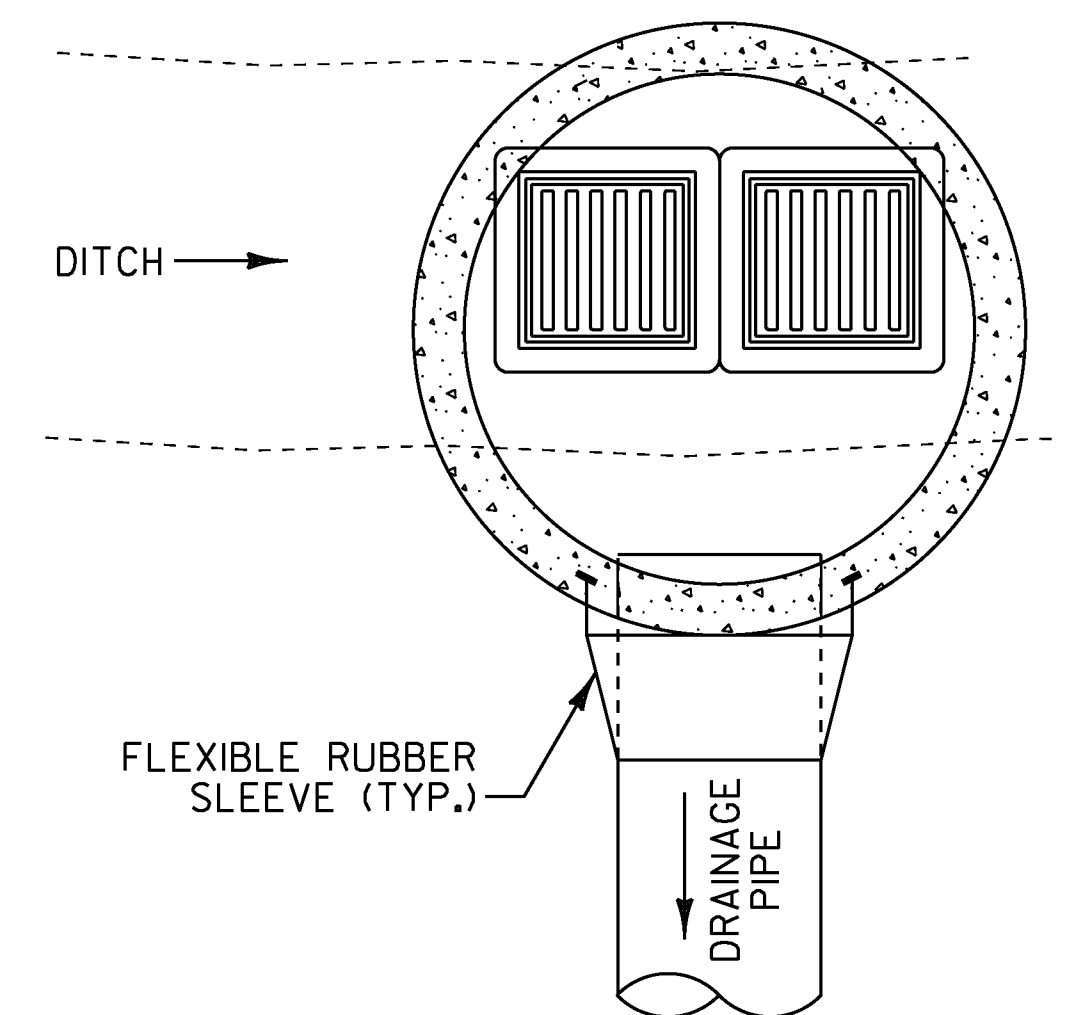
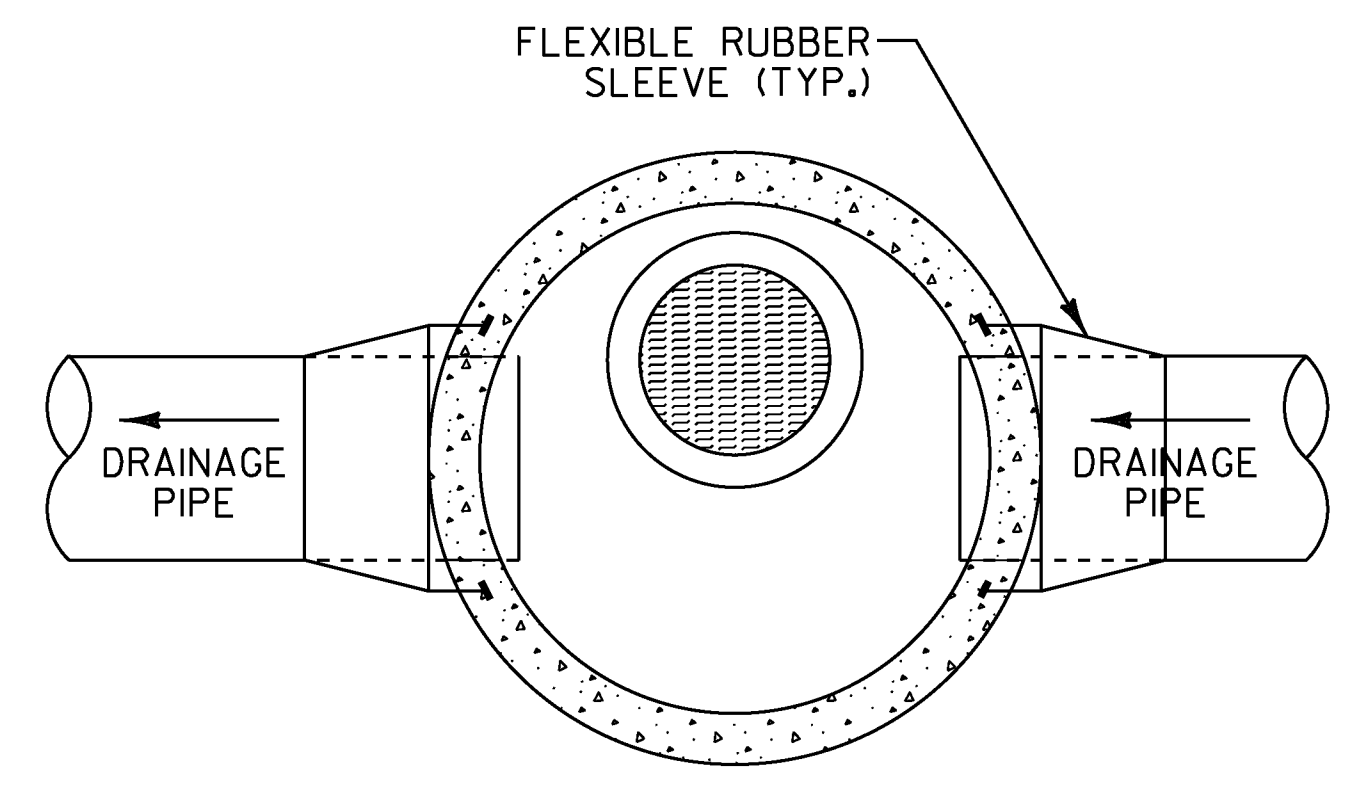


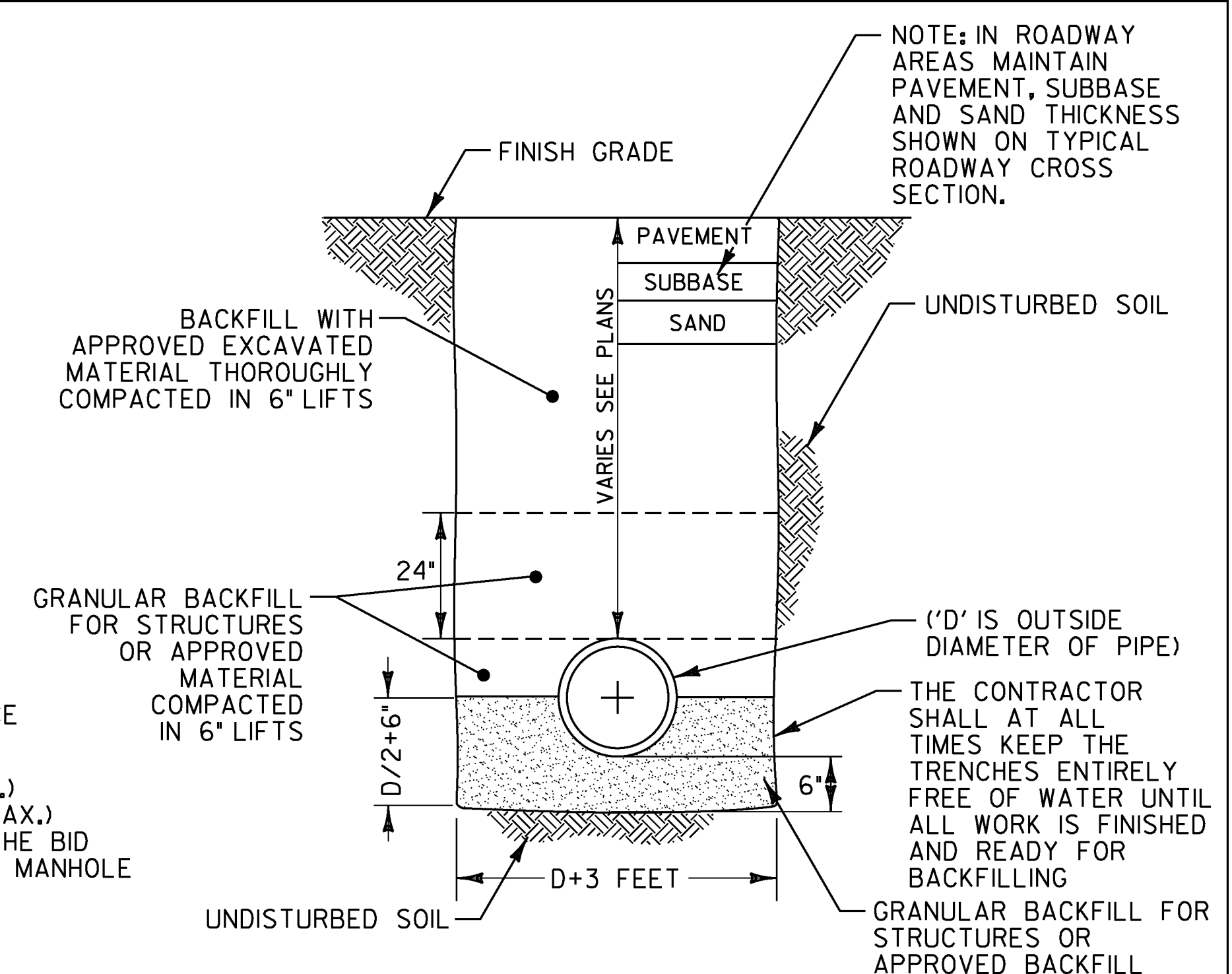
CATCH BASIN (PLAN) WITH UNDERDRAIN
NOT TO SCALE



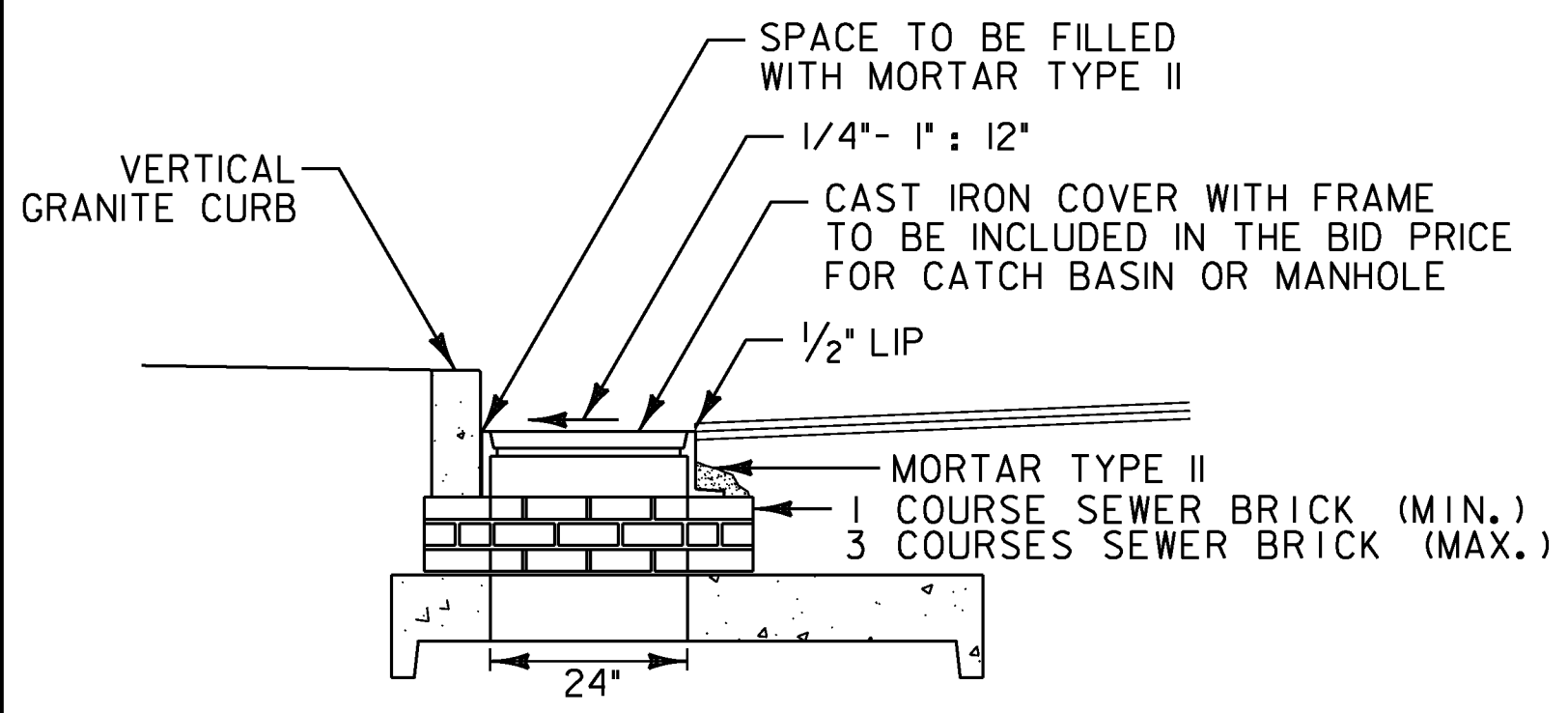
DOUBLE GRATE CATCH BASIN (PLAN)
NOT TO SCALE



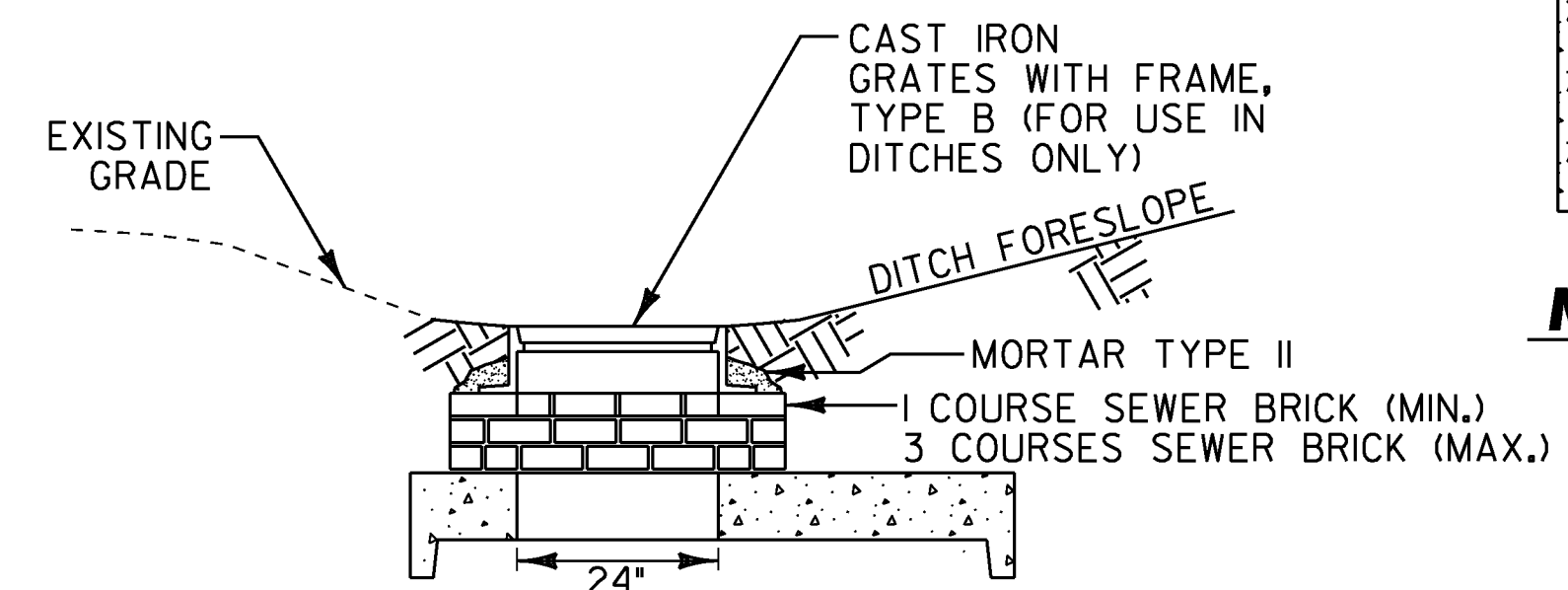
MANHOLE (PLAN)
NOT TO SCALE



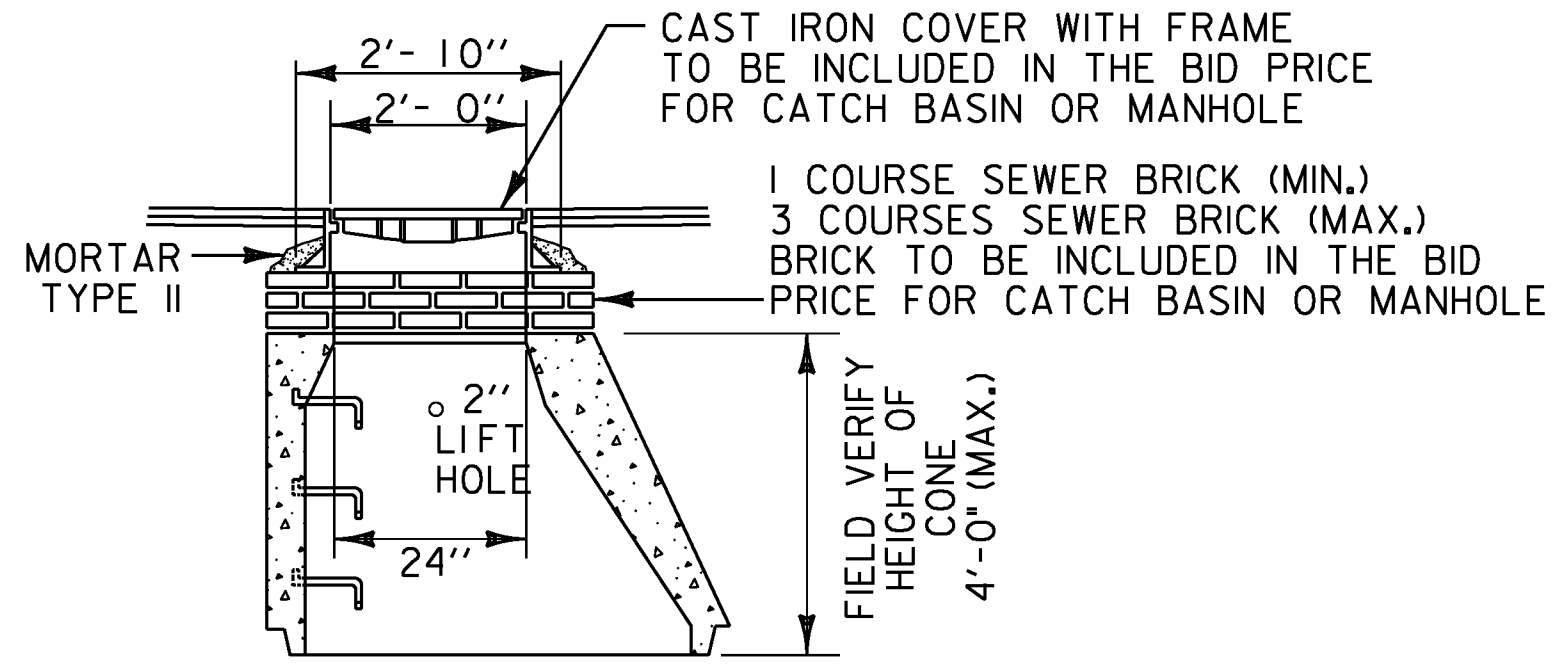
TYPICAL STORM DRAIN AND PIPE SLEEVE TRENCH
NOT TO SCALE



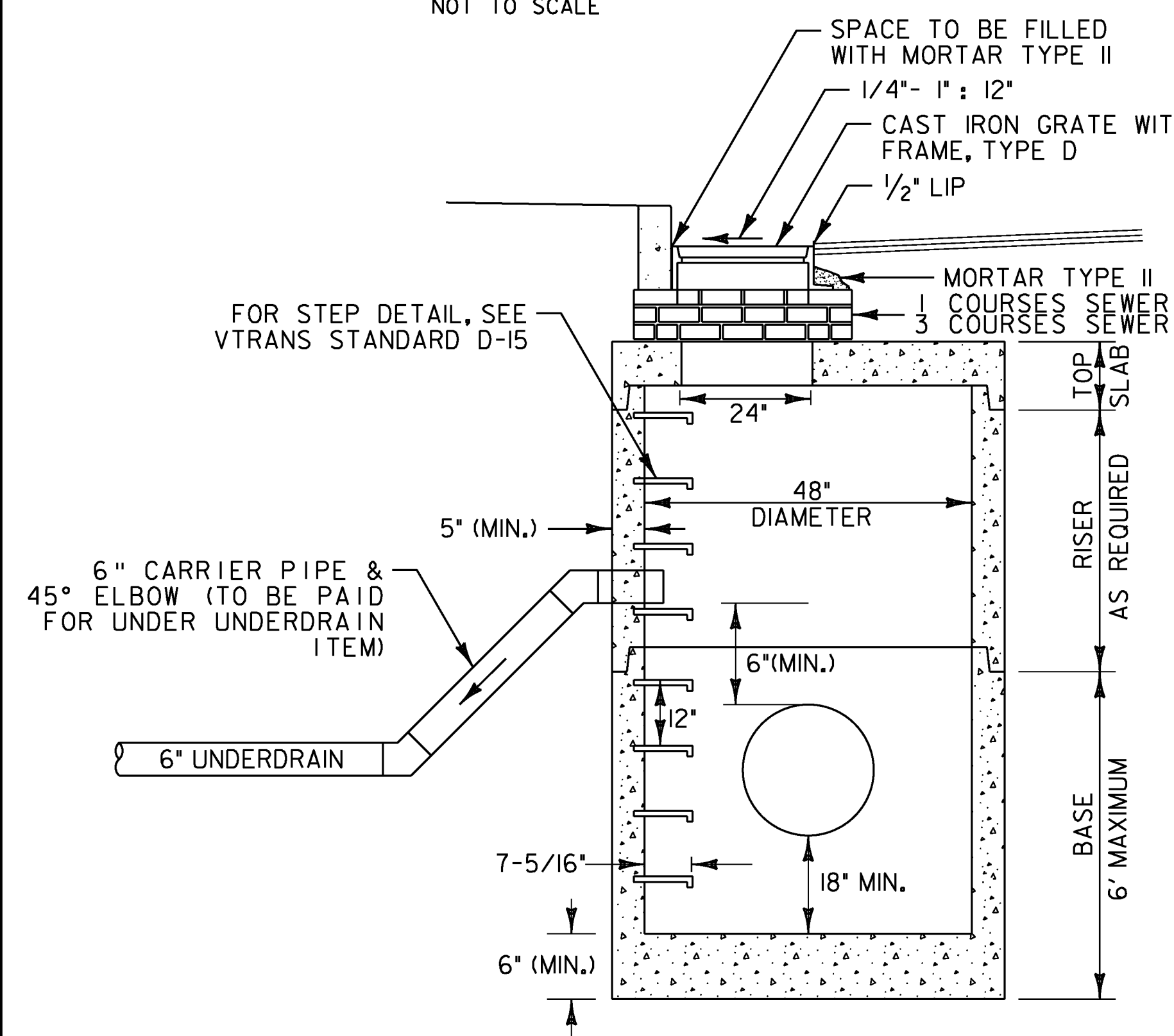
TYPICAL GRATE INSTALLATION WITH VERTICAL GRANITE CURB (ELEVATION)
NOT TO SCALE



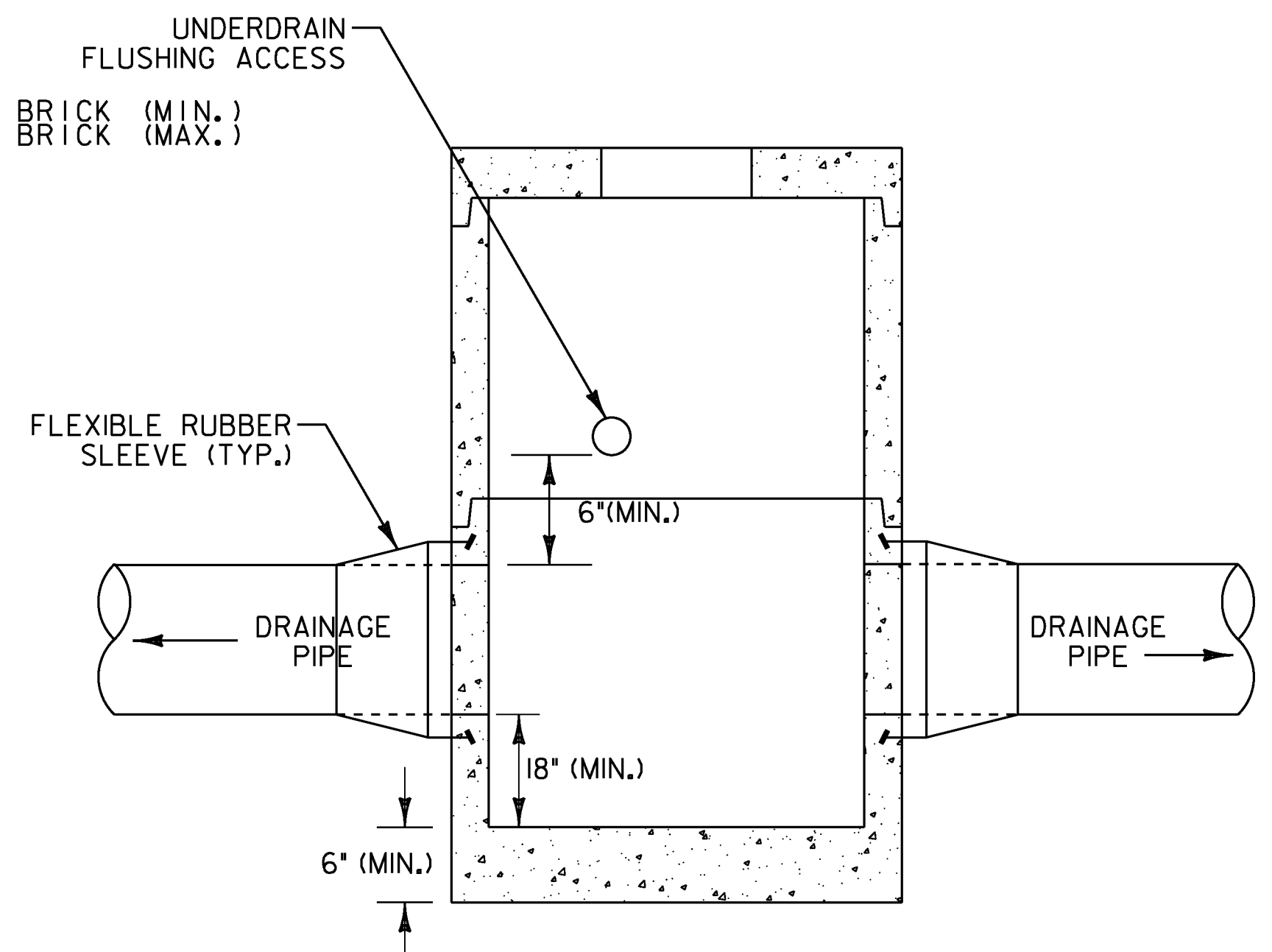
TYPICAL GRATE INSTALLATION IN DITCH (ELEVATION)
NOT TO SCALE



MANHOLE CONE SECTION
NOT TO SCALE



ELEVATION VIEW



SIDE VIEW

TYPICAL PRECAST CATCH BASIN OR MANHOLE WITH UNDERDRAIN FLUSHING ACCESS
NOT TO SCALE

PRECAST REINFORCED CONCRETE CATCH BASIN NOTES:

1. PRECAST CONCRETE SECTIONS SHALL CONFORM TO SUBSECTION 705.04 OF THE STANDARD SPECIFICATIONS.
2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 4,000 PSI AT 28-DAYS
3. STEEL REINFORCING SHALL CONFORM TO SUBSECTION 713.01 OF THE STANDARD SPECIFICATIONS.
4. MANHOLE STEPS SHALL BE 14" WIDE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC AND SHALL BE CAST INTO MANHOLE SECTIONS BY THE PRECAST CONCRETE MANUFACTURER.
5. FACE OF PIPE SHALL NOT PROJECT MORE THAN 2" OR LESS THAN 1" FROM INSIDE WALL OF STRUCTURE.
6. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF OUTSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3' TO JOINTS.
7. FITTING FRAME TO FINAL GRADE MAY BE DONE WITH BRICK OR PRECAST CONCRETE GRADE RINGS OF APPROPRIATE THICKNESS (3 COURSES MAX).
8. FLAT SLAB TOPS SHALL BE USED FOR ALL CATCH BASINS UNLESS OTHERWISE PERMITTED BY THE ENGINEER.
9. ALL PIPE INVERTS AND PENETRATION ANGLES SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
10. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT AND BE ASSEMBLED USING A BUTYL RUBBER OR APPROVED EQUAL SEALANT.
11. PROVIDE FLEXIBLE RUBBER SLEEVES CONFORMING TO ASTM C-923, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO STRUCTURE. SLEEVES SHALL BE CAST INTO PRECAST STRUCTURE BY THE MANUFACTURER FOR ALL PIPE PENETRATIONS.
12. INSTALLATION OF THE CATCH BASIN AT TH 5 STA. 61+42.0 LT OVER THE EXISTING PIPE SHALL INCLUDE CLEAN CUTTING OF THE EXISTING PIPE, PROVIDING AN EXTENSION PIPE OF SIMILAR MATERIAL AND SIZE AS THE EXISTING PIPE, COUPLINGS REQUIRED FOR THE CONNECTION BETWEEN THE EXTENSION PIPE AND THE EXISTING PIPE, AND INSTALLING FLEXIBLE RUBBER SLEEVES AS SHOWN IN DETAILS PROVIDED ON THIS SHEET. COST OF THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE C.B.
13. PAYMENT FOR INSTALLATION OF THE CATCH BASINS SHALL BE MADE UNDER THE PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE ITEM (604.20).
14. PAYMENT FOR INSTALLATION OF THE MANHOLE SHALL BE MADE UNDER THE PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER ITEM (604.21).

PROJECT NAME:	HYDE PARK
PROJECT NUMBER:	HES 030-2(23)
FILE NAME:	+08b126frm.dgn
PROJECT LEADER:	JLS
DESIGNED BY:	MBL
DRAINAGE DETAILS SHEET	
PLOT DATE:	08-DEC-2010
DRAWN BY:	MBL
CHECKED BY:	JAD
SHEET	35 OF 100