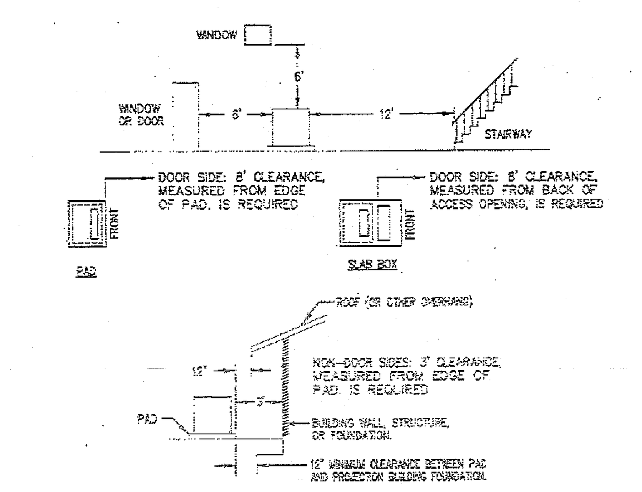
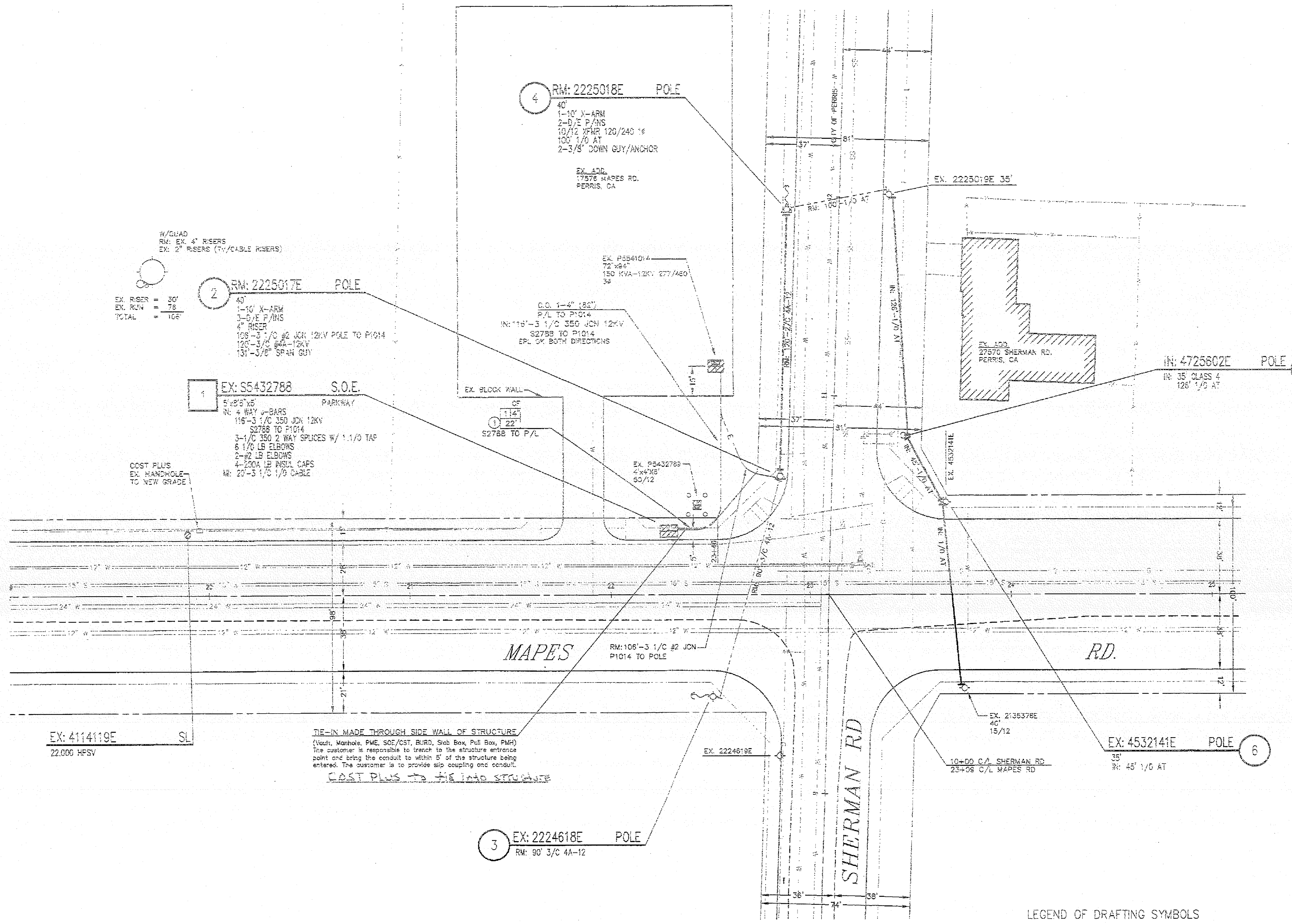
MINIMUM CLEARANCES FOR PADMOUNTED TRANSFORMERS
SEE DDS-3, 3-42

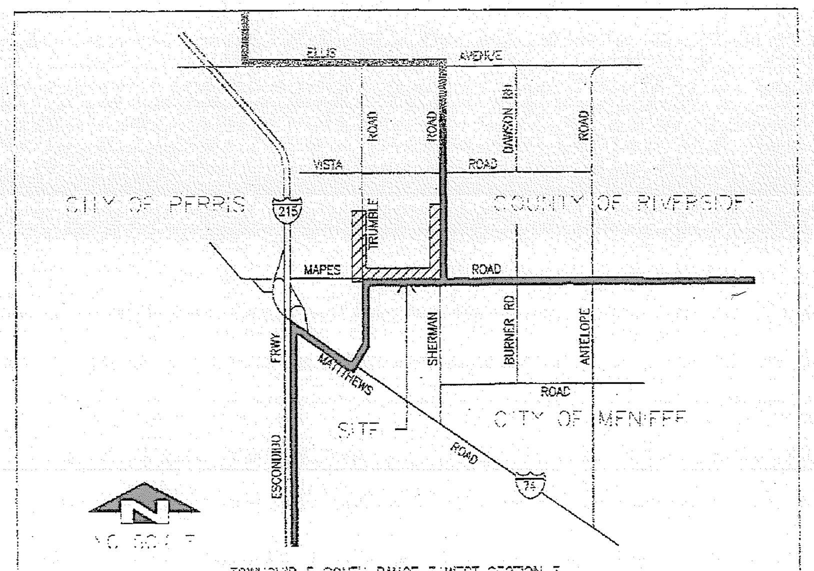


NOTES:

1. AN 8' MINIMUM CLEARANCE IS REQUIRED ON DOOR SIDE OF TRANSFORMER FOR OPERATION. THIS AREA MUST REMAIN CLEAR OF ALL OBSTRUCTIONS INCLUDING, BUT NOT LIMITED TO, SHRUBS, TREES, GATES, FENCES, WALLS, SIGNS AND POLES.
2. PAD-MOUNTED TRANSFORMERS SHALL NOT BE LOCATED IN FRONT OF DOORS, STAIRWAYS, BENEATH WINDOWS THAT CAN BE OPENED, OR WHERE THEY WILL OBSTRUCT THE VISION OF VEHICULAR TRAFFIC.
3. PAD-MOUNTED TRANSFORMERS SHALL BE LOCATED AT LEAST THE MINIMUM DISTANCE AWAY FROM BUILDINGS OR OTHER STRUCTURES TO ENSURE ADEQUATE SPACE FOR OPERATING, TO MINIMIZE VIBRATION HUMS, AND TO MEET FIRE SAFETY REQUIREMENTS.
4. A CLEAR PASSAGEWAY OF 12 FEET MINIMUM SHALL BE AVAILABLE AT ALL TIMES, IMMEDIATELY ADJACENT TO ONE SIDE OF THE TRANSFORMER TO PROVIDE AN ACCESSIBLE ROADWAY FOR TRANSFORMER MAINTENANCE. THIS PASSAGEWAY SHALL BE DESIGNED TO MEET H-20 (20-TON) CONSTRUCTION.
5. TRANSFORMER STRUCTURES WILL NORMALLY BE INSTALLED ONLY IN NONTRAFFIC AREAS. TRANSFORMER PROTECTION IS REQUIRED WHEN COMPANY EQUIPMENT IS EXPOSED TO TRAFFIC. THIS PROTECTION MAY BE IN THE FORM OF BARRIERS, BARRICADES, OR CURBS. A CURB MUST HAVE A MINIMUM HEIGHT OF 6 INCHES AND BE AT LEAST 6 INCHES THICK AND ITS FRONT FACE LOCATED 60 INCHES MINIMUM FROM THE EQUIPMENT FOUNDATION.

D54 Rev 01/22/04





TOWNSHIP 5 SOUTH RANGE 3 WEST SECTION 3
PAGE 808 OF THE THOMAS GUIDE

VICINITY MAP
NO SCALE

CONSTRUCTION NOTES:

Unless otherwise specified on the working drawing which forms a part of the specification, the Contractor/Developer shall furnish the following items at no cost to the Edison Company.

Southern California Edison Company has attempted to correctly show all existing utilities and substructures in the vicinity of the work, but does not guarantee there are no other substructures in the area. Failure of SCE to show all substructures in their correct location will not be a basis for a claim for extra work, and the contractor shall be responsible for all damages to substructures whether shown or not.

1. FOR GENERAL SPECIFICATIONS SEE UGS GI 001.
2. CONDUIT:
   a. Minimum cover in street or parkway is 30" below gutter grade, unless noted otherwise.
   b. Minimum cover on private property is 30" below finished grade, unless noted otherwise.
   c. Contractor is to furnish and install approved conduit to Edison specifications per UGS CD 100.1, 110 AND 120.
   d. For the type of conduit for this job, See UGS CD 110.1.
   e. Install all risers per UGS CD 160, 161, 162 and 170.
   f. Cap all mainline conduits per UGS CD 148 and service conduits per UGS CD 150.
   g. Install blank conduit plugs in all conduits terminating into Vaults, Manhole's, PMH's, SOE's & all cap locations, per UGS CD 180.1 & UGS CD 180.2
   h. Install pull rope in all conduit runs. Pull rope to be 1/4" polypropylene or polyethylene rope, braided or twisted. For specifications, approved makes, and suppliers, see UGS GI 040.
   i. All conduit must be mandreled with the approved mandrel UGS CD 197.
3. CONDUIT RADIUS REQUIREMENTS:
   a: The minimum radius for bends are:
   36" for conduits 3" in diameter or smaller
   48" for conduits 4" and 5" in diameter
   60" for 6" diameter conduit
   b: The minimum radius for all sweeps of all mainline conduits is 12'-6" (unless noted otherwise).
4. EXCAVATION AND BACKFILL:
   a. Work area shall be cleared and rough graded to within four inches of final grade prior to installation of Edison conduit or structures.
   b. All excavations shall be in accordance with the California State Construction Safety Orders (when applicable), Edison specifications, and all governing local ordinances.
   c. Each trench to be a uniform depth below final grade prior to installation of Edison conduit or structures.
   d. Backfill shall be provided by the Contractor for all excavations and shall include crushed rock, concrete, and/or imported backfill, when required.
   e. Backfill with a MINIMUM of one sack per yard sand cement slurry around and over vaults and manholes per UGS GI 030, section 5.4 and around PMH's within one foot of finished grade, per UGS SS 590.1.
   f. Backfill, per Edison specifications, shall immediately follow conduit or substructure installation. At no time shall conduit be left exposed over 24 hours.
   g. No rocks are allowed within 12 inches of direct-buried cables or any conduit without concrete encasement. Native backfill capable of passing through a one-half inch mesh screen shall be considered to be "rock free". If existing backfill does not pass through a 1/2" screen, place imported sand 3" below and 12" above Edison cables. After this point, no rocks larger than 12" diameter are permitted.
   h. All backfill shall be compacted to meet or exceed local ordinances or other requirements. It shall be placed in a manner that will not damage the conduit or substructure or allow future subsidence of the trench or structures.
5. PAVING:
   Repaving, where required, shall be placed in such a manner that interference with traffic, including pedestrian traffic, will be kept to a minimum. The Contractor shall establish a program of repaving acceptable to the Municipality, County, or other authority having jurisdiction and which is acceptable to Edison.
6. STRUCTURES:
   a. All substructures shall be constructed or installed to Edison specifications.
   b. Install protection barriers per UGS MS 830 when required in areas exposed to traffic, per Edison inspector.
   c. All conduit lines and concrete floored substructures shall be water tight.
   d. All grounding materials shall be furnished and installed by the Contractor.
7. RETAINING WALLS:
   When required, retaining walls shall be provided by the Developer. Walls are required wherever grade rises more than 18 inches above the structure or 24" above the pad surface at a distance of 5 feet from the same, or in areas subject to erosion. Design and installation must comply with local building ordinances. Refer to Edison Inspector for typical space requirements.
8. PERMITS:
   All permits necessary for excavation shall be provided by the Contractor/Developer.
9. ACCESS:
   Heavy truck access shall be maintained to equipment locations. Structures must be clear of all appurtenances that would obstruct the loading or unloading of equipment.
10. SERVICES:
   a. Meters and services shall comply with Edison Electric Services Requirements.
   b. Wiring must be in accordance with applicable local ordinances and approved by local inspection Authorities.
11. LOCATION:
   a. The location of excavations and structures for Edison shall be as shown on the working drawing. No deviation from the planned locations will be permitted unless approved by the Edison Inspector. See UGS GI 001, section 2.2.
   b. Actual location of obstructions, storm drains, and/or other foreign utilities to be the responsibility of the Contractor. See UGS GI 001, section 2.3.
12. Contractor is to verify location and widths of all sidewalks and driveways prior to street light installation. See UGS CD 175.1, UGS CD 175.2 and UGS CD 175.3.
13. SURVEY:
   Surveying of street improvements, property corners, lot lines, finished grade, etc., necessary for the installation of underground facilities must be completed and markers or stakes placed prior to the start of the installation. In addition, Developer shall maintain the markers during the installation and inspection by Edison. Grade and property line stakes must show any offset measurements.
14. COORDINATION AND SUPERVISION:
   The Developer shall provide supervision over and coordination among the various contractors working within the development in order to prevent damage to Edison facilities. He is responsible for the cost of repairs, replacement, relocation, or other corrections to Edison facilities made necessary by his failure to provide supervision or to otherwise comply with these specifications.
15. TELEPHONE AND OTHER UTILITY REQUIREMENTS:
   The drawing prepared for this job may also cover the facilities to be installed for the telephone company and/or other utility. Any questions concerning details of their installation should be referred to the company concerned.
16. OWNERSHIP:
   Developer is to deed to the Edison Company all structures shown hereon except those shown as customer owned.
17. WARRANTY:
   Applicants expressly represent and warrant that all work performed and all material used in meeting Applicants' obligations herein are free from defects in workmanship and are in conformity with Southern California Edison Company's requirements. This warranty shall commence upon receipt by applicants of Company's final acceptance and shall expire one year from that date. Applicants agree to promptly correct to the Company's satisfaction and that of any governmental agency having jurisdiction and at Applicant's expense any breach of this warranty which may become apparent through inspection or operation of underground electric system by Company during the warranty period.
18. INSPECTION:
   Inspection is required during the construction period. A 48 hour advance notice of intent to start construction is required from the contractor to the Southern California Edison Company. Standards of Edison construction requirements are available upon request.

Duct and Structure Inspector: WILLIE RADFORD Phone: 951-663-0321
Cabling Construction Coordinator: TODD ATKINS Phone: 951-581-2829

D36 Rev 10/17/07

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE: 1 IN = 30 FT
0 30 60

LEGEND OF CONDUIT SYMBOLS
(CONVENTIONAL U. G.)

EDISON
NO. CONDUIT REQ'D. — SIZE OF CONDUIT
RUN NO. — LENGTH OF CONDUIT RUN

TRENCH
TYPE OF FACILITY (CIC-DB, ETC.)
RUN NO. — LENGTH OF TRENCH

STREET LIGHT
NO. CONDUIT REQ'D. — SIZE OF CONDUIT
RUN NO. — LENGTH OF CONDUIT RUN

STREET LIGHT TRENCH
TYPE OF FACILITY
RUN NO. — LENGTH OF ADDITIONAL TRENCH REQ'D.

EDISON
NO. CONDUIT REQ'D. — SIZE OF CONDUIT
REFERENCE RUN NO. — MEMO — DENOTES CONDUIT RUN CONTINUATION FOR CONSTRUCTION INFORMATION

STREET LIGHT
NO. CONDUIT REQ'D. — SIZE OF CONDUIT
REFERENCE RUN NO. — MEMO — DENOTES CONDUIT RUN CONTINUATION FOR CONSTRUCTION INFORMATION

ANY OF THE ABOVE SYMBOLS FOLLOWED BY A —*

DENOTES THE FOLLOWING:

DB CONDUIT WITHOUT ENCASEMENT IS ACCEPTABLE FOR PORTIONS OF TRENCH WITH ONLY ONE OR TWO CONDUITS

SEMI-ENCASEMENT IS REQUIRED FOR PORTIONS OF TRENCH WITH ONLY THREE OR FOUR CONDUITS

FULL ENCASEMENT IS REQUIRED FOR MORE THAN FOUR CONDUITS

D18: Rev 5/08/2006

LIST OF MATERIALS [EDISON CO.]

NOTES:
1. Footage quantities are approximate.
2. Where reference is to an item not detailed, see separate description list.
3. This list provides a summary of major items.

SEE UGS SECTION INDEX FOR REFERENCE DRAWINGS

QUAN.	UNIT	DESCRIPTION	SIZE	ITEM NO.	REF DWG.	REV. DATE

D64 Rev 02/17/07

CONCRETE PRODUCTS

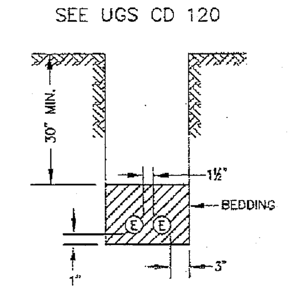
Precast concrete item complete with neck. Cover and inserts may be obtained from any of the following listed and approved manufactureres:

JENSEN PRECAST
14221 San Bernardino Ave., Fontana, Calif. 92335
Phone: (909) 350-4111
(800) 257-6100

UTILITY VAULT CO.
10650 Hemlock Ave., Fontana, Calif. 92337
Phone: (909) 428-3700
(800) 626-3860

FOR HANDHOLE AND PULLBOX MANUFACTURERS, SEE UGS HP 200.

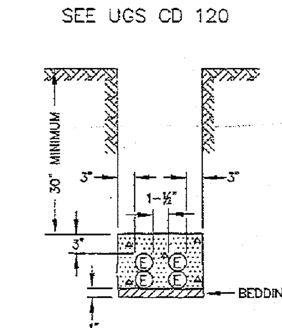
TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



DIRECT BURIAL.
SIMILAR CONSTRUCTION FOR FEWER CONDUIT
2 CONDUITS MAX.

D61 Rev. 09/23/09

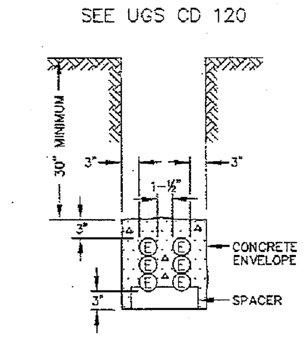
TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



SEMI-ENCASEMENT
3 OR 4 CONDUITS

D73 Rev 09/23/09

TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



FULL ENCASEMENT
MORE THAN 4 CONDUITS
(BASE SPACER REQUIRED)

D72 Rev 09/23/09

LEGEND OF DRAFTING SYMBOLS

TRENCH
- EDISON CONDUIT (DIST. & SL)
- CUST. OWNED CONDUIT
- RESIDENTIAL SERVICE CABLE
- EXISTING CONDUIT

STRUCTURES
- VAULT
- MANHOLE
- PME 3-5
- PME 6-12
- PULL BOX
- HANDHOLE
- SOE
- PAD
- 4'x4' BURD SWITCH ENCLOSURE
- 36" BURD SWITCH ENCLOSURE
- BURD TRANSFORMER ENCLOSURE
- STREET LIGHT ELECTROLIER
- C/A METER PANEL
- FIRE HYDRANT

RUN NUMBER CALL-OUTS AS FOLLOWS:
- (1) - (99) MAINLINE CONDUIT
- (100) - (199) SERVICE CONDUIT
- (400) - (599) STREET LIGHT CONDUIT

D8m Rev. 2/12/08

FINAL DESIGN
APPROVED FOR CONSTRUCTION

CONNECTING TO EXISTING SCE STRUCTURES

- Per SCE requirements, customers are not allowed to enter, intercept or tie-in to existing SCE structures, equipment or conductors. This work will only be performed by SCE. Contact the appropriate SCE inspector to schedule an appointment. Customers may connect to an existing duct stub without a SCE inspector present.
- Per CPUC/SCE's Rule 15 B.1.A and Rule 16 D.1.A., the customer will provide all necessary excavations (with the exception of excavation under pads and primary splice boxes), material (including conduit and structures) and encasement, to be utilized in the intercept/tie-in process.
- The customer must adhere to all applicable Cal-OSHA, local, city, state and federal regulations, (including, but not limited to, all necessary shoring and traffic control in place to perform the intercept/tie-in work by SCE's underground civil contractors(s))
- Intercept/tie-in work must be coordinated with SCE's civil contractors through the Division Inspector/CCM to limit exposure of excavation(s). Customer is responsible for securing excavation(s).

D08: 12/10/07

WARNING
THE EXCAVATOR MUST TAKE ALL STEPS NECESSARY TO AVOID CONTACT WITH UNDERGROUND FACILITIES WHICH MAY RESULT IN INJURY TO PERSONS OR DAMAGE TO FACILITIES IN THE AREA. THE INDICATED LOCATIONS OF EDISON UNDERGROUND FACILITIES, AS PROVIDED, ARE BELIEVED TO BE ACCURATE. HOWEVER, THE FINAL DETERMINATION OF EXACT LOCATIONS AND THE COST OF REPAIR TO DAMAGED FACILITIES IS THE RESPONSIBILITY OF THE EXCAVATOR.

WHERE CONDUITS ARE PICKED UP OR INTERCEPTED, CONDUIT SHALL BE MANDRELLED AND PULL ROPE INSTALLED FROM TERMINAL TO TERMINAL.

CONTRACTOR ____
COST PLUS ☐ FIRM ☐ DEV. ☐
INCLUDES PERM. PAVING YES ☐ NO ☐
PERMIT NUMBER ____
DATE STARTED ____
DATE COMPLETED ____
INSPECTOR ____
PRECASTER ____ CONDUIT ____

UNDERGROUND SERVICE ALERT
Dial 811
Call USA
For Underground Locating
2 Working Days Before You Dig

INSTALL METHOD:
☐ EDISON
☐ APPLICANT

THIS PLAN APPROVED AS TO LOCATION AND TYPE OF ELECTRIC SUBSTRUCTURES
Developer: ____
Attn: ____
Address: ____
Telephone: ____
FAX: ____

Dwg./Rev.	Developer's Signature	Date
Original		
Rev.		
Rev.		
Rev.		

CHANGES IN THESE PLANS WILL REQUIRE AN ADDITIONAL 3 TO 4 WEEKS AND CUSTOMER WILL BE CHARGED IN ADVANCE FOR REQUESTED CHANGES.

D35 Rev. 03/12/08

DATE	REVISION DESCRIPTION	APPROVED	DRAWN	CHECKED

DISTRICT 77-MENIFEE	PROJ. MGR. PHONE	PLANNER GREG HASTY PHONE 951-928-8363			SR NO. 1212081	
FOREMAN	TRUCK NO.	P/E	INVENTORY MAP NO. 58017161	THOMAS GUIDE RIV 838 D1	GRID NO.	DESIGN NO. 181033
CSD 140 Y__ N__	BY-PASS CODE	EXISTING ____ CHANGE TO ____	TLM CHECKED ____ %LOAD	J.P.A. NO.		ASSOCIATED DESIGN NO.
PRODUCT/SAP NO. TD 342258 - RELOCATE FACILITIES		PRODUCT/SAP NO.		PRODUCT/SAP NO.		

TYPE	APPROVED BY	DATE	CHECKED BY	DRAWN BY	PAX #
F	G. HASTY	12/16/09	J. VIZCARRA	J. DELAFLOR	52837
P		11/25/09	P. METOYER	J. GUANGA	52970
B		03/06/09	P. METOYER	M. KANCULUNGU	52962

PROPOSED CONSTRUCTION (LOCATION)
RELOCATE EX. FACILITIES ALONG MAPES RD
SHERMAN RD/MAPES RD
PERRIS

SHEET 1 OF 1
JOB NO. 0181033

Southern California Edison Company

Save Date: Dec 17, 2009 - 7:58 by DELAFLJ