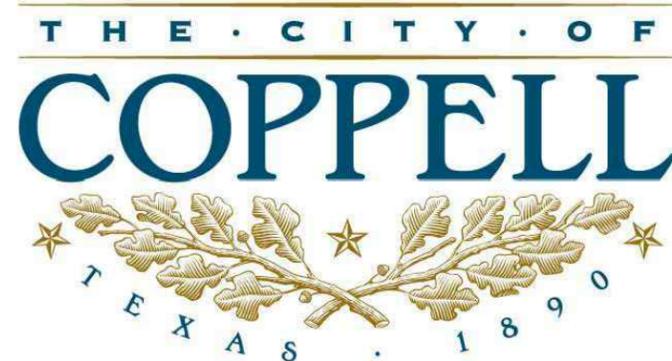


# **CITY OF COPPELL**

**DALLAS / DENTON COUNTY, TEXAS**



## **STANDARD CONSTRUCTION DETAILS**

**REVISED JULY 01, 2014**

**CITY OF COPPELL ORDINANCE # 2006-1129**

## GENERAL NOTES

1. THESE STANDARD CONSTRUCTION DETAIL DRAWINGS ARE BASED ON THE STANDARD DRAWINGS PUBLISHED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) IN 1996. IN ADDITION TO NUMEROUS LOCAL EXCEPTIONS, MANY DETAILS IN THIS SET ARE UNIQUE TO THE CITY OF COPPELL. THESE STANDARD CONSTRUCTION DETAIL DRAWINGS SUPERSEDE ALL OTHER VERSIONS OF NCTCOG AND CITY OF COPPELL STANDARD CONSTRUCTION DETAILS. THE CITY OF COPPELL RESERVES THE RIGHT TO UPDATE, MODIFY OR SUPERSEDE THESE STANDARD CONSTRUCTION DETAIL DRAWINGS WITHOUT NOTICE. THE CITY OF COPPELL RESERVES THE RIGHT TO REQUIRE METHODS AND MATERIALS CONTRADICTORY TO THOSE SHOWN IN THESE DETAILS ON A CASE BY CASE BASIS.
2. THE CITY OF COPPELL HAS ADOPTED THE "Standard Specifications for Public Works Construction", 4TH EDITION, AS ITS BASIC CONSTRUCTION SPECIFICATIONS. THIS DOCUMENT IS AVAILABLE FOR PURCHASE FROM THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG), 616 SIX FLAGS DR., SUITE 200, P.O. BOX 5888, ARLINGTON TEXAS 76005-5888, PH. 817/640-3300, nctcog.org. THE CITY OF COPPELL RESERVES THE RIGHT TO MAKE LOCAL EXCEPTIONS TO ANY STANDARD SPECIFICATION.
3. WHERE THE STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS DO NOT ADDRESS A SPECIFIC ITEM ADEQUATELY, REFER TO THE APPROPRIATE STANDARDS PUBLISHED BY THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT), THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (T.M.U.T.C.D.), TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (T.C.E.Q.), TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (T.P.D.E.S.) GENERAL PERMIT, AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O.), ASTM International AND THE ENVIRONMENTAL PROTECTION AGENCY (E.P.A).
4. LOCAL, STATE AND FEDERAL ORDINANCES WHICH REGULATE DEVELOPMENT IN THE CITY OF COPPELL ARE:
  - a. CITY OF COPPELL SUBDIVISION ORDINANCE.
  - b. CITY OF COPPELL FLOODPLAIN ORDINANCE.
  - c. CITY OF COPPELL IMPACT FEE ORDINANCE.
  - d. CITY OF COPPELL EROSION CONTROL ORDINANCE.
  - e. CITY OF COPPELL ZONING ORDINANCE.
  - f. CITY OF COPPELL RIGHT-OF-WAY MANAGEMENT ORDINANCE.
  - g. CITY OF COPPELL TREE ORDINANCE
  - h. CITY OF COPPELL NOISE ORDINANCE
  - i. CITY OF COPPELL CITY-WIDE STORM WATER MANAGEMENT STUDY
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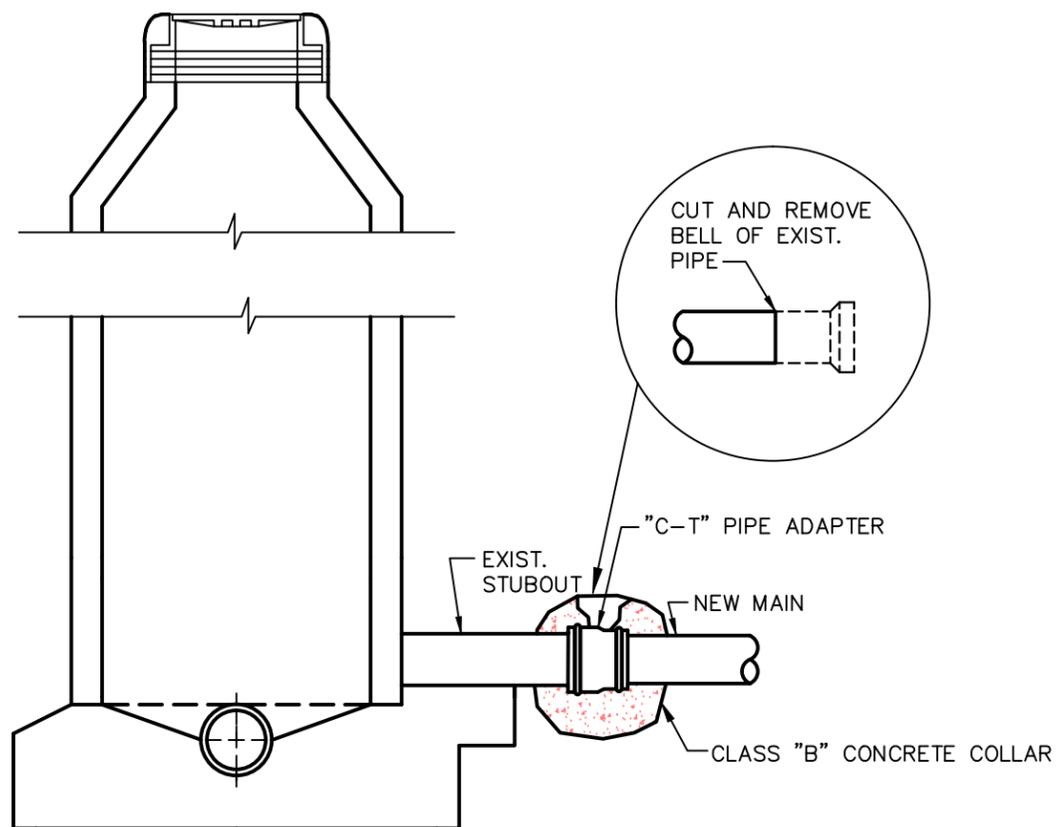
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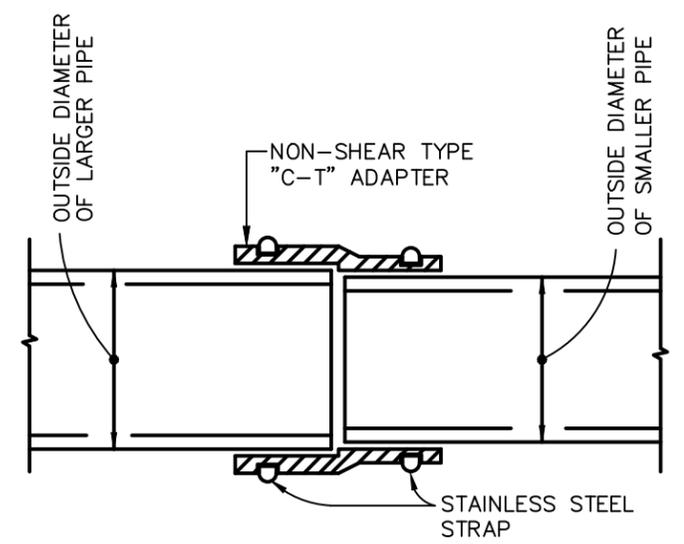
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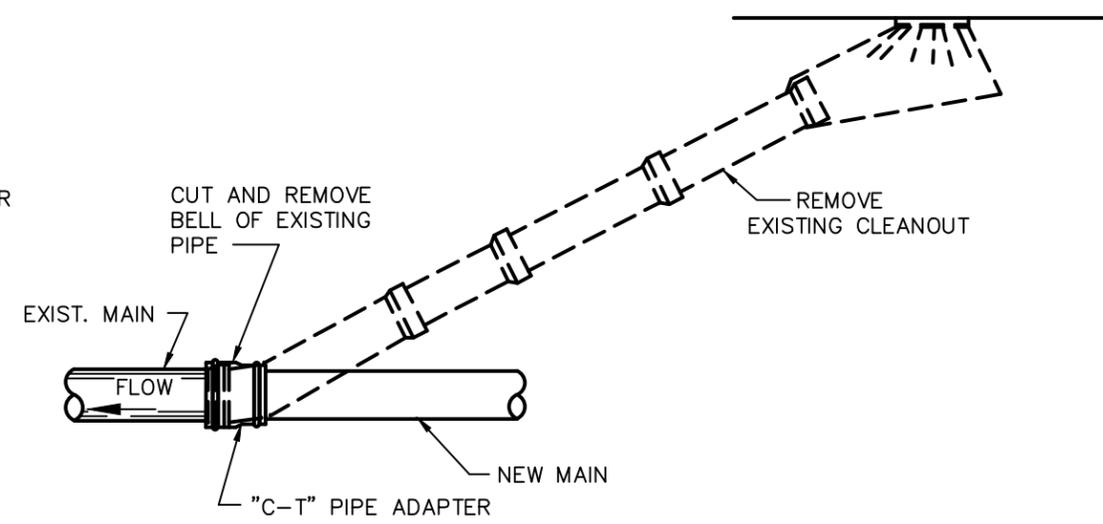
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AT STUBOUT  
N.T.S.



"C-T" PIPE ADAPTER  
N.T.S.



AT CLEANOUT  
N.T.S.

**NOTE:**  
THIS DETAIL FOR USE ONLY WHEN NEW MAIN WILL NOT MATE WITH EXISTING MAIN JOINT DUE TO DIFFERENT DIMENSIONS OR MATERIALS AND A MANHOLE IS NOT REQUIRED.

North Central Texas Council of Governments  
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

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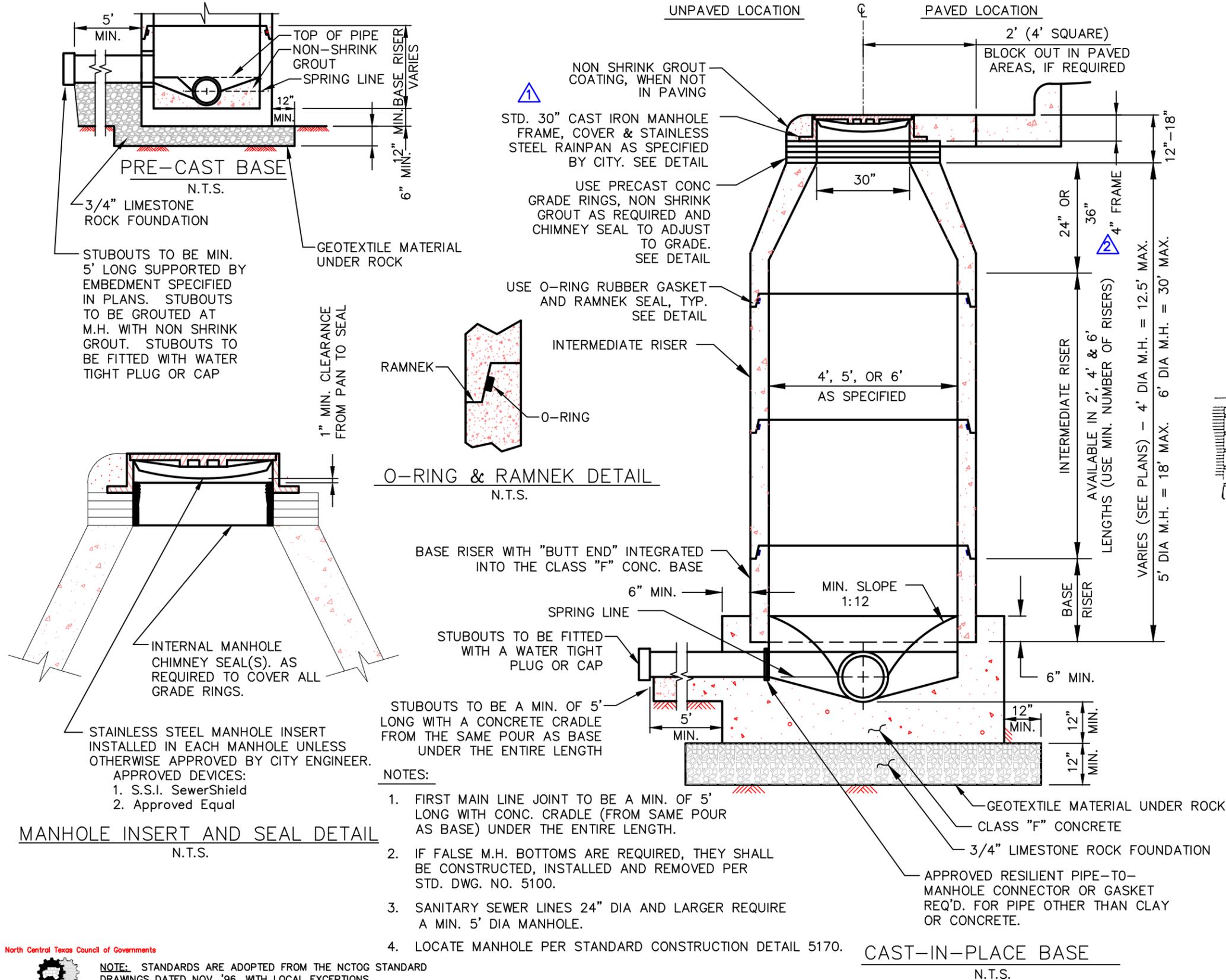
NO.	LOCAL EXCEPTION	BY	DATE



**STANDARD CONSTRUCTION DETAILS**  
SANITARY SEWER  
MAIN TIE-IN AT CLEANOUT OR STUBOUT  
CITY OF COPPELL DALLAS COUNTY, TEXAS

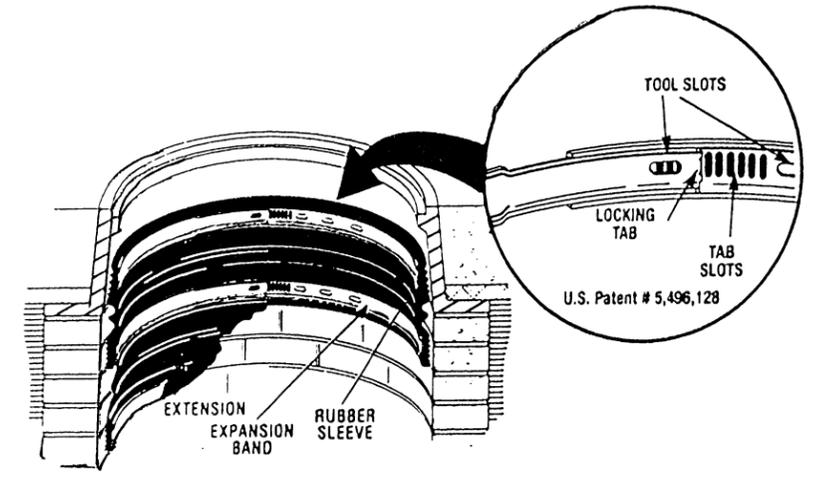
STD. SPEC. REFERENCE  
501., 502., 702.  
STANDARD DETAIL  
**5010**

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**INTERNAL MANHOLE CHIMNEY SEAL**  
REQUIRED METHOD

**COMPRESSION BAND**  
One piece uneven-legged channeled compression band, fabricated from corrosion resistant 16 ga. stainless steel conforming to ASTM A-240 (AISI type 304). The band shall compress the rubber sleeve against the inside surface of the manhole frame and chimney and allow a minimum range of adjustment of 2" on the diameter.

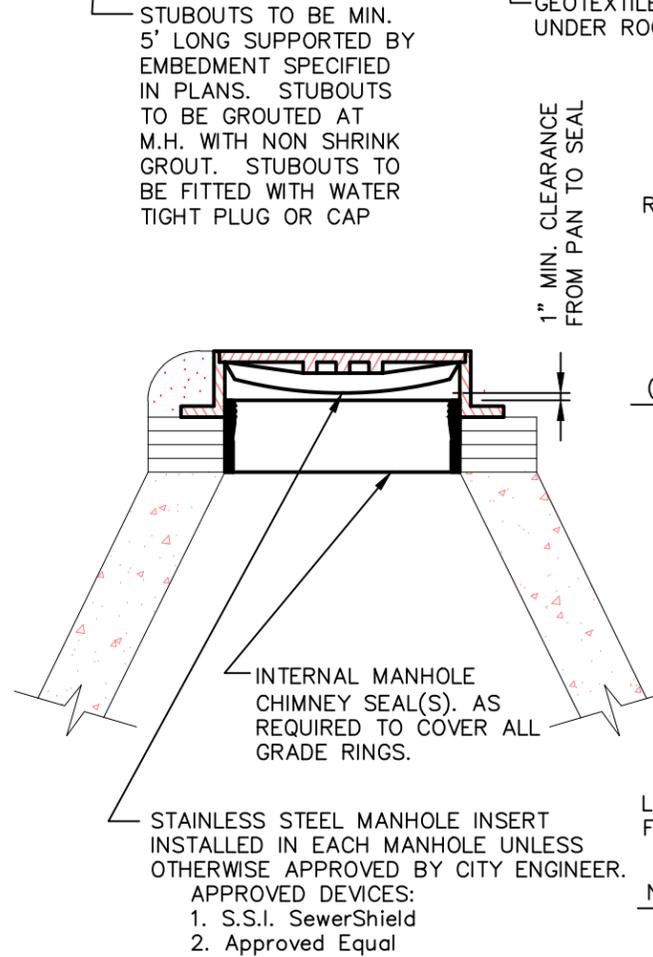


**RUBBER SLEEVE**  
The rubber chimney seal sleeve shall be furnished in either 8-1/4" or 10" width to suit manhole conditions. Extension sleeves shall be used as required. Material physical characteristics shall conform to ASTM C-923, as modified, with a minimum thickness of 3/16".

**EXTERNAL MANHOLE CHIMNEY SEAL**  
USE ONLY WITH CITY APPROVAL

**PHYSICAL PROPERTIES:**  
Tensile Strength.....1200 psi  
Elongation at Break.....350% minimum  
Hardness (Durometer).....45 ± 5  
Accelerated Oven Aging.....Max. 15% decrease of tensile, 20% of elongation  
Chemical Resistance.....No weight loss in 1M of sulphuric acid  
Compression Set.....25% max. decrease  
Water Absorption.....Max. 10% increase by weight  
Ozone Resistance.....Rating 0  
Low Temperature Brittle Point..No fracture at -40°C  
Tear Resistance.....200 lb. f/in.  
Splice Strength.....180 bend with no visible separation

**MANHOLE INSERT AND SEAL DETAIL**  
N.T.S.



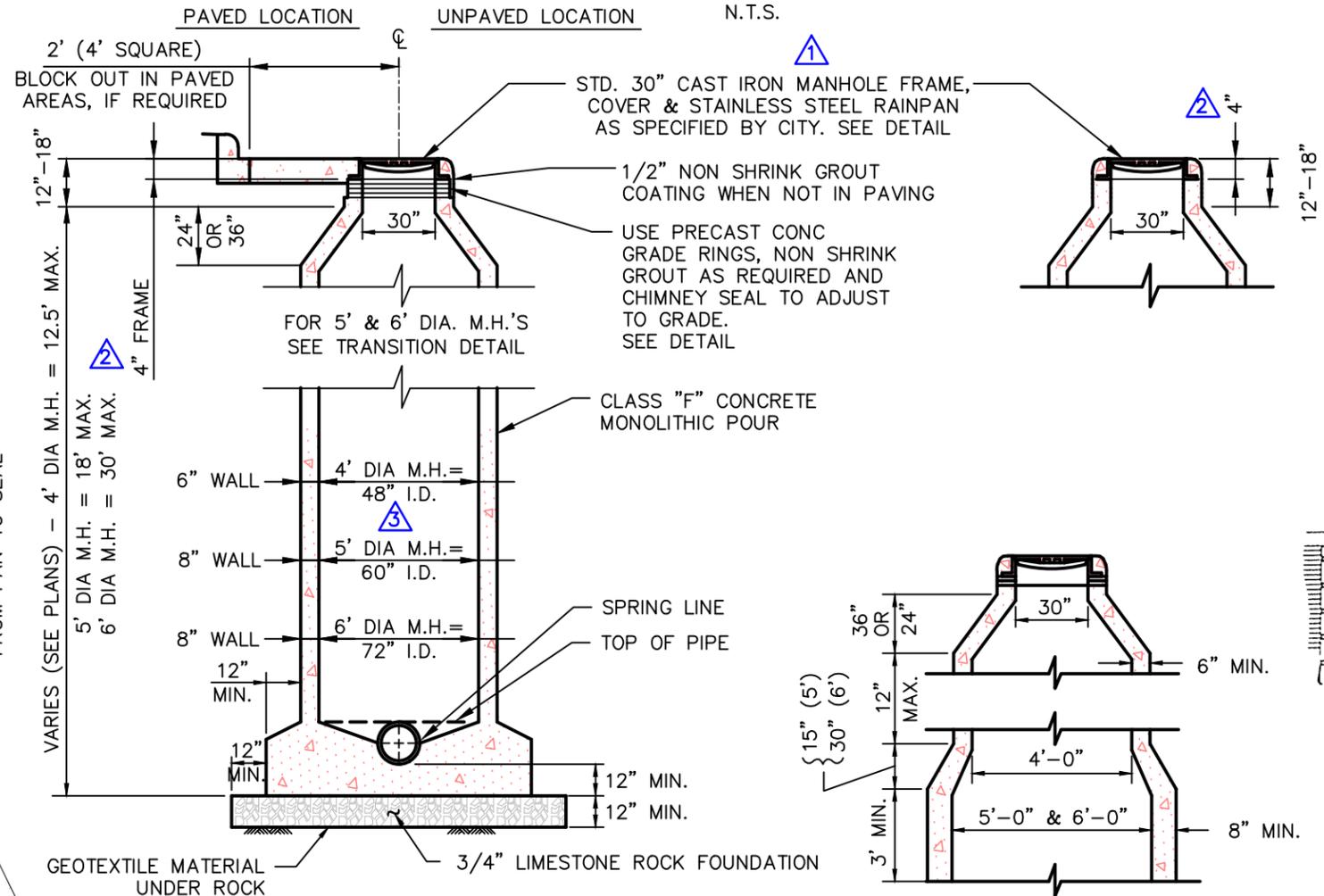
- NOTES:**
- FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER THE ENTIRE LENGTH.
  - IF FALSE M.H. BOTTOMS ARE REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED PER STD. DWG. NO. 5100.
  - SANITARY SEWER LINES 24" DIA AND LARGER REQUIRE A MIN. 5' DIA MANHOLE.
  - LOCATE MANHOLE PER STANDARD CONSTRUCTION DETAIL 5170.

**CAST-IN-PLACE BASE**  
N.T.S.

North Central Texas Council of Governments  
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

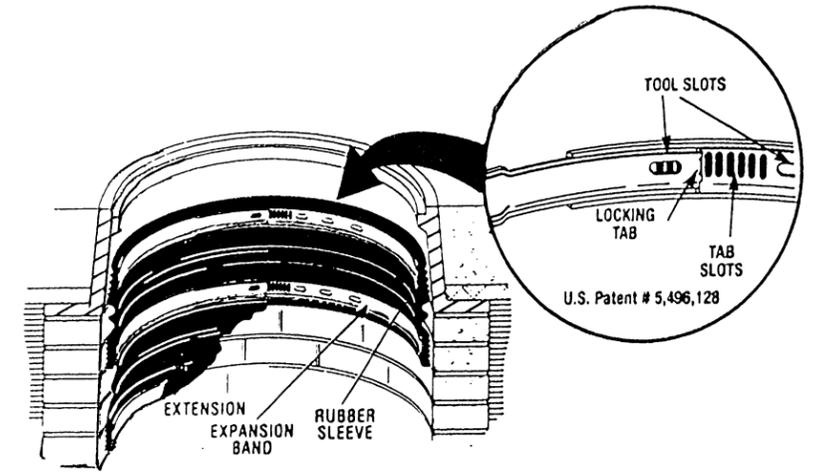
				THE CITY OF COPPELL TEXAS 1890		STANDARD CONSTRUCTION DETAILS		STD. SPEC. REFERENCE	
						SANITARY SEWER MANHOLE: PRE-CAST		501., 502., 702.	
								STANDARD DETAIL	
								5020	
						CITY OF COPPELL DALLAS COUNTY, TEXAS			
△	CHANGE RING HEIGHT FROM 6" TO 4".	SWL	JUL. '14						
△	CHANGE RING AND COVER SIZE FROM 24" TO 30".	SWL	JUL. '14						
NO.	LOCAL EXCEPTION	BY	DATE						

ADJUSTABLE FRAME ← ROOF OPTIONS → FRAME CAST IN CONCRETE



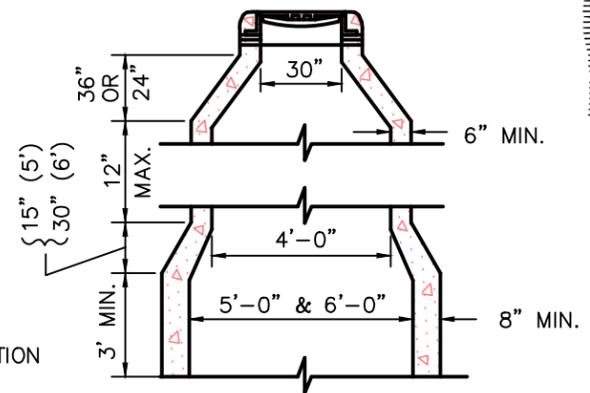
**INTERNAL MANHOLE CHIMNEY SEAL**  
REQUIRED METHOD

**COMPRESSION BAND**  
One piece uneven-legged channeled compression band, fabricated from corrosion resistant 16 ga. stainless steel conforming to ASTM A-240 (AISI type 304). The band shall compress the rubber sleeve against the inside surface of the manhole frame and chimney and allow a minimum range of adjustment of 2" on the diameter.



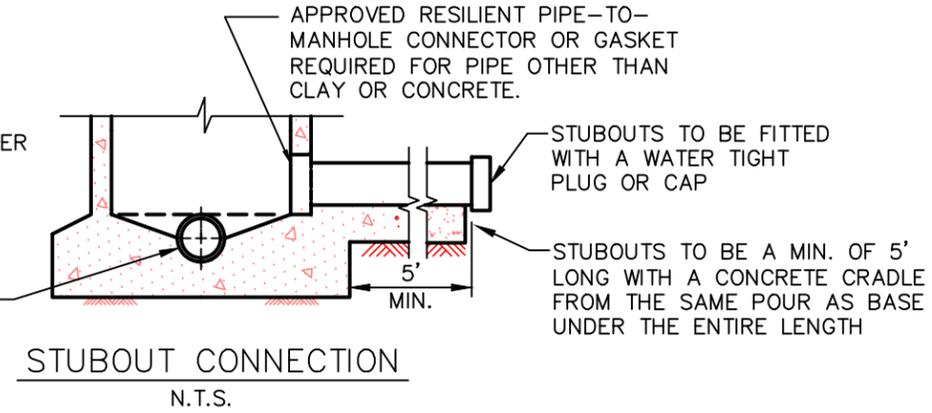
**RUBBER SLEEVE**  
The rubber chimney seal sleeve shall be furnished in either 8-1/4" or 10" width to suit manhole conditions. Extension sleeves shall be used as required. Material physical characteristics shall conform to ASTM C-923, as modified, with a minimum thickness of 3/16".

**TRANSITION DETAIL FOR 5' & 6' DIA. M.H.'S**  
N.T.S.



- NOTES**
- FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER THE ENTIRE LENGTH.
  - IF FALSE M.H. BOTTOMS ARE REQUIRED THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED. PER CONSTRUCTION STANDARD 5100.
  - SANITARY SEWER LINES 24" DIA AND LARGER REQUIRE A MIN. 5' DIA MANHOLE.
  - LOCATE MANHOLE PER STANDARD CONSTRUCTION DETAIL 5170.

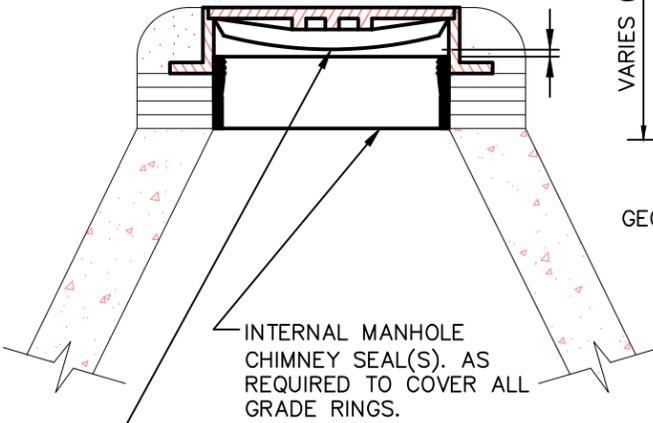
FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER THE ENTIRE LENGTH.



**EXTERNAL MANHOLE CHIMNEY SEAL**  
USE ONLY WITH CITY APPROVAL

**PHYSICAL PROPERTIES:**

Tensile Strength	1200 psi
Elongation at Break	350% minimum
Hardness (Durometer)	45 ± 5
Accelerated Oven Aging	Max. 15% decrease of tensile, 20% of elongation
Chemical Resistance	No weight loss in 1M of sulphuric acid
Compression Set	25% max. decrease
Water Absorption	Max. 10% increase by weight
Ozone Resistance	Rating 0
Low Temperature Brittle Point	No fracture at -40°C
Tear Resistance	200 lb. f/in.
Splice Strength	180 bend with no visible separation



North Central Texas Council of Governments

NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

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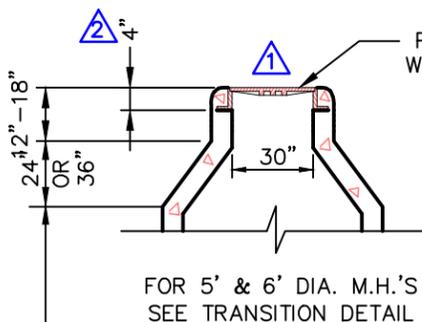
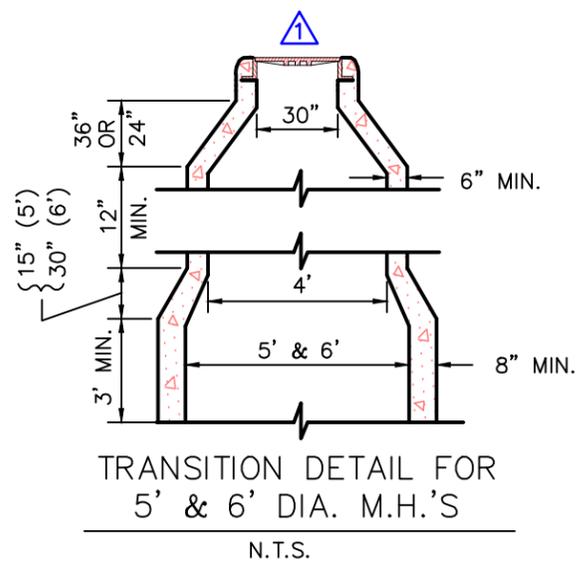
4	UPDATE NOTE 1.	SWL	JUL. '14
3	UPDATE INNER DIAMETER DIMENSIONS.	SWL	JUL. '14
2	CHANGE RING HEIGHT FROM 6" TO 4".	SWL	JUL. '14
1	CHANGE RING AND COVER SIZE FROM 24" TO 30".	SWL	JUL. '14
NO.	LOCAL EXCEPTION	BY	DATE



<b>STANDARD CONSTRUCTION DETAILS</b>		STD. SPEC. REFERENCE 501., 502., 702. STANDARD DETAIL <b>5030</b>
SANITARY SEWER MANHOLE: CAST-IN-PLACE		
CITY OF COPPELL DALLAS COUNTY, TEXAS		

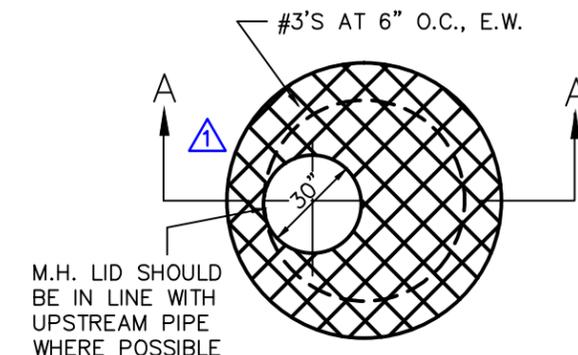
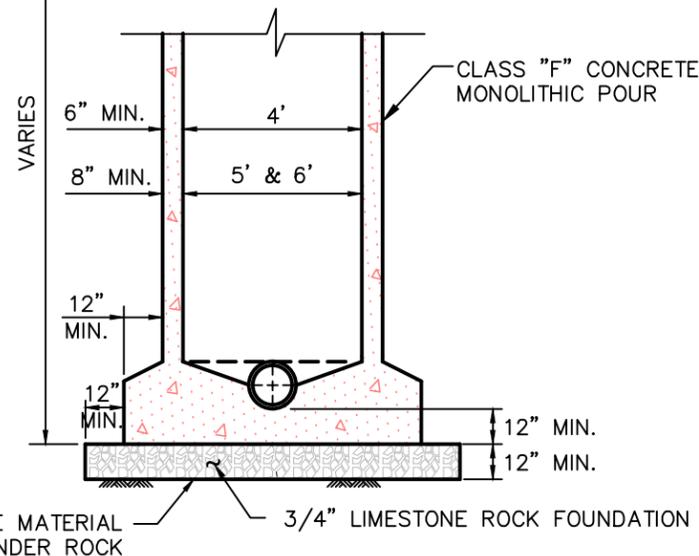
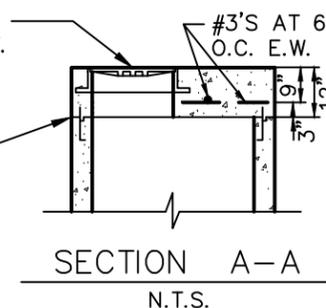
ADJUSTABLE FRAME ← ROOF OPTIONS → REINFORCED CONCRETE SLAB

N.T.S.



FOR 5' & 6' DIA. M.H.'S SEE TRANSITION DETAIL

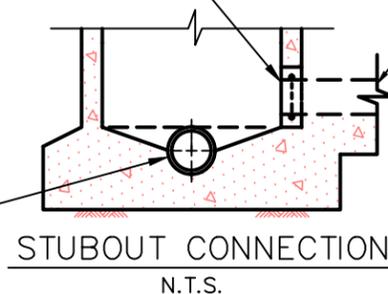
CONSTRUCTION JOINT WITH KEY WAY WATERSTOP, AND #3'S AT 12" O.C. EXTENDING 9" INTO WALL (NOT REQ'D FOR CONTINUOUS POUR)



M.H. LID SHOULD BE IN LINE WITH UPSTREAM PIPE WHERE POSSIBLE

ROOF STEEL LAYOUT  
N.T.S.

APPROVED RESILIENT PIPE-TO-MANHOLE CONNECTOR OR GASKET REQUIRED FOR PIPE OTHER THAN CLAY OR CONCRETE.



STUBOUT TO BE FITTED WITH WATERTIGHT STOPPER OR CAP  
STUBOUTS TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR) UNDER ENTIRE LENGTH

FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER ENTIRE LENGTH.

NOTES

- WHERE M.H.'S ARE IN "PROPOSED" PAVING, FRAME & COVER SHALL BE SET 23" BELOW THE PROPOSED PAVEMENT GRADE.
- IF FALSE M.H. BOTTOMS ARE REQUIRED THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED. PER STD. DWG. NO. 5100.
- LOCATE MANHOLE PER STANDARD CONSTRUCTION DETAIL 5170.

North Central Texas Council of Governments



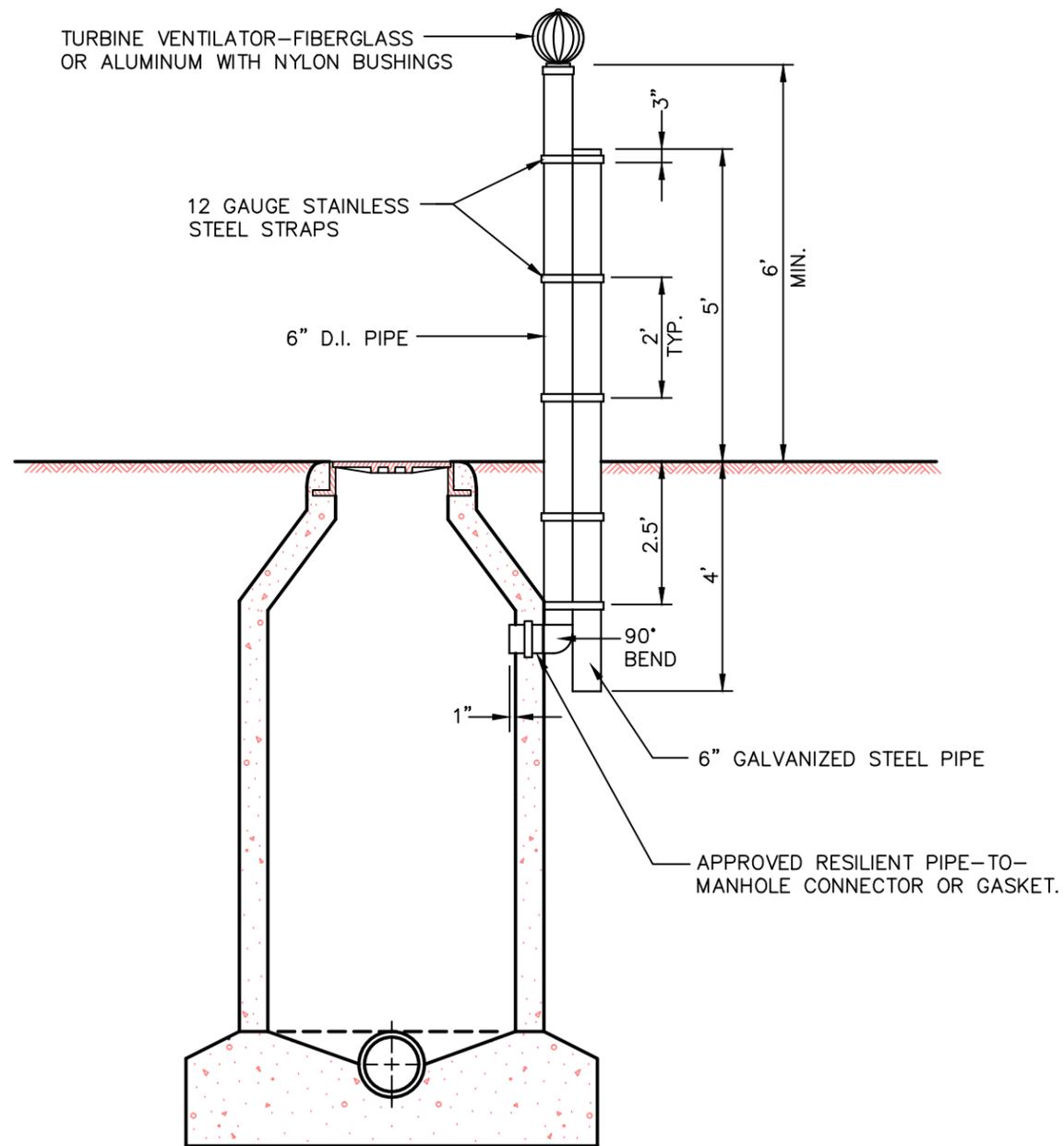
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

PATH: S:\Standard\_Details\New\_Details\_modified\SDCoppel\2005.dwg

NO.	LOCAL EXCEPTION	BY	DATE
1	CHANGE RING HEIGHT FROM 6" TO 4".	SWL	JUL. '14
2	CHANGE RING AND COVER SIZE FROM 24" TO 30".	SWL	JUL. '14



STANDARD CONSTRUCTION DETAILS	STD. SPEC. REFERENCE
SANITARY SEWER MANHOLE: PRESSURE TYPE	501., 502., 702.
CITY OF COPPELL DALLAS COUNTY, TEXAS	STANDARD DETAIL
	<b>5050</b>



North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

PATH: S:\Standard\_Details\New\_Dets\_modified\SDCoppel\2005.dwg

NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRUCTION DETAILS

SANITARY SEWER  
MANHOLE: VENTED TYPE

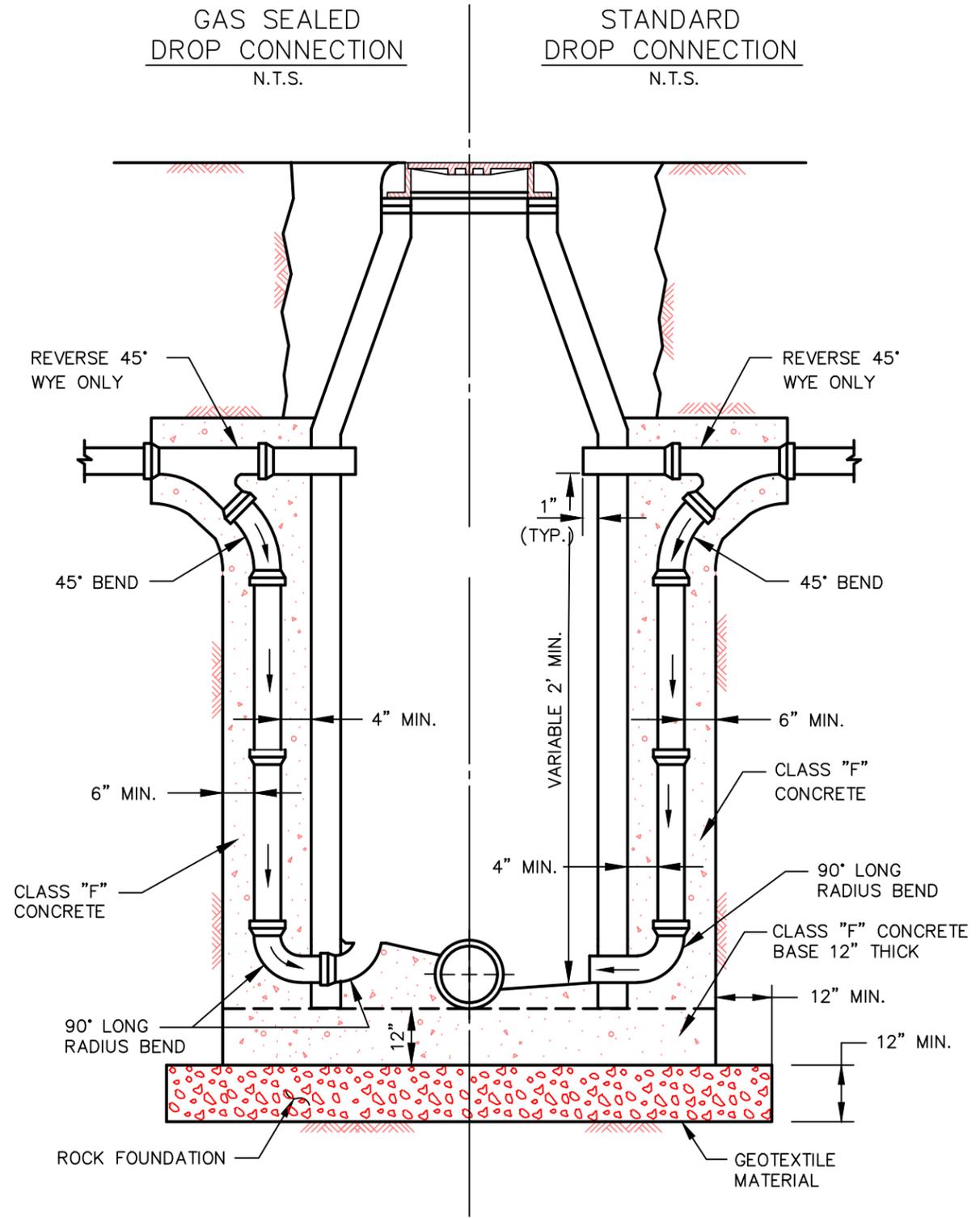
CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE

501., 502.

STANDARD DETAIL

5060



- NOTE:**
1. PIPE MATERIAL SHALL BE SDR 35 P.V.C . UNLESS OTHERWISE SPECIFIED.
  2. DROP CONNECTION MANHOLE MAY BE USED ONLY WITH APPROVAL OF THE CITY ENGINEER.

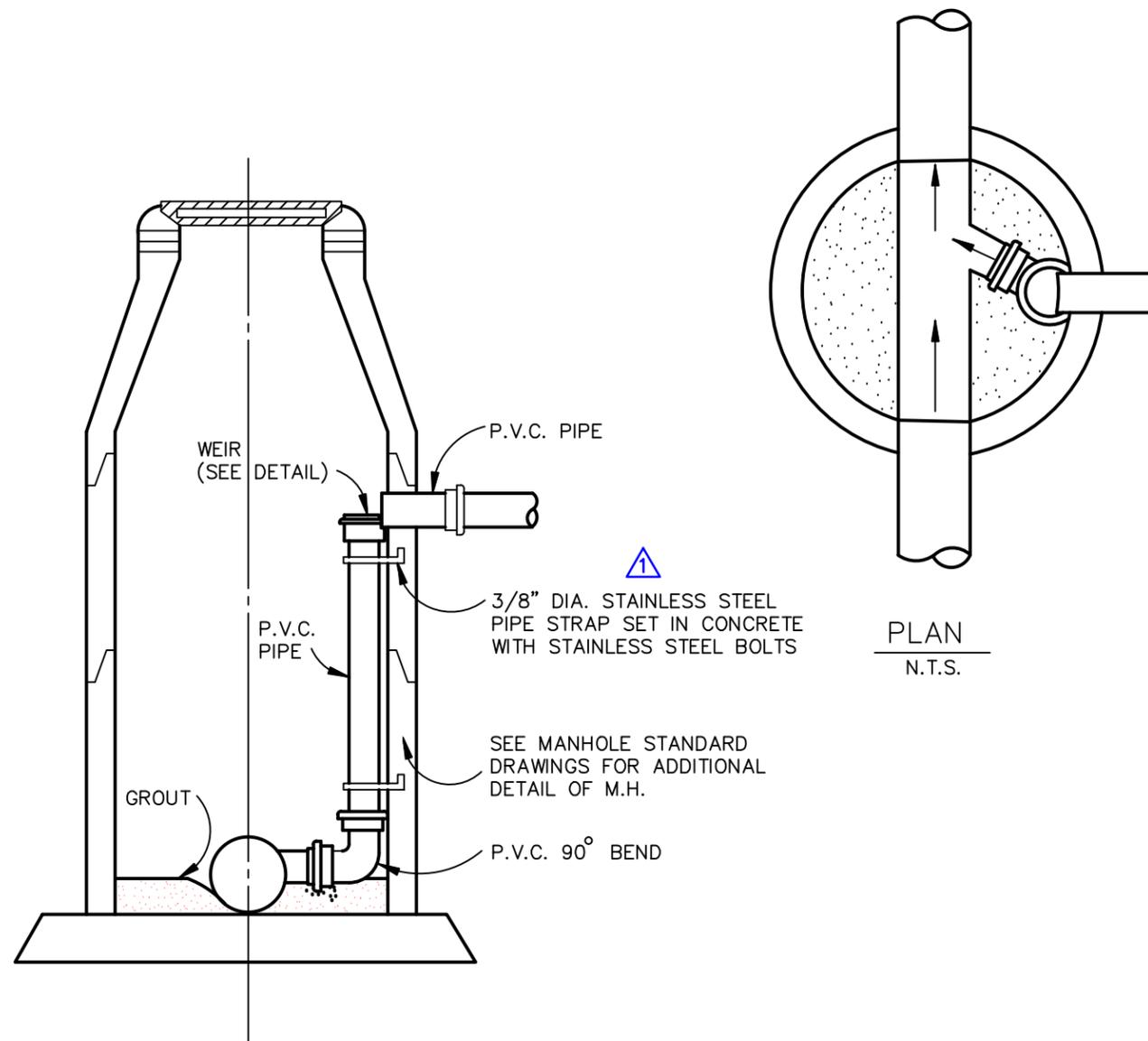
North Central Texas Council of Governments

 **NOTE:** STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

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				<b>STANDARD CONSTRUCTION DETAILS</b>		STD. SPEC. REFERENCE 501., 502., 702. STANDARD DETAIL <b>5070</b>
				SANITARY SEWER MANHOLE: OUTSIDE DROP CONNECTIONS		
NO.	LOCAL EXCEPTION	BY	DATE	CITY OF COPPELL DALLAS COUNTY, TEXAS		

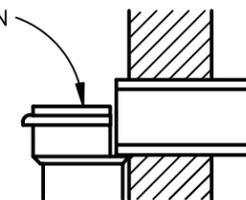
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ELEVATION  
N.T.S.

PLAN  
N.T.S.

REMOVE PORTION OF DROP PIPE TO CONNECT AS SHOWN



WEIR DETAIL  
N.T.S.

**NOTE:**

1. FLOW LINE OF SURCHARGE LINE NORMALLY PLACED AT TOP OF EXISTING SANITARY SEWER LINE UNLESS NOTED OTHERWISE ON PLANS.
2. DROP CONNECTION MANHOLE MAY BE USED ONLY WITH APPROVAL OF THE CITY ENGINEER.

North Central Texas Council of Governments



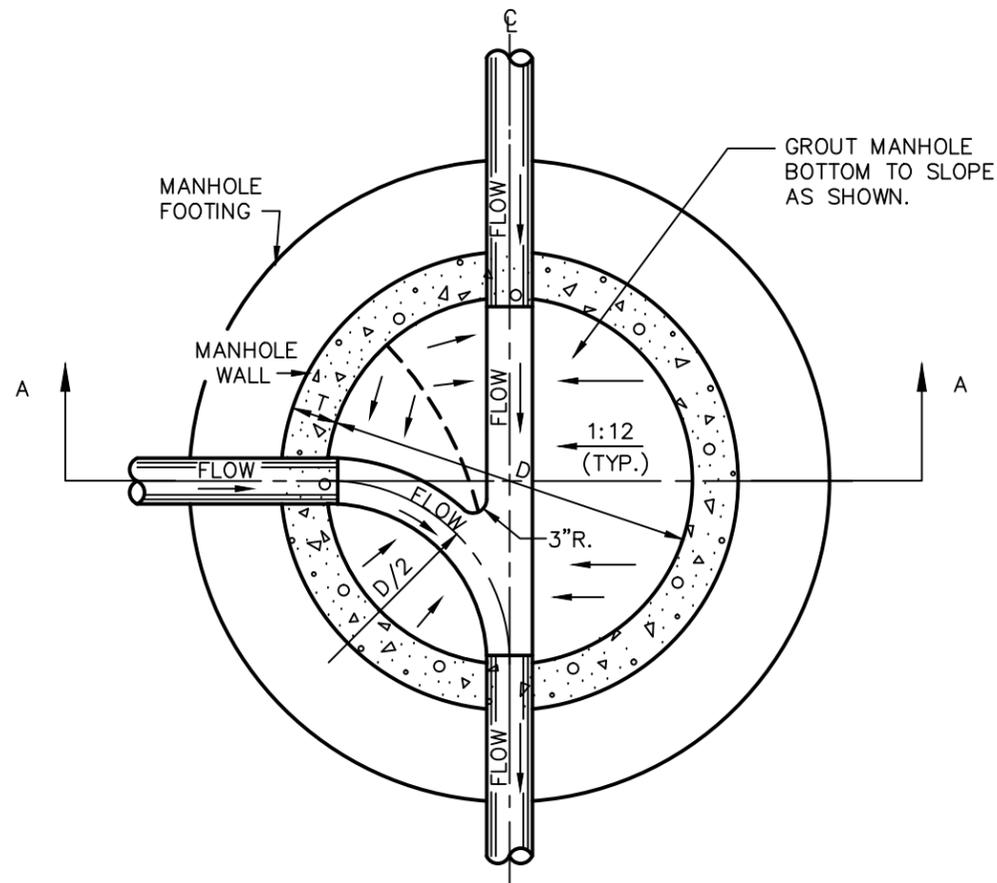
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

NO.	ADD SPECIFICATION FOR STAINLESS STEEL BOLTS.	LOCAL EXCEPTION	BY	DATE
			SWL	JUL. '14



**STANDARD CONSTRUCTION DETAILS**  
 SANITARY SEWER  
 MANHOLE: INSIDE DROP CONNECTION  
 CITY OF COPPELL DALLAS COUNTY, TEXAS

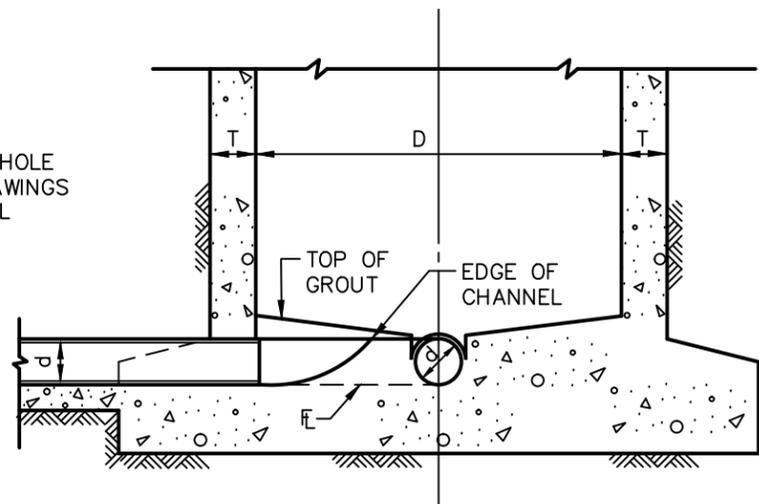
STD. SPEC. REFERENCE  
 501., 502.  
 STANDARD DETAIL  
**5080**



PLAN  
N.T.S.

T = WALL THICKNESS  
D = MANHOLE DIAMETER  
d = PIPE DIAMETER

NOTE:  
REFER TO MANHOLE  
STANDARD DRAWINGS  
FOR ADDITIONAL  
DETAIL OF M.H.



SECTION A-A  
N.T.S.

North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

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NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRUCTION DETAILS  
SANITARY SEWER  
MANHOLE: LINE INTERSECTION  
CITY OF COPPELL DALLAS COUNTY, TEXAS

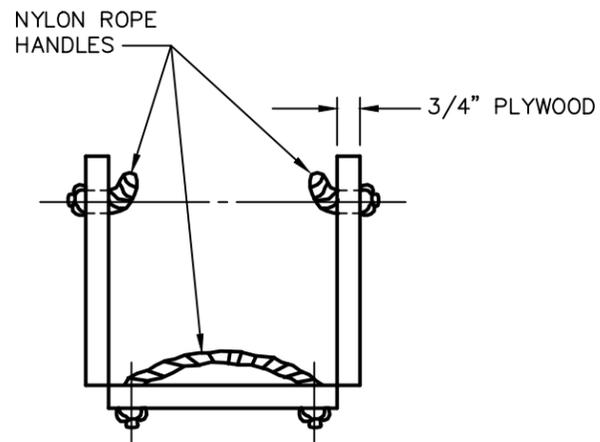
STD. SPEC.  
REFERENCE  
303., 502.  
STANDARD DETAIL  
**5090**

INSTALLATION

FALSE MANHOLE BOTTOM SHALL BE FURNISHED AND INSTALLED IN ALL MANHOLES CONSTRUCTED IN ADVANCE OF PAVING. THESE FALSE MANHOLE BOTTOMS WILL BE INSTALLED AT A TIME DIRECTED BY THE ENGINEER BUT WILL USUALLY BE AFTER ALL WORK IS COMPLETED ON THE WASTEWATER SYSTEM INCLUDING THE AIR TEST, BUT PRIOR TO THE FINAL INSPECTION.

REMOVAL

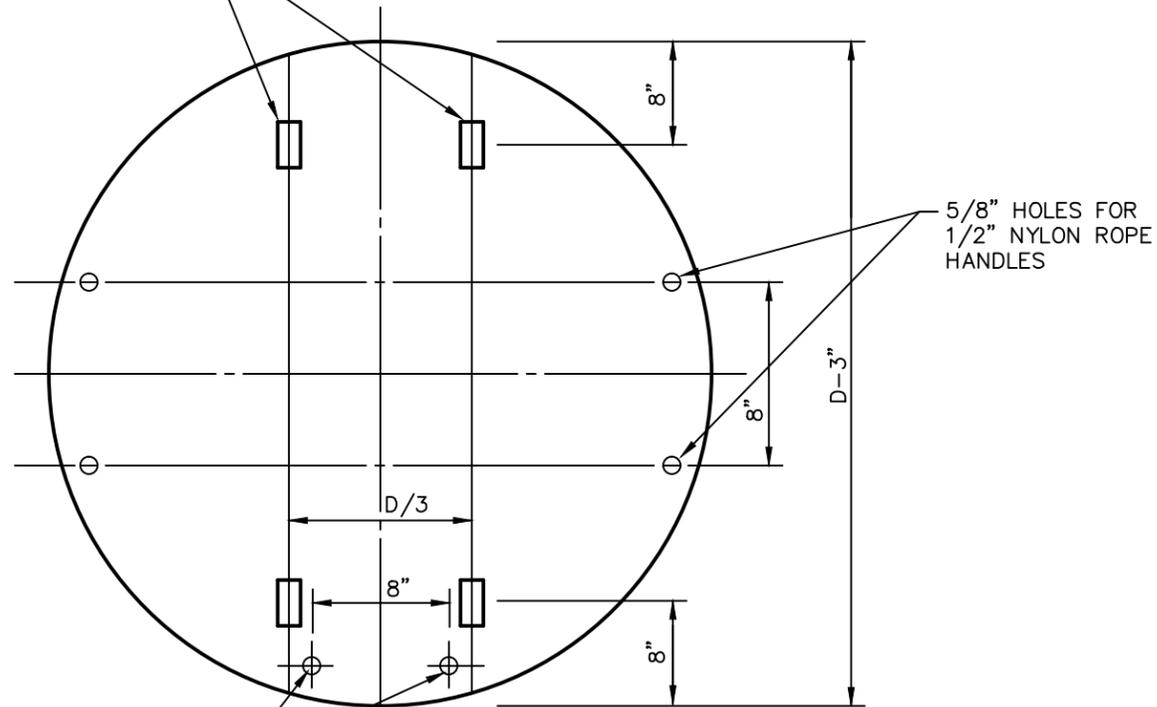
FALSE MANHOLE BOTTOM SHALL BE REMOVED AFTER THE FINAL APPURTENANCE ADJUSTMENT INSPECTION. THE PAVING CONTRACTOR AND OWNER'S REPRESENTATIVE WILL COORDINATE THE REMOVAL OF THE FALSE MANHOLE BOTTOMS.



INSTALLATION AND REMOVAL POSITION

N.T.S.

METAL STRAP HINGES (MIN. 3" LONG) W/BOLTS



5/8" HOLE FOR 1/2" NYLON ROPE HANDLES

PLAN VIEW

N.T.S.

D = INSIDE DIAMETER OF MANHOLE

PATH: S:\Standard\_Details\New\_Details\_modified\SDCoppel\2005.dwg

North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

NO.	LOCAL EXCEPTION	BY	DATE



STANDARD CONSTRUCTION DETAILS

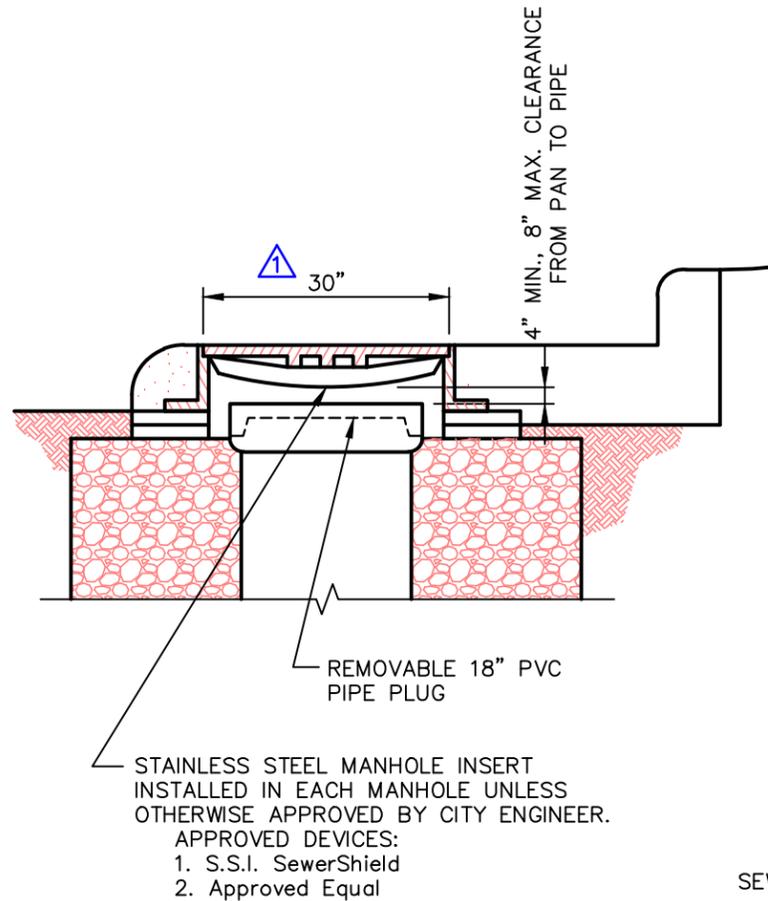
SANITARY SEWER  
MANHOLE: FALSE BOTTOM

CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE

STANDARD DETAIL

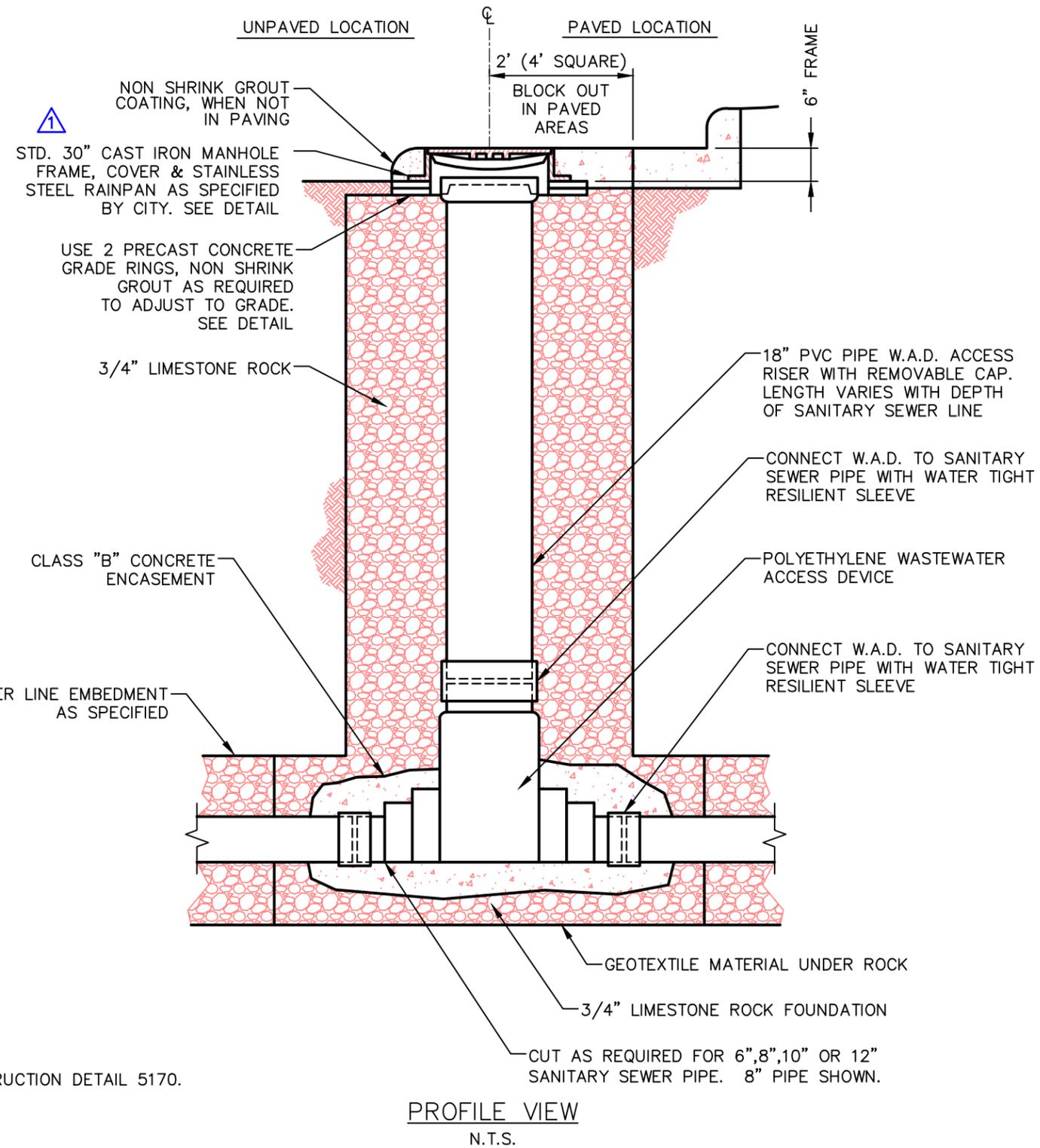
5100



MANHOLE COVER AND W.A.D. ACCESS RISER DETAIL  
N.T.S.

NOTES:

1. FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER THE ENTIRE LENGTH.
2. IF FALSE M.H. BOTTOMS ARE REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED PER STD. DWG. NO. 5100.
3. SANITARY SEWER LINES 24" DIA AND LARGER REQUIRE A MIN. 5' DIA MANHOLE.
4. LOCATE W.A.D. MANHOLE COVER PER STANDARD CONSTRUCTION DETAIL 5170.



PROFILE VIEW  
N.T.S.

North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

PATH: S:\Standard\_Details\New\_Details\_modified\SDCoppel\2005.dwg

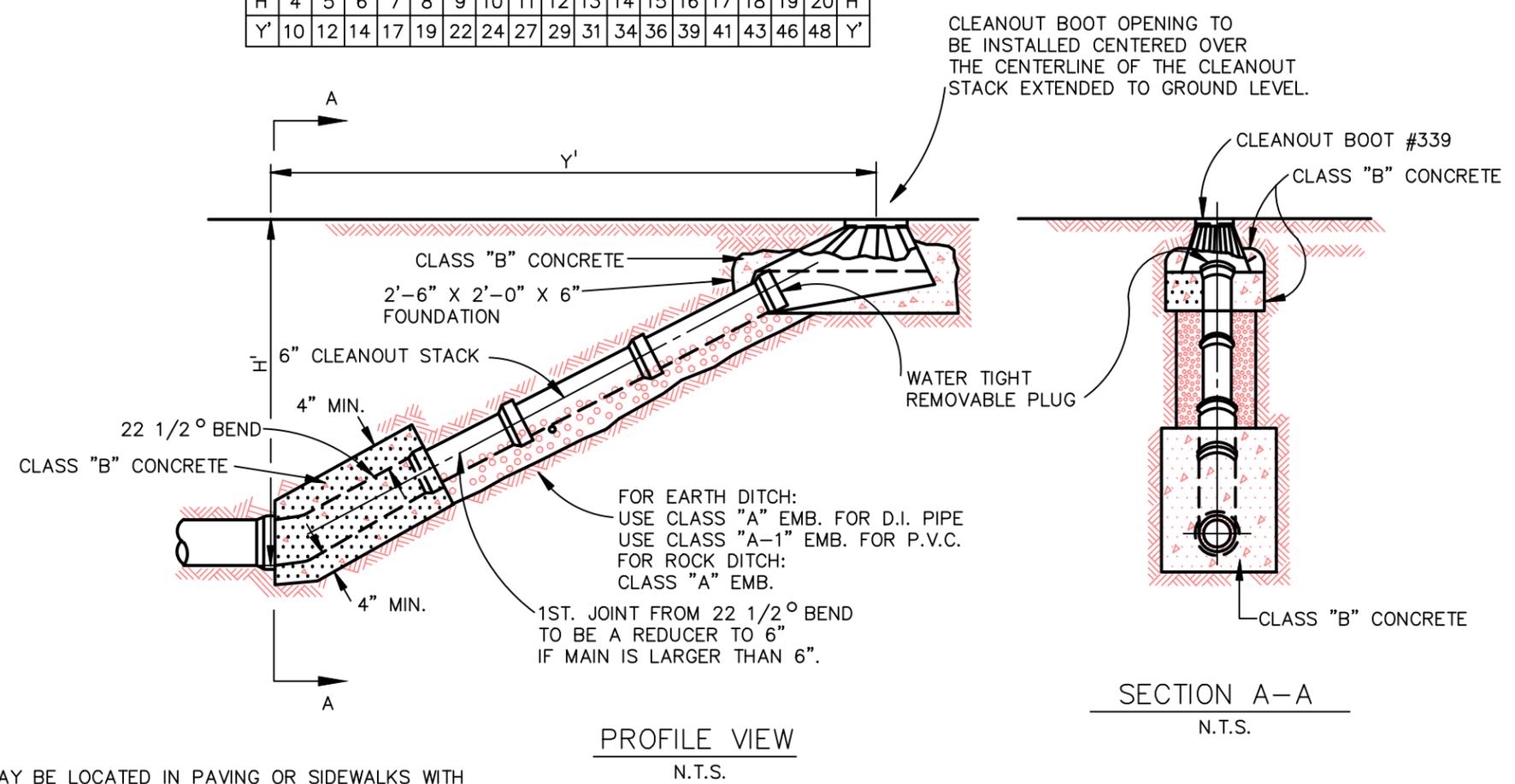
△	CHANGE RING AND COVER SIZE FROM 24" TO 30".	SWL	JUL. '14
NO.	LOCAL EXCEPTION	BY	DATE



**STANDARD CONSTRUCTION DETAILS**  
SANITARY SEWER  
WASTEWATER ACCESS DEVICE (W.A.D.)  
CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE  
501., 502., 702.  
STANDARD DETAIL  
**5105**

H'	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	H'
Y'	10	12	14	17	19	22	24	27	29	31	34	36	39	41	43	46	48	Y'



- NOTES:
- CLEANOUTS MAY BE LOCATED IN PAVING OR SIDEWALKS WITH APPROVAL OF THE CITY ENGINEER.
  - REFER TO THE CITY OF COPPELL WATER UTILITIES LIST OF APPROVED MATERIALS AND PRODUCTS FOR APPROVED BRANDS AND MODELS OF CLEANOUTS AND RELATED ITEMS.
  - IDENTIFY CLEANOUT LOCATION PER STANDARD CONSTRUCTION DETAIL 5170.

North Central Texas Council of Governments

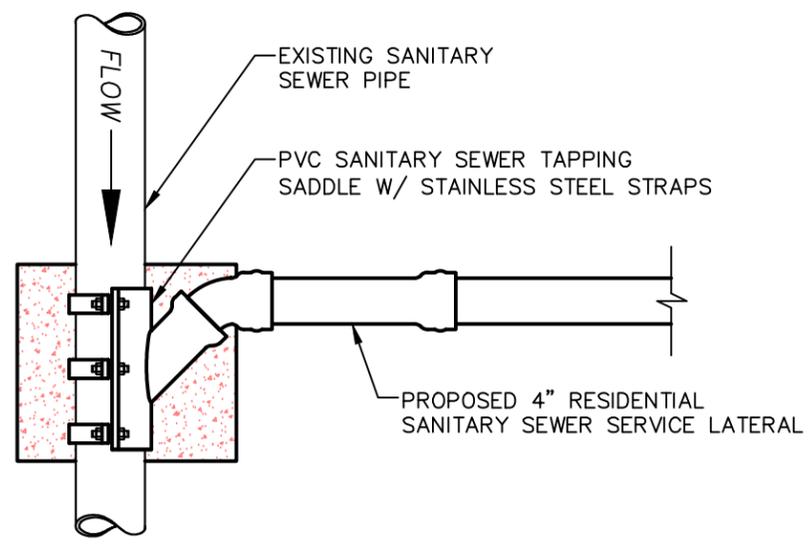
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

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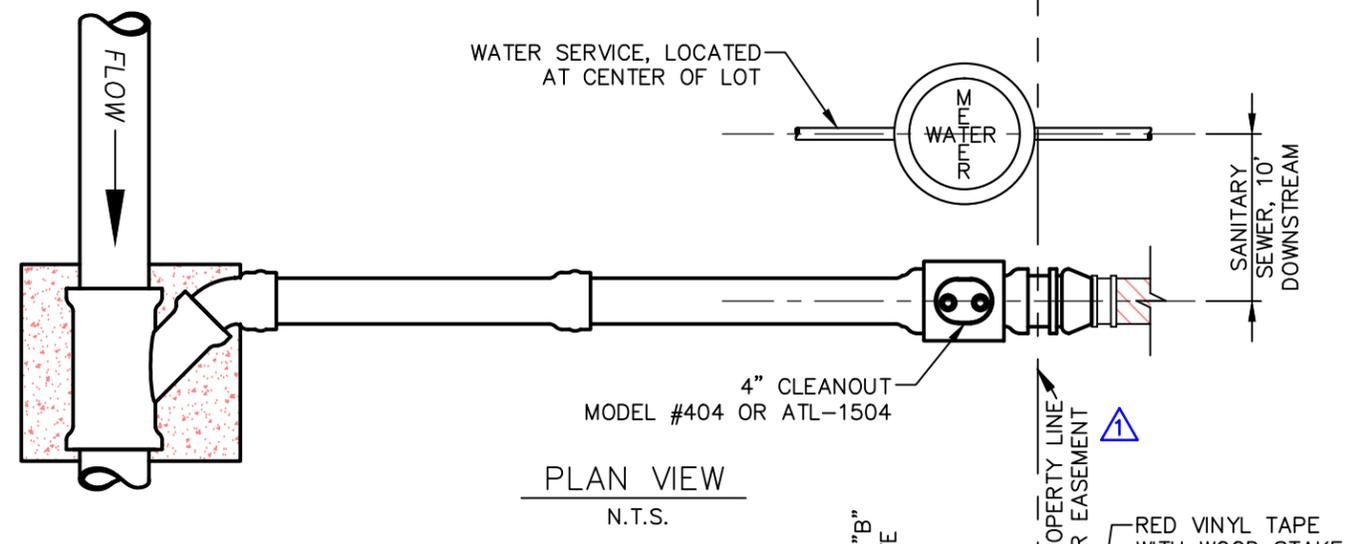
NO.	CHANGED "CLEANOUT" TO "6" COMMERCIAL CLEANOUT".	LOCAL EXCEPTION	SWL	JUL. '14
			BY	DATE



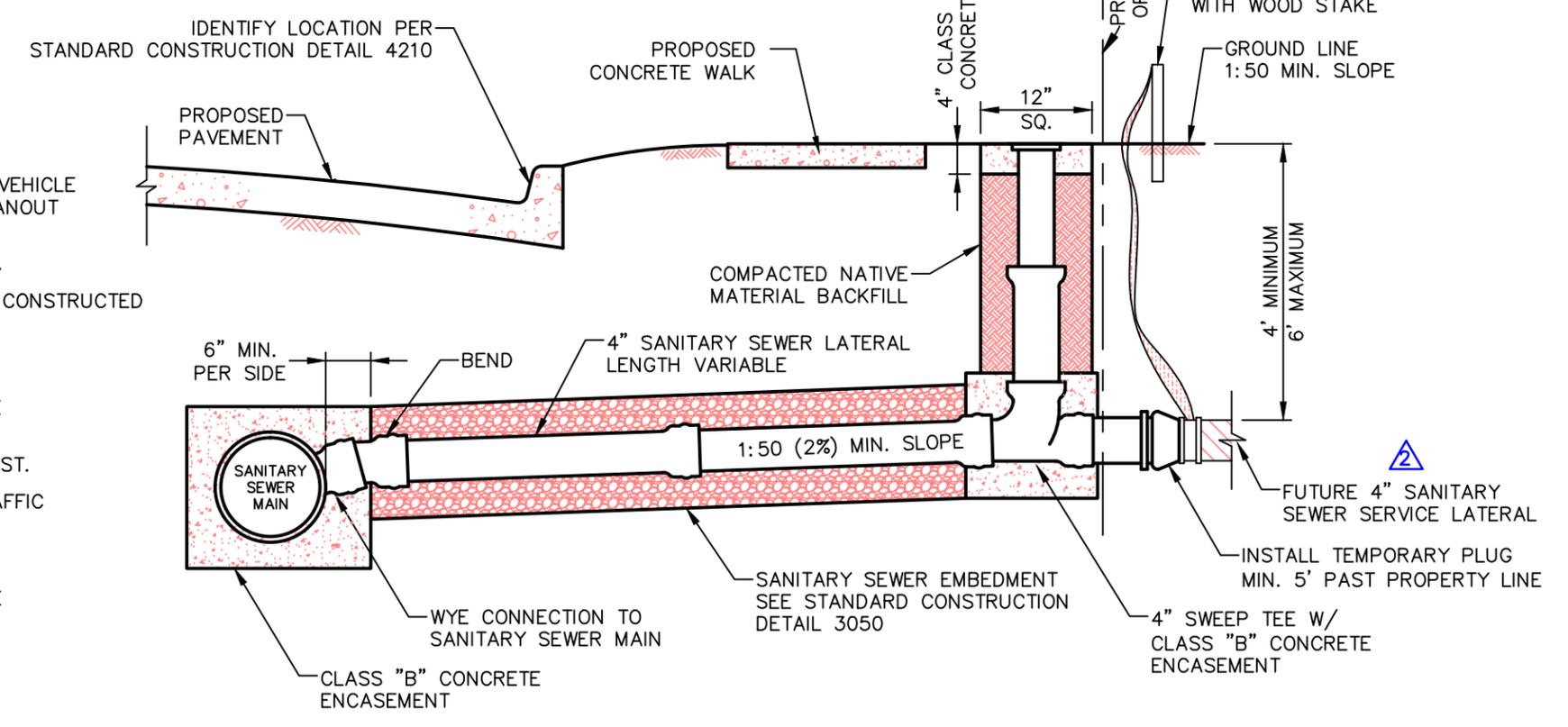
STANDARD CONSTRUCTION DETAILS		STD. SPEC. REFERENCE
SANITARY SEWER		501.,502.,504.,702.
▲ 6" COMMERCIAL CLEANOUT		STANDARD DETAIL
CITY OF COPPELL DALLAS COUNTY, TEXAS		5110



**PROPOSED RESIDENTIAL SERVICE CONNECTION TO EXISTING SEWER PIPE**  
N.T.S.



**PLAN VIEW**  
N.T.S.



**SANITARY SEWER LATERAL—STANDARD CONNECTION**  
N.T.S.

**NOTES:**

1. CLEANOUT CASTING TO BE FURNISHED AND PLACED PER SPECIAL CONDITIONS. IN VEHICLE TRAFFIC AREAS AND FOR COMMERCIAL MAINLINE LATERALS, SANITARY SEWER CLEANOUT SHALL BE OF CAST IRON.
2. SLOPE OF LATERAL TO BE 1:50 MINIMUM UNLESS INSTRUCTED OTHERWISE BY CITY.
3. THE SANITARY SEWER LATERAL SHALL BE CONNECTED TO BUILDING LATERAL AND CONSTRUCTED IN SUCH MANNER AS TO CLEAR EXISTING UTILITIES AND PROPOSED FACILITIES SUCH AS STORM SEWER MAINS, PAVING, SIDEWALKS, RETAINING WALLS, ETC. VERTICAL BENDS (22.5° MAX.) MAY BE USED IF APPROVED BY CITY.
4. THE MAINLINE LATERAL CONNECTION TO THE PRIVATE BUILDING LATERAL SHALL BE AS CLOSE TO THE PROPERTY LINE AS POSSIBLE.
5. INSTALL TEMPORARY PLUG AT PROPERTY LINE IF BUILDING LATERAL DOES NOT EXIST.
6. THE CLEANOUT STACK & CASTING MAY BE PLACED IN THE PARKWAY, VEHICLE TRAFFIC AREAS OR SIDEWALK, IF NECESSARY.
7. "STANDARD" SERVICE CONNECTIONS APPLY WHEN TRENCH IS LESS THAN 7' DEEP.
8. "DEEP" SERVICE CONNECTIONS APPLY WHEN TRENCH IS MORE THAN 7' DEEP. SEE STANDARD CONSTRUCTION DETAIL 5130.
9. DESIGN OF SERVICE LATERALS LARGER THAN 4" DIA. SHALL BE REVIEWED ON A PROJECT SPECIFIC BASIS.
10. IDENTIFY CLEANOUT LOCATION PER STANDARD CONSTRUCTION DETAIL 5170.
11. ALL SANITARY SEWER PIPE IN THE PUBLIC R.O.W. OR EASEMENT MUST BE GREEN IN COLOR AND SDR 35 OR SCH. 40.

North Central Texas Council of Governments  
 NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

PATH: S:\Standard\_Details\New\_Details\_modified\SDCoppel\2005.dwg

NO.	LOCAL EXCEPTION	BY	DATE
1	DELETE REFERENCES TO 6" SANITARY SEWER LATERAL.	SWL	JUL. '14
2	ADD "OR EASEMENT".	SWL	JUL. '14



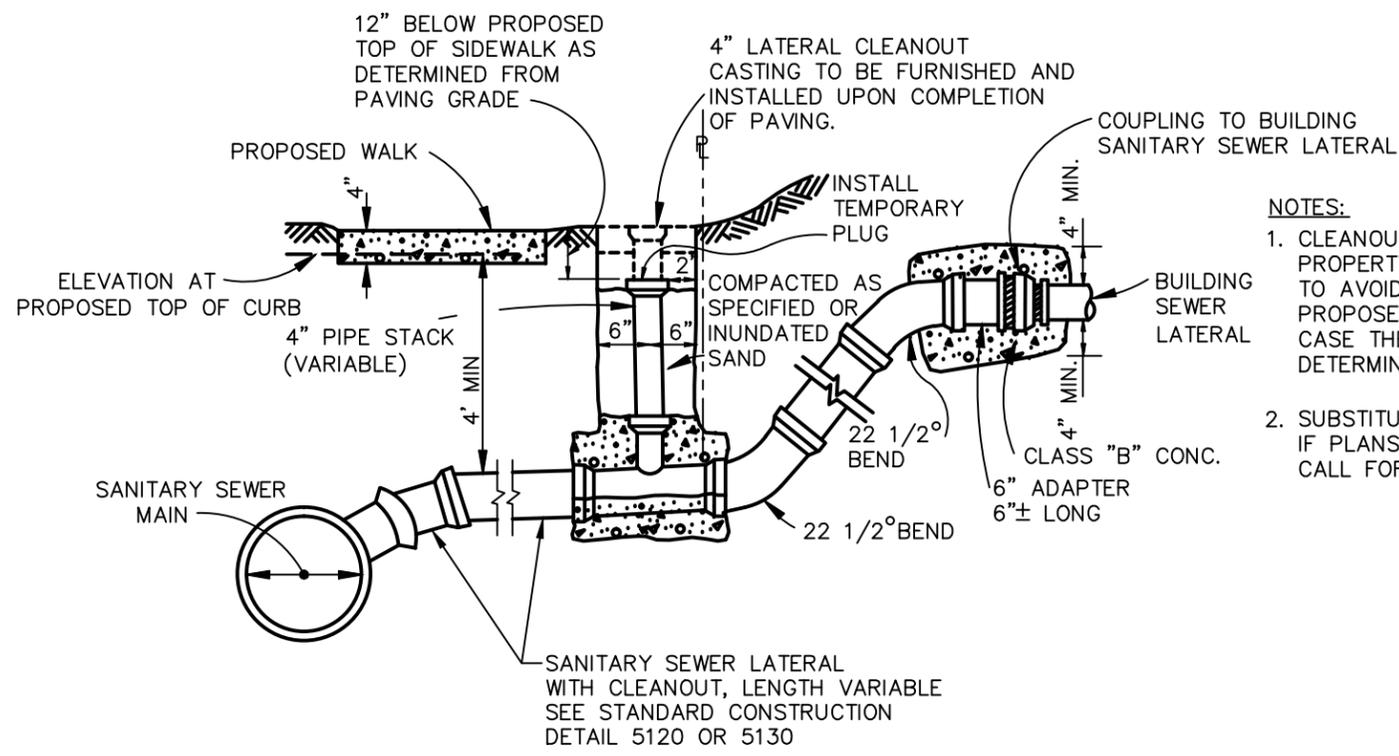
**STANDARD CONSTRUCTION DETAILS**

SANITARY SEWER  
STANDARD SERVICE CONNECTION

CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE  
501., 502., 702.  
STANDARD DETAIL  
**5120**

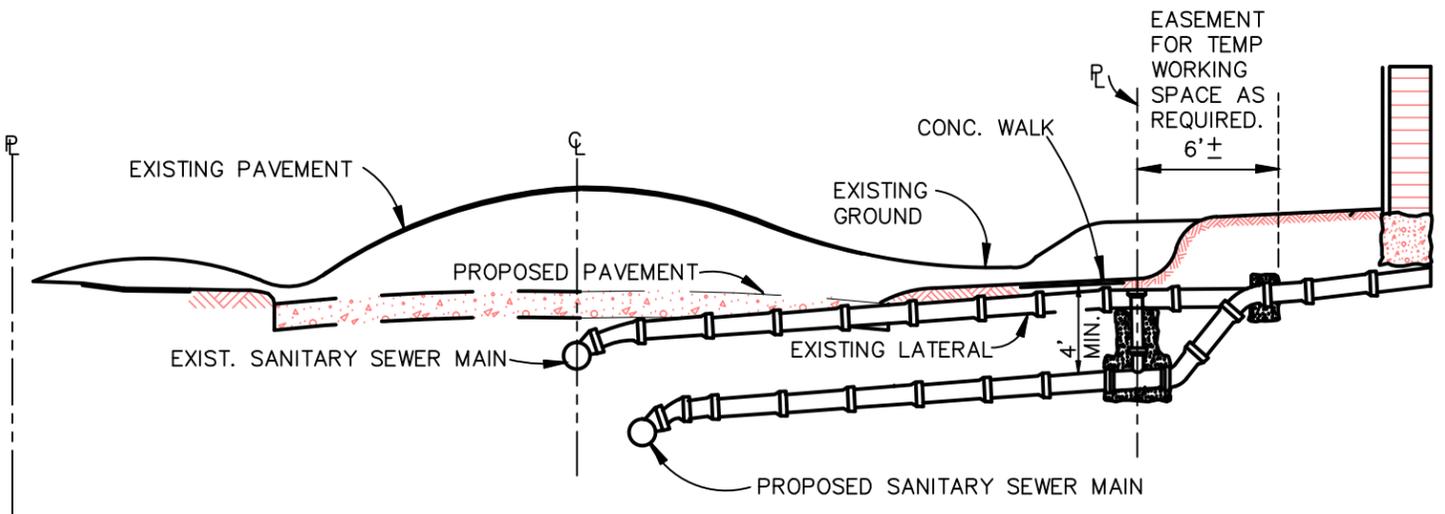




- NOTES:**
1. CLEANOUT TO BE INSTALLED ON PROPERTY LINE EXCEPT AS REQUIRED TO AVOID CONFLICT WITH EXISTING OR PROPOSED FACILITIES IN WHICH CASE THE LOCATION SHALL BE DETERMINED BY THE CITY.
  2. SUBSTITUTE 4" FOR 6" FITTINGS IF PLANS OR SPECIAL CONDITIONS CALL FOR 4" LATERALS.

PROPOSED LATERAL DETAIL  
N.T.S.

**NOTE:**  
SANITARY SEWER LATERALS AND C.O.'S ARE TO BE CONSTRUCTED TO CLEAR EXISTING AND PROPOSED FACILITIES, SUCH AS STORM SEWER MAINS, PAVING, RETAINING WALLS, OTHER UTILITIES, ETC. THE SANITARY SEWER LATERAL SHALL HAVE A MIN. COVER OF 4' BELOW THE PROPOSED CURB GRADE AT THE PROPERTY LINE, OR AS REQUIRED TO MAINTAIN A MINIMUM OF 2.00% GRADE, OR AS DIRECTED BY THE CITY.



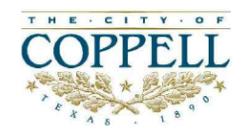
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North Central Texas Council of Governments



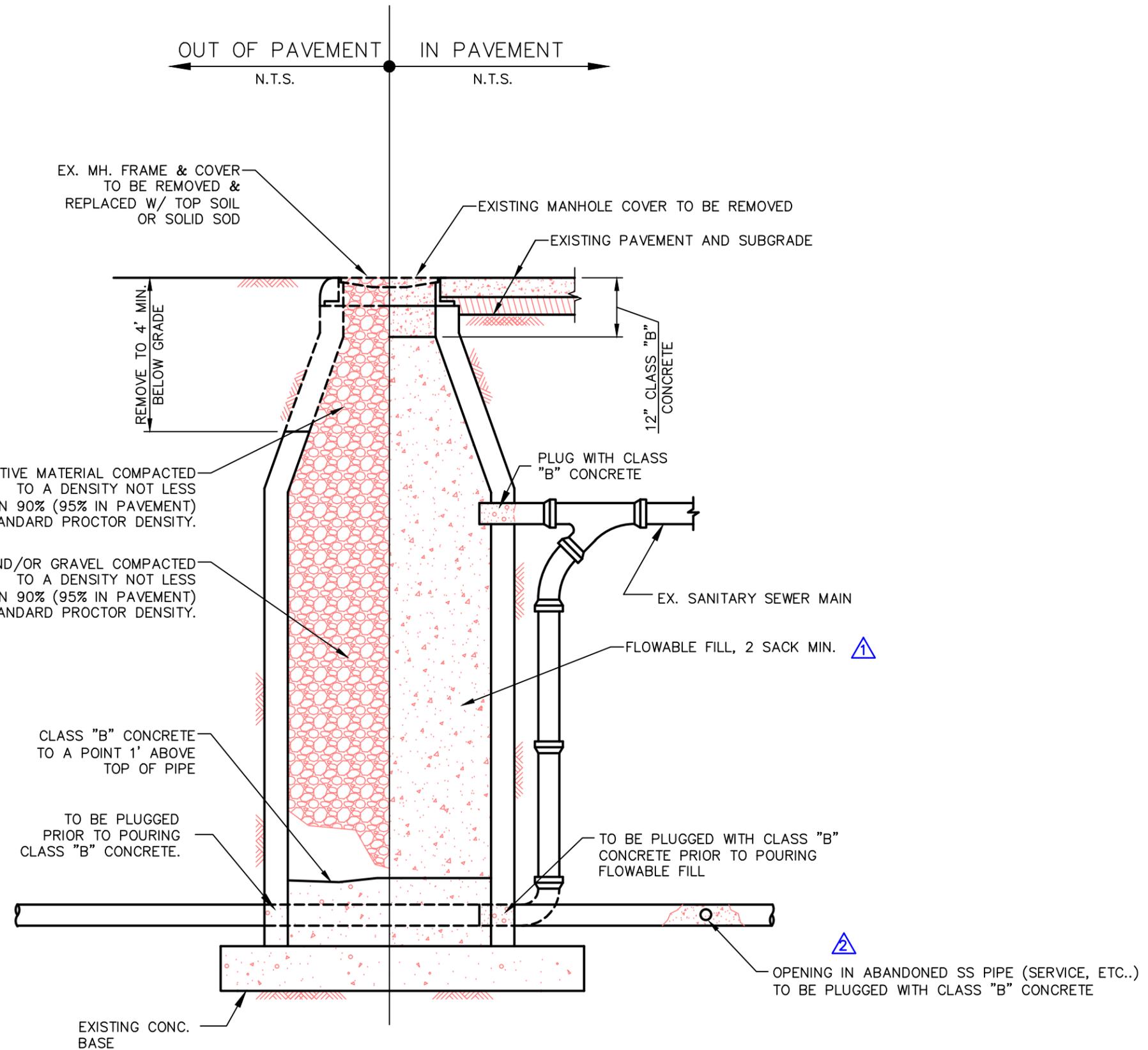
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

NO.	LOCAL EXCEPTION	BY	DATE



**STANDARD CONSTRUCTION DETAILS**  
SANITARY SEWER  
LATERAL REPLACEMENT PRIOR TO PAVING  
CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE  
501., 502., 702.  
STANDARD DETAIL  
**5140**



North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

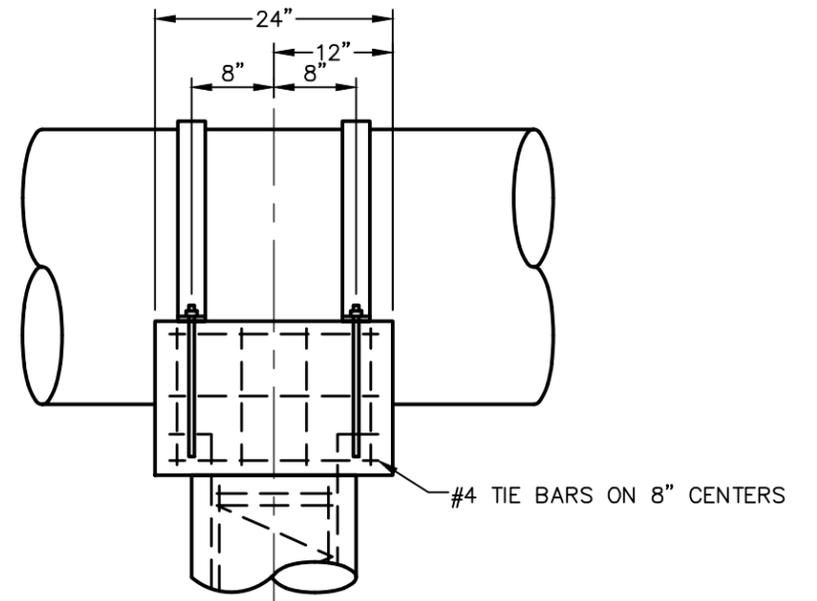
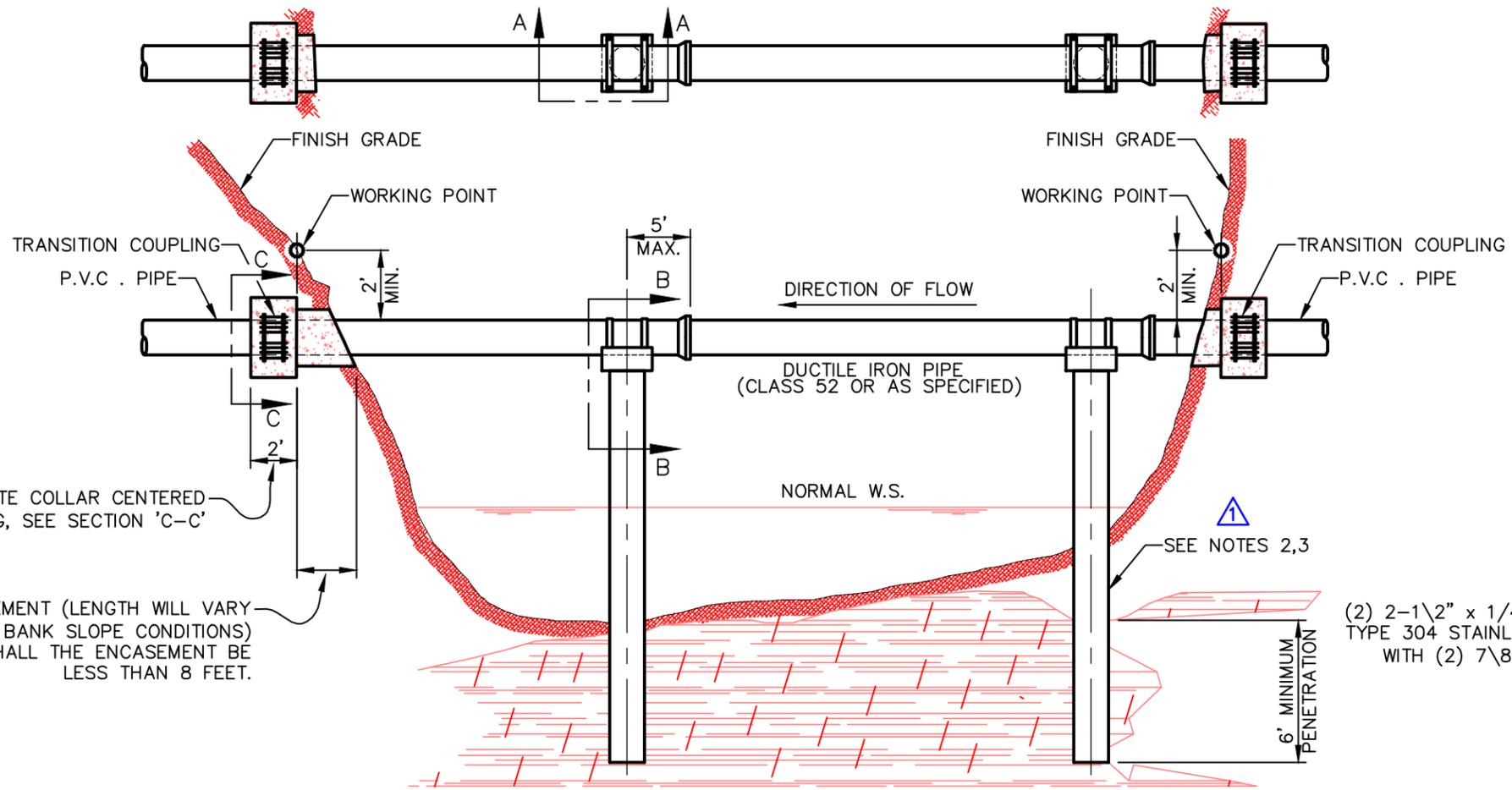
PATH: S:\Standard\_Details\New\_Details\_modified\SDCoppel\2005.dwg

△	ADD CALLOUT.	SWL	JUL. '14
△	CHANGED FLOWABLE FILL SPECIFICATION FROM 2:27 TO 2 SACK MIN.	SWL	JUL. '14
NO.	LOCAL EXCEPTION	BY	DATE

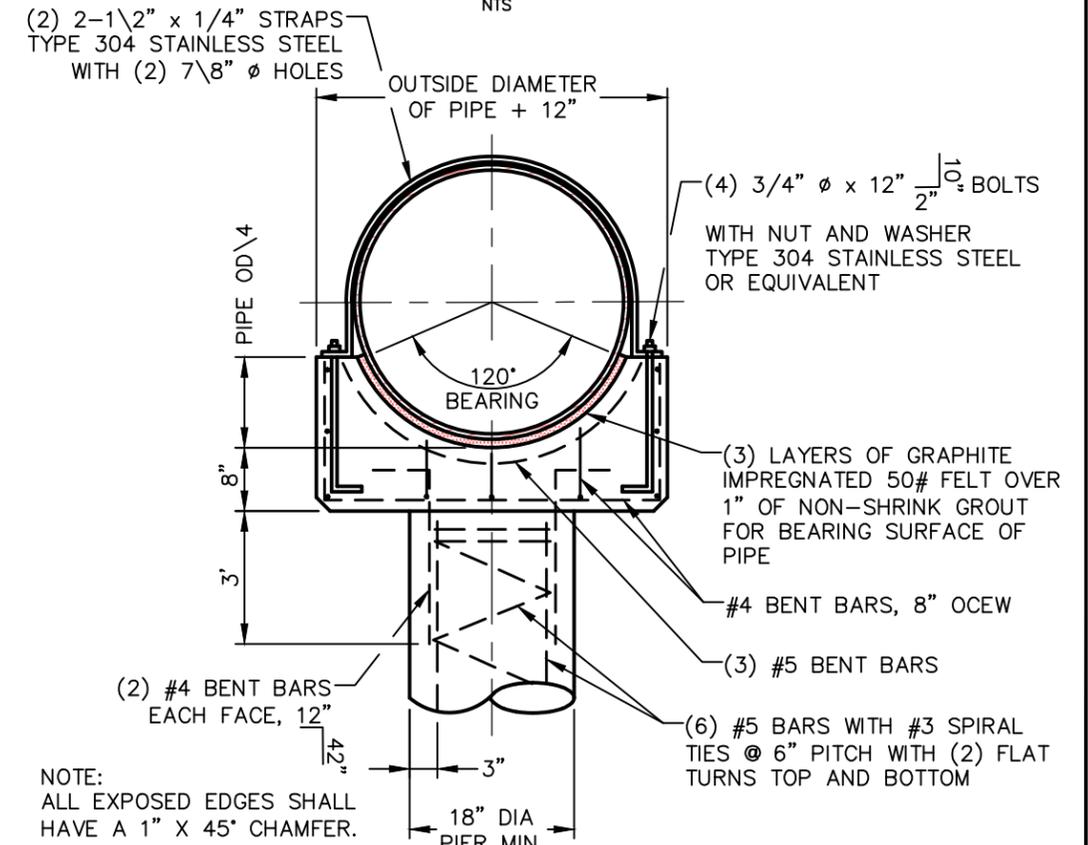


**STANDARD CONSTRUCTION DETAILS**  
**SANITARY SEWER**  
**MANHOLE ABANDONMENT IN AND OUT OF PAVING**  
 CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE  
 504., 702.  
 STANDARD DETAIL  
**5150**



SECTION A-A  
NTS



SECTION B-B  
NTS

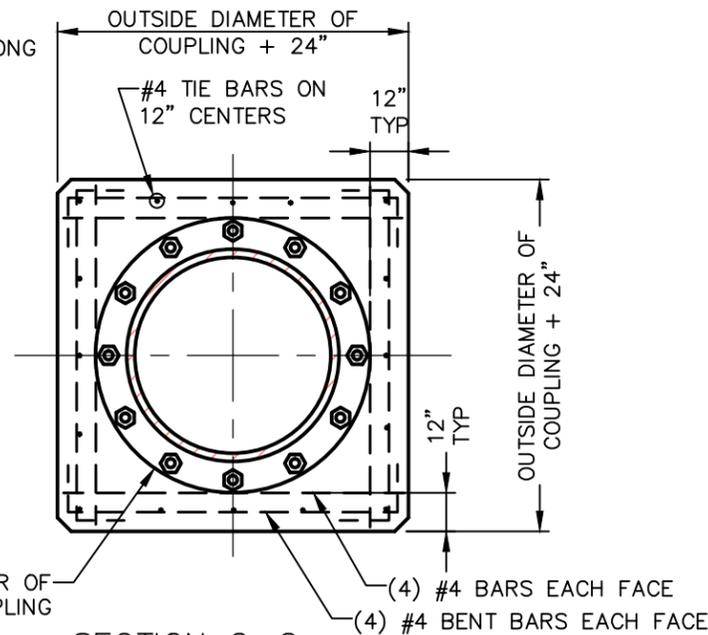
2' THICK CONCRETE COLLAR CENTERED ON COUPLING, SEE SECTION 'C-C'

CONCRETE ENCASEMENT (LENGTH WILL VARY WITH SITE AND BANK SLOPE CONDITIONS) IN NO CASE SHALL THE ENCASEMENT BE LESS THAN 8 FEET.

NOTE:  
CONSTRUCT MINIMUM WIDTH OF COLLAR ALONG PIPE=2' (1' EACH SIDE OF JOINT).

NOTES:

1. DUCTILE IRON PIPE SHALL BE CLASS 52 MINIMUM, OR AS SPECIFIED BY THE CITY ENGINEER. PIPE WALL THICKNESS SHALL BE ADEQUATE FOR THE SIZE AND SPAN AS DESIGNED.
2. PIERS SHALL PENETRATE A MINIMUM OF 6' FEET INTO ROCK OR BLUE SHALE.
3. WHERE SOILS ARE NOT STABLE, A STEEL CASING SHALL BE USED ON THE DRILLED PIER SHAFT.
4. MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND/OR LOCAL EXCEPTIONS.
5. NUMBER OF PIERS AND SPACING WILL VARY WITH LENGTH OF SPAN.
6. AERIAL CROSSING DESIGN SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER.



SECTION C-C  
NTS

North Central Texas Council of Governments



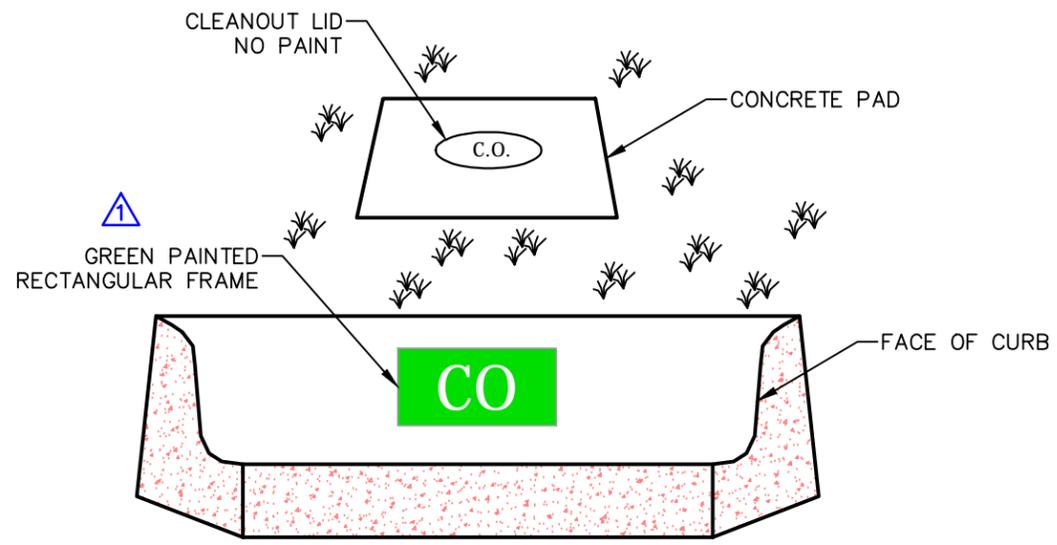
NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

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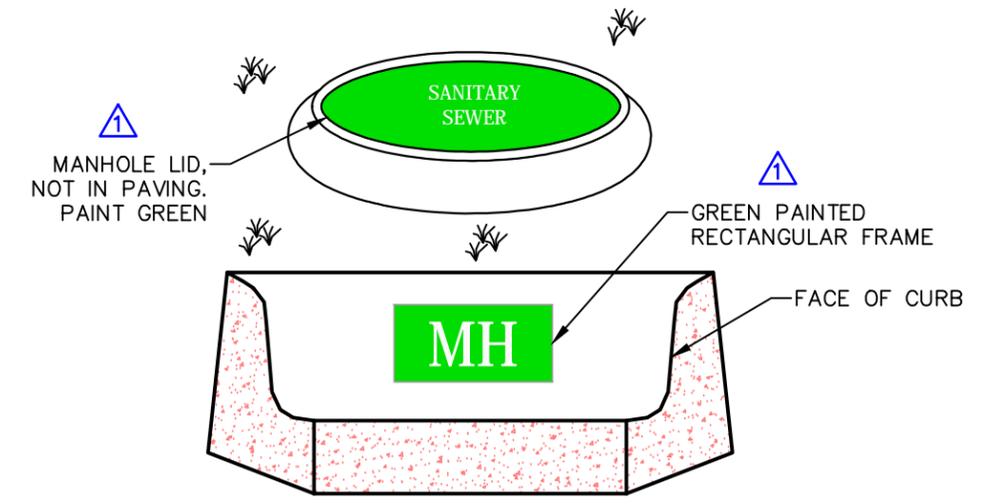
NO.	LOCAL EXCEPTION	BY	DATE
		SWL	JUL. '14
		SWL	JUL. '14



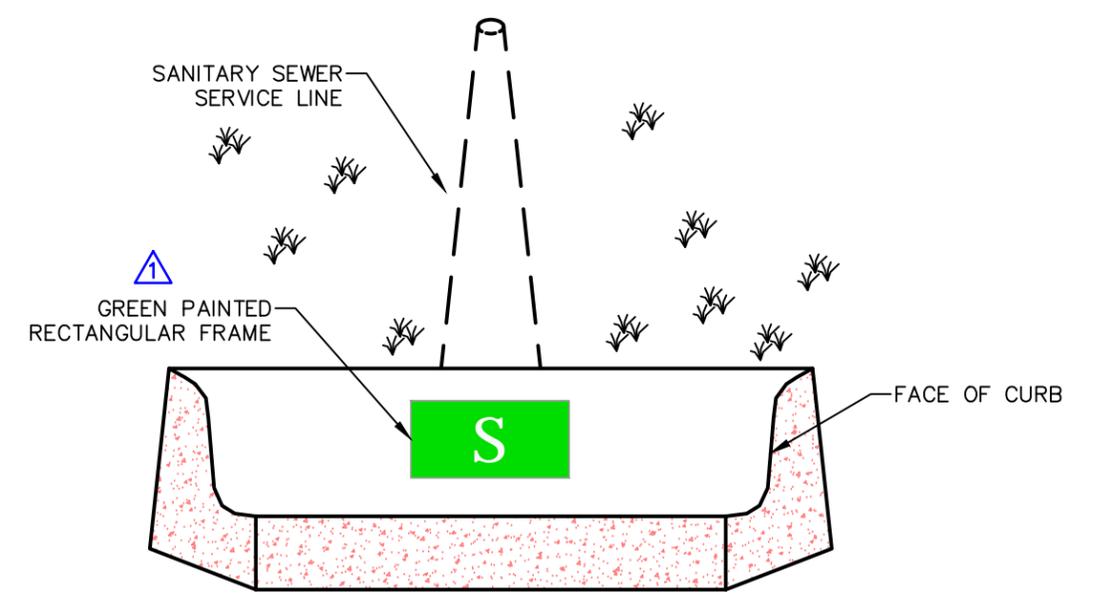
STANDARD CONSTRUCTION DETAILS		STD. SPEC. REFERENCE 303., 501., 702. STANDARD DETAIL <b>5160</b>
SANITARY SEWER AERIAL CROSSING		
CITY OF COPPELL DALLAS COUNTY, TEXAS		



SANITARY SEWER CLEANOUT IDENTIFICATION  
N.T.S.



SANITARY SEWER MANHOLE IDENTIFICATION, ADJACENT TO CURB  
N.T.S.



SANITARY SEWER SERVICE IDENTIFICATION  
N.T.S.

NOTES:

1. IDENTIFICATION LETTERS SHALL BE CHISELED OR CUT INTO THE FACE OF THE CONCRETE CURB AND IN LINE WITH MANHOLE OR CLEAN-OUT LOCATION. LETTERS SHALL BE 3" HIGH X 3" WIDE BY APPROXIMATELY 1/8" DEEP.
2. PAINTED RECTANGULAR FRAME SHALL EXTEND 1" BEYOND IDENTIFICATION LETTERS.

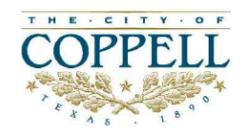
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North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

NO.	CHANGED COLOR FROM RED TO GREEN.	LOCAL EXCEPTION	BY	DATE
			SWL	JUL. '14



<b>STANDARD CONSTRUCTION DETAILS</b>
M.H. & CLEANOUT LOCATION AND IDENTIFICATION
CURB LETTERING AND COLOR CODING
CITY OF COPPELL DALLAS COUNTY, TEXAS

STD. SPEC. REFERENCE
804.
STANDARD DETAIL
<b>5170</b>

SANITARY SEWER  
GENERAL NOTES AND TESTING

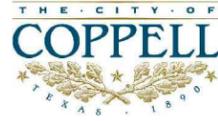
1. SANITARY SEWERLINE MINIMUM DIAMETER SHALL BE 8". SERVICE  
LATERALS SHALL HAVE A MINIMUM DIAMETER OF 4".
2. SANITARY SEWERLINE INSTALLATIONS MAY BE SUBJECT TO INFILTRATION TESTING,  
EXFILTRATION TESTING, MANDREL TESTING AND LOW PRESSURE AIR TESTING IN  
ACCORDANCE WITH THE TEXAS ADMINISTRATIVE CODE RULE 317.2.
3. ALL SANITARY SEWERLINE INSTALLATIONS SHALL HAVE A TV EXAMINATION  
PERFORMED. A COPY OF SAID EXAMINATION SHALL BE PROVIDED TO THE  
CITY FOR REVIEW PRIOR TO ACCEPTANCE OF THE SANITARY SEWERLINE  
BY THE CITY.
4. MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH  
NCTCOG CONSTRUCTION METHOD 502.1.5.2.
5. SANITARY SEWERLINE INSTALLATIONS THAT CROSS OR CLOSELY PARALLEL A  
WATERLINE SHALL BE DESIGNED IN ACCORDANCE WITH THE TEXAS ADMINISTRATIVE  
CODE RULE 317.2.
6. SANITARY SEWERLINE EMBEDMENT SHALL BE IN ACCORDANCE WITH THE CITY OF  
COPELL STANDARD CONSTRUCTION DETAILS FOR SANITARY SEWERLINE EMBEDMENT.

PATH: S:\Standard\_Details\New\_Details\_modified\SDCoppel\2005.dwg

North Central Texas Council of Governments



NOTE: STANDARDS ARE ADOPTED FROM THE NCTOG STANDARD  
DRAWINGS DATED NOV. '96, WITH LOCAL EXCEPTIONS.

					<b>STANDARD CONSTRUCTION DETAILS</b>  SANITARY SEWER GENERAL NOTES AND TESTING  CITY OF COPPELL DALLAS COUNTY, TEXAS	STD. SPEC. REFERENCE 502.  STANDARD DETAIL <b>5180</b>
NO.	LOCAL EXCEPTION	BY	DATE			