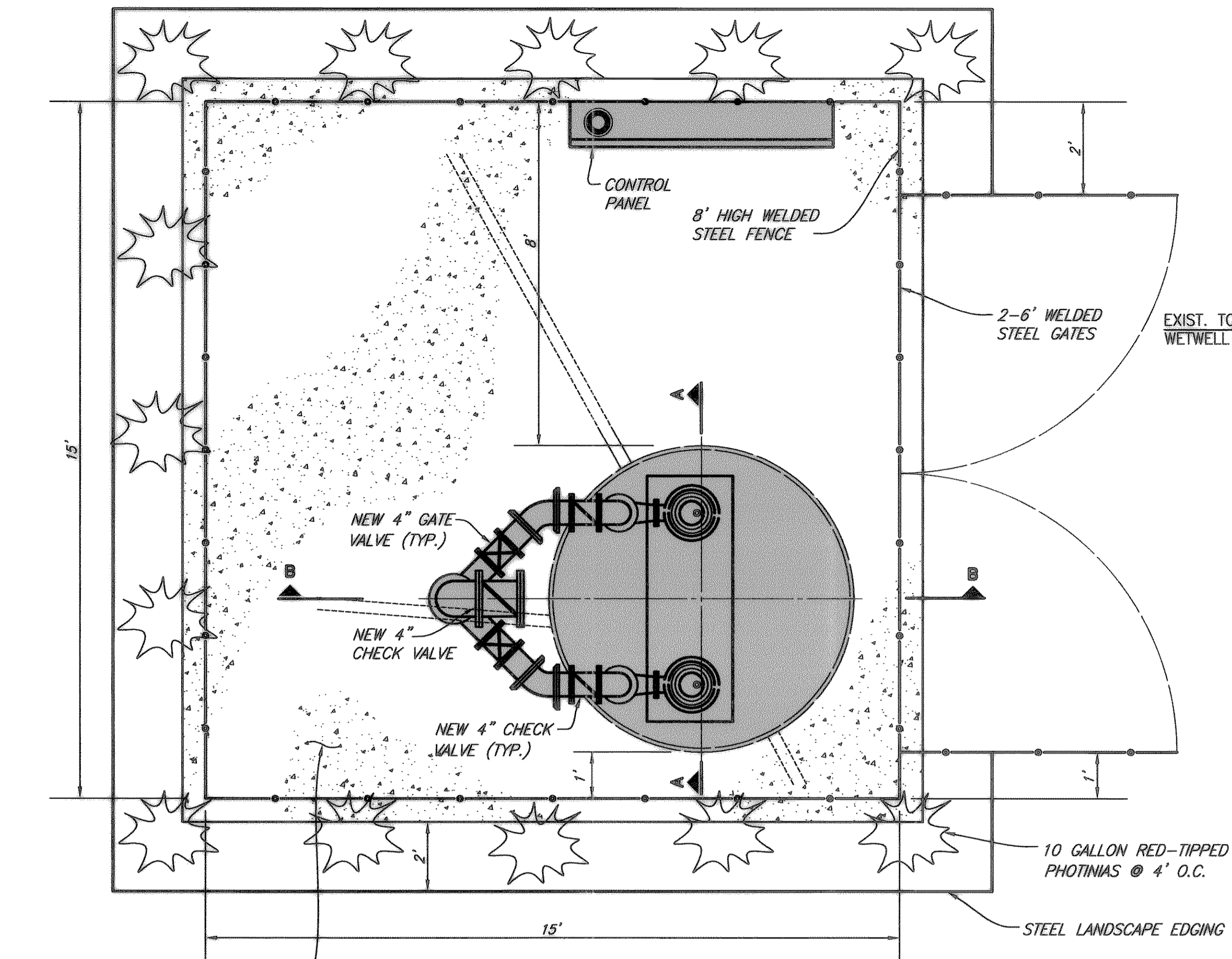


REVISION: 1/18/07 - MOLDHAM
 PLOT SCALE: 1:2,5849
 PLOT STYLE:
 PLOTTED BY: MOLDHAM ON 1/18/2007
 H:\Projects\Rockwall\2006101\Sheets\2006101-03-Proposed LS.dwg



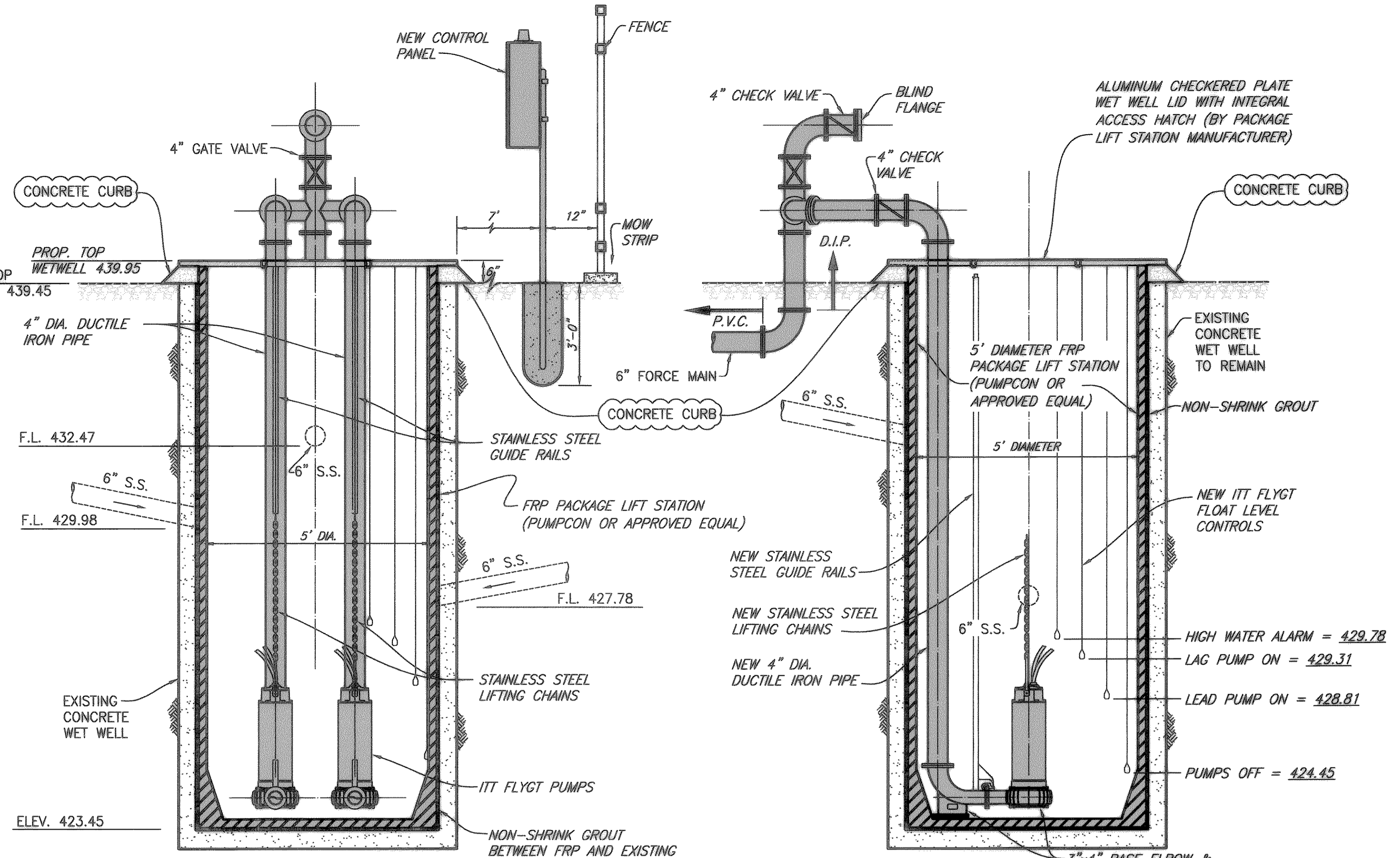
PROPOSED LIFT STATION PLAN

4" REINFORCED CONCRETE
NO. 3 BAR @ 18" O.C.E.W

NO SCALE

GENERAL NOTES

- PUMPS, GUIDE RAILS, DISCHARGE PUMPING, ETC. SHALL BE FACTORY MOUNTED INSIDE FRP WET WELL PRIOR TO DELIVERY TO PROJECT LOCATION. MANUFACTURER TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATING WET WELL.
- ALL DUCTILE IRON PIPING SHALL BE ANSI/AWWA C115. FITTINGS SHALL BE ANSI/AWWA C110 DUCTILE IRON, FLANGED, STANDARD THICKNESS. JOINTS SHALL BE ANSI/AWWA C111 MECHANICAL JOINT. PIPE AND FITTINGS SHALL HAVE INTERNAL AND EXTERNAL EPOXY COATINGS. ALL BURIED DUCTILE IRON PIPING SHALL ALSO BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA C105.
- ALL DUCTILE IRON PIPING SHALL BE LINED WITH TWO 8.0 MIL COATS (16 MIL TOTAL DFT) OF TNEEC SERIES 164 COLOR EPOXOLINE 80 OR APPROVED EQUAL.
- ALL EXPOSED METALLIC PIPE (NON GALVANIZED, NON-STAINLESS STEEL OR NON-ALUMINUM) AND FITTINGS WITHIN THE WET WELL AND VALVE VAULT SHALL BE COATED WITH A MINIMUM OF TWO 6.0 MIL COATS (12 MILS TOTAL DFT) OF DEVOE BAR-RUST 233H HIGH PERFORMANCE EPOXY COATING OR APPROVED EQUAL.
- ALL ELECTRICAL JUNCTION BOXES SHALL BE LOCATED OUTSIDE OF THE WET WELL BETWEEN THE CONTROL PANEL AND THE WET WELL. A SEAL COUPLING MAY BE USED IN LIEU OF A JUNCTION BOX, HOWEVER IT MUST BE LOCATED BETWEEN THE CONTROL PANEL AND WET WELL. ALL COMPONENTS WITHIN THE WET WELL SHALL BE EXPLOSION-PROOF.
- WHERE PIPES OR CONDUIT PASS THROUGH THE WALL OF THE WET WELL, THE SPACE BETWEEN THE WET WELL AND THE PIPE SHALL BE SEALED WITH LINK SEALS.
- COMPLETELY RESTRAIN ALL JOINTS FOR PIPE, BENDS, TEES AND FITTINGS ON THE FORCE MAIN PIPING WITHIN THE LIFT STATION SITE.
- NEMA 4X DUPLEX PUMP CONTROL PANEL SHALL ALTERNATE PUMP STARTING SEQUENCE, INTERFACE WITH LIQUID LEVEL SENSORS, CONTAIN MAIN DISCONNECT SWITCH, PILOT LIGHTS, RUN TIME METERS, HIGH LEVEL/PUMP FAIL ALARM HORN, BATTERY BACK-UP, PLC ELECTRICAL OUTLET FOR PORTABLE GENERATOR CONNECTION AND UNDERWRITERS LABORATORY APPROVAL LABEL. PUMP PANEL SHALL BE "CITY OF ROCKWALL STANDARD" AS MANUFACTURED BY STA-CON, INC. PANEL SHALL BE MOUNTED ON GALVANIZED STEEL 4" DIAMETER POSTS.
- LUMP SUM BID ITEM FOR LIFT STATION REHABILITATION IN BID SCHEDULE SHALL INCLUDE ALL LIFT STATION EQUIPMENT, MATERIALS, LABOR, ELECTRICAL WORK, ETC. IN FENCED AREA SHOWN ON LIFT STATION SITE PLAN. THIS INCLUDES THE FENCE, GATES, CONCRETE PAVEMENT, ETC. LUMP SUM BID ITEM INCLUDES A COMPLETE OPERATIONAL LIFT STATION AS SPECIFIED IN THESE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE LOCATION OF PUMPS, BASE ANCHORS, HATCHES AND ALL APPURTENANCES WITH PUMP MANUFACTURER.
- CONTRACTOR SHALL USE BASE ELBOW ANCHORS RECOMMENDED BY ITT FLYGT, ANCHORS SHALL FACTORY-CAST INTO FRP WET WELL.
- CONTRACTOR SHALL INSTALL BERMUDA SOLID BLOCK SODDING IN ALL DISTURBED AREAS (PAYMENT SUBSIDIARY TO PAVEMENT)
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH NEC, LOCAL, AND NATIONAL CODES.
- GATE VALVES SHALL BE RESILIENT SEAT GATE VALVES SUITABLE FOR SEWAGE SERVICE (AS MANUFACTURED BY MUELLER OR APPROVED EQUAL)
- CHECK VALVES SHALL BE SEWAGE SWING CHECK VALVES WITH LEVER & SPRING (AS MANUFACTURED BY MUELLER OR APPROVED EQUAL)
- CONTRACTOR SHALL CONFIRM ALL DIMENSIONS PRIOR TO FABRICATION OF PACKAGE LIFT STATION.



PROPOSED LIFT STATION SECTION A-A

NO SCALE

PROPOSED LIFT STATION SECTION B-B

NO SCALE

PUMP SCHEDULE								
PUMP NO.	MIN. PUMP EFFICIENCY (%)	G.P.M. (EA)	PRESSURE (FT. HD.)	DISCHARGE SIZE (IN.)	VOLTS	PHASE	RPM	HP (EA.)
1	46	256	156	3	460	3	3510	23
2	46	256	156	3	460	3	3510	23

* PUMP SCHEDULE BASED ON FLYGT NP3153, 274 IMPELLER

- SUBMERSIBLE SEWAGE TYPE w/RAIL RETRIEVAL SYSTEM AND FLOAT CONTROL.
- SCHEDULED NUMBERS FOR PUMP EFFICIENCY, G.P.M. AND PRESSURE REFLECT ONE PUMP IN OPERATION.
- PUMPS AND MOTORS SHALL BE EXPLOSION PROOF.
- PUMPS SHALL BE MANUFACTURED BY ITT FLYGT.
- PUMPS SHALL HAVE MIX FLUSH VALVES TO KEEP MATERIAL IN WET WELL IN SUSPENSION.

LEGEND

NEW

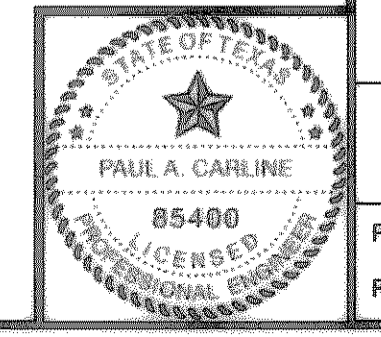
This record drawing is a compilation of the sealed engineering drawing for this project; modified by addenda, change orders and information furnished by the contractor. The information shown on the record drawings that was provided by the contractor or others not associated with the design engineer cannot be verified for accuracy or completeness. This original sealed drawings are on file at the offices of Birkhoff, Hendricks & Conway, L.L.P.

BY PAC DATE 1/17/07

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THESE DOCUMENTS ARE FOR BIDDING, CONSTRUCTION, AND PERMITS PURPOSES.

DATE: 4/19/06



CITY OF ROCKWALL, TEXAS

CHANDLERS MARINA LIFT STATION REHABILITATION LIFT STATION REHABILITATION PLAN

BIRKHOFF, HENDRICKS & CONWAY, L.L.P.
CONSULTING ENGINEERS
Dallas, Texas

PROJECT ENGINEER: PAC	PROJECT: 2006101	SHEET NO. 3
PROJECT TECHNICIAN: JUL	DATE: APRIL 2006	