

NOTES:

1. THE DIAMETER OF A MANHOLE CONSTRUCTED OVER THE CENTER OF A SEWER SHOULD VARY WITH THE SIZE OF THE SEWER. FOR EIGHT-INCH (8"), TEN-INCH (10"), AND TWELVE-INCH (12"), THE MANHOLE SHALL BE FOUR-FOOT (4') MINIMUM DIAMETER, FOR FIFTEEN-INCH (15"), EIGHTEEN-INCH (18"), TWENTY-ONE-INCH (21"), TWENTY-FOUR-INCH (24") AND TWENTY-SEVEN-INCH (27") SHALL BE FIVE-FOOT (5') MINIMUM DIAMETER; THIRTY-INCH (30") AND THIRTY-SIX-INCH (36") SHALL BE SIX-FOOT (6') MINIMUM DIAMETER. MANHOLES DEEPER THAN FIFTEEN FEET (15') SHALL BE A MINIMUM OF FIVE-FOOT (5') DIAMETER.

2. DROP MANHOLES SHALL BE REQUIRED WHEN THE INFLOW ELEVATION IS MORE THAN TWENTY-FOUR INCHES (24") ABOVE THE OUTFALL ELEVATION.

3. WHERE PIPES ENTER A MANHOLE THERE SHALL BE A MINIMUM OF TWO-TENTHS OF A FOOT (0.2') DROP BETWEEN INVERTS.

4. WHERE UNEQUAL PIPES ENTER A MANHOLE, THE CROWN OF THE PIPES SHALL BE SET AT THE SAME ELEVATION.

5. CONCRETE SHALL BE A MONOLITHIC POUR.



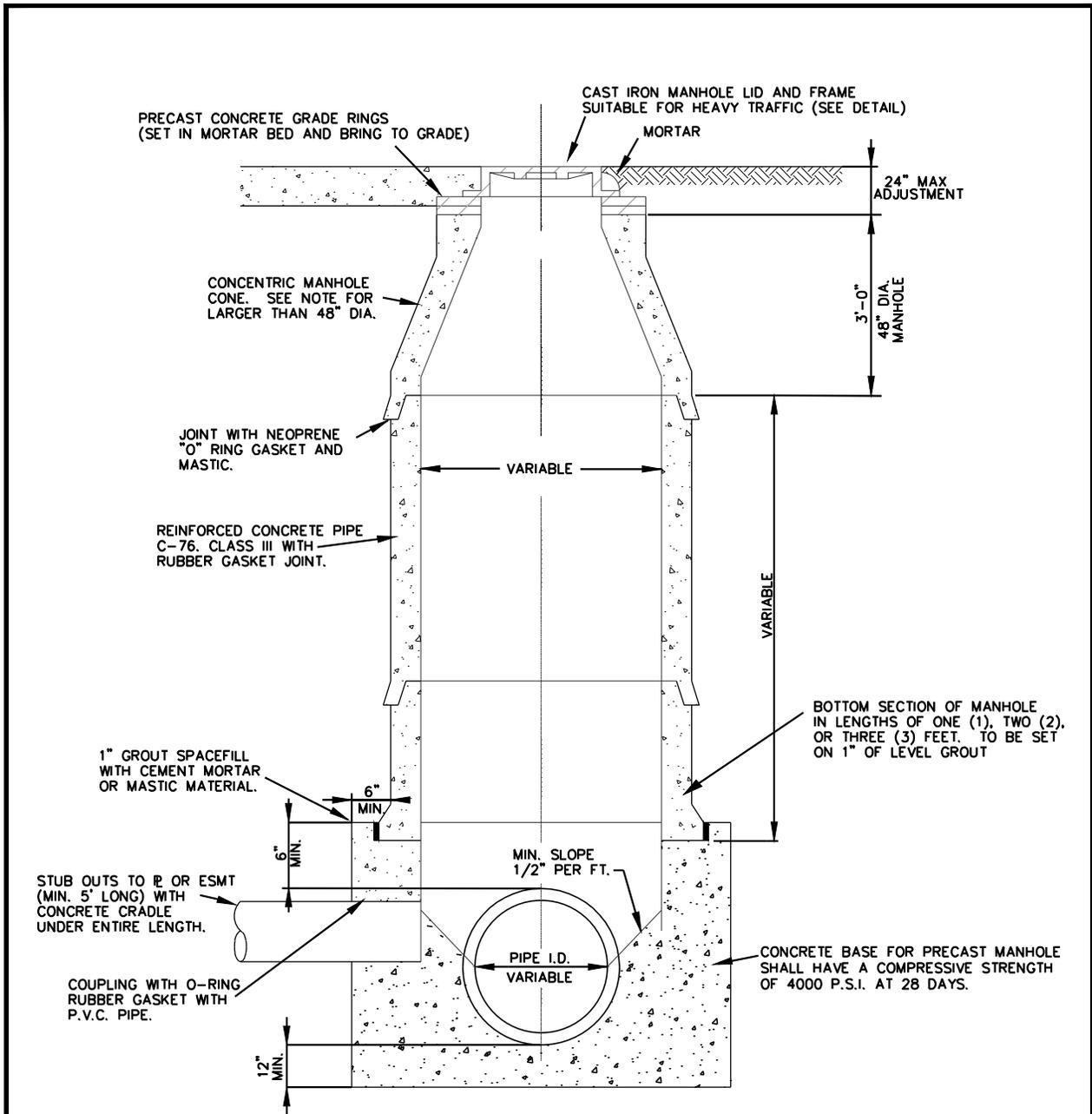
STANDARD CAST-IN-PLACE MANHOLE



**TOWN OF PROSPER, TEXAS
STANDARD CONSTRUCTION
DETAILS**

DATE: 08/07/07
DRAWN BY: WLW
APPROVED BY: HTW

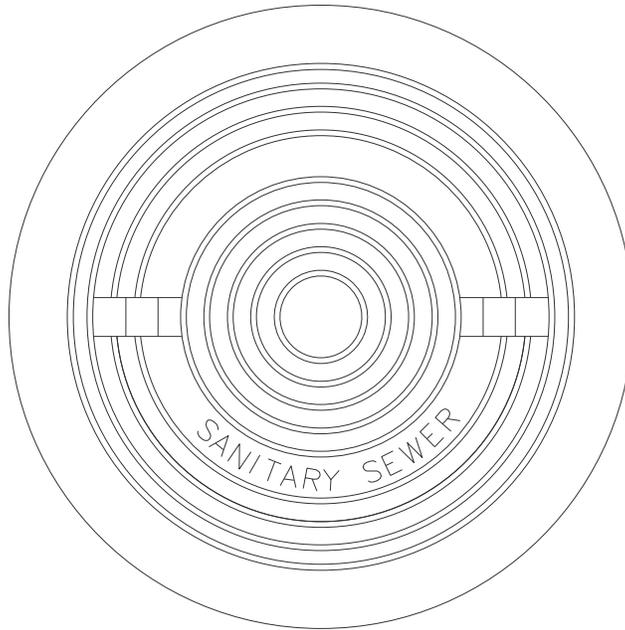
SHEET NO. : S01



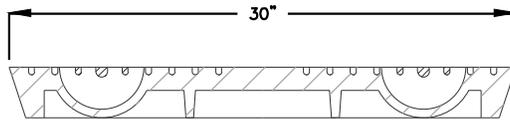
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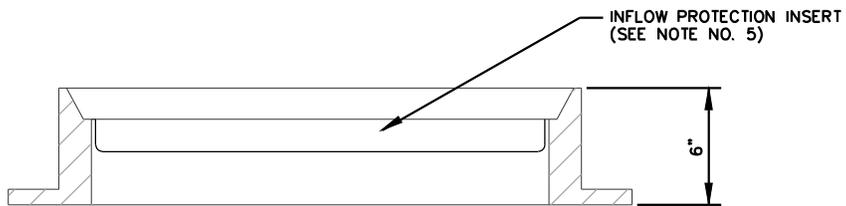
 <p>TOWN OF PROSPER</p>	<p>PRECAST CONCRETE PIPE MANHOLE</p>
 <p>Hulon T. Webb, Jr. 88679 REGISTERED PROFESSIONAL ENGINEER</p>	<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p>
<p>DATE: 06/07/07 DRAWN BY: HTW APPROVED BY: HTW</p>	<p>SHEET NO. : S02</p>



ASSEMBLY PLAN VIEW



LID SECTION VIEW

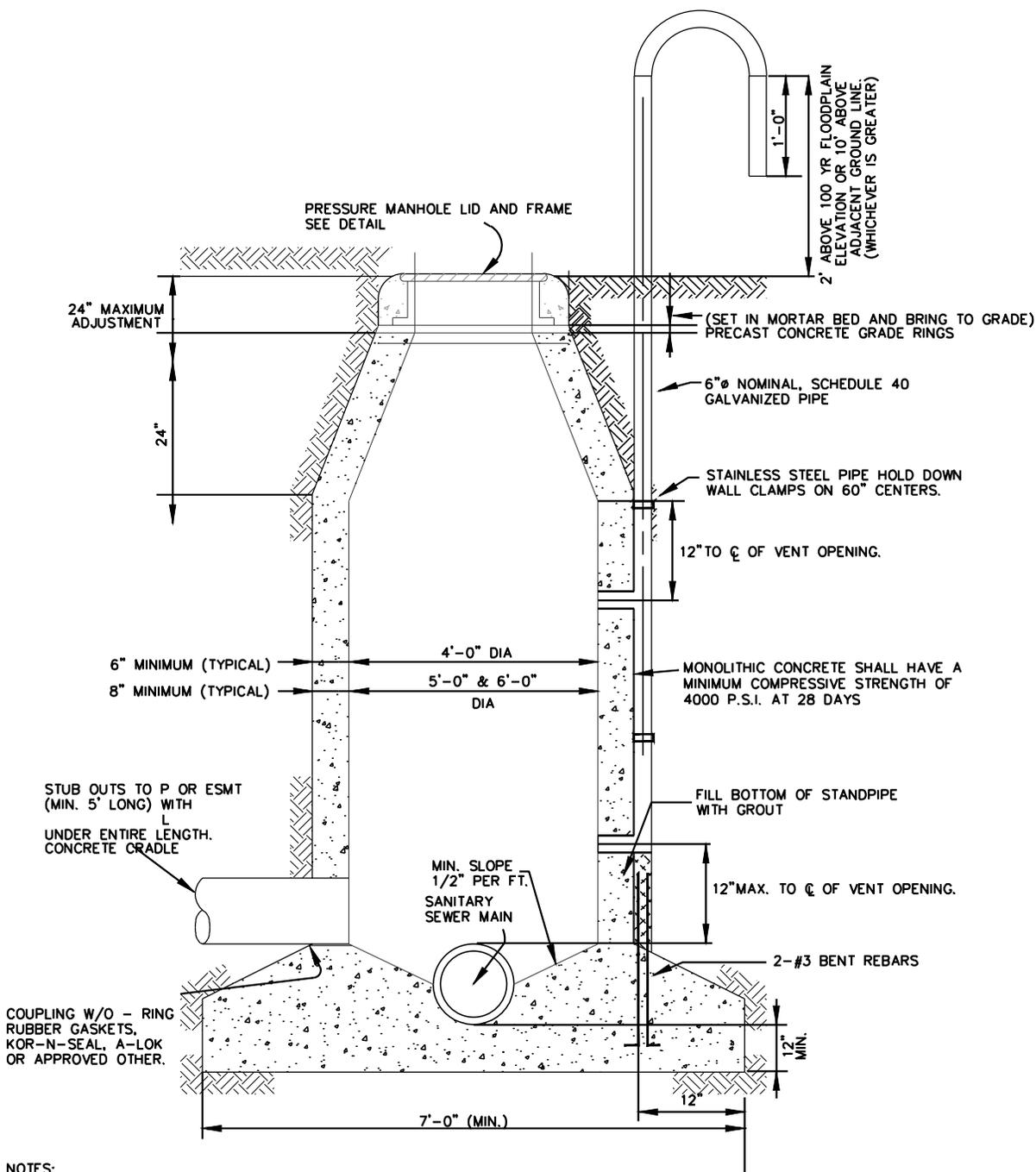


FRAME SECTION VIEW

GENERAL NOTES:

1. MANHOLE LID SHALL BE SOLID AND PROVIDED WITH PICK SLOTS ONLY
2. 24" HEAVY DUTY MANHOLE FRAME AND COVER IS TO BE CASTED 400 LBS WITH A DESIGN STRENGTH OF 4000 PSI.
3. THE HORIZONTAL BEARING SURFACES ARE TO BE MACHINE FINISHED.
4. THE SOLID LID WILL BE PROVIDED WITH MANUFACTURER'S STANDARD LETTERING SHOWING "SANITARY SEWER".
5. INFLOW PROTECTION INSERT, MINIMUM THICKNESS OF ONE-EIGHT INCH (1/8"), MADE OF HDPE MEETING ASTM D 1248 CLASS A, CATEGORY 5, TYPE 111. INSERT SHALL INCLUDE A LIFT STRAP AND VENT HOLE WITH VENT DISK AS MANUFACTURED BY KNOTSON MANHOLE INSERTS OR APPROVED OTHER.

	<p>CAST IRON MANHOLE LID AND FRAME</p>
	<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p>
<p>DATE: 08/07/07 DRAWN BY: WLW APPROVED BY: HTW</p>	<p>SHEET NO. : S03</p>



- NOTES:
1. THE DIAMETER OF A MANHOLE CONSTRUCTED OVER THE CENTER OF A SEWER SHOULD VARY WITH THE SIZE OF THE SEWER. FOR EIGHT-INCH (8"), TEN-INCH (10"), AND TWELVE-INCH (12"), THE MANHOLE SHALL BE FOUR-FOOT (4') MINIMUM DIAMETER, FOR FIFTEEN-INCH (15"), EIGHTEEN-INCH (18"), TWENTY-ONE-INCH (21"), TWENTY-FOUR-INCH (24") AND TWENTY-SEVEN-INCH (27") SHALL BE FIVE-FOOT (5') MINIMUM DIAMETER; THIRTY-INCH (30") AND THIRTY-SIX-INCH (36") SHALL BE SIX-FOOT (6') MINIMUM DIAMETER. MANHOLES DEEPER THAN FIFTEEN FEET (15') SHALL BE A MINIMUM OF FIVE-FOOT (5') DIAMETER.
 2. DROP MANHOLES SHALL BE REQUIRED WHEN THE INFLOW ABOVE THE ELEVATION IS MORE THAN TWENTY-FOUR INCHES (24") ABOVE THE OUTFALL ELEVATION.
 3. WHERE PIPES ENTER A MANHOLE THERE SHALL BE A MINIMUM OF TWO-TENTHS OF A FOOT (0.2') DROP BETWEEN INVERTS.
 4. WHERE UNEQUAL PIPES ENTER A MANHOLE, THE CROWN OF THE PIPES SHALL BE SET AT THE SAME ELEVATION.
 5. CONCRETE SHALL BE A MONOLITHIC POUR.



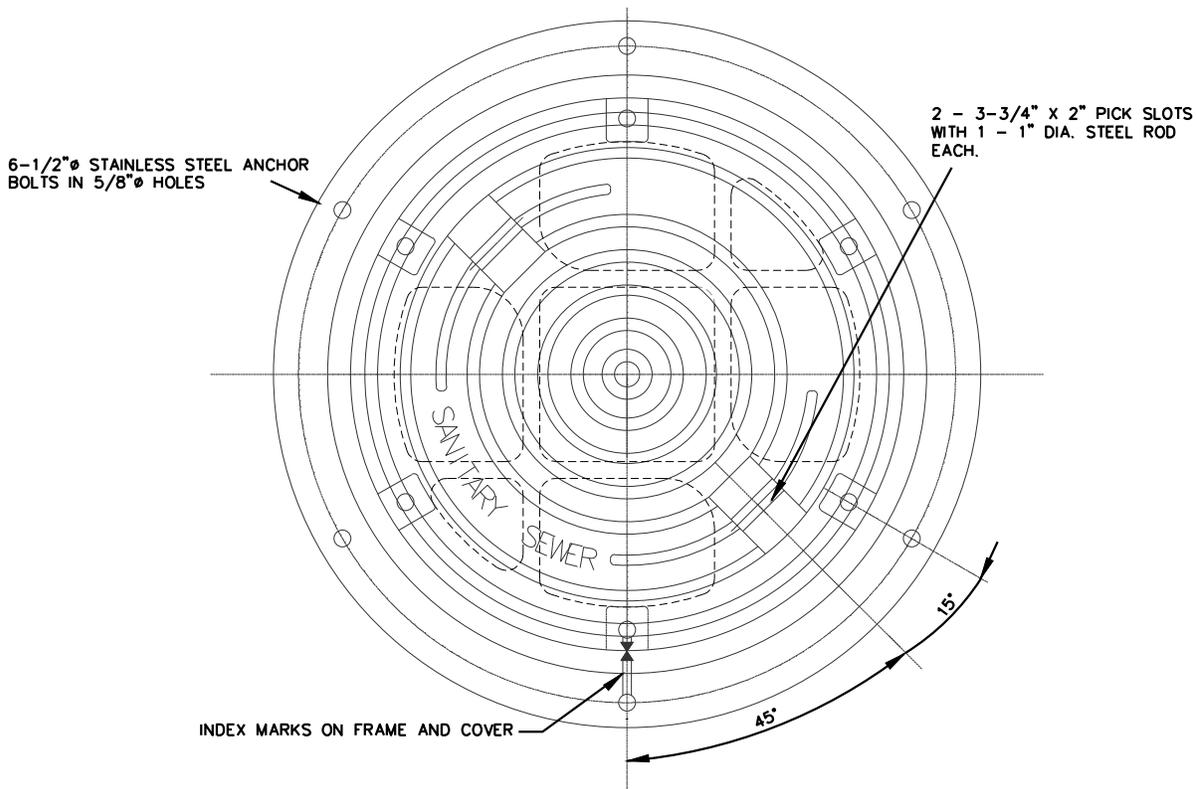
VENTED TYPE S MANHOLE

TOWN OF PROSPER, TEXAS
STANDARD CONSTRUCTION
DETAILS

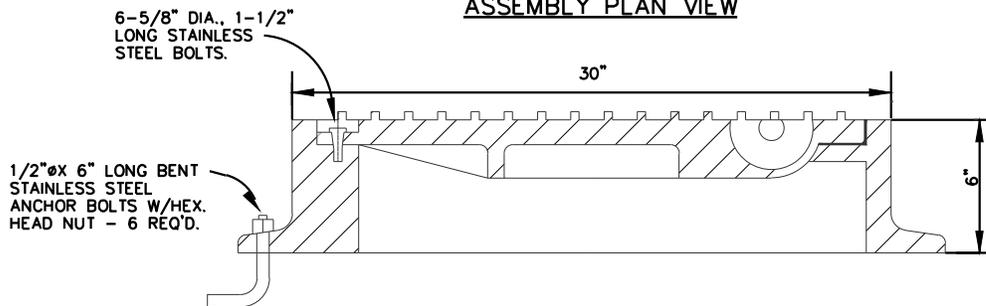


DATE: 08/07/07
DRAWN BY: HTW
APPROVED BY: HTW

SHEET NO. : S04



ASSEMBLY PLAN VIEW

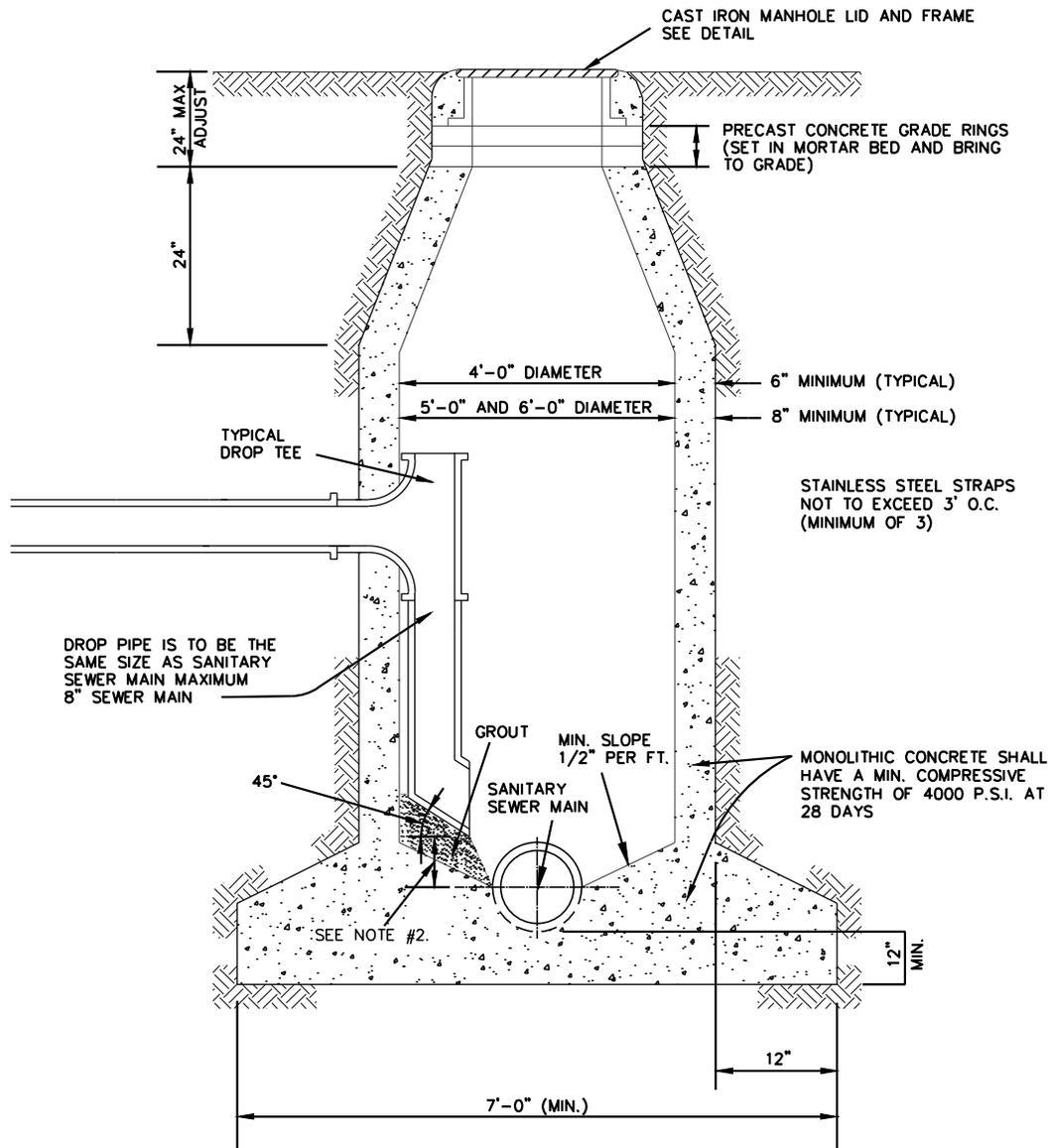


ASSEMBLY CROSS SECTION

GENERAL NOTES:

1. THE HORIZONTAL BEARING SURFACES ARE TO BE MACHINE FINISHED.
2. FOR A SEAL BETWEEN THE RING FRAME AND COVER A 1/4" Ø NEOPRENE "O-RING" GASKET SHALL BE AND INSTALLED BY THE MANUFACTURER. THE LOCATION SHALL BE AS PER THE MANUFACTURER'S STANDARDS BUT SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.
3. THE SOLID LID WILL BE PROVIDED WITH MANUFACTURER'S STANDARD LETTERING SHOWING "SANITARY SEWER".
4. NOT ALLOWED IN TRAFFIC AREA.

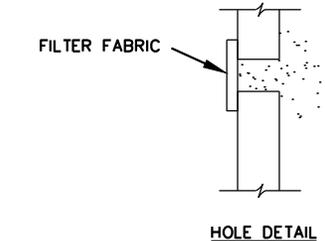
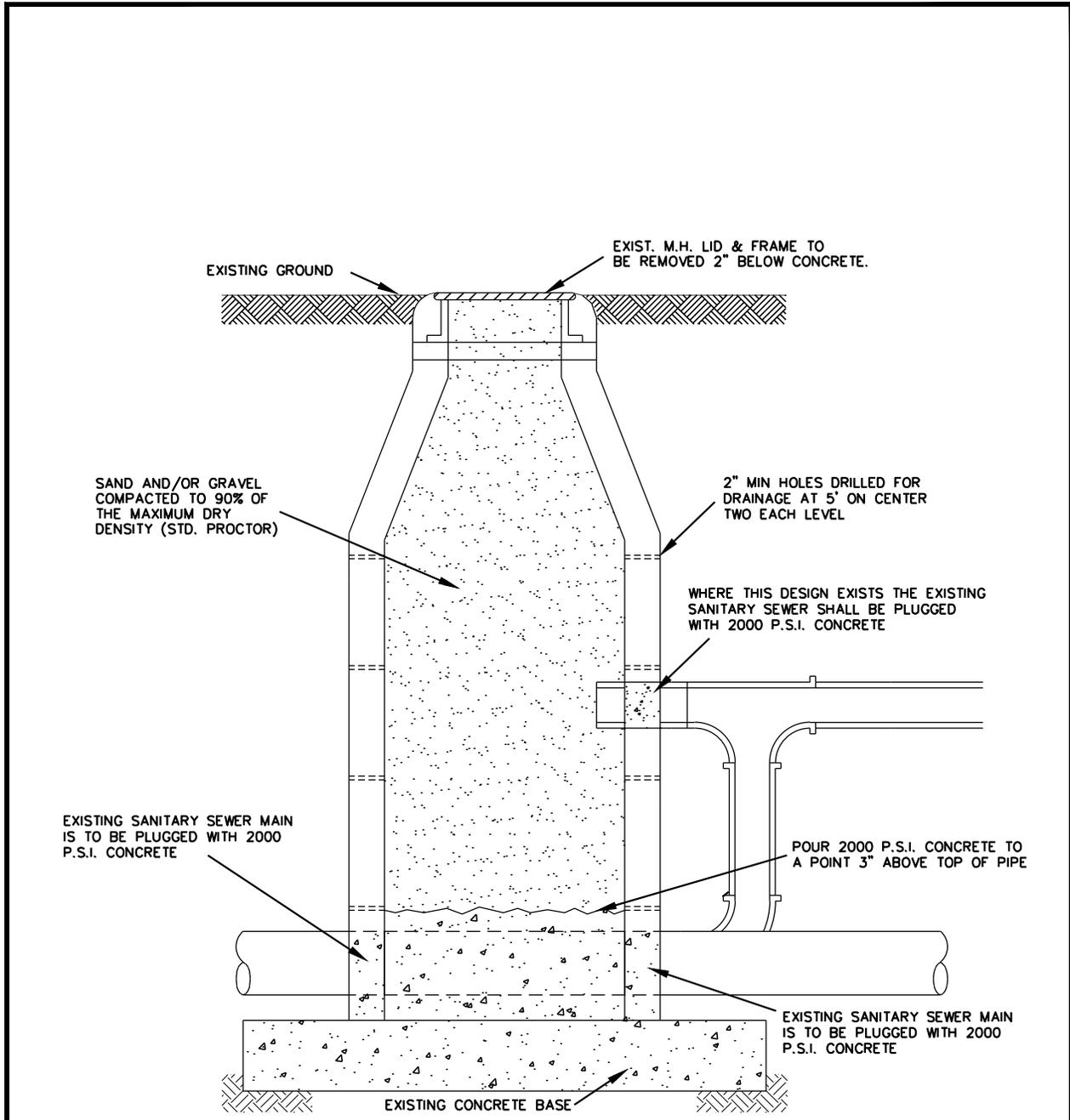
 <p>TOWN OF PROSPER</p>	<p>PRESSURE MANHOLE LID AND FRAME</p>
	<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p>
<p>DATE: 06/07/07 DRAWN BY: WLW APPROVED BY: HTW</p>	<p>SHEET NO. : S05</p>



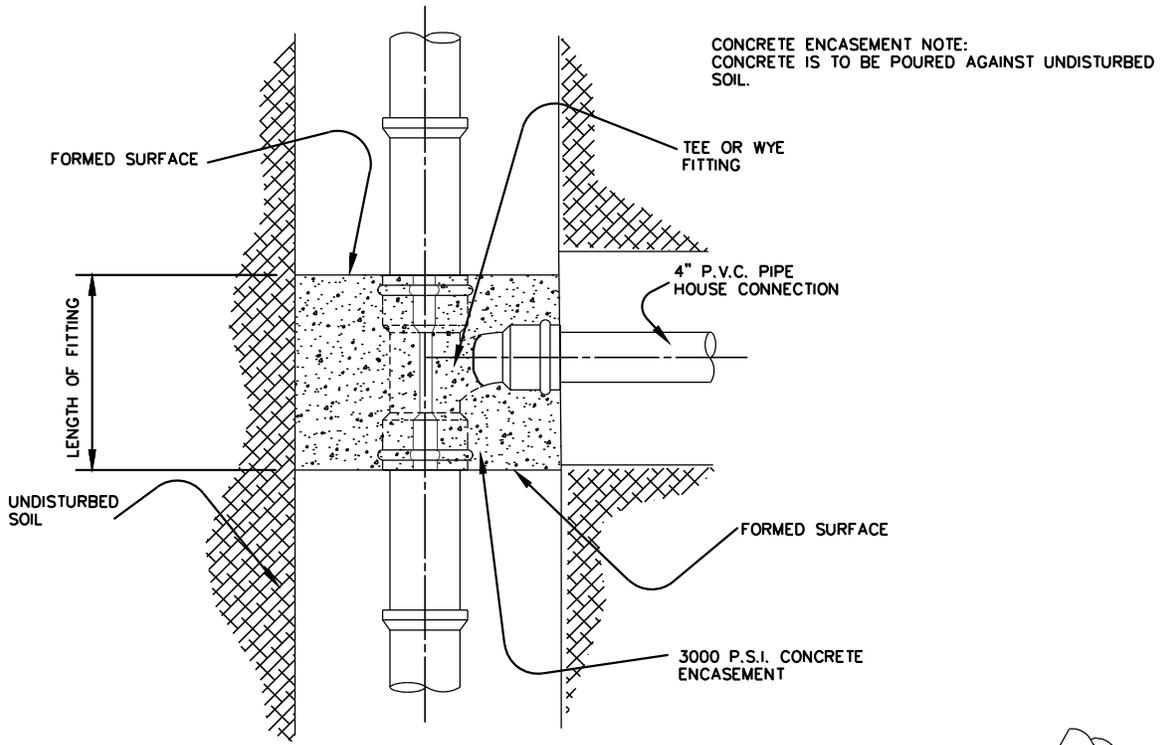
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2. FLOWLINE OF DROP SHALL BE LOCATED BETWEEN THE CENTERLINE AND TOP OF SEWER MAIN.
3. WHERE PIPES ENTER A MANHOLE THERE SHALL BE A MINIMUM OF TWO-TENTHS OF A FOOT (0.2') DROP BETWEEN INVERTS.
4. WHERE UNEQUAL PIPES ENTER A MANHOLE, THE CROWN OF THE PIPES SHALL BE SET AT THE SAME ELEVATION.
5. CONCRETE SHALL BE A MONOLITHIC POUR.

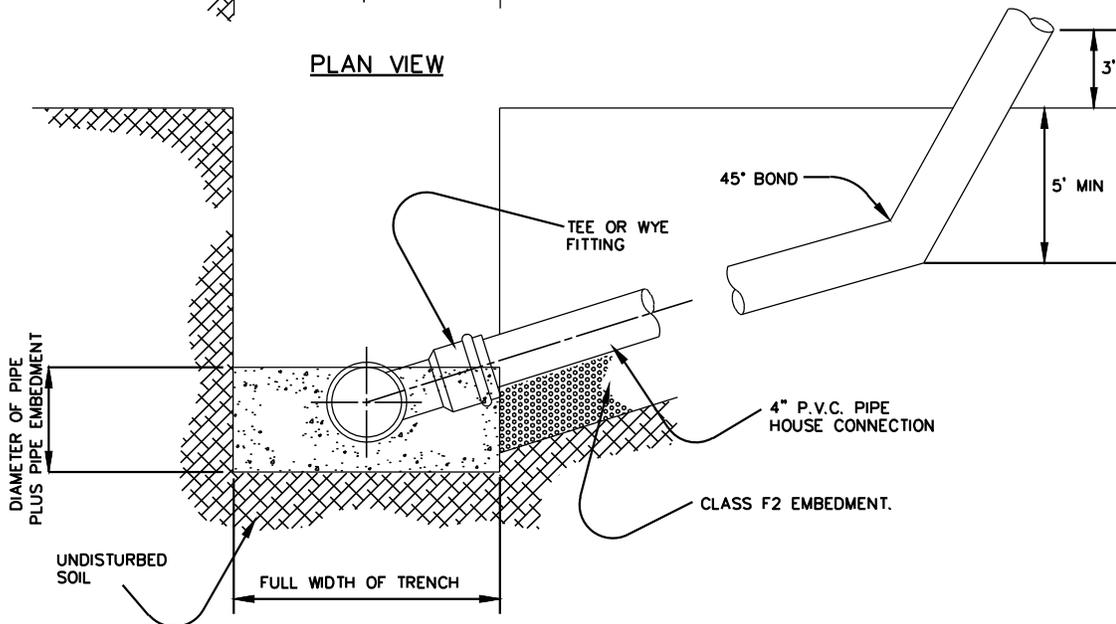
	<h2 style="margin: 0;">MANHOLE INSIDE DROP CONNECTION</h2>
	<h3 style="margin: 0;">TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</h3>
DATE: 08/07/07 DRAWN BY: HTW APPROVED BY: HTW	SHEET NO. : S07



 <h2 style="margin: 0;">MANHOLE ABANDONMENT</h2>	
<h3 style="margin: 0;">TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</h3>	
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<p>SHEET NO. : S08</p>	



PLAN VIEW

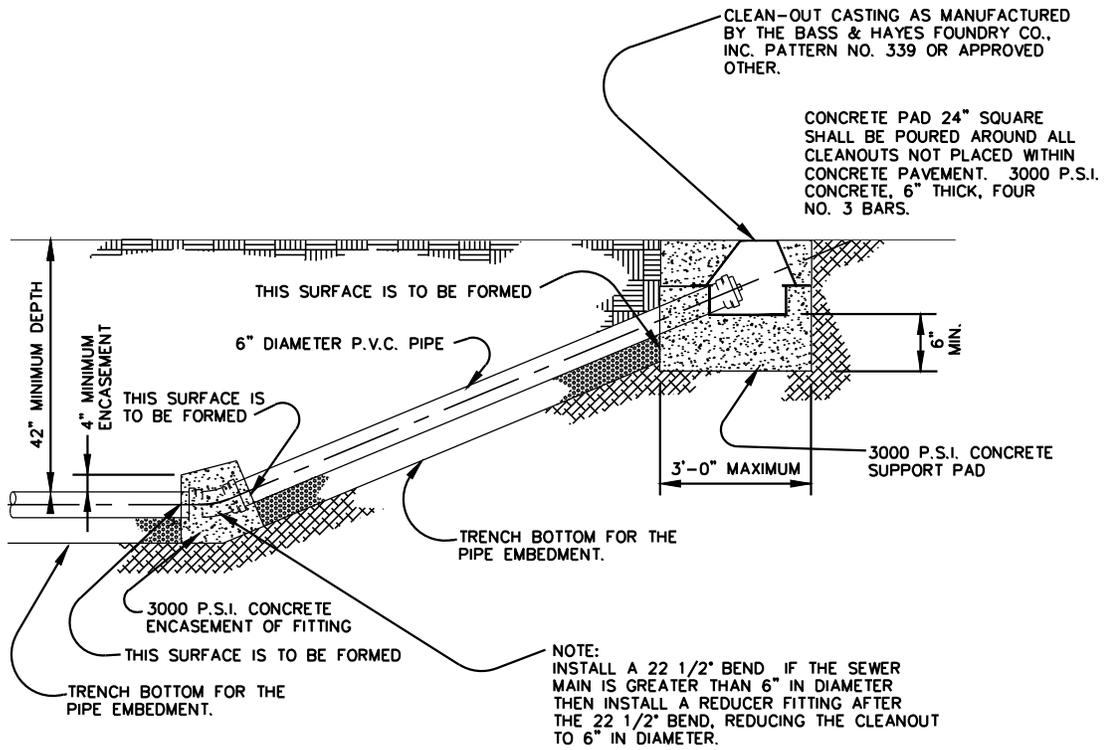


SECTION THRU TRENCH

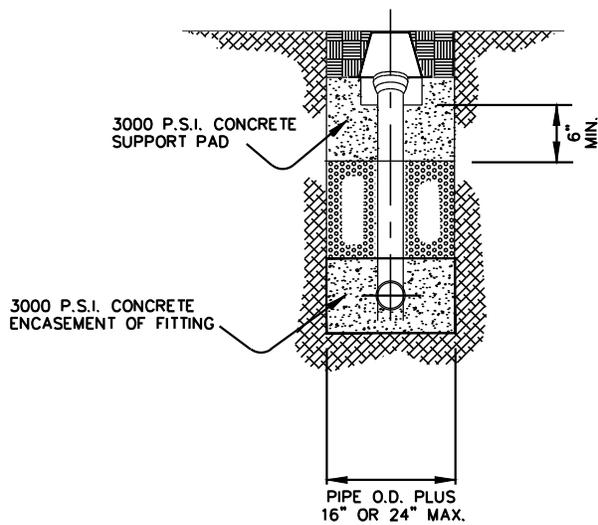
GENERAL NOTES:

1. SEWER SERVICE LATERAL IS TO BE:
 - A. POLY VINYL CHLORIDE (PVC)
 - B. TYPE SDR 35, GREEN IN COLOR
 - C. FITTINGS MAY BE GREEN OR WHITE IN COLOR.

<p>TOWN OF PROSPER</p>	<p>RESIDENTIAL SANITARY SERVICE CONNECTION</p>	
	<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p>	
	DATE: 08/07/07	<p>SHEET NO. : S09</p>
	DRAWN BY: ITW	
	APPROVED BY: ITW	

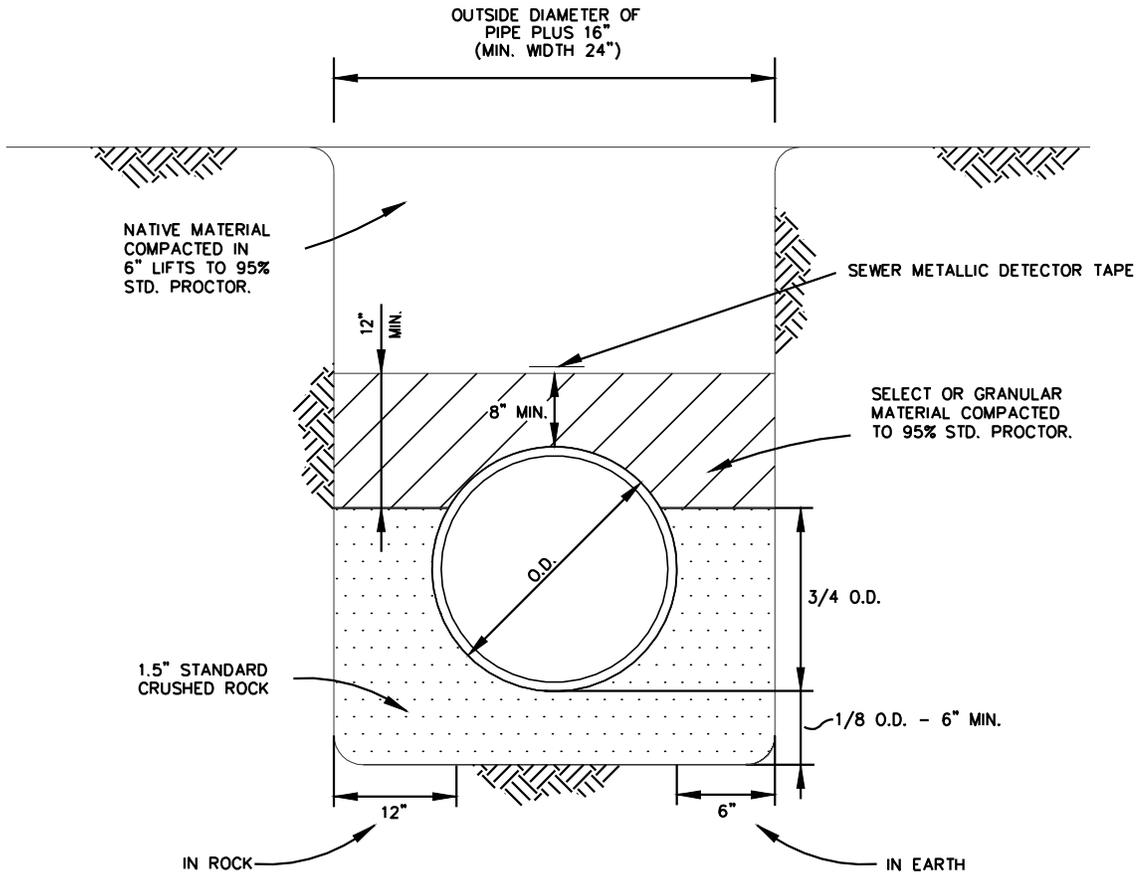


SECTIONAL ELEVATION



CROSS SECTION

	<h2>SANITARY SEWER MAIN CLEANOUT</h2>	
	<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p>	
	<p>DATE: 06/07/07</p>	
	<p>DRAWN BY: ITW</p>	
	<p>APPROVED BY: ITW</p>	
		<p>SHEET NO. : S10</p>



MIN. STD. P.V.C. SEWER
NTS



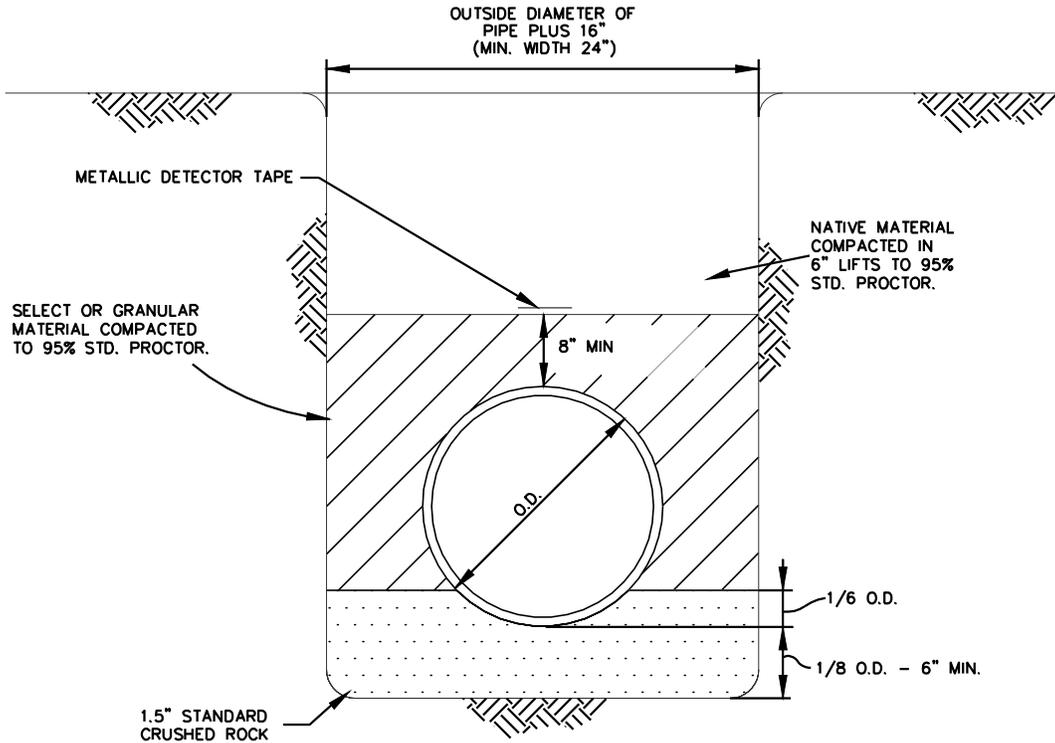
CLASS F2 EMBEDMENT



TOWN OF PROSPER, TEXAS
STANDARD CONSTRUCTION
DETAILS

DATE: 06/07/07
DRAWN BY: WLW
APPROVED BY: HTW

SHEET NO. : S11



MIN. STD. DUCTILE IRON SEWER
NTS



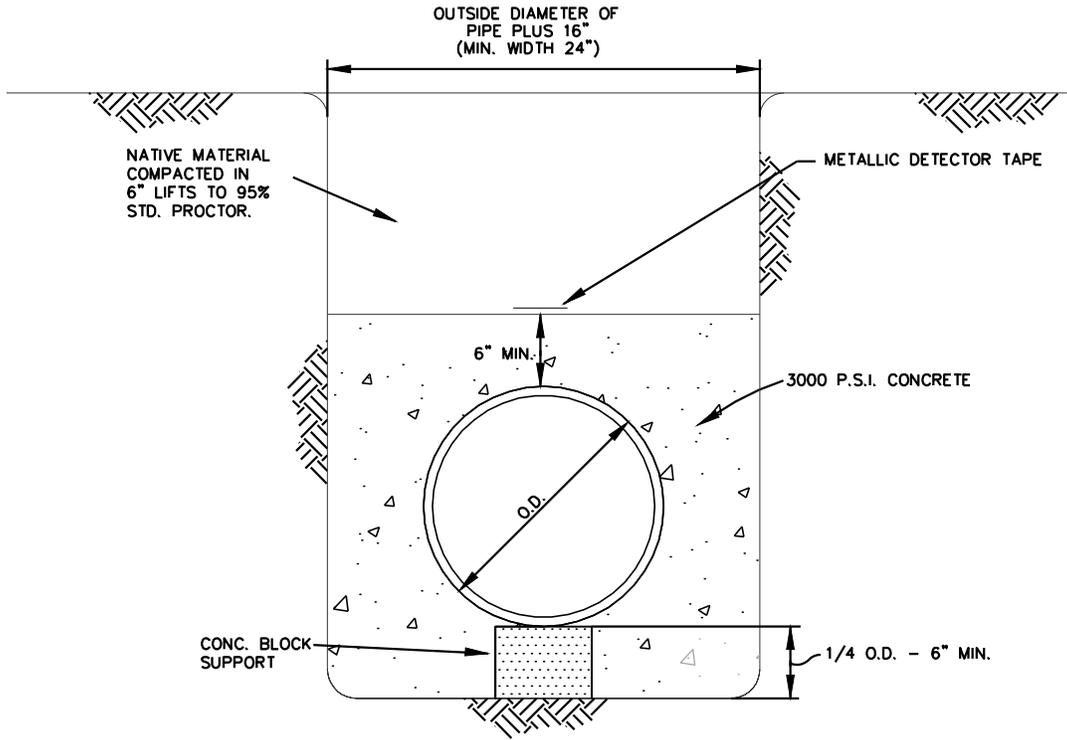
CLASS F3 EMBEDMENT



TOWN OF PROSPER, TEXAS
STANDARD CONSTRUCTION
DETAILS

DATE: 08/07/07
DRAWN BY: WLW
APPROVED BY: HTW

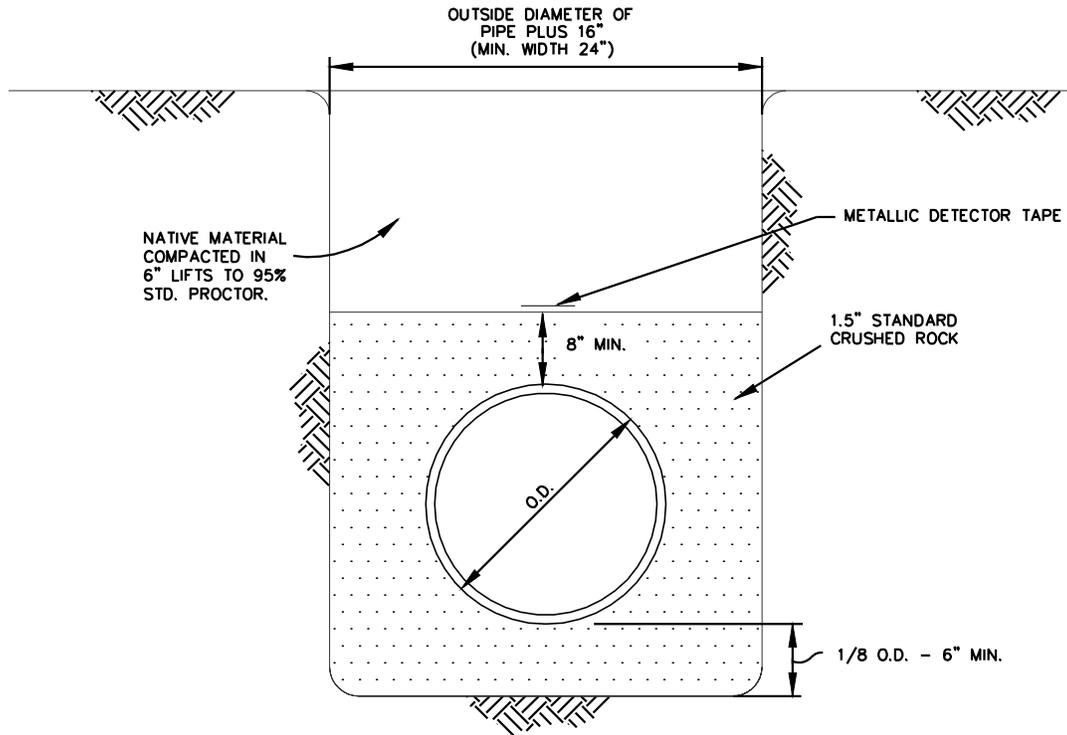
SHEET NO. : S12



CONCRETE ENCASEMENT

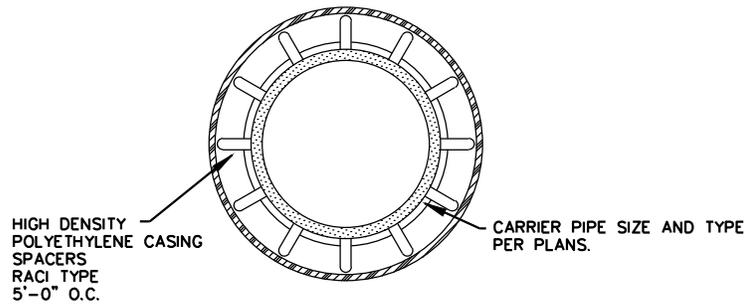
NTS

	<p>CLASS F4 EMBEDMENT</p>				
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DATE: 08/07/07	SHEET NO. : S13				
DRAWN BY: WLW					
APPROVED BY: HTW					



DEEP SDR 35 ENCASMENT
NTS

	<p>CLASS F5 EMBEDMENT</p>				
	<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p> <table border="1"> <tr> <td data-bbox="1015 1879 1161 1900">DATE: 08/07/07</td> <td data-bbox="1161 1879 1437 1921" rowspan="3">SHEET NO. : S14</td> </tr> <tr> <td data-bbox="1015 1900 1161 1921">DRAWN BY: WLW</td> </tr> <tr> <td data-bbox="1015 1921 1161 1932">APPROVED BY: HTW</td> </tr> </table>	DATE: 08/07/07	SHEET NO. : S14	DRAWN BY: WLW	APPROVED BY: HTW
DATE: 08/07/07	SHEET NO. : S14				
DRAWN BY: WLW					
APPROVED BY: HTW					

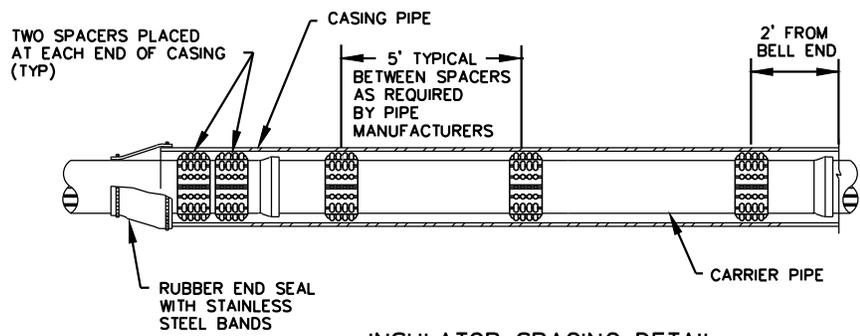


CASING SPACERS SHALL BE USED TO INSTALL CARRIER PIPE INSIDE THE ENCASEMENT PIPE. TO PROVIDE SUPPORT AROUND THE PERIPHERY OF THE PIPE SHOULD THE PIPE TWIST AS IT IS PUSHED THROUGH THE CASING, THE SPACERS SHALL BE OF A PROJECTION TYPE THAT HAS A MINIMUM NUMBER OF PROJECTIONS AROUND THE CIRCUMFERENCE TOTALLING THE NUMBER OF DIAMETER INCHES. FOR EXAMPLE, 8" PIPE SHALL HAVE A MINIMUM OF 8 PROJECTIONS AND 18" PIPE SHALL HAVE A MINIMUM NUMBER OF 18 PROJECTIONS.

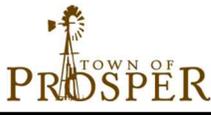
CASING SPACERS SHALL HAVE A MAXIMUM SPACING SPAN OF 5 FEET. THE SPAN BETWEEN SPACERS SHOULD RESULT IN CONSERVATIVE LONG TERM SAFETY FACTOR PROVIDED TOTAL LOAD PER SPACER DOES NOT EXCEED THE MAXIMUM LOAD FOR PIPE FULL OF LIQUID PER SPACER LISTED IN THE LITERATURE FOR CLASS SPACER USED. SPACERS SHALL HAVE A MINIMUM HEIGHT THAT CLEARS THE PIPE BELL OR AS OTHERWISE INDICATED ON PLANS. CASING SPACERS SHALL USE DOUBLE BACKED TAPE PROVIDED WITH THE SPACERS, TO FASTEN TIGHTLY ONTO THE CARRIER PIPE, SO THAT THE SPACERS DO NOT MOVE DURING INSTALLATION.

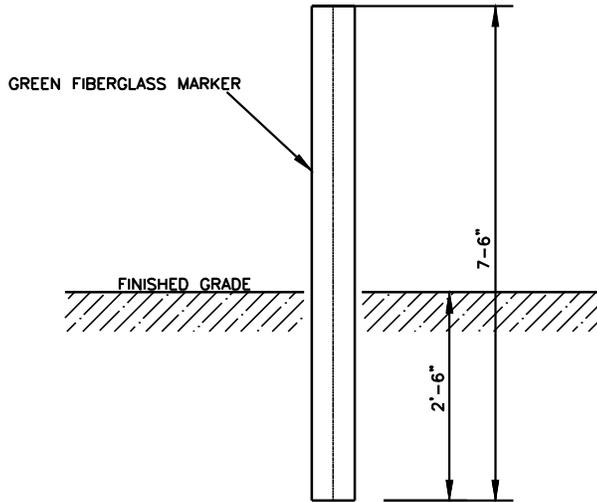
PIPE INSULATOR DETAIL
NTS

SPACERS SHALL BE RACI HIGH DENSITY POLYETHYLENE OR CITY APPROVED OTHER.

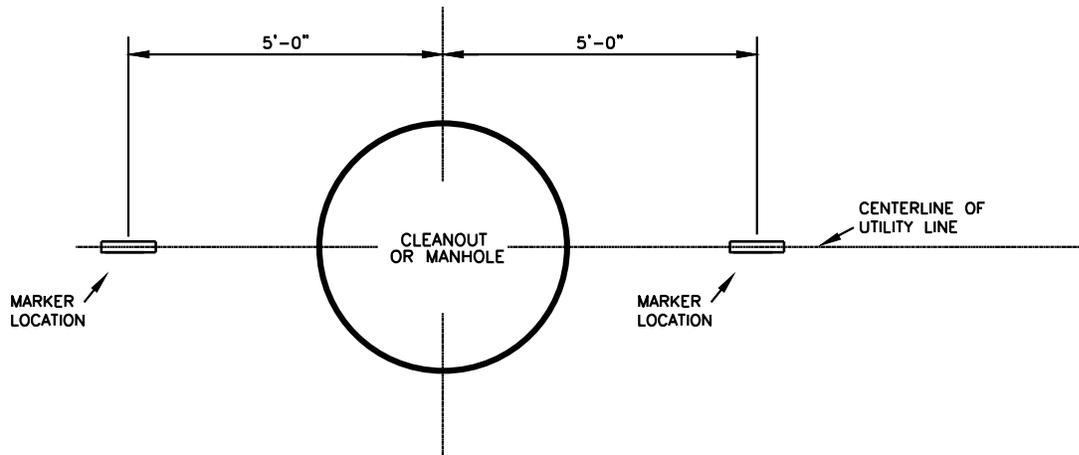


INSULATOR SPACING DETAIL
NTS

 <p>TOWN OF PROSPER</p>		<p>CASING</p>
		<p>TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS</p>
<p>DATE: 08/07/07 DRAWN BY: HTW APPROVED BY: HTW</p>		<p>SHEET NO. : S15</p>



ELEVATION



FIELD INSTALLATION DETAIL

GENERAL NOTES

1. ALL OFFSITE CITY OF FRISCO MAINS WITH CLEANOUTS AND MANHOLES SHALL BE MARKED AS DETAILED ON THIS SHEET.

	OFFSITE SANITARY SEWER MARKER	
	TOWN OF PROSPER, TEXAS STANDARD CONSTRUCTION DETAILS	
	DATE: 08/07/07	SHEET NO. : S16
	DRAWN BY: HTW	
	APPROVED BY: HTW	