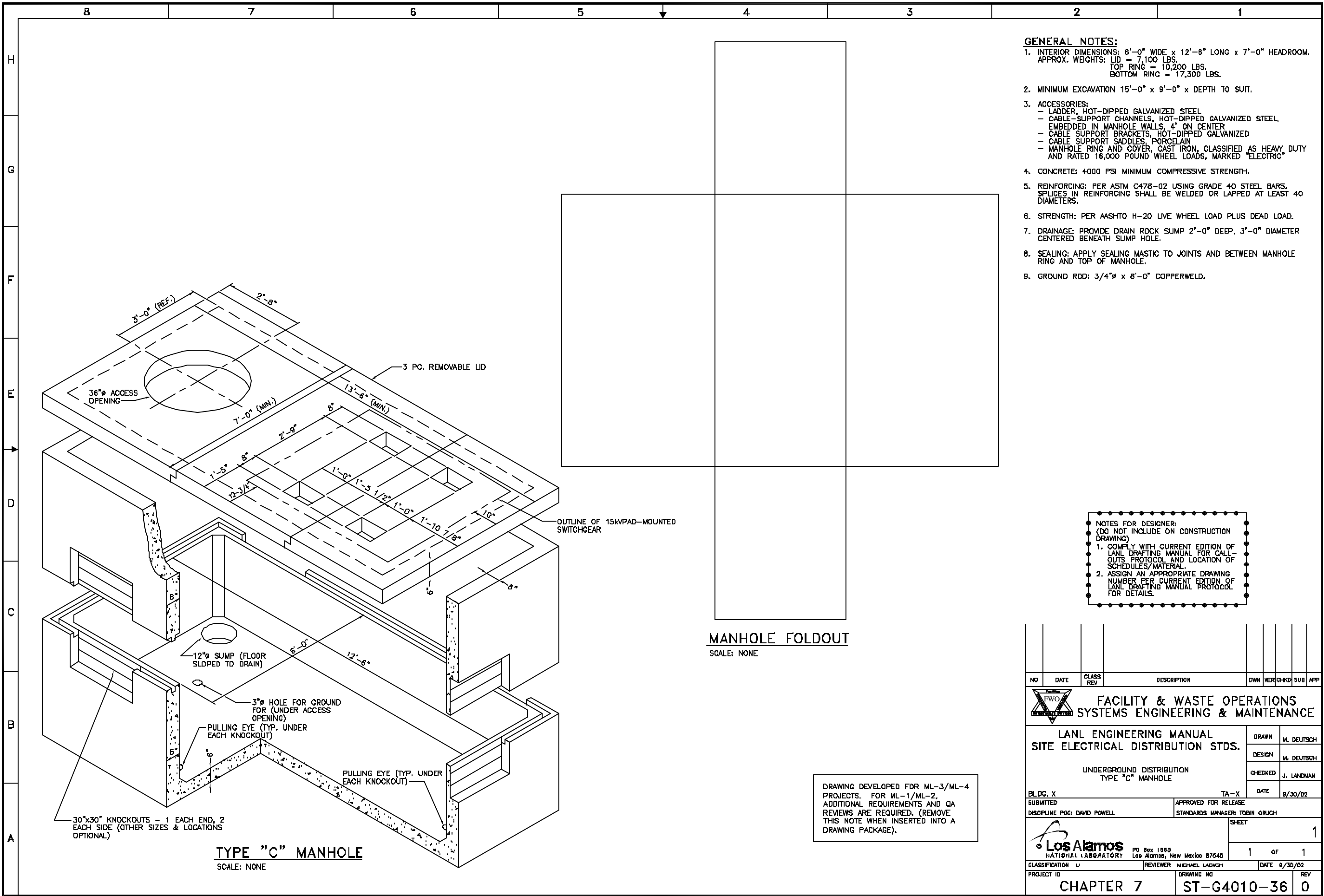


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TYPE "C" MANHOLE
SCALE: NONE

MANHOLE FOLDOUT
SCALE: NONE

- GENERAL NOTES:**
- INTERIOR DIMENSIONS: 6'-0" WIDE x 12'-6" LONG x 7'-0" HEADROOM.
APPROX. WEIGHTS: LID = 7,100 LBS.
TOP RING = 10,200 LBS.
BOTTOM RING = 17,300 LBS.
 - MINIMUM EXCAVATION 15'-0" x 9'-0" x DEPTH TO SUIT.
 - ACCESSORIES:
 - LADDER, HOT-DIPPED GALVANIZED STEEL
 - CABLE-SUPPORT CHANNELS, HOT-DIPPED GALVANIZED STEEL, EMBEDDED IN MANHOLE WALLS, 4' ON CENTER
 - CABLE SUPPORT BRACKETS, HOT-DIPPED GALVANIZED
 - CABLE SUPPORT SADDLES, PORCELAIN
 - MANHOLE RING AND COVER, CAST IRON, CLASSIFIED AS HEAVY DUTY AND RATED 16,000 POUND WHEEL LOADS, MARKED "ELECTRIC"
 - CONCRETE: 4000 PSI MINIMUM COMPRESSIVE STRENGTH.
 - REINFORCING: PER ASTM C478-02 USING GRADE 40 STEEL BARS. SPLICES IN REINFORCING SHALL BE WELDED OR LAPPED AT LEAST 40 DIAMETERS.
 - STRENGTH: PER AASHTO H-20 LIVE WHEEL LOAD PLUS DEAD LOAD.
 - DRAINAGE: PROVIDE DRAIN ROCK SUMP 2'-0" DEEP, 3'-0" DIAMETER CENTERED BENEATH SUMP HOLE.
 - SEALING: APPLY SEALING MASTIC TO JOINTS AND BETWEEN MANHOLE RING AND TOP OF MANHOLE.
 - GROUND ROD: 3/4" x 8'-0" COPPERWELD.

NOTES FOR DESIGNER:
(DO NOT INCLUDE ON CONSTRUCTION DRAWING)

- COMPLY WITH CURRENT EDITION OF LANL DRAFTING MANUAL FOR CALL-OUTS PROTOCOL AND LOCATION OF SCHEDULES/MATERIAL.
- ASSIGN AN APPROPRIATE DRAWING NUMBER PER CURRENT EDITION OF LANL DRAFTING MANUAL PROTOCOL FOR DETAILS.

DRAWING DEVELOPED FOR ML-3/ML-4 PROJECTS. FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE).

NO	DATE	CLASS REV	DESCRIPTION	OWN	VER	CHKD	SUB	APP	
FACILITY & WASTE OPERATIONS SYSTEMS ENGINEERING & MAINTENANCE									
LANL ENGINEERING MANUAL SITE ELECTRICAL DISTRIBUTION STDS.				DRAWN M. DEUTSCH					
UNDERGROUND DISTRIBUTION TYPE "C" MANHOLE				DESIGN M. DEUTSCH					
				CHECKED J. LANDMAN					
				DATE 9/30/02					
BLDG. X		TA-X		SHEET 1		1 OF 1			
SUBMITTED DISCIPLINE POC: DAVID POWELL			APPROVED FOR RELEASE STANDARDS MANAGER TOBIN GRUCH						
CLASSIFICATION U		REVIEWER MICHAEL LADACH		DATE 9/30/02		REV			
PROJECT ID CHAPTER 7				DRAWING NO ST-G4010-36					0