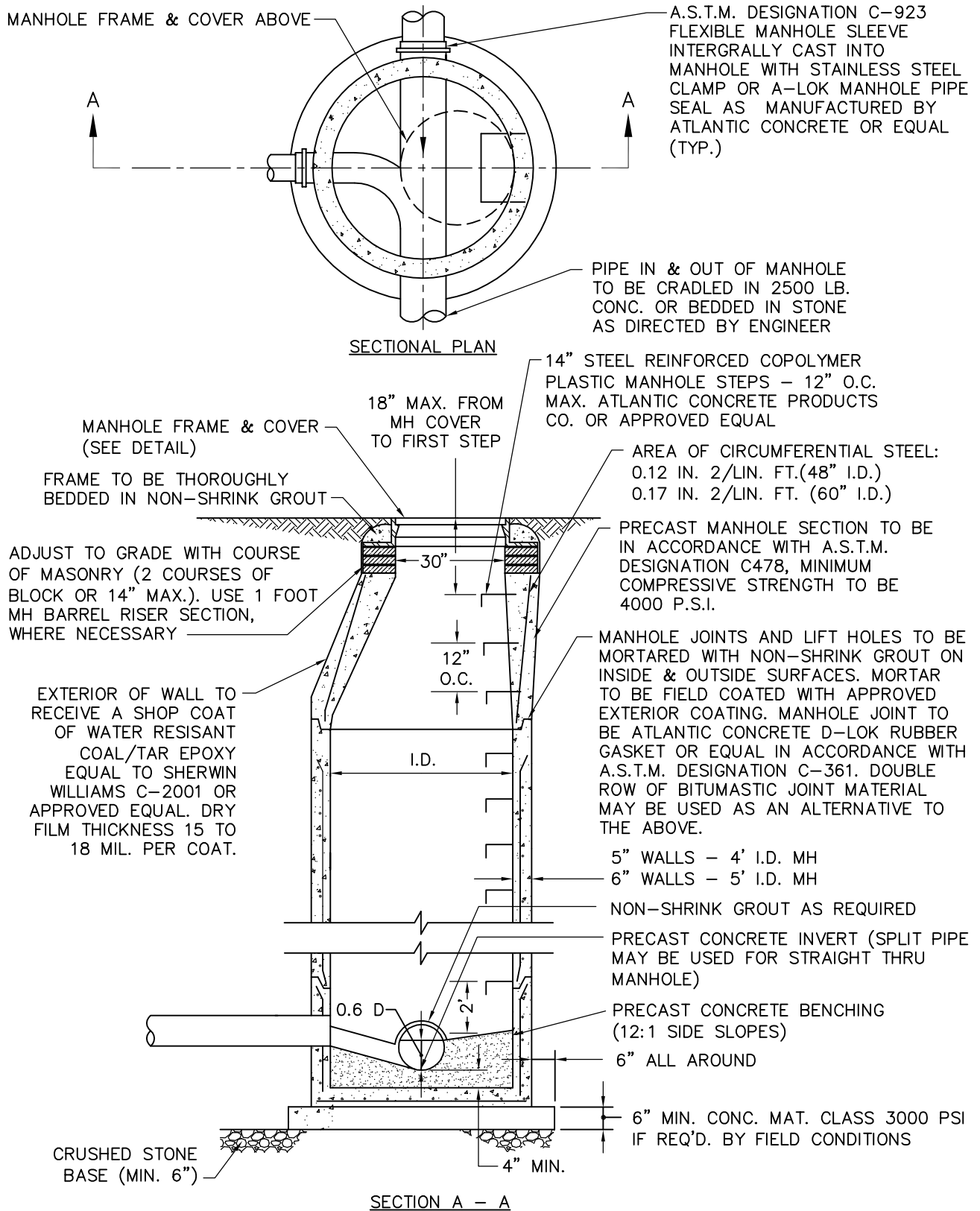




SANITARY SEWER

STANDARD CONSTRUCTION DETAILS

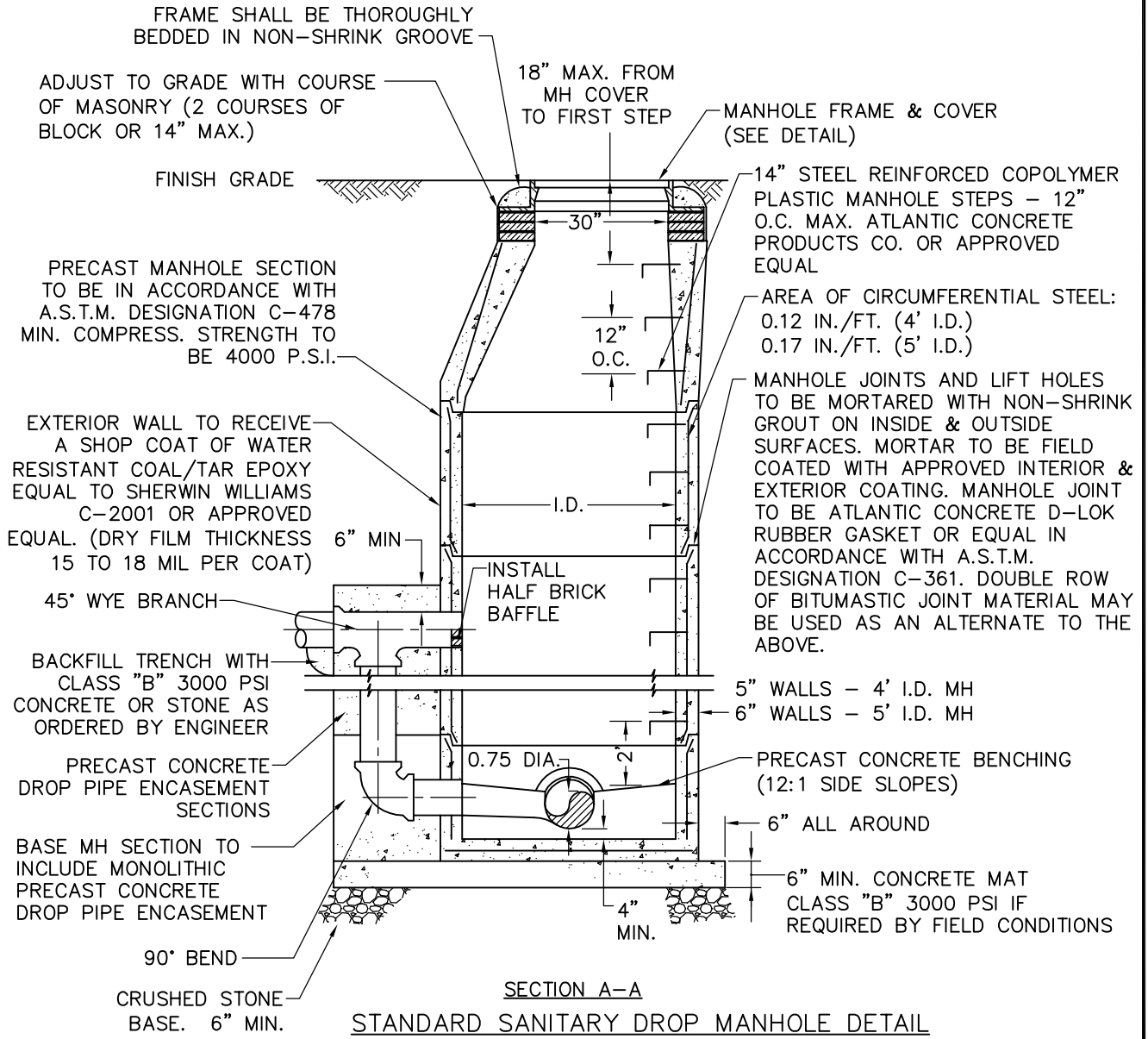
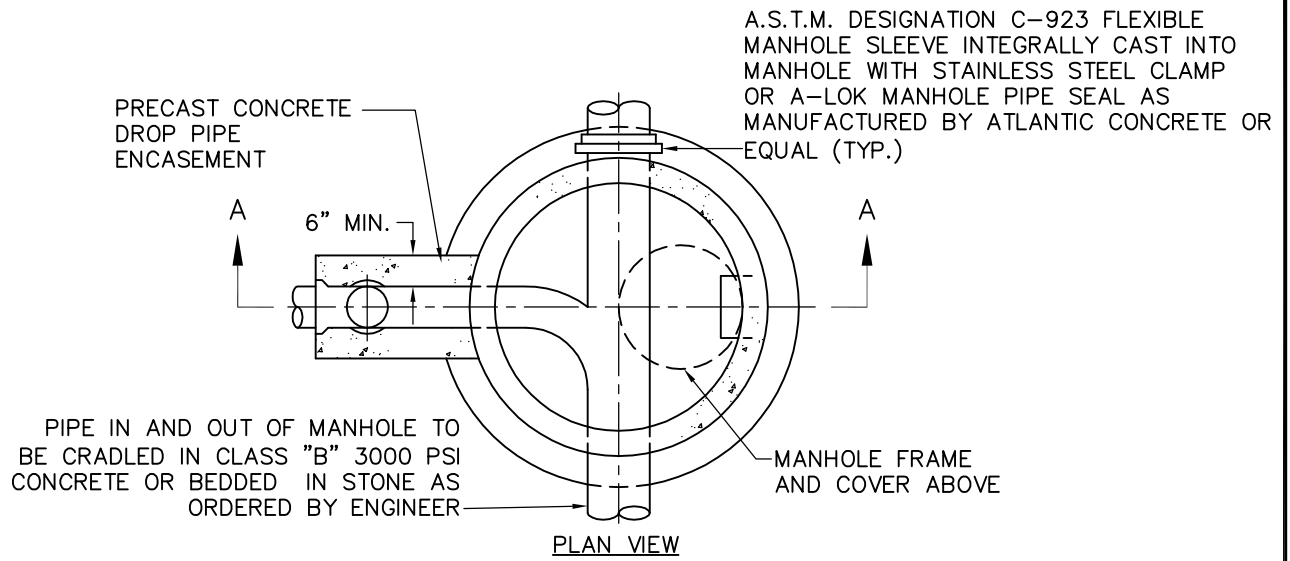
<u>Detail #</u>	<u>Description</u>	<u>Drawing No.</u>
001	Standard Sanitary Manhole	HMUA-SAN-001
002	Standard Sanitary Drop Manhole	HMUA-SAN-002
003	Force Main Connection Manhole	HMUA-SAN-003
004	Existing Manhole Wall Pipe Penetration	HMUA-SAN-004
005	Standard Manhole Frame & Cover	HMUA-SAN-005
006	Typical 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)

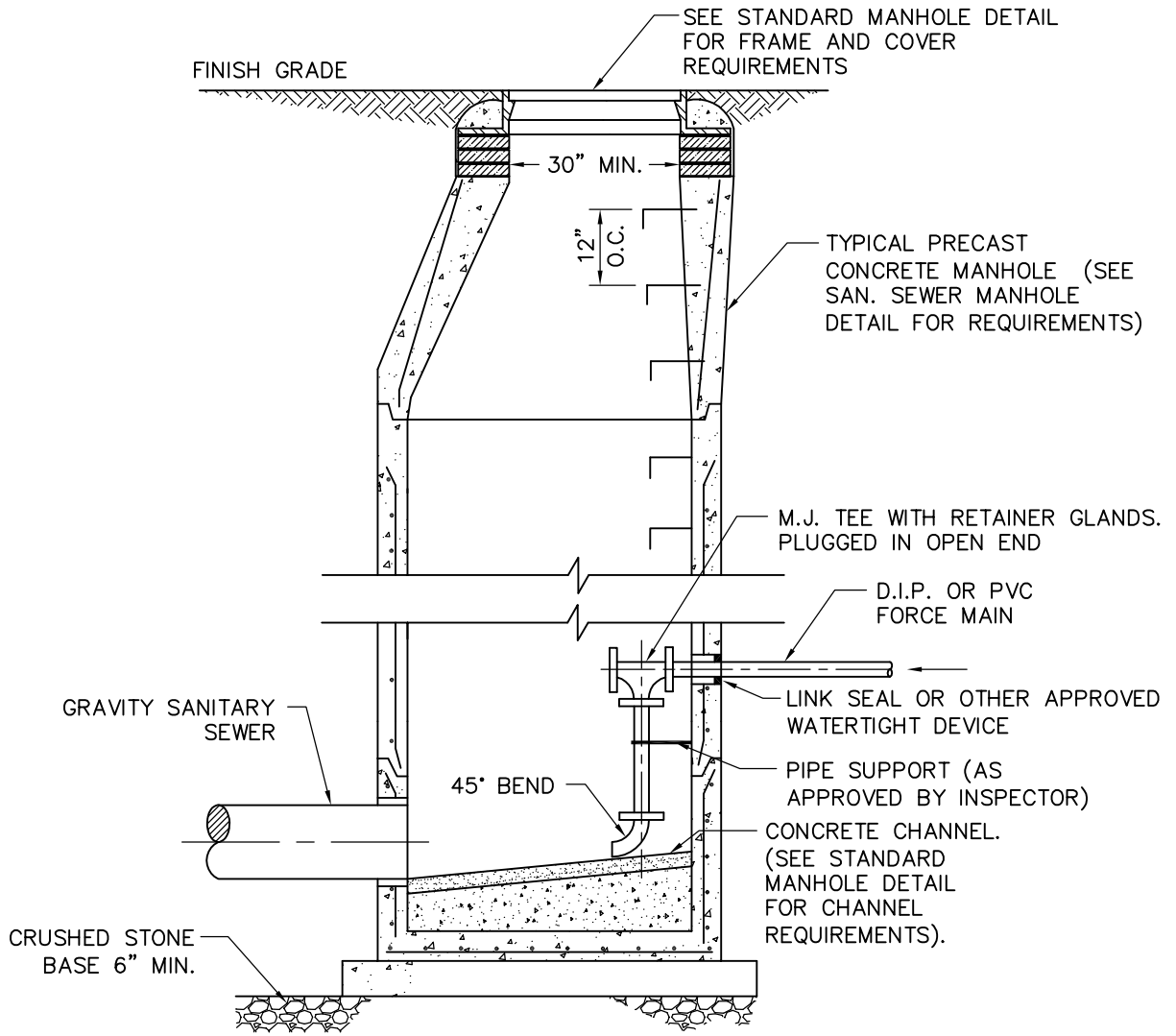
NOTE:
48" I.D. MANHOLE TO BE USED FOR PIPE SIZES THRU 24"Ø. 60"Ø I.D. BASE W/ TAPER SECTION TO BE USED FOR PIPE SIZES OVER 24"Ø

		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.: HMUA-SAN-001
		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

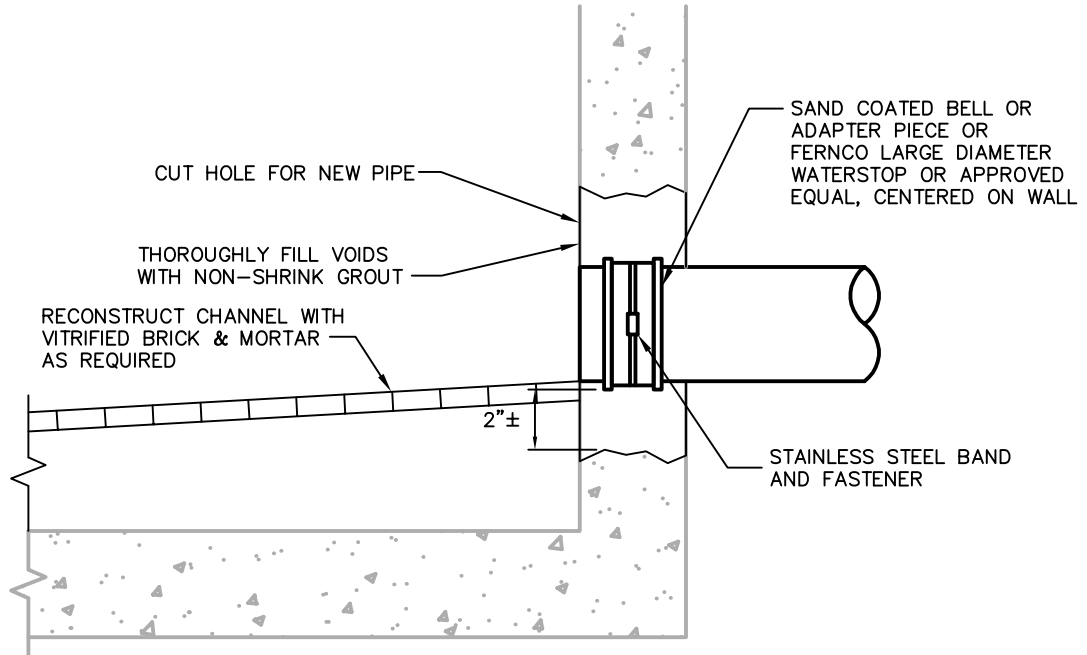
6/11/07		GENERAL REVISIONS		STANDARD DETAIL	
Date:	Revision:			STANDARD SANITARY DROP MANHOLE (HACKETTSTOWN MUA)	
424 Hurley Drive Hackettstown, NJ 07840		Date:	Dwg. No.:	HMUA-SAN-002	
		07/29/03		Sh. 1 of 1	



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.: HMUA-SAN-003
		Sh. 1 of 1	



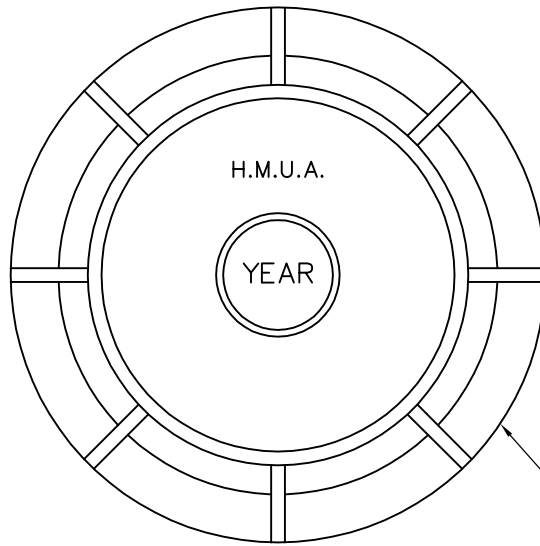
NOTES:

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

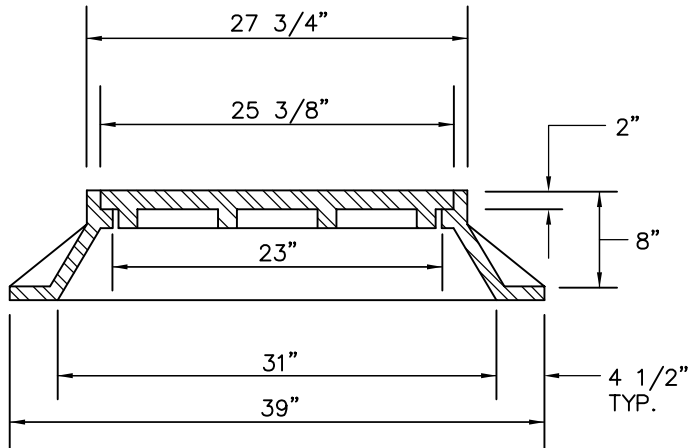
EXISTING MANHOLE WALL PIPE PENETRATION DETAIL

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.: HMUA-SAN-004 Sh. 1 of 1



PLAN



SECTION

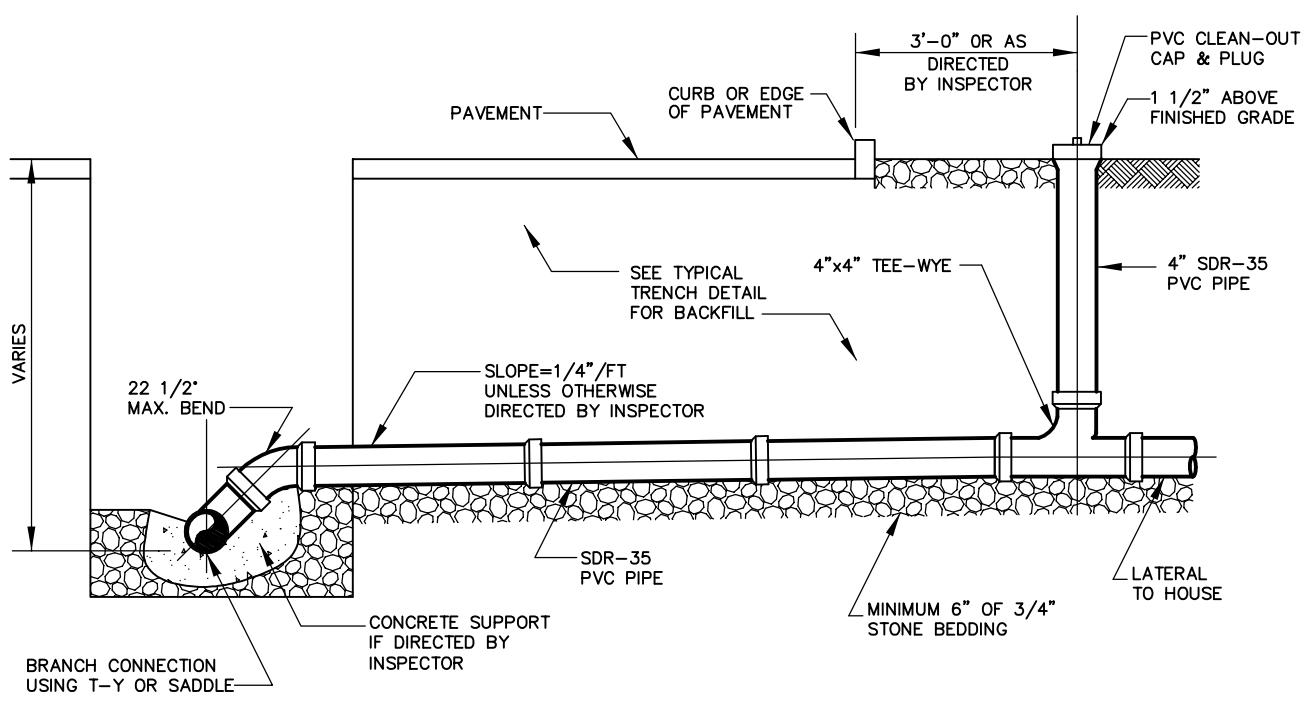
NOTES:

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.

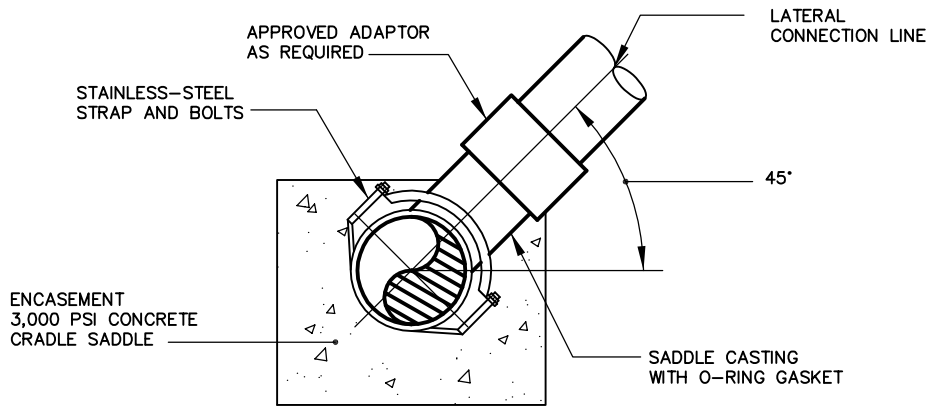
		STANDARD DETAIL	
		STANDARD MANHOLE FRAME & COVER (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/24/03	Dwg. No.: HMUA-SAN-005 Sh. 1 of 1



TYPICAL HOUSE CONNECTION DETAIL

NOT TO SCALE

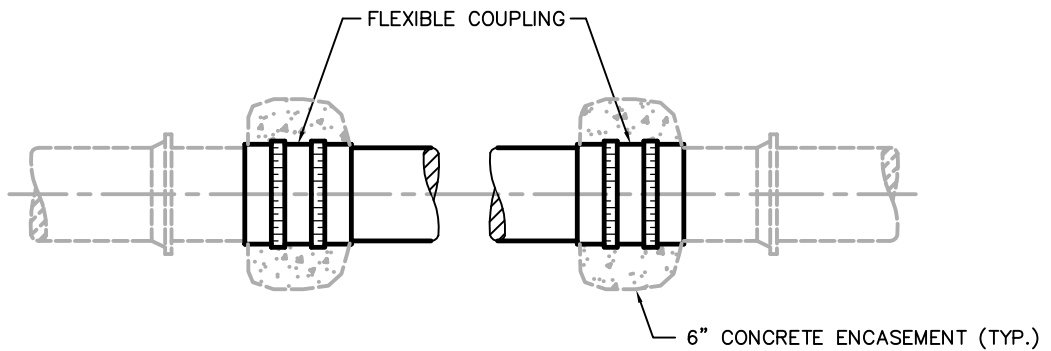
		STANDARD DETAIL TYPICAL HOUSE CONNECTION (HACKETTSTOWN MUA)	
Date:	Revision:	Date:	Dwg. No.:
		06/11/07	HMUA-SAN-006
424 Hurley Drive Hackettstown, NJ 07840		Sh. 1 of 1	



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



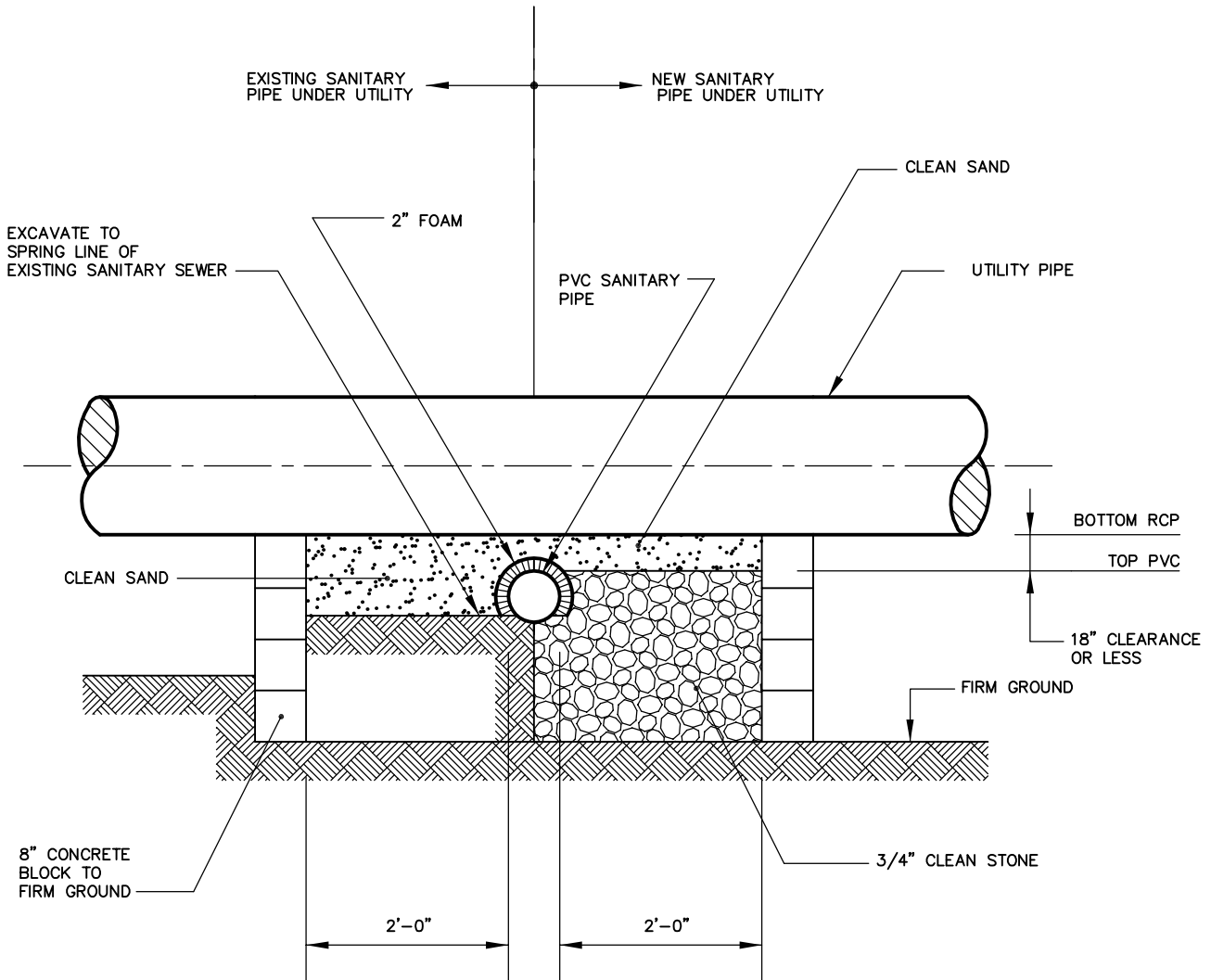
NOTE:

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

DETAIL FOR JOINING PIPES OF DIFFERENT MATERIALS

NOT TO SCALE

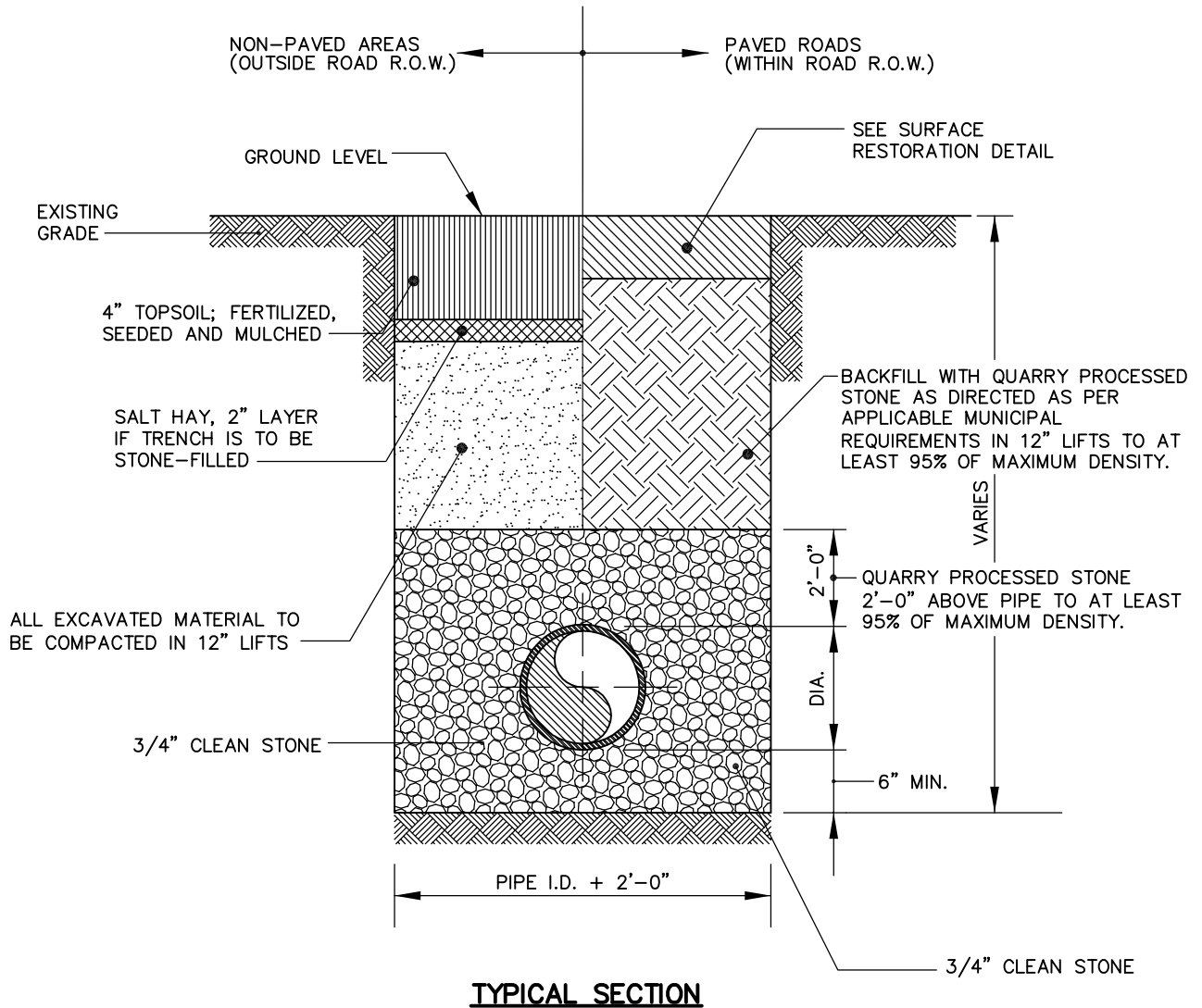
		STANDARD DETAIL	
		JOINING PIPES WITH FLEXIBLE COUPLINGS (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: HMUA-SAN-009
		Sh. 1 of 1	



SANITARY SEWER – UTILITY CROSSING DETAIL

NOT TO SCALE

		STANDARD DETAIL	
		SANITARY SEWER - UTILITY CROSSING (HACKETTSTOWN MUA)	
6/11/07	GENERAL REVISIONS		
Date:	Revision:		
424 Hurley Drive Hackettstown, NJ 07840		Date: 07/23/03	Dwg. No.: HMUA-SAN-010
			Sh. 1 of 1



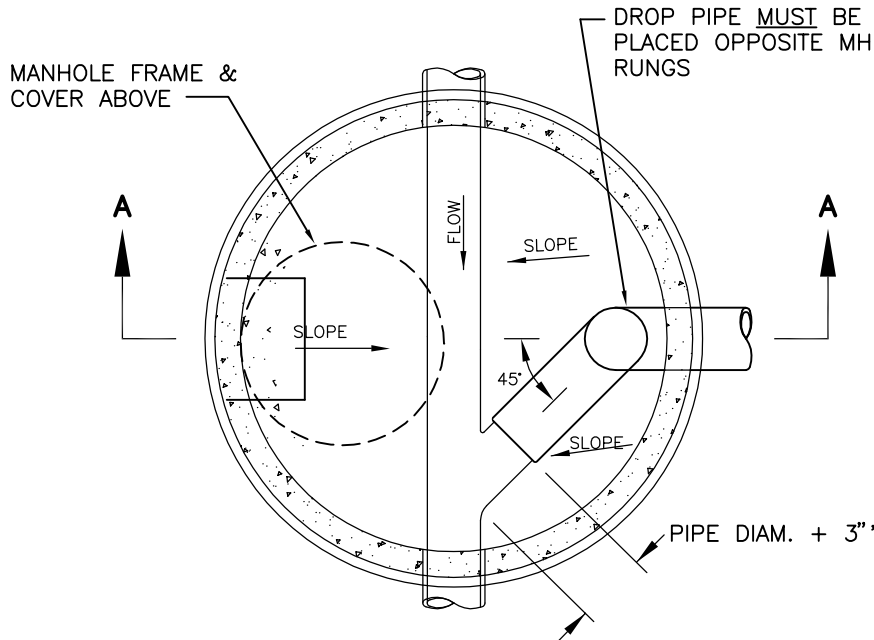
TYPICAL SECTION
PVC SANITARY SEWER TRENCH DETAIL

NOT TO SCALE

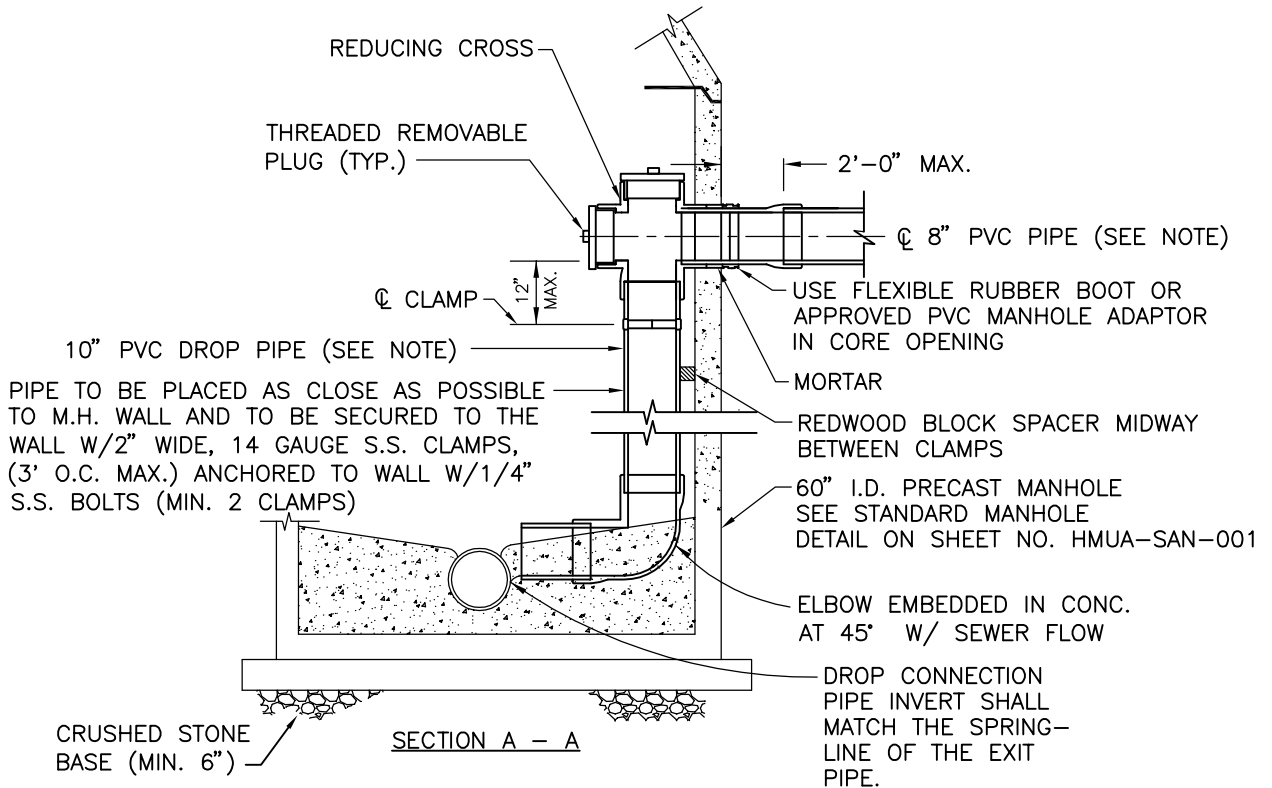
NOTES:

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.: HMUA-SAN-011
		Sh. 1 of 1	



INSIDE DROP - PLAN



INSIDE DROP CONNECTION
(NOT TO SCALE)

NOTE:
FOR 8" PVC PIPE PROVIDE
10" PVC INTERNAL DROP PIPING
FOR 10" PVC PIPE PROVIDE
12" PVC INTERNAL DROP PIPING

		STANDARD DETAIL	
		INSIDE DROP CONNECTION (HACKETTSTOWN MUA)	
Date:	Revision:	Date:	Dwg. No. HMUA-SAN-012
424 Hurley Drive Hackettstown, NJ 07840		02/25/08	Sh. 1 of 1