

DATE	JAN 2023
REVISION / REMARKS	
GENERAL REVISION	

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SHEET NUMBER 0 OF 0

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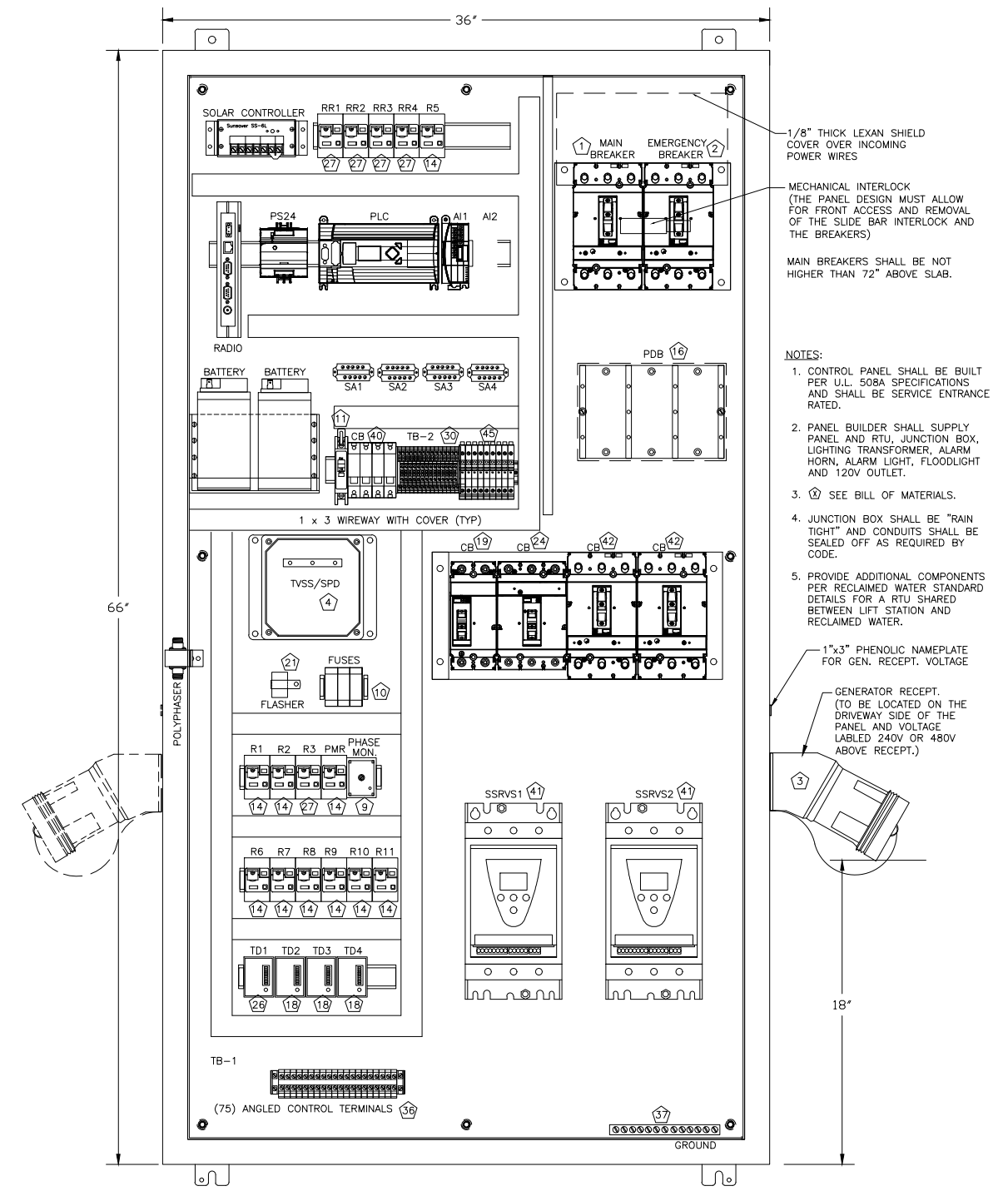
DESIGNED BY: WUD
DRAWN BY: M. BUCKNER
CHECKED BY: J. LAMMERT
APPROVED BY: WUD

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SUNSHINE STATE ONE CALL OF FLORIDA, INC.
UTILITIES NOTIFICATION CENTER

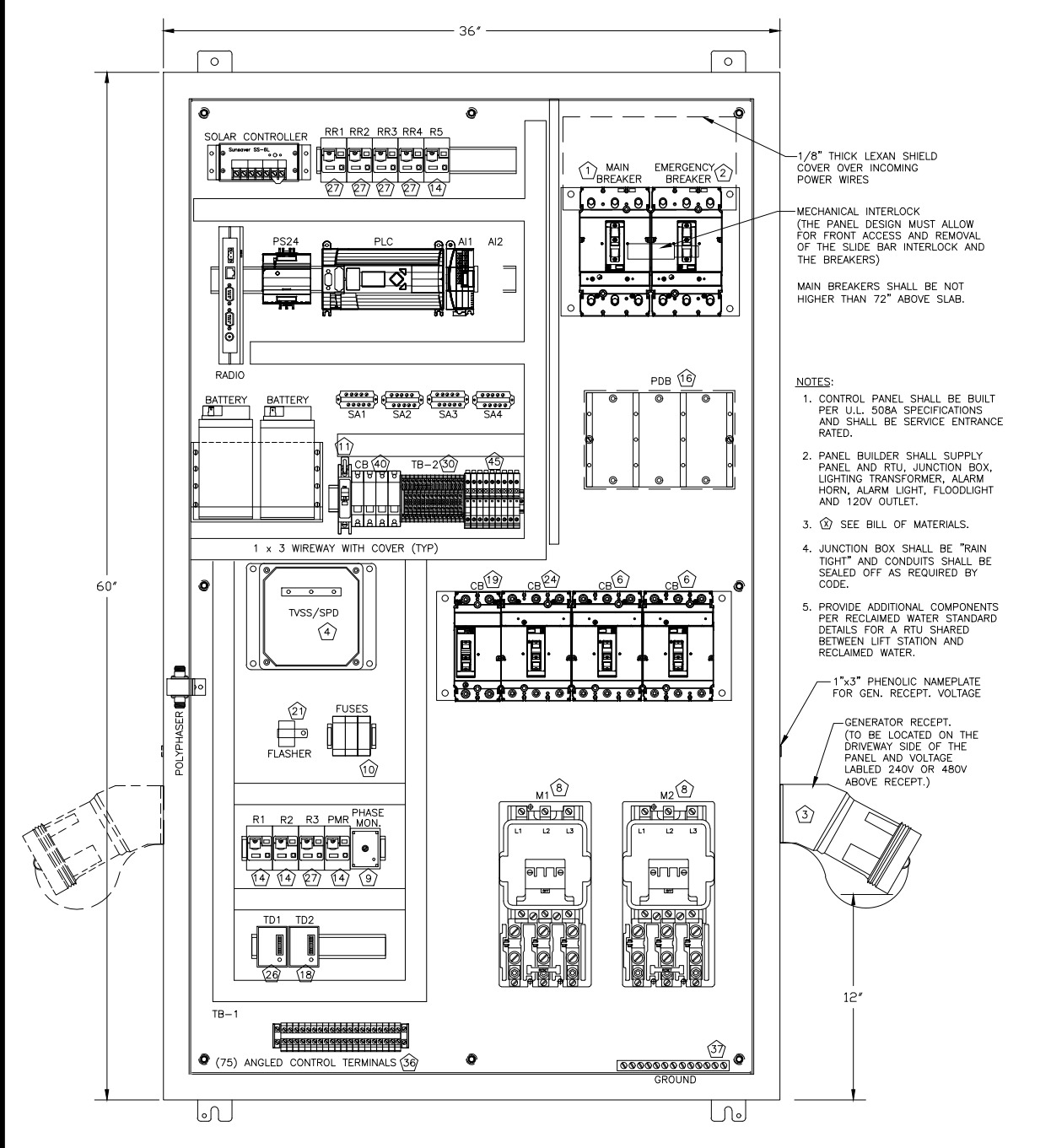
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Palm Beach County
Water Utilities Department
P.O. Box 16097
West Palm Beach, FL 33416-6097

Mar 17, 2023



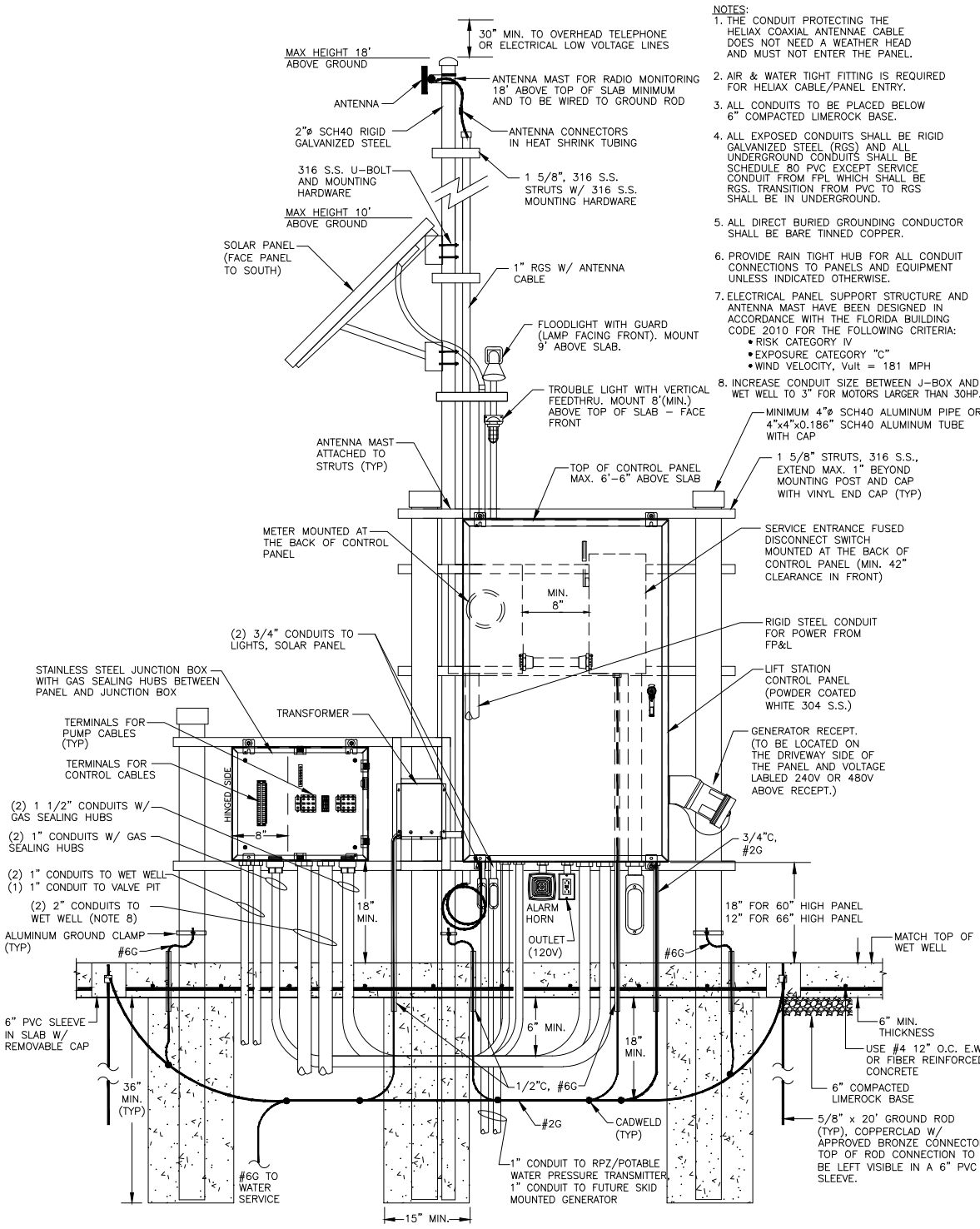
LIFT STATION CONTROL PANEL INTERNAL LAYOUT FOR 20 HP MOTORS AND LARGER * 60S



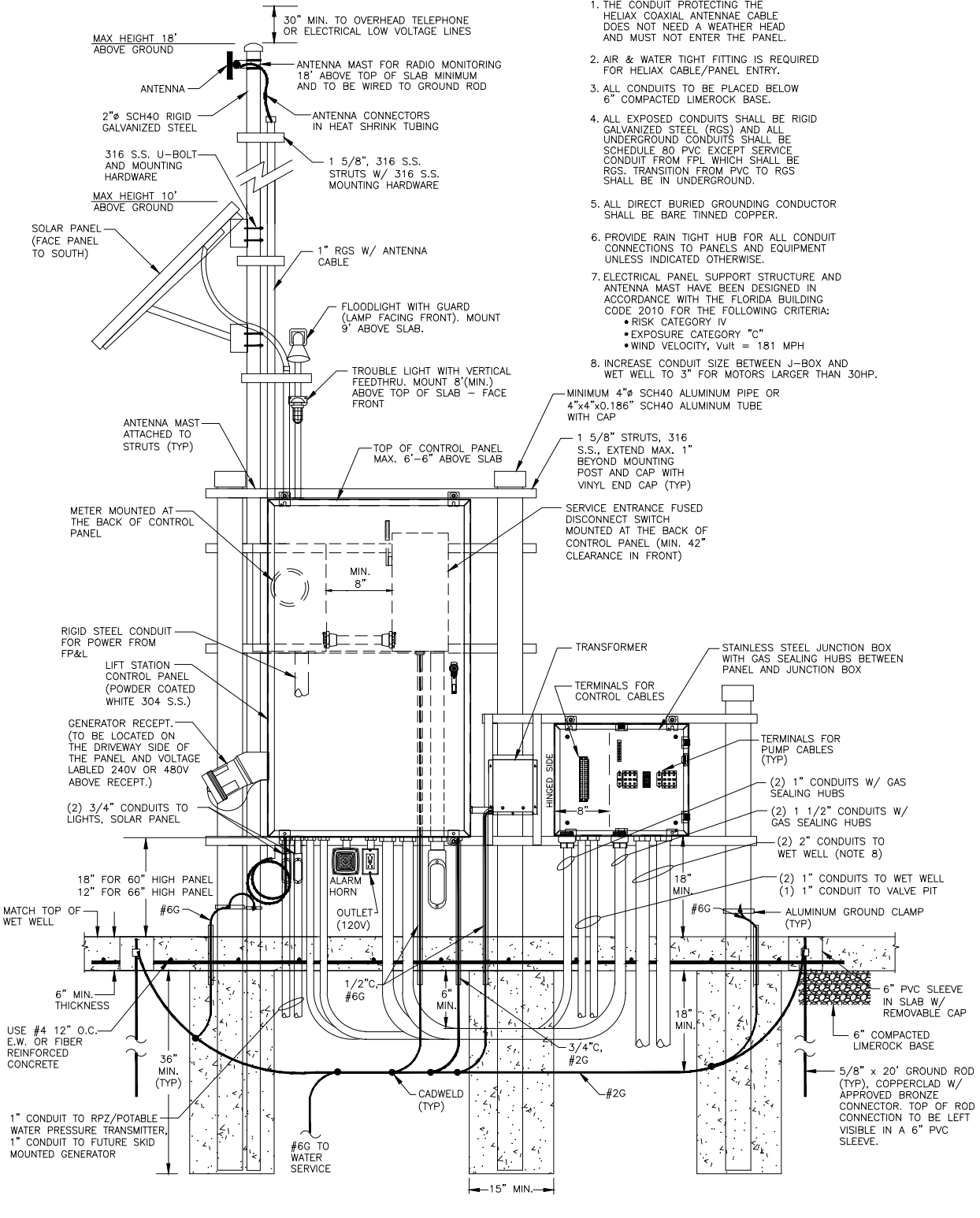
LIFT STATION CONTROL PANEL INTERNAL LAYOUT FOR MOTORS SMALLER THAN 20 HP * 59S

- ### INSTALLATION NOTES
- PANEL, METER, JUNCTION BOX AND 120-VOLT TRANSFORMER ARE TO BE MOUNTED ON STAINLESS STEEL STRUTS, WITH STAINLESS STEEL FASTENING DEVICES, AND SHALL BE SUPPORTED BY MINIMUM OF THREE POSTS, MIN. FOUR (4) INCH DIAMETER PIPE OR MIN. FOUR (4) INCH SQUARE TUBE (ALUMINUM OR STAINLESS STEEL) CAPPED AT THE TOP. PAINT BELOW GRADE SUPPORTS WITH ASPHALTUM PAINT TO FOUR (4) INCHES ABOVE GRADE.
 - PANEL SHALL BE AT 42 INCHES FROM THE WET WELL OPENING MEASURED FROM THE FRONT OF THE WET WELL UNLESS OTHERWISE SHOWN IN THE DRAWINGS. FRONT OF CONTROL PANEL SHALL FACE TO THE WET WELL.
 - RADIO TO MATCH PALM BEACH COUNTY'S SYSTEM INCLUDING RUN TIME TRANSMITTAL. LIVE TEST OF THE TELEMETRY SYSTEM MUST BE DONE AND APPROVED AT THE PUMP STATION START-UP. ANTENNA AND CABLE SHALL BE PART OF THE RADIO SYSTEM. ANTENNA SHALL BE SEPARATELY GROUND TO THE GROUND ROD OF THE STATION.
 - FABRICATE ANTENNA FROM 21 FEET LENGTH OF 2" DIAMETER SCHEDULE 40 GALVANIZED STEEL CONTINUOUS PIPE. PAINT LOWER 42 INCHES WITH ASPHALTUM PAINT. CAP THE TOP OF PIPE.
 - RUN (1) INCH RIGID GALVANIZED CONDUIT UP THE MAST FOR THE ANTENNA CABLE TO WITHIN 16 INCHES OF THE TOP. RUN SECOND 3/4 INCH CONDUIT UP THE MAST FOR ALARM AND FLOOD LIGHTS AS SHOWN. RUN THIRD 3/4 INCH CONDUIT UP THE MAST FOR SOLAR PANEL. USE STAINLESS STEEL UNISTRUT AND CLAMPS TO HOLD CONDUITS TO THE MAST.
 - MOUNT FLOOD LIGHT AND FLASHING RED LIGHT ON THE ANTENNA MAST AT NINE (9) FEET AND EIGHT (8) FEET ABOVE GRADE.
 - CONDUIT TO THE POWER COMPANY SERVICE POINT SHALL BE RIGID GALVANIZED WITH ASPHALTUM PAINT ON ALL FITTINGS AND ON ALL RISERS TO 12 INCHES ABOVE GRADE. CONDUIT FROM SERVICE ENTRANCE FUSED DISCONNECT SWITCH TO THE PANEL SHALL BE RIGID GALVANIZED CONDUIT ENTERING THE BOTTOM OF THE PANEL. ALL WIRE SHALL BE COPPER. HIGH LEG ON 240 VOLT SHALL BE TAPED ORANGE AND PUT ON CENTRAL TERMINAL IN PANEL AND RIGHT TERMINAL IN METER.
 - PROVIDE PVC SCHEDULE 80 CONDUITS WITH SWEEP BENDS FROM THE JUNCTION BOX TO THE WET WELL.
 - SUPPORT PUMP CABLES WITH STAINLESS SPLIT BASKET KELLUM (OR EQUAL) GRIPS IN WET WELL. SUPPORT FLOAT CABLE ON S.S. THIMBLE FROM THE RACK. ALL HARDWARE IN THE WET WELL AND ALL FASTENERS SHALL BE STAINLESS STEEL. CABLES SHALL BE CONTINUOUS FROM THE JUNCTION BOX TO THE MOTORS OR SENSORS.
 - WHEN CONNECTIONS ARE COMPLETE IN THE JUNCTION BOX, COAT THE TERMINAL BLOCKS AND WIRE ENDS WITH PROTECTIVE COMPOUND, NO-OXIDE OR EQUAL, TO PREVENT CORROSION.
 - PROVIDE 3/4 INCH RIGID GALVANIZED CONDUIT FROM THE PANEL TO 120 VOLT TRANSFORMER. ALL CONDUITS ENTER BOTTOM OF THE PANEL UNLESS OTHERWISE SHOWN. SEAL ALL CONDUITS WITH DUCT SEAL TO KEEP OUT MOISTURE.
 - PAINT PVC PIPES, CONDUITS AND ANY PARTS NOT STAINLESS OR ALUMINUM WITH TWO (2) COATS OF ALUMINUM PAINT.
 - LIFT STATION START UP SHALL BE PERFORMED DURING THE ANTICIPATED PEAK FLOOD CONDITIONS. TEST AS FOLLOWS (PUMP SUPPLIER'S FIELD REPRESENTATIVE MUST BE PRESENT AT THE START UP):
A. MEGGER MOTORS, MOTORS SHALL BE 20 MEGOHMS OR MORE TO GROUND, DO NOT MEGGER LOW VOLTAGE CONTROLS.
B. CHECK VOLTAGE, CHECK PUMP ROTATION, RECORD VOLTAGE AND AMPS UNDER LOAD.
C. DEMONSTRATE PROPER OPERATION OF ALL CONTROLS.
D. CONDUCT DRAWDOWN TESTS AS REQUIRED TO CONFIRM PROPER PUMP/MPPELLER INSTALLATION.
E. CHECK OPERATION WITH OWNER'S PORTABLE GENERATOR CHANGE WIRE CONNECTIONS IN THE PANEL TO GIVE CORRECT ROTATION.
 - TEST AND DEMONSTRATE PROPER OPERATION OF THE RADIO TELEMETRY SYSTEM. SUPPLIER'S FIELD REPRESENTATIVE SHALL MOUNT AND CONNECT THE ANTENNA AND MAKE THE FINAL CONNECTIONS TO THE SYSTEM.
 - PROVIDE LIQUID TIGHT NONMETALLIC FLEXIBLE CONDUIT (CARLON CARFLX) WITH SEAL TYPE FITTINGS FOR LEVEL TRANSMITTER CABLES INSIDE THE WET WELL.
 - PROVIDE GAS SEALOFF WITH CHICO COMPOUND FOR CONDUITS BETWEEN JUNCTION BOX AND CONTROL PANEL.
 - ALL STAINLESS STEEL SHALL BE 316 UNLESS INDICATED OTHERWISE.
 - PHASE SEQUENCE IN CONTROL PANEL SHALL BE SETUP FOR CLOCKWISE ROTATION TO MATCH THE ROTATION OF PCWUD PORTABLE STANDBY GENERATORS.

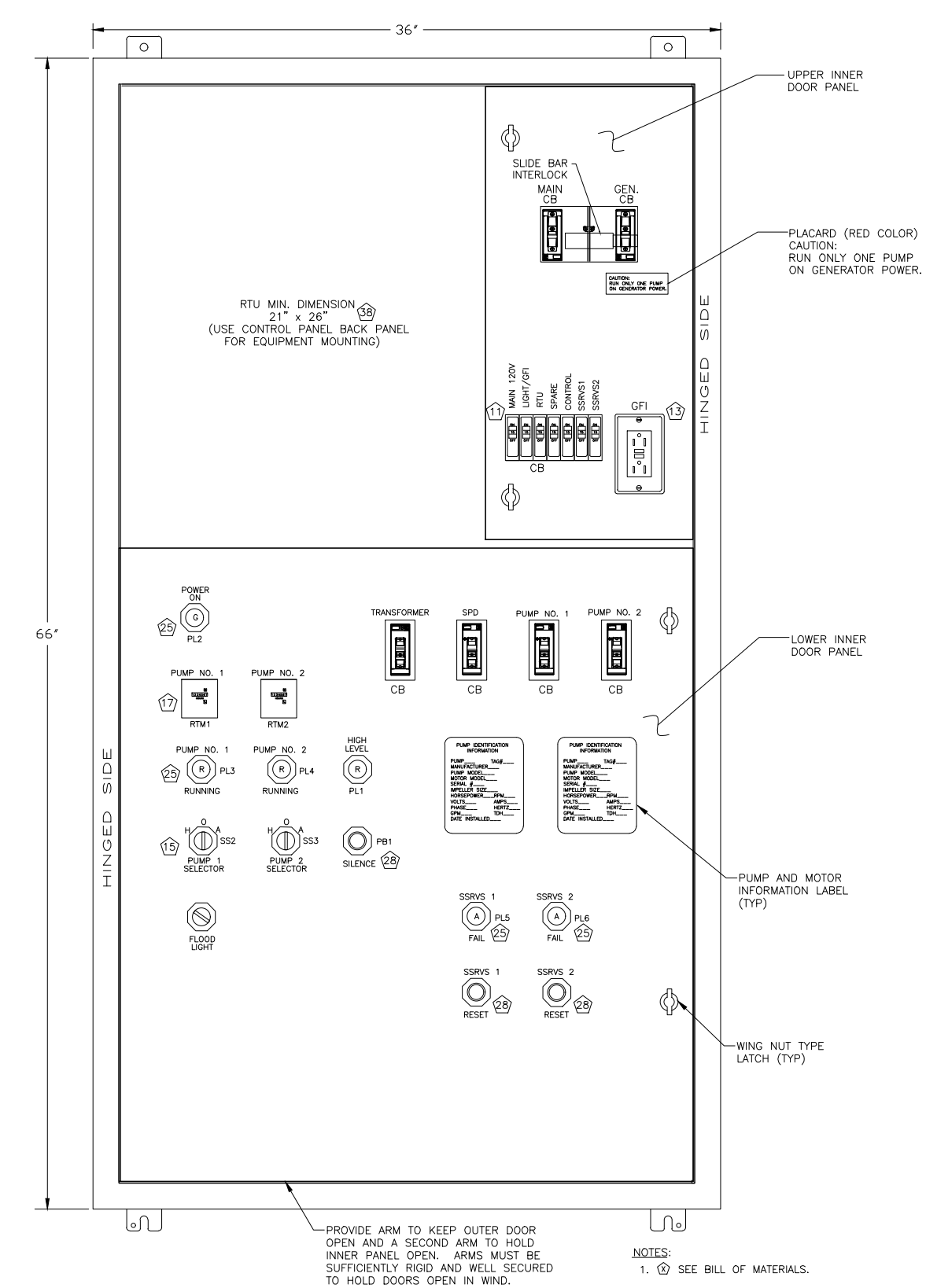
CONTROL PANEL INSTALLATION NOTES * 58S



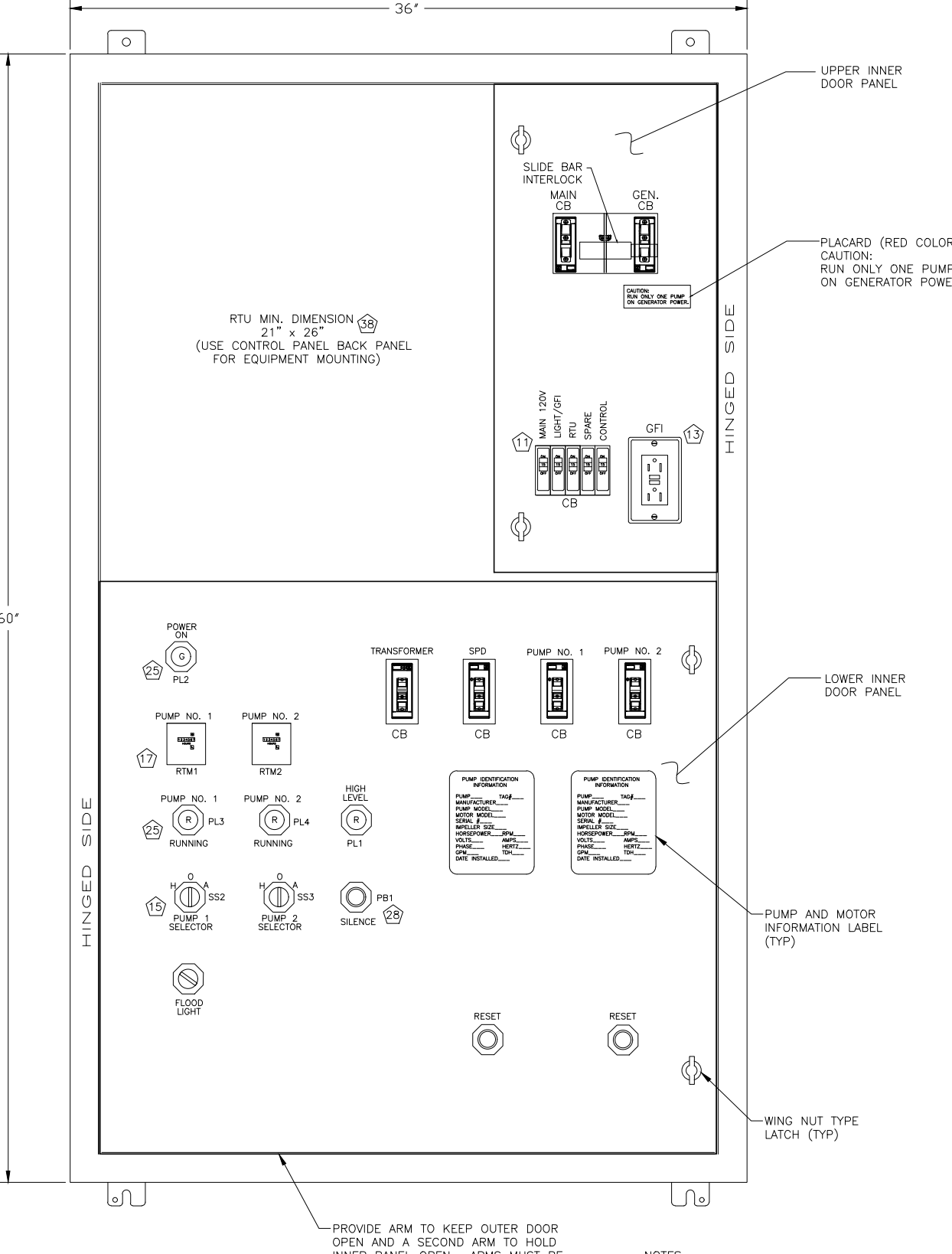
LIFT STATION ELECTRICAL RACK FOR GENERATOR RECEPTACLE LOCATED ON RIGHT SIDE * 57S



LIFT STATION ELECTRICAL RACK FOR GENERATOR RECEPTACLE LOCATED ON LEFT SIDE * 56S



LIFT STATION CONTROL PANEL INNER DOORS FOR 20HP MOTORS AND LARGER * 62S



LIFT STATION CONTROL PANEL INNER DOORS FOR MOTORS SMALLER THAN 20HP * 61S