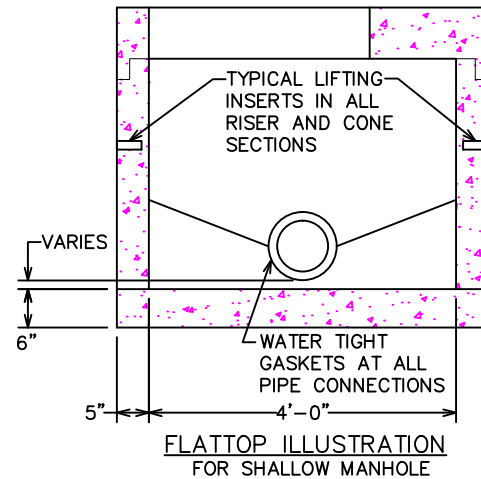
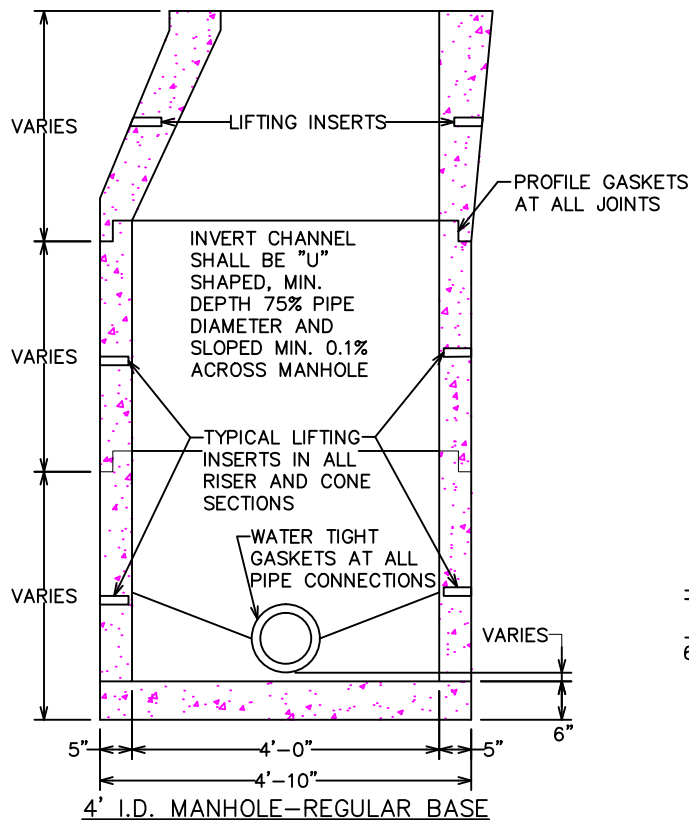


NOTES:

1. UNLESS OTHERWISE SPECIFIED, USE ECCENTRIC CONES AT ALL LOCATIONS
2. USE CONCENTRIC CONES ONLY AT CITY APPROVED LOCATIONS
3. REINFORCEMENT MEETS OR EXCEEDS ASTM C478-95 REQUIREMENTS
4. REQUIRED 28 DAY CONCRETE IS 4,000-4,500 PSI (WET CONCRETE)
5. MONOLITHIC MANHOLE TO BE DESIGNED BY PROFESSIONAL ENGINEER

SHEET 1 OF 1


<p>APPROVED BY: Anthony Daniel, P.E.</p> <p>DRAWN BY: Chris Paul</p>			<p style="text-align: center;">CITY OF TEMPLE ENGINEERING DEPARTMENT</p> <p>3219 E. Avenue H, Bldg. A</p> <p style="text-align: right;">TEMPLE, TX. 76801-8402</p>	
<p>DBAB APPROVED DATE: 8 September 2005</p> <p>FILE NAME: 4' I.D. MANHOLE CONE.dwg</p>		<p style="text-align: center;">MANHOLE CONE DETAIL</p>		<p>SCALE: 1"=10'</p>

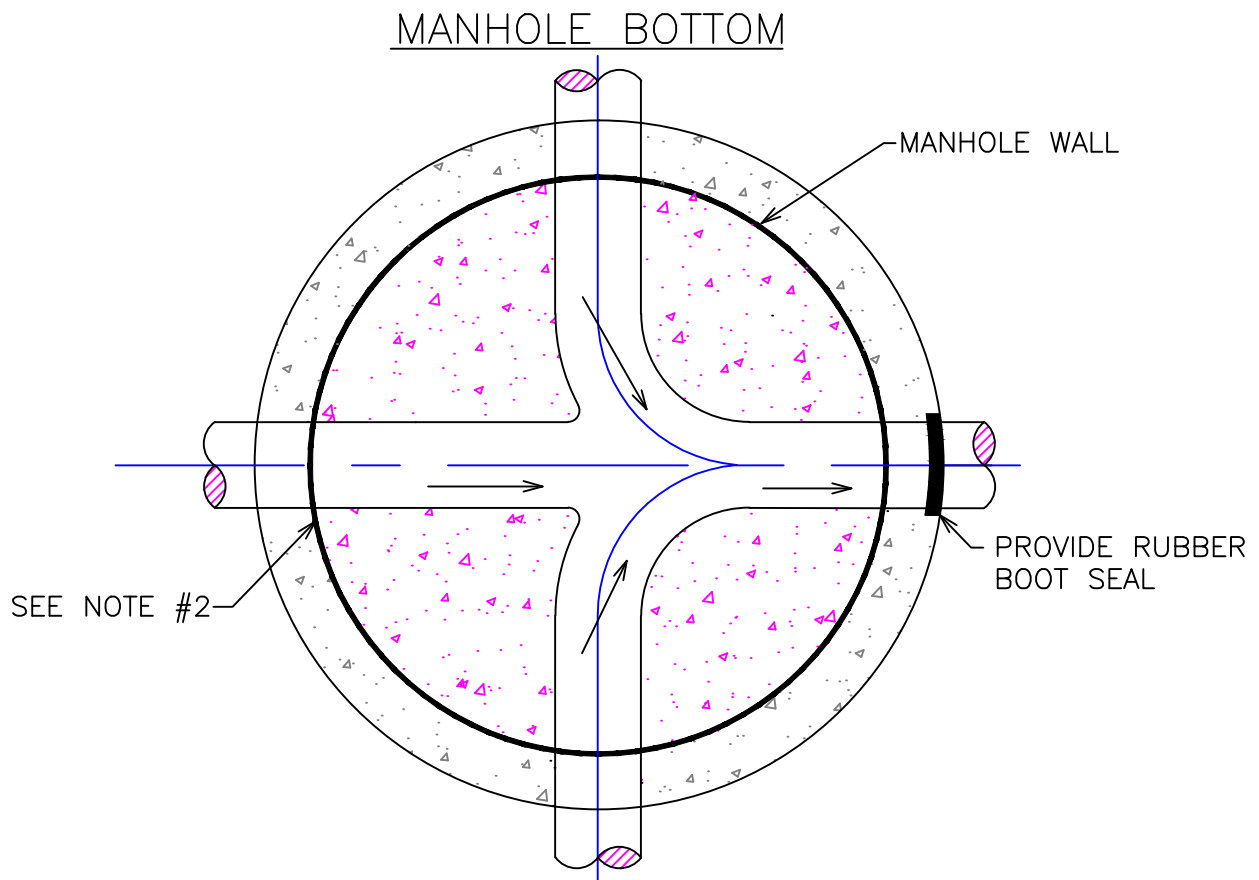


NOTE:

1. REINFORCEMENT MEETS OR EXCEEDS ASTM C478-95 REQUIREMENTS
2. REQUIRED 28 DAY CONCRETE STRENGTH RANGE IS 4,000 - 4,500 PSI (WET POURED CONCRETE)
3. ALL SEALS BETWEEN WASTEWATER LINES AND MANHOLES SHALL BE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTIONS ALLOWING FOR DIFFERENTIAL SETTLEMENT AND MEETING ASTM C923
4. ALL MANHOLE INVERTS SHALL:
 - A. BE PROVIDED WITH A "U" SHAPED CHANNEL WITH A MINIMUM OF 0.1 FT FALL ACROSS THE MANHOLE. PROVIDE AS MUCH AS POSSIBLE FALL FOR A SMOOTH CONTINUATION OF THE INLET AND OUTLET PIPES
 - B. ENSURE ALL BENCH PROVIDED ABOVE THE CHANNEL SHALL BE SLOPED AT A MINIMUM OF 1/2" PER FT TOWARDS THE FLOW LINE
5. WHEN EXISTING CONDITIONS REQUIRE AN EXTENDED CONCRETE BASE, REFER TO DESIGN ENGINEER

SHEET 1 OF 1


<div style="display: flex; align-items: center; justify-content: center;">  </div>		CITY OF TEMPLE ENGINEERING DEPARTMENT <small>3210 E. Avenue H, Bldg. A TEMPLE, TX. 76501-8402</small>	
APPROVED BY: Anthony Daniel, P.E.	DSAB APPROVED DATE: 8 September 2005	4'-0" MANHOLE REGULAR BASE DETAIL	<small>SCALE: 1"=30'</small>
DRAWN BY: Chris Peal	FILE NAME: 4'I.D.MANHOLE-REGULAR.dwg		



NOTE:

1. MANHOLE BOTTOM SHALL BE SHAPED WITH CONCRETE GROUT TO DRAIN TO CENTER, 1/2" PER FOOT MIN.
2. MIN. DROP OF 0.1ft ACROSS MANHOLE INVERT
3. INSTALL WATER TIGHT SEALS AT ALL PIPE PENETRATION THROUGH MANHOLE STRUCTURE
4. ALL SEALS BETWEEN WASTEWATER LINES AND MANHOLE SHALL BE WATER TIGHT, SIZE-ON-SIZE RESILIENT CONNECTIONS ALLOWING FOR DIFFERENTIAL SETTLEMENT AND MEETING ASTM C923.

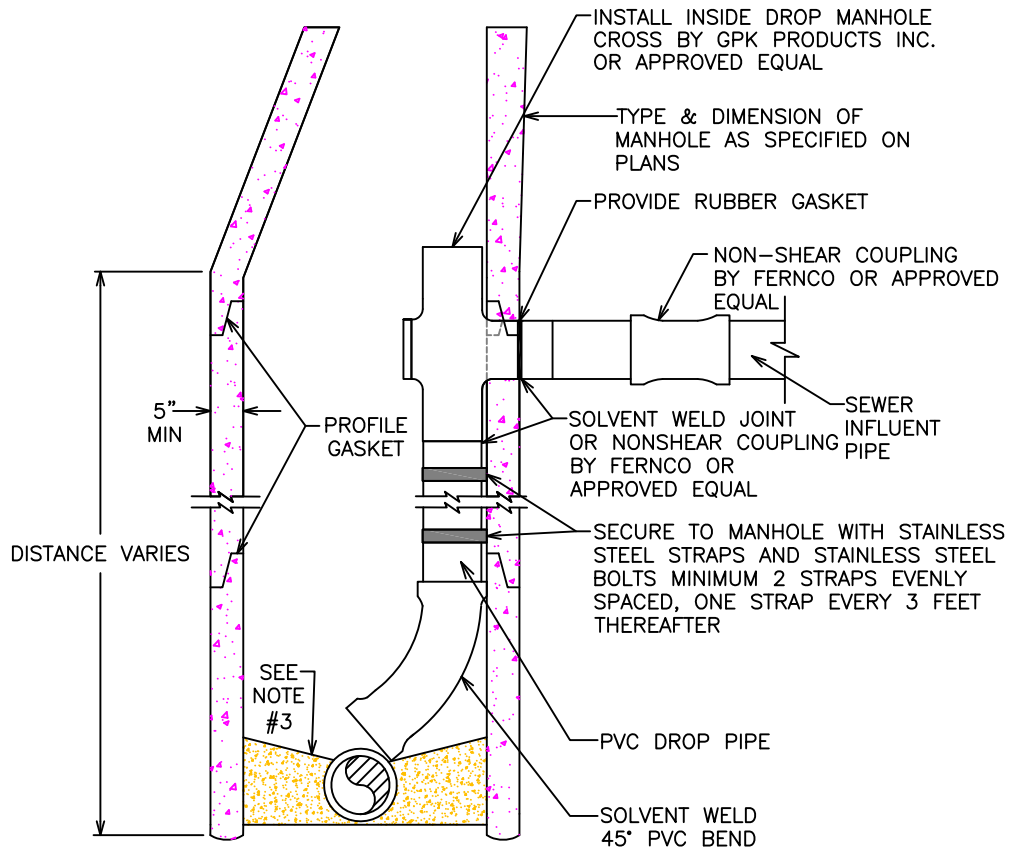
SHEET 1 OF 1

<div style="display: flex; justify-content: space-between;"> <div> <p>APPROVED BY: Anthony Daniel, P.E.</p> <p>DRAWN BY: Chris Peal</p> </div> <div> <p>DSAB APPROVED DATE: 10 MARCH 2011</p> <p>FILE NAME: MANHOLE BOTTOM DETAILS</p> </div> </div>		 <p>CITY OF TEMPLE ENGINEERING DEPARTMENT</p> <p>3210 E. Avenue H, Bldg. A</p> <p>MANHOLE BOTTOM DETAILS</p>	

TEMPLE, TX. 76501-9402

SCALE:
N.T.S.

DROP MANHOLE

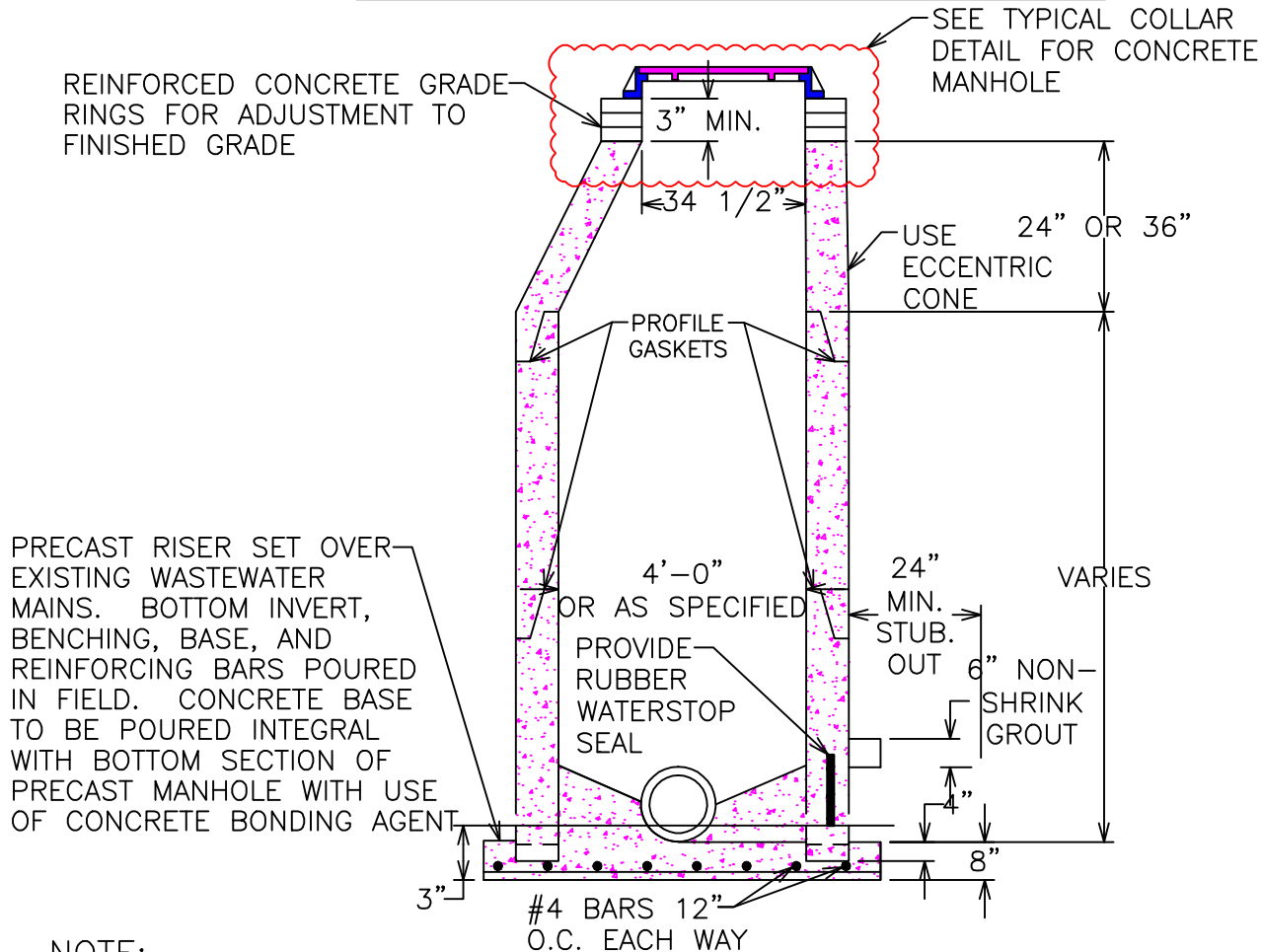


FOR 6" TO 10" DIA. INFLUENT PIPE

NOTE:

1. USE PVC CROSS FOR DROP CONNECTION
2. IF A PRE-CAST SECTION IS INSTALLED TO FORM THE BOTTOM BASE, INSTALL WATER TIGHT SEALS AT ALL PIPE PENETRATIONS THROUGH MANHOLE STRUCTURE
3. ALL SEALS BETWEEN SEWER LINES AND MANHOLES SHALL BE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTIONS ALLOWING FOR DIFFERENTIAL SETTLEMENT AND MEETING ASTM C923
4. TRIM PVC CROSS FOR EASE OF MAINTENANCE
5. A DROP MANHOLE IS REQUIRED WHEN THE INFLUENT FLOWLINE IS MORE THAN 24" HIGHER THAN THE FLOWLINE OUT
6. ALL FITTINGS INSIDE MANHOLE SHALL BE SDR 35 SOLVENT WELD
7. ALL PIPE INSIDE MANHOLE FOR DROP CONNECTION SHALL MATCH THE PIPE INSTALLED FOR THE MAIN OUTSIDE OF MANHOLE.
8. 12 INCH DIAMETER AND LARGER TO BE DESIGNED BY ENGINEER

PRECAST CONCRETE MANHOLE OVER AN EXISTING SEWER LINE



NOTE:

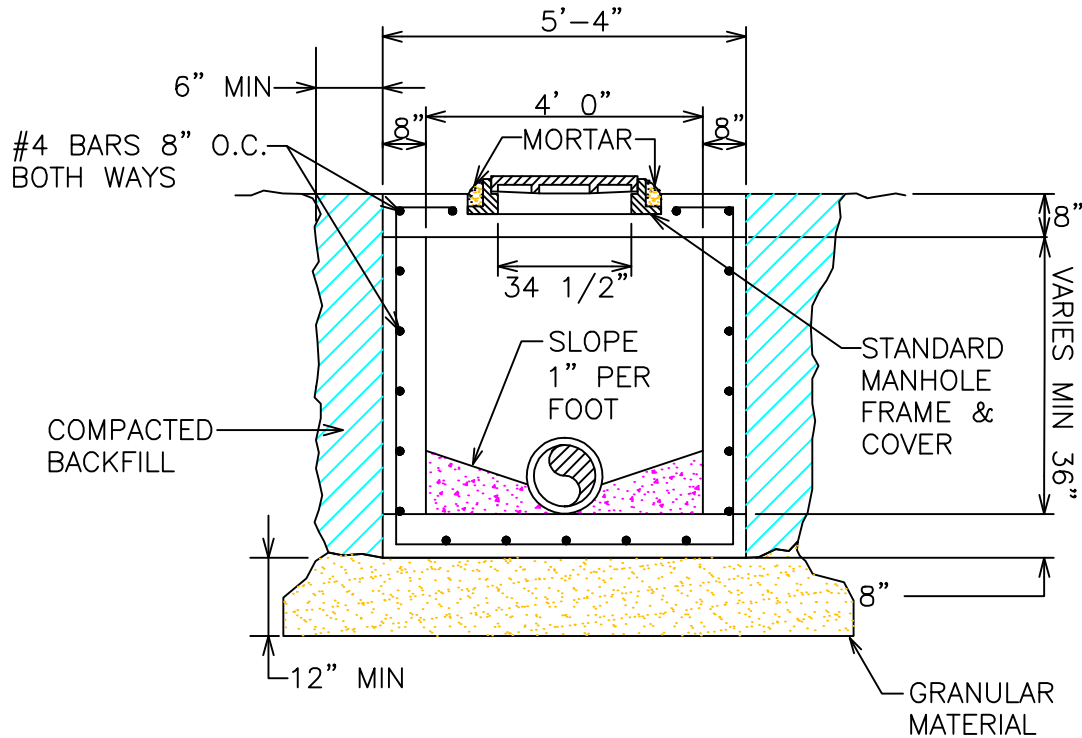
1. IF A PRE-CAST SECTION IS INSTALLED TO FORM THE BOTTOM BASE, INSTALL WATER TIGHT SEALS AT ALL PIPE PENETRATIONS THROUGH MANHOLE STRUCTURE.
2. ALL SEALS BETWEEN SEWER LINES AND MANHOLES SHALL BE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTIONS ALLOWING FOR DIFFERENTIAL SETTLEMENT AND MEETING ASTM C923.
3. USE CONCRETE BONDING AGENT WHEN POURING BASE ON PRE-CAST "DOG HOUSE" MANHOLE.
4. ALL MANHOLES WILL HAVE ECCENTRIC CONES WITH 32" DIA. LIDS.

(TYPE 3 - PRECAST CONCRETE CONE)
TONGUE & GROOVE JOINTS ASTM C478 OR
MONOLITHIC PRECAST

SHEET 1 OF 1

			CITY OF TEMPLE ENGINEERING DEPARTMENT	
			3210 E. Avenue H, Bldg. A TEMPLE, TX. 76801-8402	
APPROVED BY: Anthony Daniel, P.E.	DEAB APPROVED DATE: 8 September 2005		PRE-CAST MANHOLE DETAIL	
DRAWN BY: Chris Paul	FILE NAME: PRECAST CONCRETE MANHOLE			


TYPICAL SECTION OF SHALLOW MANHOLE

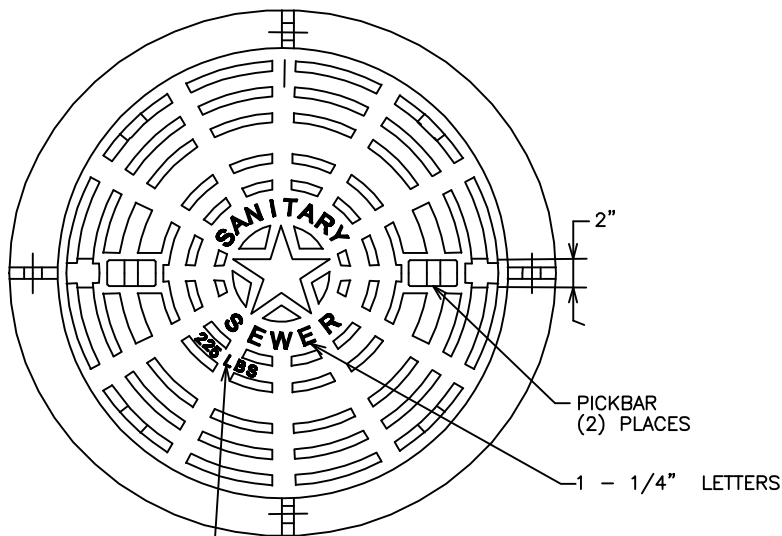


NOTE:

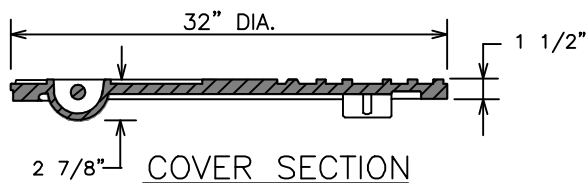
1. INVERT CHANNEL SHALL BE "U" SHAPED. MINIMUM DEPTH 75% OF PIPE DIAMETER AND SLOPED MINIMUM OF 0.1' ACROSS MANHOLE
2. MANHOLE SHALL BE MINIMUM DEPTH UNLESS OTHERWISE SPECIFIED BY A REGISTERED PROFESSIONAL ENGINEER
3. CONCRETE SHALL HAVE MINIMUM 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS
4. WASTEWATER LINES LESS THAN OR EQUAL TO 24" DIAMETER – USE 4' I.D. MANHOLE
WASTEWATER LINES GREATER THAN 24" – REFER TO DESIGN ENGINEER

SHEET 1 OF 1

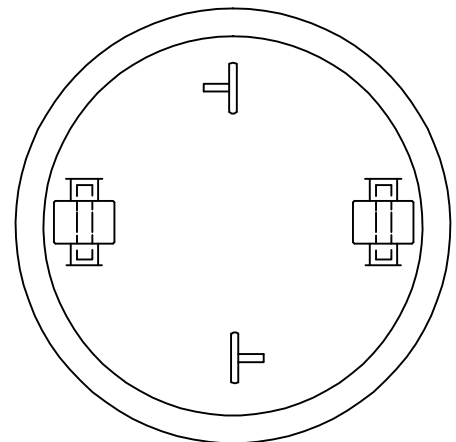
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>City of Temple</p> </div> <div style="text-align: center;"> <p>CITY OF TEMPLE ENGINEERING DEPARTMENT</p> <p><small>3210 E. Avenue H, Bldg. A</small></p> </div> </div>		<p>SHALLOW MANHOLE DETAIL</p>	
<p><small>APPROVED BY: Anthony Daniel, P.E.</small></p> <p><small>DRAWN BY: Chris Paul</small></p>	<p><small>DESIGN APPROVED DATE: 8 September 2006</small></p> <p><small>FILE NAME: SHALLOW MANHOLE.dwg</small></p>	<p><small>TEMPLE, TX. 76801-6402</small></p> <p><small>SCALE: N.T.S.</small></p>	



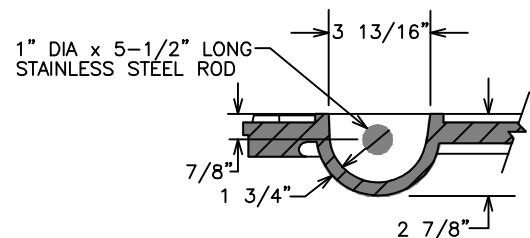
3/4" (19mm) LETTERS



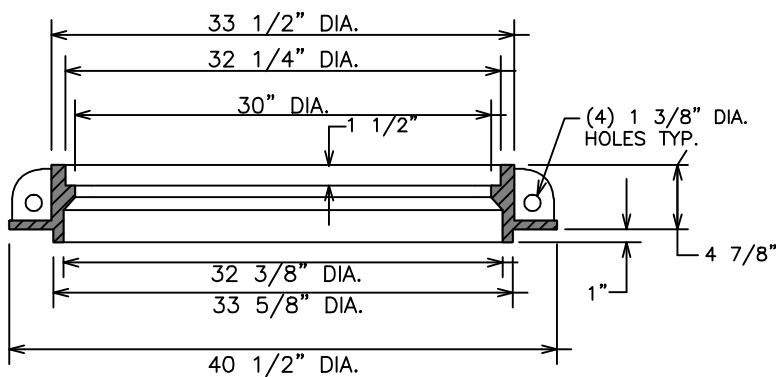
COVER SECTION



BOTTOM VIEW



PICKBAR DETAIL



FRAME SECTION

NOTES:

1. LOAD RATING - HEAVY DUTY
2. MATERIAL AND ESTIMATED WEIGHT:
COVER - DUCTILE IRON, ASTM A48 CL35 - 225 LBS.
FRAME - GREY IRON, ASTM A48 CL35 - 225 LBS.
3. SEE GENERAL SEWER NOTES

SHEET 1 OF 1

APPROVED BY: Anthony Daniel, P.E.

DRAWN BY: Chris Paul

DESIGN APPROVED DATE 8 September 2005

FILE NAME: STANDARD DUCTILE IRON
MANHOLE FRAME & COVER.dwg



CITY OF TEMPLE
ENGINEERING DEPARTMENT

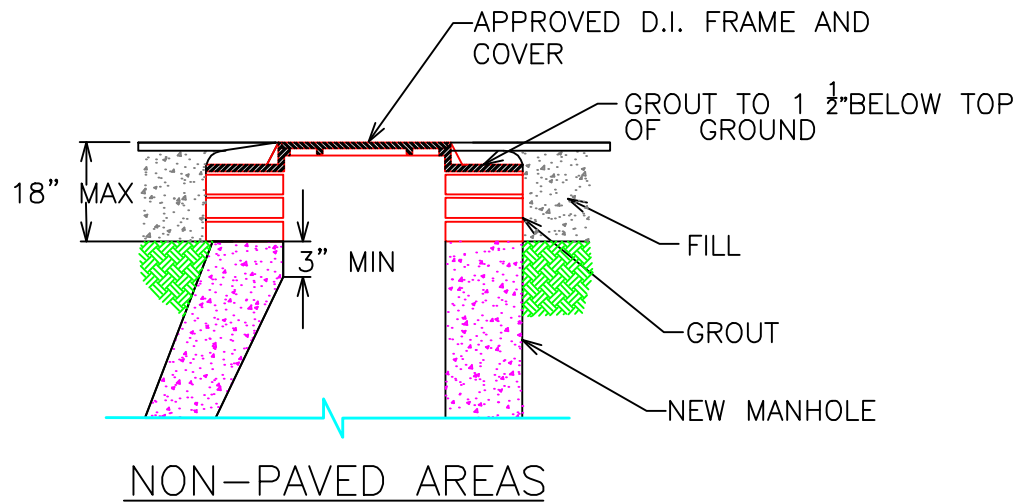
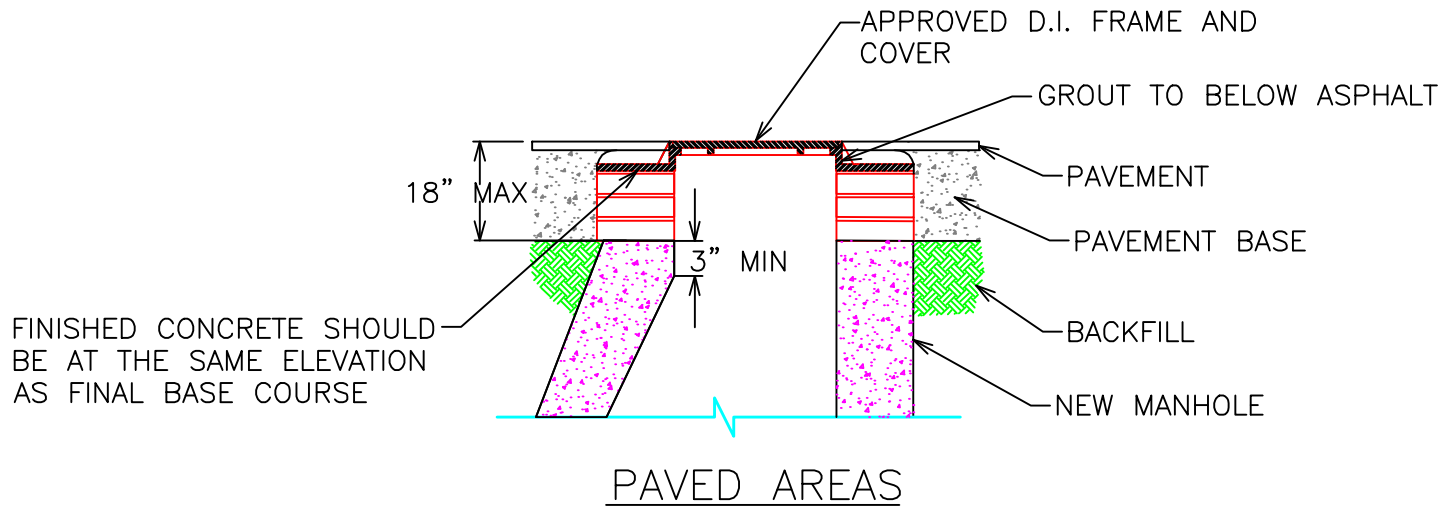
3210 E. Avenue H, Bldg. A

TEMPLE, TX 76801-0402

D.I. MANHOLE FRAME & COVER DETAIL

SCALE:
N.T.S.


TYPICAL COLLAR DETAIL FOR CONCRETE MANHOLE

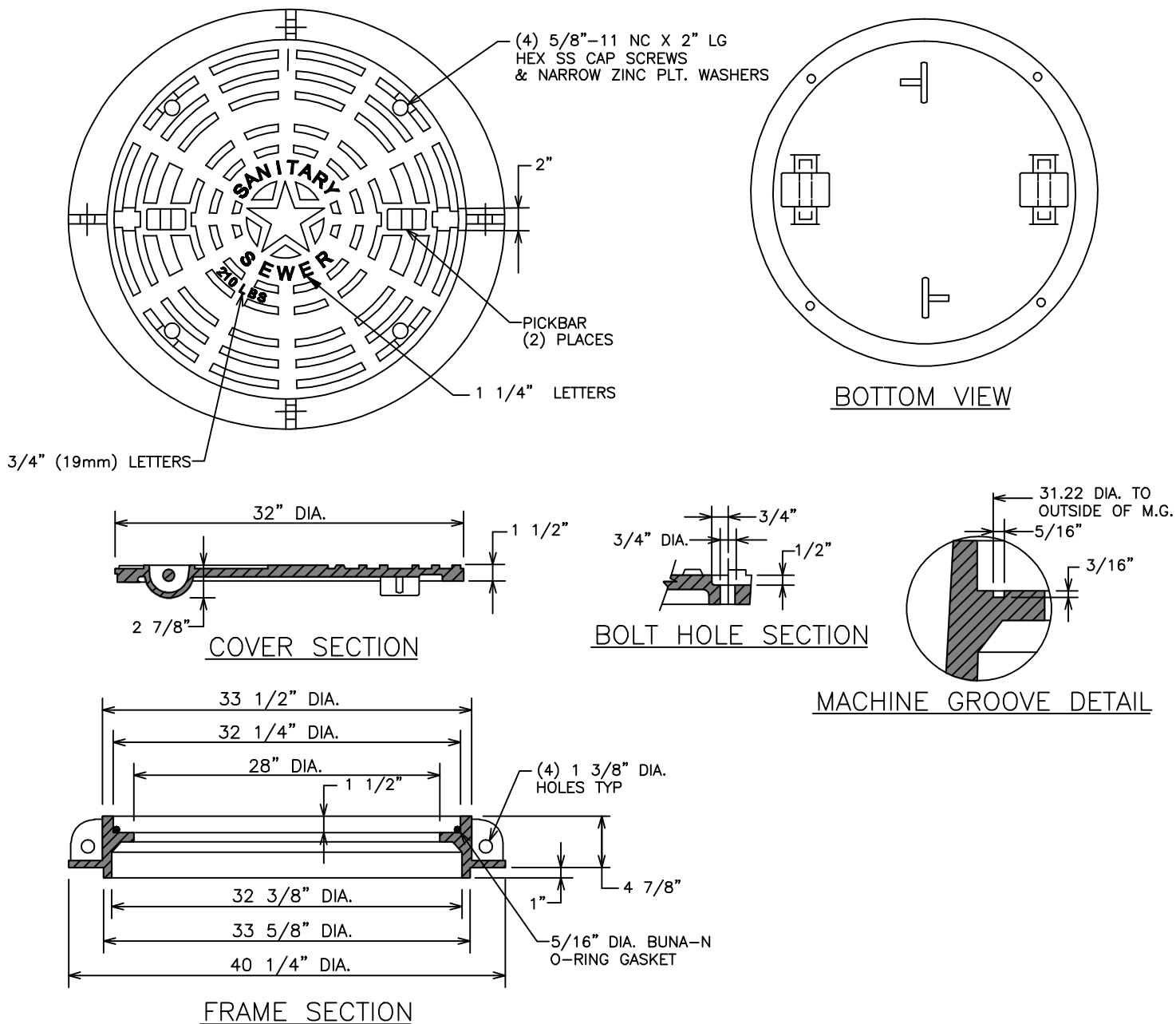


NOTE:

1. USE REINFORCED CONCRETE GRADE RINGS WITH GROUT TO ACHIEVE SPECIFIED ELEVATION AS REQUIRED

SHEET 1 OF 1

<p>APPROVED BY: Anthony Daniel, P.E.</p> <p>DRAWN BY: Chris Paul</p>			<p style="text-align: center;">CITY OF TEMPLE ENGINEERING DEPARTMENT</p> <p>3210 E. Avenue H, Bldg. A TEMPLE, TX 76701-8402</p>	
<p>DBAB APPROVED DATE: 8 September 2005</p> <p>FILE NAME: TYPICAL COLLAR DETAIL FOR CONCRETE MANHOLE.dwg</p>		<p>COLLAR DETAIL FOR CONCRETE MANHOLE</p>		<p>SCALE: N.T.S.</p>



NOTES:

1. LOAD RATING - HEAVY DUTY
2. MATERIAL AND ESTIMATED WEIGHT:
COVER - DUCTILE IRON, ASTM A48 CL35 - 210 LBS.
FRAME - DUCTILE IRON, ASTM A48 CL35 - 265 LBS.
3. WHEN BUILDING WITHIN A FLOOD PLAIN, WATER TIGHT MANHOLES
WITH BOLTED AND GASKETED RING AND COVERS ARE REQUIRED.

SHEET 1 OF 1

APPROVED BY: Anthony Daniel, P.E.

DRAWN BY: Chris Paul

DBAS APPROVED DATE: 8 September 2005

FILE NAME: WATER TIGHT DUCTILE IRON
MANHOLE FRAME & COVER.dwg



**CITY OF TEMPLE
ENGINEERING DEPARTMENT**

3210 E. Avenue H, Bldg. A

TEMPLE, TX 76801-8402

**WATER TIGHT DUCTILE IRON MANHOLE
FRAME AND COVER DETAIL**

SCALE:
N.T.S.