WATER AND SANITARY MATERIAL SPECIFICATIONS

WATERMAIN AND FIRE SERIVCE:

DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A21.51 WITH RUBBER GASKET PUSH-ON JOINTS CONFORMING TO ANSI A21.11. ALL FITTINGS SHALL CONFORM TO ANSI A21.10/AWWA C110.

WATER SERIVCE:

TYPE K COPPPER OR

DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A21.51 WITH RUBBER GASKET PUSH-ON JOINTS CONFORMING TO ANSI A21.11. ALL FITTINGS SHALL CONFORM TO ANSI A21.10/AWWA C110.

SANITARY SEWER:

POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL CONFORM TO ASTM DESIGNATION D-3034 WITH AN SDR OF 26, WITH ELASTOMERIC GASKET JOINTS CONFORMING TO: ASTM D3212-96a Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals ASTM F477-0221 Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe

SANITARY SERVICE:

WATERMAIN CLASS PIPE: POLYVINYL CHLORIDE (PVC) SDR 21 SEWER PIPE SHALL CONFORM TO:

D2241-04a Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)

D3139-98 Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals

TESTING NOTES:

1, MANHOLE LEAKAGE TESTS SHALL BE IN ACCORDANCE WITH

ASTM C969-02 Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines

ASTM C1244-02e1 Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill

2. INFILTRATION, EXFILTRATION, AIR EXFILTRATION AND DEFLECTION TESTING SHALL BE DONE IN ACCORDANCE WITH SECTION 31-1.11 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS

SEE PLANS AND SPECIFICATIONS FOR SURFACE RESTORATION IDENTIFICATION OF WHERE SELECT GRANULAR MATERIAL IS REQUIRED	WIDTH OF PERMANENT PAVEMENT REMOVAL AND REPLACEMENT FOR PAYMENT PURPOSES	TERMINOLOGY, DIMENSIONS AND TYPE OF SELECT MATERIAL, WHEN REQUIRED
13 REGUIRED		
EXISTING SURFACE	0" BOTTOM OF PAVEMENT STRUCTURE	1'-0"
*ALL CONDUITS LOCATED UNDER OR WITHIN 2' OF EXISTING OR FUTURE PAVED AREAS.	INSIDE WALL	VARIES TINAL S BACKFILL TO
PAVED AREAS INCLUDE STREETS, CURBS, GUTTERS SHOULDERS, AND SIDEWALKS	PROPOSED CONDUIT	CA-7, CA-9, CA-8, FA-5, FA-8, FA-
ALL NON RIGID CONDUITS AND *RIGID CONDUITS UNDER OR WITHIN 2' OF EXISTING OR PAVED AREAS	MIN.	1 INITIAL STATE OF ST
ALL NON RIGID CONDUITS, AND A SEWERS, RIGID WATER MAINS AND FORCEMAINS WITHIN 2' OF EXISTI OR FUTURE PAVED AREAS		1/2 O.D. HAUNCHING
WHERE SOIL CONDITIONS WARRANT. **		VARIES FOUNDATION VARIES
6" ALLOWANCE FOR TRENCH SHORING, BRACING, OR BOX, TYPICAL BOTH SIDES	2' + O.D. MINIMUM INSIDE WIDTH 3' + O.D. MAXIMUM WIDTH FOR PAYMENT	NOTE: TRENCH BOX SHALL NOT EXTEND BELOW TOP OF PIPE, HOWEVER IT SHALL NOT EXCEED 2 FEET FROM THE BOTTOM OF
SELECT GRANULAR BACKFILL OTHER INCIDENTAL TO THE PIPE **INDICATES ELIGIBLE FOR PAYMENT SELECT FOUNDATION MATERIAL	WISE PURPOSES	STANDARD SPECIFICATION
NON RIGID CONDUITS ARE DEFINED AS FLEXIBLE THERMOPLASTIC PIPE AND/OR CORRUGATED METAL PIPE.		FOR WATER AND SEWER IN ILLINOIS

SEE NSSD BEDDING DETAIL BELOW

INSIDE DIAMETER (CONDUIT IN INCHE	MAXIMUM TRENCH WIDTH IN FEET FOR PAYMENT	BEDDING CY,/FOO WHERE ELIGIBLE FOR PAYMENT	HAUCHING C.Y./FOOT WHERE ELIGIBLE FOR PAYMENT	INITIAL BACKFILL C.Y./FOOT WHERE ELIGIBLE FOR PAYMENT	FINAL BACKFILL C.Y./FOOT WHERE ELIGIBLE FOR PAYMENT	PERMANENT PAVEMENT REMOVA AND REPLACEMENT C.Y./FOOT
6	3.58	0.04	0.03	0.17	0.13	0.62
8	3.78	0.05	0.05	0.19	0.14	0.64
10	3.97	0.05	0.06	0.20	0.15	0.66
12	4.17	0.05	0.07	0.22	0.15	0.69
14	4.36	0.05	0.08	0.24	0.16	0.71
15	4.46	0.06	0.09	0.25	0.17	0.72
16	4.56	0.06	0.10	0.26	0.17	0.73
18	4.75	0.06	0.11	0.29	0.18	0.75
20	4.94	0.06	0.12	0.31	0.18	0.77
21	5.04	0.06	0.13	0.32	0.19	0.78
24	5.33	0.07	0.15	0.35	0.20	0.81
27	5.63	0.07	0.17	0.38	0.21	0.85
28	5.72	0.07	0.18	0.39	0.21	0.86
30	5.92	0.07	0.20	0.41	0.22	0.88
33	6.21	0.08	0.22	0.45	0.23	0.91
36	6.50	0.08	0.24	0.48	0.24	0.94
42	7.08	0.09	0.29	0.56	0.26	1.01
48	7.67	0.09	0.35	0.63	0.28	1.07
54	8.25	0.10	0.40	0.71	0.31	1.14
60	8.83	0.11	0.46	0.79	0.33	1.20
66	9.42	0.12	0.52	0.87	0.35	1.27
72	10.00	0.12	0.58	0.95	0.37	1.33
78	10.58	0.13	0,65	1.04	0.39	1.40
84	11.17	0.14	0.72	1.13	0.41	1.46
90	11.75	0.15	0.79	1.23	0.44	1.53
96	12.33	0.15	0.86	1.32	0.46	1.59
102	12.92	0.16	0.94	1.42	0.48	1.66
108	13.50	0.17	1.02	1.52	0.50	1.72
120	14.67	0.18	1.19	1.73	0.52	1.85

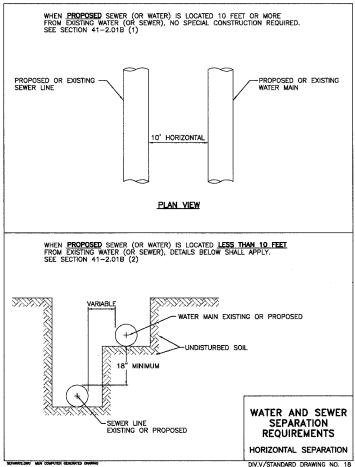
TABLE I

ዶጜ

STANDARD DRAWING NO. 2

3-4-98 DBD





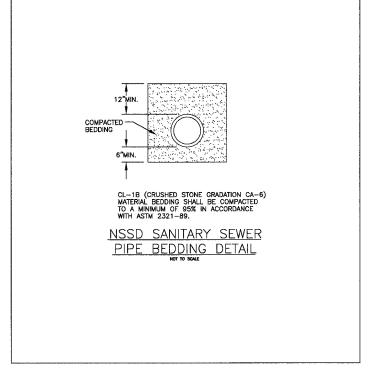
NORTH SHORE SANITARY DISTRICT NOTES:

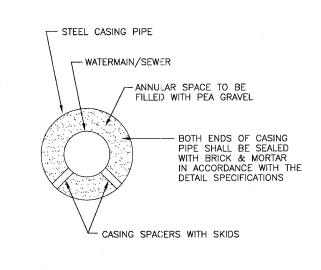
1. THE CONTRACTOR SHALL NOTIFY THE NORTH SHORE SANITARY DISTRICT A MINIMUM OF 24 HOURS PRIOR TO THE START OF CONSTRUCTION EITHER BY PHONE AT 847-623-6060 OR BY EMAIL AT engmail@northshoresanitary.org.

2. ALL SANITARY SEWER PIPE SHALL BE BEDDED, WITH A MINIMUM OF 6" BELOW THE PIPE AND 12" ABOVE THE PIPE, IN CA-6 CRUSHED MATERIAL. CA-7 MAY BE ALLOWED AT THE DISCRETION OF THE NORTH SHORE SANITARY DISTRICT IF EXTREMELY WET CONDITIONS ARE

3. THE CONNECTION TO DOWNSTREAM SEWERS SHALL BE PLUGGED WITH A WATER TIGHT CONCRETE PLUG AND MAINTAINED IN PLACE UNTIL CONNECTION IS APPROVED BY THE NORTH

4. (IF APPLICABLE) ALL SANITARY SEWER EXTENSIONS SHALL BE TELEVISED IN THE PRESENCE OF NORTH SHORE SANITARY DISTRICT PERSONNEL AFTER HAVING NOTIFIED THE DISTRICT A MINIMUM OF 24 HOURS PRIOR TO TELEVISING EITHER BY PHONE AT 847-623-6060 OR BY EMAIL AT englighorthshoresanitary.org. A COPY OF THE TELEVISED SEWER EXTENSION, IN VHS OR DVD FORMAT, SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL.





CASING PIPE DETAIL N.T.S.

CASING PIPE MATERIAL: ASTM AS3 GRADE "B" STEEL

DIAMETER: SEE BELOW

SPACING:

0.375 INCHES, MINIMUM WALL THICKNESS:

YIELD STRENGTH: 35,000 PSI, MINIMUM

GALVANIZED PAINT COATING:

JOINTS: WELDED, LEAK PROOF, CAPABLE OF WITHSTANDING HIGHWAY LOADINGS

MODEL CCS STAINLESS STEEL AS MANUFACTURED CASING SPACERS:

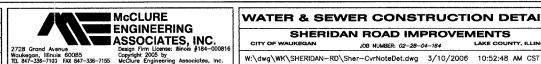
BY CASCADE WATERWORKS MANUFACTURING CO. a. AT EACH SPIGOT END OF EACH PIPE NEXT

d. AT EACH SPIGOT END OF EACH PIPE, NEXT TO THE BELL END OF THE ADJACENT PIPE AFTER THE JOINT IS FULLY ASSEMBLED b. NOT MORE THAN SIX FEET ON CENTER ALONG THE LENGTH OF THE PIPE c. WITHIN TWO FEET OF EACH END OF THE CHARLES THE CONTROL OF THE CON

WATERMAIN/SEWER	STEEL CASING PIPE
6"	12"
8"	16"
10"	18"
12"	20"
16"	24"

	REVISIONS	
NO.	ITEM	DATE

SCALE:	N. T. S.	
DRAWN BY:	MRT	
 CHECKED BY:	DBD	
 DATE:	1-16-06	



WATER & SEWER CONSTRUCTION DETAIL	LS∐	
-----------------------------------	-----	--

SHERIDAN ROAD IMPROVEMENTS JOB NUMBER: 02-28-04-164

