Customer Requirements for Underground Secondary Service, Looped Radial System

1. Scope

This standard covers customer requirements for underground secondary services within the Seattle City Light (SCL) Looped Radial system.

An underground secondary service can be served from an overhead, pole-mounted transformer or an underground transformer located in the right-of-way. The service point is determined by SCL.

Underground secondary service in the Network system is outside the scope of this standard.

Primary service is outside the scope of this standard.

SCL shall determine whether the service design will be primary or secondary.

A service where the customer must provide a facility on private property for SCL transformers is outside the scope of this standard.

2. Application

This standard is intended for use by customers and SCL engineering, electric service representatives, and operations personnel.

This standard provides a reference to SCL standards that specify customer requirements for underground secondary service in the looped radial system.

3. Inspection

The following items must be inspected by SCL before cover is installed:

- Conduit trench
- Trench bedding
- Conduit
- Trench backfill
- Handhole bedding
- Handholes

Inspection points shall be adhered to for all installation projects. Inspection points are put in place to ensure conformity to SCL requirements. Failure of the customer to request an inspection may result in additional requirements.

4. Conflict

Where conflict exists between SCL requirements, the following order of precedence shall apply:

1. Project-specific Customer Requirements Package, including the Service Construction Drawing
2. SCL 0224.01
3. Other SCL standards

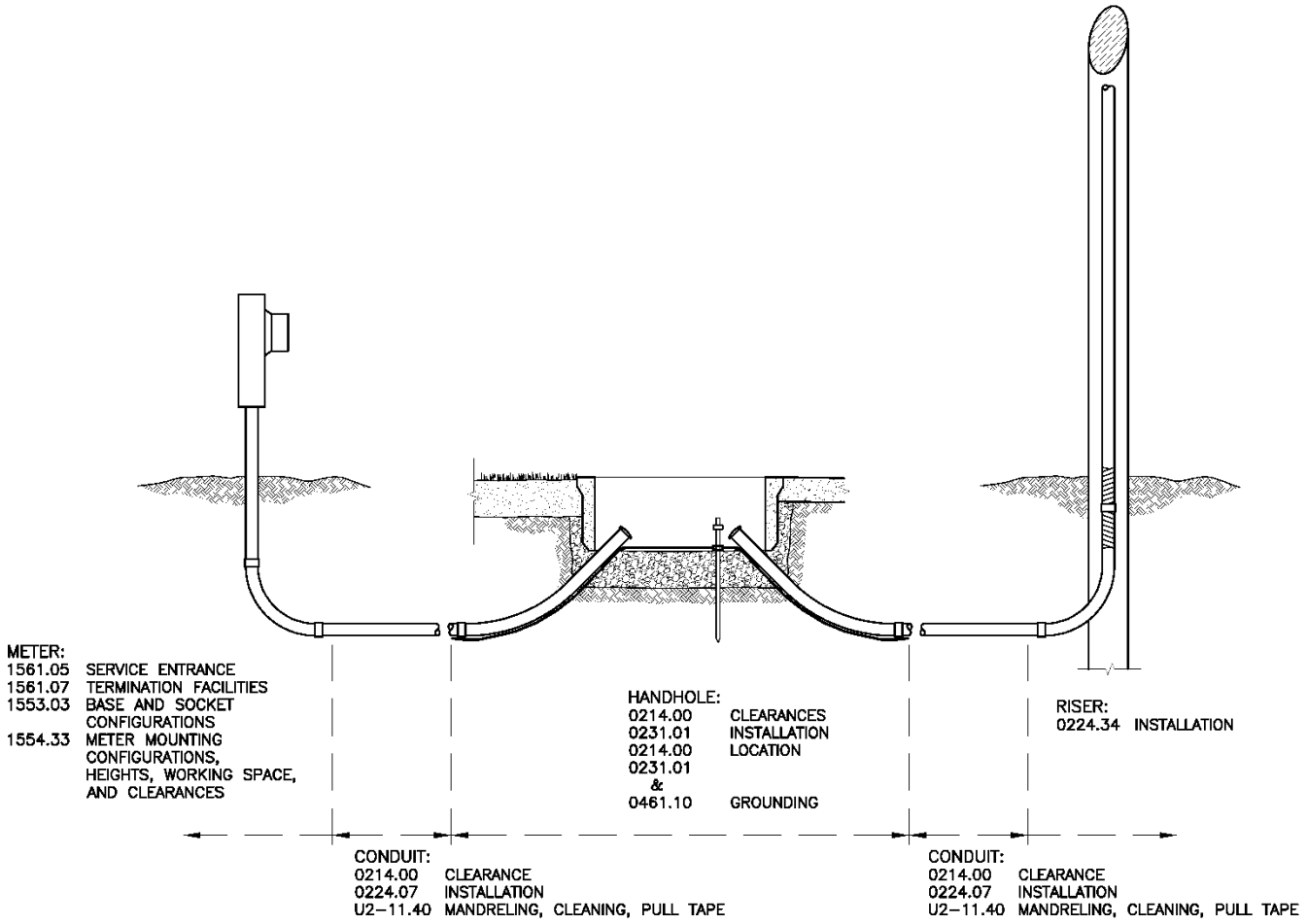
5. Requirements

Customer is responsible for obtaining municipal permit before trenching in the right-of-way.

It is the customer's responsibility to locate all underground utilities before excavating. Customer should call 811 at least two business days before the planned excavation date.

Customer-owned cable shall comply with the electrical code enforced by the Authority Having Jurisdiction (AHJ) and shall be visibly marked at the point of termination (service point) to indicate phase and service being fed.

Figure 5. Guide to Underground Secondary Service Standards



6. References

Requirements for Electrical Service Connection (RESC); Seattle City Light

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

SCL Construction Standard 0224.07; "Requirements for Secondary Conduit Installation"

SCL Construction Standard 0224.34; "Steel Conduit Risers"

SCL Construction Standard 0231.01; "Secondary Handhole Installation"

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

SCL Construction Standard 1553.03; "Meter Base and Socket Configurations"

SCL Construction Standard 1554.33: "Meter Mounting Configurations, Heights, Working Space, and Cearances, Exterior (Outdoor)"

SCL Construction Standard 1561.05; "Customer Requirements for Underground Single or Dual Meters, Residential Service"

SCL Construction Standard 1561.07; "Customer Requirements for Underground Secondary Service Termination Facilities"

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

SCL Construction Standard U2-14.2; “Vault Installation”

7. Sources

Chao, Yaochiem; SCL Standards Engineer, originator, and subject matter expert for 0224.01

Hanowell, Manny; SCL North Distribution Engineer and subject matter expert for 0224.01

Panomvana, Tanya; SCL North Distribution Engineer and subject matter expert for 0224.01

Perander, Eivind; SCL North Distribution Supervisor and subject matter expert for 0224.01