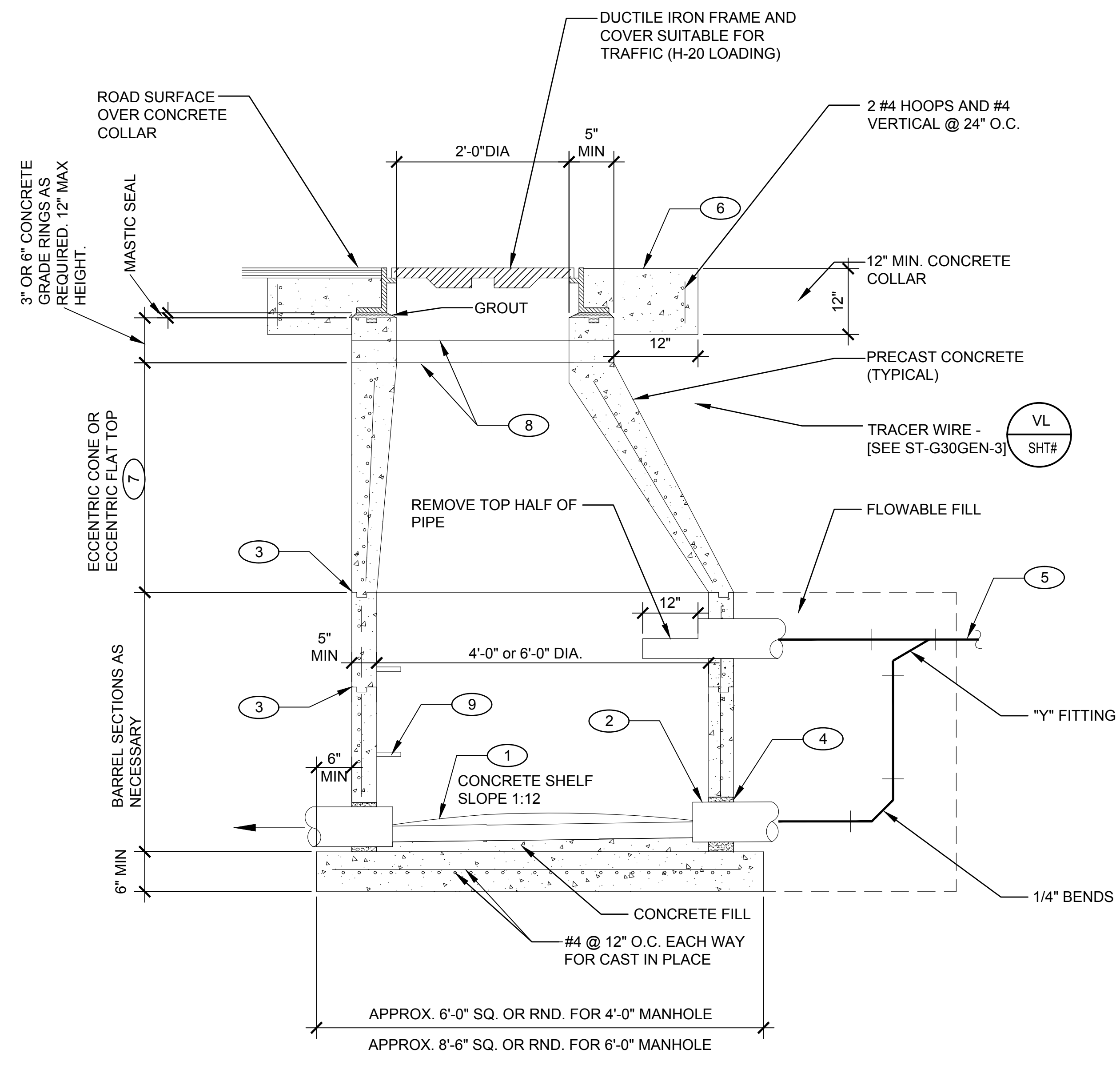


D
C
B
A



GENERAL NOTES:

- IF THIS SHEET IS NOT 24" X 36" USE GRAPHIC SCALE ACCORDINGLY

KEYED NOTES:

- FORM FLOW CHANNELS THRU MANHOLE THE FULL SIZE OF SEWER MAINS CONFORMING TO THE GROSS SECTION OF PIPE; SHAPE AND TROWEL SMOOTH
- TERMINATE ALL PIPE APPROXIMATELY 1" INTO MANHOLE
- CLEAN ALL JOINTS AND INSTALL SEALING GASKETS.
- NON-SHRINK GROUT WITH WATER STOP GROUTING RING FOR PIPE (TYPICAL).
- USE DROP WHERE INVERT CAN NOT BE SET AT MANHOLE FLOW LINE.
- TEST STATION WITH 6" THICK CONCRETE COLLAR.
- DO NOT USE FLAT TOPS IN PARKING LOTS OR ROADWAYS WITHOUT APPROVAL OF LANL WASTE WATER SYSTEM ENGINEER.
- MASTIC AND/OR GROUT FOR WATER TIGHT SEAL AND PREVENTION OF DISPLACEMENT OF RINGS AND COVER.
- INSTALL TWO BOTTOM STEPS ABOVE OUTLET IN MANHOLE.

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)

SANITARY SEWER MANHOLE DETAIL
SCALE: NONE

NOTES FOR DESIGNER:

- (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)
- WHEN EDITING DETAIL TO SUIT PROJECT, ADD JOB SPECIFIC REQUIREMENTS AND DELETE ONLY THOSE PORTIONS, THAT DO NOT APPLY. TO SEEK A VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM CIVIL POC.
 - REFER TO THE FOLLOWING LANL STANDARDS FOR ADDITIONAL REQUIREMENTS:
 - ENGINEERING STANDARDS MANUAL CIVIL CHAPTER.
 - MASTER SPECIFICATION 31 2000, EARTH MOVING, (INCLUDES TRACER WIRE AND TEST STATION SPECIFICATIONS).
 - MASTER SPECIFICATION 33 0513, MANHOLES AND STRUCTURES.
 - MASTER SPECIFICATION 33 3000, SANITARY SEWERAGE UTILITIES.
 - SIX FEET DIAMETER MANHOLE SHALL BE USED UNLESS ALL OF THE FOLLOWING CONDITIONS ARE MET.
 - DEPTH OF MANHOLE IS 8'-0" OR LESS
 - INLET PIPE(S) IS ONE 6" DIAMETER PIPE OR LESS, OR IS TWO 4" DIAMETER PIPES.
 - NOT A DROP MANHOLE.

NO	DATE	CLASS REV	DC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
3	09/01/2016	UNCLASS		ADMIN CHANGES TO NEW FORMAT CAD STD REV#5. MINOR DESIGN CHANGES & INCORPORATED DESIGN NOTES FROM SHEET 2 OF 2.	EJS	MS	MS	CJRR	TO
2	08/21/2006	U	DY	REVISED KEYED NOTE 4, ADDED KEYED NOTE 9, & REVISED DETAIL ACCORDINGLY. 6" DIA MANHOLE WAS 5" DIA, & 9' SQ. PAD WAS 8'	RP	EH	MS	EH	TO
1	08/23/2002	U	DY	GENERAL REVISION AND DWG. NO. WAS ST3732	RP	EH	MS	EH	TO

ENGINEERING STANDARDS

CIVIL

SANITARY SEWER MANHOLE DETAIL

TA-XX BLDG XXXX

DRAWN: R. PEARSON
DESIGN: E. HOTH
CHECKED: M. SMITHOUR
DATE: 6-28-99

1 OF 1

Los Alamos NATIONAL LABORATORY P.O. Box 1663 Los Alamos, New Mexico 87545

D.C.: U PROJECT ID: CHAPTER 3 REVIEWER: LARRY BAYS DRAWING NO: ST-G3020-1 DATE: REV: 3

00% REVIEW
NOT FOR CONSTRUCTION