# Secondary Service Bridles

# Scope This standard covers the information necessary to install bridles on secondary service overhead conductor spans in the Seattle City Light (SCL) Looped Radial Distribution System. Secondary service drops are outside the scope of this standard. See SCL 0130.30. Application This standard provides direction to SCL crews and approved contractors for the installation of bridles on secondary service overhead conductor spans. Bridles are installed to allow a service drop to either meet clearance requirements or avoid aerial trespass. Services drops from the bridle to the service strike shall be no more than 75-ft long. Bridles shall be high enough to meet the ground clearance requirements of SCL 0130.30 for service drops.

LR brackets for bridles shall be installed as shown in SCL 0100.11.

LR brackets for bridle spans between poles shall be installed on the side of the pole toward the building to which the service is being provided.

Bridle messengers shall be installed with a span guy insulator, 12 ft (typical) from the face of the pole.

See figures 3a, 3b, and 3c.

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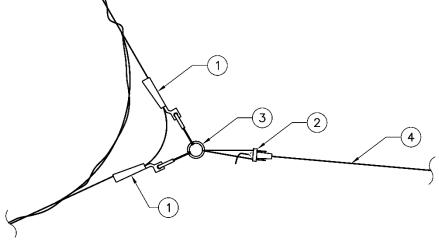
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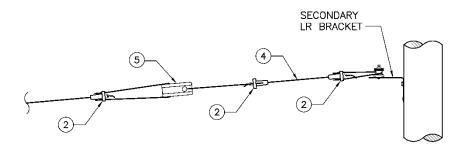
Seattle City Light CONSTRUCTION STANDARD Secondary Service Bridles

Figure 3a. Bridle Assembly

### POLE 2 DETAILS FIGURE 3B FIGURE 3B POLE 1 POLE 1 POLE 2 DETAILS FIGURE 3C STRAIN INSULATOR 12' TYP POLE 2 POLE 2 STRAIN INSULATOR 12' TYP POLE 2 POLE 2 DETAILS FIGURE 3C STRAIN INSULATOR 12' TYP POLE 2 DETAILS FIGURE 3C STRAIN INSULATOR 12' TYP POLE 2 DETAILS FIGURE 3C STRAIN INSULATOR 12' TYP POLE 2 DETAILS FIGURE 3C STRAIN INSULATOR 12' TYP POLE 2 DETAILS FIGURE 3C STRAIN INSULATOR 12' TYP POLE 2 POLE 2 STRAIN INSULATOR 12' TYP POLE 2 POLE 2 STRAIN INSULATOR 12' TYP STRAIN INSULATOR INSULATORINATOR INSULATORINATOR INSULATORIN



### Figure 3c. Attachment of Bridle to Pole 2, Detail



### 4. Construction Notes

Run continuous service when possible.

Do not use automatic or straight-line clamps for service drop connection to buildings.

Consult with an SCL engineer for:

- 4/0 quadruplex or larger service
- Service drops longer than 75 ft from the bridle to the service strike
- Clearance or overhang-related issues
- Installing a bridle off of a bridle

### 5. Material List

### Table 5. Materials for Bridle Installation

| Fig           | Compatible Unit                             | ID           | Quantity |     |
|---------------|---|--------------|----------|-----|
| 3a, 3b,<br>3c | Bridle assembly, #2-1/0                     | CNDBRIDLE1/0 |          |     |
| 3a, 3b,<br>3c | Bridle assembly, 4/0                        | CNDBRIDLE4/0 |          |     |
| #             | Material Description                        | ID           | ¥        | ł   |
| 1             | Clamp, service neutral wedge (#4–1/0 ACSR)  | 581342       | _        | 2   |
| 1             | Clamp, service neutral wedge (2/0–4/0 ACSR) | 581344       | 2        | _   |
| 2             | Deadend, automatic, Cu (#4 solid / #6 str.) | 581308       | 4        | 4   |
| 3             | Nut, oval eye, 5/8-inch                     | 565252       | 1        | 1   |
| 4             | Wire, #4 AWG Cu, covered (ft)               | 611392       | 150      | 150 |
| 5             | Insulator, guy strain, porcelain            | 690104       | 1        | 1   |

## 6. References

SCL Construction Standard 0100.11; "LR Bracket Installation"

SCL Construction Standard 0130.30; "Secondary Service Drops"

### 7. Sources

**National Electrical Safety Code (NESC) C2-2017 Edition**; Institute of Electrical and Electronics Engineers (IEEE) Inc., New York, NY, 2016

**NFPA-70, National Electric Code (NEC), Article 230**; 2014 Edition, National Fire Protection Association, Quincy, MA, 2013

Lu, Curtis; SCL Standards Engineer, subject matter expert for 0130.20

**Neuansourinh, Ponet**; SCL Standards Engineer, subject matter expert, and originator of 0130.20

SCL Construction Standard D13-1 (canceled); "Secondary Service Details"

Washington Administrative Code (WAC) 296-307-36609; "What Requirements Apply to Conductors"

Washington Administrative Code (WAC) 468-34-290; "Vertical Clearances"