

NPCO STD. 12-10

BACKFILL AS REQUIRED BY LOCAL CODES, IF IN PUBLIC RIGHT OF WAY. NATURAL BACKFILL SHALL CONTAIN NO ROCKS LARGER THAN 3". POWER MARKING TAPE (Installation per Std. 12-1) (Stock No. 30-2080). TELEPHONE MARKING TAPE. NEVADA POWER CO. APPROVED SAND 4" BELOW 8" ABOVE CONDUIT COMPACTED TO 90% OF THE RELATIVE DENSITY. TELEPHONE. POWER CONDUIT (PER NPCO STD. 2-100). CABLE TELEVISION.

NOTES:
 1. Trench Depth Shall Be 43" Min. Below Elevation Of Finished Grade.
 2. Refer To U.G. Standard 2-9 For Installation Of Conduit.
 3. For "Sole Use" Trench With One Conduit Only, Trench Width May Be Reduced To Two Times The Nominal Diameter Of The Conduit, But In No Case Less Than 6 Inches.
 4. Vinyl Marking Tape Is Provided As Supplemental Protection, Per N.E.S.C., Because Nevada Power Co. Can Not Control The Final Grade Depth Due To Possible Future Surface Grade Changes By Developer Or Owner.

NEVADA POWER COMPANY APPROVED BY DATE: CSK 2/26/82
 TYPICAL COMMERCIAL TRENCH DETAIL UNDERGROUND STANDARDS Rev. Date 10-84 Cns. 3 Date 10-82 SHEET NO. 12-10

NPCO STD. 13-34C

NEVADA POWER COMPANY APPROVED BY DATE: CSK 4/85
 COMMERCIAL PAD FOR TWO SINGLE PHASE TRANSFORMERS (POURED IN PLACE) DISTRIBUTION STANDARDS 13-34 C

NPCO STD. 13-26

POURED IN PLACE PAD Dimensions as shown (See Note 3)
 PRECAST PAD TABLE 1

| MANUFACTURER | CATALOG NUMBER | W | D |
|--------------|----------------|-----|-----|
| Quickset | S-1.636-1 | 48" | 54" |
| Jensen | 25-167 | 44" | 48" |
| Brooks | 1510-3 | 48" | 54" |
| Rockway | E-30 | 54" | 49" |

TABLE APPROVED 17" x 3" HANDHOLES

| MANUFACTURER | CATALOG NUMBER | TYPE |
|--------------|--------------------|------|
| J & R | # 8 State pull box | C |
| Armorcast | 6001785 | F |
| Brooks | GOPB | F |
| Rockway | E-30 | C |

C - Concrete, depth - 12"
 F - Fiberglass, depth - 18"

NOTES:
 1. Grounding shall be two 30' length of #2 Str. CU in the Primary and Secondary trench with 5' pig tails in the pad opening. If one of the trenches is to short then replace its wire with a 1/2" x 8" Copper clad ground rod.
 2. For location and clearance to other structures see STD. 13-29.
 3. All rebar to be 3" from bottom and sides of concrete surfaces.
 4. Concrete mix shall be Class 6C 3000 per Clark County requirements.
 5. Top of pad to be smooth and level with 1/2" level on all outer edges.
 6. Retaining wall required when grade from pad has 1' rise in 5'.

NEVADA POWER COMPANY APPROVED BY DATE: CSK 6/85
 COMMERCIAL SINGLE PHASE PAD INSTALLATION DISTRIBUTION STANDARDS 13-26

NPCO STD. 13-7

NEVADA PRECAST No. 1502
 JENSEN PRECAST No. 3672 - 4'-0"
 ROCKWAY PRECAST No. RPC 1500

NOTES:
 1. For pull box and manhole installation requirements see standard No. 13-3.
 2. All pull boxes and manholes shall be designed for H-20-44 loading.
 3. All cover plates and lids shall be designed for H-20-44 loading.
 4. The word "ELECTRIC" shall be bead welded on all cover plates and lids.
 5. All cover plates and structural steel shall have a coat of red lead primer or rust inhibiting paint.
 6. All cover plates shall have lifting holes and are to be held in place with bolts.
 7. All structures must have pulling irons. They must be a minimum of two pulling irons in a pull box and four in a man hole. Pulling irons positioned in the floor must be recessed.
 8. Dimensions relating to the knockouts are approximate and are to the inside edge of the knockout.
 9. All pull boxes and manholes shall be designed, tested, and constructed to meet all applicable ANSI standards relating to underground precast concrete utility structures.

NEVADA POWER COMPANY APPROVED BY DATE: CSK 7/84
 3'-0" x 6'-0" x 4'-0" PULL BOX (minimum inside dimensions) UNDERGROUND STANDARDS DATE 7/84 REV. DATE SHEET NO. 13-7

NPCO STD. 13-12

TEMPORARILY OMIT TOP CAP AND PROVIDE TEMPORARY TRAFFIC COVER DURING CONSTRUCTION

NOTES:
 1. Vault to be designed for H-20-44 loading.
 2. Minimum excavation size 8'-0" x 13'-0" x 6'-0" (See Note 1).
 3. Refer to U.G. Standard 13-2 for excavation, installation and protection.
 4. All conduits shall enter the vault perpendicular to the walls.
 5. Grout ends flush to wall.
 6. Vertical spacing of conduits at entrance will make a knockout possible.
 7. Install manhole per U.G. Standard 13-3.
 8. Pull-out switch will be installed over area.
 9. Refer to U.G. Standard 13-11 for typical floor plan & knockout details.
 10. Top Section same as Nevada Power Coy. No. 650C.

NEVADA POWER COMPANY APPROVED BY DATE: CSK 2/87
 5'-0" x 10'-6" x 6'-0" MANHOLE UNDERGROUND STANDARDS DATE 7/84 REV. DATE SHEET NO. 13-12

NPCO STD. 13-35C

NEVADA POWER COMPANY APPROVED BY DATE: CSK 6/85
 COMMERCIAL PAD FOR THREE SINGLE PHASE TRANSFORMERS (POURED IN PLACE) DISTRIBUTION STANDARDS 13-35 C

NPCO STD. 13-31

NEVADA POWER COMPANY APPROVED BY DATE: CSK 4-85
 REINFORCED CONCRETE TRANSFORMER PAD 75-500KVA 3φ UNDERGROUND STANDARDS DATE 4-85 Cns. 1 REV. DATE 4-82 SHEET NO. 13-31

| NO. | QTY. | ITEM |
|-----|------|--------------|
| 1 | 3 | Rebar, Steel |
| 2 | 3 | Rebar, Steel |
| 3 | 3 | Rebar, Steel |
| 4 | 4 | Rebar, Steel |
| 5 | 3 | Rebar, Steel |
| 6 | 2 | Rebar, Steel |

NOTES:
 1. All reinforcement steel to be 1/2" diameter - No. 4.
 2. Grounding shall be two 30' length of #2 Str. Cu. ground wire with 5' pig tails in the pad opening. One each in bottom of primary and secondary trench. If the secondary trench is to short then replace its wire with a 1/2" x 8" copper clad ground rod.
 3. Concrete mix shall be 1:2:4 proportion if field mixed, or 3000 P.S.I. after 28 days if transit mix.
 4. Relative compaction of natural ground shall be not less than 90%.
 5. Tie wire all rods at crossings.
 6. Clearance requirement is 10' in front, 4' on sides and 6' in rear in any structure or as shown on N.P.Co. construction drawings. Also, refer to U.G. Standard 13-29.
 7. 2'-0" x 2'-0" x 4'-0" pullbox (less cover) per N.P.Co. U.G. Standard 13-4 shall be used as trough for pad. Terminate all conduits perpendicular to wall with ends flush to inside wall of box.

NPCO STD. 13-8

NEVADA PRECAST No. 500
 JENSEN PRECAST No. 4878 - 4'-0"

NOTES:
 1. For pull box and manhole installation requirements see standard No. 13-3.
 2. All pull boxes and manholes shall be designed for H-20-44 loading.
 3. All cover plates and lids shall be designed for H-20-44 loading.
 4. The word "ELECTRIC" shall be bead welded on all cover plates and lids.
 5. All cover plates and structural steel shall have a coat of red lead primer or rust inhibiting paint.
 6. All cover plates shall have lifting holes and are to be held in place with bolts.
 7. All structures must have pulling irons. They must be a minimum of two pulling irons in a pull box and four in a man hole. Pulling irons positioned in the floor must be recessed.
 8. Dimensions relating to the knockouts are approximate and are to the inside edge of the knockout.
 9. All pull boxes and manholes shall be designed, tested, and constructed to meet all applicable ANSI standards relating to underground precast concrete utility structures.

NEVADA POWER COMPANY APPROVED BY DATE: CSK 7/84
 4'-0" x 6'-6" x 4'-0" PULL BOX (minimum inside dimensions) UNDERGROUND STANDARDS DATE 7/84 REV. DATE SHEET NO. 13-8

W.A. Scale (V) Date Design by Drawn by

Scale (H) NONE Fid. bk. no. Design by

REVISIONS

Department of Public Works Engineering Design Division

ELECTRICAL REFERENCE STANDARDS

DOWNTOWN TRANSPORTATION CENTER OFFSITE IMPROVEMENTS

30-13-102

CONTRACT DRAWING APRIL 25, 1986

Drawing no. 50 590-2D 51