



S-291 ELECTRICAL SITE PLAN DETAILS
 SCALE: 1" = 3'
E001 E002

GROUNDING NOTES:

- CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE GROUNDING SYSTEM FOR THE GATE STRUCTURE AND CONTROL BUILDING. CONTRACTOR SHALL ALSO BOND EXISTING GROUND AT HEAD WATER SECTION TO NEW GROUND SYSTEM.
- GROUNDING SHALL INCLUDE A BURIED #2/0 GROUND LOOP AROUND THE STRUCTURE AND BUILDING WITH A MINIMUM #4 GROUND TAILS (UNLESS OTHERWISE SHOWN) CONNECTED TO ALL METAL PARTS OF THE STRUCTURE AND PROJECT SITE TO INCLUDE BUT NOT LIMITED TO STRUCTURE REBAR (SUB-STRUCTURE, BUILDING COLUMNS AND SLABS), MOTORS, RAILS (TO BE SECURELY STRAPPED) (ALL SECTIONS), METAL GRATES AND FRAMES, JUNCTION BOXES, GRADING, EMBEDDED FRAMING, RTU ANTENNA, LIGHT FIXTURES, LOUVERS AND HOODS, EXHAUST FANS AND FRAMES, ALL ELECTRICAL EQUIPMENT AND ENCLOSURES, ETC.
- CONTRACTOR SHALL PROVIDE AND INSTALL FENCE GROUNDING LOOP WITH #2/0 BARE COPPER CONDUCTOR, MINIMUM 30" DEEP WITH GROUND RODS INSTALLED AS SHOWN AND INSTALL A GROUND ROD AND BONDING CONDUCTOR AT EACH GATE FENCE POST BOTH CONNECTED TO GROUNDING LOOP. COORDINATE WITH FENCING PLANS FOR GROUNDING INTERVALS.
- ALL BELOW GRADE GROUND CONNECTIONS SHALL BE EXOTHERMIC WELDED. ABOVE GRADE GROUND CONNECTIONS SHALL BE EXOTHERMIC WELD OR MECHANICAL CONNECTIONS. CONTRACTOR SHALL NOT "DAISY CHAIN" MECHANICAL GROUND CONNECTIONS.
- SEE DRAWINGS E015 FOR GROUNDING DETAILS.
- SEE DRAWING E003 FOR ADDITIONAL BUILDING AND EQUIPMENT GROUNDING.

GENERAL NOTES:

- FOR REFERENCE: ORIENTATION OF THE GATE (NUMBER SCHEME) IS GATE CLOSEST TO CONTROL BUILDING IS GATE 1 AND GATE 2 IS GATE LOCATED FURTHEST AWAY FROM CONTROL BUILDING. GATE 1A & 2A IS THE UPPER GATE (WEIR) AND GATE 1B & 2B IS THE LOWER OF THE TWO GATES (SLIDE GATE).
- THE S-291 SITE CONTAINS EXISTING UNDERGROUND CONDUITS IN CLOSE PROXIMITY TO THE PROJECT WORK AREA. PLEASE REFER TO THE US ARMY CORPS OF ENGINEERS (USACE) AS-BUILTS FOR DETAILS ON CONDUIT SCHEDULE AND LOCATION. THE DISTRICT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE USACE AS-BUILTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UTILIZE THE SERVICES OF AN UNDERGROUND UTILITY LOCATING SERVICE BEFORE STARTING TRENCHING WORK IN ORDER TO LOCATE EXISTING UNDERGROUND SERVICE AND UTILITIES.
- FOR EXISTING UNDERGROUND CONDUITS THAT POTENTIALLY ARE IN THE WAY OF THE PATH OF NEW CONDUIT RUNS, WE WANT TO MAINTAIN 24" COVER FOR OUR NEW CONDUIT RUNS. IF THE NEW LAYOUT CAN MAINTAIN 24" COVER - THE CONTRACTOR CAN RUN NEW CONDUITS OVER THE EXISTING UNDERGROUND CONDUITS. IF THE NEW LAYOUT CAN NOT MAINTAIN 24" COVER, THEN THE CONTRACTOR IS TO RUN THE NEW CONDUITS UNDERNEATH THE EXISTING UNDERGROUND CONDUITS.
- CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR FOR THE INSTALLATION OF THE ELECTRICAL SERVICE FOR THE GATE STRUCTURE AND PAY ALL FEES REQUIRED FOR THE ELECTRIC SERVICE.
- CONTRACTOR SHALL COORDINATE WITH GLADES ELECTRIC CO-OP FOR EXACT LOCATION OF THE SERVICE POINT UTILITY POWER POLE. INSTALL THE ELECTRIC SERVICE AS PER GLADES ELECTRIC CO-OP STANDARDS AND INSTALLATION REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE ELECTRICAL DRAWINGS WITH ALL OTHER DISCIPLINE DRAWINGS AND HIS WORK WITH OTHER TRADES TO AVOID CONFLICTS.
- CONDUIT ROUTING IS SHOWN FOR CLARITY, CONTRACTOR SHALL ADJUST CONDUIT ROUTING IN THE FIELD TO MEET SITE CONDITION AND EQUIPMENT LOCATIONS.
- CONTRACTOR SHALL KEEP MINIMUM 1 FOOT DISTANCE BETWEEN POWER CONDUITS AND INSTRUMENTATION CONDUITS.
- CONTRACTOR SHALL PROVIDE AND INSTALL A CATHODIC PROTECTION SYSTEM FOR THE LP FUEL TANK PER SPECIFICATION 16061 FOR A COMPLETE WORKING SYSTEM IN PLACE.
- CONTRACTOR SHALL PROVIDE SURVEYED LOCATIONS AND ELEVATIONS OF UNDERGROUND GROUND CONDUCTORS AND CONDUITS AT EACH CHANGE OF DIRECTION AND FOR EACH IN-GROUND PULL BOX INSTALLED BY THIS CONTRACT IN ACCORDANCE WITH SPECIFICATION SECTION 01050, FIELD ENGINEERING.
- FOR KEY NOTES # SEE DRAWING E008.
- FOR CIRCUIT AND CONDUIT SCHEDULES SEE DRAWING E007.
- TORQUE ALL ELECTRICAL CONNECTIONS PER NEC ANNEX I.

- LEGEND**
- GROUND ROD
 - 2/0 AWG GROUND COPPER CABLE
 - GROUND CONNECTION
 - UNDERGROUND CONDUIT

The consultant, contractor or other parties associated with this project shall comply with Florida Statutes Chapter 119. These plans are the property of the District and must be secured and maintained in a confidential manner. Review by any unauthorized individual or outside/third party not performing work necessary for this project is prohibited.



NOTE:
 THE ELEVATIONS SHOWN HEREON ARE BASED ON THE [NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)]. BENCH MARK NO. XXX. NGVD29 = NAVD88 [+/-] XX.XX' FOR THIS LOCATION.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
 ECOSYSTEM RESTORATION AND CAPITAL PROJECTS DIVISION
 ENGINEERING & CONSTRUCTION BUREAU

ENGINEER: J. BARTON
DRAWN: ED HICKSON, JR.
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DATE: MARCH 2020
SCALE: AS SHOWN

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REVISIONS

NO.	DATE	BY	DESCRIPTION
1	8/26/20	EHAR	ELIMINATED EXCESS FLOOR BLOCKOUTS FOR REVERSING STARTERS

ENGINEER OF RECORD:
 JACK S. BARTON, P.E.
 FLORIDA P.E. LICENSE NO.: 42467

PROJECT ID NO.
100588

DRAWING NUMBER
E002

SHEET
35 OF 63

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CORRECTED FINAL (RTA)