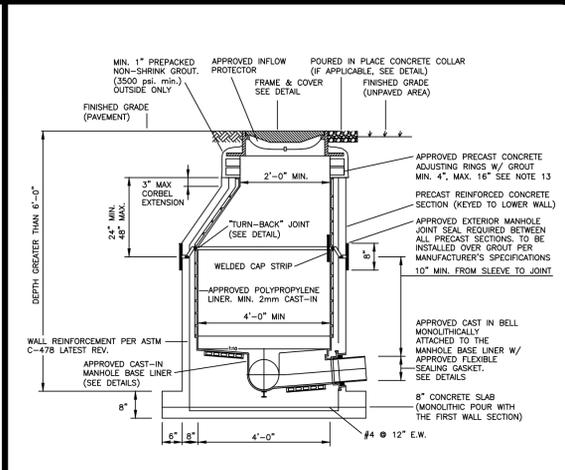


NO.	DATE	REVISION / REMARKS
1	DEC 2021	GENERAL REVISION
2	JAN 2023	GENERAL REVISION

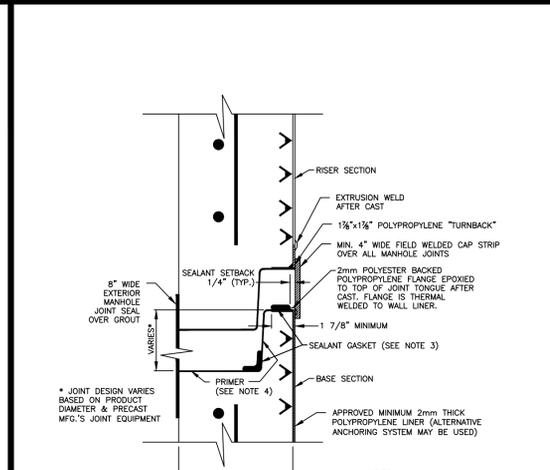
STD DETAILS
SHEET NUMBER 0 OF 0

SEAL



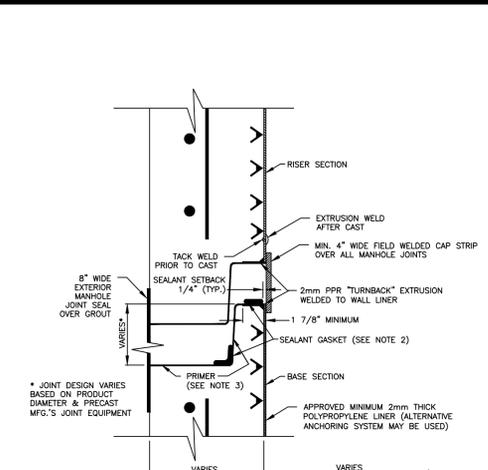
- NOTES:
1. PRECAST CONCRETE TYPE II 4000 P.S.I. CALCEAREOUS AGGREGATE REQUIRED (MIN. C6003 CONTENT; 65% IN LARGE AGGREGATE, 50% IN CONCRETE SCREENING).
 2. RUB'R NEK (RU 106) OR APPROVED EQUAL AT ALL RISER JOINTS. SIZES TO BE SPECIFIED ON SHOP DRAWINGS.
 3. ALL PIPE OPENINGS SHALL BE GAS TIGHT AND WATER TIGHT WITH NO EXPOSED CONCRETE SURFACES.
 4. CAST OPENINGS SHALL BE MANUFACTURED WITH A POLYPROPYLENE SLEEVE CAST IN APPROVED FLEXIBLE MANHOLE CONNECTORS SHALL BE USED AT PIPE CONNECTIONS. HOLE SIZE PER BOOT MANUFACTURER'S SPECIFICATIONS. DOUBLE PIPE CLAMPS MUST BE INSTALLED ON FLEXIBLE SLEEVES WHERE REQUIRED BY BOOT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 5. CORED PIPE OPENINGS SHALL BE INSTALLED PER DETAIL. APPROVED FLEXIBLE CONNECTOR WILL BE INSTALLED ONTO POLYPROPYLENE WALL SLEEVE. WALL SLEEVE SHALL BE EPOXIED INTO CORED OPENING AND THERMAL WELDED TO WALL LINER BY LICENSED CONTRACTOR.
 6. FLOW CHANNELS SHALL DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL).
 7. LIFT HOLES ARE PERMITTED.
 8. INSIDE DROPS SHALL NOT BE DESIGNED TO EXCEED 1.80 FEET AND NOT CONSTRUCTED TO EXCEED 2.0 FEET. MAX. 6\"/>

STANDARD MANHOLE WITH CAST-IN LINER AND BASE LINER 29S



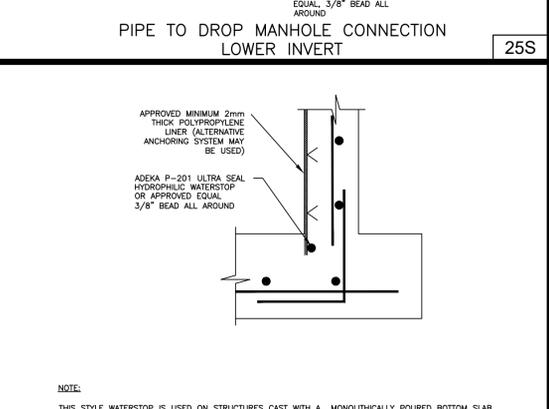
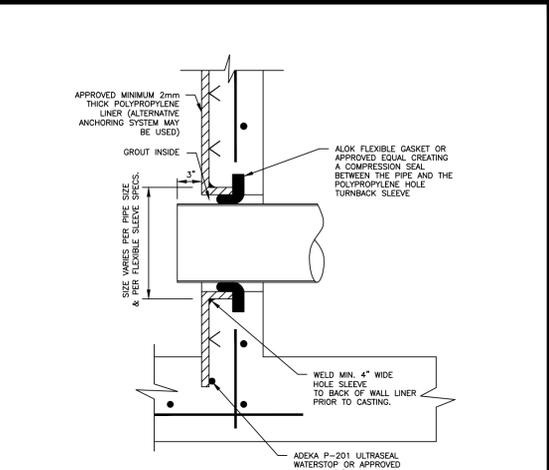
- NOTES:
1. THE "AFTER CAST" "TURNBACK" JOINT IS USED WHEN THE "PRIOR TO CAST" "TURNBACK" JOINT IS NOT FEASIBLE.
 2. LINER WELDING SHALL BE PERFORMED EXCLUSIVELY BY LICENSED, CERTIFIED WELDERS.
 3. STRUCTURE SHOP DRAWINGS SHALL CALL OUT THE SIZE, TYPE AND PLACEMENT OF THE JOINT SEALANT.
 4. JOINT PRIMER TO BE APPLIED BY THE PRECASTER (TONGUE SECTION ONLY).

TURN BACK JOINT INSTALLED AFTER CAST 28S

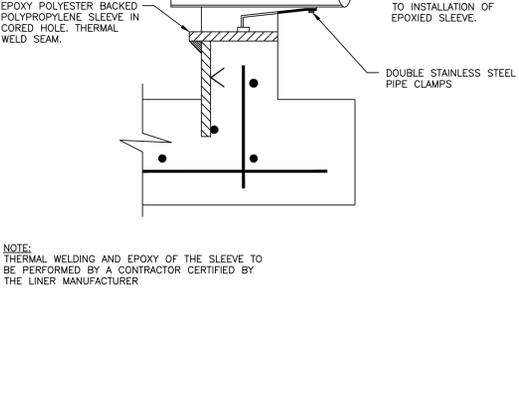
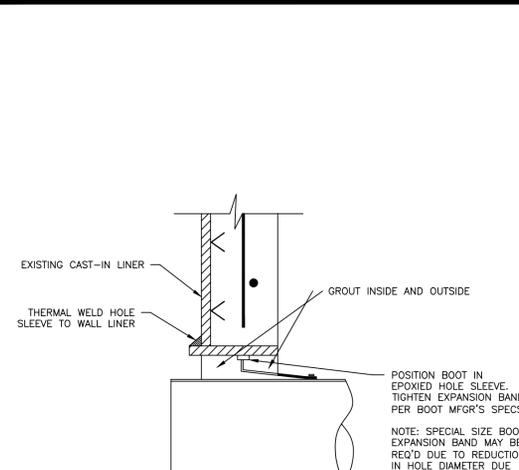


- NOTES:
1. LINER WELDING SHALL BE PERFORMED EXCLUSIVELY BY LICENSED, CERTIFIED WELDERS.
 2. STRUCTURE SHOP DRAWINGS SHALL CALL OUT THE SIZE, TYPE AND PLACEMENT OF THE JOINT SEALANT.
 3. JOINT PRIMER TO BE APPLIED BY THE PRECASTER (TONGUE SECTION ONLY).

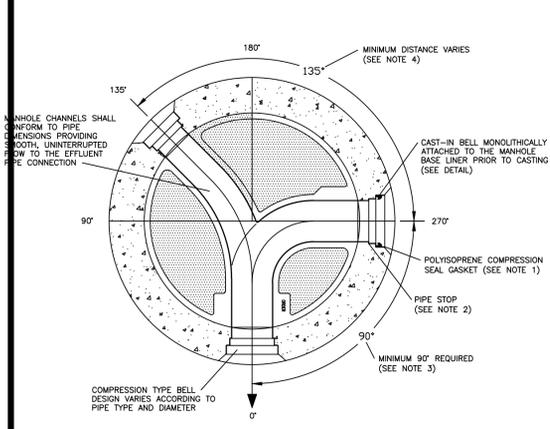
TURN BACK JOINT INSTALLED PRIOR TO CAST 27S



BASE MANHOLE SECTION WATERSTOP DETAIL 26S

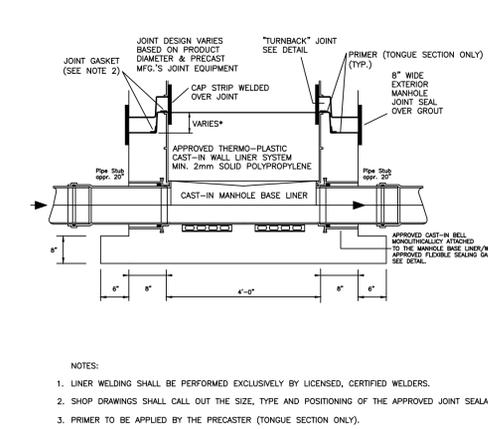


CORED HOLE W/FLEX. CONNECTOR & TURNBACK SLEEVE POLYPROPYLENE LINER SYSTEM CAST-IN 24S



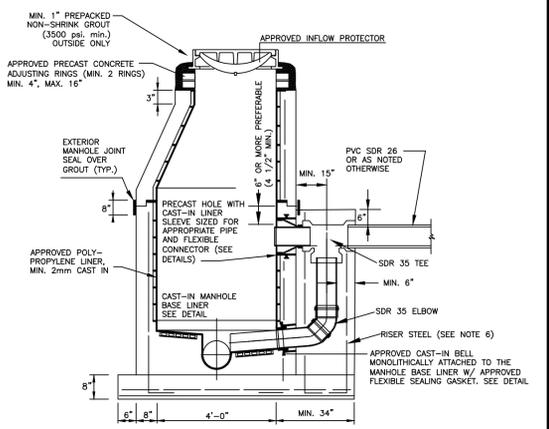
- NOTES:
1. ONLY THE POLYSILOXANE GASKET PROVIDED BY THE MANHOLE BASE LINER MANUFACTURER SHALL BE USED IN COMPRESSION TYPE BELLS.
 2. CONNECTION PIPES SHALL BE INSERTED COMPLETELY INTO THE BELL, CONNECTOR FLUSH WITH THE PIPE STOP PROVIDING A SMOOTH TRANSITION FROM PIPE TO MANHOLE BASE LINER CHANNEL.
 3. MINIMUM OF 90 DEGREES BETWEEN INCOMING, LEFT OR RIGHT OF OUTGOING PIPE. DISTANCE BETWEEN CONNECTIONS MAY VARY ACCORDING TO MANHOLE DIAMETER, PIPE SIZE AND TYPE.
 4. MINIMUM DISTANCE BETWEEN INFLUENT PIPE CONNECTIONS MAY VARY AND SHALL BE SPECIFIED BY THE LINER MANUFACTURER ACCORDING TO MANHOLE AND/OR PIPE DIAMETER AND TYPE.

FLOW CHANNEL/PIPE CONNECTION TO NEW CAST-IN BASE LINER 33S



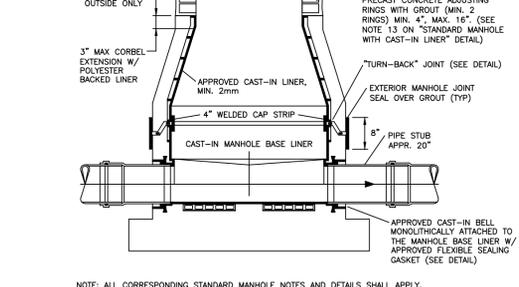
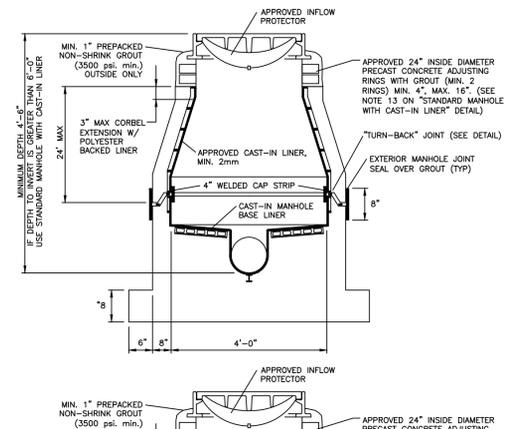
- NOTES:
1. LINER WELDING SHALL BE PERFORMED EXCLUSIVELY BY LICENSED, CERTIFIED WELDERS.
 2. SHOP DRAWINGS SHALL CALL OUT THE SIZE, TYPE AND POSITIONING OF THE APPROVED JOINT SEALANT.
 3. PRIMER TO BE APPLIED BY THE PRECASTER (TONGUE SECTION ONLY).

MANHOLE BASE SECTION 32S



- NOTES:
1. ALL DETAILS AND SPECIFICATIONS FOR "STANDARD MANHOLE WITH SOLID POLYPROPYLENE LINER SYSTEM" ARE APPLICABLE EXCEPT FOR REFERENCES TO DROP ASSEMBLY.
 2. THE PRECAST BASE SHALL EXTEND FULLY UNDER THE DROP ASSEMBLY.
 3. PRECAST DROP ENCASMENT REQUIRED UP TO TOP EDGE OF 90 DEGREE ELBOW, BRICK AND CONCRETE RUBBLE ARE PERMITTED AS FILLER IN REMAINDER OF DROP ENCASMENT.
 4. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT INVERT IS LOCATED 2.0 FEET OR MORE ABOVE THE MAIN INVERT CHANNEL. DROP CONNECTIONS SHOULD NOT BE DESIGNED FOR LESS THAN A 2.4 FOOT DROP.
 5. PVC SDR 26 PIPE WITH PVC SDR 35 FITTINGS SHALL BE UTILIZED IN THE DROP ASSEMBLY.
 6. DROP ENCASMENT REINFORCING STEEL TO BE CAST IN PLACE WITH BASE (4 RODS) OR USE 4-1/2\"/>

OUTSIDE DROP MANHOLE WITH CAST-IN LINER AND BASE LINER 31S



SHALLOW MANHOLE WITH CAST-IN LINER AND BASE LINER 30S

WASTEWATER #4 STANDARD DETAILS

CONSULTANT:

IT'S THE LAW!
CALL 48 HOURS BEFORE YOU DIG
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
UTILITIES NOTIFICATION CENTER.

DESIGNED BY: WUD
DRAWN BY: M. BUCKNER
CHECKED BY: J. LAMMERT
APPROVED BY: WUD

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West Palm Beach, FL 33416-6097

Mar 01, 2023