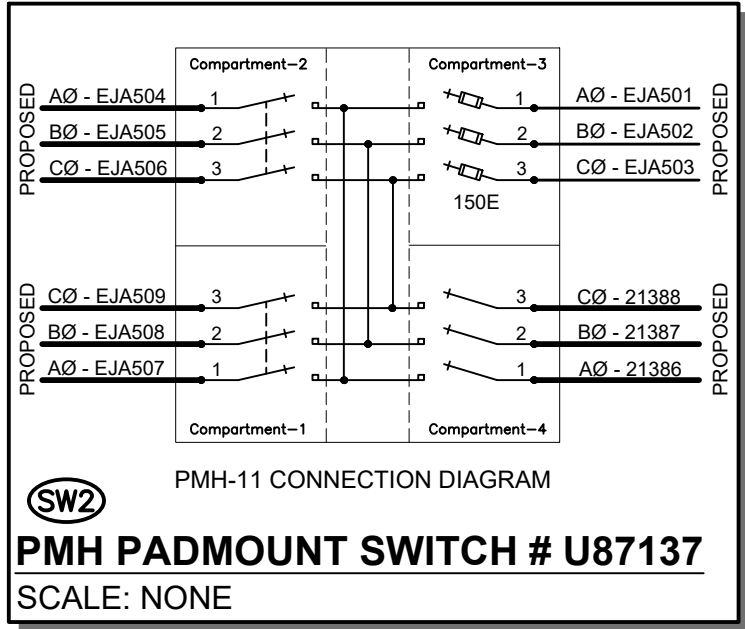
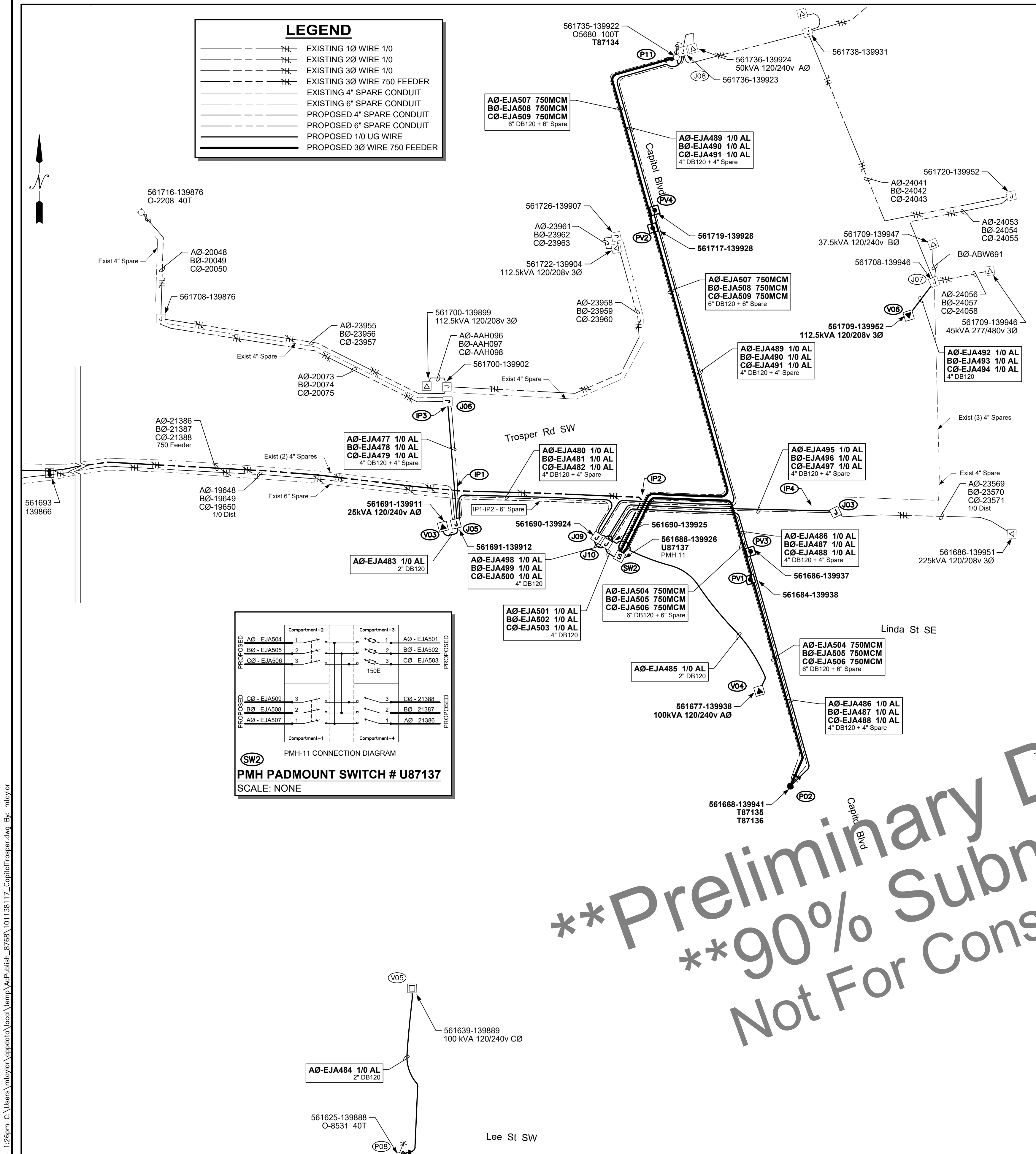
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PRIMARY CONDUIT & CABLE ONE-LINE DIAGRAM

SCALE: NONE

LEGEND

- EXISTING 1Ø WIRE 1/0
- EXISTING 2Ø WIRE 1/0
- EXISTING 3Ø WIRE 1/0
- EXISTING 3Ø WIRE 750 FEEDER
- EXISTING 4" SPARE CONDUIT
- EXISTING 6" SPARE CONDUIT
- PROPOSED 4" SPARE CONDUIT
- PROPOSED 6" SPARE CONDUIT
- PROPOSED 1/0 UG WIRE
- PROPOSED 3Ø WIRE 750 FEEDER



PRIMARY CABLE & CONDUIT TABLE

LOCATION		CONDUIT									PRIMARY CABLE							ASBUILT INFORMATION		
		SIZE	Qty	Design Length (ft)	BENDS				PULL	PULL	Cable	Design Length (ft)	Total Actual Cable (ft)	Cable Numbers			Please Record			Foreman - Complete
FROM	TO	(in)			90°	45°	22°	11°	(lbs)	Rev (lbs)	Size			A	B	C	Manufacturer	Compound	Year	Actual Amount Installed (Conduit & Cable)
J05	J06	4"	2	110	0	1	0	0	154.7	159.6	1/0 UG	130		EJA477	EJA478	EJA479				
J05	J09	4"	2	200	1	1	0	0	212.6	207.1	1/0 UG	220		EJA480	EJA481	EJA482				
J05	V03	2"	1	27	2	0	0	0	66	66	1/0 UG	47		EJA483						
P08	V05	2"	1	159	1	2	0	0	83.5	78.8	1/0 UG	179		EJA484						
J09	V04	2"	1	218	2	1	0	0	108.4	123.9	1/0 UG	238		EJA485						
P02	PV3	4"	2	220	2	0	0	0	217.7	232.6	1/0 UG	240		EJA486	EJA487	EJA488				
PV3	J10	4"	2	170	2	0	1	1	332	321.4	1/0 UG	190		EJA486	EJA487	EJA488				
J09	PV4	4"	2	410	2	0	1	1	529	447.4	1/0 UG	430		EJA489	EJA490	EJA491				
PV4	J08	4"	2	190	2	0	1	0	418.2	524.6	1/0 UG	210		EJA489	EJA490	EJA491				
J07	V06	4"	2	40	1	0	0	0	145.1	150.9	1/0 UG	60		EJA492	EJA493	EJA494				
J10	J03	4"	2	221	1	0	0	2	263	238.6	1/0 UG	241		EJA495	EJA496	EJA497				
J10	J09	4"	1	19	0	0	0	0	230.4	230.4	1/0 UG	39		EJA498	EJA499	EJA500				
SW2	J10	4"	1	20	1	1	0	0	149	149	1/0 UG	40		EJA501	EJA502	EJA503				
P02	PV1	6"	2	190	0	0	0	2	519.2	515.1	750 UG	210		EJA504	EJA505	EJA506				
PV1	SW2	6"	2	200	2	1	0	1	866.7	853.7	750 UG	220		EJA504	EJA505	EJA506				
SW2	PV2	6"	2	370	2	0	0	2	1112.1	1446.8	750 UG	390		EJA507	EJA508	EJA509				
PV2	P11	6"	2	200	1	0	0	0	686.1	634.4	750 UG	220		EJA507	EJA508	EJA509				
IP1	IP2	6"	1	170																

				90°	45°	22°	11°	BellEnds
Total:	2"		404	5	3	0	0	18
Total:	4"		3,161	12	3	3	4	70
Total:	6"		2,090	5	1	0	5	18

Total:	1/0	5,864
Total:	750	3,120

VAULT & EQUIPMENT TABLE

SITE	GRID NUMBER	VAULT SIZE & COVER	TYPE & SIZE EQUIPMENT IN VAULT	PRIMARY BUSHINGS		TRANSFORMER ID NUMBERS (Company ID)	ASBUILT INFORMATION Foreman-Complete
				LB	DC		
J03	561692-139945	JBOX15L (5'x7'x6')	(3) 200A J-BOX MID 7625900	3			
J05	561691-139912	JBOX15L (5'x7'x6')	(3) 200A J-BOX MID 7625900	7	5		
J06	561702-139911	JBOX15L (5'x7'x6')	(3) 200A J-BOX MID 7625900	7	5		
J09	561690-139924	JBOX15L (5'x7'x6')	(3) 200A J-BOX MID 7625900	7	5		
J10	561690-139925	JBOX15L (5'x7'x6')	(3) 200A J-BOX MID 7625900	7	5		
V03	561691-139911	36"x 42"x 38" Smt Unistrut MP HH MID 7663001	25kVA 120/240v MID 6247000	1	1		
V04	561677-139938	48"x 48"x 38" Lrg Unistrut MP HH MID 7663002	100kVA 120/240v MID 6247200	1	1		
V06	561709-139952	48"x 48"x 38" Lrg Unistrut MP HH MID 7663002	150kVA 120/208v MID 8258100	1	1		
PV1	561688-139937	64"x11'10"x7'8" Vault MID 7906800 HD Frame & Cover 42" MH MID 9995596 (2) 6" & 12" Ring Risers	(3) 750 Splices Std 6041.2000_SPL750	-	-		
PV2	561717-139928	64"x11'10"x7'6" Vault MID 7906800 HD Frame & Cover 42" MH MID 9995596 (2) 6" & 12" Ring Risers	(3) 750 Splices Std 6041.2000_SPL750	-	-		
PV3	561684-139938	48"x7'x7" Vault MID 9996930 HD Frame & Cover 42" MH MID 9995596 (2) 6" & 12" Ring Risers	(3) 1/0 Splices Std 6041.2000_SPL10J	-	-		
PV4	561719-139928	48"x7'x7" Vault MID 9996930 HD Frame & Cover 42" MH MID 9995596 (2) 6" & 12" Ring Risers	(3) 1/0 Splices Std 6041.2000_SPL10J	-	-		
SW2 U87137	561688-139926	S106 Switch Vault & Cover MID 7906902	PMH11 PM Switch Gear MID 7833800 1 Pos. 200A & 3 Pos. 600A Fuse 150E MID 3285200				

	LoadBreak Elbows	Dust Covers
Totals:	34	23

For contacts below dial 1-888-CALL PSE (225-5773)

CALL (800) 424-5555

2 BUSINESS DAYS BEFORE YOU DIG

THIS SKETCH NOT TO BE RELIED UPON FOR EXACT LOCATION OF EXISTING FACILITIES

Developer Locates Req'd	Yes
PSE Locates Req'd	Yes
Outages Req'd	Yes
Flagging Req'd	Yes

REAL ESTATE/EASEMENT	PERMIT		
City of Tumwater			
FUNCTION	CONTACT	PHONE NO	DATE
PROJECT MGR	J.Lengel	425-449-9954	07/06/21
ENGR - POWER	M.Taylor	85-5970	07/06/21
ENGR - GAS			
DRAWN BY	M.Taylor	85-5970	07/06/21
CHECKED BY			
FOREMAN #1			
FOREMAN #2			
MAPPING			

UTILITIES CONTACT PHONE#	
--------------------------	--

INCIDENT	MAOP
Gas Order	Elect Order
SCALE	PAGE
AS NOTED	04/05

DESIGNED BY PSE

PI - RAB @ Capitol Blvd & Trosper Rd

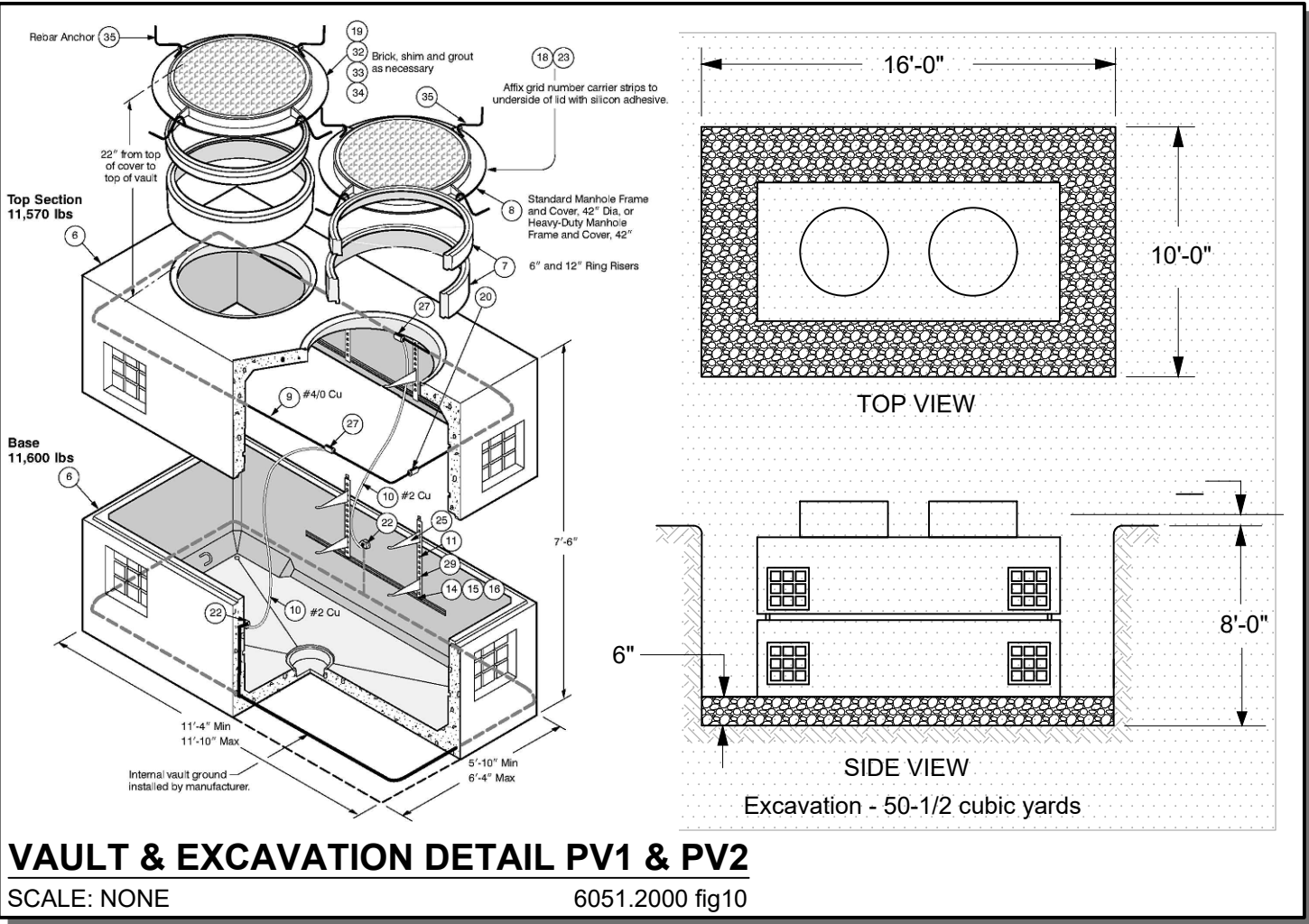
N/API - Relocate OH & UG Facilities

Trosper Rd SW & Capitol Blvd

Cable & Conduit Plan And MiscTables

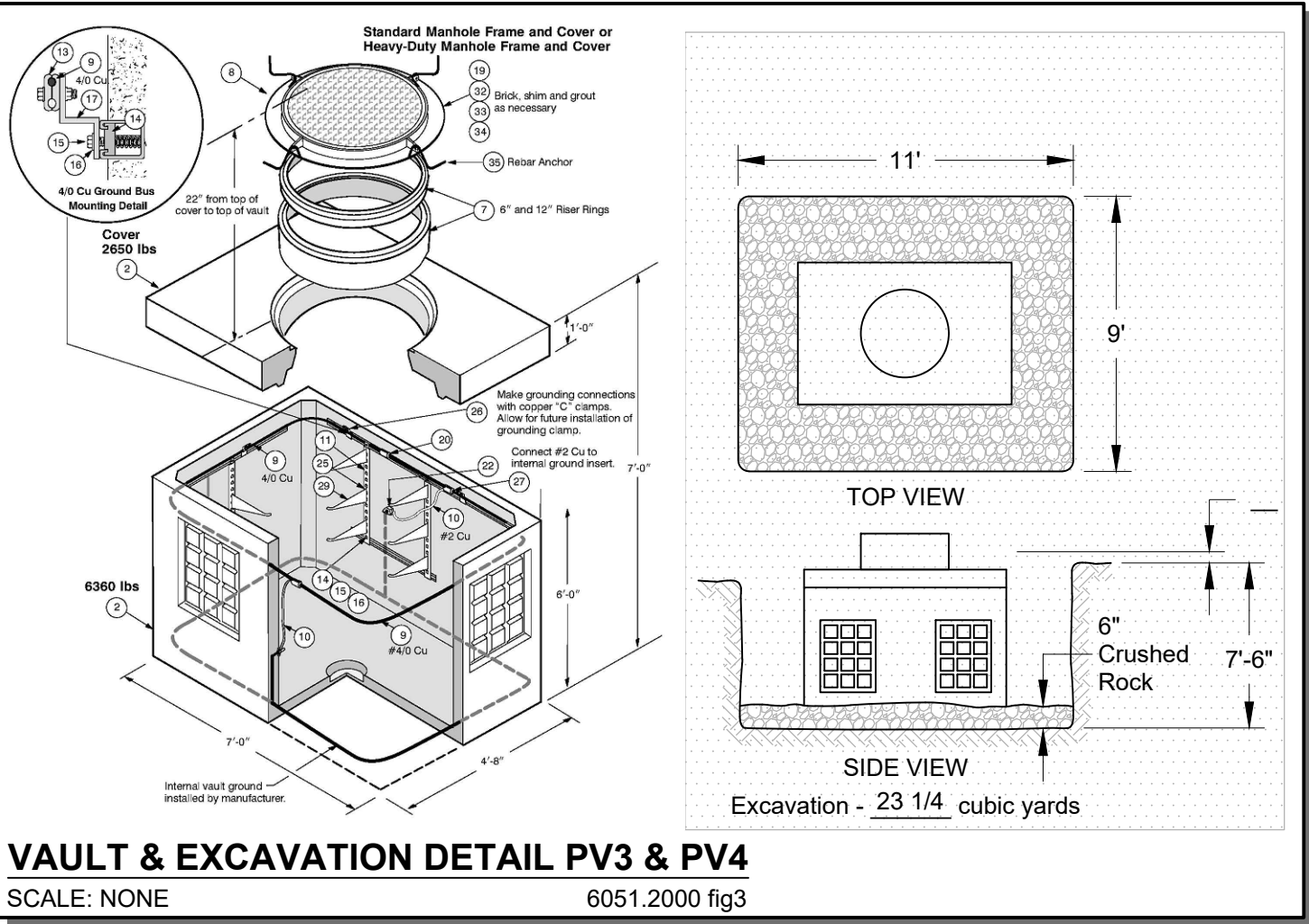
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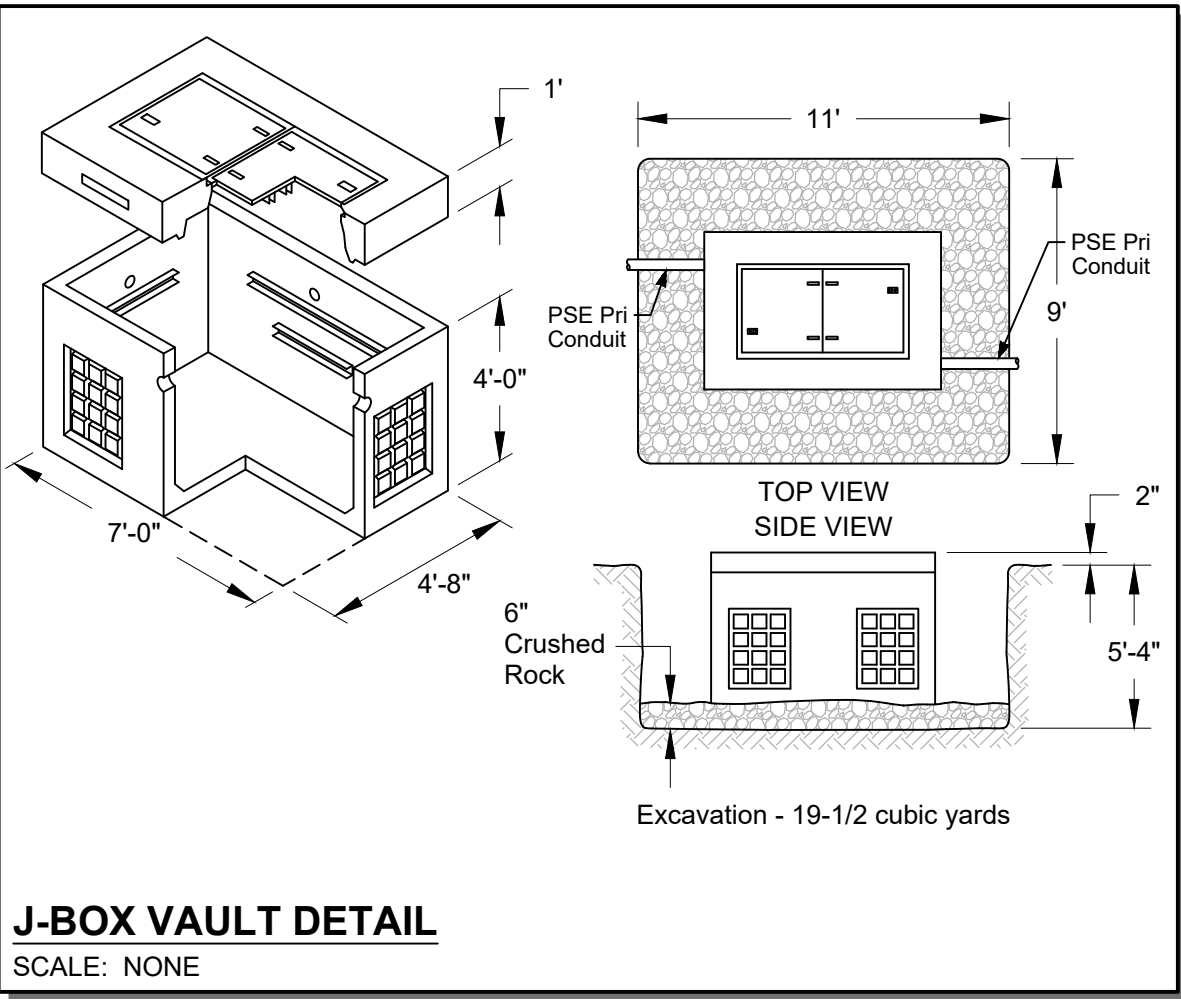
VAULT & EXCAVATION DETAIL PV1 & PV2

SCALE: NONE 6051.2000 fig10



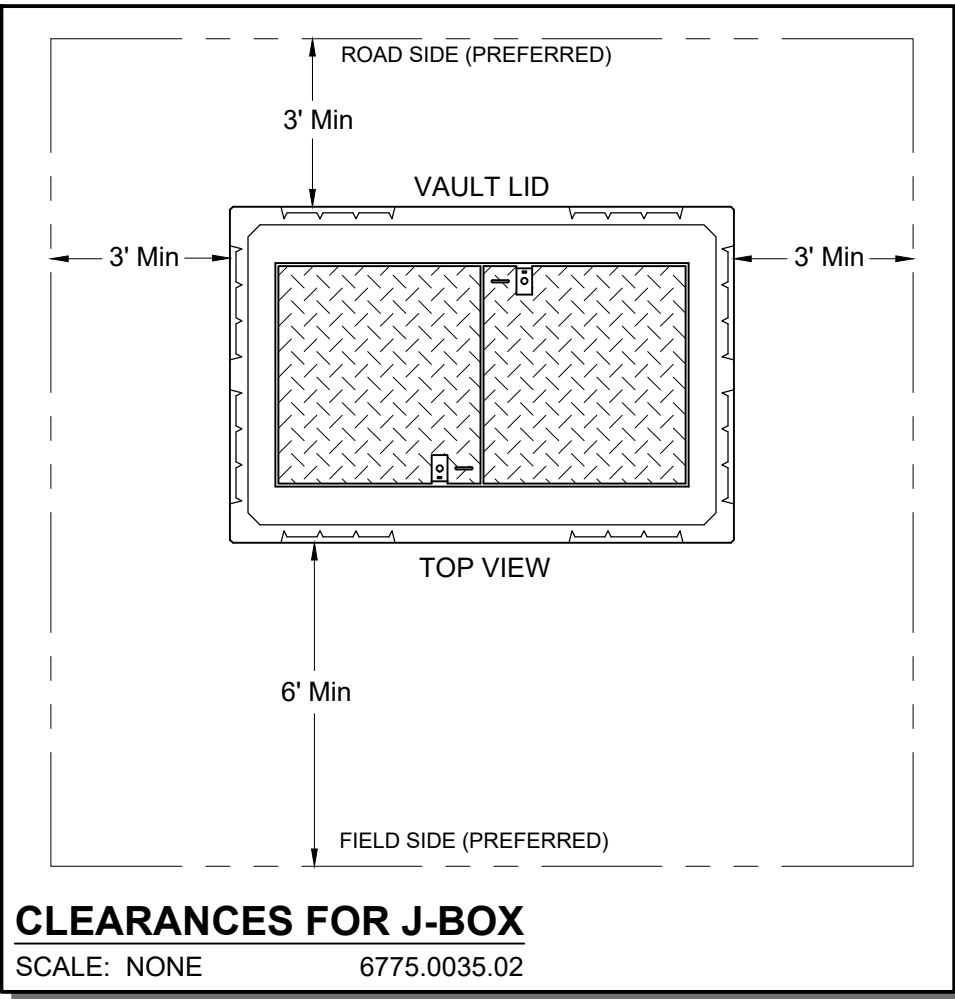
VAULT & EXCAVATION DETAIL PV3 & PV4

SCALE: NONE 6051.2000 fig3



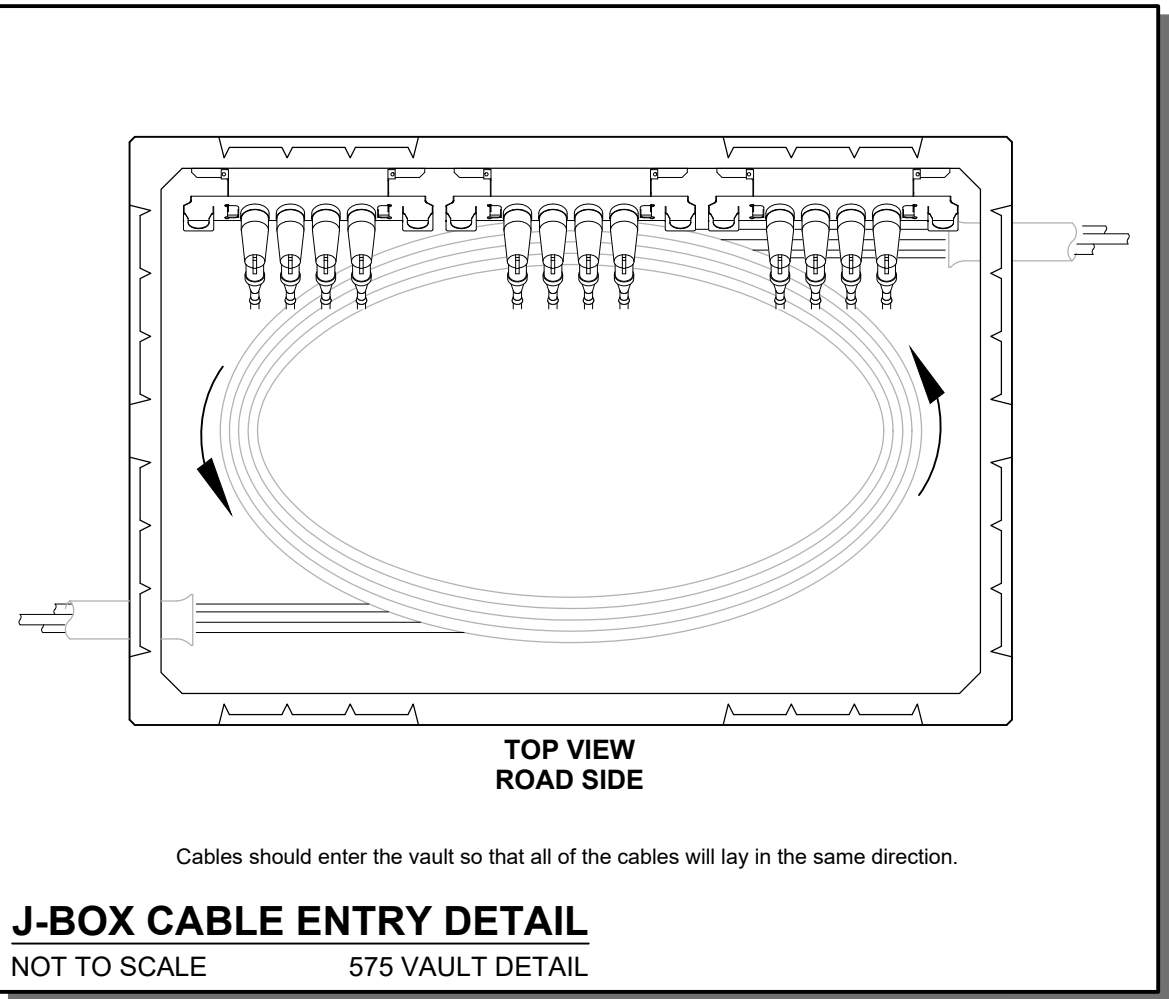
J-BOX VAULT DETAIL

SCALE: NONE



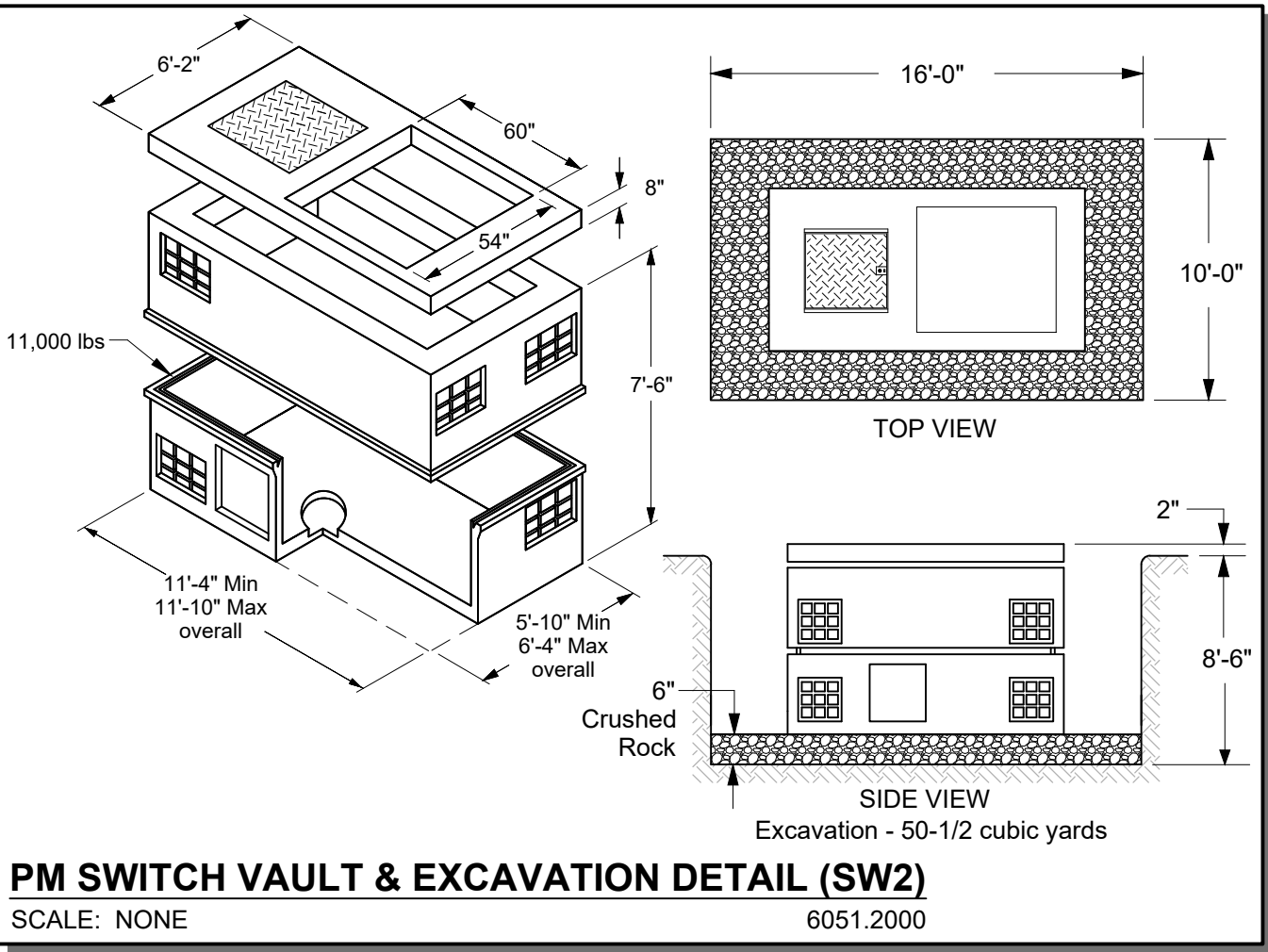
CLEARANCES FOR J-BOX

SCALE: NONE 6775.0035.02



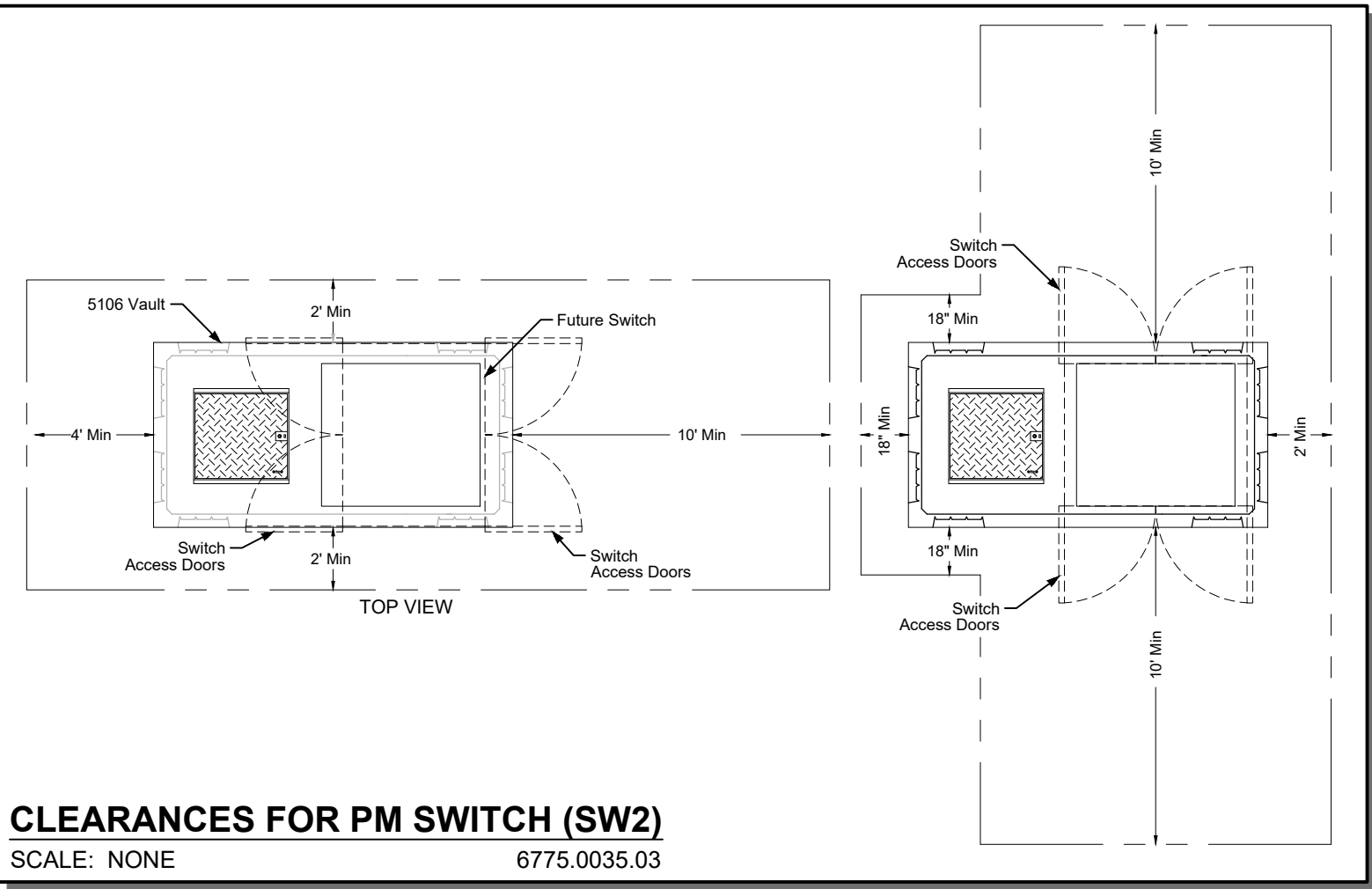
J-BOX CABLE ENTRY DETAIL

NOT TO SCALE 575 VAULT DETAIL



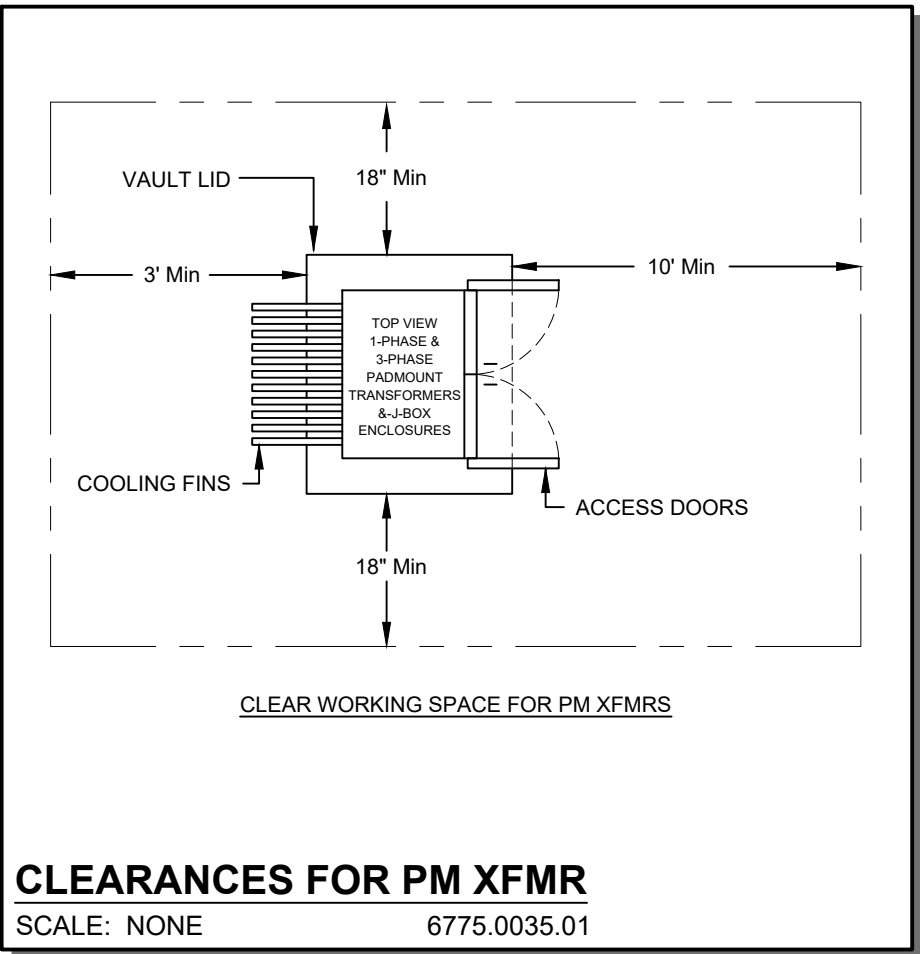
PM SWITCH VAULT & EXCAVATION DETAIL (SW2)

SCALE: NONE 6051.2000



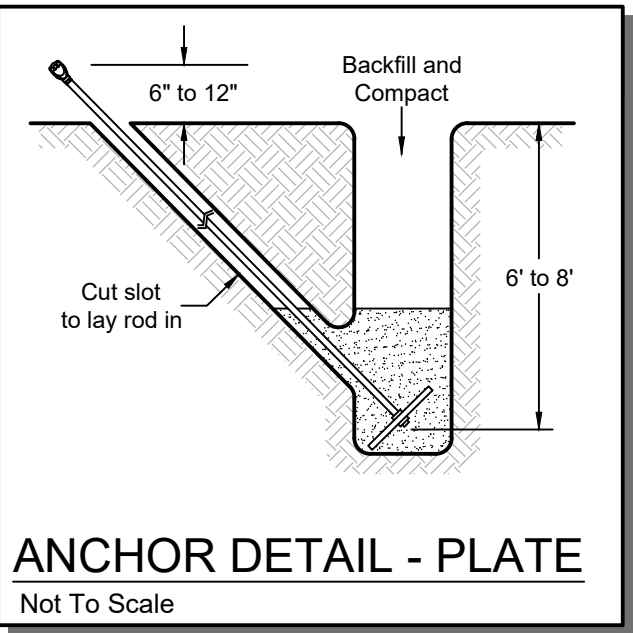
CLEARANCES FOR PM SWITCH (SW2)

SCALE: NONE 6775.0035.03



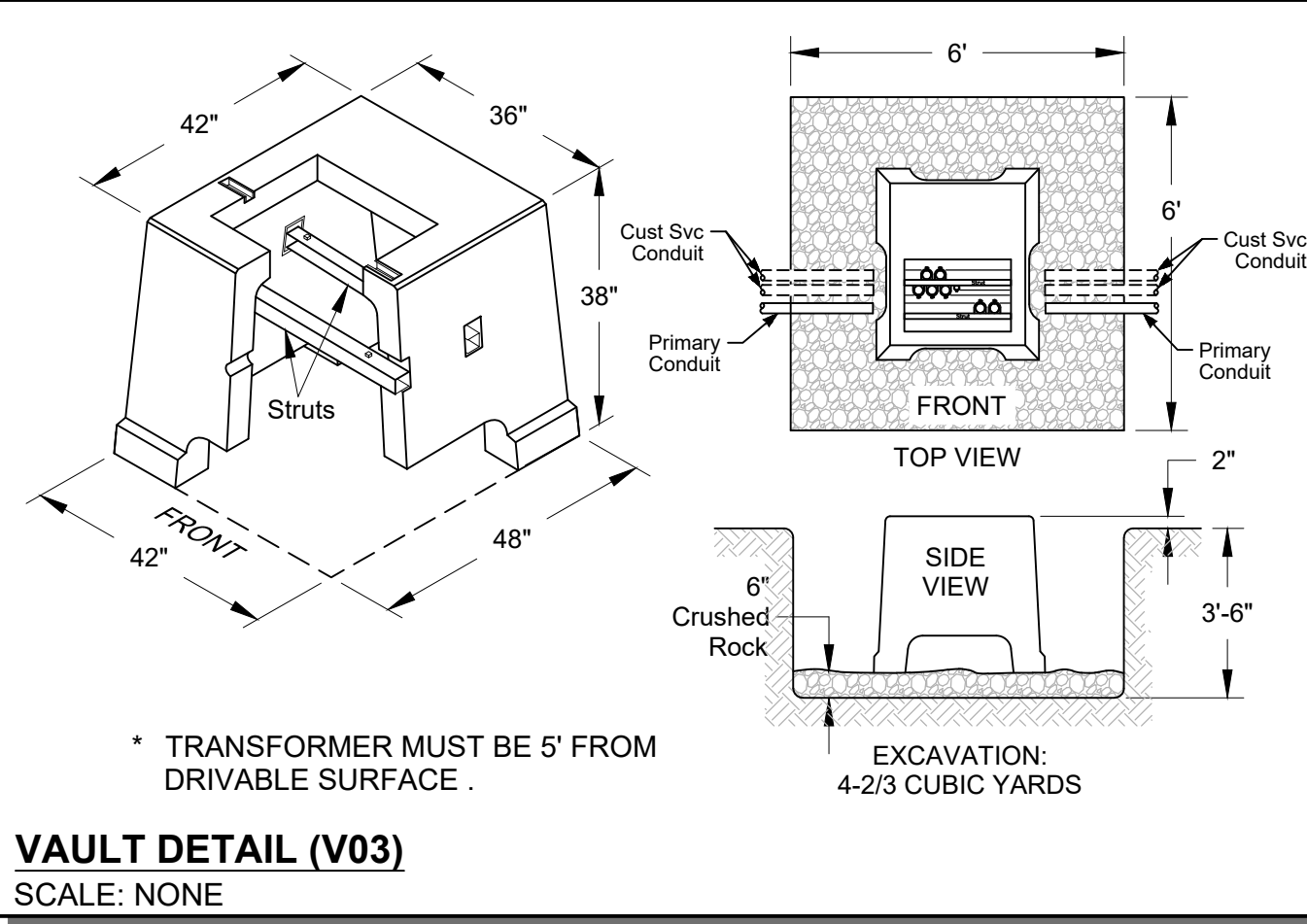
CLEARANCES FOR PM XFMR

SCALE: NONE 6775.0035.01



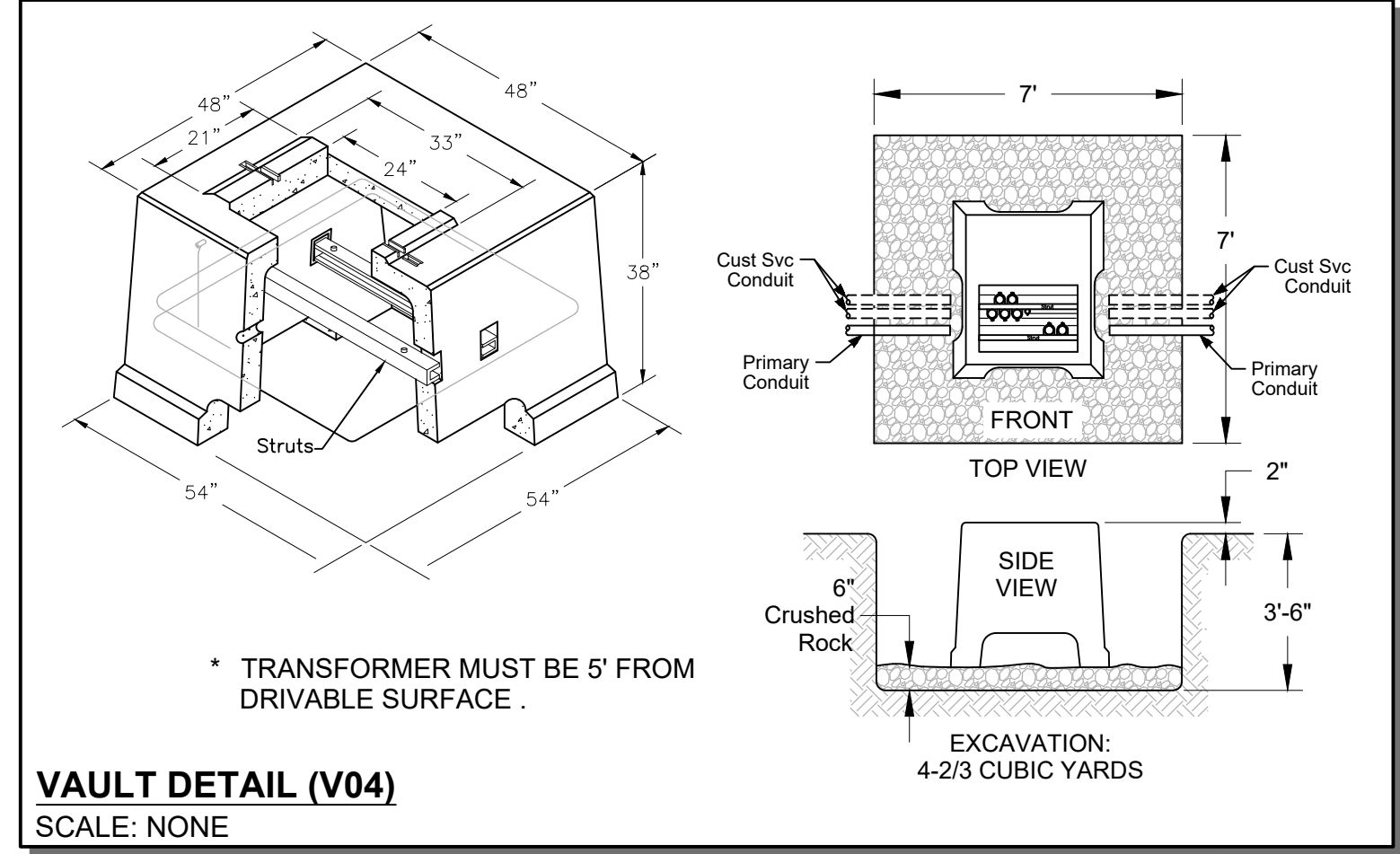
ANCHOR DETAIL - PLATE

Not To Scale



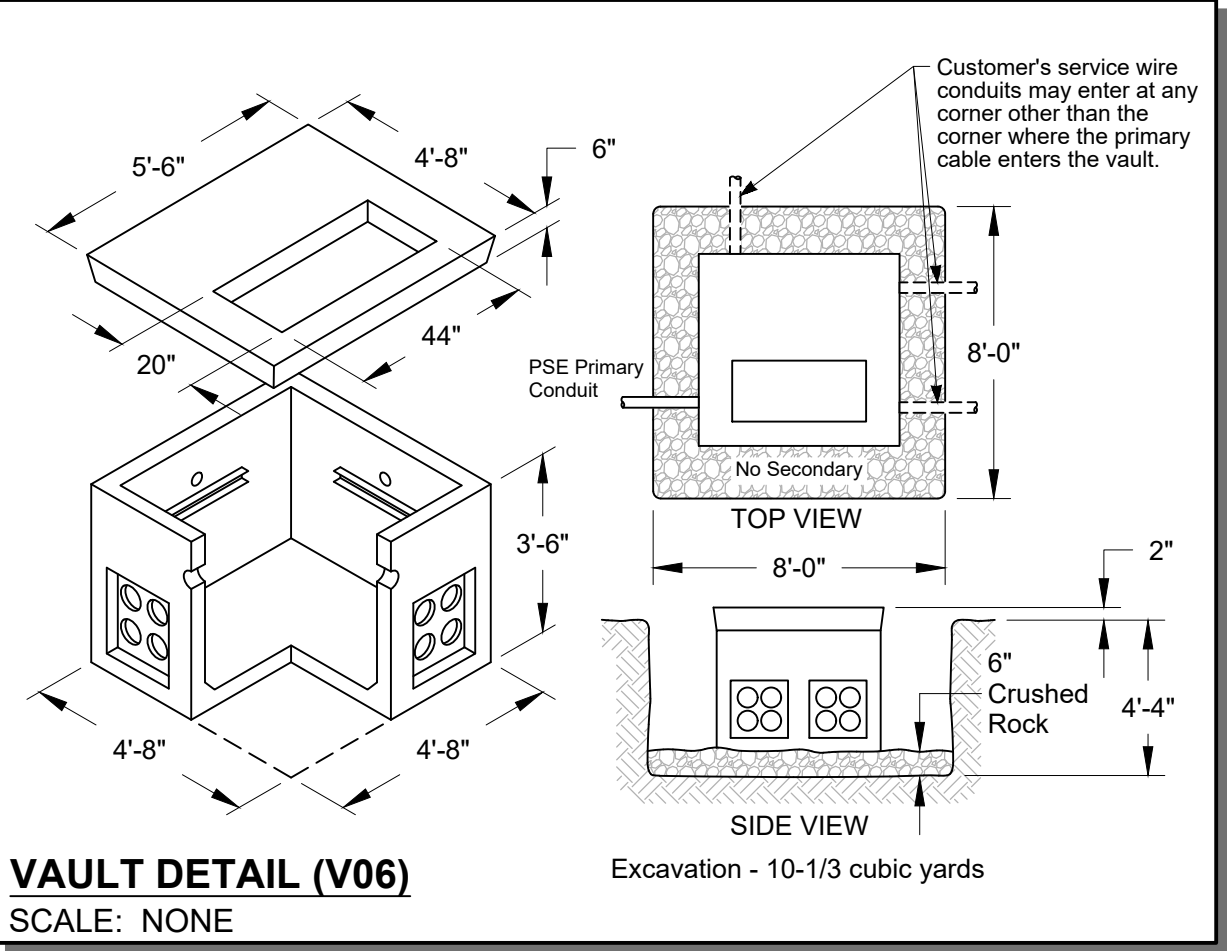
VAULT DETAIL (V03)

SCALE: NONE



VAULT DETAIL (V04)

SCALE: NONE



VAULT DETAIL (V06)

SCALE: NONE

Project Manager Contact Information:

Manager: Jim Lengel  
Cell Phone: 425-449-9954  
E-Mail: James.Lengel@pse.com

For contacts below dial 1-888-CALL PSE (225-5773)

Developer Locates Req'd Yes  
PSE Locates Req'd No  
Outages Req'd Yes  
Flagging Req'd Yes

CALL (800) 424-5555

2 BUSINESS DAYS BEFORE YOU DIG

THIS SKETCH NOT TO BE RELIED UPON FOR EXACT LOCATION OF EXISTING FACILITIES

Outages Req'd Flagging Req'd				Yes Yes		REAL ESTATE/EASEMENT REQ'D		PERMIT City of Tumwater	
3						FUNCTION	CONTACT	PHONE NO	DATE
2						PROJECT MGR	J.Lengel	425-449-9954	07/06/21
1						ENGR - POWER	M.Taylor	85-5970	07/06/21
REV#	DATE	BY	DESCRIPTION						
COUNTY	Thurston	Emer Sect	Gas Wk Ctr	POWER WK CTR	OSTHLE	CHECKED BY	M.Taylor	85-5970	07/06/21
1/4 SEC	SE1/4, Sect 34, T4S, R2W	OP MAP		PLAT MAP		APPROVED BY			
U-MAP NO	1802W136	OH OKT MAP	UG OKT MAP	CIRCUIT NO		FOREMAN #1			
		1702W089	1802W136	BAR-17		FOREMAN #2			
						MAPPING			
JOINT FACILITIES ARRANGEMENTS									
UTILITIES									
CONTACT									
PHONE#									