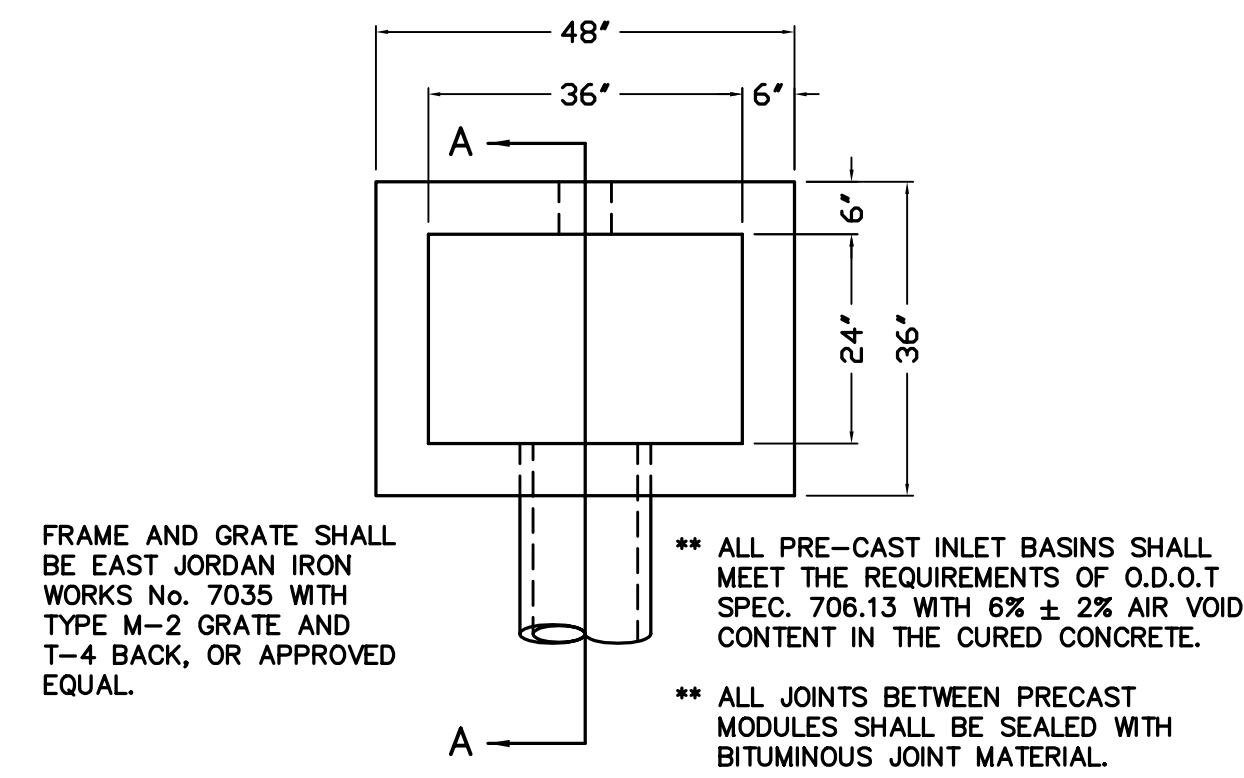


## STORM SEWER NOTES

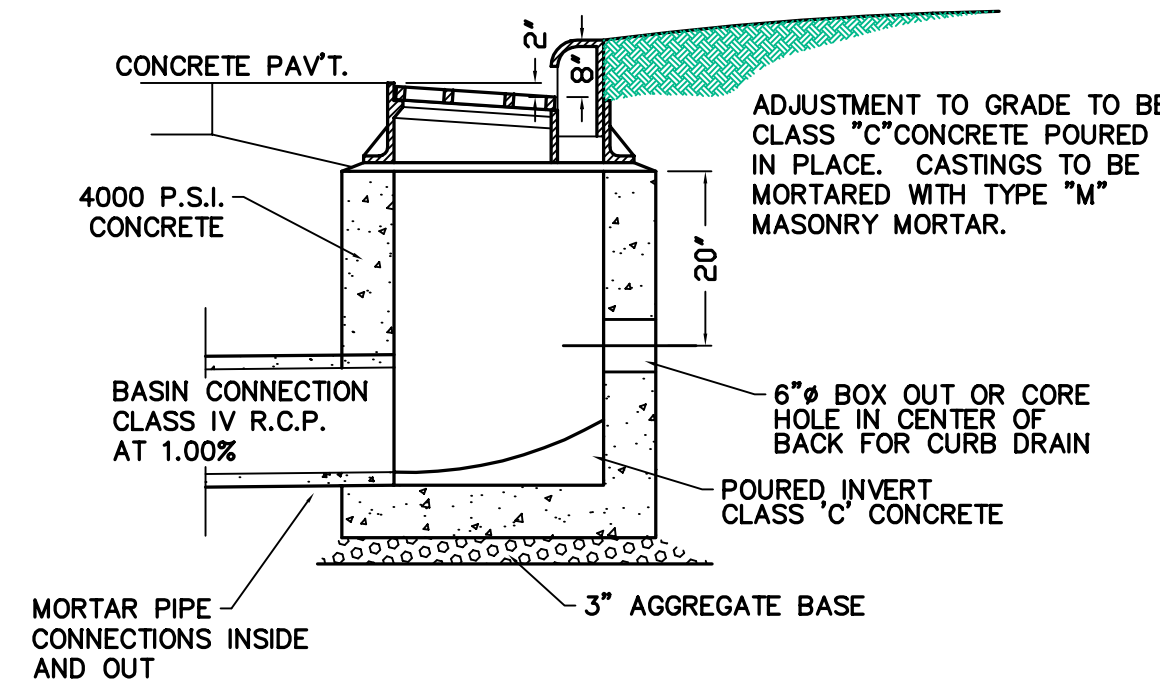
1. STORM SEWER PIPE MATERIAL SHALL BE AS SPECIFIED ON THE CONSTRUCTION PLANS AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

MATERIAL	TYPE	SPECIFICATIONS	SUGG. MFR.	ACCEPTABLE AREAS OF USE
REINFORCED CONCRETE PIPE (RCP)	CLASS IV	ASTM C-655, ODOT 706.02	---	ANY LOCATION
REINFORCED CONCRETE PIPE (RCP)	CLASS III	ASTM C-655, ODOT 706.02	---	OUTSIDE OF PAVED AREAS
HIGH DENSITY POLYETHYLENE (HDPE) PIPE	SMOOTH-LINED CORRUGATED (PERFORATED FOR DITCH ENCLOSURES)	AASHTO M294 (TYPE S), ODOT 707.33	HANCOR HI-D "SURE-LOK"; ADVANCED DRAINAGE SYSTEMS W/ PREMIUM COUPLERS OR APPROVED EQUAL.	OUTSIDE OF PAVED AREAS WHERE COVER IS 12 FEET OR LESS. PIPE WITH 6 FEET OR MORE OF COVER REQUIRE TELEVISION INSPECTION. SEE MEDINA COUNTY ENGINEER SUPPLEMENTAL SPECIFICATIONS.
HIGH DENSITY POLYETHYLENE (HDPE) PIPE	SMOOTH-LINED CORRUGATED (PERFORATED)	AASHTO M294 ODOT 707.33	HANCOR, ADVANCED DRAINAGE SYSTEMS, OR APPROVED EQUAL.	4" Ø UNDERDRAINS

- ALL STORM SEWER PIPE UNDER THE PROPOSED ROAD PAVEMENT SHALL BE REINFORCED CONCRETE PIPE (R.C.P.) CLASS IV.
- ALL INLET BASIN CONNECTIONS SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS IV OF THE SIZE SHOWN ON THE PLANS AND INSTALLED AT A MINIMUM GRADE OF 1.00%.
- ALL STORM SEWER PIPE IS TO BE SAW CUT, NOT BROKEN.
- ALL JOINTS BETWEEN SECTIONS OF REINFORCED CONCRETE PIPE (RCP) SHALL BE SEALED WITH BITUMINOUS JOINT MATERIAL.
- ALL STORM SEWER PIPE SHALL BE DESIGNED AND LAID WITH A MINIMUM SLOPE OF 0.5%.
- THE INSTALLATION OF STORM SEWERS AND CULVERTS SHALL BE IN ACCORDANCE O.D.O.T. ITEM 603 SPECIFICATIONS.
- ALL ROCK CHANNEL PROTECTION SHALL BE PER O.D.O.T. ITEM 601.09, AS DIMENSIONED ON THE PLANS.
- ALL STORM CONNECTIONS AND LATERALS SHALL HAVE A 6" MINIMUM GRANULAR BEDDING AND BACKFILL, (CLASS B).
- ALL MANHOLES SHALL BE SET TO GRADE PER THE CONSTRUCTION PLANS, BY THE SEWER CONTRACTOR AT THE TIME OF INSTALLATION. THE FINAL ADJUSTMENT OF THE CASTINGS SHALL BE THE RESPONSIBILITY OF THE SEWER CONTRACTOR AND THE FINAL INSPECTION, APPROVAL AND ACCEPTANCE OF THE SEWER SYSTEM BY THE MEDINA COUNTY ENGINEERING DEPARTMENT SHALL BE CONTINGENT UPON THIS FINAL ADJUSTMENT OF THE CASTINGS.
- CONCRETE HEADWALLS (CAST-IN-PLACE OR PRECAST) SHALL BE SPECIFIED AND CONSTRUCTED AT ALL OPEN ENDS OF PIPES, AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - HEADWALLS SHALL CONFORM TO OHIO DEPARTMENT OF TRANSPORTATION DETAILS AND SPECIFICATIONS.
  - HEADWALLS SHALL BE CONSTRUCTED IN CONJUNCTION WITH THE INSTALLATION OF THE AFFECTED PIPE.
  - WHEN PRECAST HEADWALLS ARE USED, PIPES SHALL BE MORTARED TO THE HEADWALLS.
  - CHAMFER ALL EXPOSED EDGES OF POURED HEADWALLS.
- ALL STORM MANHOLES AND INLET BASINS SHALL HAVE POURED INVERTS.
- ALL STORM SEWER PIPE CONNECTING A STREET INLET BASIN TO A STORM SEWER MAIN LINE MANHOLE SHALL BE REINFORCED CONCRETE PIPE (R.C.P.) CLASS III.

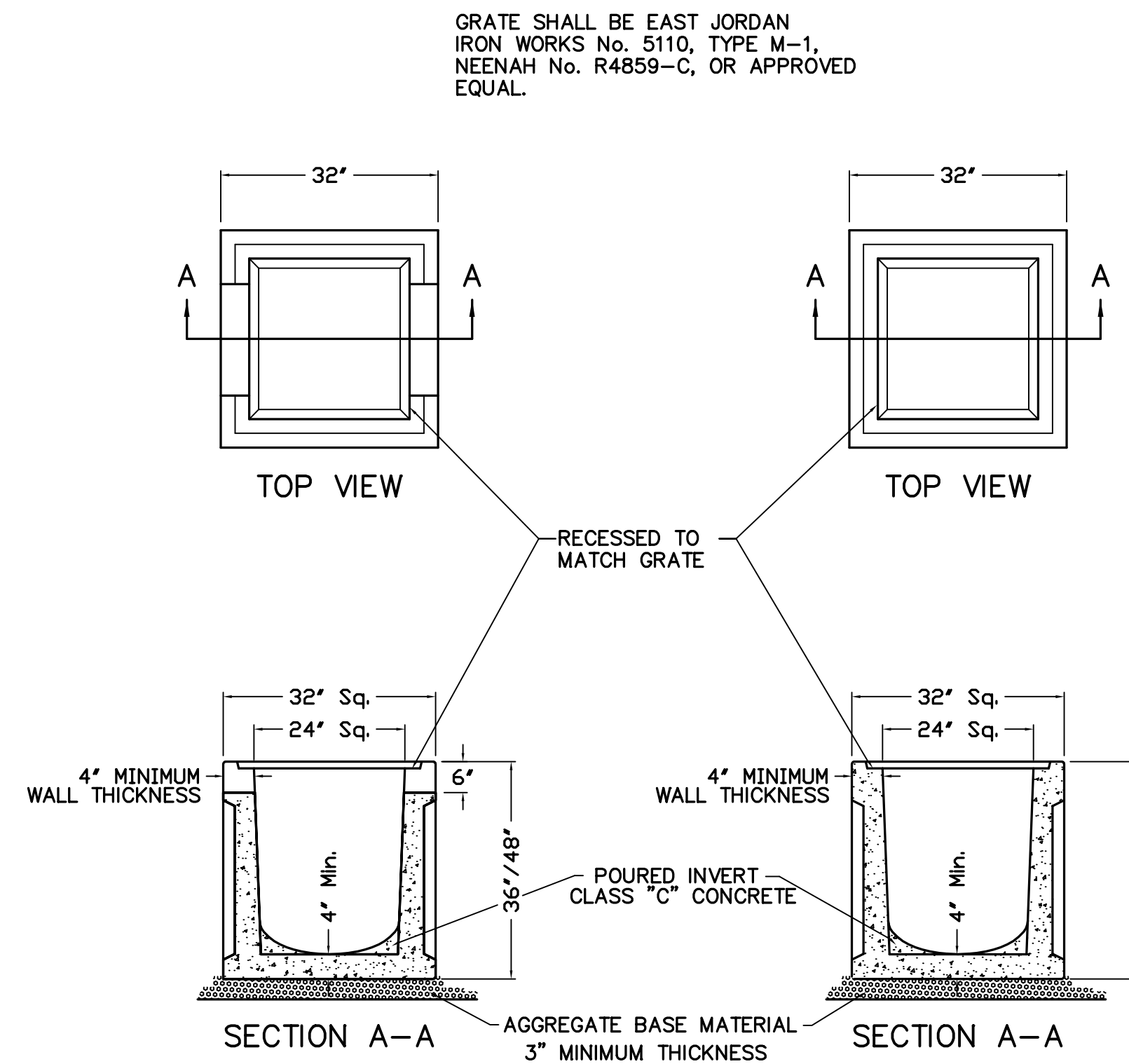


TOP VIEW (CASTING REMOVED)



SECTION A-A

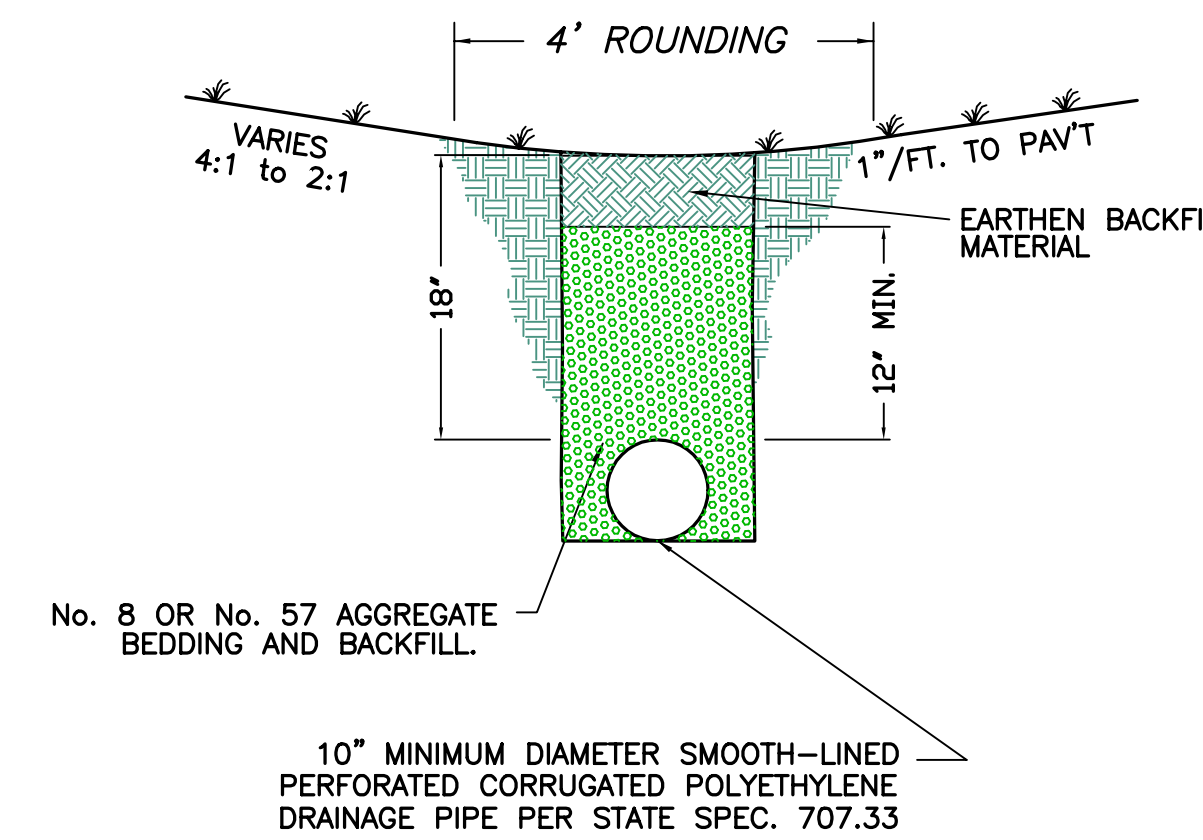
### REINFORCED CONCRETE CURB INLET BASIN



2-2-A

2-2-B

### MODIFIED PRECAST YARD BASINS



MINIMUM TRENCH WIDTH SHALL ALLOW FOR THOROUGH COMPACTION OF BEDDING AND BACKFILL MATERIAL

### SPECIAL RESIDENTIAL DITCH ENCLOSURE

#### NOTES

GENERAL: WITH NORMAL SOIL AND SITE CONDITIONS THIS STANDARD PRECAST MANHOLE MAY BE USED FOR ANY REQUIRED MANHOLE DEPTH.

SECTIONS OF THE PRECAST MANHOLE SHALL BE ASSEMBLED WITH EITHER ALL TONGUE OR ALL GROOVE ENDS UP. LIFT HOLES MAY BE PROVIDED IN EACH SECTION FOR HANDLING.

TOP AND TRANSITION (OR REDUCER) SECTIONS MAY BE EITHER ECCENTRIC CONE OR FLAT SLAB.

BASES FOR NUMBER 3 MANHOLES ARE SHOWN WITH MONOLITHIC FLOOR AND RISER. OPENINGS FOR INLET AND OUTLET PIPES SHALL BE PROVIDED, EITHER WHEN THE UNIT IS CAST OR LATER, TO MEET PROJECT REQUIREMENTS. BOTTOM CHANNELS MAY BE CONCRETE PRE-POURED AT PLANT OR BY FIELD CONSTRUCTION AS SHOWN ON ODOT MH-1 AND MH-2.

OPENINGS IN RISER SECTIONS FOR 18" AND SMALLER INLET PIPES MAY BE PREFABRICATED OR CUT IN THE FIELD PROVIDED THE SIDES OF THE PIPE AT THE SPRINGLINE DO NOT PROJECT INTO THE MANHOLE.

JOINT SEAL BETWEEN PRECAST MANHOLE SECTIONS SHALL BE EITHER BITUMINOUS PIPE JOINT FILLER PER ODOT SPEC. 706.10 OR RESILIENT AND FLEXIBLE GASKETS PER ODOT SPEC. 706.11.

MATERIALS FOR BASES AND OTHER PRECAST SECTIONS, INCLUDING REINFORCEMENT NOT SPECIFIED HEREON, SHALL COMPLY WITH THE REQUIREMENTS OF ODOT SPEC. 706.13.

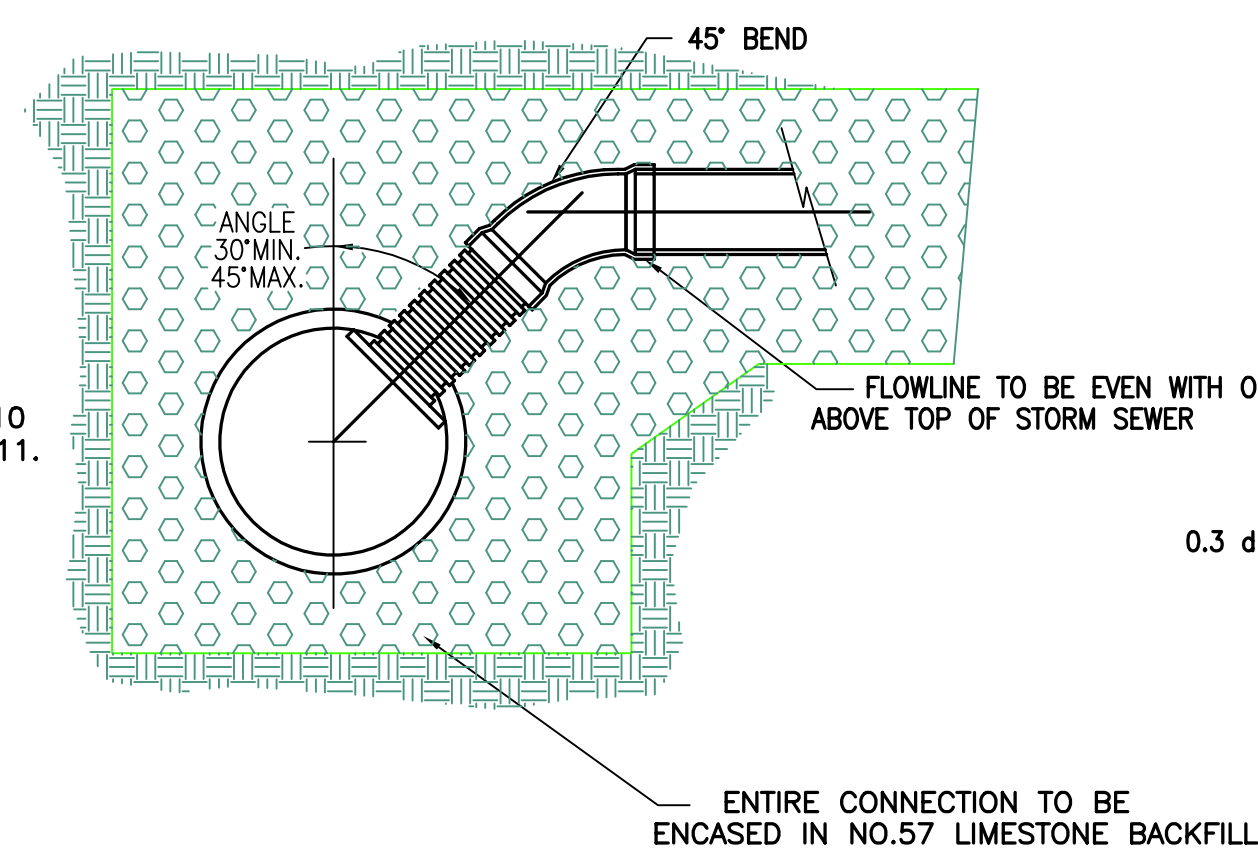
STEPS, FRAMES AND COVERS SHALL CONFORM WITH THE REQUIREMENTS SET FORTH ON ODOT DWG. MH-1.

#### NOTES

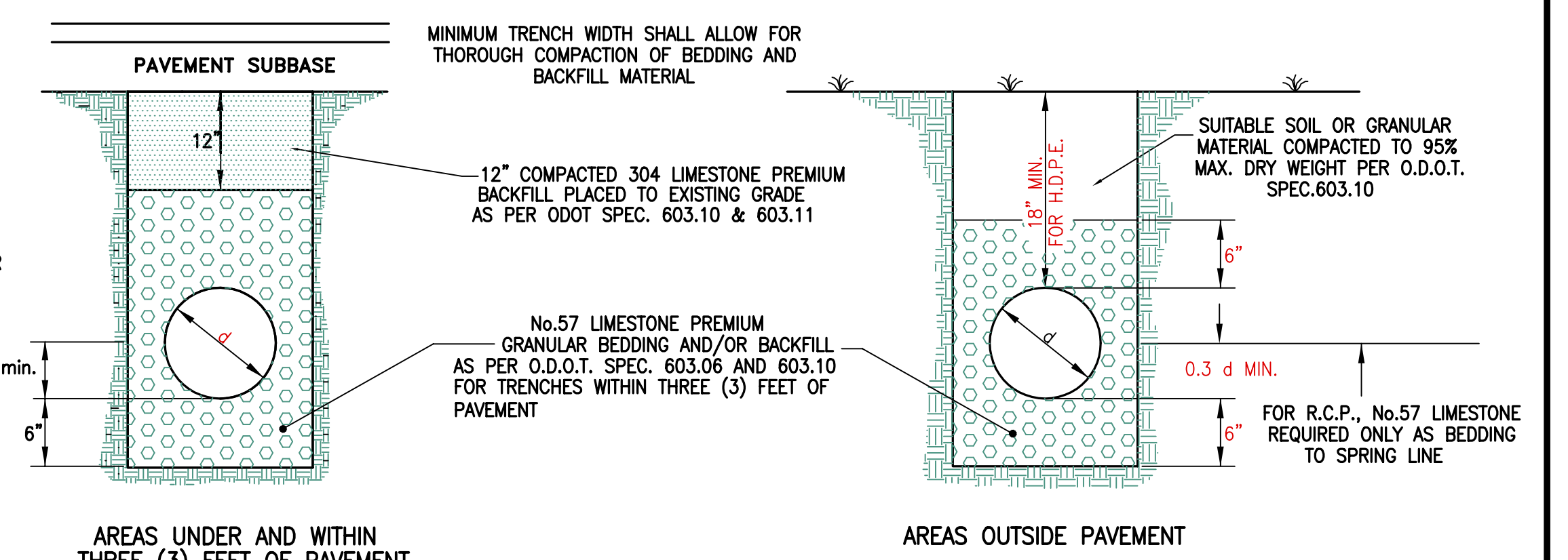
STORM SEWER WYE OR TEE CONNECTIONS INTO MAINLINE PIPE SHALL BE FACTORY MADE. IN THE EVENT WYE OR TEE CONNECTIONS HAVE TO BE INSTALLED IN THE FIELD, THE MAINLINE STORM SEWER SHALL BE CORED AND A RUBBER BOOT INSTALLED.

STORM SEWER HOUSE CONNECTIONS SHALL BE 6" ACRILONITRILE BUTADIENE STYRENE (ASTM-2751, 200 PSI PIPE STIFFNESS) WITH CHEMICALLY WELDED JOINTS USING STANDARD ABS COUPLINGS (ASTM D-2680), OR THE PIPE MAY BE POLYVINYL CHLORIDE (ASTM D-3034, SDR-35) WITH COMPRESSION TYPE JOINTS (ASTM D-3212).

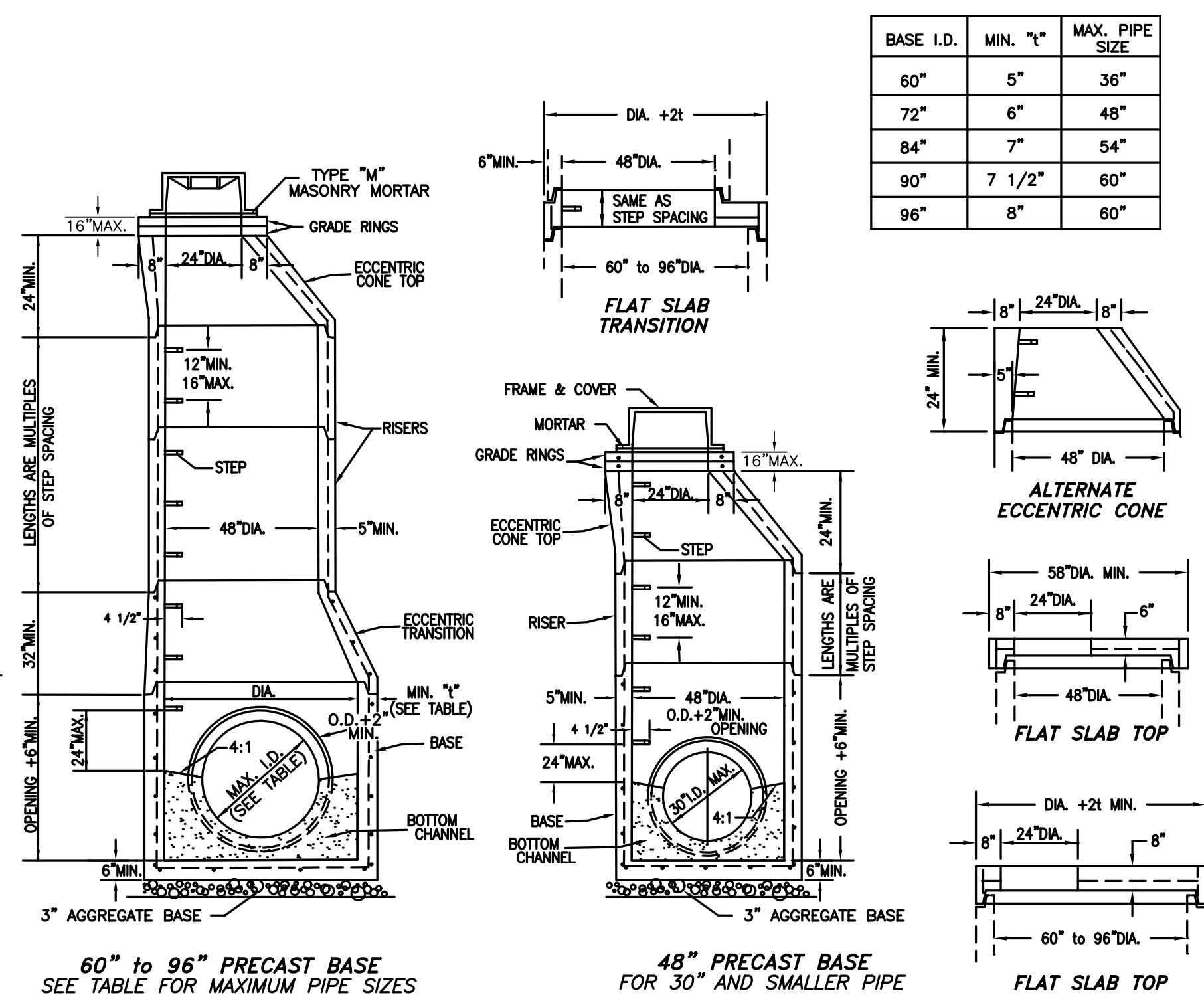
THE CONNECTIONS SHALL BE LAID AT A MINIMUM SLOPE OF 1.00% AND CARRIED TO A POINT 12' BEYOND THE PROPERTY LINE A 4"x4" TREATED POST SHALL BE SET TO MARK THE END OF THE CONNECTION.



### STORM SEWER CONNECTION



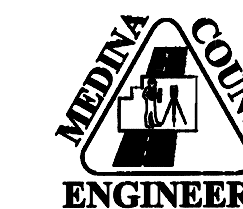
### TRENCHES



### REINFORCED PRECAST CONCRETE MANHOLES

OFFICE OF THE  
MEDINA COUNTY  
ENGINEER  
MICHAEL J. SALAY, P.E., P.S.

MEDINA COUNTY ENGINEERING CENTER  
791 W. SMITH ROAD  
P.O. BOX 825  
MEDINA, OHIO 44256-0825  
Ph. (530) 723-9561



PROJECT:

### TYPICAL STORM SEWER DETAILS

THE DESIGN ENGINEER WHOSE STAMP OR SIGNATURE IS AFFIXED TO THIS SET OF PLANS CERTIFIES UNDER THE PENALTY OF PERJURY THAT THE INFORMATION ON THIS SHEET HAS NOT BEEN MODIFIED FROM ITS ORIGINAL FORM UNLESS EXPRESSLY APPROVED BY THE MEDINA COUNTY ENGINEER'S OFFICE.

DRAWN BY: A. CONRAD	DATE: 1/9/01			
CHECKED BY: H. GERSPACHER	SCALE: AS NOTED			
M.C.E. COMPUTER FILE No. M\SUBDIV\STMD27LS				
REV. No.	DATE	DESCRIPTION	DRAWN BY	PAGE
1	JAN. 08	MISC. & COVER OVER HDPE	SHAWK	OF
2	MAR. 06	T.V. INSPECTION, ADD NOTE #13	M. MARTIN	
3	MAR. 07	MANHOLE ADJUST--GRADE RINGS ONLY	H. GERSP.	