
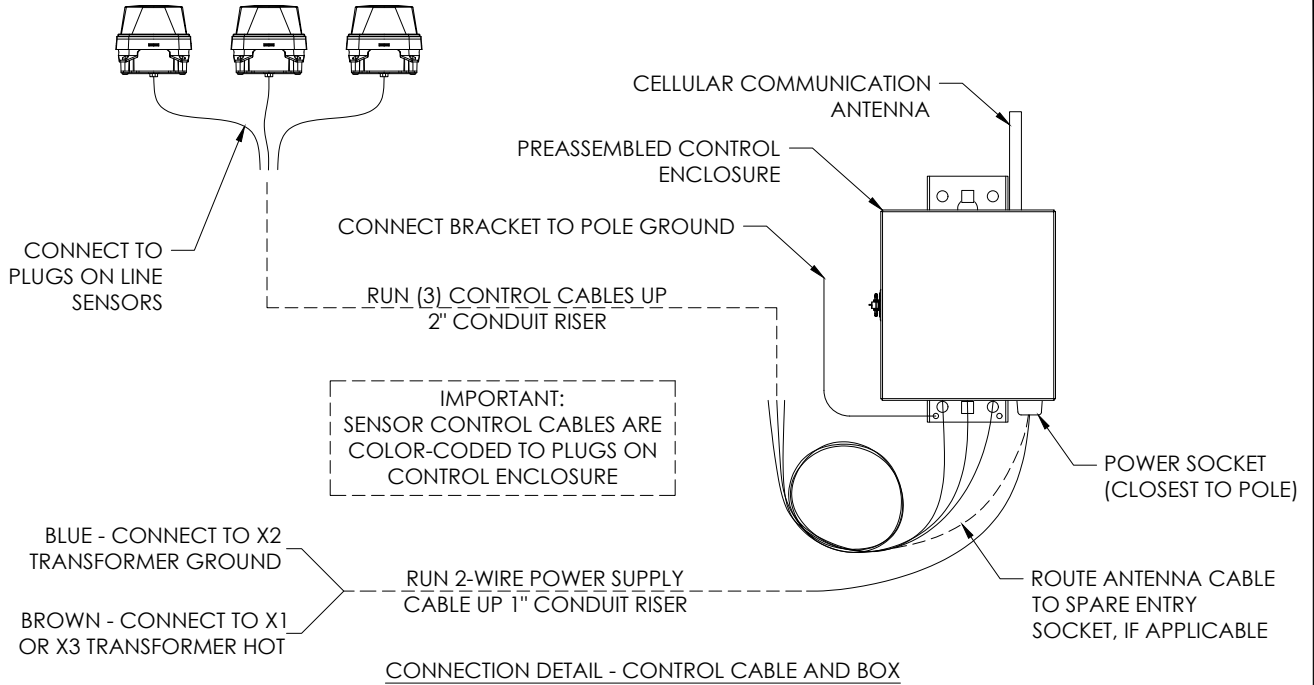


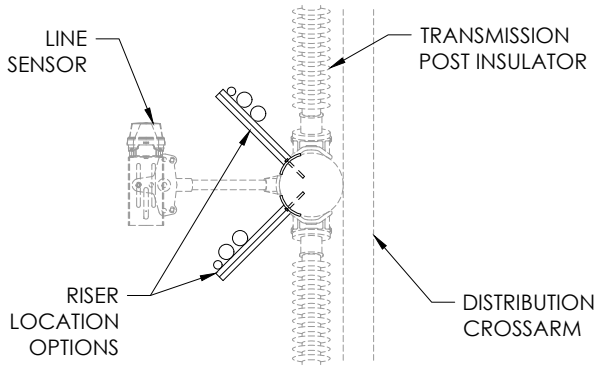
Notes:

1. Adjust bolt lengths as necessary.
2. All 3 sensors must be set at 45" from conductors (+/- 2"), unless otherwise indicated by Engineering.
3. Conduit lengths provided for 75' transmission pole. Adjust lengths as needed for different pole heights.

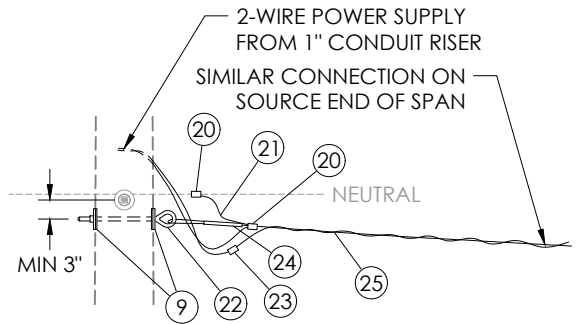
STANDARDS		CONSTRUCTION STANDARDS		REV	DATE	DESCRIPTION
 <p>PUBLIC UTILITY DISTRICT NO. 1 Cowlitz County, Washington 961 12th Avenue Longview, Washington</p>	<p>EARLY FAULT DETECTION STANDARDS TRANSMISSION HLP INSTALLATION</p>		0	06/18/25	Initial release	
			Designed D. Tuominen	Checked D. Thomas T. Walling	Standards Approved <i>Rash</i>	Std/Dwg No. 11-210 (1 of 3)



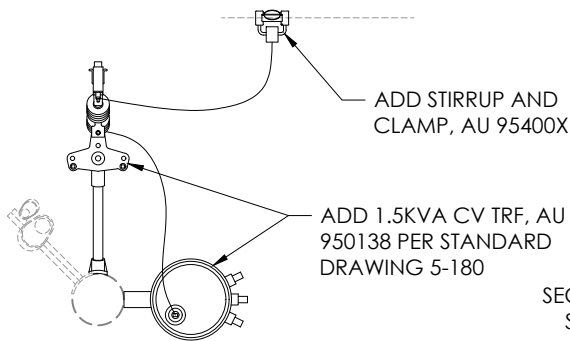
CONNECTION DETAIL - CONTROL CABLE AND BOX



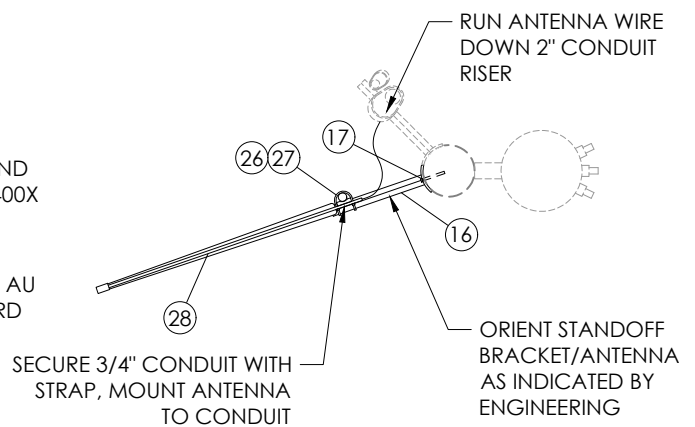
RISER LOCATION DETAILS - TOP VIEW




OVERHEAD SECONDARY OPTION - SIDE VIEW
(SEE MATERIALS ON SHEET 3)



NEW TRANSFORMER OPTION - TOP VIEW



DIPOLE ARRAY ANTENNA OPTION - TOP VIEW
(SEE MATERIALS ON SHEET 3)

STANDARDS		CONSTRUCTION STANDARDS		REV	DATE	DESCRIPTION
 <p>PUBLIC UTILITY DISTRICT NO. 1 Cowlitz County, Washington 961 12th Avenue Longview, Washington</p>	<p>EARLY FAULT DETECTION STANDARDS TRANSMISSION HLP INSTALLATION</p>	Designed	Checked	0	06/18/25	Initial release
		D. Tuominen	D. Thomas T. Walling	Standards Approved	Std/Dwg No.	11-210 (2 of 3)


ITEM	QTY	ITEM #	MATERIAL DESCRIPTION	AU #
1	3	MTR0430	Fault detection line sensor, standard bracket	991-124 or 991-125
2	1	MTR04XX	Fault detection control box, with bracket	
3	3	105-001	Cutout bracket, 18", 1ph fiberglass	
4	6	801-545	Bolt, 1/2" x 2", stainless	
5	6	801-500	Nut, 1/2", hex cap screw, silicon bronze	
6	6	801-510	Washer, round flat, 1-1/4", 9/16" hole, stainless	
7	3	120-434	Bolt, machine, 5/8" x 14", with square nut	
8	2	120-440	Bolt, machine, 5/8" x 20", with square nut	
9	5	350-110	Washer, square curved, 3" x 3", 11/16" hole	
10	60'	416-167	Conduit, 2" SCH 40 PVC	
11	25'	416-137	Conduit, 1" SCH 40 PVC	
12	5'	417-300	Conduit, 1" flexible, non-metallic	
13	1	402-137	Female adapter fitting, 1" PVC to 1" IPS	
14	2	417-310	Male straight fitting, 1" NM flex conduit	
15	1	410-110	Service entrance cap, 1" PVC	
16	7	585-145	Conduit standoff bracket, 15"	
17	17	284-098	Lag bolt, 3/8" x 4"	
18	9	585-167	Conduit strap, 2"	
19	3	585-155	Conduit strap, 1"	
20	Varies	155-1XX	Connector, ground clamp, vise type, size varies	
21	2'	606-160	Wire, No. 4 sol Cu, bare, soft drawn	

OVERHEAD SECONDARY OPTION - ADDITIONAL MATERIALS

ITEM	QTY	ITEM #	MATERIAL DESCRIPTION	AU #
9	4	350-110	Washer, square curved, 3" x 3", 11/16" hole	980-300
20	3	155-1XX	Connector, ground clamp, vise type, size varies	
21	2'	606-160	Wire, No. 4 sol Cu, bare, soft drawn	
22	2	120-312	Bolt, oval eye, 5/8" x 12", with square nut	
23	2	155-682	Connector, insulated service, compression, No. 6 - No. 10, blue - brown	
24	2	140-658	Clamp, service wedge, flex cable, No. 6 - No. 2	900-020
25	As req'd	599-050	Wire, No. 6 str Al, covered, duplex	

DIPOLE ARRAY ANTENNA OPTION - ADDITIONAL MATERIALS

ITEM	QTY	ITEM #	MATERIAL DESCRIPTION	AU #
16	1	585-145	Conduit standoff bracket, 15"	991-131
17	2	284-098	Lag bolt, 3/8" x 4"	
26	1'	416-127	Conduit, 3/4" SCH 40 PVC	
27	1	585-154	Conduit strap, 3/4"	
28	1	MTR0440	Antenna, directional wideband, conduit mount, for INDT GEN unit	

 <p>PUBLIC UTILITY DISTRICT NO. 1 Cowlitz County, Washington 961 12th Avenue Longview, Washington</p>	<p>STANDARDS</p> <p>CONSTRUCTION STANDARDS EARLY FAULT DETECTION STANDARDS TRANSMISSION HLP INSTALLATION</p>	<table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>06/18/25</td> <td>Initial release</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DATE	DESCRIPTION	0	06/18/25	Initial release						
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