

GENERAL INFORMATION FROM SERVICE CONVERSION FROM OVERHEAD TO UNDERGROUND

1. **PRE-INSPECTION:** Once the City provides notification to the property owners that the District is ready for private overhead to underground utility conversion, please contact the responsible Building Inspector, Ed Hotz, at (949) 644-3273 for a pre-inspection. A pre-inspection is required even if your property has existing underground services. The pre-inspection checklist will indicate whether further underground utility processes need to be taken.

If your property has existing electric, telephone, and cable underground services, no further action will be necessary after the pre-inspection. If one or more of the existing services need to be undergrounded, please note the following steps.

2. **RETAIN AN APPROPRIATE CONTRACTOR:** The contractor you retain must possess one of the following contractor's license to perform the private underground conversion work:

- C-10: Electrical Contractor (Specialty)
- A: Engineering Contractor
- B: General Building Contractor
- Owner/Builder

It is strongly recommended that you obtain at least 3 bids from contractors and ask for references in order to get a reputable contractor that will provide the highest quality of work at the lowest possible price. Please refer to the California Contractor's State License Board for further information on hiring a contractor.

3. **DETERMINE METHOD OF CONNECTION AND PREPARE EXHIBIT:** You and your contractor will need to prepare a line diagram (exhibit) of the work being proposed. The exhibit should show all boxes, conduit, conductor sizes, service rating, and breaker sizes. SCE requires that your contractor call the Local Service Planner to approve your meter location. The contractor will need to obtain a plan from SCE prior to any excavation. Please note that any existing, non-conforming services may need to be upgraded and/or relocated.

Please see attached exhibits for appropriate requirements to underground your electric, telephone, and/or cable services. All installations shall comply with the rules and regulations of the City of Newport Beach along with all applicable governing laws and ordinances, Southern California Edison, AT&T, and Time Warner Cable.

- Meter height must meet 4'-0" to 6'-3" from final grade to centerline of meter.
- Provide 36-inch sweeps.
- Conduits to be placed a minimum of 30 inches below finished grade measured from the outside of the conduit.
- Provide a 12-inch separation between other utilities, 6 inches for crossings.
- Install a yellow ¼-inch pole pull rope in the conduit for mandrelling.

6. **CALL FOR INSPECTION:** An inspection approval shall be obtained from the City's Building Department and SCE Inspector for the conduit installation PRIOR to backfilling the trench. Please provide a minimum 48 hour notice for inspections.

Ed Hotz, City Building Inspector, at (949) 644-3273.
 Joe Guy, SCE Inspector, at (714) 895-0448

7. **METER PANEL UPGRADE AND BACKFILLING:** All meter panel installations shall comply with the rules and regulations of the City of Newport Beach along with all applicable governing laws and ordinances and the Electrical Services Requirements of Southern California Edison.

All backfilling shall comply with City Building Department requirements, and Public Works Department requirements, if applicable.

8. **CALL FOR "ROUGH SERVICE RELEASE" INSPECTION:** Once the work described in Step 7, the contractor shall call Ed Hotz, City Building Inspector at (949) 644-3273, for a "rough service release" inspection. A "rough service release" must be approved prior to contacting SCE to arrange for a "cut-over".

Once Step 7 has been completed, the owner/contractor shall await for further notice from the City to schedule a "cut-over" as described in Step 8.

8. **SCHEDULE CUT-OVER:** Once 90 percent of the District receives the appropriate City and SCE "releases," SCE will begin contacting contractors to schedule a "cut-over" to the new panel. The contractor must be present at the scheduled "cut-over" time. All overhead wires will be removed and the overhead riser mast will be cut and capped under. This step is to complete the actual work to convert overhead services to underground services.

9: **SCHEDULE A FINAL INSPECTION:** A final City inspection shall be made to ensure that all work is complete. All repaving shall be completed. The Electrical Permit will not be "finaled" until this step has been taken.

If any questions arise concerning these requirements, please contact the City's Building Department at (949) 644-3275 or your SCE Local Service Planning Office at (714) 895-0217.

AT&T Service Undergrounding Procedures

When all conduits and underground structure are in place, each property will have a two-inch (2") telephone service conduit capped off at the property line. It is the individual property owner's (or contractor's) responsibility to extend this service conduit to the existing telephone connection box. The connection box, also known as a standard network interface (SNI), is mounted to the inside wiring. It may be located in the eaves, the attic, or on the side of the house.

AT&T conduit and trenching requirements are provided in Attachment #1. These requirements, for your information and use by your contractor, show the method to bring your two-inch (2") conduit to the connection box / SNI plus a typical trench cross-section.

The work provided by AT&T at the time of the undergrounding will be limited to the following:

1. The pulling of new lines through the conduit to the EXISTING connection box / SNI location. For those properties where the conduit does not run to the existing connection box / SNI location – the wiring will be run exposed along the outside wall to make the connection.
2. Replacement of an existing old connection boxes with a new SNI where appropriate.
3. Conversion of all working telephone lines to underground and removal of aerial drop wires back to the pole from the house.

Due to tariff and specific billing requirements, connection box relocations and inside wiring work cannot be provided by this undergrounding district. By law, a service order MUST be placed with AT&T to relocate the existing connection box, if so desired. Those property owners that wish to relocate the connection box(es) to the end of their conduit should refer to Attachment #3.

Terminal cabinets to house connections box(es) SNI's are not required by AT&T at the time of the undergrounding with the exception of new residential construction.

The SNI unit is a gray, boxlike unit that can be mounted directly to the structure. For those property owners that wish to have the SNI enclosed in a cabinet, Attachment #2 provides the minimum specifications that we must have to utilize such cabinets.

AT&T – ATTACHMENT #2
TELEPHONE TERMINAL HOUSING REQUIREMENTS

AT&T does NOT require the use of cabinets to house connection boxes or SNI units unless new construction is involved.

Minimum size cabinets to be placed is 11"x14" (will house one to six lines).

Depth of cabinet will never be less than 4" from the backboard to the front surface.

Cabinet to be provided with:

1. 3/4" plywood backboard
2. #6 ground capabilities

Gauge of steel required:

1. 20 gauge steel up to 14"w x 16"h
2. 16 gauge steel from 14"w x 18"h up to 32"w x 36"h
3. 14 gauge steel for all cabinets 34"w x 36"h and larger

Must be UL approved.

For security and aesthetic appearance the conduit can be run up to the cabinet.

Suppliers of approved cabinets can be found through electricians, their suppliers, or in the AT&T Yellow Pages under the listing of Telecommunications.

AT&T reserves the right to refuse to install service into those cabinets that do not meet the above specifications in accordance with the National Electrical Codes.

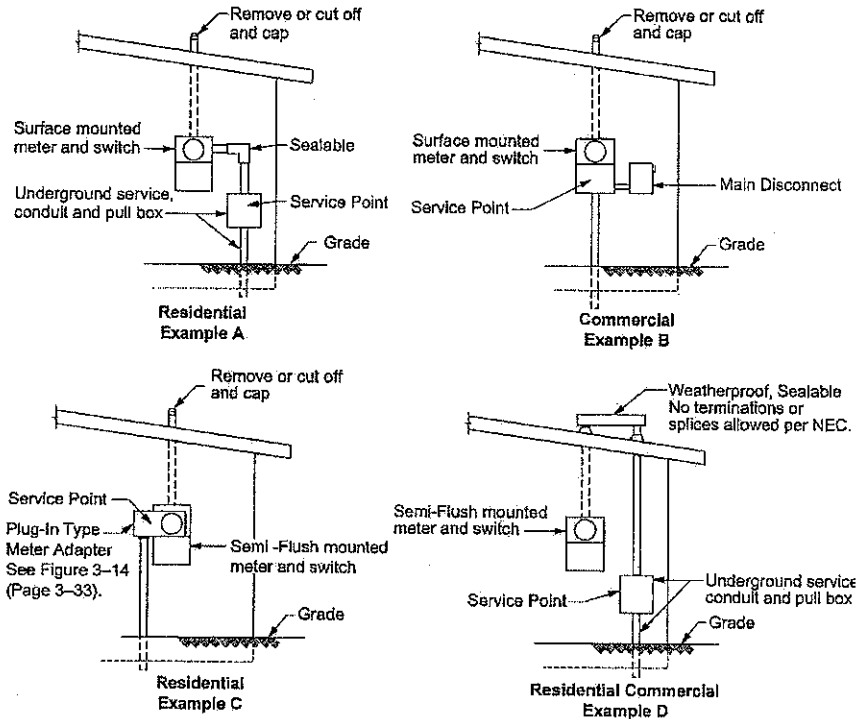
Updated 4/25/07

UNDERGROUND UTILITY ASSESSMENT DISTRICT No. ____

Private Conversion Checklist for Owner/Contractor

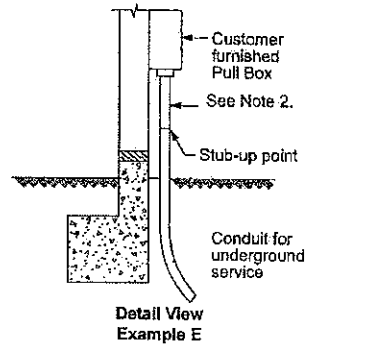
- ____ Wait for conversion letter from the City of Newport Beach to start work.
(owner)
- ____ Schedule a pre-inspection with the designated City Building Inspector. A pre-inspection checklist will be provided upon completion. (owner)
- ____ Retain an electrical contractor to perform underground utilities work.
(owner)
- ____ Contractor to obtain conduit map from SCE Local Service Planner prior to trenching and conduit installation.
- ____ Apply and obtain approval for an electrical permit at City Building Department. The completed pre-inspection list must be presented. Should any portion of the work take place in the public right-of-way, an approved encroachment permit from the City Public Works Department must be obtained prior to starting work. (contractor)
- ____ Contractor to start work by opening trench, installing conduits, and upgrading the meter panel, as necessary.
- ____ Schedule a 2nd inspection with City Building Inspector to review trench, proximity of footing, conduits, and anything that is deemed necessary by the Building Inspector. This should be performed prior to closing the trench. (contractor)
- ____ Schedule a SCE "release inspection" with designated SCE inspector to inspect trench, conduit material, pull rope, and all other designated SCE items. This inspection shall be completed prior to closing the trench.
(contractor)
- ____ Schedule a "rough service release inspection" with City Building Inspector to inspect installed meter panel and grounding. This inspection shall be scheduled after the trench is backfilled and repaved. (contractor)
- ____ Wait for letter from City indicating SCE is ready to schedule a cut-over. A "rough service release" approval must be obtained prior to scheduling a cut-over. (owner)
- ____ SCE will contact contractor to schedule a cut-over once 90 percent of the district has received City and SCE "releases". The contractor will need to meet with the SCE representative at the project site. (contractor)
- ____ Schedule a final inspection with City Building Inspector once all work is completed (contractor).

Figure 3-13: Typical Service Conversion from Overhead to Underground



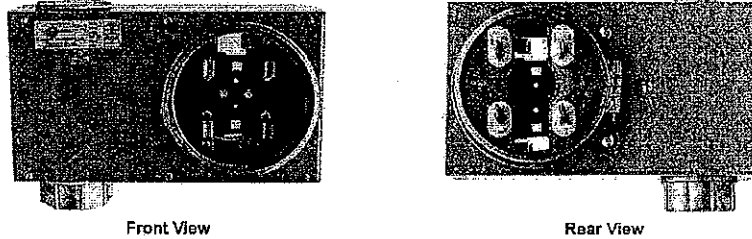
Notes

1. Customer to furnish conduits pull boxes, adapters, gutters, trench, and backfill.
2. Conduits may be stubbed-up by utility for customer pick-up.
3. Exposed PVC conduit, where acceptable to local inspection agency, shall be minimum Schedule 40. Where exposed to physical damage, install Schedule 80.
4. Weatherhead-to-weatherhead conversion requires local city, county inspection, jurisdiction approval. Pull-box shall be grounded by the customer.



ESR-3	Underground Service Connections 0-600 Volts	Approved <i>PHH</i>
Page 3-32	Electrical Service Requirements SCE Public	Effective Date 5-16-2005

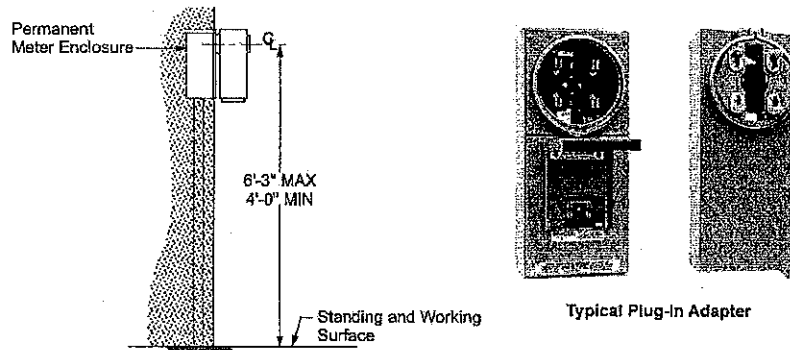
Figure 3-14: Typical Plug-In Type Meter Adapter



Note

1. The plug-in type meter adapter is limited to 120/240 V, 125 A single-phase service only. The maximum cable size to pull and terminate into the adapter is 1/0 CLP due to limited working clearance in the terminating section.

Figure 3-15: Plug-In Temporary (Piggyback) Service Adapter

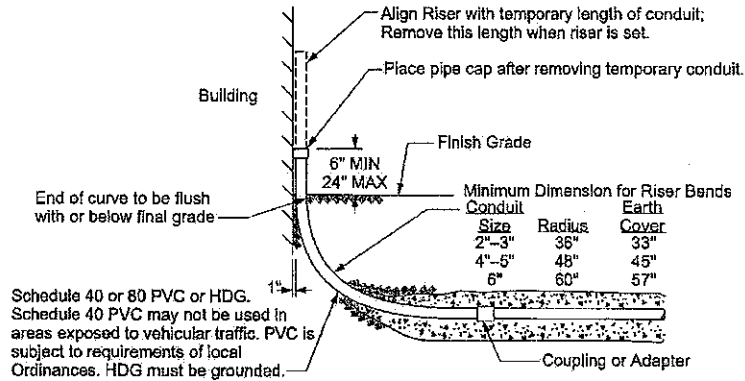


Note

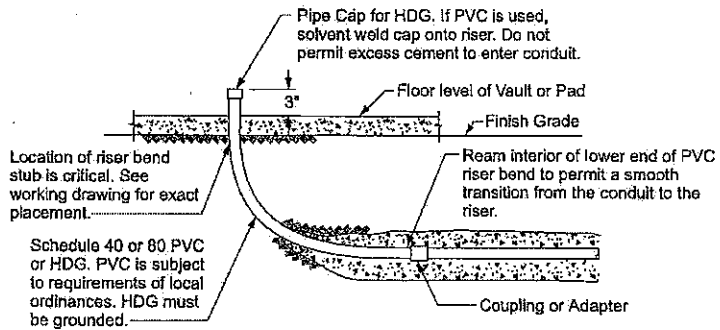
1. Permanent service cables must be installed and approved by the local inspection jurisdiction before a temporary (Piggyback) service adapter may be installed.

Approved <i>PHH</i>	Underground Service Connections 0-600 Volts	ESR-3
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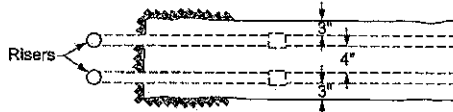
Figure 3-21: Riser Bend Installation at Wall or Pad



Typical Riser at Building



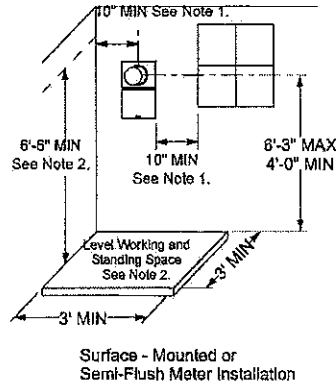
Typical Riser at Vault or PAD



Plan-View For Two Conduit Terminals

Approved <i>PLH</i>	Underground Service Connections 0-600 Volts	ESR-3
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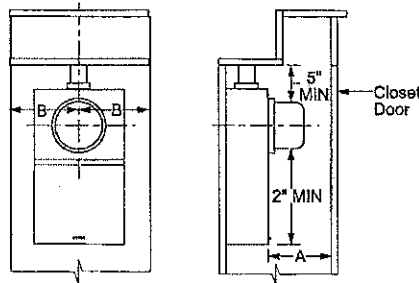
Figure 5-5: Workspace – Surface-Mounted or Semi-Flush Meter Installation



Notes

1. The horizontal clearance from the centerline of the meter to the nearest side wall or other obstruction shall be 10-inches minimum. A horizontal clearance from the edge of the meter panel to the edge of a window or doorway (including sliding glass doors) shall be 10-inches minimum. A gas meter or plumbing fixture that does not protrude more than six (6) inches out from the wall, or extend less than 18 inches horizontally from the outside edge of the meter panel, shall not be considered an obstruction. See Figure 5-4 (Page 5-23).
2. A level working and standing surface, clear and unobstructed, entirely on the property of the customer, shall be provided. The minimum width of the workspace shall be 36 inches overall, but need not be centered beneath the meter. The minimum depth of the workspace shall be 36 inches. Where meters are enclosed in a closet or recessed in an enclosure, the depth of the workspace is measured from the outer face of the closet or recess. The minimum height of the workspace shall be 78 inches.

Figure 5-6: Minimum Enclosed Meter Clearances – 0-600 Volts



Minimum Enclosed Meter Clearances

	A	B
Residential	7"	10"
Commercial	11"	10"

ESR-5	Meters-EXO Installations	Approved <i>RWH</i>
Page 5-24	Electrical Service Requirements SCE Public	Effective Date 7-28-2006