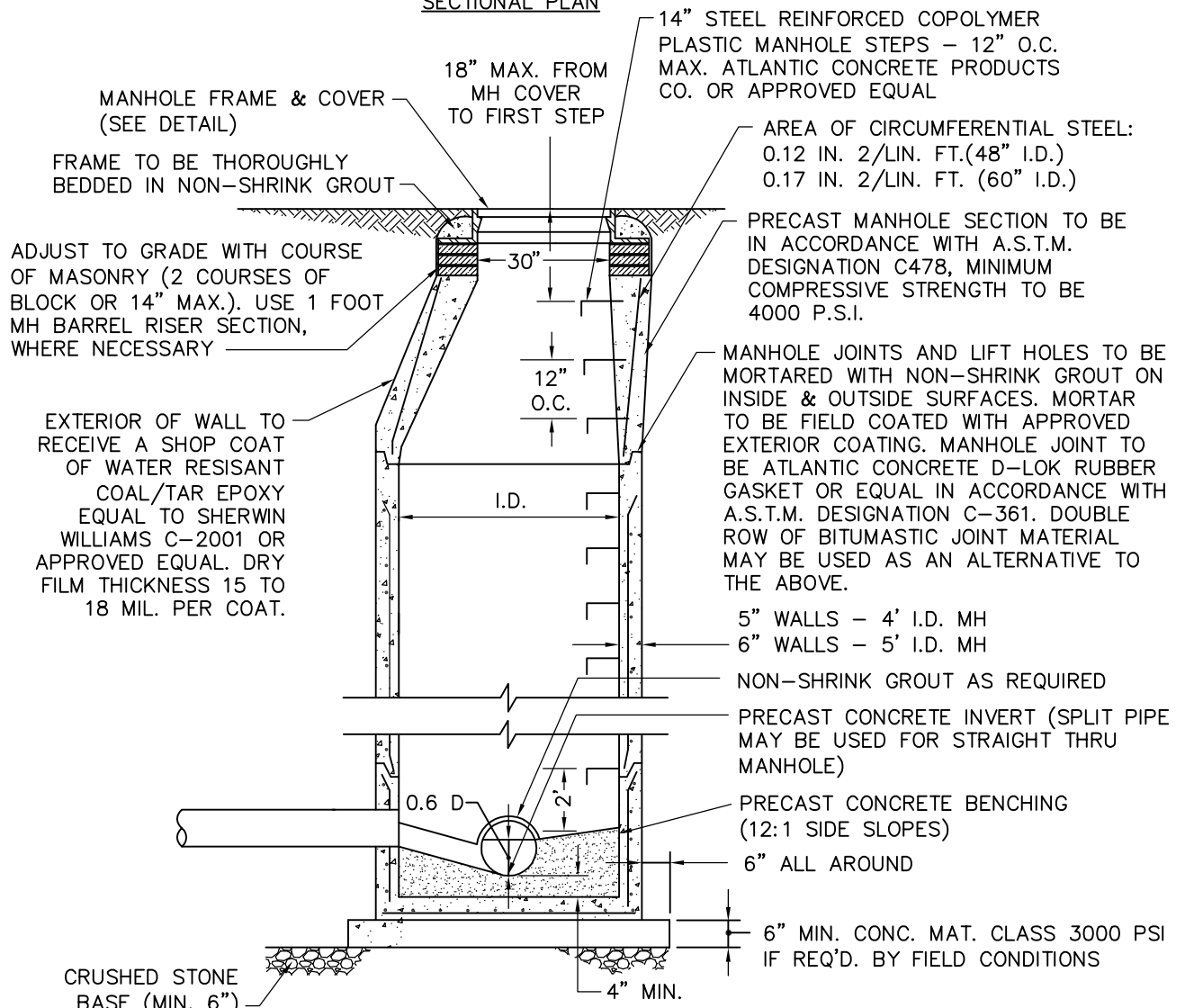
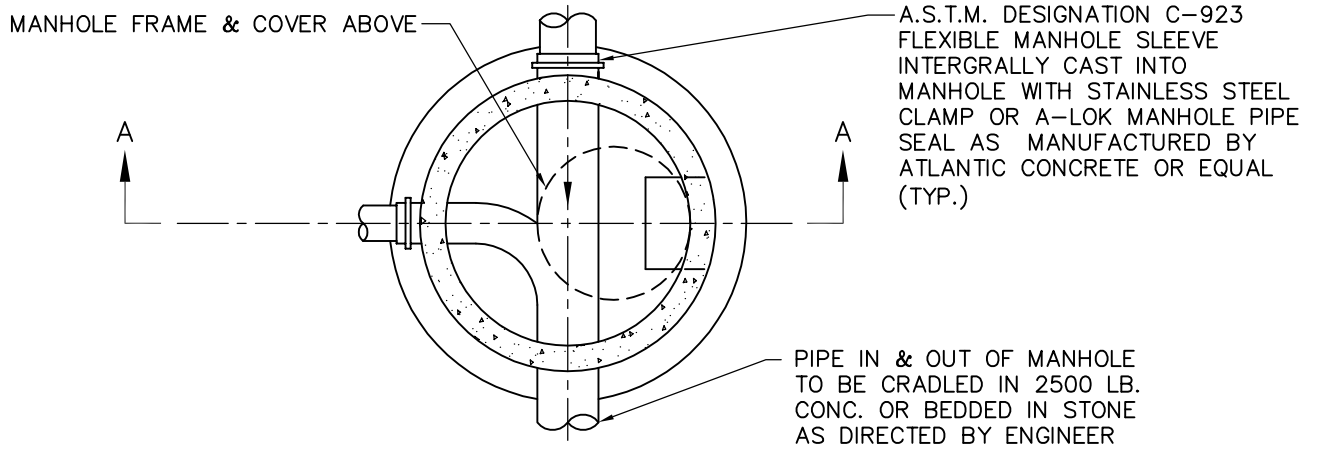




SANITARY SEWER

STANDARD CONSTRUCTION DETAILS

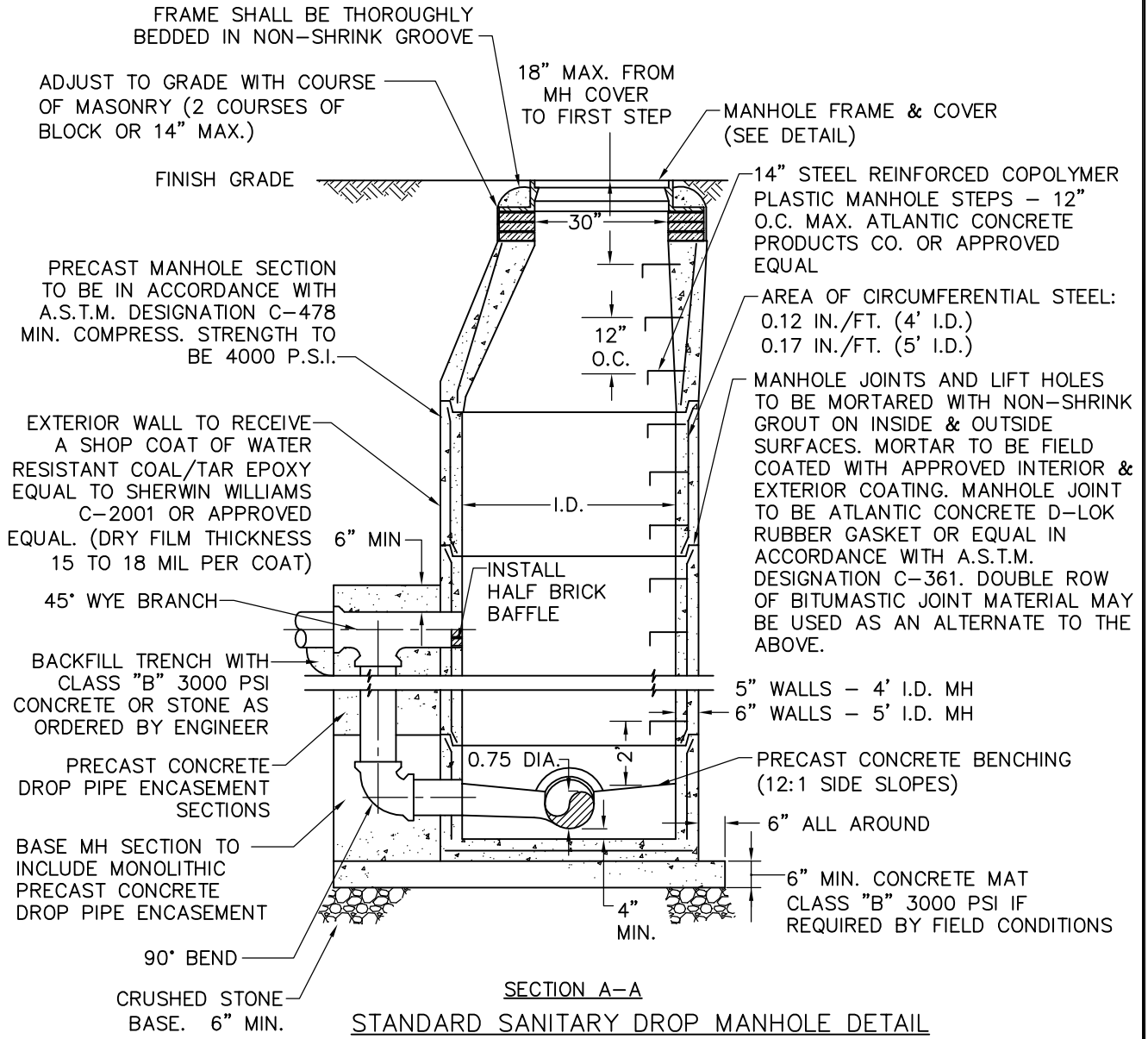
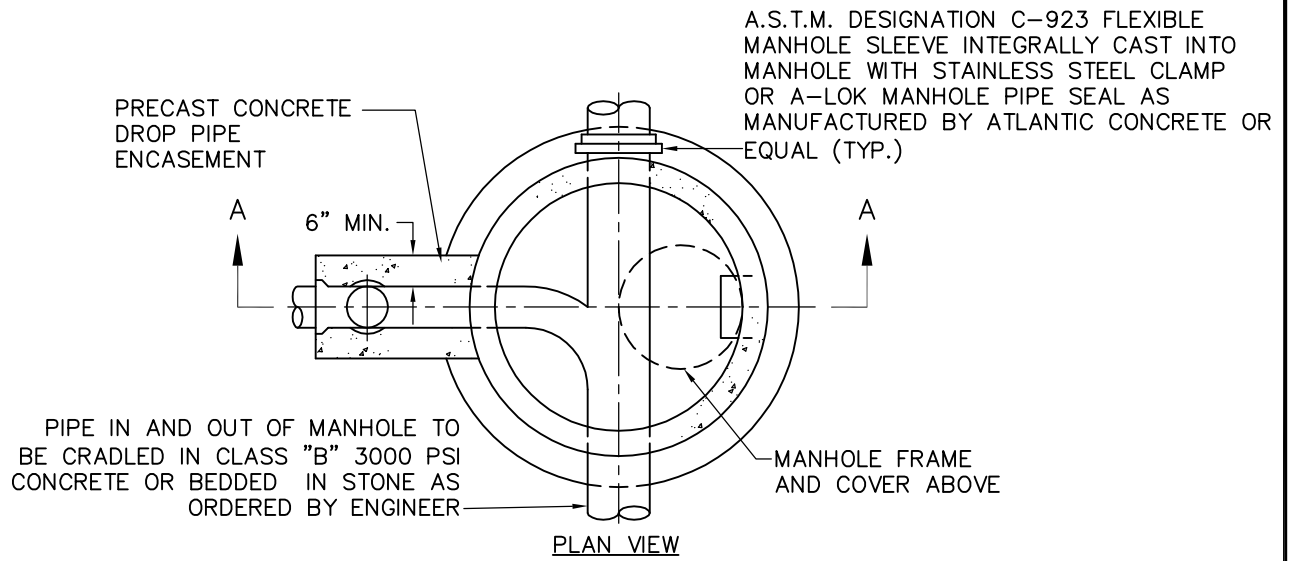
<u>Detail #</u>	<u>Description</u>	<u>Drawing No.</u>
001	Standard Sanitary Manhole	HMUA-SAN-001
002	Standard Sanitary Drop Manhole	HMUA-SAN-002
003	Force Main Connection Manhole	HMUA-SAN-003
004	Existing Manhole Wall Pipe Penetration	HMUA-SAN-004
005	Standard Manhole Frame & Cover	HMUA-SAN-005
006	Typical House Connection	HMUA-SAN-006
007	Cleanout Riser Cover	HMUA-SAN-007
008	Typical Lateral Saddle Tap Connection	HMUA-SAN-008
009	Joining Pipes With Flexible Couplings	HMUA-SAN-009
010	Sanitary Sewer – Utility Crossing	HMUA-SAN-010
011	PVC Sanitary Sewer Trench Detail	HMUA-SAN-011
012	Inside Drop Connection	HMUA-SAN-012



STANDARD SANITARY MANHOLE DETAIL  
(NOT TO SCALE)

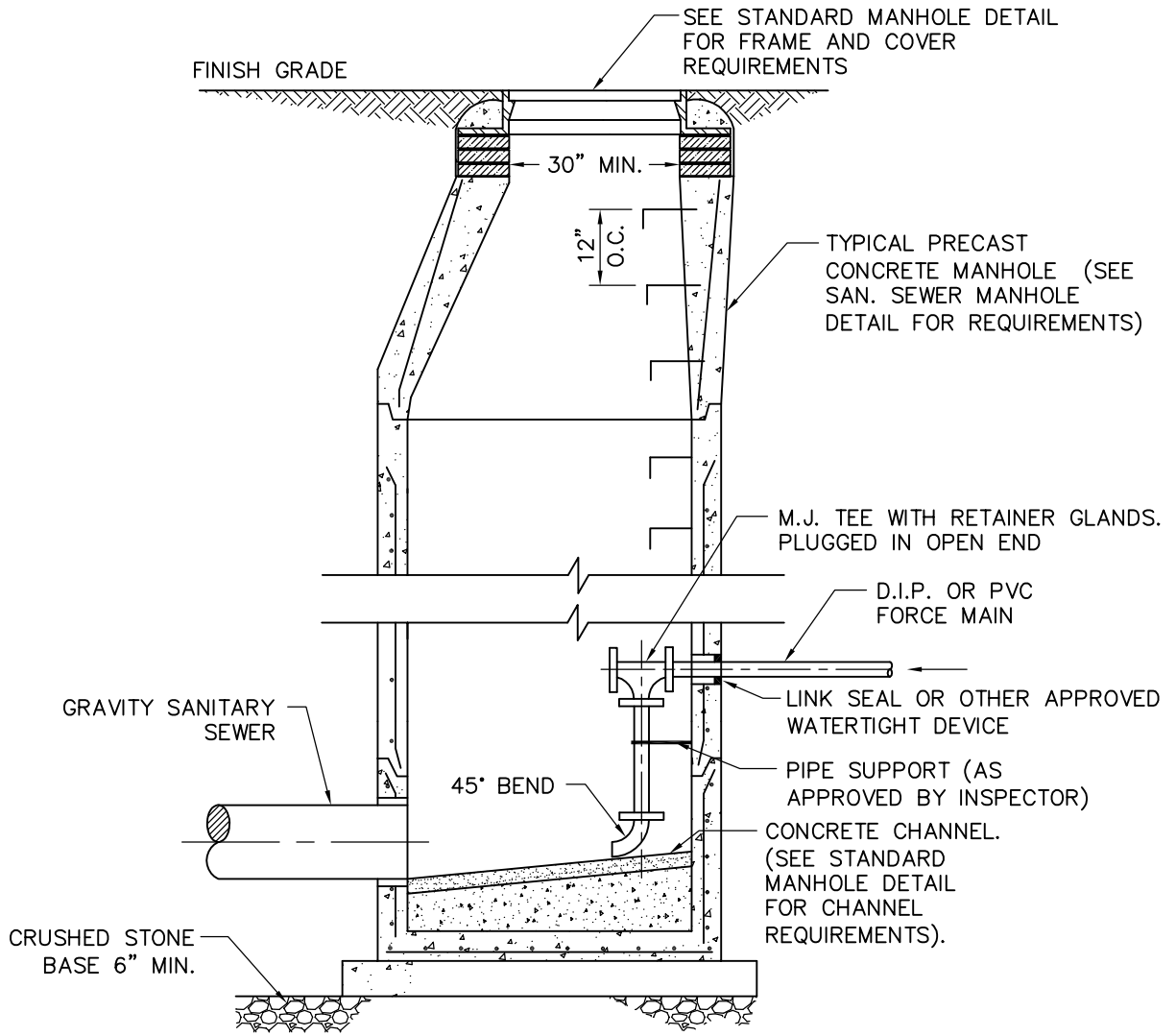
**NOTE:**  
48" I.D. MANHOLE TO BE USED FOR PIPE SIZES THRU 24"Ø. 60"Ø I.D. BASE W/ TAPER SECTION TO BE USED FOR PIPE SIZES OVER 24"Ø

		STANDARD DETAIL	
		STANDARD SANITARY MANHOLE (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/28/03	Dwg. No.: <b>HMUA-SAN-001</b>
		Sh. 1 of 1	



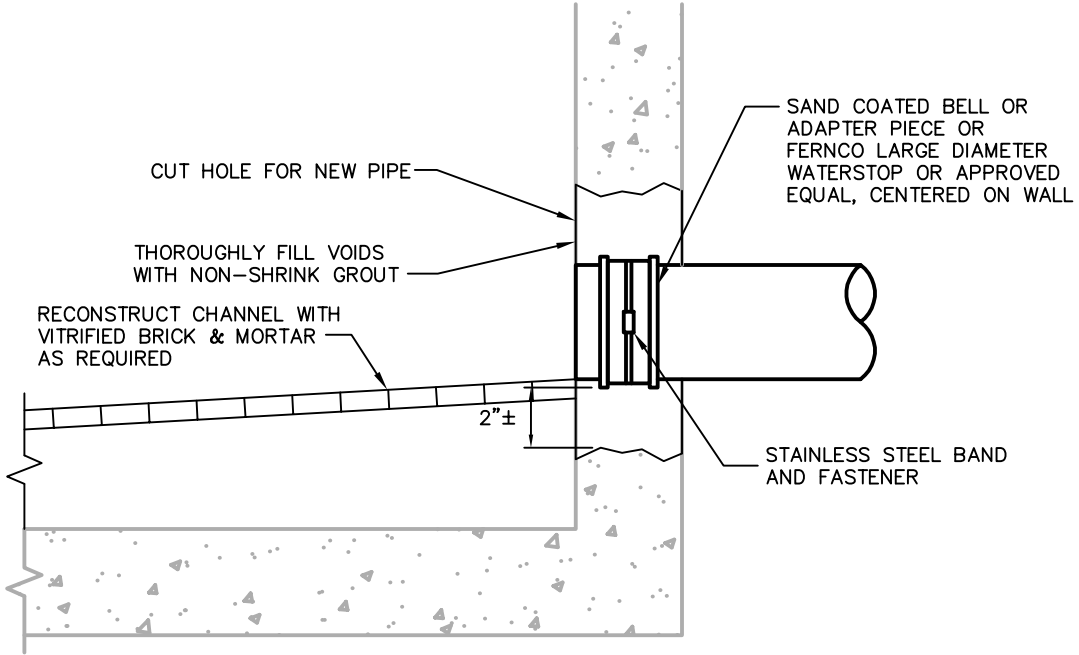
**NOTE:**  
48" I.D. MANHOLE TO BE USED FOR PIPE SIZES THRU 24"Ø. 60"Ø I.D. BASE W/ TAPER SECTION TO BE USED FOR PIPE SIZES OVER 24"Ø

6/11/07		GENERAL REVISIONS		STANDARD DETAIL	
Date:	Revision:			STANDARD SANITARY DROP MANHOLE (HACKETTSTOWN MUA)	
424 Hurley Drive Hackettstown, NJ 07840		Date:	Dwg. No.:	HMUA-SAN-002	
		07/29/03		Sh. 1 of 1	



FORCE MAIN CONNECTION MANHOLE DETAIL  
N.T.S.

		STANDARD DETAIL	
		FORCE MAIN CONNECTION MANHOLE (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/24/03	Dwg. No.: <b>HMUA-SAN-003</b>
		Sh. 1 of 1	



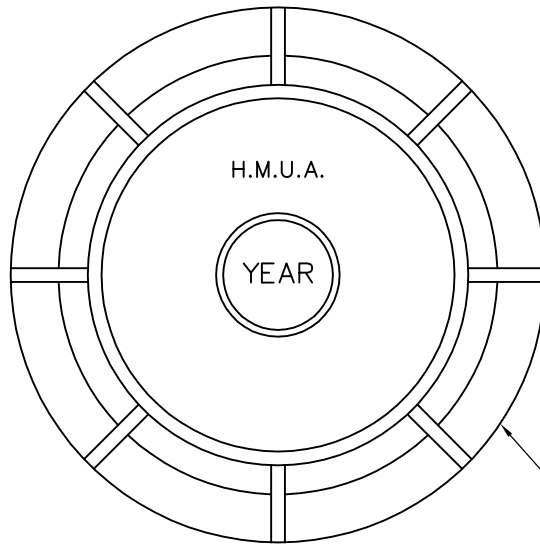
**NOTES:**

1. NON-SHRINK GROUT TO BE FIVE STAR STRUCTURAL CONCRETE OR APPROVED EQUAL.

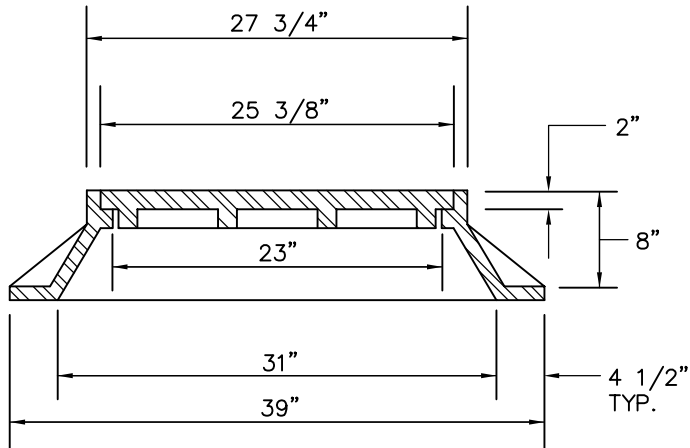
**EXISTING MANHOLE WALL PIPE PENETRATION DETAIL**

NOT TO SCALE

		STANDARD DETAIL	
		EXISTING MANHOLE WALL PIPE PENETRATION (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: <b>HMUA-SAN-004</b> Sh. 1 of 1



PLAN



SECTION

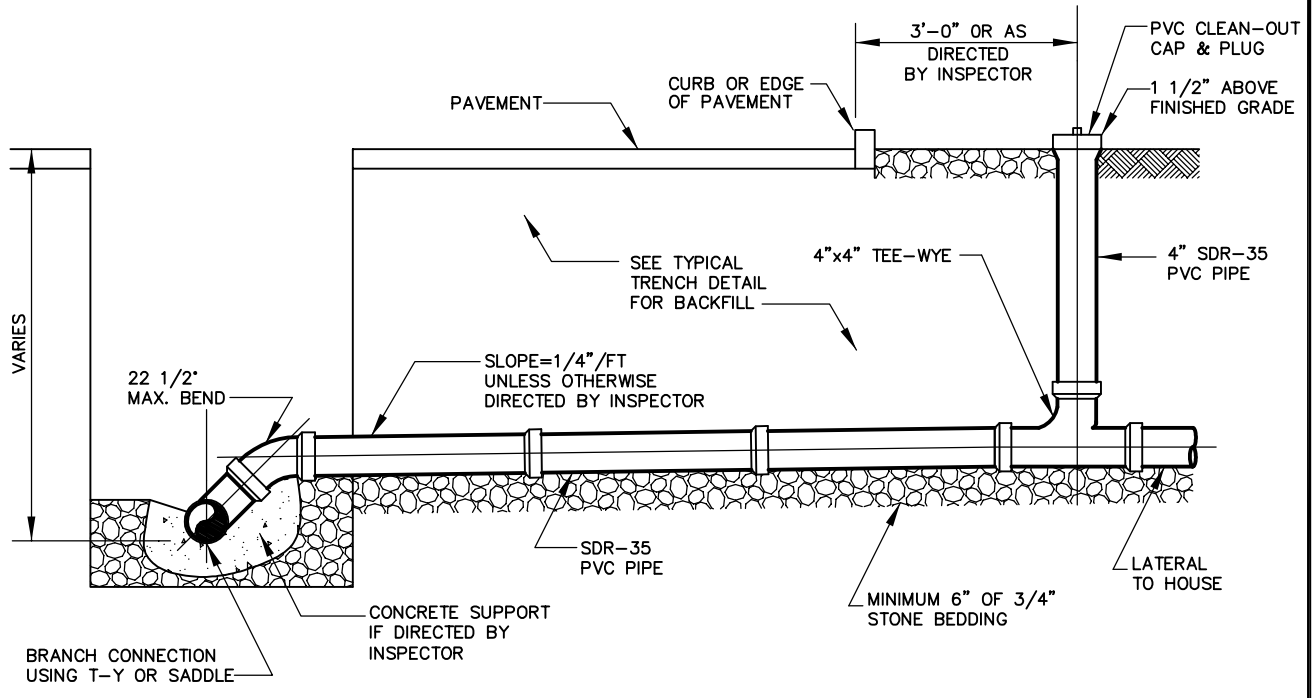
NOTES:

1. ALL MANHOLES IN EASEMENTS SHALL BE PROVIDED WITH COVER LOCKING DEVICE OF BRONZE AND KEY WHERE REQUIRED.
2. YEAR OF CONSTRUCTION REQUIRED ON MANHOLE COVER

STANDARD MANHOLE FRAME & COVER DETAIL

N.T.S.

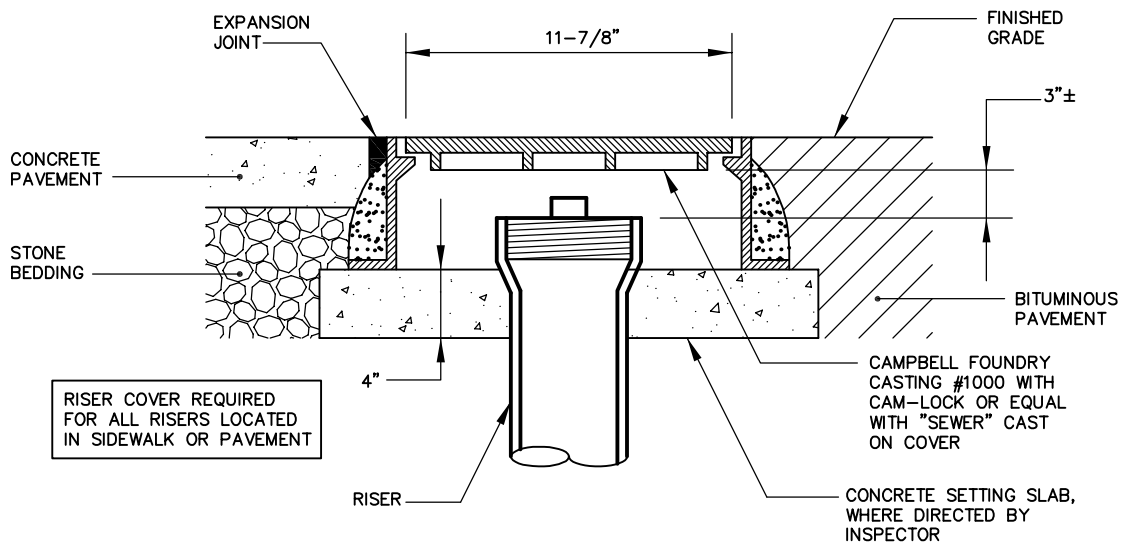
		STANDARD DETAIL	
		STANDARD MANHOLE FRAME & COVER (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/24/03	Dwg. No.: <b>HMUA-SAN-005</b>
		Sh. 1 of 1	



**TYPICAL HOUSE CONNECTION DETAIL**

NOT TO SCALE

		STANDARD DETAIL TYPICAL HOUSE CONNECTION (HACKETTSTOWN MUA)	
Date:	Revision:	Date:	Dwg. No.:
		06/11/07	HMUA-SAN-006
424 Hurley Drive Hackettstown, NJ 07840		Sh. 1 of 1	



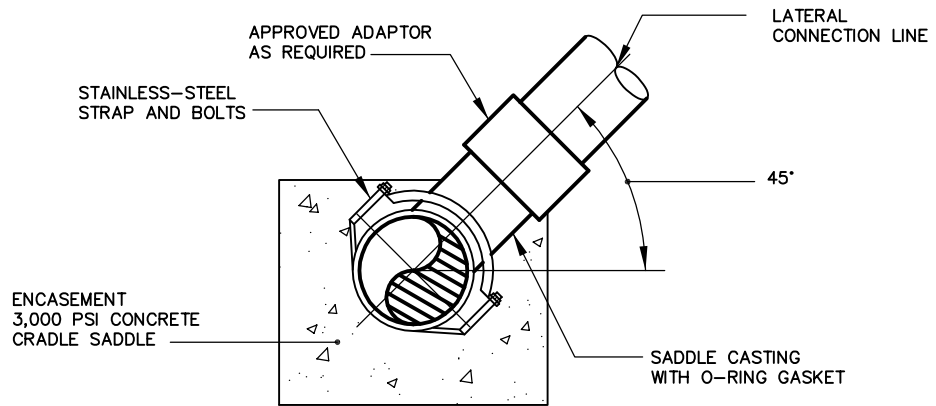
RISER COVER REQUIRED FOR ALL RISERS LOCATED IN SIDEWALK OR PAVEMENT

**CLEANOUT RISER COVER DETAIL**

NOT TO SCALE

		STANDARD DETAIL	
		CLEANOUT RISER COVER (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: HMUA-SAN-007
		Sh. 1 of 1	

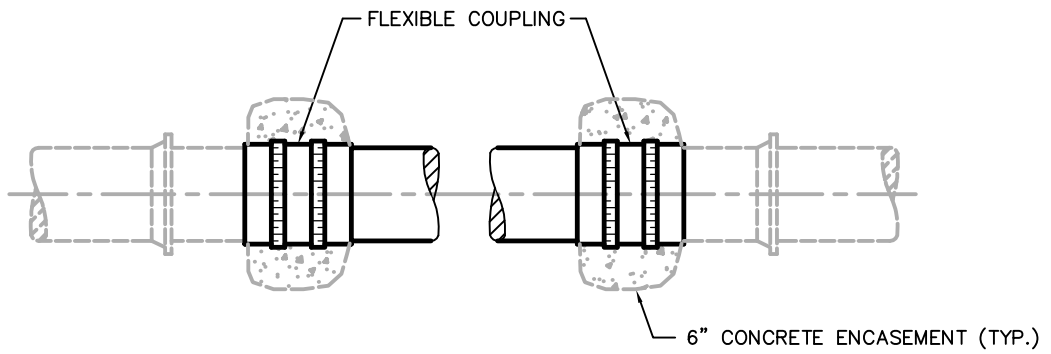




**LATERAL DETAIL CONNECTION  
BY SADDLE TAP TO PIPE**

NOT TO SCALE

		STANDARD DETAIL	
		TYPICAL LATERAL SADDLE TAP CONNECTION (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: HMUA-SAN-008
		Sh. 1 of 1	



**NOTE:**

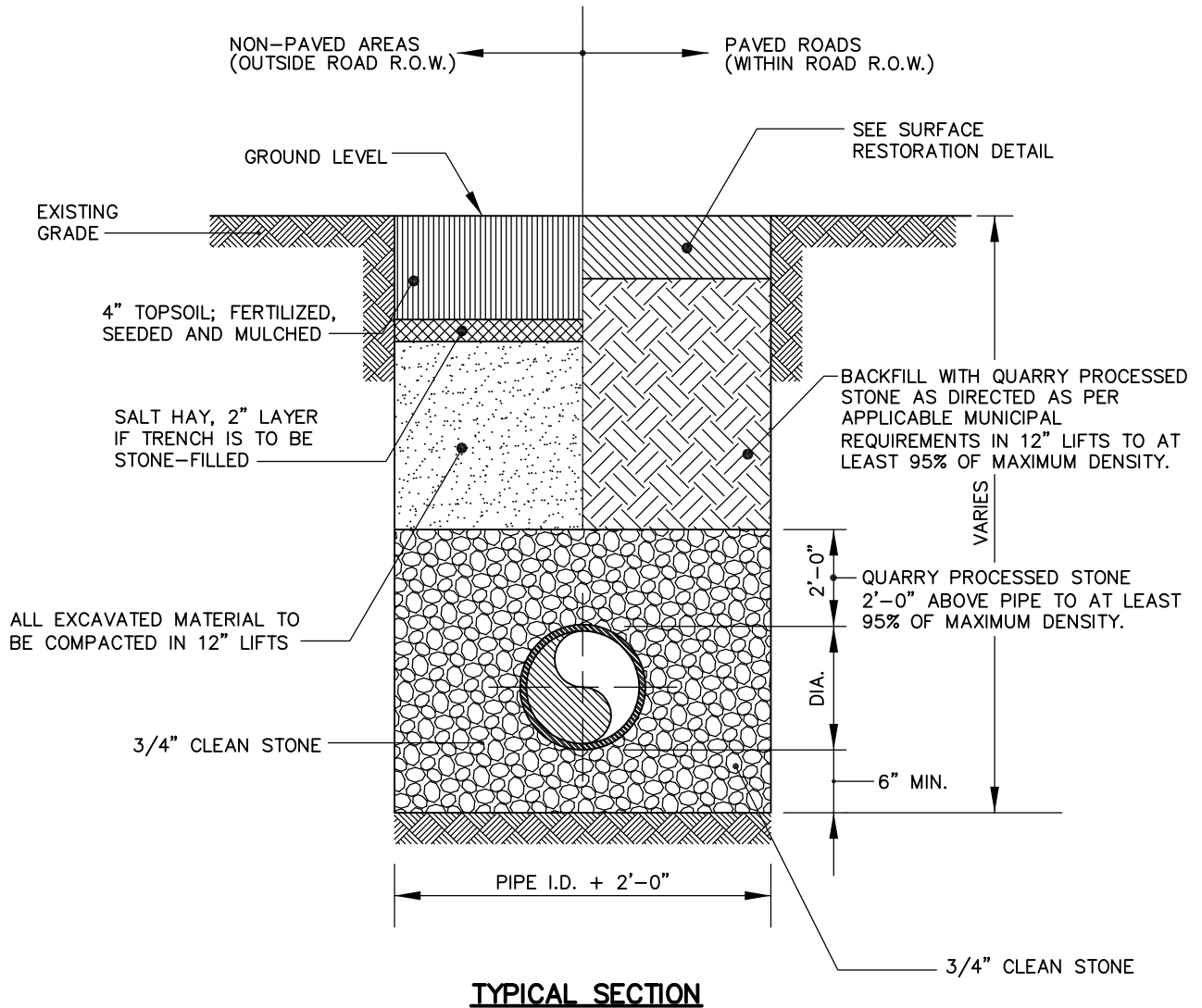
1. FLEXIBLE COUPLING TO BE FERNCO 1000 SERIES OR APPROVED EQUAL.

**DETAIL FOR JOINING PIPES OF DIFFERENT MATERIALS**

NOT TO SCALE

		STANDARD DETAIL	
		JOINING PIPES WITH FLEXIBLE COUPLINGS (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: <b>HMUA-SAN-009</b>
			Sh. 1 of 1





**PVC SANITARY SEWER TRENCH DETAIL**

**NOTES:**

1. RECYCLED CONCRETE IS NOT TO BE USED AS BACKFILL.
2. COMPACTED BACKFILL TO BE FREE OF EXCESSIVE CLAY, ORGANIC MATTER AND BOULDERS.

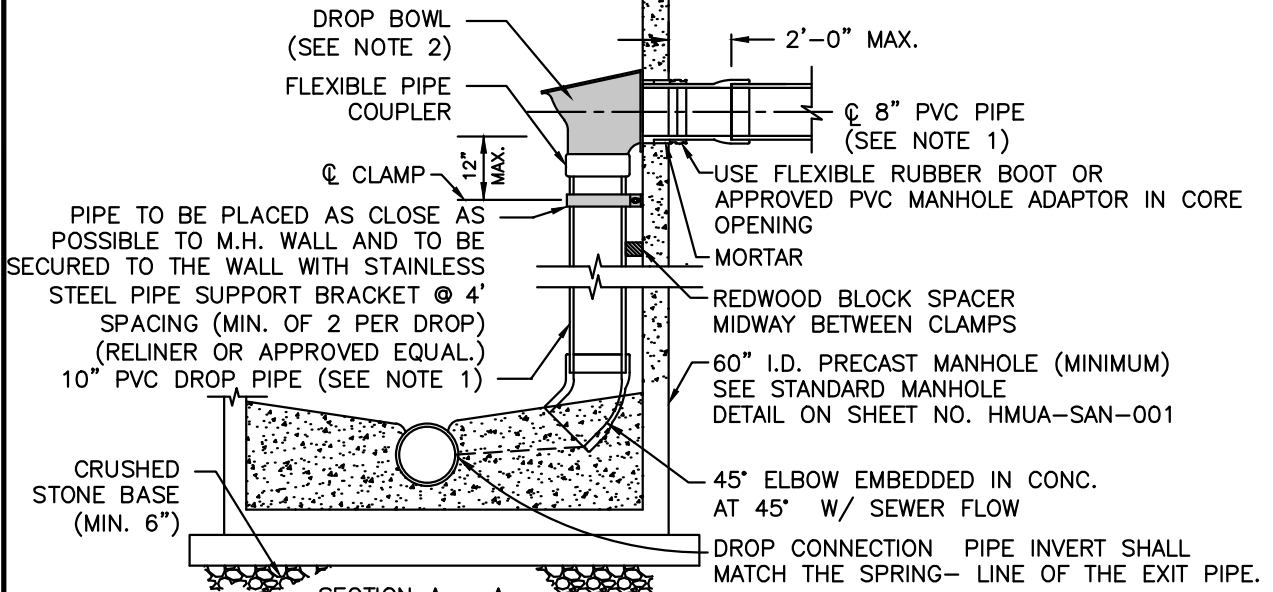
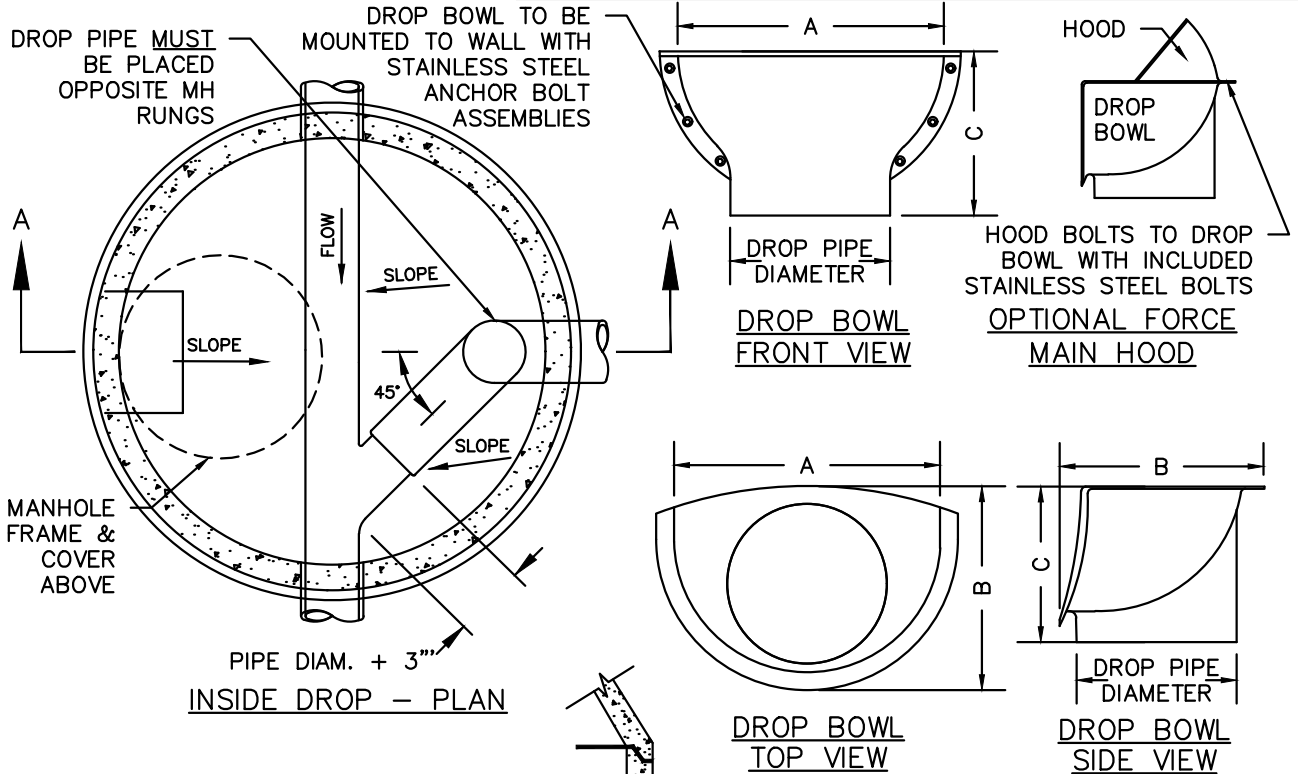
		STANDARD DETAIL	
		PVC SANITARY SEWER TRENCH DETAIL (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: <b>HMUA-SAN-011</b>
		Sh. 1 of 1	

**NOTES:**

- FOR 8" PVC PIPE PROVIDE 10" PVC INTERNAL DROP PIPING FOR 10" PVC PIPE PROVIDE 12" PVC INTERNAL DROP PIPING.
- DROP BOWL TO BE RELINER/DURAN, INC. OR APPROVED EQUAL. DROP BOWLS SHALL BE FABRICATED IN MARINE GRADE FIBERGLASS AND FINISHED IN BRIGHT WHITE GEL COAT.
- PROVIDE OPTIONAL FORCE MAIN HOOD FOR ALL FORCE MAIN INTERNAL DROP CONNECTIONS.

**DROP BOWL DIMENSIONS (RELINER OR APPROVED EQUAL)**

SERIES	DROP PIPE DIAMETER			ANCHOR BOLT QUANTITY & TYPE
	WIDTH "A"	DEPTH "B"	HEIGHT "C"	
A4	4"	12"	9.5"	4 - 1" TAMP-IN
A6	6"	12"	11.1"	4 - 1" TAMP-IN
B8	8"	18"	13.0"	4 - 1" TAMP-IN
B10	10"	18"	13.5"	4 - 1" TAMP-IN
24/12	12"	24"	16.5"	6 - 1" TAMP-IN
24/15	15"	24"	19.3"	6 - 1" TAMP-IN
30/18	18"	30"	23.5"	6 - 1" TAMP-IN
36/21	21"	36"	31.6"	8 - 3" WEDGE
48/24	24"	48"	30.5"	10 - 3" WEDGE



**SECTION A - A**  
**INSIDE DROP CONNECTION**  
 (NOT TO SCALE)

Date:		Revision:	
424 Hurley Drive Hackettstown, NJ 07840		Date: 03/16/2022	Dwg. No.: HMUA-SAN-012

STANDARD DETAIL  
 INSIDE DROP CONNECTION  
 (HACKETTSTOWN MUA)