

General Notes

GENERAL NOTES

THE REQUIREMENTS OF THE DEKALB SANITARY DISTRICT SET FORTH IN THESE NOTES AND DETAILS ARE NOT INTENDED TO BE ALL-INCLUSIVE, BUT RATHER TO HIGHLIGHT MORE SIGNIFICANT ITEMS.

THE DISTRICT RESERVES THE RIGHT TO ESTABLISH OR MODIFY REQUIREMENTS, THAT ARE DEEMED APPROPRIATE IN THE OPINION OF THE DISTRICT, AS NEEDED, ON A CASE BY CASE BASIS.

OTHER REQUIREMENTS OF THE DISTRICT MAY BE FOUND IN VARIOUS ORDINANCES RELATING TO SEWER USE CHARGES, ANNEXATION/CONNECTION FEES, INSTALLATION AND OPERATION OF SANITARY INFRASTRUCTURE AND ENFORCEMENT OF REGULATIONS.

SANITARY SEWER CONSTRUCTION SHALL CONFORM TO STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS LATEST EDITION AS PUBLISHED BY THE ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, TITLE 35 ILLINOIS ADMINISTRATIVE CODE, SUBTITLE C: WATER POLLUTION, CHAPTER 16 ENVIRONMENTAL PROTECTION AGENCY, PART 310: ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS DESIGN AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, ILLINOIS DEPARTMENT OF TRANSPORTATION (ISBPC).

THE ASSEMBLY, APPLICATION OR INSTALLATION OF SANITARY SEWER COMPONENTS AND APPURTENANCES SHALL BE PERFORMED PER THE MANUFACTURER'S PROCEDURES AND INSTRUCTIONS. FAILURE TO FOLLOW PRESCRIBED INSTALLATION PROCEDURES OR INSTRUCTIONS MAY NEGATE THE PURPOSE OR LIMIT THE EFFECTIVENESS OR USEFUL LIFE OF THE PRODUCT.

IEPA PERMIT MUST BE EXECUTED BEFORE CONSTRUCTION STARTS

PROJECT COMPLETION, ACCEPTANCE AND PLACEMENT OF SEWERS INTO SERVICE

THE DISTRICT USES A 'SANITARY SEWER PROJECTS - STATUS MATRIX' TO HELP TRACK SEWER PROJECTS. THE MATRIX ADDRESSES EVERYTHING FROM PIPE AND MANHOLE TESTING TO RECORD DRAWINGS AND CONFORMANCE THAT ANY OUTSTANDING ADMINISTRATION & INSPECTION FEES HAVE BEEN PAID. THE PLACEMENT OF NEW SEWERS INTO SERVICE WILL NOT OCCUR UNTIL ALL MATRIX REQUIREMENTS ARE SUCCESSFULLY COMPLETED AND ALL REQUIRED DOCUMENTATION IS SUBMITTED TO THE DISTRICT. A COPY OF THE MATRIX IS INCLUDED IN THE DRAWINGS. THE MATRIX CAN HELP YOU TRACK COMPLETED ISSUES AS WELL AS THOSE NEEDING SUCCESSFUL COMPLETION BEFORE THE DISTRICT WILL ALLOW THE SEWER TO PROVIDE SERVICE.

SYSTEM ISOLATION

THE DEKALB SANITARY DISTRICT WILL INSTALL ISOLATION PLOGS TO PROTECT THE 'LIVE' DOWNSTREAM SANITARY SEWERS FROM EXTRANEOUS WATER AND DEBRIS DURING SEWER CONSTRUCTION.

THE ISOLATION PLOGS WILL NOT BE REMOVED UNTIL THE NEW SEWERS HAVE PASSED THE REQUIRED TESTS, INSPECTIONS AND ALL REQUIRED DOCUMENTATION, IN ACCEPTABLE FORMAT, HAS BEEN PROVIDED AND AT SUCH TIME THAT THE DISTRICT DETERMINES TO BE APPROPRIATE.

TAMPERING WITH OR REMOVAL OF THE ISOLATION PLOGS IS A VIOLATION OF DEKALB SANITARY DISTRICT ORDINANCE NO. 299. ANY PERSONS VIOLATING SAID ORDINANCE PROVISION IS SUBJECT TO FINES, LEGAL ACTION, AND IMMEDIATE ARREST.

QUALITY ASSURANCE (*#8 ON STATUS MATRIX): QUALITY ASSURANCE (QA) INSPECTIONS AND TESTS ARE REQUIRED. THE DEVELOPER'S CONTRACTOR WILL PERFORM THE QA TESTING WORK OR SUBCONTRACT IT TO A COMPANY THAT PERFORMS THESE SERVICES. TESTING WILL INCLUDE LOW PRESSURE AIR TESTING, DEFLECTION TESTING OF ALL FLEXIBLE PIPE, LAMPING, MANHOLE VACUUM TESTING AND TELEVISION ALL GRAVITY SEWER PIPE. ALL PIPE SHALL BE TESTED AND THE SYSTEM CLEANED OF DEBRIS PRIOR TO TELEVISION.

THE DEVELOPER SHALL FURNISH THE DISTRICT WITH ONE COPY OF THE VIDEOTAPE FOR REVIEW. IN THE EVENT THAT A DEFICIENCY IS NOTED, THE DEVELOPER/ CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING THIS DEFICIENCY AND RETESTING THE FAILED SECTION.

THE DEVELOPER/CONTRACTOR MUST INITIATE CONTACT WITH THE DISTRICT AS TO HIS SCHEDULE AND READINESS FOR INSPECTIONS AND/OR TEST. OBSERVATION, AFTER CONTACT BY THE CONTRACTOR, THE DISTRICT WILL SCHEDULE INSPECTIONS OR TESTS. INSPECTIONS AND/OR OBSERVATION TESTING. A REPRESENTATIVE OF THE DEKALB SANITARY DISTRICT MUST BE PRESENT TO OBSERVE THE TESTING PROCEDURES. THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH AT LEAST 24 HOURS NOTICE SO THE DISTRICT CAN EFFECTIVELY SCHEDULE MANHOLES. THE DISTRICT MUST ALSO BE INFORMED WHEN A DEFICIENCY HAS BEEN CORRECTED OR WE WON'T KNOW THAT IT IS READY FOR A RE-INSPECTION.

RECORD DRAWINGS (*#7 ON STATUS MATRIX): THE DEVELOPER SHALL SUPPLY THE DISTRICT, THROUGH HIS ENGINEER, WITH TWO HARD COPY SETS OF RECORD DRAWINGS. ONE SET IS TO BE A MICLAR COPY AND ONE SET IS TO BE A BLUELINE XEROX COPY. ELECTRONIC FILES (R COPY) SHALL BE IN MICROSTATION (.dgn) FILE OR AUTOCAD 2000 (.dwg) FILE FORMATS.

THE RECORD DRAWINGS SHALL INDICATE ANY DEVIATION FROM THE APPROVED PROJECT PLANS AND/OR MATERIALS. THE RECORD DRAWINGS SHALL INCLUDE THE FOLLOWING: RM AND INVERT ELEVATIONS (USGS/MSL DATUM), THE X GRADE, SIZE, PIPE MATERIAL, DISTANCE FROM MANHOLE TO MANHOLE, THE DISTANCE FROM A DEFINED MANHOLE TO EACH SERVICE WYE OR TEE, THE LOCATION OF LATERALS AT PROPERTY LINES (MEASURED FROM THE LOT LINE PINS), THE SIZE AND MATERIAL SERVICE LATERAL ARE MADE OF.

RECORD DRAWINGS ARE TO BE LABELED 'RECORD DRAWINGS' AND DATED AND SIGNED BY AN ENGINEER LICENSED IN THE STATE OF ILLINOIS.

COST OF SANITARY SEWERS THAT WILL BE DEDICATED AS PUBLIC (*#8 ON STATUS MATRIX): THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD REQUIRES GOVERNMENT AGENCIES TO LIST THEIR INFRASTRUCTURE INVESTMENTS. INFRASTRUCTURE IS GOING TO BE DEDICATED AND ACCEPTED BY THE DEKALB SANITARY DISTRICT AS A PUBLIC SYSTEM. THE COSTS ASSOCIATED WITH THE INSTALLATION OF THE SANITARY SYSTEM ARE TO BE PROVIDED TO THE SANITARY DISTRICT COPIES OF CONTRACTS OR PROJECT GEN WAIVERS THAT INCLUDE ALL SANITARY INSTALLATION COSTS WILL BE ACCEPTABLE. PLEASE NOTE THAT MANY INFRASTRUCTURE CONTRACTS ALSO INCLUDE WATER MAIN AND STORM SEWER INSTALLATIONS. THE DISTRICT IS ONLY CONCERNED WITH THE SANITARY INFRASTRUCTURE COSTS. THEREFORE THE COSTS MAY NEED TO BE BROKEN OUT ON THE CONTRACT FORMULATED TO REFLECT INDIVIDUAL COSTS FOR SANITARY, STORM AND WATER MAIN.

PROJECT COMPLETION/ACCEPTANCE FOR SERVICE (*#10 ON STATUS MATRIX): THE PLACEMENT OF THE NEW SEWERS INTO SERVICE WILL NOT OCCUR UNTIL ALL REQUIREMENTS ARE SUCCESSFULLY COMPLETED AND ALL REQUIRED DOCUMENTATION IN ACCEPTABLE FORMAT TO THE DISTRICT HAS BEEN PROVIDED AND AT SUCH TIME THAT THE DISTRICT DETERMINES TO BE APPROPRIATE. PROVIDED THAT ALL OUTSTANDING REQUIREMENTS (AS NOTED IN THE SEWER PROJECT DEFICIENCY & STATUS MEMO AND IN THE SANITARY SEWER PROJECTS - STATUS MATRIX) HAVE BEEN COMPLETED AND A WRITTEN REQUEST FROM THE DEVELOPER TO MAKE THE SANITARY SEWER AVAILABLE FOR USE, THE DISTRICT WILL ACCEPT AND ALLOW THE SANITARY SEWER PORTION OF THIS PROJECT TO BE ACTIVATED FOR SERVICE.

SANITARY MANHOLE CONSTRUCTION

CONSTRUCT MANHOLE WITH LID/CASTING SET TO FINISHED GRADE. LID MUST BE EXPOSED. IN PAVEMENT, BINDER COURSE IS TO BE FRAMED TO PROTECT FROM EQUIPMENT STRIKES IF THE FINAL FINISHING COURSE IS NOT INSTALLED FOR A SEASON OR MORE.

SANITARY MANHOLE FRAME TO CONE SEALS (CHIMNEY SEALS) SHALL CONSIST OF AN EXTERNAL CANUSA WRAP/ SEAL INSTALLATION. MANUFACTURE'S INSTALLATION PROCEDURES ARE TO BE FOLLOWED FOR PREPARATION AND INSTALLATION OF THE CANUSA WRAP/ SEAL.

IF IT BECOMES NECESSARY TO RE-ADJUST ANY MANHOLE FRAME ELEVATION, REINSTALL THE NECESSARY PORTIONS OF THE CHIMNEY SEAL AND CONTACT THE DISTRICT FOR FINAL VISUAL INSPECTION OF THE CHIMNEY SEAL PRIOR TO ANY BACKFILLING.

MANHOLE SPECIFICATIONS: PROVIDE PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, CONES, BOTTOMS, AND FLAT TOP SLABS COMPLYING WITH ASTM C478.

DESIGN FLAT TOP SLABS FOR HS20-44 LOADINGS.

PROVIDE ECCENTRIC CONE SECTION.

PROVIDE PRECAST REINFORCED CONCRETE MONOLITHIC BASES WITH PRECAST INVERT AND BENCHES FOR NEW SEWER LINES.

THE EXTERIOR OF MANHOLE ELEMENTS ARE TO BE 'WATERPROOFED' WITH A FACTORY APPLICATION OF CONSEAL CS-95 (PER MANUFACTURE'S SPECIFICATIONS).

JOINTS FOR PRECAST SECTIONS: PROVIDE TONGUE AND GROOVE JOINTS WITH EITHER FLEXIBLE WATER TIGHT RUBBER GASKETS OR PREFORMED BITUMINOUS MASTIC. GASKETS SHALL CONFORM TO A HOMOGENEOUS BLEND OF REFINED HYDROCARBON RESINS AND PLASTICIZING COMPOUND REINFORCED WITH INERT MINERAL FILLER. ACCEPTABLE PREFORMED GASKET PRODUCTS:

K.T. SNYDER CO., RM-NK, OR EQUAL

CONCRETE SEALANTS, TYPE CS-102, OR EQUAL

ON THE EXTERIOR OF BARREL TO BARREL JOINTS, APPLY MAC WRAP WATERPROOFING STRIPS (MAR MAC COMPANY).

STEPS

PROVIDE STEPS WITH A MINIMUM WIDTH OF 12 INCHES AND A MINIMUM PROJECTION OF 5 INCHES. STEPS SHALL BE PROVIDED ON 16' CENTERS.

USE STEPS CONSISTING OF COPOLYMER POLYPROPYLENE PLASTIC WITH A CONTINUOUS 1/2-INCH STEEL REINFORCEMENT AS MANUFACTURED BY MA INDUSTRIES, INC.

FRAMES AND LIDS

PROVIDE CAST IRON FRAMES AND LIDS WITH SOLID SELF-SEALING LIDS AND MACHINED BEARING SURFACES, STAMPED WITH THE WORD 'SANITARY'.

ACCEPTABLE PRODUCTS: NEENAH R-1712, EAST JORDAN 1050 SD EXTRA HEAVY DUTY OR EQUAL.

PROVIDE BOLTED AND GASKETED COVERS WHERE DIRECTED BY THE DISTRICT.

ACCEPTABLE PRODUCTS: NEENAH R-1916-C, EAST JORDAN 1058 WT OR EQUAL.

ADJUSTMENT OF FRAMES AND COVERS

IN PAVED AREAS: SO THAT THE TOP OF THE COVER WILL BE FLUSH WITH THE FINISHED PAVEMENT WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED 12 INCHES ACCOMPLISHED THROUGH A MAXIMUM OF 2 RINGS. FRAMES AND ADJUSTMENT RINGS SHALL BE SEALED WITH TROWELABLE MASTIC TO MINIMIZE SETTLEMENT.

FLEXIBLE PIPE CONNECTORS

PROVIDE FLEXIBLE RUBBER GASKET COLLAR FOR CONNECTING PIPES TO THE MANHOLE OPENINGS. FOR PIPE 24-INCH AND SMALLER, USE PSX GASKET SYSTEM BY PRESS-SEAL GASKET CORPORATION, OR EQUAL. FOR PIPE 27-INCH AND LARGER, USE RESILIENT GASKET BY A-LOK PRODUCTS, INC., OR EQUAL.

MANHOLE DROP CONNECTIONS

8-INCH TO 12-INCH DIAMETER DROP: PVC SDR 26. DROP SHALL BE PRECAST AND CONSTRUCTED VERTICALLY AND PARALLEL TO THE OUTSIDE OF THE MANHOLE. OVER 12-INCH DIAMETER DROP: DUCTILE IRON CLASS 50.

ENCASE DROP PIPE FROM BASE OF MANHOLE TO 6 INCHES ABOVE TOP OF INCOMING SEWER WITH 4000 PSI CONCRETE AT A MINIMUM THICKNESS OF 6 INCHES.

DROP SHALL BE CONSTRUCTED VERTICALLY AND PARALLEL TO THE OUTSIDE OF THE MANHOLE.

ENCASE DROP ELBOW AT BASE OF MANHOLE ONLY IN CONCRETE.

ENCASE TO 2 FEET ABOVE TOP OF ELBOW.

UTILIZE DUCTILE IRON RESTRAINED JOINT PIPE AND FITTINGS FOR DROP ELBOW, PIPE, AND DUCTILE IRON TEE AT INCOMING SEWER.

SUPPORT DROP PIPE TO MANHOLE WALL WITH STAINLESS STEEL BRACKETS AND STRAPPING WHERE DROPS ARE OVER 10 FEET LONG.

PVC DROPS OVER 12-INCH DIAMETER WITH TOTAL CONCRETE ENCASUREMENT MAY BE UTILIZED IF APPROVED BY THE DISTRICT. NO INTERNAL DROPS ARE ALLOWED.

CONNECTIONS TO EXISTING SEWERS

AT LOCATIONS WHERE A SANITARY SEWER IS PROPOSED ON AN EXISTING LINE THE MANHOLE SHALL BE PLACED BY UTILIZING THE FOLLOWING PROCEDURE. 'DOG HOUSING' IS PROHIBITED. ALL BASE AND LOWEST SECTIONS OF THE MANHOLE SHALL BE MORTAR SET.

THE EXISTING PIPES SHALL BE CUT SMOOTH APPROXIMATELY 5' FROM THE OUTSIDE OF THE PROPOSED MANHOLE.

LENGTHS OF IDENTICAL PIPE SHALL BE FITTED WITH NON-SHEAR COUPLINGS AND THEN ATTACHED TO THE MANHOLE USING BOOTED CONNECTIONS.

DOGHOUSING OR PLACING STRUCTURES DIRECTLY OVER THE EXISTING LINES IS NOT PERMITTED.

SANITARY MANHOLE TESTING

ALL SANITARY MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS SECTION 370.330.E.2.

THE CONTRACTOR SHALL NOTIFY THE DEKALB SANITARY DISTRICT 24 HOURS IN ADVANCE OF THE TESTING PROCEDURES.

MANHOLES SHALL BE TESTED FROM THE TOP OF THE FRAME ON DOWN.

REMOVE LID AND PLACE VACUUM TESTER HEAD ON TOP PORTION OF FRAME. DRAW VACUUM OF 10 INCHES HG (MERCUY).

TIME FOR VACUUM TO DROP TO 9 INCHES HG SHALL NOT BE LESS THAN 40, 50, OR 60 SECONDS FOR MANHOLE DIAMETERS OF 48, 60, AND 72 INCHES, RESPECTIVELY.

FOR MANHOLES DEEPER THAN 20 FEET, TEST TIMES SHALL BE INCREASED BY 2 SECONDS PER FOOT OF ADDITIONAL MANHOLE DEPTH.

MANHOLES THAT FAIL SHALL BE SEALED AND RETESTED BY CONTRACTOR UNTIL MANHOLE IS ABLE TO PASS TEST.

ISOLATE AND REPAIR ANY LEAKING JOINTS, PIPE SEALS, ETC. OBTAIN PRE-APPROVAL OF REPAIR MATERIALS AND METHODS FROM DEKALB SANITARY DISTRICT. LEAKS MUST BE REPAIRED EXTERNALLY (AVANTIPRODUCT OR SIMILAR). MIXING OF MORTAR OR SEALANTS ON INSIDE OF SURFACE OF MANHOLE WILL NOT BE ACCEPTED.

GREASE INTERCEPTORS

ALL NEW CONSTRUCTION OF COMMERCIAL OR INSTITUTIONAL FOOD SERVICE ESTABLISHMENTS SHALL REQUIRE A GREASE INTERCEPTOR AS PER THE OSO STANDARD DETAIL.

SEWER PIPE & FITTINGS SPECIFICATIONS

DUCTILE IRON PIPE AND FITTINGS:

DUCTILE IRON PIPE: AWWA C156 THICKNESS AWWA C150; INTERIOR CEMENT LINING AND BITUMINOUS COATINGS; EXTERIOR COAL TAR COATING AWWA C104, PRESSURE CLASS 350. JOINTS SHALL BE AWWA CIRCUBER RING SLIP SEAL OR PUSH-ON TYPE.

PIPE: COMPLY WITH ANSI A21.5, CLASS 50.

FITTINGS: COMPLY WITH ANSI A21.6.

JOINTS: COMPLY WITH ANSI A21.6.

ALL PIPE AND FITTINGS SHALL BE CEMENT LINED IN ACCORDANCE WITH ANSI A21.4, STANDARD THICKNESS.

ALL DUCTILE IRON PIPES SHALL BE INSTALLED WITH POLYETHYLENE ENCASUREMENT. THIS MAY BE WAIVED IF THE APPLICANT PROVIDES THE DEKALB SANITARY DISTRICT WITH SUFFICIENT SOIL INFORMATION TO INDICATING THAT EXISTING SOILS WILL NOT ADVERSELY AFFECT THE PIPE.

PVC PIPE AND FITTINGS

PVC PLASTIC SEWER PIPE AND FITTINGS (DEPTHS OF 20' OR LESS)

POLYVINYL CHLORIDE (PVC) PIPE: ASTM D3034, HEAVY WALL SEWER PIPE; SDR-26. JOINTS SHALL BE ASTM D3212 FLEXIBLE ELASTOMERIC SEALS.

PIPE AND FITTINGS: NOMINAL SIZES UP TO 15" IN DIAMETER SHALL AT A MINIMUM BE ASTM D-3034. NOMINAL SIZES 18", 24" AND 30" SHALL MEET THE REQUIREMENTS OF ASTM F-479 AS APPLICABLE TO T-1 MATERIALS. FOR ALL SIZES, THE STANDARD DIMENSION RATIO (SDR) SHALL BE NO LESS THAN SDR-26.

JOINTS: PVC SEWER PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D-3212.

PVC HEAVY WALL GRAVITY SEWER PIPE (DEPTHS GREATER THAN 20')

PVC PIPE SHALL CONFORM TO AWWA C900/C905, DEPENDING ON DIAMETER. DIMENSION RATIO SHALL BE INDICATED ON THE PLANS AND SHALL BE NO GREATER THAN 21.

JOINTS SHALL BE ELASTOMERIC PUSH-ON TYPE JOINTS IN ACCORDANCE WITH ASTM F477 AND SHALL BE PRESSURE RATED IN ACCORDANCE WITH ASTM D339.

PVC WATER MAIN QUALITY PIPE (LARGE DIAMETER AT DEPTH GREATER THAN 20')

PIPE AND FITTINGS: NOMINAL SIZES 14", 16", 18", 20", 24" AND 30" SHALL MEET THE REQUIREMENTS OF AWWA STANDARDS ANSI/AWWA C-905.

HIGH DENSITY POLYETHYLENE SEWER PIPE (HDPE)

HDPE SHALL BE SDR 11 OR AS APPROVED BY THE DISTRICT

CELL CLASSIFICATION OF PE345464C OR GREATER PER ASTM D3350

THE USE OF HDPE AND ALL FITTINGS WILL BE APPROVED BY THE DISTRICT ON A CASE-BY-CASE BASIS.

ALL HDPE WELDS SHALL BE CERTIFIED THROUGH THE USE OF A DATALOGGER.

TWO TRACER WIRES SHALL BE INSTALLED WITH THE HDPE PIPE.

COUPLINGS

PROVIDE NON-SHEAR FLEXIBLE RUBBER COUPLINGS WITH ADJUSTABLE STAINLESS STEEL BANDS FOR CONNECTING NEW PIPE TO EXISTING SEWER PIPE AND FOR REPAIRING SEWER PIPE.

ACCEPTABLE PRODUCTS: NON-SHEAR COUPLINGS BY DFW PLASTICS/HEFCO PLASTICS, INC., OR FERRO

CONSTRUCTION STANDARDS

ALL PIPE SHALL BE INSPECTED AND APPROVED BY THE DISTRICT OR DISTRICT'S AGENT PRIOR TO INSTALLATION.

PROVIDE MINIMUM COVER OF 5 FEET ABOVE TOP OF PIPE WHERE PIPE CROSSES BENEATH PAVED AREAS SUCH AS STREETS AND DRIVEWAYS AND A MINIMUM COVER OF 4 FEET IN UNPAVED AREAS.

SANITARY SEWER INSTALLATION SHALL NOT START UNTIL MASS GRADING HAS BEEN COMPLETED.

PIPE SHALL BE LAID AT A CONSTANT PITCH ON A STRAIGHT LINE FROM MANHOLE TO MANHOLE. CURVILINEAR SANITARY SEWERS OR SEWERS WITH DEFLECTED PIPES ARE PROHIBITED.

ALL CHANGES IN PIPE MATERIAL, CLASS, SIZE, SLOPE, AND DIRECTION SHALL BE MADE AT A MANHOLE UNLESS APPROVED BY THE DISTRICT. ALL SANITARY SEWERS SHALL BE CONSTRUCTED WITH THE USE OF A PIPE LASER.

ALL SANITARY SEWER SERVICES SHALL BE SDR 26 WITH A MINIMUM INSIDE DIAMETER OF SIX-INCHES (6") WHEN INSTALLED CONCURRENT WITH MAIN INSTALLATIONS.

SANITARY SEWER SERVICES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 1/8" PER FOOT FOR 6" DIAMETER SERVICES OR 2/8" PER FOOT FOR 4" DIAMETER SERVICES.

PLACE THE BUILDING SEWER PIPE/SERVICE ON A LAYER OF WASHED STONE CONFORMING TO 100T CRADATION CA 7. PROVIDE A MINIMUM THICKNESS OF FOUR (4) INCHES UNDER THE PIPE BARREL AND TWO (2) INCHES UNDER BELLS. CAREFULLY PLACE AND COMPACT AROUND THE PIPE TO PROVIDE UNIFORM SUPPORT TO THE BOTTOM QUADRANT. BACKFILL PVC PLASTIC PIPE WITH BEDDING MATERIAL TO ONE (1) FOOT ABOVE TOP OF PIPE AND COMPACT IT PER THE DIRECTION OF THE DISTRICT.

PIPE BEDDING AND COVERING

PROVIDE GRANULAR PIPE BEDDING AND COVER MATERIAL OF WELL GRADED, WASHED, MIXTURE OF GRAVEL OR STONE AGGREGATE FREE OF CLAY, LOAM, DIRT, CALCAREOUS OR OTHER FOREIGN MATTER CONFORMING TO THE 100T STANDARD SPECIFICATIONS CRADATION NO. CA 7, OR THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.

FOLLOWING PLACEMENT OF PIPE AND INSPECTION OF JOINTS, PROVIDE COMPACTED GRANULAR PIPE BEDDING AND COVER MATERIAL FOR THE FULL WIDTH OF THE TRENCH TO THE FOLLOWING LEVELS UNLESS OTHERWISE SHOWN ON THE DRAWINGS:

FOR PIPE SIZES 24-INCH AND SMALLER, EXCEPT FLEXIBLE THERMOPLASTIC PIPE: TO 4 INCHES ABOVE THE TOP OF THE PIPE.

FOR PIPE SIZES 27-INCH AND LARGER, EXCEPT FLEXIBLE THERMOPLASTIC PIPE: TO THE HORIZONTAL CENTERLINE (SPRINKLINE) OF THE PIPE.

FOR FLEXIBLE THERMOPLASTIC PIPES, INCLUDING PVC PLASTIC PIPE, AND OTHER FLEXIBLE TYPE PIPE: TO 12 INCHES ABOVE THE TOP OF THE PIPE.

SEWER PIPE TESTING

TESTING WILL INCLUDE LOW PRESSURE AIR TESTING, DEFLECTION TESTING OF ALL FLEXIBLE PIPE, SEGMENT LAMPING AND TELEVISION. ALL GRAVITY SEWER PIPE SHALL BE TESTED AND THE SYSTEM CLEANED OF DEBRIS PRIOR TO TELEVISION. THE DEKALB SANITARY DISTRICT MUST BE NOTIFIED ON THE DATE WHEN PIPE CONSTRUCTION IS COMPLETED.

THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETION OF AIR TESTING ALL SANITARY SEWER LINES. THIS SHALL BE DONE IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN SECTION 371.0 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

MANHOLE DEFLECTION TESTING OF ALL FLEXIBLE PIPE SHALL NOT COMMENCE PRIOR TO 30 DAYS AFTER THE INSTALLATION OF THE LAST SECTION OF PIPE.

THE FULL LENGTH OF ALL SANITARY SEWERS SHALL BE TESTED AS SPECIFIED IN DIVISION 3, SECTION 31 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

PAVEMENT REPLACEMENT

PAVEMENT REPLACEMENT SHALL DEFEND ON THE MAKE UP OF THE EXISTING PAVEMENT STRUCTURE AND BE IN ACCORDANCE WITH THE CITY OF DEKALB REQUIREMENTS FOR THE PAVEMENT IN QUESTION (SEE DISTRICT'S STANDARD DRAWINGS).

CASING PIPES

STEEL CASING PIPE

STEEL CASING PIPE SHALL BE A MINIMUM OF 24" DIAMETER, SHALL HAVE A MINIMUM WALL THICKNESS OF 1/4" AND SHALL BE STEEL CONFORMING TO ASTM A-53, TYPE S, GRADE B. IT SHALL HAVE A 16 MIL BITUMINOUS COATING INSIDE OF AND OUT OF CASING PIPE. THICKNESS SHALL BE AS REQUIRED TO RESIST ALL LOADS INCLUDING, BUT NOT LIMITED TO, SOIL, STRUCTURES, VEHICLE DEAD LOADS, AS WELL AS VEHICLE LIVE LOADS AND LIVE LOAD SURCHARGES.

STAINLESS STEEL CASING SPACERS

CARRIER PIPE SHALL BE CENTERED WITHIN A CASING BY USE OF STAINLESS STEEL CASING SPACERS AS SHOWN ON THE PLANS. CENTER-TO-CENTER DIMENSIONS ARE TO BE PER THE DETAIL PROVIDED.

ACCEPTABLE MANUFACTURER: CASCADE WATERWORKS MANUFACTURING, CO - YORKVILLE, ILLINOIS - MODEL CCS, OR ACCEPTABLE ALTERNATIVE.

ALL WELDS AND METAL SURFACES SHALL BE CHEMICALLY PASSIVATED.

CASING END SEALS

ENDS OF ALL CASING PIPES SHALL BE SEALED WITH A PREFABRICATED END SEAL CONSTRUCTED FROM VIRGIN SDR WITH T-305 STAINLESS STEEL BANDS. CASCADE MODEL CCESS WITH STAINLESS STEEL BANDS OR APPROVED EQUAL BRICK AND MORTAR ARE NOT PERMITTED

CONSTRUCTION STANDARDS

NO MORE THAN 3 INCHES LATERAL AND 1 INCH VERTICAL DEVIATION FROM THE THEORETICAL ALIGNMENT SHALL BE PERMITTED IN THE POSITION OF THE COMPLETED SEWER PIPE AT ANY POINT ALONG THE ALIGNMENT.

SANITARY SEWER PROJECTS - STATUS MATRIX

NOT AVAILABLE/AT OWN RISK: MEANS THE SANITARY SEWERS FOR THIS DEVELOPMENT HAVE NOT BEEN APPROVED FOR USE AND MAY BE ISOLATED FROM THE DISTRICT'S ACTIVE LIVED SANITARY SEWER SYSTEM. 1) THE DISCHARGE OF ANY WASTEWATER TO THIS SYSTEM IS ILLEGAL AND NOT PERMITTED. 2) UNTIL THIS SEWER SYSTEM IS COMPLETED (AND PROTECTED FROM DAMAGE) IT MAY ACCUMULATE STORM AND/OR GROUND WATER. IT IS THE DEVELOPER'S RESPONSIBILITY TO MONITOR WATER LEVELS AND PUMP OUT THIS SYSTEM AS THE OWNER DEEMS NECESSARY. THE DISCHARGE FROM THE ABOVE 'PUMP OUT' OPERATION IS NOT TO BE MANDATED INTO ANY SANITARY SEWER. 3) ISOLATION PLUG 'N' MEANS A PLUG IS INSTALLED, TAMPERING WITH OR REMOVAL OF AN ISOLATION DEVICE MAY RESULT IN FINES, LEGAL ACTION AND/OR IMMEDIATE ARREST.

MANHOLE FRAMES AND LIDS - FINAL CONDITION ON MANY OCCASIONS, MANHOLE FRAMES ARE DAMAGED OR DISLODGED BY CONSTRUCTION EQUIPMENT OR SNOW PLOWS PRIOR TO INSTALLATION OF THE FINAL ROAD SURFACE. INADEQUATE RAMPING AND/OR ACTUAL BINDER SETTLEMENT ARE THE USUAL CULPRITS. MANHOLE FRAMES AND LIDS WILL BE RE-INSPECTED FOR DAMAGE AFTER APPLICATION OF THE FINAL ROAD SURFACE. ANY DEFICIENCIES SHALL BE RECTIFIED. BECAUSE OF THE POTENTIAL FOR EXTENDED PERIODS OF TIME BETWEEN SYSTEM ACCEPTANCE FOR SERVICE (4-YEAR WARRANTY BEGINS) AND FINAL ROAD SURFACE, FRAME AND LID ISSUES MAY NOT BE SUBJECT TO THE 1-YEAR WARRANTY PERIOD.

TESTS AND REQUIREMENTS (MANHOLES AND PIPES FREE FROM ANY BREAKAGE, LEAKAGE MISALIGNMENT AND/OR DEBRIS):

- PIPE LEAKAGE/INFILTRATION TEST (LOW PRESSURE AIR)
- LAMPING (CCTV SEWER INSPECTION WILL BE REQUIRED IF CONDITIONS WARRANT)
- PIPE DEFLECTION (AFTER 30 DAYS - PVC ONLY)
- MANHOLE VACUUM (FROM CONE DOWN OR FROM FRAME DOWN)
- BINDER APPLIED. MANHOLE FRAME AT LEAST AT BINDER ELEVATION AND WATER-TIGHT (TEMPORARY)
- MANHOLE FRAME AT FINAL GRADE ELEVATION WITH EXTERIOR SEAL IN PLACE AND RAMPED OR WITH FINAL SURFACE APPLIED.
- MANHOLES AND PIPES FREE FROM BREAKAGE, LEAKAGE MISALIGNMENT AND/OR DEBRIS.
- (CCTV SEWER INSPECTION IS REQUIRED IF CONDITIONS WARRANT.)
- RECORD DRAWINGS (ACCEPTABLE FORMAT) RECEIVED.
- COSTS AND APPROPRIATE WAIVERS FOR PUBLIC PORTION OF SANITARY SEWER RECEIVED BY THE DISTRICT.
- WRITTEN REQUEST FROM THE DEVELOPER TO MAKE THE SEWER AVAILABLE FOR USE (ITEMS 1-8 COMPLETE).
- ALL ORD. 456 FEES HAVE BEEN PAID TO THE DEKALB SANITARY DISTRICT (PROJECT PLAN REVIEW, ADMINISTRATION AND INSPECTION).

DEVELOPMENT / PROJECT NAME	SANITARY SEWERS IN THIS PROJECT ARE 'AVAILABLE' OR 'NOT AVAILABLE' FOR USE	CAN BUILDING LATERALS BE CONNECTED TO SANITARY SEWER MAINS? 'NO' OR 'AT OWN RISK' OR 'YES'	OUTSTANDING TESTS and REQUIREMENTS TO BE 100% COMPLETE BEFORE SEWER IS AVAILABLE FOR USE. (GREEN OR 'X' OUT WHEN COMPLETE)										SYSTEM ISOLATION PLUG STATUS: ISO 'N' OR 'NONE INSTALLED' OR 'OUT'	NOTES, REMINDERS and OTHER PROJECT ERRATA	DATE SYSTEM ACCEPTED BY OSD	
'THIS PROJECT'	NOT AVAILABLE	NO	1	2	3	4	5a	5b	6	7	8	9	10	ISO IN		

Issue	Resolution	Date	Copyright:
			THIS DRAWING SHALL NOT BE USED, REPRODUCED, MODIFIED OR SOLD EITHER WHOLLY OR IN PART, EXCEPT WHEN AUTHORIZED IN WRITING BY THE DEKALB SANITARY DISTRICT.

DeKalb Sanitary District
 803 Hollister Avenue • DeKalb, Illinois 60115
 815.758.3513 Fax: 815.758.0615

Standard Sanitary Sewer Construction Details

DeKalb, Illinois

Issue Date:	Scale:	Sheet Number
		1

Sheet 144 8746