

# PRELIMINARY DRAWINGS

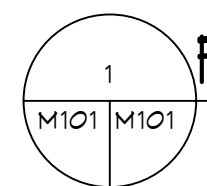
## GENERAL NOTES:

- PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT FOR A COMPLETE OPERATING SYSTEM. THE SYSTEM SHALL INCLUDE PIPING, VALVES, FITTINGS, AND SUPPORTS WITHOUT ANY RESTRICTIONS TO VOLUME. CONTRACTOR TO CONSTRUCT NEW RISERS WITH CONNECTORS FOR RAIN WATER PUMPS AT EACH HEADWALL.
- CONTRACTOR SHALL PROVIDE LISTED EQUIPMENT FROM MANUFACTURE LISTED OR EQUAL.
- ALL WORK AND MATERIAL SHALL CONFORM STRICTLY TO THE LATEST LOCAL, CITY, PARISH, STATE, DEQ AND NATIONAL GOVERNING CODES.
- CONTRACTOR INSTALLING HDPE PIPE SHALL BE CERTIFIED BY THE MANUFACTURER TO INSTALL HDPE PIPING.
- CONTRACTOR IS TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, ELEVATIONS AND SIZES PRIOR TO COMMENCING ANY WORK. CONTRACTOR SHALL PAY NECESSARY FEES FOR PERMITTING.
- CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXISTING INVERTS AND SET NEW INVERTS OF FORCE MAIN.
- FITTINGS SHALL BE MANUFACTURED FROM A HDPE, SDR-11 (HIGH DENSITY POLYETHYLENE) COMPOUND PER ANSI B-16.40, ASTM D2513 DOT PART 192 AND MANUFACTURED IN ACCORDANCE WITH ISO 9002. ALL FITTINGS SHALL BE PRODUCED TO SCHEDULE 80 DIMENSIONS. PRODUCTS SHALL BE PRESSURE RATED FOR A MINIMUM OF 160 PSI USING QUALITY ASSURANCE TEST REQUIREMENTS OF THESE STANDARDS WITH REGARD TO DIMENSIONS, WORKMANSHIP, BURST PRESSURE, FLATTENING RESISTANCE AND END PRODUCT QUALITY. ALL VALVE DIAPHRAGMS AND SEATS SHALL BE PTFE; VALVE O-RINGS SHALL BE EPDM OR VITON® AS APPLICABLE. ALL VALVE UNION NUTS SHALL HAVE BUTTRESS STYLE THREADS. ALL VALVE COMPONENTS SHALL BE REPLACEABLE. ALL SYSTEM COMPONENTS SHALL BE MANUFACTURED BY AN ISO CERTIFIED MANUFACTURER.
- BUTT FUSION SHALL BE USED TO JOIN INDIVIDUAL LENGTHS OF PIPE IN THE FOLLOWING SEQUENCE:
  - SECURE COMPONENTS TO BE JOINED WITH CLAMPING DEVICE(S).
  - FACE PIPE ENDS TO MEET MANUFACTURERS SPECIFICATIONS, USING A ROTATING PLANNER BLOCK.
  - PROPERLY ALIGN PIPE.
  - HEAT ENDS OF PIPE TO MANUFACTURER'S RECOMMENDATION AND BRING TOGETHER AT RECOMMENDED FORCE USING A HYDRAULIC MACHINE THAT WILL APPLY MANUFACTURER'S SPECIFIED FORCE, FOR THE PIPE SIZE.
  - HOLD PRESSURE ON PIPE JOINT FOR TIME SUFFICIENT TO DEVELOP THE REQUIRED STRENGTH, AS RECOMMENDED BY THE MANUFACTURER.
  - REMOVE THE INTERIOR BEAD, USING MANUFACTURER'S RECOMMENDED EQUIPMENT.
  - ALL JOINTS SHALL BE INSTALLED SUCH THAT THE CONNECTION OF PIPE SECTION SHALL BE WATERTIGHT AND FORM A CONTINUOUS LINE FREE FROM IRREGULARITIES IN THE FLOW LINE.
- TRENCH WIDTH SHALL BE IN ACCORDANCE WITH ASTM D2321 AND SHALL BE SUFFICIENT TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIALS. TRENCH WIDTH SHALL INCLUDE SUFFICIENT AREA FOR HDPE FORCE MAIN AND ELECTRICAL CONDUITS WITH A MINIMUM SEPARATION OF 12". MINIMUM BACKFILL DEPTH SHALL NOT BE LESS THAN 36" WHERE VEHICULAR TRAFFIC CAN BE PRESENT AND 24" WHERE WASHOUT OCCURS.
- TEST ALL PIPING AT REQUIRED PRESSURE.
- THE DRAWINGS INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALE DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION AND LOCATION OF ALL RISERS SHALL BE DETERMINED BY ACTUAL CONDITIONS IN THE FIELD.
- ALL FORCE MAINS AND PIPING NOT SHOWN FOR CLARITY, ALL LOCATIONS FIELD VERIFIED.

## GENERAL CONSTRUCTION NOTES

- ALL MATERIALS AND WORK, INCIDENTAL TO THE CONSTRUCTION OF THIS PROJECT, SHALL CONFORM TO ALL GOVERNING CODES, AND REGULATIONS OF AGENCIES IN AUTHORITY.
- CONTRACTOR SHALL PROVIDE ALL PUBLIC PROTECTIONS NECESSARY AS REQUIRED BY LAW.
- THE DRAWINGS, SPECIFICATIONS AND ANY SUBSEQUENTLY ISSUED ADDENDA, AMENDMENTS OR SUCH CHANGE ORDERS APPROVED BY THE OWNER AND THE CONTRACTOR ARE PART OF THESE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL WARRANT ALL WORK FOR ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION UNLESS SPECIFICALLY DIRECTED IN OTHER DRAWINGS, SPECIFICATIONS OR SUBSEQUENTLY ISSUED ADDENDA OR AMENDMENTS.
- DO NOT SCALE DRAWINGS. CONSULT WITH THE ENGINEER REGARDING ANY ITEMS IN THE CONTRACT DOCUMENTS THAT REQUIRE CLARIFICATION.
- TRASH SHALL BE REMOVED FROM THE SITE NOT LESS THAN TWICE MONTHLY.
- THE GENERAL CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES TO THE ENGINEER.
- CONTRACTOR VEHICLES AND EQUIPMENT NECESSARY FOR CONSTRUCTION MAY BE PARKED ON THE SITE. OTHER VEHICLES PARKED ON THE SITE REQUIRE THE OWNER'S PERMISSION.
- NAMING A CERTAIN BRAND, MAKE OR MANUFACTURER IS TO DESIGNATE THE GENERAL STYLE, TYPE, CHARACTER AND QUALITY STANDARD OF THE PRODUCT DESIRED. SUBSTITUTION REQUESTS MUST BE SUBMITTED PRIOR TO BIDDING.
- ALL MATERIALS/EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. WORK NOT CONSISTENT WITH MANUFACTURER'S RECOMMENDATIONS WILL BE REJECTED BY OWNER/ENGINEER.

NOTE: NAMING A CERTAIN BRAND, MAKE OR MANUFACTURER IS TO DESIGNATE THE GENERAL STYLE, TYPE, CHARACTER AND QUALITY STANDARD OF THE PRODUCT DESIRED. SUBSTITUTION REQUESTS MUST BE SUBMITTED PRIOR TO BIDDING.



## FORCE MAIN SITE PLAN

