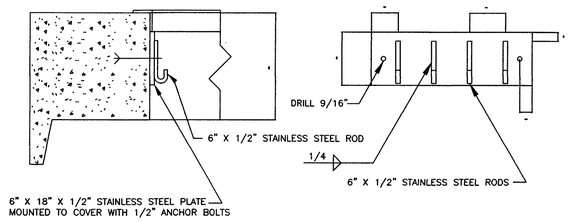
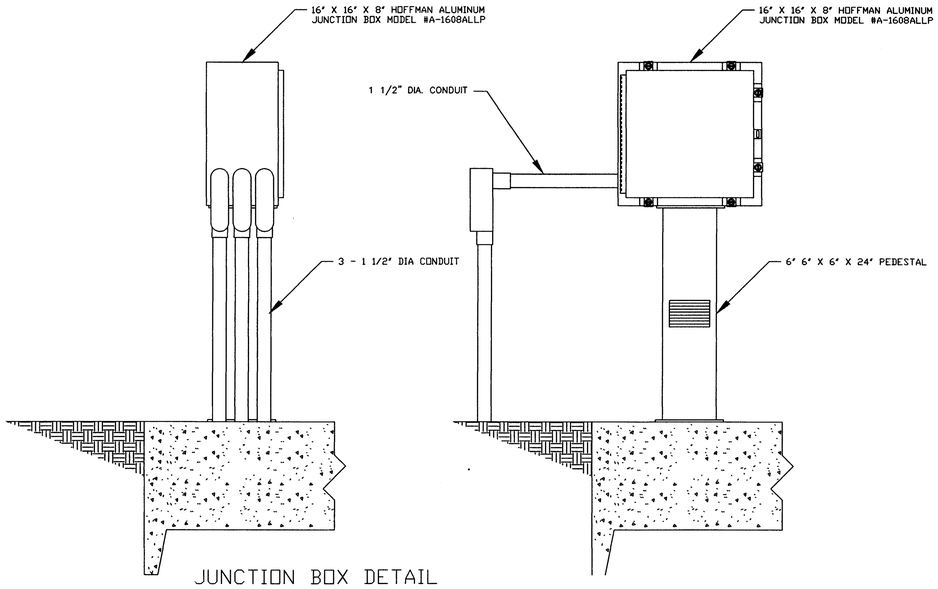
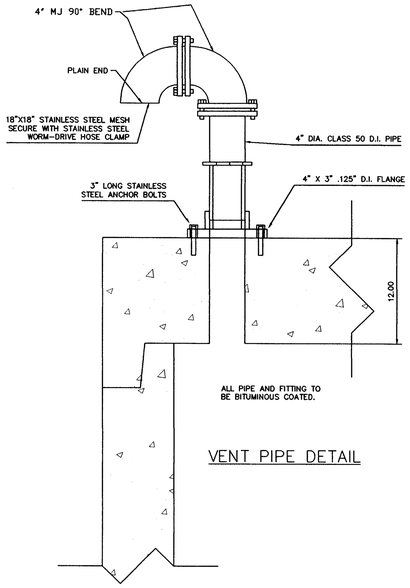


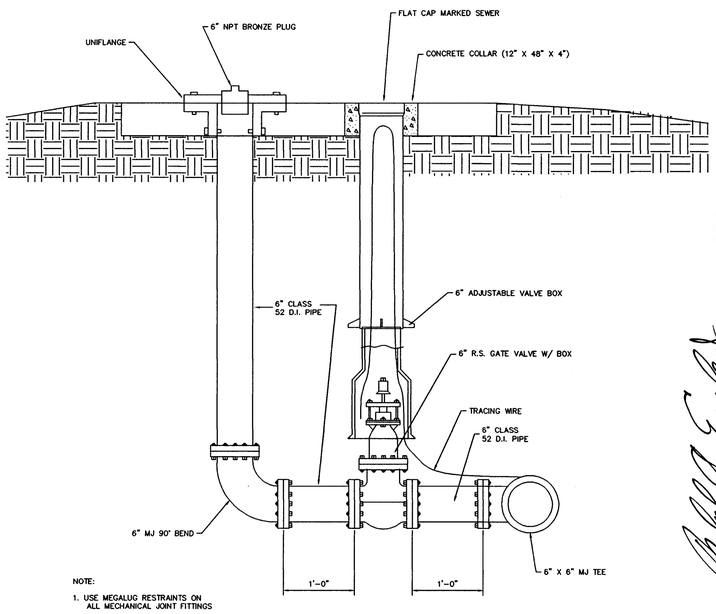
FLOAT BRACKET DETAIL



JUNCTION BOX DETAIL

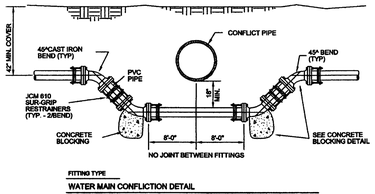


VENT PIPE DETAIL

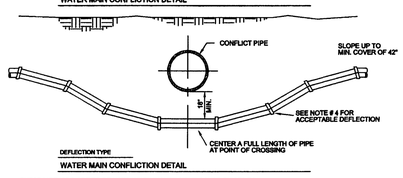


NOTE:
1. USE MEGALUG RESTRAINTS ON ALL MECHANICAL JOINT FITTINGS

EMERGENCY PIPING DETAIL

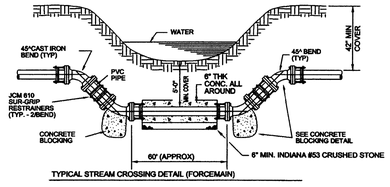


FITTING TYPE
WATER MAIN CONFLICTION DETAIL



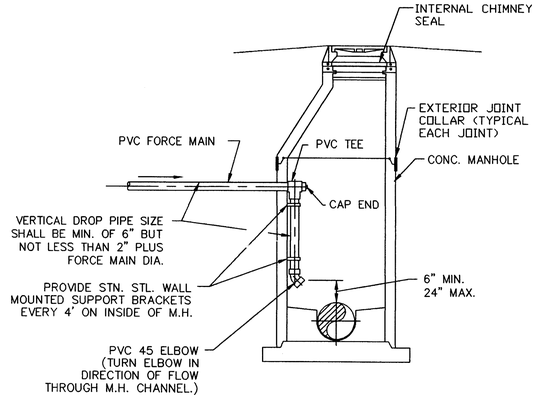
DEFLECTION TYPE
WATER MAIN CONFLICTION DETAIL

1. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW WATER MAIN TO CROSS ABOVE CONFLICT PIPE WITH LESS THAN 6" VERTICAL SEPERATION (18" FOR SANITARY SEWER) AND MAINTAIN 42" COVER FINISHED GRADE
2. FITTINGS SHALL BE RESTRAINED WITH THRUST BLOCKS.
3. THE DEFLECTION STYLE CROSSING IS THE PREFERRED METHOD.
4. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.



TYPICAL STREAM CROSSING DETAIL (FORCEMAIN)

PVC FORCE MAIN PIPE TRENCH DETAIL



FORCE MAIN DROP INTO SANITARY MANHOLE

NOTES

1) ALL WORK SHALL BE IN ACCORDANCE WITH THE EVANSVILLE WATER AND SEWER UTILITY (EWSU) RULES AND REGULATIONS. CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS TO THE EWSU FOR APPROVAL PRIOR TO AUTHORIZING SHIPMENT TO SITE.

2) CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, RULES , REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF MUNICIPAL AUTHORITIES WHICH BEAR ON THE PERFORMANCE OF THE WORK.

3) MATERIAL SPECIFICATIONS SHALL BE IN CONFORMANCE WITH APPLICABLE PORTIONS OF THE INDOT STANDARD SPECIFICATIONS, (LATEST EDITION) UNLESS SPECIFICALLY STATED OTHERWISE ON THESE PLANS, CONTRACT DOCUMENTS OR LOCAL CODE.

4) THE CONTRACTOR IS CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON THE RECORDS OF VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENT TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES INDIANA UNDERGROUND UTILITY LOCATE SERVICE, PHONE 1-800-382-5544

5) ALL FITTINGS USED FOR BENDS SHALL BE SECURED USING APPROVED DESIGN AND INSTALLATION METHODS.

6) FORCEMAIN TRENCH SHALL BE BACKFILLED WITH SAND IN AREAS WITHIN 5- OF A PAVED ROADWAY OR DRIVEWAY. BACKFILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 9" LOOSE MEASUREMENT AND EACH LAYER COMPACTED TO MINIMUM 95% STANDARD PROCTOR IN ACCORDANCE WITH AASHTO T-99. PVC FORCEMAIN IS TO BE SUPPLIED WITH A CONTINUOUS SOLID 12 GAUGE INSULATED COPPER TRACE WIRE. ATTACH ALONG TOP OF PIPE IN AN APPROVED MANNER PRIOR TO BACKFILL. RUN INTO STRUCTURES WITH PIPE AT EITHER END OF FORCEMAIN AND ATTACH TO AN ACCESSIBLE ON INSIDE OF COVER.

7) THE PUMPS SHALL BE EQUIPPED WITH METAL TO METAL GUIDE RAIL SYSTEM & STAINLESS STEEL LIFT CHAINS. ALL NUTS & BOLTS MUST BE STAINLESS STEEL.

8) ALL PIPING WITHIN THE STATION SHALL BE CLASS 52 DUCTILE IRON PIPE.

9) ALL FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT FITTINGS AND SHALL BE FULLY RESTRAINED.

10) ALL VALVES SHALL BE IN ACCORDANCE WITH EWSU SPECIFICATION.

11) LIFT STATION INSTRUMENTATION AND CONTROLS SHALL COMPLY WITH REQUIREMENTS OF THE MOST RECENT VERSION OF THE EWSU RULES AND REGULATIONS.

12) WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. USE NO. 4 GAUGE WIRE AT FOUR (4-) INCH SPACING EACH WAY UNLESS OTHERWISE INDICATED.

13) PIPE OPENINGS IN BASE AND RISER SECTIONS SHALL BE FORMED OR CORE DRILLED.

14) PIPE CONNECTIONS TO MANHOLES SHALL BE MADE WITH WATERTIGHT FLEXIBLE RUBBER BOOTS WITH STAINLESS STEEL BANDS OR FLEXIBLE WATERTIGHT GASKETS. ACCEPTABLE PRODUCTS ARE KOR-N-SEAL AS MANUFACTURED BY CORE AND SEAL COMPANY: DURA-SEAL III AS MANUFACTURED BY DURA TECH, INC.: PSX AS MANUFACTURED BY THE PRESS SEAL GASKET CORPORATION: OR EQUAL

15) SEAL SUMP JOINTS WITH CON SEAL CS-231 WATER STOP SEALANT ON JOINTS AND WRAP JOINTS WITH RUB'R - NEK EXTERNAL CONCRETE JOINT WRAP.

16) COAT OUTSIDE OF SUMP WITH BITUMINOUS COATING MATERIAL AND COAT INSIDE OF SUMP WITH WOHL CHEMICAL Co. CC-760 COAL TAR MASTIC. APPLY STRICTLY IN CONFORMANCE WITH MANUFACTURES RECOMMENDATIONS INCLUDING SSPC-SP6 COMMERCIAL BLAST CLEANING AND MIL THICKNESSES.

17) THE CONTRACTOR SHALL BE REQUIRED TO USE A "CAN" OR BOLTED PLATE TYPE SHORING FOR SUMP (WET WELL) CONSTRUCTION IN ORDER TO KEEP SOIL FROM BEING DISTURBED, AS FAR AS POSSIBLE, UNDER VALVE VAULT. IF SOIL IS DISTURBED. CONSOLIDATE ALL FILL MATERIAL TO 95%. CAN OR SHORING SHALL BE LARGE ENOUGH TO PROVIDE, AT LEAST, 3 FEET OF CLEARANCE BETWEEN WET WELL AND CAN. CONTRACTOR SHALL PLACE COMPACTED FILL BETWEEN CAN AND WET WELL PRIOR TO RAISING THE CAN.

18) BITUMINOUS COAT OUTSIDE OF VALVE VAULT WITH APPROVED SEAL COATING.

19) CONTRACTOR SHALL PROVIDE (2) FLOAT BRACKETS AND INSTALL AS LOCATIONS SHOWN IN SECTION A--A.

20) HYDROMATIC FLOAT LEVEL CONTROLLERS FOR HIGH AND LOW LEVEL ALARM, LEAD PUMP ON, LAG PUMP ON AND PUMP OFF. SEE ELECTRICAL SHEETS.

21) DUPLEX PUMP SYSTEM. TWO HYDROMATIC SM4 PUMPS WITH 7.5 HP MOTORS. PUMPS MANUFACTURED BY ABS OR FLYGT MAY BE APPROVED IF THEY HAVE SIMILAR OPERATING CONDITIONS, AS DETERMINED BY EWSU.

22) CONTROL CABLE FOR POWER TO PUMPS AND LEVEL CONTROLS (HYDROMATIC OR EQUAL).

23) PROVIDE STAINLESS STEEL ANCHORS.

24) HATCHES SHALL BE ALUMINUM AND FLOOD TIGHT, SUCH AS SERIES FIR AS MANUFACTURED BY HALLIDAY PRODUCTS, ORLANDO, FL WITH 300 PSF MINIMUM LOAD RATING.

25) ALL LIFT STATION PIPING SHALL BE CEMENT LINED DUCTILE IRON F51PE WITH FLANGED ENDS.

26) CONTRACTOR SHALL SEAL EDGE BETWEEN HATCH FLANGE AND CONCRETE WITH DOW 790 SILICONE BUILDING SEALANT (COLOR GREY) OR EQUAL.

RALPH A. EASLEY, JR. REGISTERED No. 12892 STATE OF INDIANA PROFESSIONAL ENGINEER

ANDY EASLEY ENGINEERING
CIVIL ENGINEERING (812) 424-2481 LAND SURVEYING
1133 WEST MILL ROAD EVANSVILLE, INDIANA 47710

LIFT STATION DETAILS
WESTCREEK LEISURE LIVING
ALLENS LANE
VANDERBURGH COUNTY, INDIANA

DRAWN BY: TJK
CHECKED BY: RAE
SCALE: AS NOTED
DATE: 5/8/03
PROJECT NO.: 5996
REVISIONS

SHEET NO.: S4.2