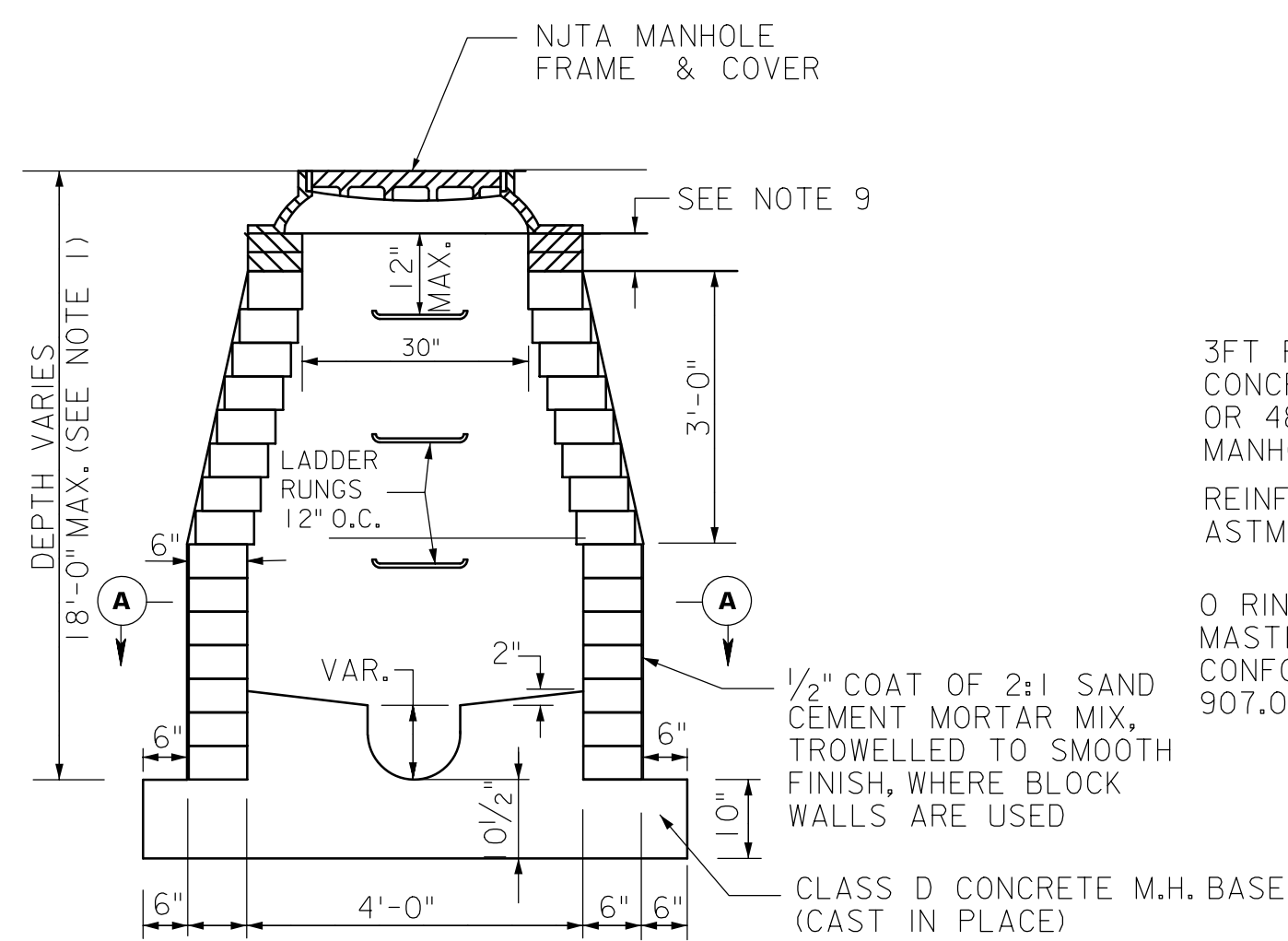
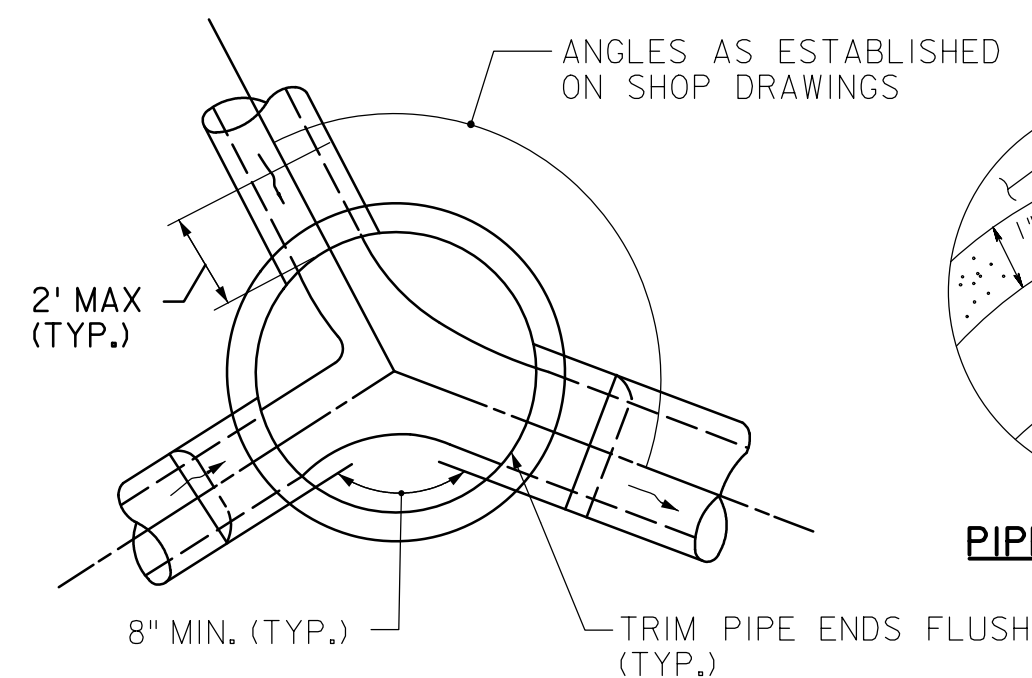
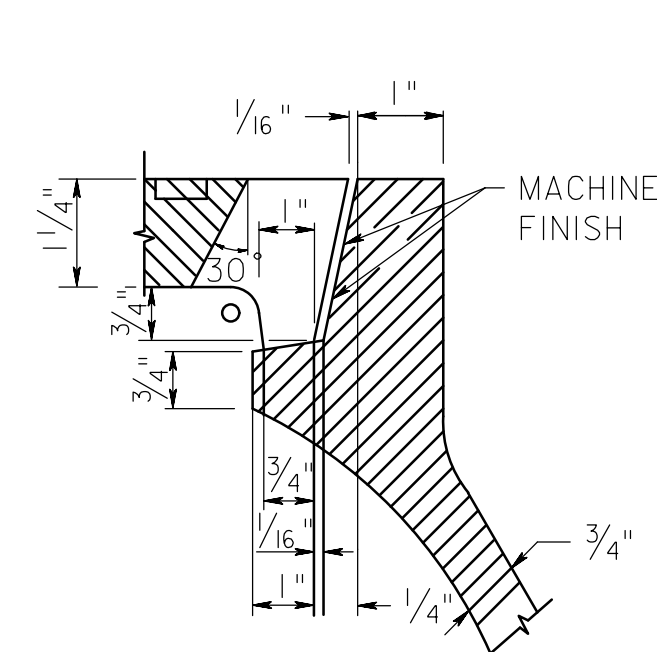




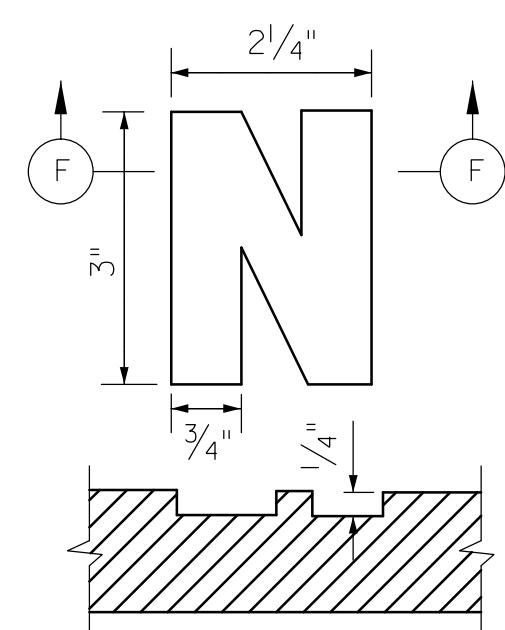
MANHOLE - TYPE M-1



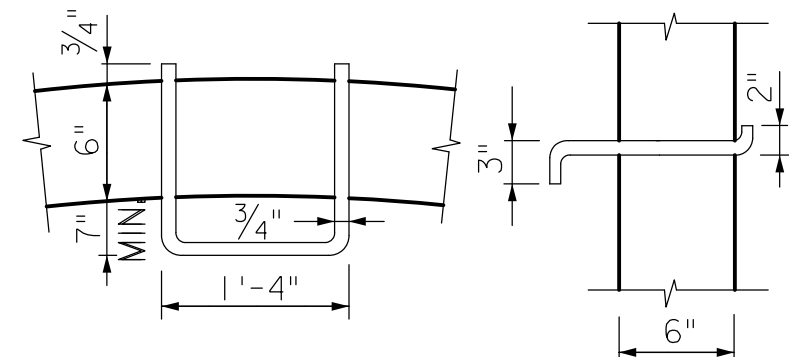
SECTION A-A



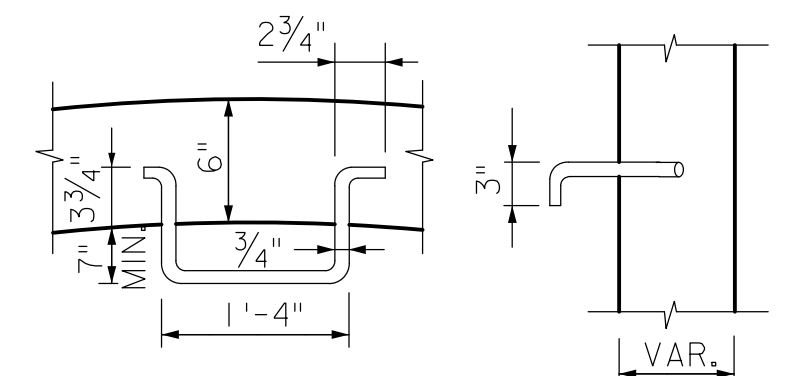
DETAIL "A"



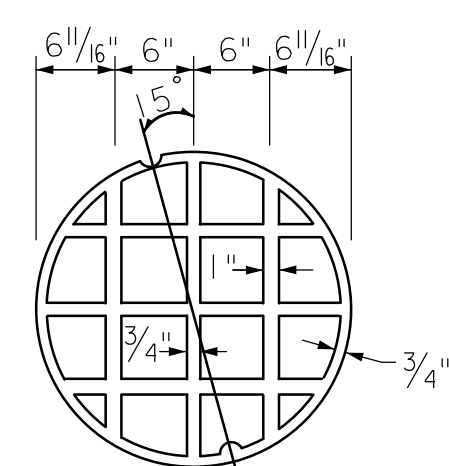
SECTION "F"
DETAIL OF LETTERING



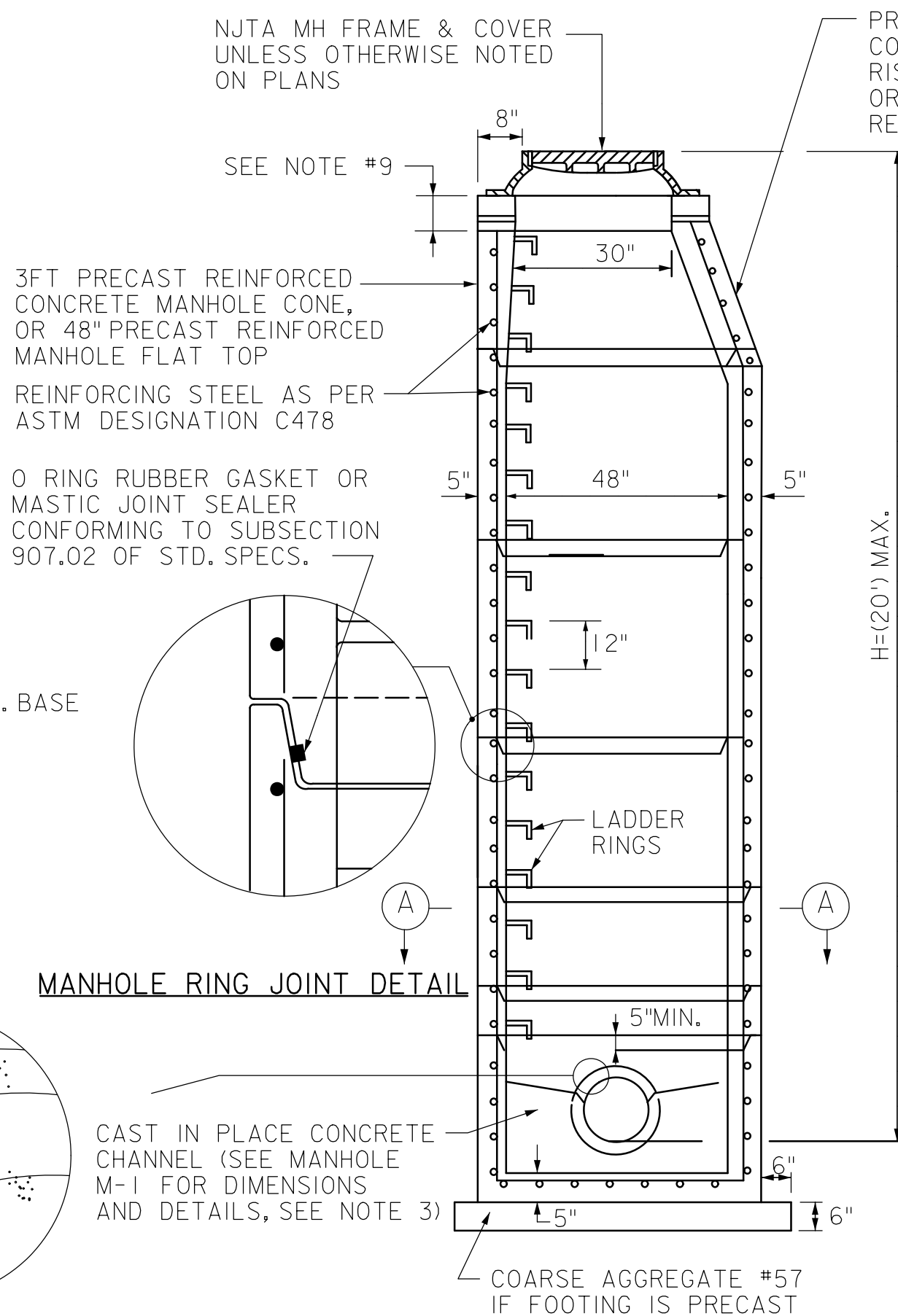
PLAN
CONCRETE BLOCK WALLS



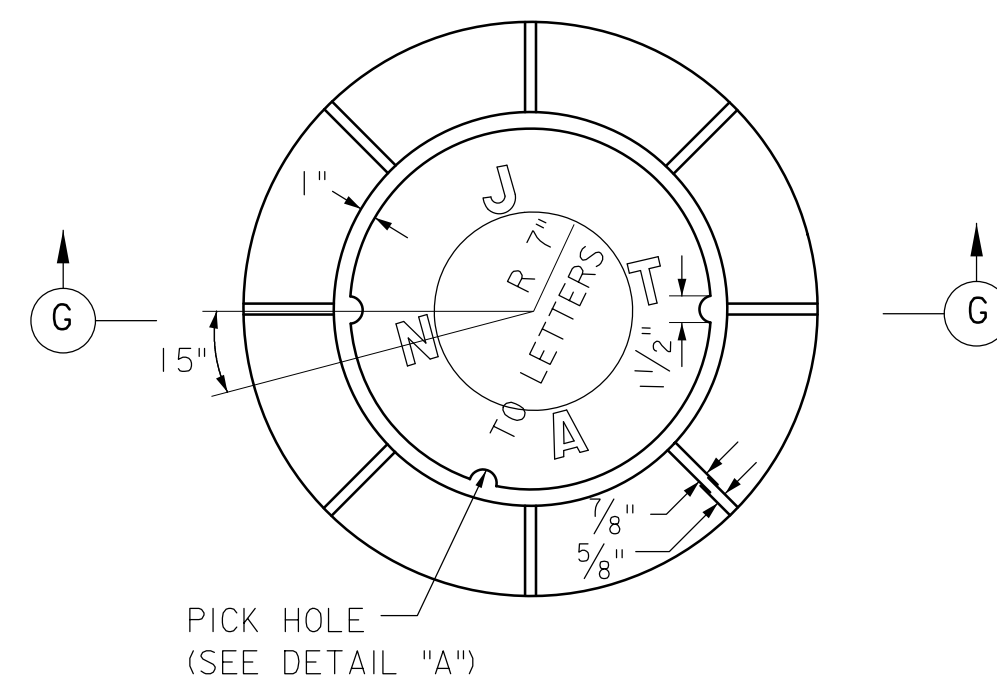
PLAN
LADDER RUNG DETAILS



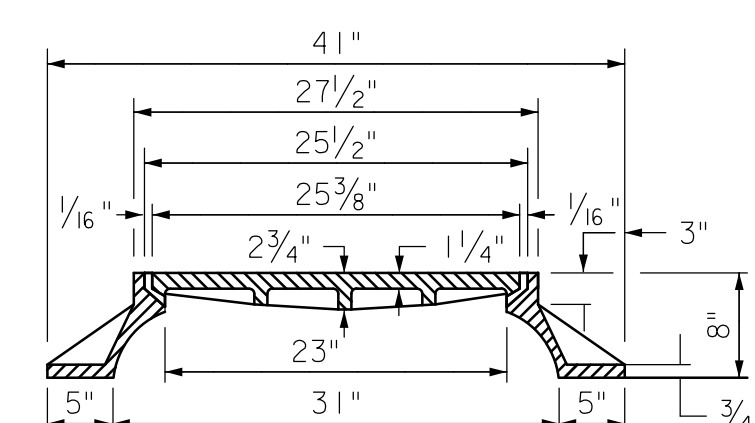
UNDERSIDE OF COVER



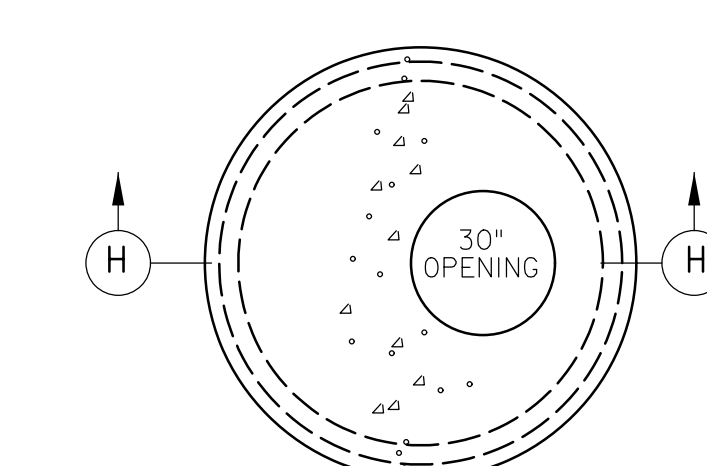
MANHOLES - TYPE P-1
FOR PIPES 36" DIAMETER OR LESS



SECTION G-G
MANHOLE FRAME & COVER

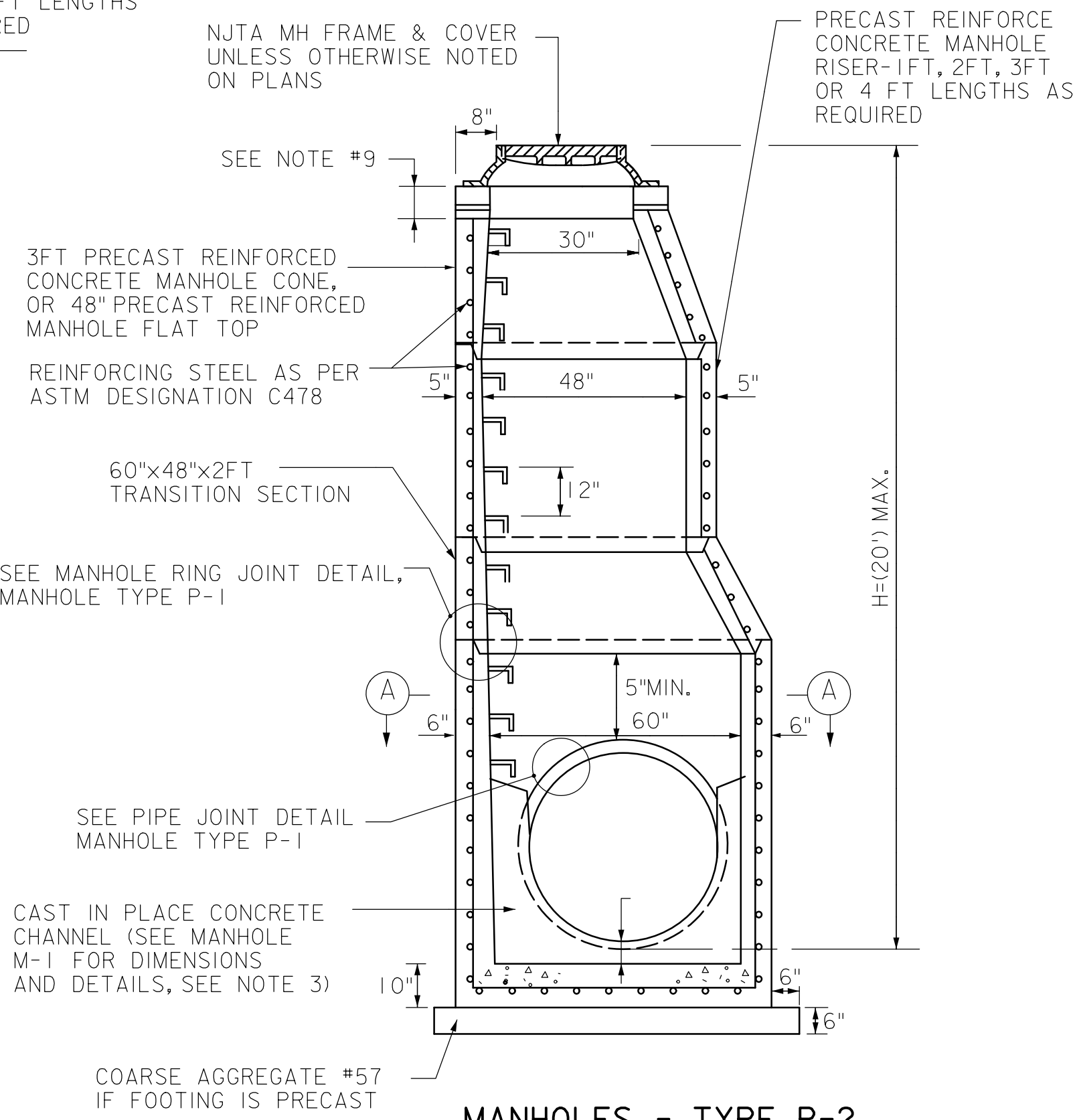
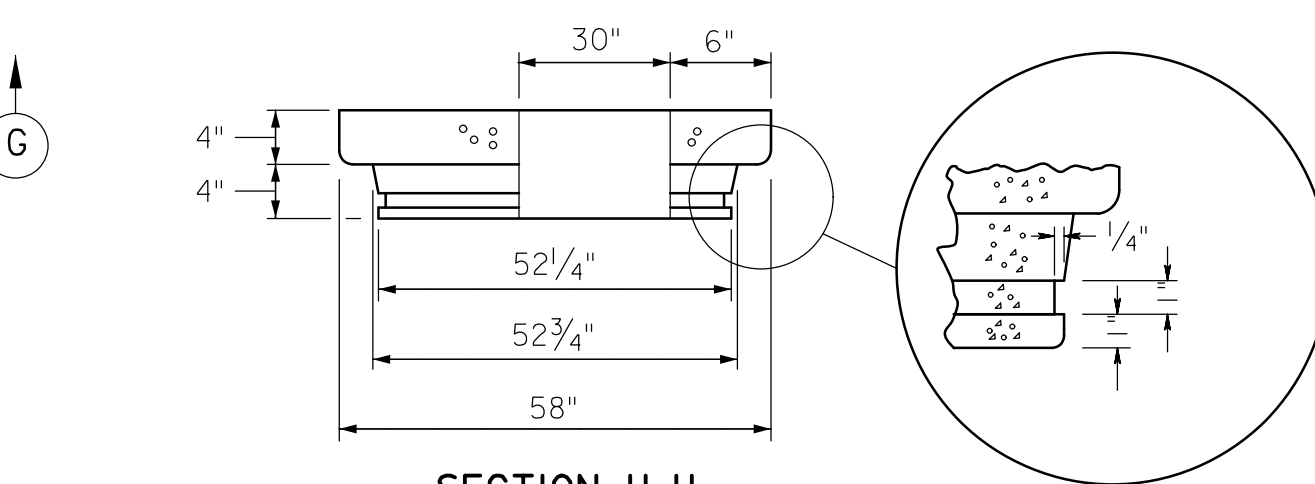


48" PRECAST REINFORCED
CONCRETE MANHOLE FLAT TOP
USE IN LIEU OF CONE SECTION ETC.



SECTION H-H

GROOVE FOR "O" RING
RUBBER GASKET



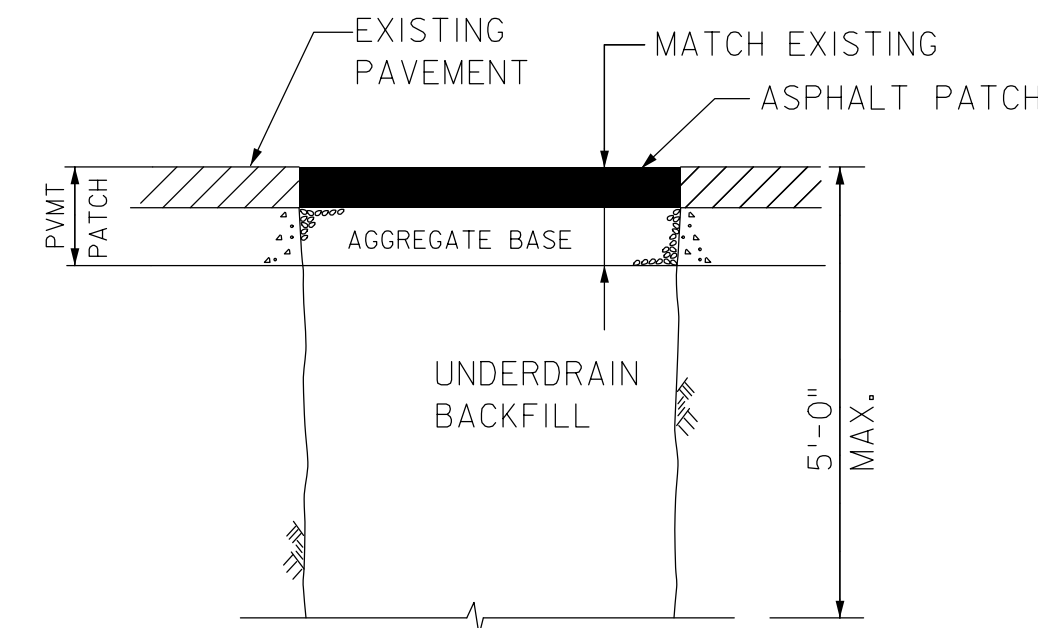
MANHOLES - TYPE P-2
FOR PIPES 42" & 48" DIAMETER

SEE MANHOLE RING JOINT DETAIL,
MANHOLE TYPE P-1

SEE PIPE JOINT DETAIL
MANHOLE TYPE P-1

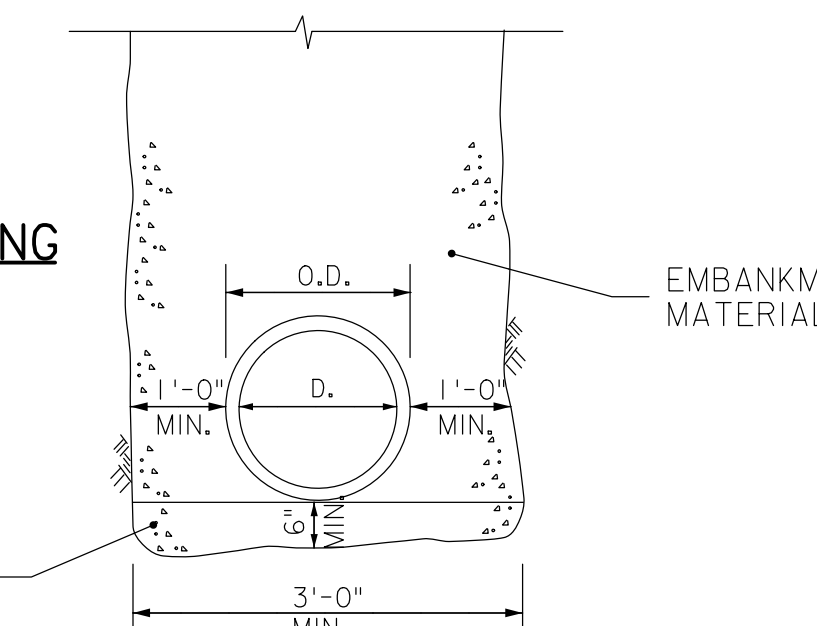
CAST IN PLACE CONCRETE
CHANNEL (SEE MANHOLE
M-1 FOR DIMENSIONS
AND DETAILS, SEE NOTE 3)

COARSE AGGREGATE #57
IF FOOTING IS PRECAST

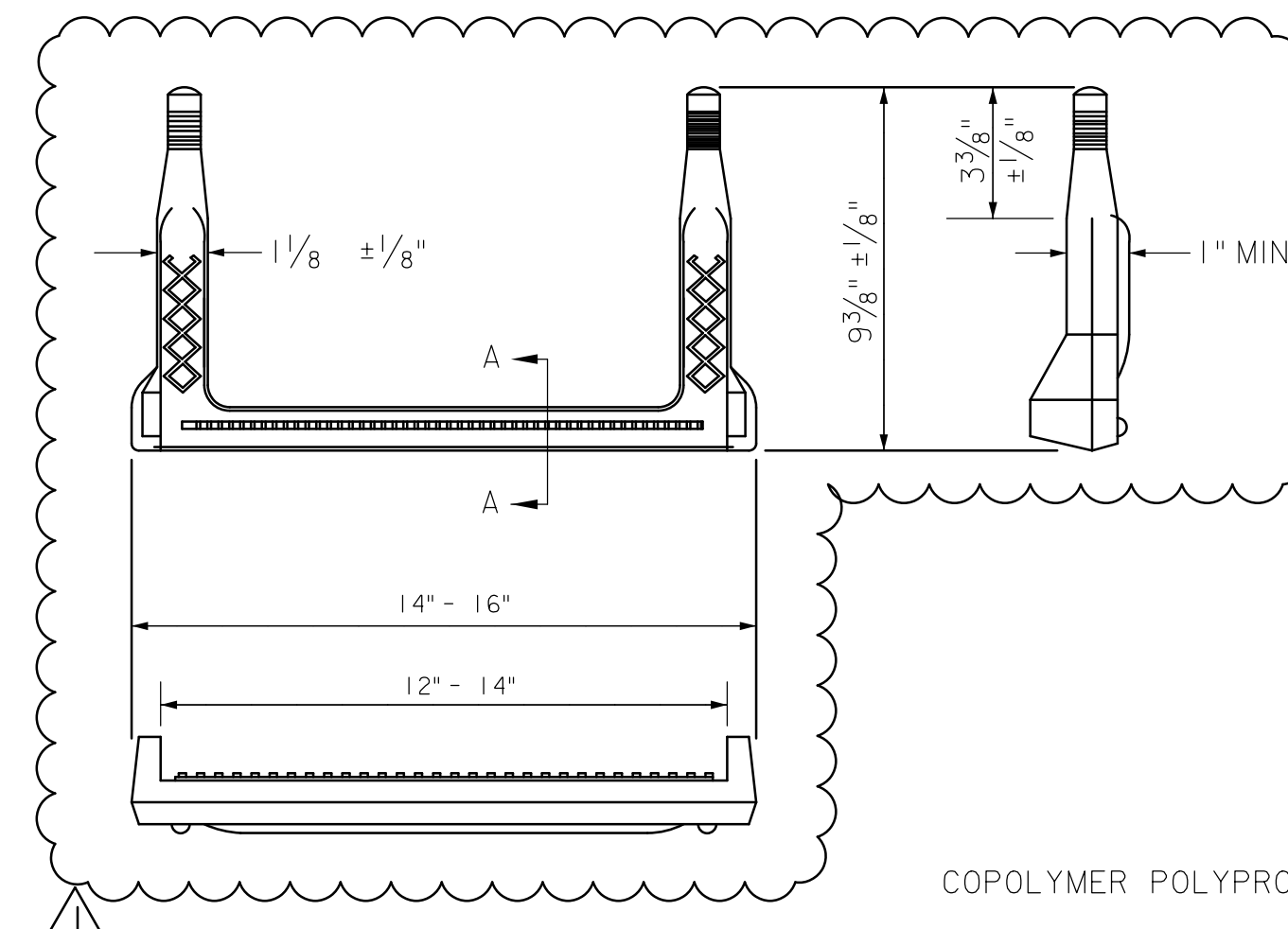


PAVEMENT PATCH

NOTE:
ELIMINATE PAVEMENT PATCH WHERE
FINISHED GRADE IS MORE THAN 8"
ABOVE EXISTING PAVEMENT OR
WHERE EXISTING PAVEMENT IS
BEING REMOVED.



NEW PIPE INSTALLATION



COPOLYMER POLYPROPYLENE PLASTIC LADDER RUNG



SECTION A-A

NOTES:

- WALL OF M-1 MANHOLES SHALL BE 6" THICK & BE CONSTRUCTED OF EITHER (A) CLASS "A" CONCRETE WITH AIR ENTRAINMENT - CAST IN PLACE PRECAST (B) CONCRETE BLOCK.
- BASES OF MANHOLES TO BE CONSTRUCTED OF CLASS "D" CONCRETE.
- MANHOLE CHANNEL CAN BE FORMED CONCRETE OR A COMPOSITE OF POURED CONCRETE & CONCRETE BLOCK.
- LADDER RINGS TO BE PROVIDED IN ALL MANHOLES OVER 4' DEEP, SEE SUBSECTION 916.05 OF THE STANDARD SPECIFICATIONS.
- PIPES MAY ENTER OR EXIST MANHOLES IN ANY DIRECTION, INDICATED ON THE PLANS.
- ALL INTERIOR JOINTS TO BE POINTED FULL AND FLUSH.
- WHERE DEPTH OF M-1 MANHOLES EXCEED 10 FEET, WALL THICKNESS BELOW THE 8 FOOT DEPTH SHALL BE 1'-0" MAXIMUM DEPTH TO BE 13 FEET.
- FRAMES TO BE SET IN FULL BED OF STIFF MORTAR (SEE STD. DWG. DR-2).
- ADJUST TO GRADE WITH BRICK, AS REQUIRED (12" MAX).
- WHERE MANHOLE, TYPE P-1 OR P-2 MANHOLE, TYPE P-2 ARE USED THE STRAIGHT SIDE OF EACH SECTION WILL BE SET PLUMB.
- STEEL REINFORCEMENT FOR PRECAST REINFORCED CONCRETE MANHOLE FLAT TOP SHALL BE AS PER ASTM DESIGNATION C478.
- AS AN ALTERNATE TO THE STANDARD MANHOLE FRAME AND COVER, A 39 INCH DIAMETER FRAME WITH 4 INCH FLANGE MAY BE FURNISHED WITH ALL OTHER DIMENSIONS AND WEIGHTS REMAINING THE SAME.



ORIGINAL SIZE IN INCHES

NEW JERSEY TURNPIKE AUTHORITY

MANHOLE AND PIPE PLACEMENT DETAILS

OFFICE OF THE CHIEF ENGINEER

2009 STANDARD
DRAWING

DR-3

App.	No.	DATE	REVISION
	I	03-22	REVISED CASTING WEIGHTS, NOTES AND RUNG DETAIL
	O	04-09	ORIGINAL DRAWING

CONTRACT NO.

SHEET NO.

OF