

MASON COUNTY PUD #1

PROJECT: <u>LILLIWAUP CORNER REBUILD</u>		WO # <u>25060</u>	LINE: _____
UG LOCATE TICKET # _____	BY _____	DETAIL MAP _____	COUNTY _____ SCHOOL DISTRICT _____
TWSP _____	RANGE _____	SECTION _____	NOTES _____ REVISION M _____
		STAKED BY _____	DATE _____
		REVISED BY _____	DATE _____
		CHECKED BY _____	DATE _____

NOTES - Refer to Specifications and Guidelines for Additional Information

PUD1 will provide some of the major UG materials: **500MCM cable, #2 cable, SCH40 stick conduit, 575 vaults, padmount transformers and 1-phase cabinets (comes with 4-ways).**

Contractor provides everything NOT mentioned above, including but not limited to:

All primary and secondary riser assemblies (SCH80 conduit, jumpers, terminators, grounding, lightning arrestors, GOS, etc.), materials needed for making up vaults and cabinets (junctions, deadbreak, loadbreak, fused elbow, etc.) secondary pedestals, rolled pipe (for bores) and any other material, implied or otherwise shall be provided by contractor.

Refer to installation specifications for storage and installation of equipment and material. If there are competing specifications or guideline adhere to strictest one.

All elbows shall be installed on multi point junctions from left to right (Source, Load, Tap, Tap).

All equipment shall be installed as described.

All underground pulls shall be well lubricated. Pulling eyes for 500MCM cable pulls greater than 1000' should be considered.

All sweeps shall be long radius, except where specified otherwise in construction unit drawings.

Use plastic conduit plugs at each stub location.

All trenches shall have a minimum width of 1.5' unless specified otherwise.

All trenches shall be backfilled in accordance with specifications.

All boring per specifications. Review specifications regarding WSDOT and PUD1 requirements.

All cable shall be phase marked and tagged with the destination (vault/cabinet #) of cable.

All phases shall be marked

All lightning arrestors shall be 10 kV MOV 8.4 kV MCOV.

Make arrester ground terminal-to-neutral (or concentric) jumper as short as possible.

All secondary pedestals shall be above ground (not-flush mount).

PUD1 will provide: Wood Poles and transformers.

Contractor to provide: All OH assemblies.

All poles shall have split bolts at top of pole when not framed for two directions.

Guying shall be done in accordance with Guy & Anchor Standards found in the guidelines attachment.

Poles shall be installed 10% + adder. in accordance with TM-10-MA01 found in the 2.4 Guidelines attachment.

All 8' deadend crossarms shall be 3-position fiberglass with a minimum ultimate deadend strength of 13,900 lbs/position.

Technical Assumptions

Assumed Worst Case Tension (WCT) for 4/0 ACSR (Penguin) is 2662 ft-lbs.

Assumed Worst Case Tension (WCT) for 1/0 ACSR (Raven) is 1534 ft-lbs.

Guying/Anchoring strengths based on 10" anchor installation torque of 3000 ft-lbs.

8" helix anchors may be used in lieu of 10" anchors, such that the holding capacity meets or exceeds 16kip.

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OVERHEAD PROJECT: LILLIWAUP BAY CORNER REBUILD
DRAWING #S: E1

WO # 25060

ACTION LEGEND: E=EXISTING
R=REMOVE
A=ADD

DATE: 6/10/2026

REVISION: 1 IFC

Action	POLES			UNIT	CONDUCTOR			R-W CLEAR	LINE ANGLE (Deg)	GUY			ANCHOR		GROUND	#	MISC.	TRANSFORMER		SECONDARY			REMARKS				
	KEYED NOTE	ORIGINAL STR # NEW STR#	MAP #		HT-CL-TYPE					Back Span (Ft)	#	Size Type	#	Type				Lead (Ft)	#	Type	UNIT	KVA		#	Size	Span (Ft)	Unit
					HT	CL	TYPE																				
A	P1	N136		50	2	DF	C5.21F	3	4-0 ACSR			1	E1.1	25	1	F2.8								INSET NEW 50-2 DE POLE INLINE WITH EXISTING OH-SEE UG FOR 3-PH GOS RISER & 1PH RISER			
A	P1	N136						1	1-0 ACSR			1	E1.1	20	1	F2.8											
R	P2	N136	2331	40	4	DF	CAL2	3	4-0 ACSR																		
R	P2	N136	2331					1	1-0 ACSR																		
R	P2	N136	2331				A5.2	2	4ACSR																		
R	P3	N136R1	6183	45	2	DF	A5.1	100	2	4ACSR														DROP PRI RISER INTO NEW CABINET C1			
R	P4	N137	2332	40	4	DF	CAL3	285	3	4-0 ACSR																	
R	P4	N137	2332					285	1	1-0 ACSR																	
R	P5	N138	2334	45	4	DF	C5.21	275	3	4-0 ACSR			1	E1.1					G1.4	10	2	4-TPX		J2.1			
R	P5	N138	2334					275	1	1-0 ACSR			1	E1.1													
R	P5	N138	2334				A5.2	2	4 ACSR			1	E1.1														
R	P6	N138B1		45	2	DF															1	4-TPX	150	J2.1			
R	P7	N138A1		40	4	DF															1	4-TPX	110	J2.1			
R	P8	N138L1	2335	40	5	DF	A5.1	300	2	4 ACSR			1	E1.1	1	F2.8	H1.1		G1.5	25				DROP PRI & SEC RISERS INTO NEW TRANSFORMER T1			
R	P9	N145	2338	40	4	DF	C5.21					2	E1.1	1	F2.8	H1.1								RETIRE			
R	P10	N146	2339	40	4	DF	C2.21L	100	3	4-0 ACSR									G1.4	25					REUSE XFMR AND TRANSFER TO B-PHASE.		
R	P10	N146	2339					100	1	1-0 ACSR																	
A	P10	N146		50	2	DF	C5.21F	3	1-0 ACSR			1	E1.1	25	1	F2.8	H1.1		G1.5	25					REPLACE EXISTING POLE WITH 50-2 DE POLE. SEE UG FOR 3-PH RISER & 1PH RISER		
A	P10	N146						1	1-0 ACSR			1	E1.1	20	1	F2.8											

MASON COUNTY PUD #1

UNDERGROUND PROJECT: LILLIWAUP BAY CORNER REBUILD
 DRAWING #'S: E1

WO#: 25060

ACTION LEGEND: E=EXISTING
 R=REMOVE
 A=ADD

DATE: 6/10/2026

REVISION: 1 IFC

Action	LOCATION			PRIMARY CONDUIT		PRIMARY CABLE		PRIMARY UNIT		PAD/VAULT		GROUND	TRANSFORMER		ELBOW		MULTI-PT. TERMIN.		CAP		MISC		CONDUIT ELBOWS		SEC/SVC CONDUIT		SECONDARY CABLE			SECONDARY UNIT		REMARKS	
	KEYED NOTE	STR #	MAP#	Distance Back (ft)	# Size Type	Cable Length (Ft)	# Size Type	# Assy	# Assy	UNIT	KVA	# Size Type	# Size Type	# Size Type	# Size Type	# Size Type	# Per Primary or Sec Cond Size	Distance Back (ft)	# Size Type	Cable Length (Ft)	# Size Type	# Assy	# Assy	# Assy	# Assy	# Assy	# Assy	# Assy	# Assy	# Assy			
A	P1	N136		3	3" SCH40		3	500MCM	1	UC3.3GOS		HC3.3											3	UP7.04.90.3								INSTALL 500MCM RISER W/GOS	
A	P1	N136		1	2" SCH40		1	#2	1	UA1.2																					INSTALL 1PH RISER (10K) TO CABINET C1		
R	P2	N136R1	6183				1	#2	1	UA1.2																					DROP RISER INTO NEW 1PH CABINET C1		
A	C1	N136-CAB1		180	2" SCH40	210	1	#2	1	US1.PJ													2	UP7.04.90.2							INTERCEPT EXISTING UG PRIMARY VIA RISER. INSTALL CABINET. ELBOWS/CAP/GROUNDING INCLUDED WITH ASSEMBLY		
A	V1	N136-V1		1300	3" SCH40	1330	3	500MCM			1	VC57/V57	UVG		6	UM6.EL6.500	3	UM6.JN6666	5	UM6.C6												SET 575 VAULT W/ LID 3PH 600A IN & OUT. 1 PH 200A TO C2. TAP B-PHASE. NEED 600A TO 200A "FOOTBALL" UM6.BA.62	
A	V1	N136-V1		1	2" SCH40										1	UM6.EL2.2				1	UM6.BA.62												
A	C2	N136-CAB1		550	2" SCH40	580	1	#2	1	US1.PJ												1	UP7.04.90.2									SET 1PH CABINET. CHANGE OUT (1) LB ELBOW WITH FUSED ELBOW	
A	C2	N136-CAB1													1	UM6.EL2F				1	UM6.EL2F.8.2	1	UP7.04.90.2									INSTALL 8A FUSED ELBOW	
A	T1	N136-CAB1.2		240	2" SCH40	270	1	#2				UG1.3	P25Z	25																	INSTALL FEED-THRU XFMR. DROP PRI & SEC RISERS FROM P8 INTO XFMR		
R	P5	N138	2334	3	2" SCH40		3	4-0	1	UC3																						RETIRE ALL	
R	P8	N138L1	2335																							2	3" SCH40			1	UK3.1	RETIRE POLE & RISERS. DROP PRI & SEC RISERS INTO T1	
R	P9	N145	2338	1425			3	4-0	1	UC3																						RETIRE ALL	
A	V2	N136-V2		550	3" SCH40	580	3	500MCM			1	VC57/V57	UVG		6	UM6.EL6.500	3	UM6.JN6666	6	UM6.C6													SET 575 VAULT W/ LID 3PH 600A IN & OUT.
A	P10			520	3" SCH40	585	3	500MCM	1	UC3.3																						INSTALL REVERSE FEED PRI RISER WITH SOLID BLADES & SEC RISER WITH SEC PED	