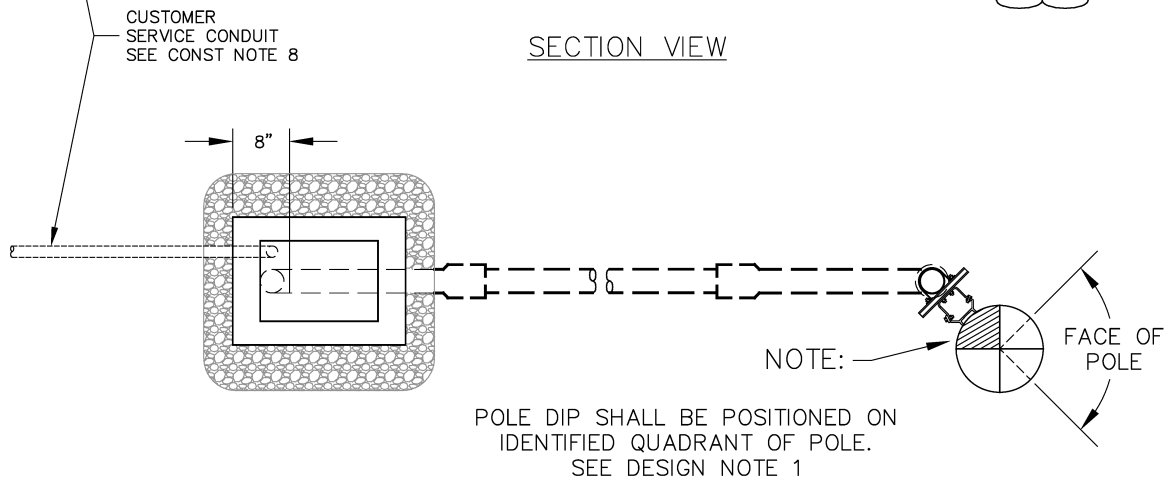


SECTION VIEW



PLAN VIEW

EC5-1.2001 - EC5-1.2017

**DISTRIBUTION CONSTRUCTION STANDARD**  
**EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON**

**SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE 2", 3" & 5"**

Approved May 03, 2019

**EC5-1.2000**

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**ASSEMBLY EC5-1.2001**

2" SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE WITH 12" BRACKETS - FOR MAINTENANCE ONLY

1.	428-0000814	2 EA	CLPCNDSTRAP2"
2.	416-0000773	2 EA	BRKTCND12"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4
4.	438-0000988	10 FT	CND2"x10'PVC 40
5.	438-0001034	1 EA	ELL2"SCH4036"RAD
6.	438-0001032	1 EA	ELL2"SCH4090<24"RAD

**ASSEMBLY NOTES:**

1. See design note 7.

**ASSEMBLY EC5-1.2002**

3" SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE WITH 12" BRACKETS

1.	428-0000815	2 EA	CLPCNDSTRAP3"
2.	416-0000773	2 EA	BRKTCND12"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4
4.	438-0000991	10 FT	CND3"x10'PVC 40
5.	438-0001045	1 EA	ELL3"SCH4036"RAD
6.	438-0001044	1 EA	ELL3"90< SCH4024"RAD

**ASSEMBLY NOTES:**

1. See design note 7.

**ASSEMBLY EC5-1.2003**

5" SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE WITH 12" BRACKETS

1.	428-0000817	2 EA	CLPCND STRAP 5"
2.	416-0000773	2 EA	BRKTCND12"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4
4.	438-0000995	10 FT	CND5"x10'PVC 40
5.	438-0001065	2 EA	ELL5"SCH4048"RAD

**ASSEMBLY EC5-1.2004**

2" SCHEDULE 40 PVC SECONDARY CUSTOMER SUBSTRUCTURE WITH 12" BRACKETS - FOR MAINTENANCE ONLY

1.	428-0000814	2 EA	CLPCNDSTRAP2"
2.	416-0000773	2 EA	BRKTCND12"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4

**ASSEMBLY NOTES:**

1. See design note 7.
2. Refer to assembly EC5-1.2021 for 2" conduit straps for use on existing pole dip brackets.

**ASSEMBLY EC5-1.2005**

2" SCHEDULE 40 PVC SECONDARY CUSTOMER SUBSTRUCTURE WITH 18" BRACKETS - FOR MAINTENANCE ONLY

1.	428-0000814	2 EA	CLPCNDSTRAP2"
2.	416-0000774	2 EA	BRKTCNDT18"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4

**ASSEMBLY NOTES:**

1. See design note 7.

**ASSEMBLY EC5-1.2006**

3" SCHEDULE 40 PVC SECONDARY CUSTOMER SUBSTRUCTURE WITH 12" BRACKETS

1.	428-0000815	2 EA	CLPCNDSTRAP3"
2.	416-0000773	2 EA	BRKTCND12"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4

**ASSEMBLY NOTES:**

1. See design note 7.
2. Refer to assembly EC5-1.2022 for 3" conduit straps for use on existing pole dip brackets.

**ASSEMBLY EC5-1.2007**

3" SCHEDULE 40 PVC SECONDARY CUSTOMER SUBSTRUCTURE WITH 18" BRACKETS

1.	428-0000815	2 EA	CLPCNDSTRAP3"
2.	416-0000774	2 EA	BRKTCND18"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4

**ASSEMBLY NOTES:**

1. See design note 7.

**ASSEMBLY EC5-1.2008**

5" SCHEDULE 40 PVC SECONDARY CUSTOMER SUBSTRUCTURE WITH 12" BRACKETS

1.	428-0000817	2 EA	CLPCND STRAP 5"
2.	416-0000773	2 EA	BRKTCND12"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4

**ASSEMBLY NOTES:**

1. Refer to assembly EC5-1.2023 for 5" conduit straps for use on existing pole dip brackets.

**ASSEMBLY EC5-1.2009**

5" SCHEDULE 40 PVC SECONDARY CUSTOMER SUBSTRUCTURE WITH 18" BRACKETS

1.	428-0000817	2 EA	CLPCND STRAP 5"
2.	416-0000774	2 EA	BRKTCND18"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4

**ASSEMBLY EC5-1.2010**

2" SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE WITH 18" BRACKETS - FOR MAINTENANCE ONLY

1.	428-0000814	2 EA	CLPCNDSTRAP2"
2.	416-0000774	2 EA	BRKTCND18"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4
4.	438-0000988	10 FT	CND2"x10'PVC 40
5.	438-0001034	1 EA	ELL2"SCH4036"RAD
6.	438-0001032	1 EA	ELL2"SCH4090<24"RAD

**ASSEMBLY NOTES:**

1. See design note 7.

**ASSEMBLY EC5-1.2011**

3" SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE WITH 18" BRACKETS

1.	428-0000815	2 EA	CLPCNDSTRAP3"
2.	416-0000774	2 EA	BRKTCND18"STANDOFF
3.	388-0000677	4 EA	SCRLAG 1/2 X 4
4.	438-0000991	10 FT	CND3"x10'PVC 40
5.	438-0001045	1 EA	ELL3"SCH4036"RAD
6.	438-0001044	1 EA	ELL3"90< SCH4024"RAD

**ASSEMBLY NOTES:**

1. See design note 7.

DISTRIBUTION CONSTRUCTION STANDARD  
EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

**SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE 2", 3" & 5"**

Approved May 03, 2019

**EC5-1.2000**

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**ASSEMBLY EC5-1.2012**

5" SCHEDULE 40 PVC SECONDARY POLE DIP SUBSTRUCTURE WITH 18" BRACKETS

- 1. 428-0000817                    2 EA    CLPCND STRAP 5"
- 2. 416-0000774                    2 EA    BRKTCNDT18"STANDOFF
- 3. 388-0000677                    4 EA    SCRLAG 1/2 X 4
- 4. 438-0000995                    10 FT    CND5"x10'PVC 40
- 5. 438-0001065                    2 EA    ELL5"SCH4048"RAD

**ASSEMBLY EC5-1.2015**

2" SCHEDULE 40 PVC SECONDARY SUBSTRUCTURE ON EXISTING BRACKETS - FOR MAINTENANCE ONLY

- 1. 428-0000814                    2 EA    CLPCNDSTRAP2"
- 4. 438-0000988                    10 FT    CND2"x10'PVC 40
- 5. 438-0001034                    1 EA    ELL2"SCH4036"RAD
- 6. 438-0001032                    1 EA    ELL2"SCH4090<24"RAD

**ASSEMBLY NOTES:**

- 1. See design note 7.
- 2. Refer to assembly EC5-1.2021 for 2" conduit straps for use on existing pole dip brackets.

**ASSEMBLY EC5-1.2016**

3" SCHEDULE 40 PVC SECONDARY SUBSTRUCTURE ON EXISTING BRACKETS

- 1. 428-0000815                    2 EA    CLPCNDSTRAP3"
- 4. 438-0000991                    10 FT    CND3"x10'PVC 40
- 5. 438-0001045                    1 EA    ELL3"SCH4036"RAD
- 6. 438-0001044                    1 EA    ELL3"90< SCH4024"RAD

**ASSEMBLY NOTES:**

- 1. See design note 7.
- 2. Refer to assembly EC5-1.2022 for 3" conduit straps for use on existing pole dip brackets.

**ASSEMBLY EC5-1.2017**

5" SCHEDULE 40 PVC SECONDARY SUBSTRUCTURE ON EXISTING BRACKETS

- 1. 428-0000817                    2 EA    CLPCND STRAP 5"
- 4. 438-0000995                    10 FT    CND5"x10'PVC 40
- 5. 438-0001065                    2 EA    ELL5"SCH4048"RAD

**ASSEMBLY NOTES:**

- 1. Refer to assembly EC5-1.2023 for 5" conduit straps for use on existing pole dip brackets.

**ASSEMBLY EC5-1.2021**

2" CONDUIT STRAP - FOR USE ON EXISTING POLE DIP BRACKETS - FOR MAINTENANCE ONLY

- 1. 428-0000814                    2 EA    CLPCNDSTRAP2"

**ASSEMBLY NOTES:**

- 1. See design note 7.

**ASSEMBLY EC5-1.2022**

3" CONDUIT STRAP - FOR USE ON EXISTING POLE DIP BRACKETS

- 1. 428-0000815                    2 EA    CLPCNDSTRAP3"

**ASSEMBLY NOTES:**

- 1. See design note 7.

**ASSEMBLY EC5-1.2023**

5" CONDUIT STRAP - FOR USE ON EXISTING POLE DIP BRACKETS

- 1. 428-0000817                    2 EA    CLPCND STRAP 5"

**CONSTRUCTION NOTES:**

1. All conduits shall enter the same end of the secondary box a maximum of 8" from the bottom inside edge of the secondary box.
2. Conduits shall not extend more than shown above the crushed rock base.
3. Base for secondary box shall allow drainage.
4. The exposed ends of all conduits shall be cut off square, free of any sharp edges, and temporarily sealed to prevent rocks or other materials from entering them after mandreling.
5. Field bending of PVC conduits is not allowed. All sweeps shall be made with manufactured elbows.
6. Provide compacted backfill as shown in excavated area around all vaults and boxes.
7. Top of secondary box base shall be set 2" above the surrounding final grade. If depth of landscaping material is not known at time of secondary box installation, top of box base shall be 4" above surrounding dirt to allow for landscaping material.
8. For customer service conduit entering a secondary box, a 90 degree elbow with a 24" radius for conduits smaller than 5" and 48" radius for 5" conduit is required.
9. The final height of the top of the 10' section of conduit will vary depending on the depth of the duct run.
10. When conduit and top pole dip bracket cannot be attached to the pole at the height shown, the installer shall strap conduit to bracket and temporarily tape the bracket to the pole. EWEB Electric Operations crew will install top standoff bracket when installing top portion of pole dip.

**DESIGN NOTES:**

1. Location of pole dip to be identified and located to allow for climbing space clearances.
2. Using the 12" pole dip brackets is the preferred assembly.
3. 18" brackets shall be used for joint use applications when the total number of conduits exceeds (3) on the EWEB pole dip bracket.
4. Secondary box SHALL NOT be installed closer than 5 ft. to a pole to maintain a clear area around the base of pole for climbing safety.
5. For new construction, the preferred location for a secondary box is within 10 ft of the pole dip with the maximum of 100 ft. Distances greater than 100 ft requires electric operations approval. For distances over 10 ft from a pole dip, a three person crew will be required to pull secondary conductor in.
6. A schedule 80 PVC substructure is required when a pole dip is exposed to vehicular traffic.
7. For new construction, a minimum 3" conduit is required for a primary or secondary pole dip.

**REFERENCE STANDARDS:**

- A) Refer to EC5-2.0400, EC5-2.0500, EC5-2.1100 and EC5-2.2700 for secondary box assemblies.
- B) Refer to EC4-0.3800 for climbing space reference.
- C) Refer to EC5-6.3400 for 350 & 500 KCM urd secondary moles.
- D) Refer to EC5-6.3500 for 750 KCM urd secondary moles.
- E) Refer to EC5-2.0100 for required minimum feeder, primary and secondary/service conductor makeup length for vaults and secondary boxes.
- F) Refer to EC5-9.0500 for conductor support brackets, secondary mole support brackets.
- G) Refer to ED5-1.0100 for Electrical Equipment placement clearances at a street corner, maximum size & setback requirements.
- H) Refer to ED5-1.6000 for Low voltage design tool.
- I) Refer to EC5-9.0200 for conduit elbow radius requirements.
- J) Refer to EC5-B.1000 for Underground service conduit and conductor requirements.
- K) Refer to EC5-B.3000 for Temporary service requirements.