CONSTRUCTION NOTES & SPECIFICATIONS

1) ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", FIFTH EDITION WITH ADDENDUM #2 (THE SPECIFICATION)

PRIOR TO BEGINNING WORK ON THE SEWER SYSTEM, THE CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL REGULATIONS AND REQUIREMENTS OF THE CITY OF SUPERIOR, WASTE WATER DIVISION OF PUBLIC WORKS (THE DEPARTMENT) ALL WORK SHALL BE OPEN AT ALL TIMES TO INSPECTION BY THE DEPARTMENT THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT NOT LESS THAN THREE WORKING DAYS BEFORE BEGINNING CONSTRUCTION OF THE SEWER SYSTEM TO ARRANGE FOR A CONSTRUCTION INSPECTOR, THE DEPARTMENT WILL SUPPLY CONSTRUCTION INSPECTION AT NO COST TO THE CONTRACTOR ONLY THE DEPARTMENT SHALL PERFORM THE OPERATION OF ANY VALVES ON THE EXISTING COLLECTION SYSTEM THE CONTRACTOR SHALL GIVE 24 HOURS NOTICE TO THE DEPARTMENT OF THE NEED FOR OPERATION OF ANY EXISTING VALVES

ALL GRAVITY SANITARY SEWER SYSTEMS SHALL BE CONSTRUCTED OF PVC PVC SEWER PIPE AND FITTINGS SHALL BE ASTM D-3034, MINIMUM PIPE WALL SHALL BE SDR 35 ALL JOINTS SHALL BE ELASTOMERIC COMPOUND PER ASTM F-477 JOINT ASSEMBLY LUBRICATION SHALL HAVE NO DETRIMENTAL EFFECTS THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF ALL ASTM MATERIAL ALL SANITARY SEWER PIPE SHALL BE EMBEDDED IN THE TRENCH IN ACCORDANCE WITH THE DETAIL THE CONTRACTOR SHALL GUARANTEE ALL UTILITY TRENCH COMPACTION FOR ONE YEAR SANITARY SEWER SERVICES SHALL BE 6" NOMINAL DIAMETER, SHALL UTILIZE A SANITARY TEE, SHALL BE INSTALLED IN THE 10 00 POSITION ABOVE THE SPRING LINE, AND SHALL BE LAID AT 4% GRADE THE LOCATION OF THE SANITARY SEWER SERVICE FOR THE RESTAURANT SHALL BE COORDINATED WITH THE OWNER

COMPLETED SEWER SHALL BE WATER INFILTRATION TESTED AND LOW-PRESSURE AIR TESTED IN ACCORDANCE WITH THE SPECIFICATION, SECTIONS 3 7 2 & 3 7 3 COMPLETED SEWER SYSTEM SHALL BE DEFLECTION TESTED IN ACCORDANCE WITH THE SPECIFICATION, SECTION 3 2 6(i) 4 COMPLETED SEWER SYSTEM SHALL BE TELEVISED, CONTRACTOR SHALL PROVIDE WRITTEN REPORT INDICATING (1) PIPE LOCATION, (2) PIPE MATERIAL AND (3) LOCATION AND TYPE OF ANY DEFECTS

ALL FORCE MAIN SANITARY SEWER SYSTEMS SHALL BE DUCTILE IRON (D I) D I PIPE SHALL BE ANSI A-21 51, CLASS 50, CEMENT LINED AND BITUMINOUS COATED INSIDE AND OUTSIDE IN ACCORDANCE WITH ANSI A-21 4 FITTINGS SHALL BE ANSI A-21 10 MECHANICAL JOINTS SHALL BE ANSI A-21 11 THE COMPLETED SYSTEM SHALL BE AIR TESTED IN ACCORDANCE WITH THE SPECIFICATION, SECTION 3 7 3 THE CONTRACTOR SHALL TIE THE NEW LIFT STATION OUTLET INTO THE EXISTING 6" CAST IRON C I FORCE MAIN THE CONTRACTOR THE COORDINATE THE TIE-IN WORK WITH THE DEPARTMENT THE FORCE MAIN SHALL BE TESTED IN ACCORDANCE WITH THE SPECIFICATION AND THE DEPARTMENT REQUIREMENTS

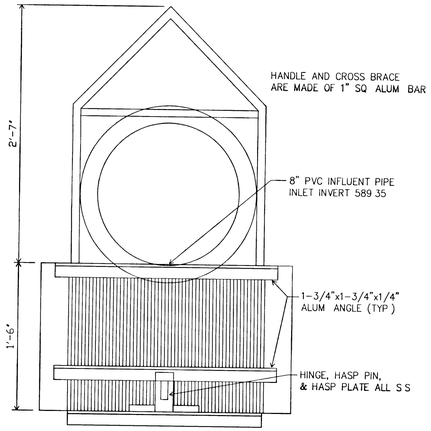
2) ALL WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", FIFTH EDITION WITH ADDENDUM #2 (THE SPECIFICATION)

PRIOR TO BEGINNING WORK ON THE WATER SYSTEM, THE CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL REGULATIONS AND REQUIREMENTS OF SUPERIOR WATER LIGHT AND POWER COMPANY (SWL&P) AT NO COST TO THE CONTRACTOR, SWL&P WILL SHUT DOWN THE EXISTING MAINS AS NEEDED FOR THE CONTRACTOR TO PERFORM THE TIE-INS THE CONTRACTOR WILL EXCAVATE AND BACKFILL AS NEEDED FOR SWL&P TO PERFORM THE 6" WET TAP OF THE EXISTING 12" WATER MAIN SWL&P SHALL SUPPLY THE TAPPING FITTING, THE CONTRACTOR SHALL SUPPLY THE 6" BRANCH VALVE AND VALVE BOX

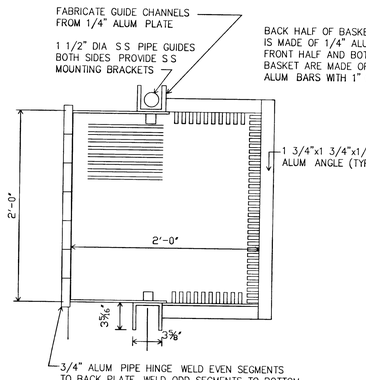
ALL NEW WATER MAIN SHALL BE 6" DUCTILE IRON (D I) PIPE, SHALL BE CLASS 53 CONFORMING TO ANSI A-21 51, SHALL BE CEMENT LINED, STANDARD THICKNESS, PER ANSI A-21 4, AND SHALL HAVE 1 MIL ASPHALTIC COATING WATER MAIN SHALL BE BURIED WITH A MINIMUM OF 7' OF COVER TO FINISHED GRADE AND SHALL BE EMBEDDED IN THE TRENCH IN ACCORDANCE WITH SECTION 6 4 3 0 OF THE SPECIFICATION THE CONTRACTOR SHALL GUARANTEE ALL UTILITY TRENCH COMPACTION FOR ONE YEAR D I PIPE IS ALLOWED A MAXIMUM DEFLECTION OF 5 DEGREES PER JOINT DEFLECTIONS GREATER THAN 11 DEGREES SHALL BE ACCOMPLISHED WITH FITTINGS AND SHALL BE "THRUST BLOCKED" IN ACCORDANCE WITH THE SPECIFICATION WATER SERVICE LINES SHALL BE INSTALLED PER THE DRAWING IN ACCORDANCE WITH THE SPECIFICATION THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE SERVICE FOR THE RESTAURANT WITH THE OWNER

THE CONTRACTOR SHALL DISINFECT THE NEW WATER SYSTEM IN ACCORDANCE WITH THE SPECIFICATION AT NO COST TO THE CONTRACTOR, SWL&P WILL SAMPLE AND TEST FOR BACTERIA IN THE EVENT OF BACTERIA TEST FAILURE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISINFECTING THE SYSTEM AND THE COST OF RE-TESTING

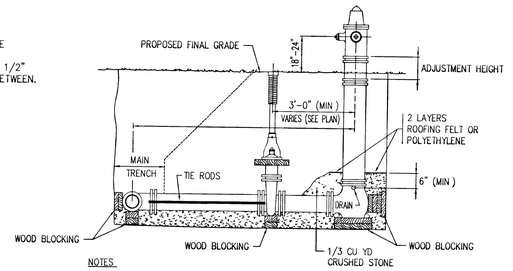
3) THE LIFT STATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL THE DEPARTMENT SHALL SUPPLY THE CONTROL PANEL AND PUMP CONTROL "TREE" THE CONTRACTOR SHALL SUPPLY ALL CONDUIT, MISCELLANEOUS FITTINGS AND LABOR TO INSTALL ALL CONTROLS THE WET WELL AND VALVE MANHOLE SHALL BE WATERPROOF IN ACCORDANCE WITH THE SPECIFICATION ALL RAIL GUIDE SYSTEMS AND STRUCTURAL SUPPORTS IN THE WET WELL SHALL BE SS



TRASH BASKET FRONT VIEW
NOT TO SCALE



TRASH BASKET PLAN VIEW
NOT TO SCALE

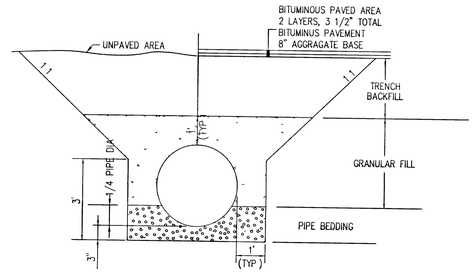


NOTES

① HYDRANT SHALL BE WATEROUS PACER OR APPROVED EQUAL

② HYDRANT SHALL HAVE NATIONAL STANDARD SCREW THREADS FOR FIRE HOSE COUPLINGS AND FITTINGS ALL VLAVES SHALL OPEN COUNTERCLOCKWISE

FIRE HYDRANT ASSEMBLY INSTALLATION DETAIL
NOT TO SCALE



TRENCH DETAIL FOR ALL SEWER PIPE
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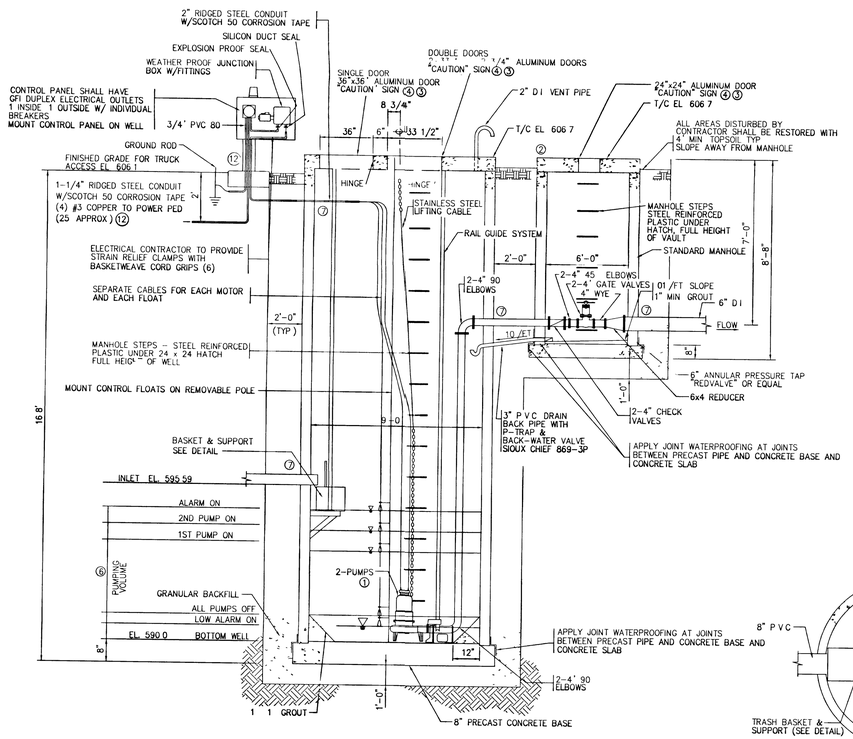


LIFT STATION ELEVATION
NOT TO SCALE

GENERAL NOTES

① PUMPS SHALL BE 200 GPM AT 33 FEET TDH FLYGT 3102 INSTALL MIX-FLUSH VALVE ON ONE PUMP

② TOP OUTSIDE EDGE OF CONCRETE COVERS TO BE CHAMFERED 3/4"

③ ALL HATCHES ARE SIZED AS CLEAR, INSIDE DIMENSIONS HATCHES SHALL BE HS-20 LOADING AND LOCKABLE W/ PADLOCK HATCHES ARE "BILCO" OR "NYSTROM" ONLY

④ THE CAUTION SIGN SHALL BE YELLOW AND BLACK, AND HAVE A MINIMUM SIZE OF 25cm (10") BY 35cm (14") THE LETTER SIZE SHALL BE AT LEAST 25 4mm (1") HIGH THE SIGN SHALL READ
CAUTION – DANGEROUS / HAZARDOUS GASES
LEVEL 2 CONFINED SPACE
DO NOT ENTER WITHOUT PROPER EQUIPMENT AND SUPERVISION

⑤ CONTROL BOX SHALL BE AT LEAST 3 FEET AWAY FROM VENT

⑥ PUMP CONTROLS & ALARMS SHALL BE SET BY THE DEPARTMENT

⑦ ALL WET WELL PENETRATIONS BELOW GRADE SHALL BE DOUBLE SEALED W/LINK SEALS (SS HDWR) ALL VALVE VAULT & MANHOLE PENETRATIONS BELOW GRADE SHALL BE SEALED W/ LINK SEALS (SS HDWR) WELL & VAULT PENETRATIONS SHALL BE CAST OR CORE DRILLED – NO GROUT

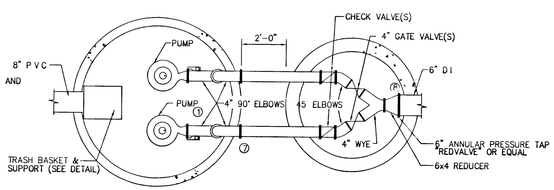
⑧ PROVIDE 6" ANNULAR PRESSURE TAP FOR PRESSURE TRANSDUCER INSTALL 3/4" CONDUIT FROM VALVE MANHOLE TO CONTROL PANEL TRANSDUCER IS PROVIDED BY OTHERS

⑨ CONTRACTOR SHALL INSTALL PRESSURE TRANSDUCER, FLOAT TREE MOUNTING BRACKET, PUMP MODULES, ULTRA SONIC LEVEL SENSOR AS DIRECTED BY I C S

⑩ CONTRACTOR SHALL SUPPLY PUMP MODULES AND SPARE PARTS TO INCLUDE UPPER & LOWER SEAL, ROTATING & STATIONERY WEAR RINGS, UPPER & LOWER BEARINGS, ONE COMPLETE FLUSH-MIX VALVE, 3 DIAPHRAGM KITS FOR FLUSH-MIX VALVE

⑪ DEPARTMENT WILL SUPPLY CONTROL CABINET, CONTRACTOR WILL INSTALL DEPARTMENT WILL SUPPLY FLOAT TREE, ULTRA SONIC SENSOR, PRESSURE TRANSDUCER

⑫ CONDUIT (NUMBERS AND SIZE) SHALL BE AS REQUIRED COORDINATE W/ I C S



PLAN OF LIFT STATION
NOT TO SCALE

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CLIENT
CITY OF SUPERIOR, WI

NO	DATE	REVISION
A	23 JUN 03	CHANGE ORDER

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Wisconsin

SIGNATURE Jay Bergman
TYPED OR PRINTED NAME
DATE 6/27/03 REG NO 32653-006

PROJECT NAME
BARKER'S ISLAND SITE IMPROVEMENTS PHASE 1

DRAWING TITLE
BARKER'S ISLAND UTILITIE DETAILS

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FILE 03026\dwgs\C\C1
DRAWN BY RSR
CHECKED BY -
PROJ NO 03026 30
DRAWING NO **C.2**