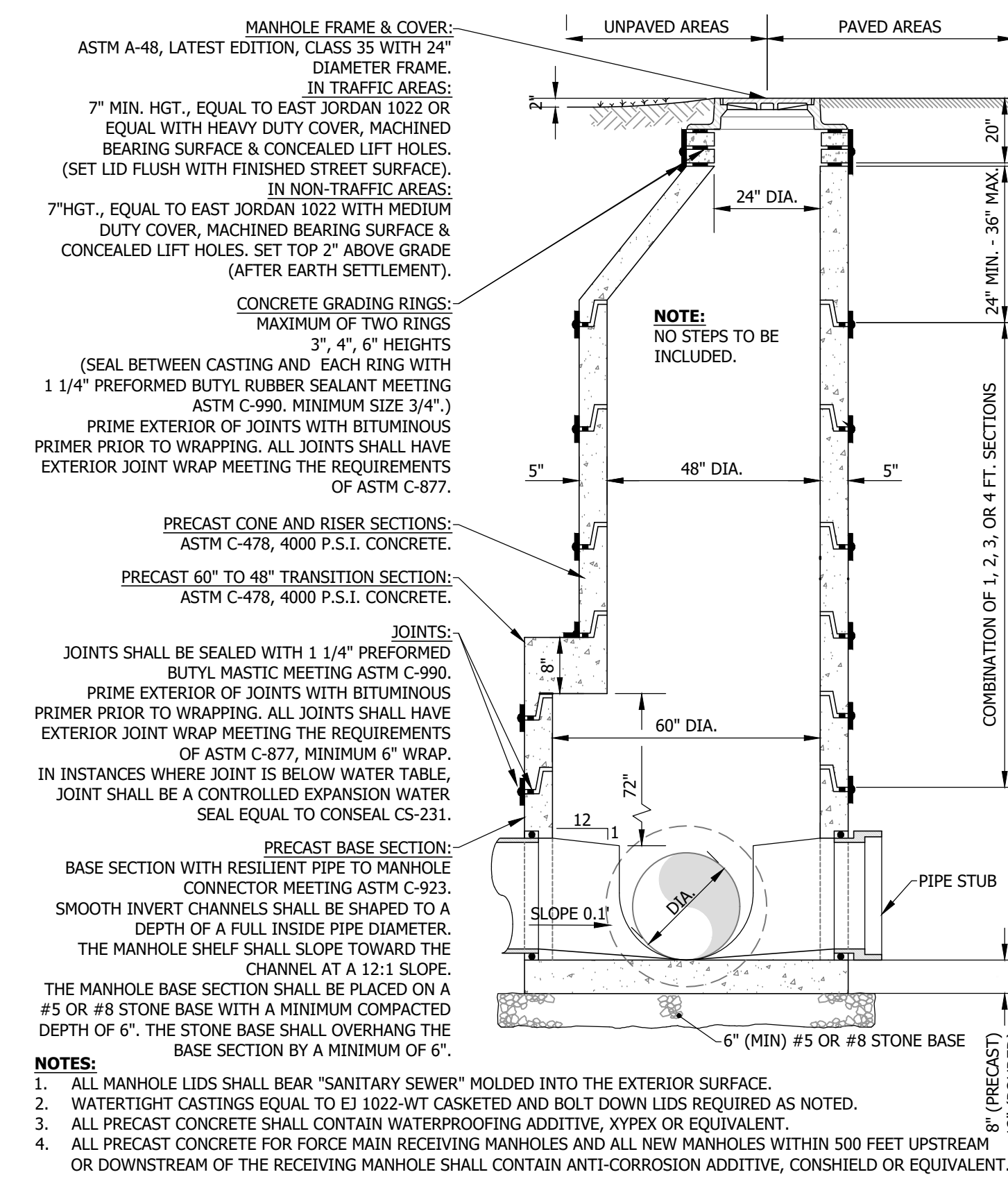


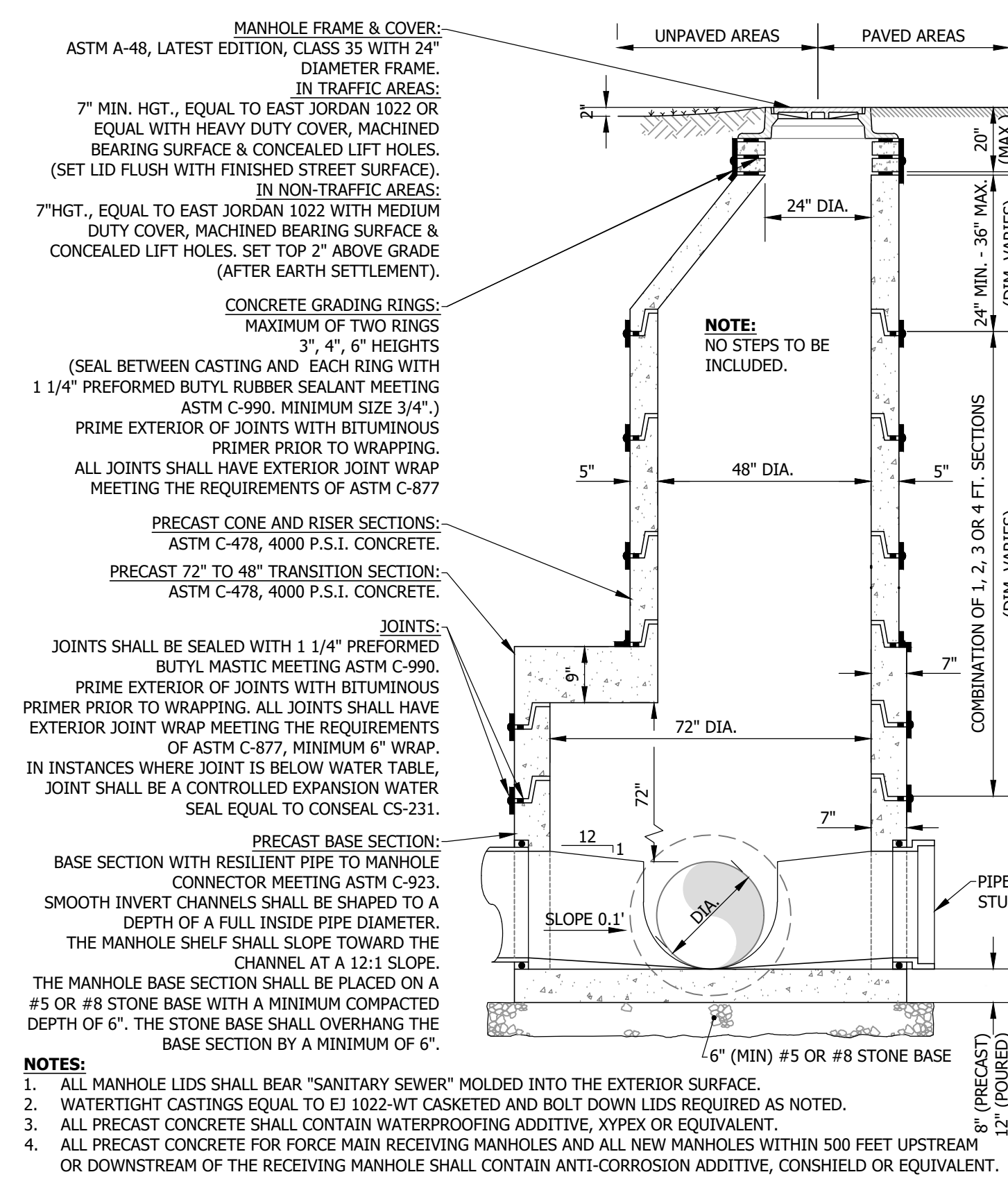
**WW-01 - STANDARD PRECAST 48" MANHOLE**

SCALE: N.T.S.



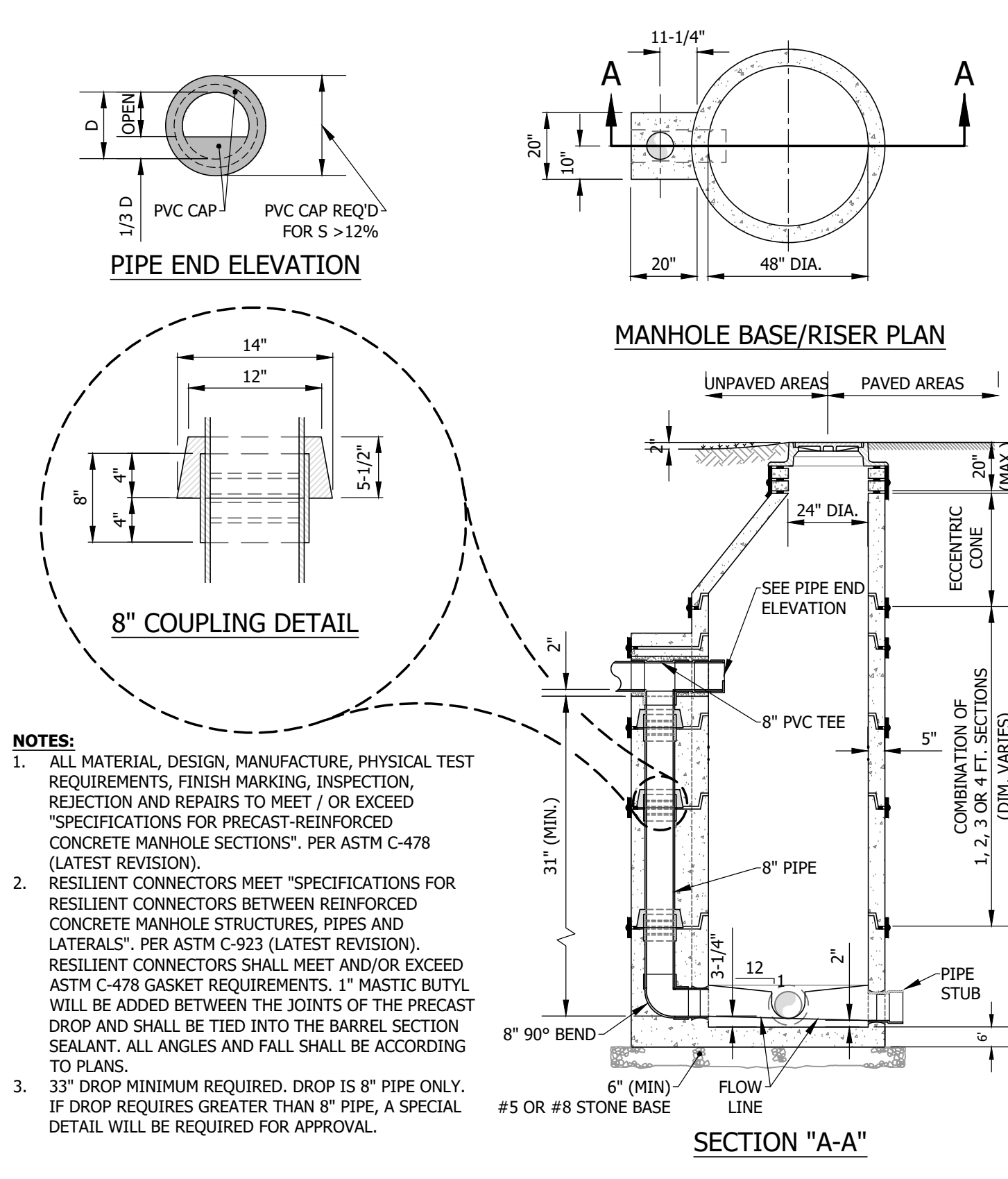
**WW-02 - STANDARD PRECAST CONCRETE 60" MANHOLE**

SCALE: N.T.S.



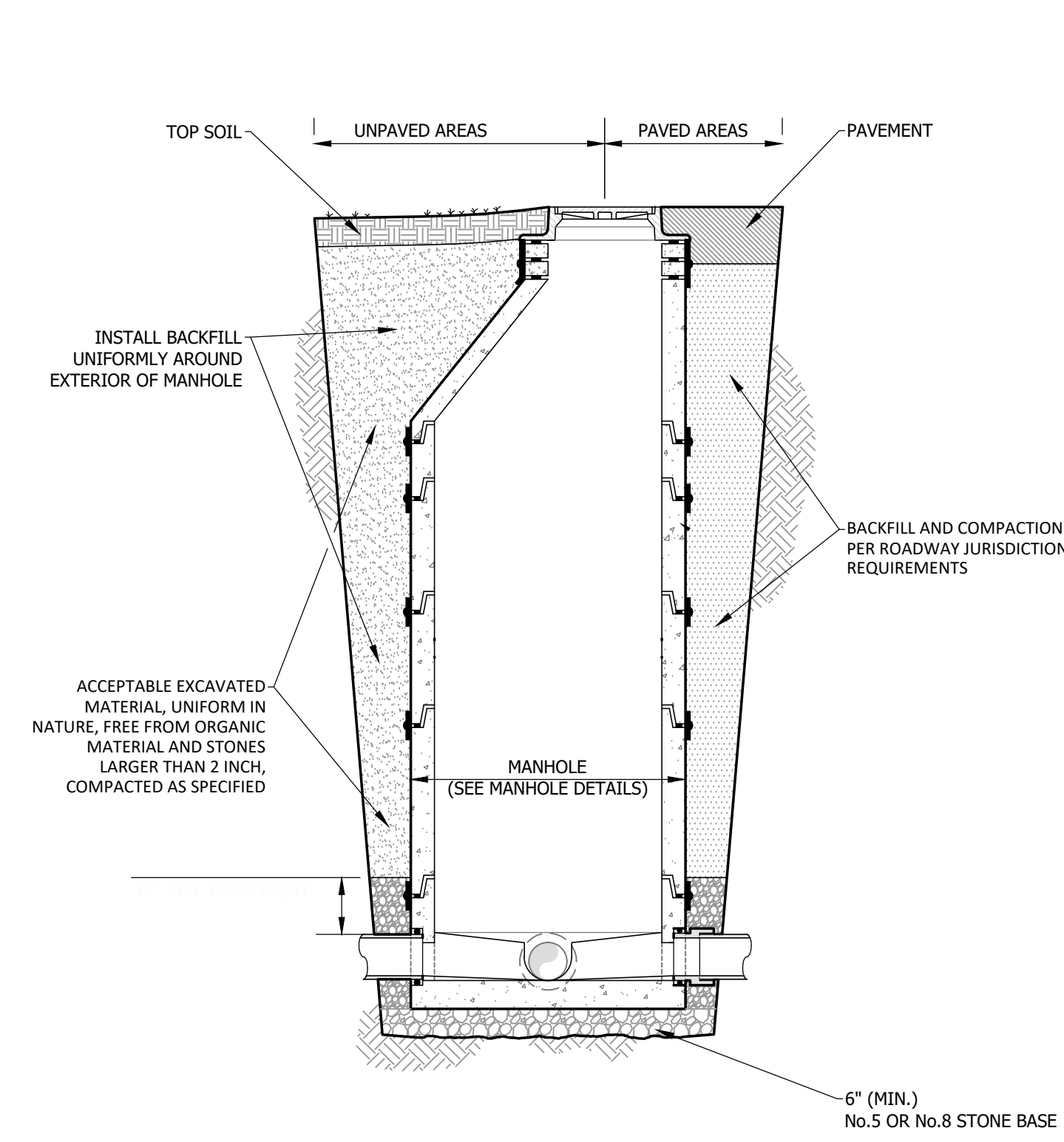
**WW-03 - STANDARD PRECAST CONCRETE 72" MANHOLE**

SCALE: N.T.S.



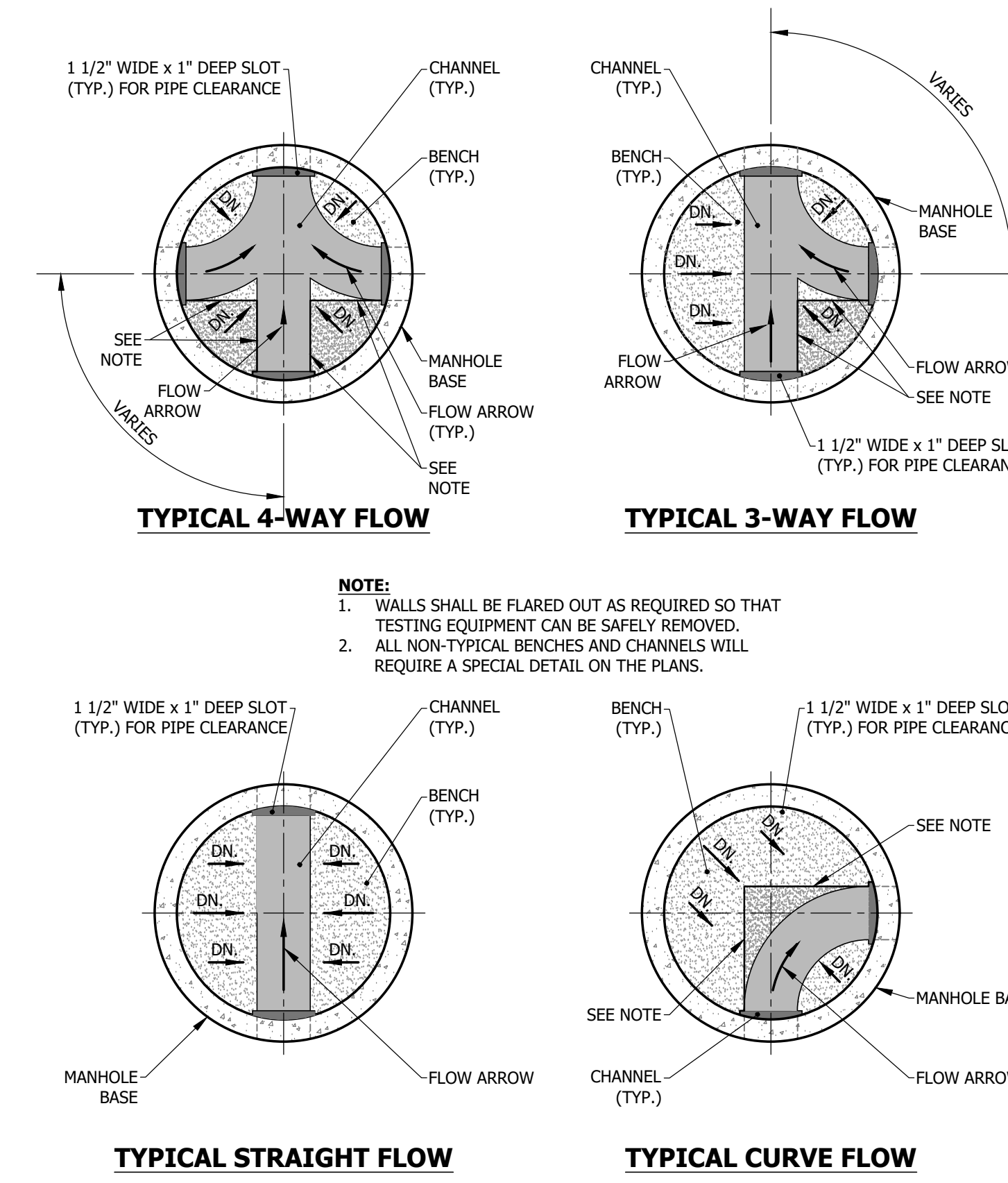
**WW-04 - PRECAST EXTERNAL DROP MANHOLE (REQUIRED ON ALL DROPS GREATER THAN 24")**

SCALE: N.T.S.



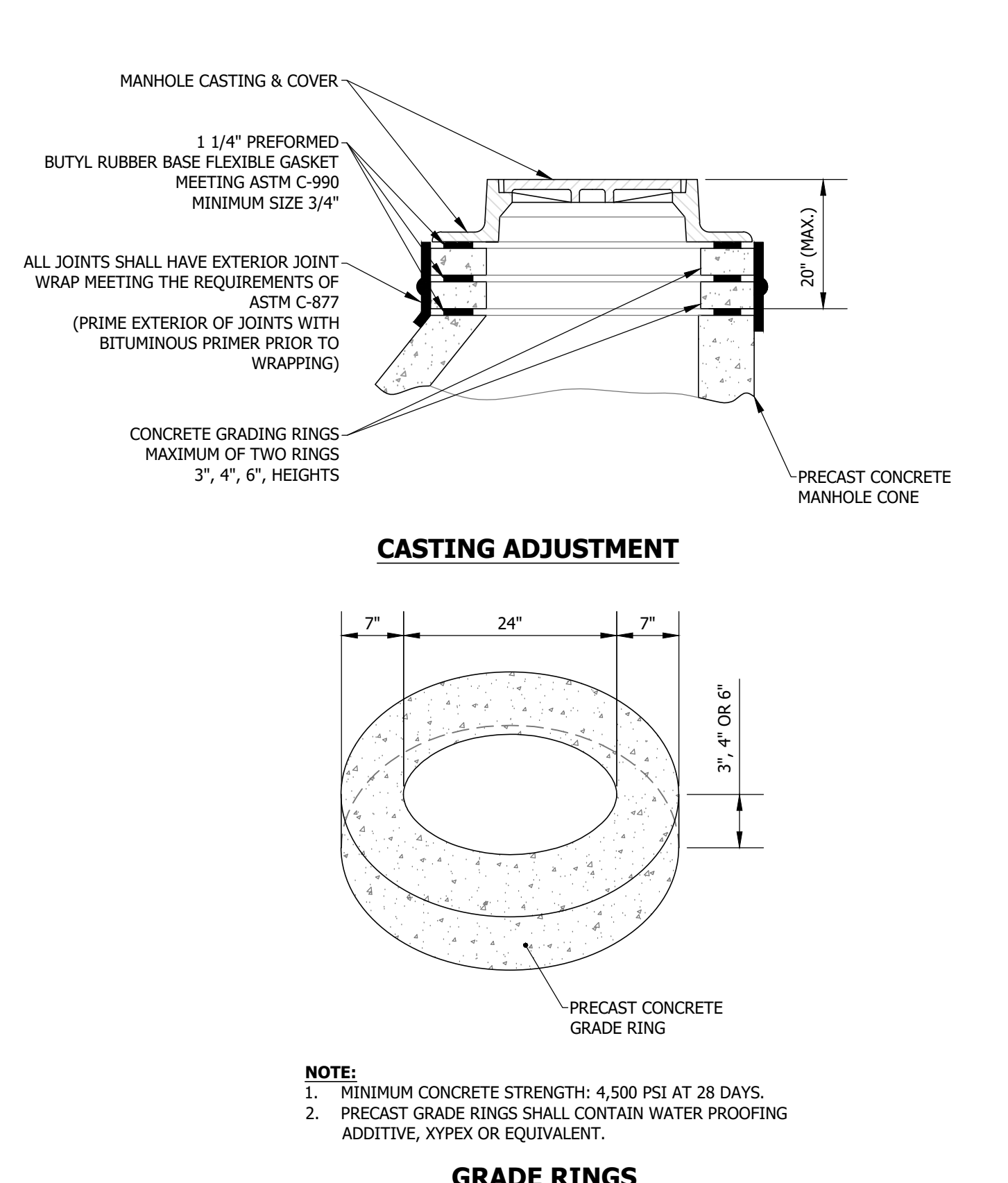
**WW-05 - STANDARD MANHOLE BACKFILL**

SCALE: N.T.S.



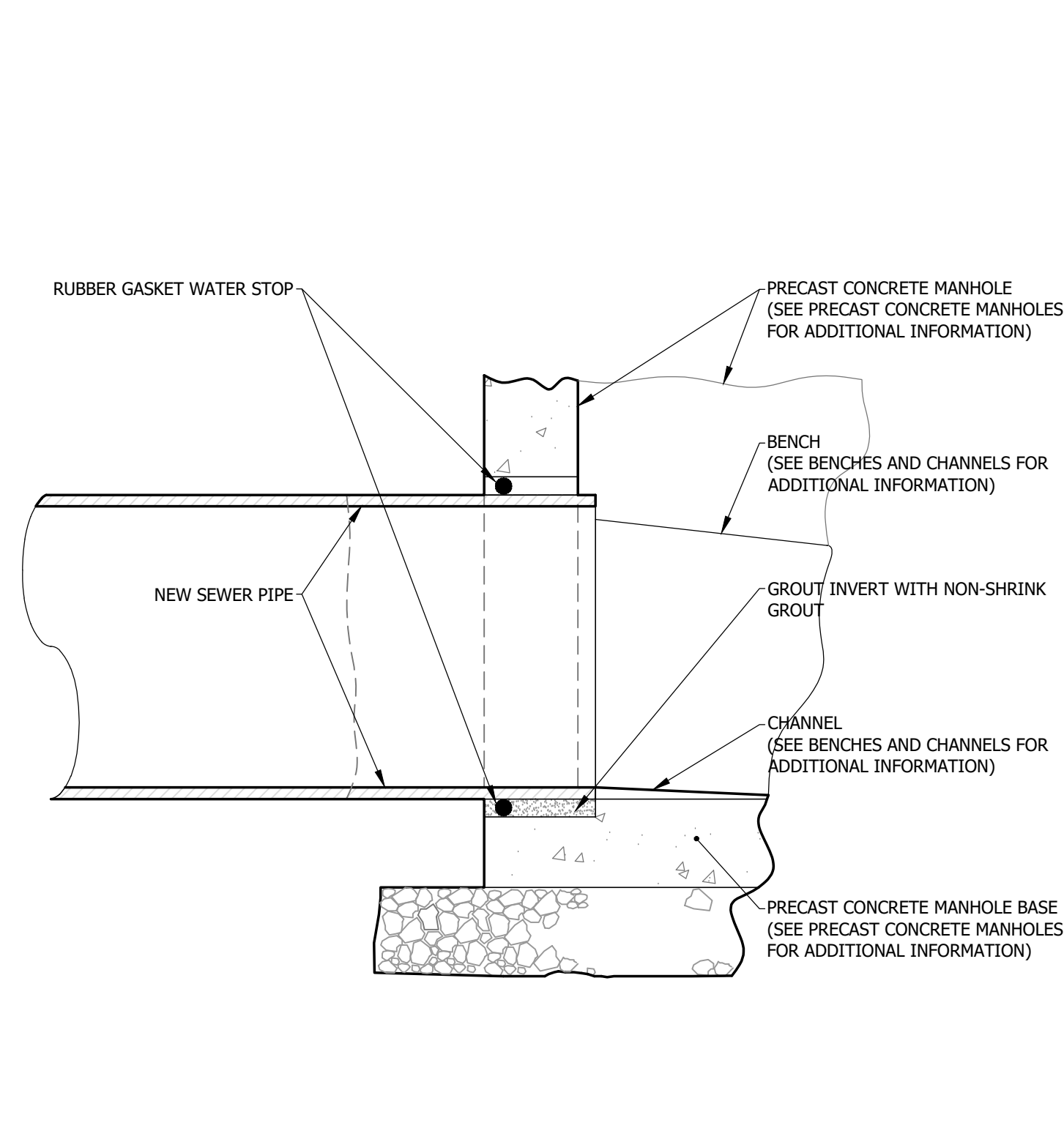
**WW-06 - STANDARD MANHOLE BENCHES AND CHANNELS**

SCALE: N.T.S.



**WW-07 - STANDARD CASTING ADJUSTMENT AND GRADE RINGS**

SCALE: N.T.S.



**WW-08 - STUB-OUT AT MANHOLE**

SCALE: N.T.S.

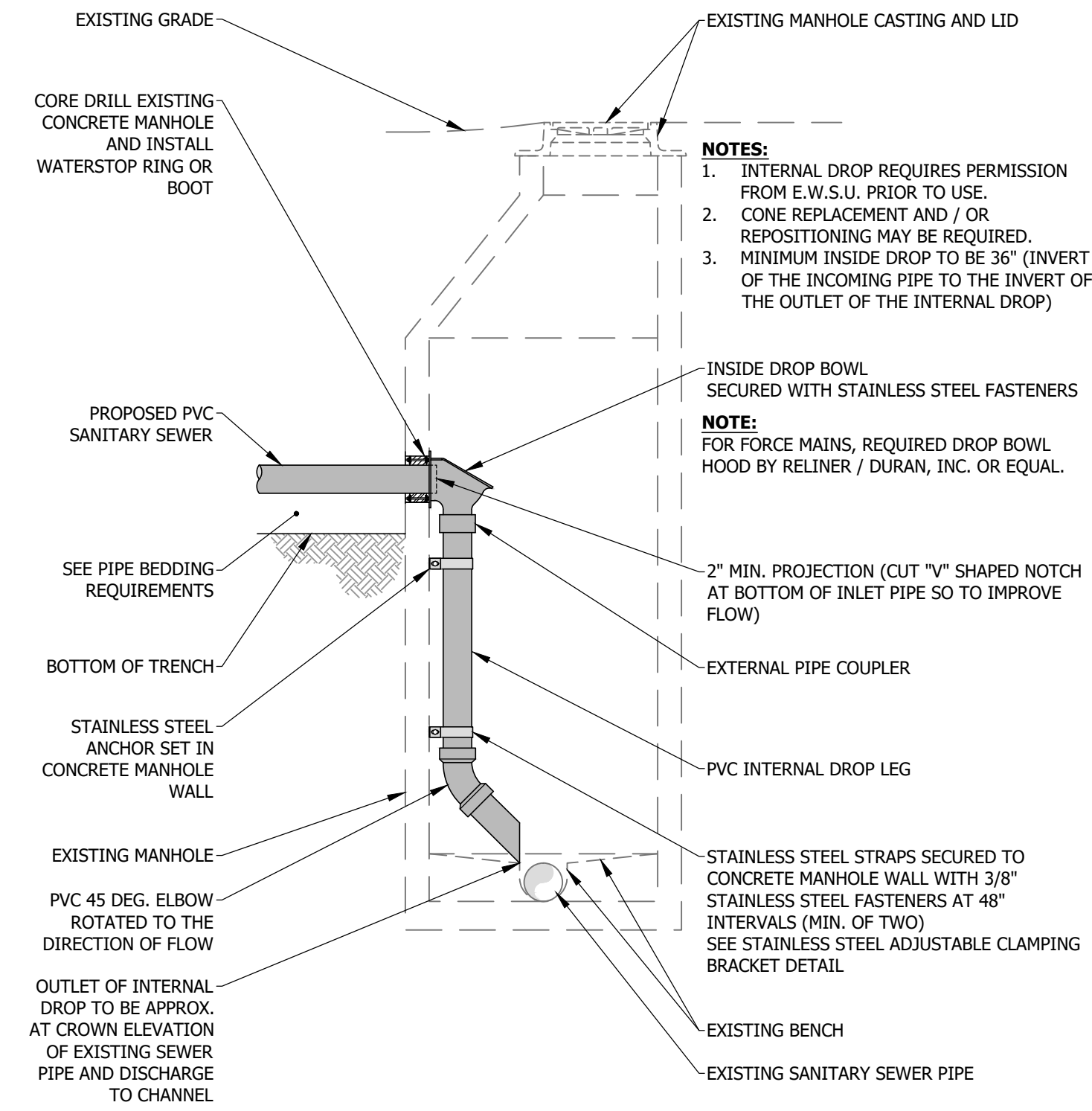
APPROVED:	02/28/17	ADAPTED:	02/28/17
APPROVED BY:	M.D.L.	SCALE:	N.T.S.
FIGURES:	WW-01 THROUGH WW-08	TITLE:	DATE:
<b>EVANSVILLE WATER AND SEWER UTILITY</b>			
1831 Aliens Lane - Evansville, IN 47720 (812) 421-2126			
<b>STANDARD SANITARY SEWER DETAILS</b>			



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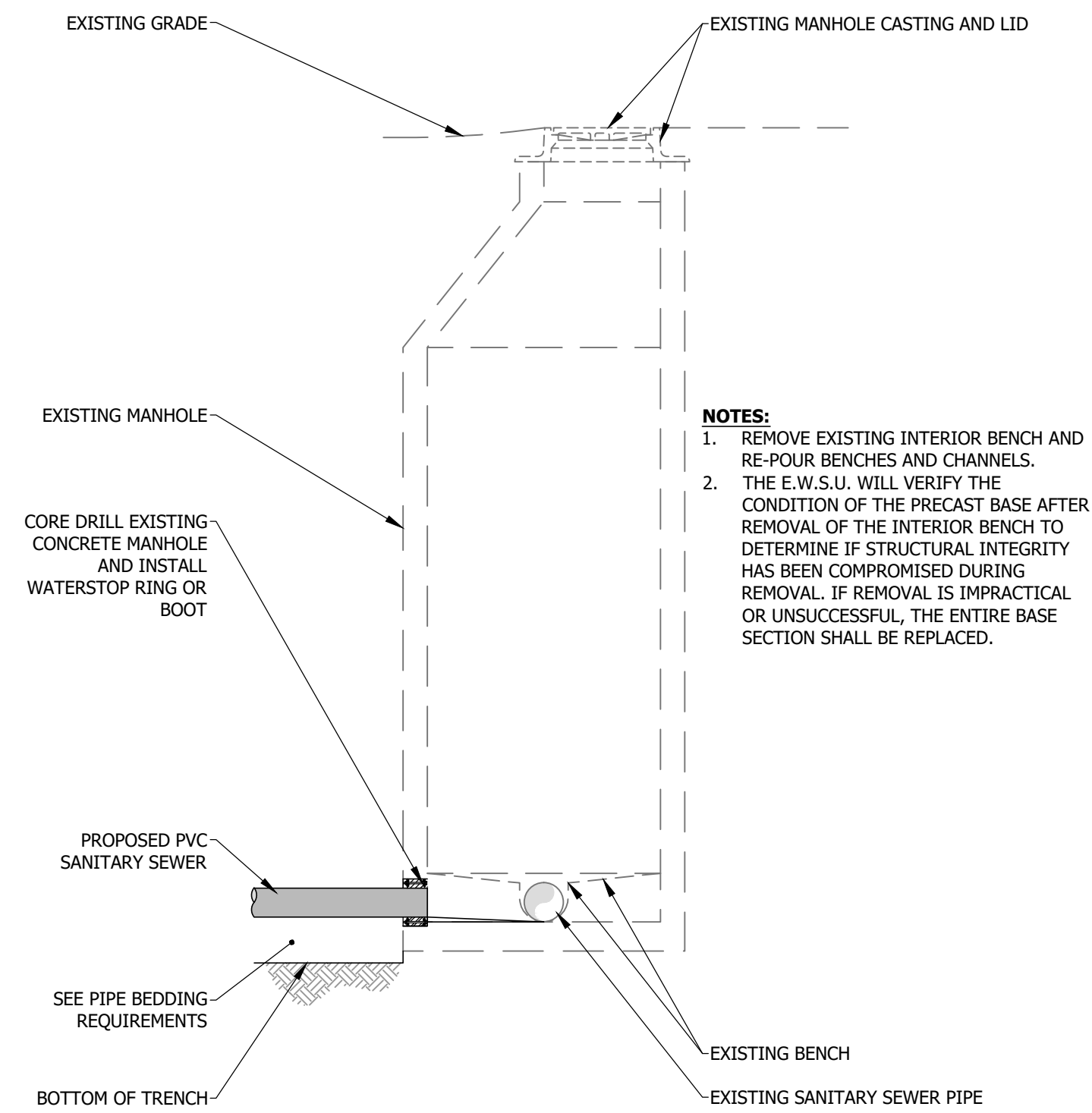
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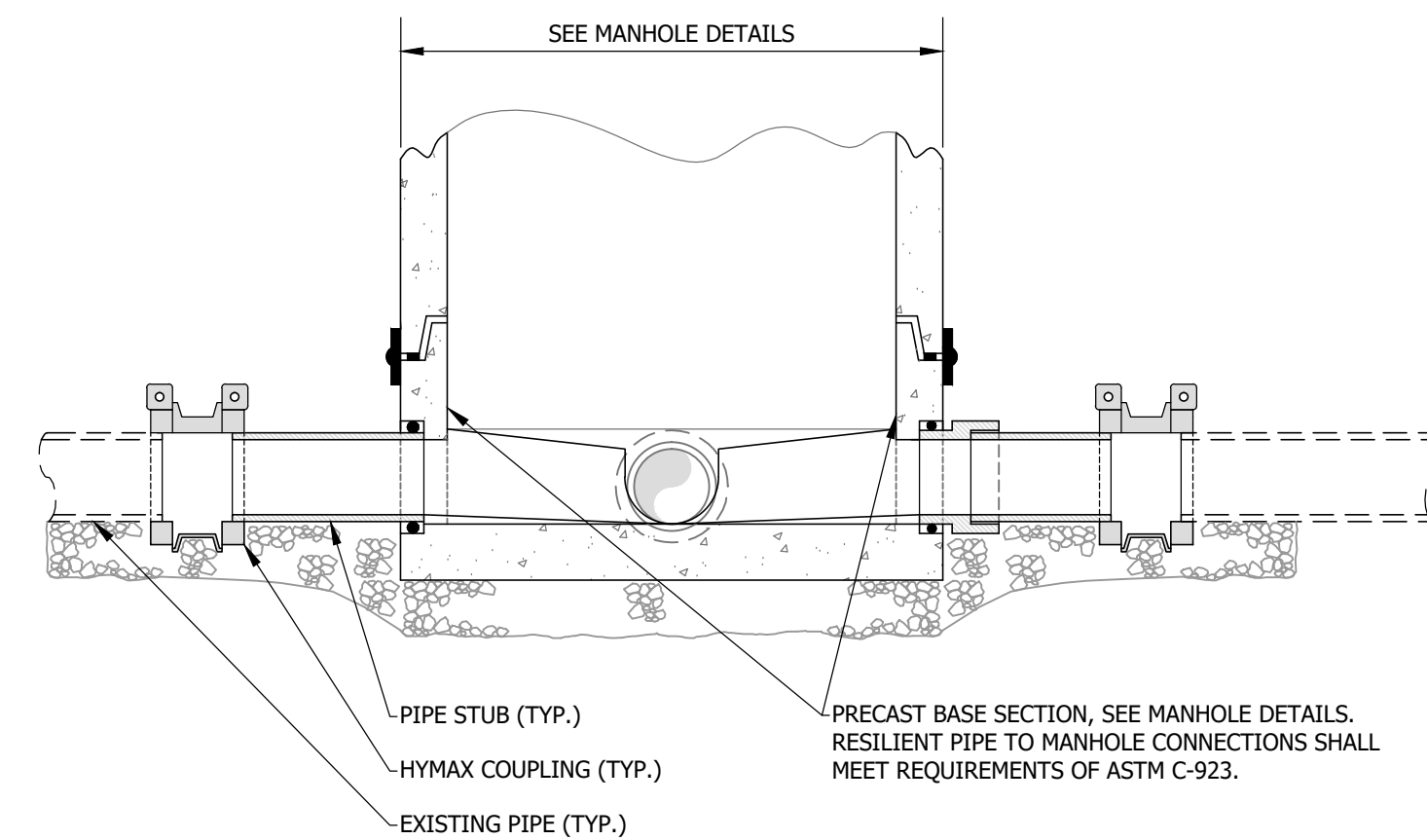
**WW-09 - INTERNAL DROP CONNECTION TO EXISTING MANHOLE**

SCALE: N.T.S.



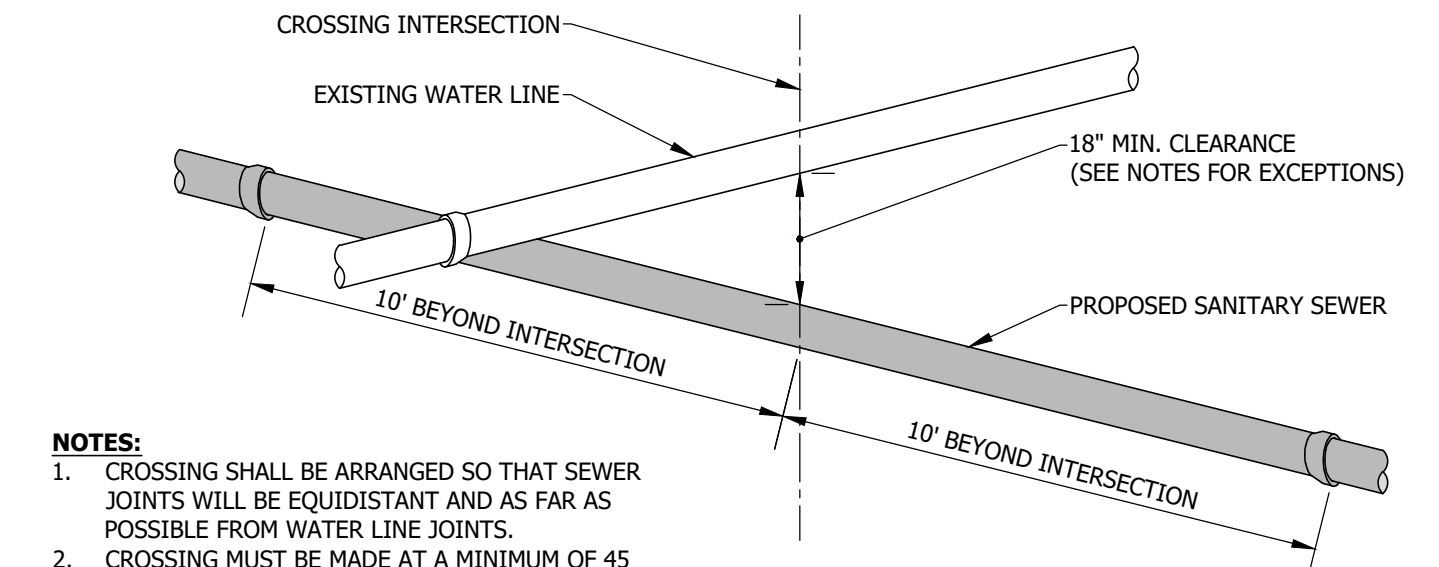
**WW-10 - NEW PIPE CONNECTION TO EXISTING MANHOLE**

SCALE: N.T.S.



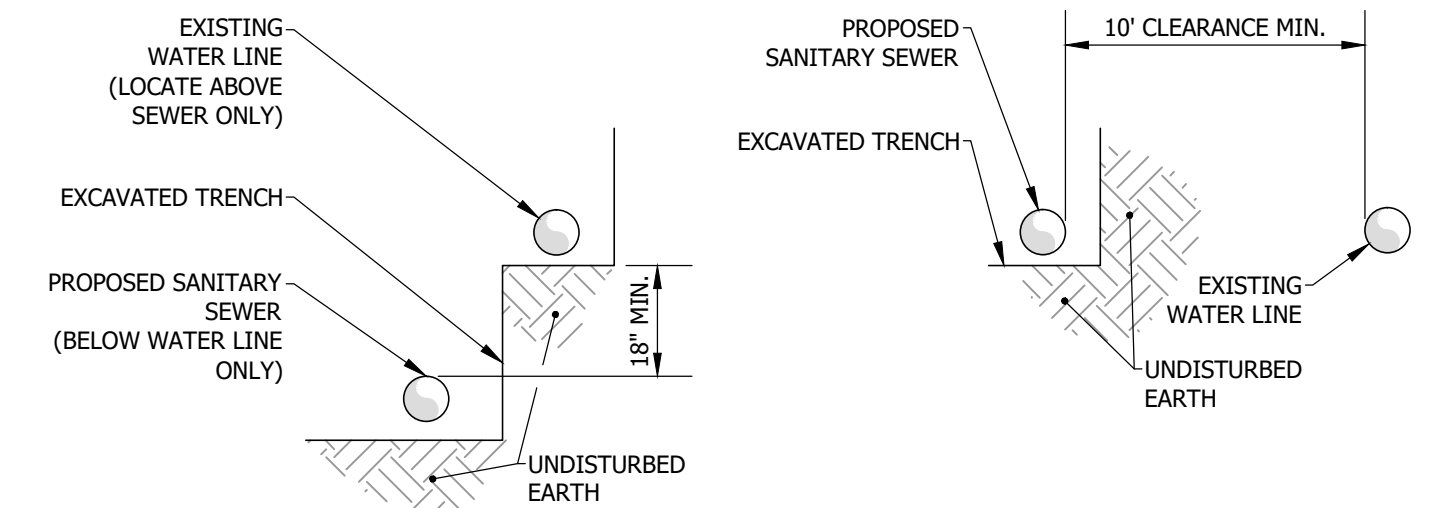
**WW-11 - NEW MANHOLE ON EXISTING PIPE**

SCALE: N.T.S.



**NOTES:**

- CROSSING SHALL BE ARRANGED SO THAT SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM WATER LINE JOINTS.
- CROSSING MUST BE MADE AT A MINIMUM OF 45 DEGREES MEASURED FROM THE CENTER LINES OF THE MAINS.

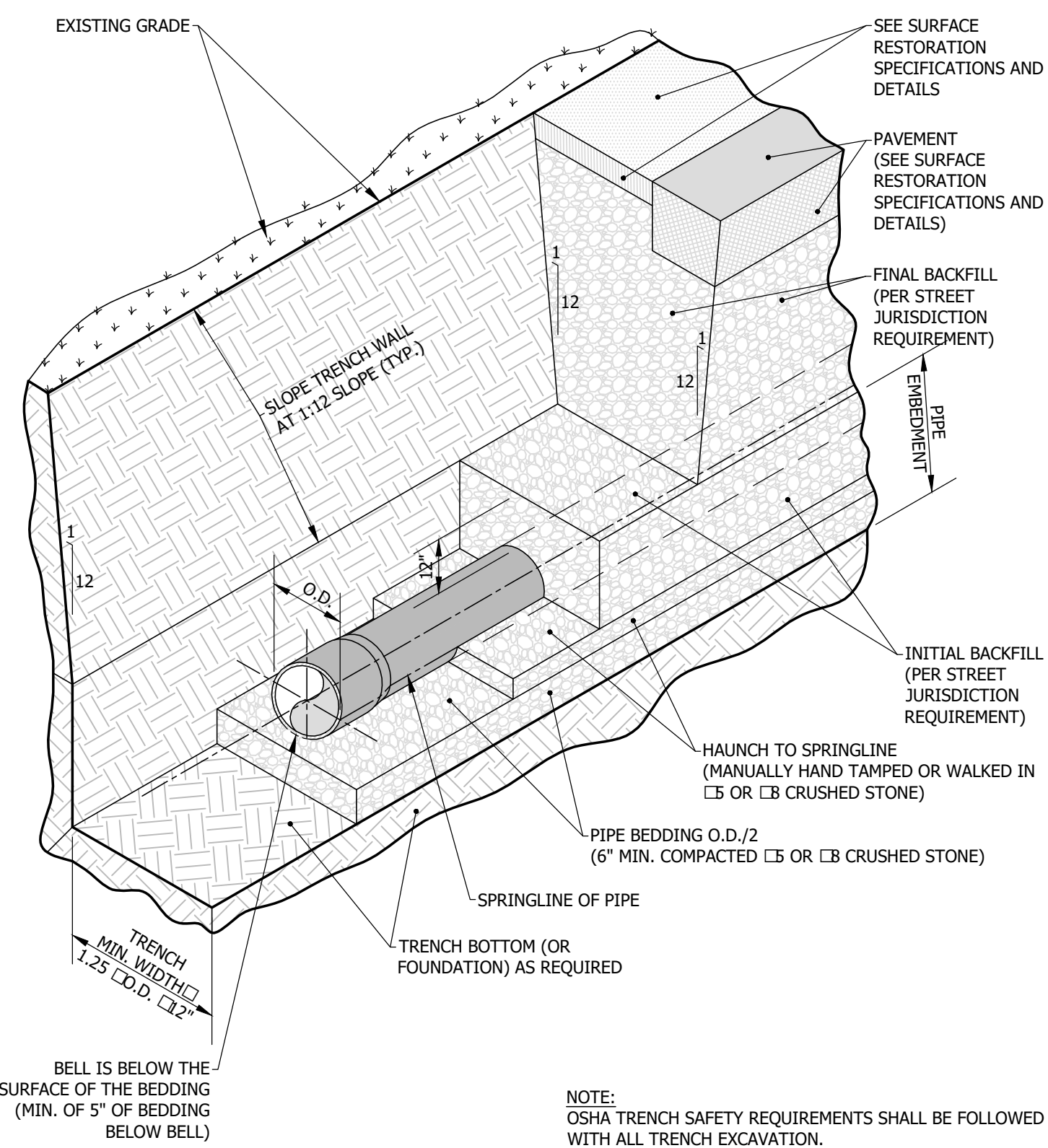


**EXCEPTIONS:**

- ALL OF THE FOLLOWING MUST BE MET
- THE SANITARY SEWER AND WATER MAIN ARE NOT IN CONTACT.
  - THE SANITARY SEWER MATERIAL IS PVC SDR-21 OR PVC C900 FOR ALL INSTANCES WHERE HORIZONTAL OR VERTICAL CLEARANCE REQUIREMENTS ARE NOT MET.
  - THE SANITARY SEWER MEETS ALL PRESSURE TESTING REQUIREMENTS OF WATER MAIN.
  - THE SANITARY SEWER AND WATER MAIN ARE LAID ON SEPARATE TRENCH SHELVES.
  - ANY SANITARY SEWER JOINTS ARE A COMPRESSION TYPE JOINT THAT ARE PLACED EQUIDISTANTLY FROM THE WATER MAIN.

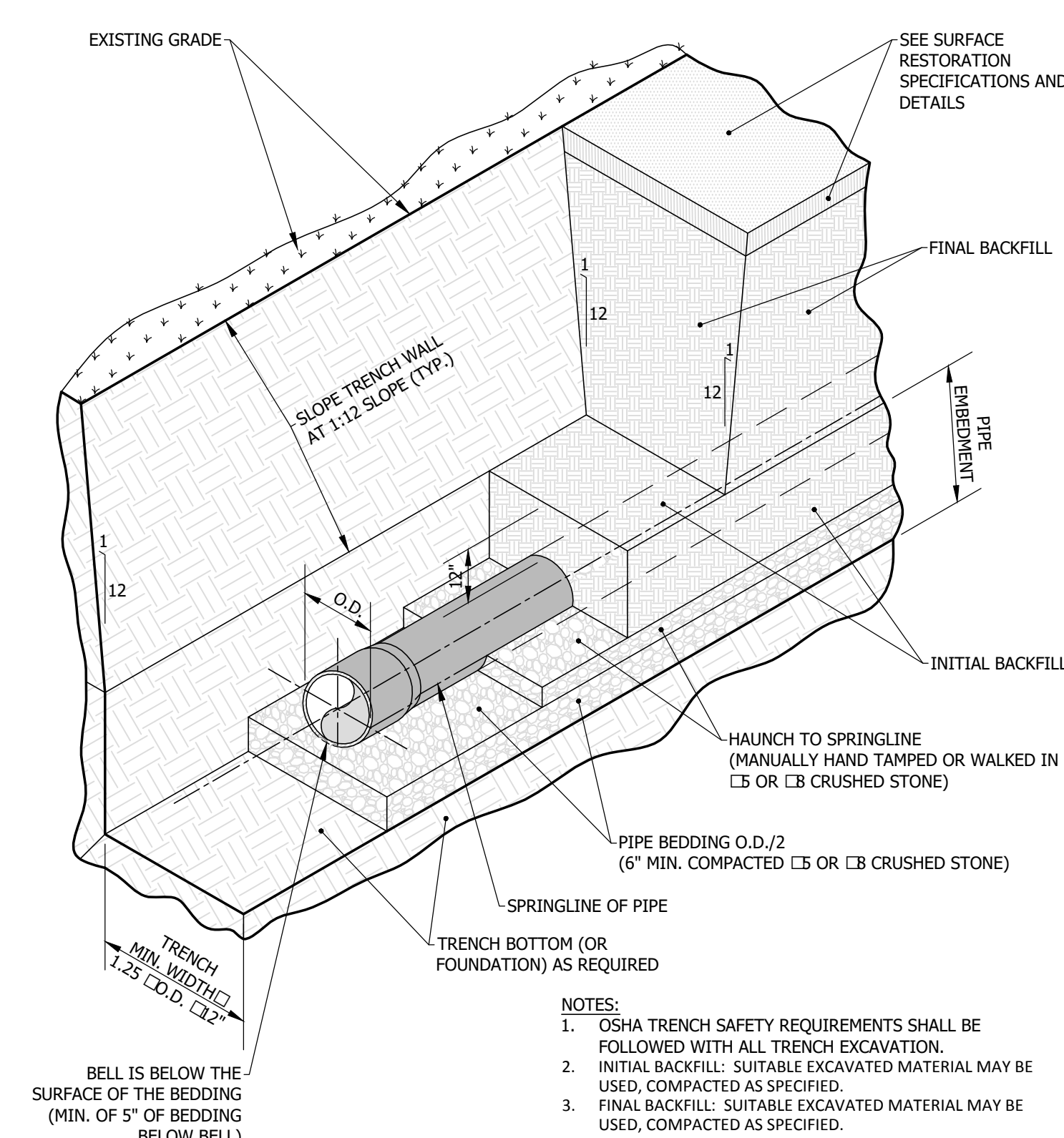
**WW-12 - PROPOSED SANITARY SEWER AND EXISTING WATER LINE CROSSING**

SCALE: N.T.S.



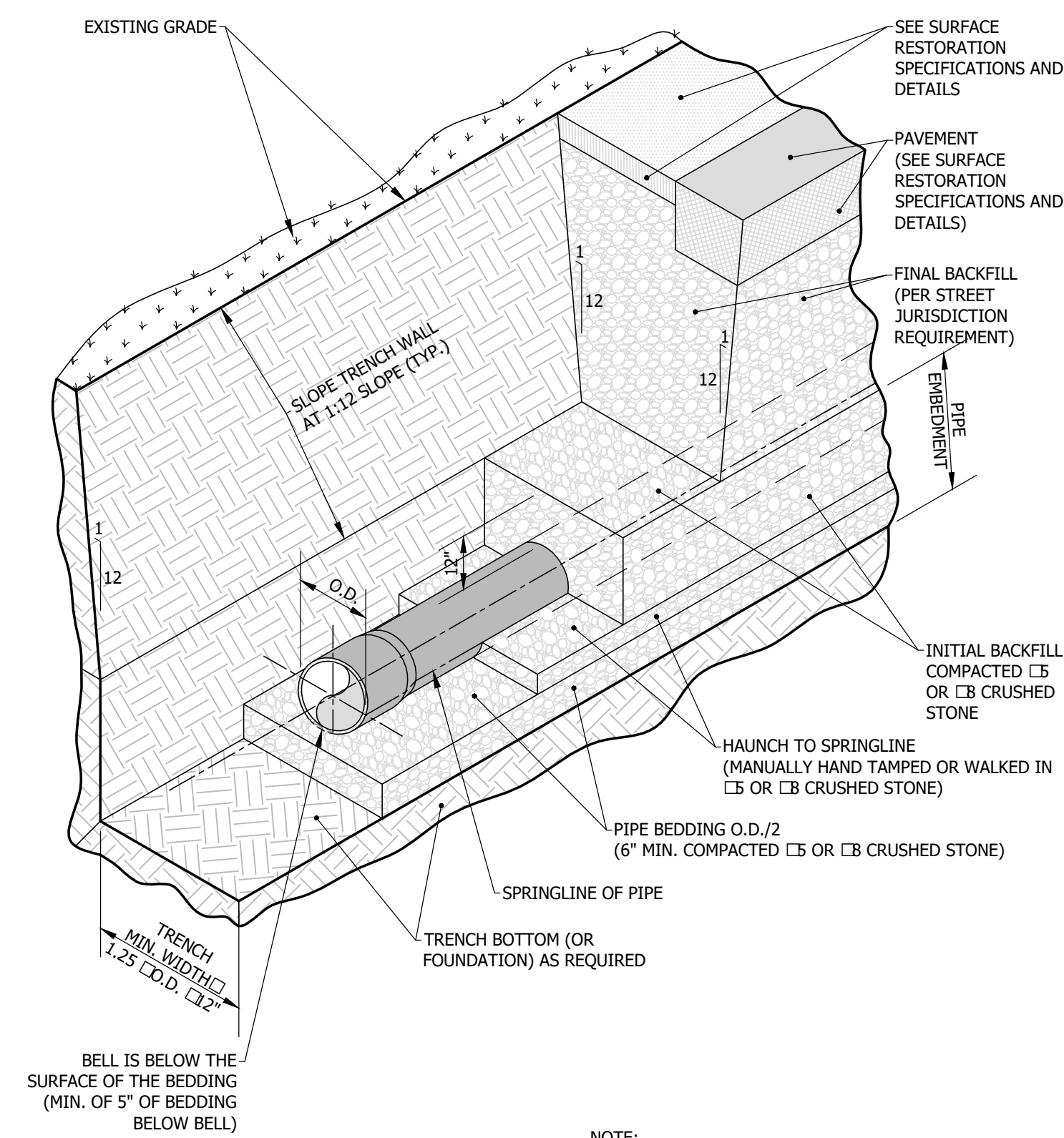
**WW-13 - RIGID SANITARY SEWER PIPE BEDDING AND BACKFILL WITHIN 5' OF, OR UNDER PAVEMENT**

SCALE: N.T.S.



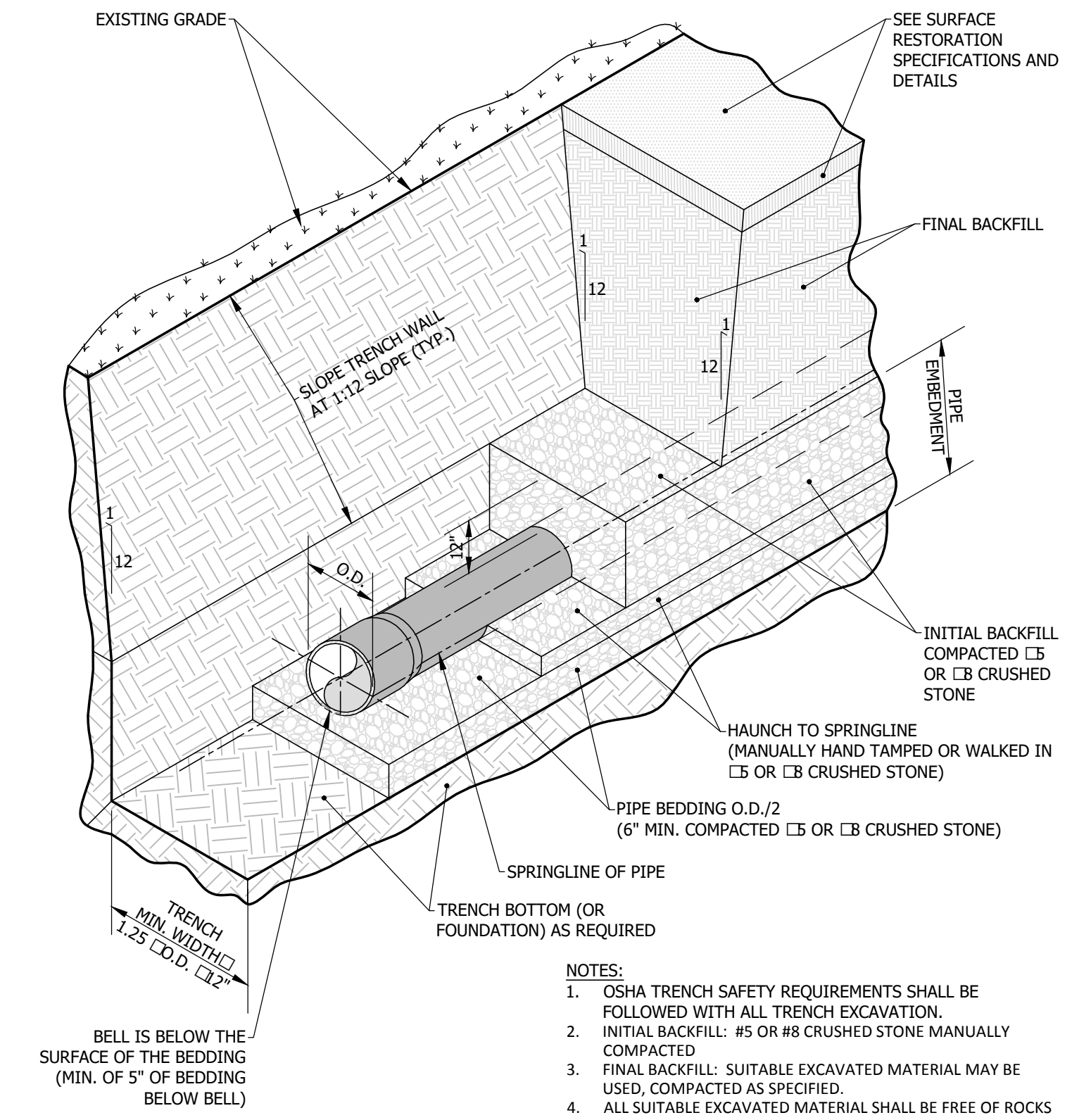
**WW-14 - RIGID SANITARY SEWER PIPE BEDDING AND BACKFILL MORE THAN 5' FROM PAVEMENT**

SCALE: N.T.S.



**WW-15 - NON-RIGID SANITARY SEWER PIPE BEDDING AND BACKFILL WITHIN 5' OF, OR UNDER PAVEMENT**

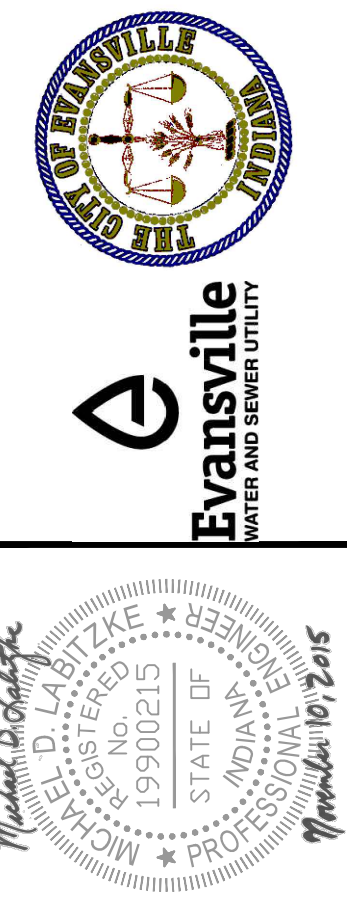
SCALE: N.T.S.



**WW-16 - NON-RIGID SANITARY SEWER PIPE BEDDING AND BACKFILL MORE THAN 5' FROM PAVEMENT**

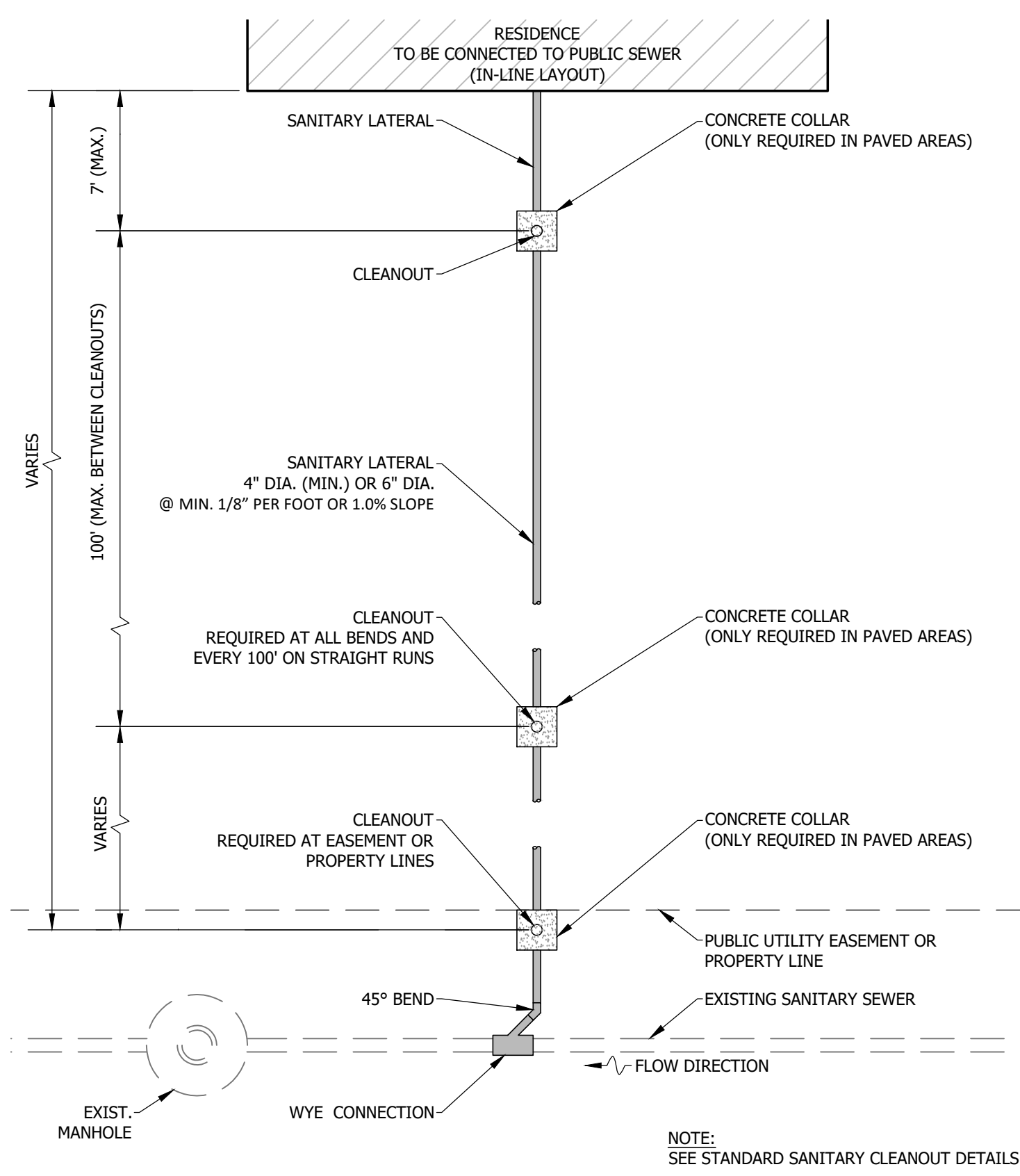
SCALE: N.T.S.

APPROVED:	11/10/15	ADOPTED:	11/10/15
APPROVED BY:	M.D.L.	SCALE:	N.T.S.
FIGURES:	WW-09 THROUGH WW-16	TITLE:	DATE:
EVANSVILLE WATER AND SEWER UTILITY 1931 Aliens Lane - Evansville, IN 47720 (812) 421-2126		STANDARD SANITARY SEWER DETAILS	

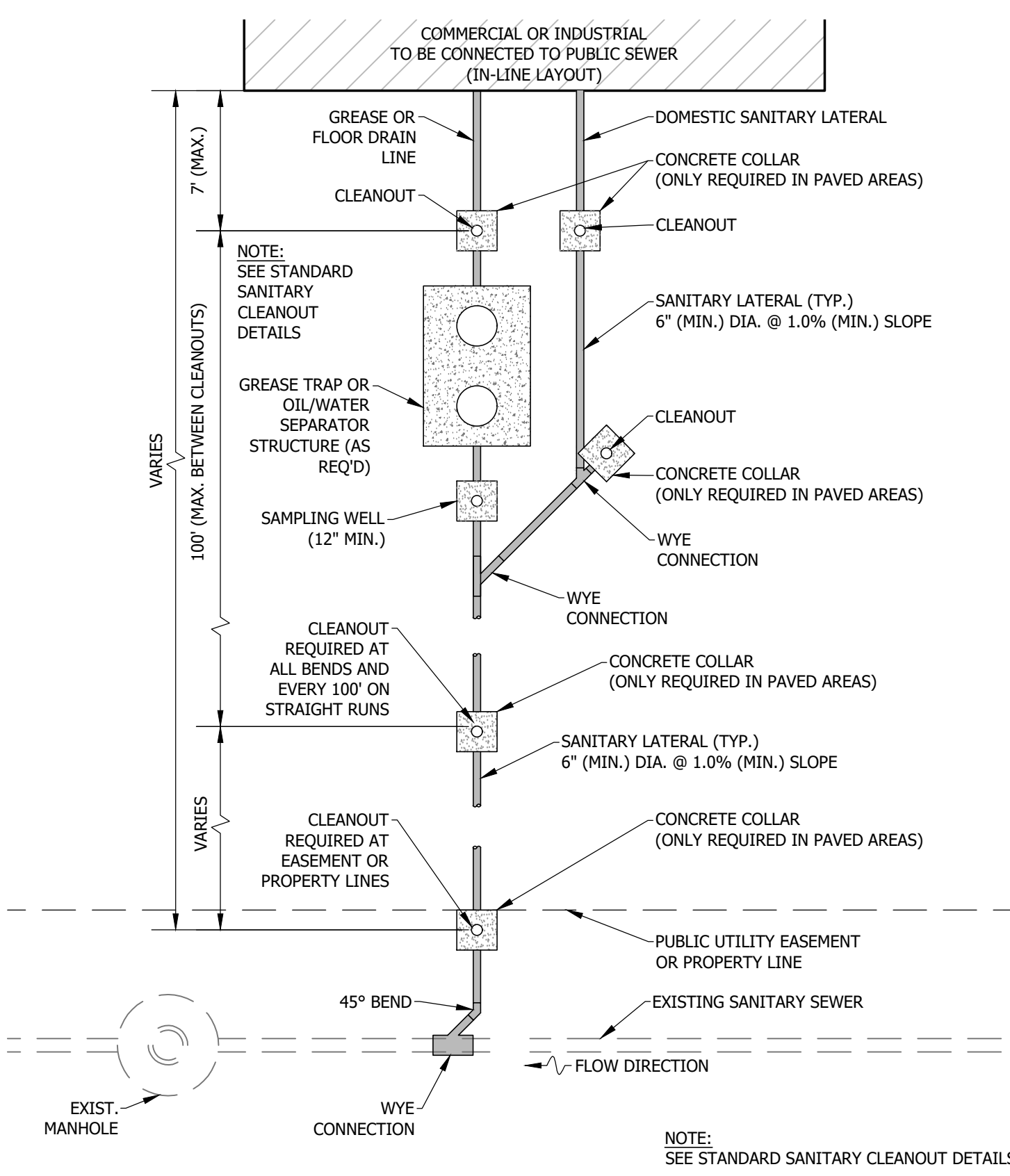


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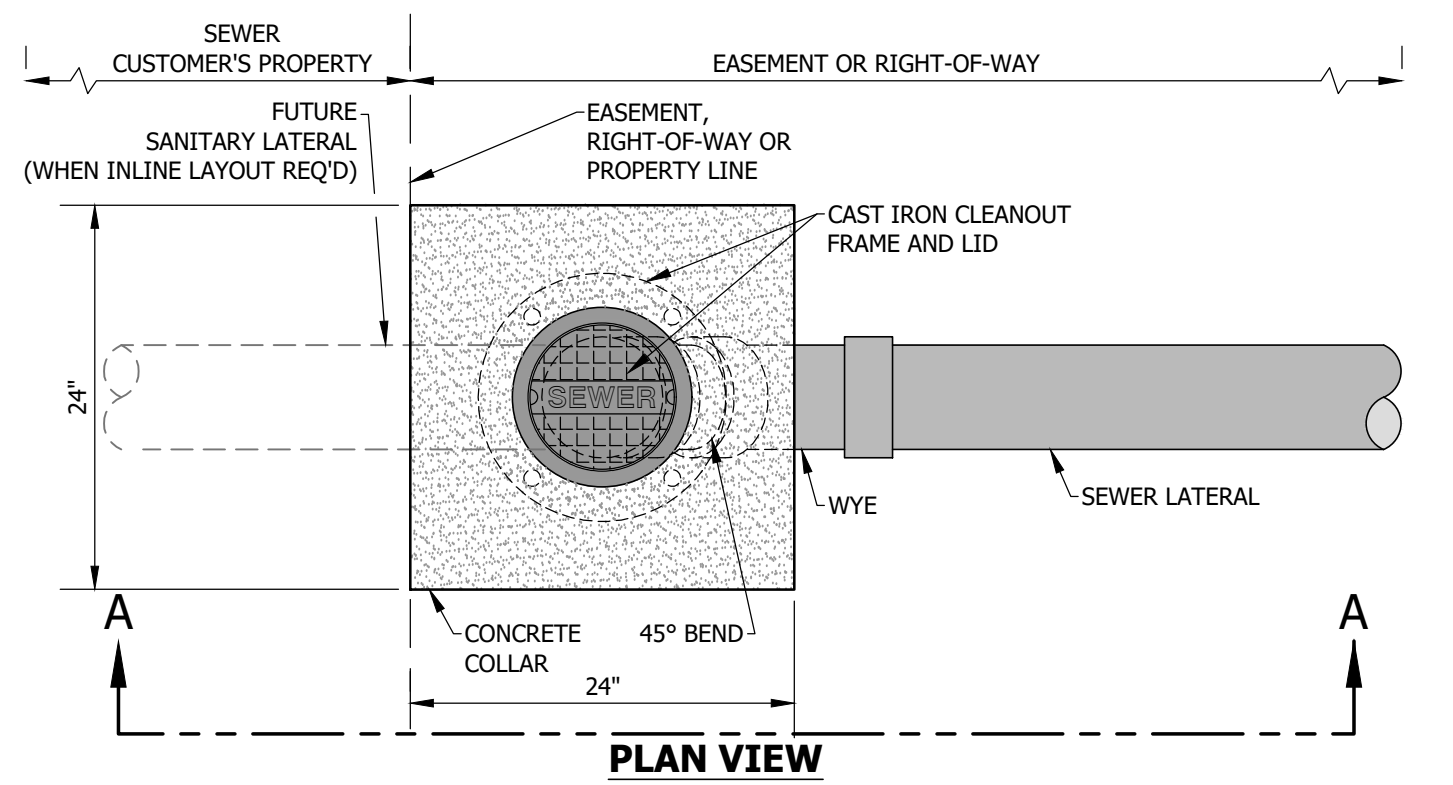
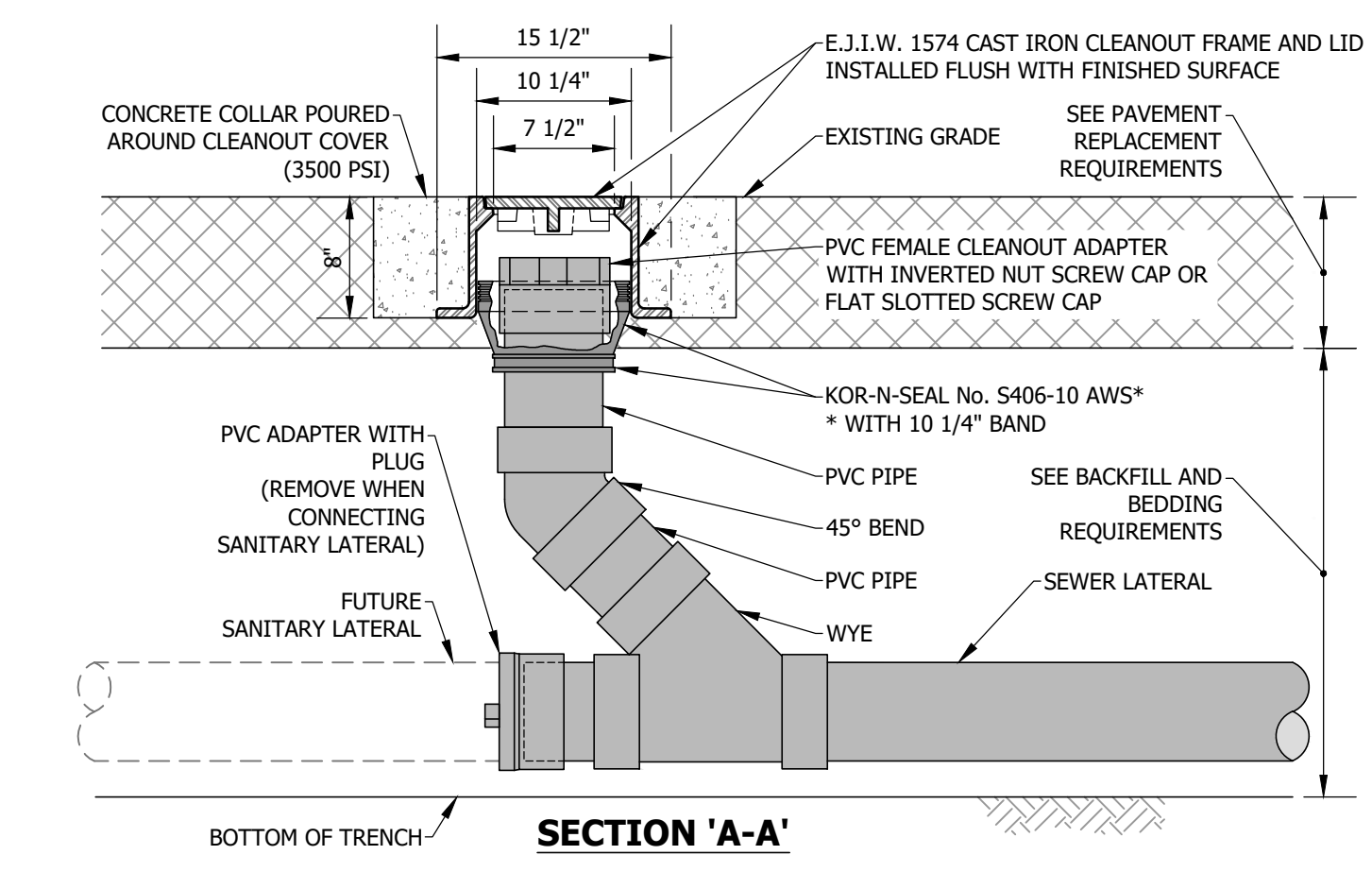
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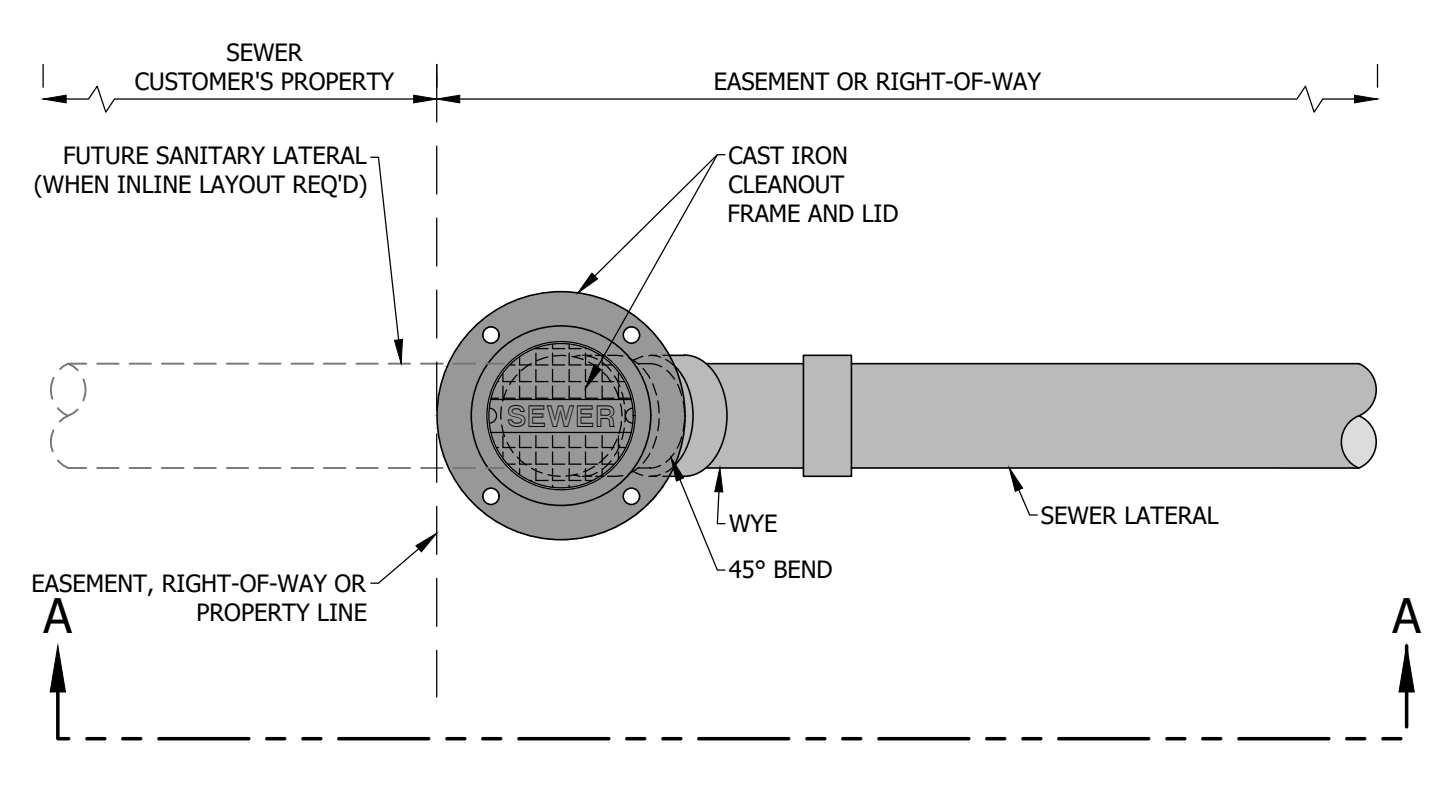
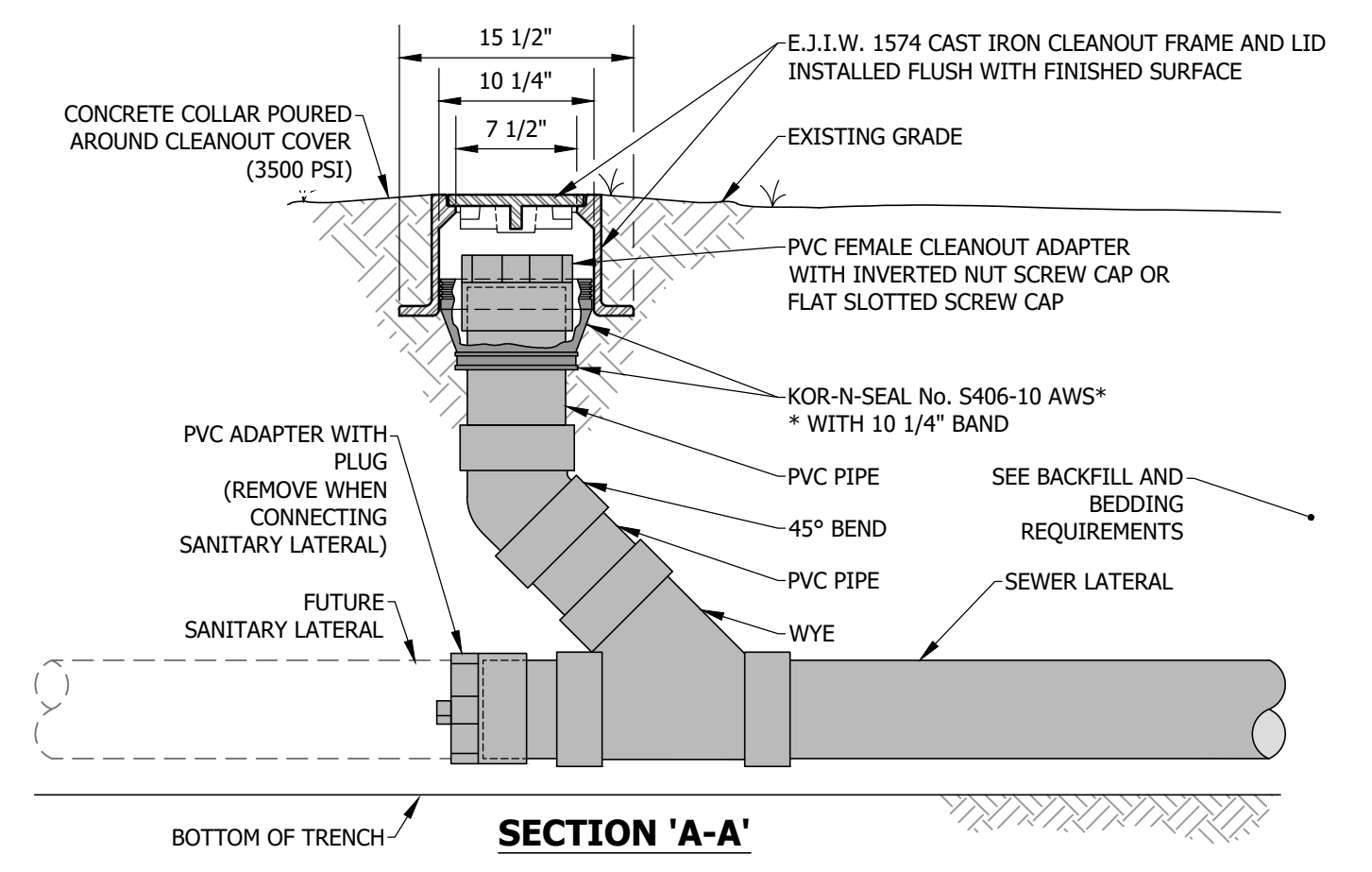
**WW-17 - LATERAL SEWER CONNECTION LAYOUT (RESIDENTIAL)**  
SCALE: N.T.S.



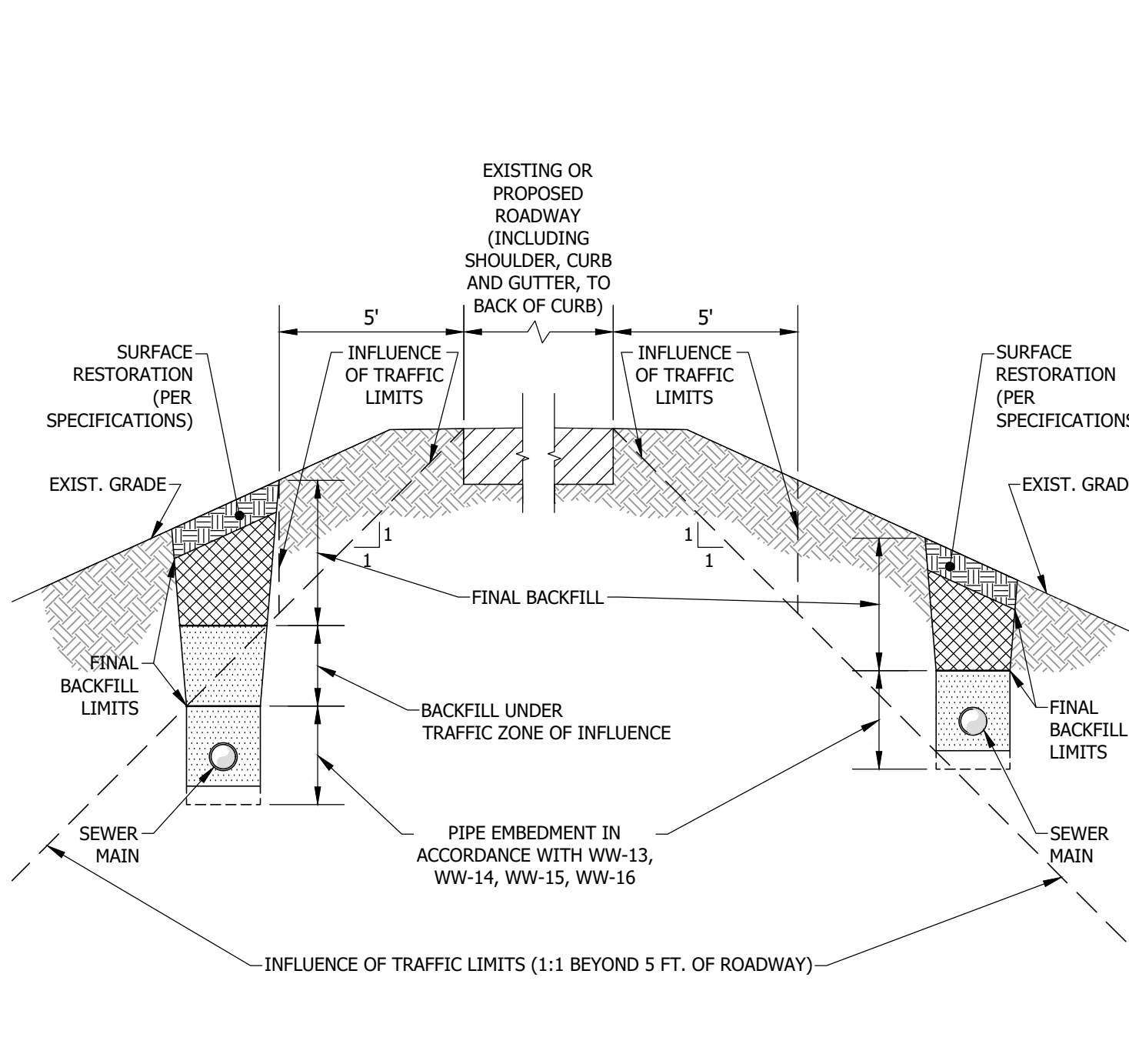
**WW-18 - LATERAL SEWER CONNECTION LAYOUT (COMMERCIAL)**  
SCALE: N.T.S.



**WW-19 - STANDARD SANITARY CLEANOUT IN PAVED AREAS**  
SCALE: N.T.S.

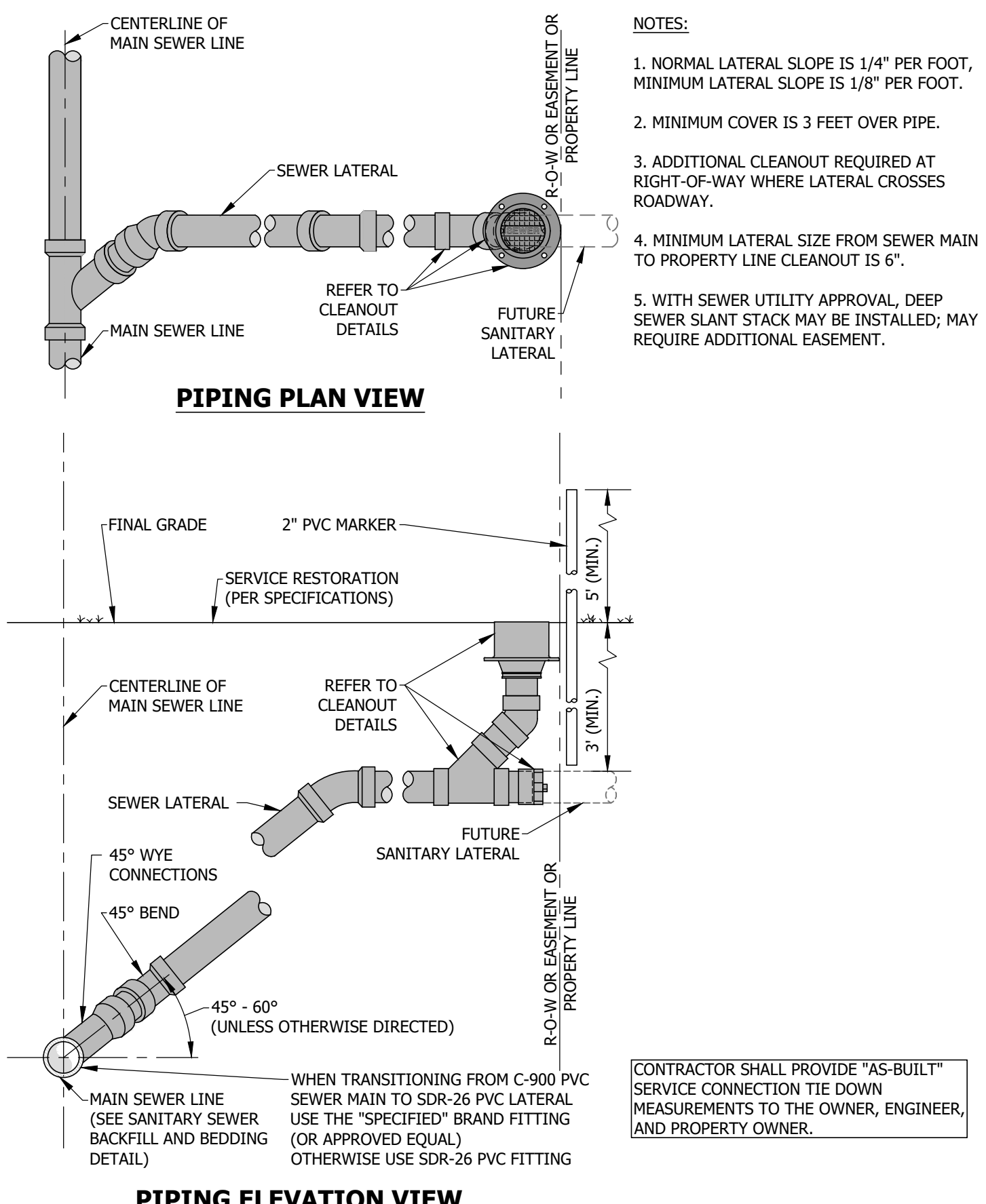


**WW-20 - STANDARD SANITARY CLEANOUT IN UN-PAVED AREAS**  
SCALE: N.T.S.

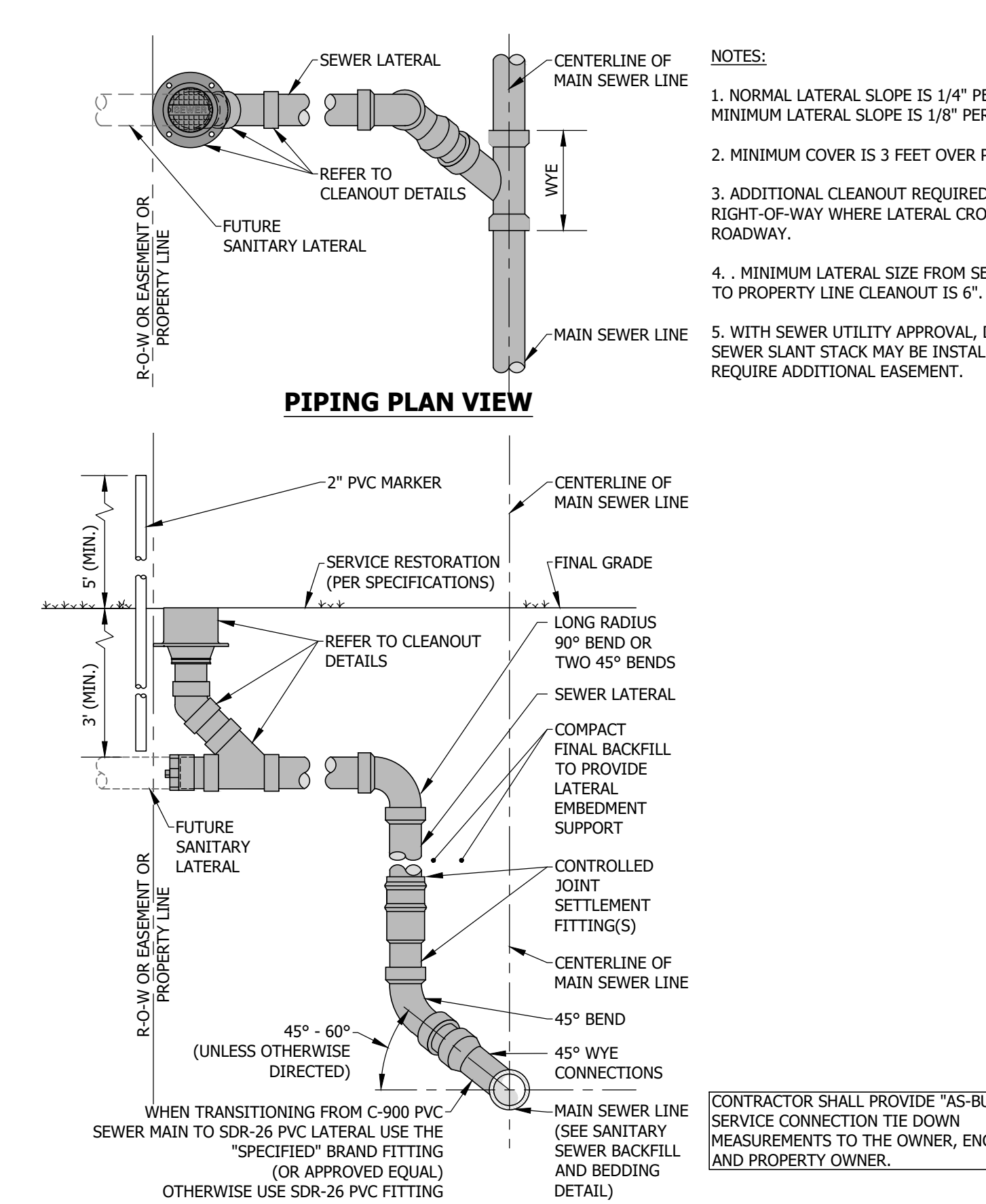


- NOTES:**
- BEDDING AND BACKFILL SHALL CONFORM TO DETAILS WW-13, WW-14, WW-15, WW-16.
  - FOR SEWERS GREATER THAN FIVE FEET FROM THE EDGE OF EXISTING OR PROPOSED ROADWAY, ANY PORTION OF THE TRENCH BELOW THE ZONE OF TRAFFIC INFLUENCE SHALL BE BACKFILLED IN ACCORDANCE WITH THE STREET JURISDICTION REQUIREMENTS.

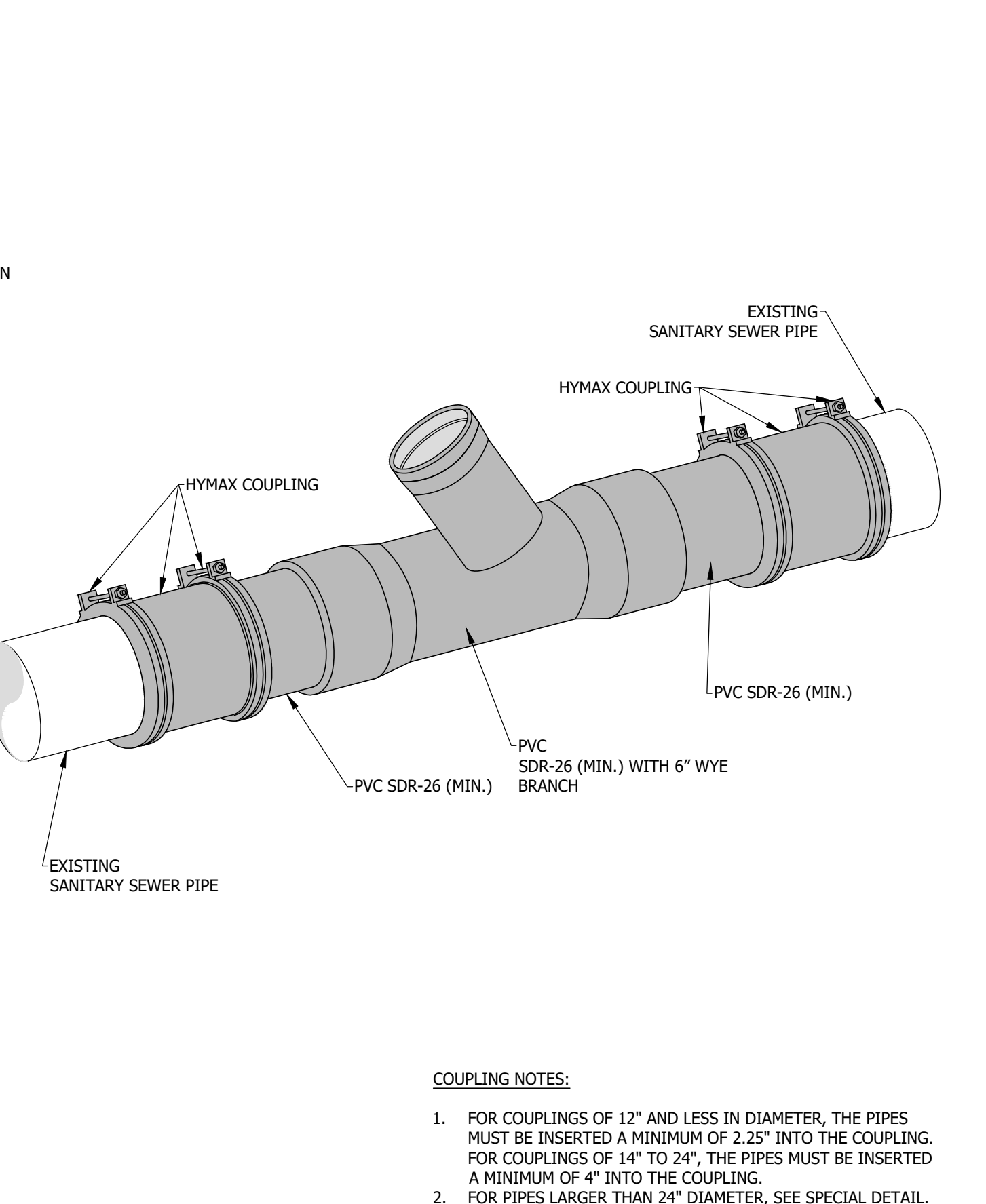
**WW-21 - FINAL BACKFILL AND TRAFFIC INFLUENCE DETAIL**  
SCALE: N.T.S.



**WW-22 - SHALLOW SANITARY SERVICE CONNECTION**  
SCALE: N.T.S.



**WW-23 - DEEP SANITARY SERVICE CONNECTION**  
SCALE: N.T.S.

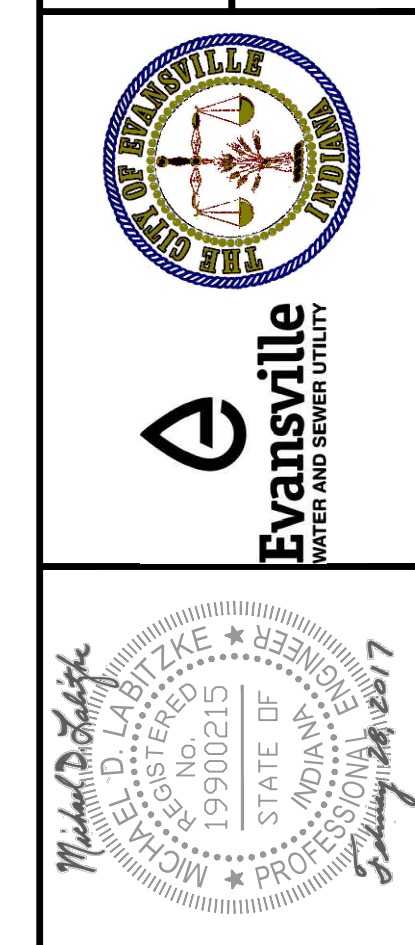


**WW-24 - SANITARY SERVICE CONNECTION TO EXISTING PIPE**  
SCALE: N.T.S.

APPROVED:	02/28/17	ADOPTED:	02/28/17
APPROVED BY:	M.D.L.	SCALE:	N.T.S.
FIGURES:	WW-17 THROUGH WW-24	TITLE:	

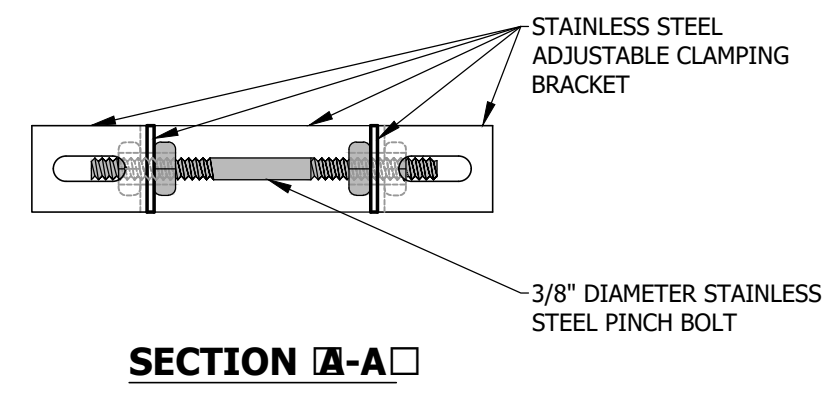
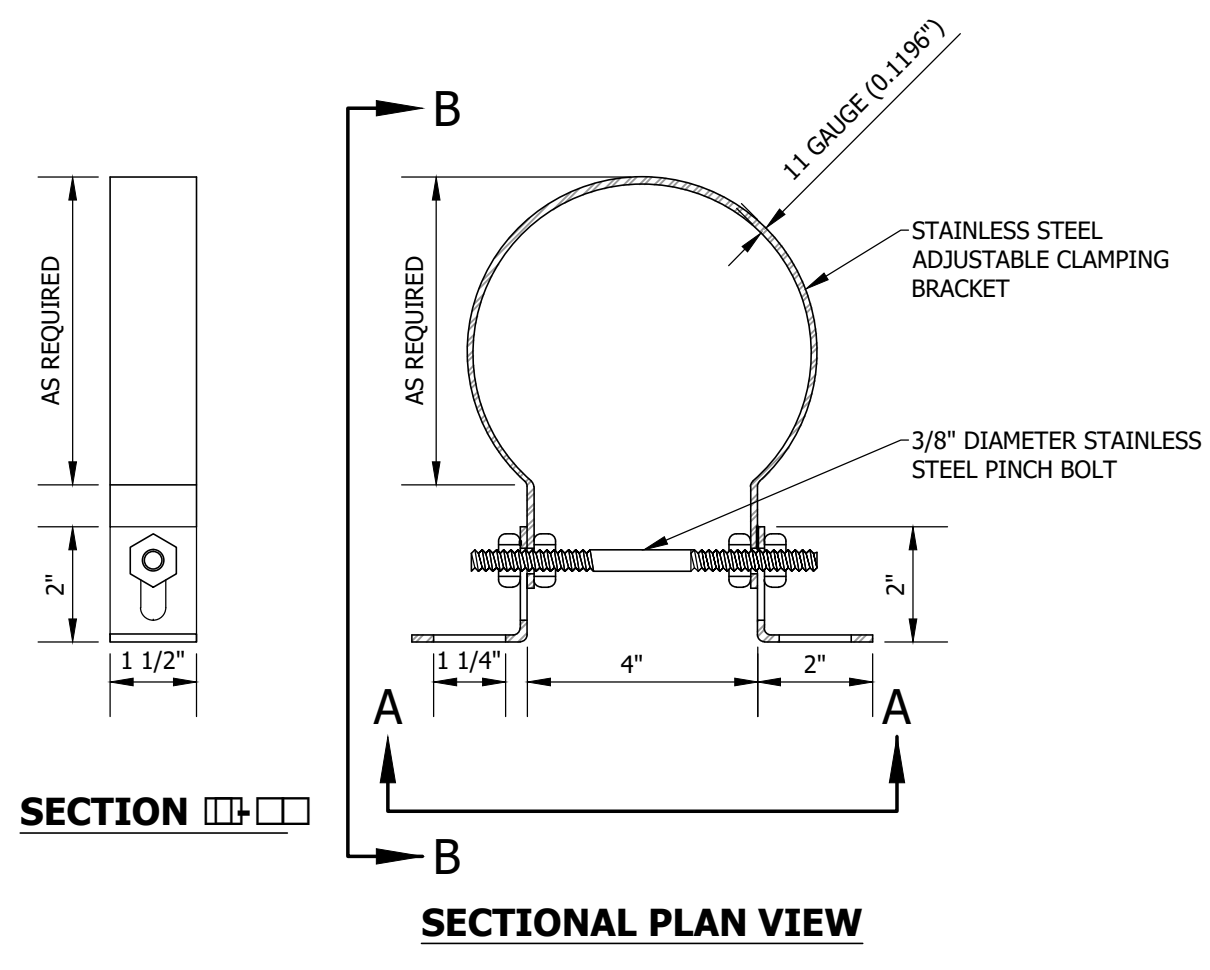
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1931 Aliens Lane - Evansville, IN 47720 (812) 421-2126

**STANDARD SANITARY SEWER DETAILS**



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- SPECIFICATIONS:
- 1) CLAMP AND BRACKETS IS TYPE 304 STAINLESS STEEL, 11 GAUGE (.1196").
  - 2) 3/8"  $\phi$  PINCH BOLT AND NUTS IS TYPE 18-8 STAINLESS STEEL.

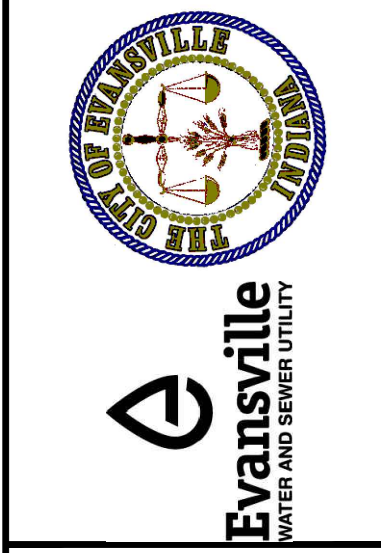
**WW-25 - INSIDE DROP STAINLESS STEEL  
ADJUSTABLE CLAMPING BRACKET**

SCALE: N.T.S.

APPROVED:	11/10/15	ADOPTED:	11/10/15
APPROVED BY:	M.D.L.	SCALE:	N.T.S.
FIGURES:	WW-25		
APPROVED:		TITLE:	DATE:

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**STANDARD SANITARY SEWER DETAILS**



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