Standard Number: **1561.09**

Superseding: New

Effective Date: December 19, 2016

Page: 1 of 3

Customer Requirements for Underground Secondary Service Termination Handholes in the Public Right-of-Way



1. Scope

This standard covers the requirements for the construction and installation of underground secondary service terminations in the public right-of-way in the Seattle City Light (SCL) service territory. This standard only applies to underground service installations where the point of termination is in the right-of-way.

For underground secondary services on private property, refer to SCL 0224.01.

2. Application

This standard provides direction to engineers, consultants, contractors and customers about how to properly install an underground secondary service in the public right-of-way.

This standard also provides the details to be used for inspection by SCL electric service representatives/engineers, civil inspectors and electrical reviewers.

3. General Requirements

Customer shall meet underground secondary service requirements. See SCL 0224.01.

Customer shall meet clearances between SCL underground structures and other utility structures in the public right-of-way. See SCL 0214.00.

Customer shall meet termination handhole installation requirements. See SCL 0231.01.

See Figure 3 for SCL and customer responsibilities.

Jololpul

Standards Coordinator

Brett Hanson

Mut Hanson

Standards Supervisor John Shipek Unit Director Darnell Cola

Damel Coh

Handholes in the Public Right-of-Way

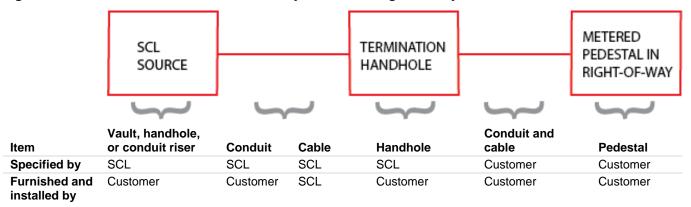
Standard Number: **1561.09**

Superseding: New

Customer Requirements for Underground Secondary Service Termination Effective Date: December 19, 2016

Page: 2 of 3

Figure 3. Basic Infrastructure of a Customer System in the Right-of-Way



Detailed SCL Responsibilities

SCL equipment, including the termination handhole, is covered by the NESC.

SCL shall designate service points for customer electrical services from a distribution source. Streetlight circuits shall not be tapped for customer equipment or loads.

An SCL electrical reviewer shall inspect and test systems before service connections are made.

Detailed Customer Requirements

Customer shall install a pedestal-mounted, external service disconnect or other approved service disconnect. The pedestal shall be above grade.

The service equipment pedestal or other approved service disconnect shall be located after the termination handhole (service point).

Meter requirements shall be determined by SCL Customer Engineering.

The Authority Having Jurisdiction (AHJ) shall inspect and approve each customer electrical installation before service connections are made by SCL.

All conductive components in termination handholes shall be bonded to the grounding electrode.

Connections to the grounding electrode shall be made by irreversible means. Above grade connections may be irreversibly bolted or exothermically welded. Below grade connections shall be exothermically welded.

Customer shall determine if service overcurrent protection will be either fuses or a circuit breaker. Customer overcurrent devices shall be installed in the customer service equipment pedestal.

Customer shall furnish and install NEC-sized conductors from the termination handhole to the customer service pedestal. SCL shall install conductors from the SCL source to the termination handhole and make all connections in the termination handhole and at the SCL source.

Customer equipment from the customer conductors in the termination handhole and downstream is covered by Seattle Electrical Code Article 80 and the NEC.

Customer service bond shall be located at the customer service metered pedestal or other approved disconnect.

Customer Requirements for Underground Secondary Service Termination Handholes in the Public Right-of-Way

Standard Number: **1561.09**

Superseding: New

Effective Date: December 19, 2016

Page: 3 of 3

6. References

SCL Construction Standard 0214.00; "Clearances between SCL Underground Structures and Other Utility Structures in the Public Right-of-Way"

SCL Construction Standard 0224.01; "Customer Requirements for Underground Secondary Service, Looped Radial System"

SCL Construction Standard 0231.01; "Secondary Handhole Installation"

7. Sources

Hanson, Brett; SCL Standards Engineer and originator of 1561.09 (brett.hanson@seattle.gov)

Chao, Yaochiem; SCL Standards Engineer and subject matter expert for 1561.09 (yaochiem.chao@seattle.gov)

Borek, Tom; SCL Streetlight Engineer and subject matter expert for 1561.09 (tom.borek@seattle.gov)

Perander, Eivind; SCL Service Engineer and subject matter expert for 1561.09 (eivind.perander@seattle.gov)

SCL Construction Standard 0222.02; "Requirements for Duct Banks in the Public Right-of-Way"

SCL Construction Standard 0224.07; "Requirements for Secondary Conduits in the Right-of-Way"

SCL Construction Standard 0233.05; "Secondary Handhole Grounding"

SCL Construction Standard 0461.10; "Grounding Electrodes for Handholes and Vaults"

SCL Construction Standard 0468.90; "Exothermic Connection System"

SCL Construction Standard U2-11.40/NDK-40; "Mandreling and Cleaning of Ducts and Conduits"

Zhuang, **Liman**; SCL Service Engineer and subject matter expert for 1561.09 (liman.zhuang@seattle.gov)