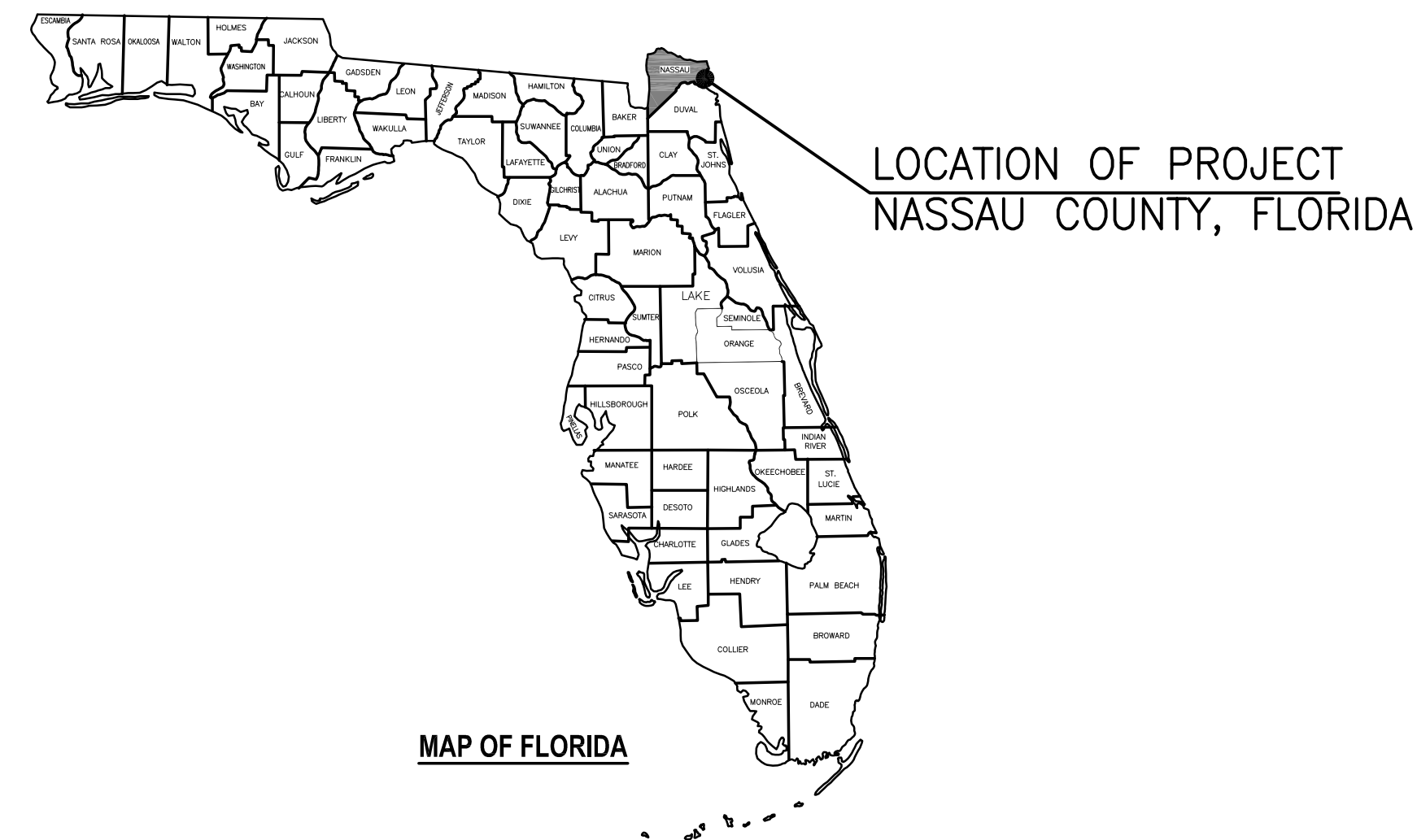
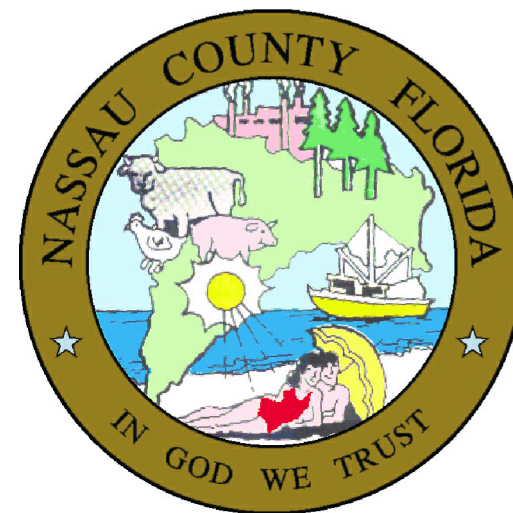


NASSAU COUNTY - AMELIA ISLAND WWTP GENERATOR REPLACEMENT PROJECT



Prepared For:



96135 NASSAU PLACE
SUITE 1
YULEE, FL 32097

Prepared By:



gai consultants

1301 RIVERPLACE BOULEVARD
SUITE 900
JASKSON, FLORIDA 32207
PHONE: (904) 363-1110

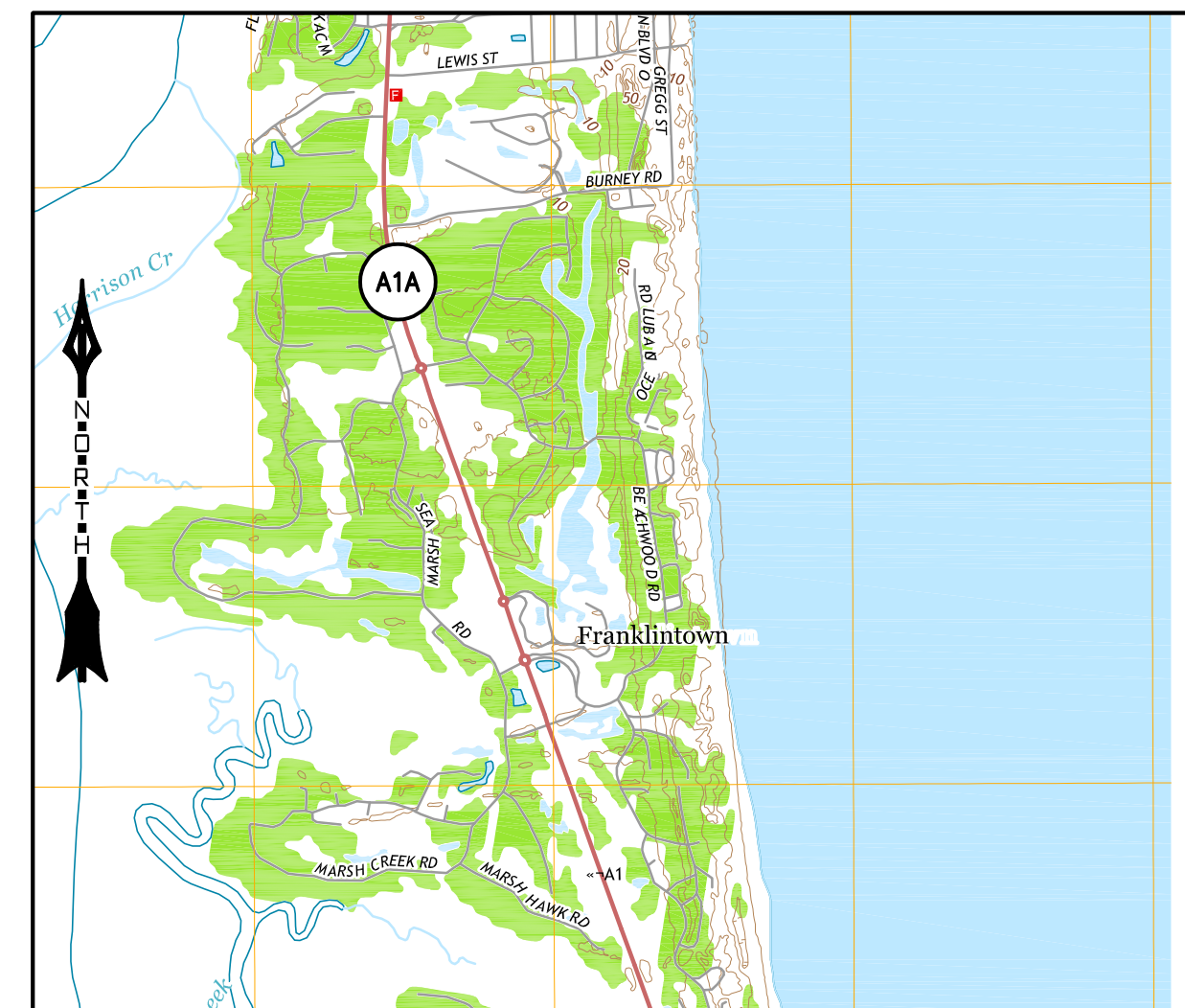
MARCH, 2020

NASSAU PROJECT NO.
PROJECT BID NUMBER.

NASSAU COUNTY OFFICIALS

COMMISSION CHAIRMEN	DANIEL B. LEEPER
COMMISSION VICE CHAIR:	PAT EDWARDS
COMMISSIONER:	JUSTIN M. TAYLOR
COMMISSIONER:	AARON C. BELL
COMMISSIONER:	THOMAS R FORD
COUNTY MANAGER:	MICHAEL S MULLIN

LOCATION MAP



AMELIA ISLAND, FLORIDA

BASE MAP USGS, AMELIA NASSAU COUNTY 7.5 MINUTE
QUADRANGLE

CONTACT LIST

OWNER'S REPRESENTATIVE
NASSAU COUNTY ENGINEERING
SERVICES
96161 NASSAU PLACE
YULEE, FLORIDA 32097
(904) 530-6225
ATTN: .

CIVIL ENGINEERS
GAI CONSULTANTS, INC.
1301 RIVERPLACE BOULEVARD
SUITE 900
JACKSONVILLE, FLORIDA 32801
(561) 465-8001
ATTN: JULES JAY AMENO, P.E.

== == == **BID SET** == == ==

INDEX OF DRAWINGS

DWG. NO.	TITLE
—	COVER SHEET
G-1	INDEX OF DRAWINGS / GENERAL SITE MAP
G-2	GENERAL NOTES
G-3	STANDARD ABBREVIATIONS AND SYMBOLS

DWG. NO.	TITLE
	ELECTRICAL
E-01	ELECTRICAL NOTES, SYMBOLS AND ABBREVIATIONS
E-02	ELECTRICAL SITE PLAN
E-03	EXISTING SINGLE LINE DIAGRAM
E-04	PROPOSED SINGLE LINE DIAGRAM
E-05	EXISTING MCC-1 FRONT VIEW AND LOAD TABULATION
E-06	STEP 1-ELECTRICAL PLAN
E-07	STEP 2-ELECTRICAL PLAN
E-08	STEP 3-ELECTRICAL PLAN
E-09	PANEL SCHEDULES AND ELECTRICAL DETAILS

DWG. NO.	TITLE
	STRUCTURAL
S-01	GENERATOR PAD DESIGN



== = BID SET = ==

INDEX OF DRAWINGS / GENERAL SITE MAP

GENERATOR REPLACEMENT
NASSAU COUNTY

SEAL

Jules J. Ameno Jr., P.E.
Florida Registration #31049


gal consultants
EB 9951
1301 RIVERPLACE BLVD, SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A170003.04

SHEET

G-1

REVISIONS

DESCRIPTION

APPRO

CHNG

OWN

DATE

NO.

SCALE: N.T.S

DATE: MARCH 2020

DRAWN: SAH

CHECKED: JJA

APPROVED: JJA

GENERAL NOTES

GENERAL

- EXISTING UTILITY LOCATIONS AS SHOWN ARE APPROXIMATE AND WERE BASED ON RECORD DRAWINGS AND HAVE NOT BEEN FIELD-VERIFIED. THE EXISTING UTILITIES SHOWN SHALL NOT BE CONSTRUED AS BEING ALL-INCLUSIVE OF UTILITIES IN THE AREA. ANY INTERRUPTION OF SERVICE SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SUPPORT OF UTILITIES POLES AND COORDINATION OF SUCH WITH UTILITIES OWNERS. IF IT IS DETERMINED THAT UTILITY POLES REQUIRE HOLDING OR RELOCATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXPENSES ASSOCIATED WITH THEIR HOLDING AND/OR RELOCATION.
- PIPE LENGTHS ARE MEASURED CENTER LINE TO CENTER LINE FOR MANHOLES AND INLETS AND FROM THE END OF THE PIPE FOR MITERED END SECTIONS.
- ALL PIPE AND FITTINGS SHALL BE PRESSURE TESTED AS SPECIFIED.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINT, BRACING, TEST PLUGS AND/OR OTHER DEVICES AS NECESSARY TO SUCCESSFULLY COMPLETE PRESSURE TESTING OF ALL PRESSURE PIPING SYSTEMS.
- PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES, THE LENGTHS ARE FOR INFORMATIONAL PURPOSES AND THE CONTRACTOR SHALL DETERMINE THE ACTUAL CONSTRUCTION QUANTITIES.
- UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. THE WATER MAIN SHALL BE CONSTRUCTED ABOVE OTHER PIPELINE WHEN POSSIBLE.
- UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. THE WATER MAIN SHALL BE CONSTRUCTED ABOVE OTHER PIPELINE WHEN POSSIBLE.
- WHERE SANITARY SEWERS, FORCE MAINS AND SEWER LATERALS MUST CROSS A WATER MAIN WITH LESS THAN THE REQUIRED VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
- ALL CROSSINGS SHOULD BE ARRANGED SO THAT THE SEWER MAIN PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUAL DISTANCE FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
- WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN THE REQUIRED VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE NEW PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
- A MINIMUM 3 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- WHERE IT IS NOT POSSIBLE TO MAINTAIN A 3 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR THE FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
- WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
- VERTICAL TRANSITION FITTINGS DEC NOT BE SHOWN ON YARD PIPING PLANS. ALL SUCH FITTINGS SHALL BE PROVIDED BY THE CONTRACTOR TO AVOID PIPING CONFLICTS AND TO PROVIDE ADEQUATE COVER AT NO ADDITIONAL COST TO OWNER.
- ALL DIP USED IN UTILITY SEPARATION SITUATIONS SHALL BE CLASS 50 OR HIGHER AND DUCTILE IRON FITTINGS SHALL BE CLASS 350. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED.
- ALL PIPING SHALL HAVE 3 FEET MINIMUM COVER UNLESS OTHERWISE NOTED. CONTRACTOR SHALL TAKE CARE TO PROVIDE PROPER GRADE ELEVATIONS AND ALIGNMENTS.
- ALL AREAS WHERE LANDSCAPE OR SOD HAS BEEN REMOVED BY CONTRACTOR'S OPERATIONS SHALL BE REPLACED TO MEET NASSAU COUNTY STANDARDS.
- FITTINGS DEC BE USED FOR PIPE ALIGNMENT CHANGES RATHER THAN DEFLECTING JOINTS AT THE CONTRACTOR'S EXPENSE.
- DEWATERING DEC BE REQUIRED IN SOME PIPING AREAS TO ACHIEVE THE NECESSARY EXCAVATION AND SUBSEQUENT CONSTRUCTION, BACKFILLING, AND COMPACTING. NO EXTRA COMPENSATION FOR DEWATERING WILL BE AUTHORIZED.
- ALL DEWATERING COSTS ASSOCIATED WITH THE INSTALLATION AND CONSTRUCTION OF THE UNDERGROUND UTILITIES, STORMWATER PIPES, MANHOLES, AND STORMWATER MANAGEMENT SYSTEMS AS WELL AS ALL OTHER STRUCTURES AT THE WTP SHALL BE INCLUDED AS PART OF THE CONSTRUCTION COSTS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST BE FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS HE DETERMINES NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC SILT PEAT AREAS, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFF SITE, AND MATERIALS TO BE DISPOSED OF OFF SITE, ALL OF WHICH WILL AFFECT PRICING. ANY DELAY, INCONVENIENCE, OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE AUTHORIZED.
- ALL PAVING, STABILIZED EARTH, DRIVEWAYS, CURBS, CULVERTS, SIDEWALKS, FENCES, SOD, LANDSCAPING, ETC. DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH MATERIAL TO MATCH EXISTING. ALL CULVERTS THAT ARE REPLACED AND ARE RELOCATED WITHIN THE RIGHT-OF-WAY SHALL HAVE THE INVERT ELEVATIONS DETERMINED BY THE ENGINEER OF RECORD.
- ALL DRAINAGE AREAS THAT ARE CROSSED BY PIPELINES SHALL BE LEFT OPEN AT ALL TIMES EXCEPT FOR SHORT PERIODS AS DEC BE NECESSARY DURING ACTUAL CONSTRUCTION HOURS.

GENERAL CONT.

- THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A REGISTERED PROFESSIONAL LAND SURVEYOR FOR RESTORING ALL MONUMENTS AND PROPERTY CORNERS DISTURBED DURING CONSTRUCTION. PROOF OF REGISTRATION SHALL BE SUBMITTED TO THE ENGINEER.
- THE CONTRACTOR SHALL LOCATE ALL WATER, WASTEWATER, AND GRAVITY MAINS AT PROPOSED TIE-IN LOCATIONS TO VERIFY ACTUAL LOCATION, SIZE, ELEVATION, AND MATERIAL PRIOR TO ORDERING NEW MATERIALS.
- ALL POTABLE WATER MAINS EITHER INSTALLED OR DISTURBED DURING CONSTRUCTION SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C-651 LATEST EDITION, SUBSECTION 4.8, AND SECTION 9. SUCH WATER MAINS SHALL THEN BE BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. A REPRESENTATIVE FROM THE UTILITY MUST BE PRESENT DURING THE TAKING OF ALL WATER SAMPLES, PRESSURE TESTS, FLUSHING, ETC.
- LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY NASSAU COUNTY, THE CONSTRUCTION DRAWINGS, AND CONSTRUCTION SPECIFICATIONS. WHERE CONFLICTS OR OMISSIONS EXIST, NASSAU COUNTY'S STANDARDS SHALL DICTATE. SUBSTITUTIONS AND DEVIATION FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH O.S.H.A. REQUIREMENTS. THE CONTRACTOR'S SIGNATURE AFFIXED TO THE CONTRACT AGREEMENT WITH THE OWNER IS CONSIDERED CERTIFICATION OF CONFORMANCE TO SUCH REQUIREMENTS.
- SHOP DRAWINGS OF MATERIALS USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL AND APPROVAL SHALL BE GIVEN PRIOR TO INSTALLATION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT REQUIRED PERMITS ARE OBTAINED AND IN ACCORDANCE WITH O.S.H.A. REQUIREMENTS. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. ANY PENALTIES, STOP WORK ORDERS OR ADDITIONAL WORK RESULTING FROM THE CONTRACTOR BEING IN VIOLATION OF THE REQUIREMENTS ABOVE SHALL BE FULLY BORNE BY THE CONTRACTOR.
- A PRECONSTRUCTION MEETING IS TO BE HELD BETWEEN THE JURISDICTIONAL ENTITY OF NASSAU COUNTY UTILITIES, ENGINEER OF RECORD, AND CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT UNDERGROUND INSTALLATIONS, INCLUDING SPRINKLERS, SHALL BE PLACED BENEATH THE PAVEMENT AND ITS EDGES PRIOR TO THE CONSTRUCTION OF THE PAVEMENT. THE PAVEMENT SHALL NOT BE CUT WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- CONSTRUCTION INSPECTION WILL BE PROVIDED BY THE CONTRACTOR AND HE SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND AT LEAST 48 HOURS BEFORE REQUIRING INSPECTION ON EACH AND EVERY PHASE OF WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS NOTICE PRIOR TO SCHEDULED TESTING. NO BACTERIOLOGICAL TESTING, PRESSURE TESTING, OR FINAL TESTING WILL BE ACCEPTED UNLESS WITNESSED BY THE ENGINEER'S REPRESENTATIVE.
- CONTRACTORS, NASSAU COUNTY REPRESENTATIVES, AND UTILITY COMPANIES ARE RESPONSIBLE FOR THEIR RESPECTIVE SURVEYING AND LAYOUT FROM BENCHMARK PROVIDED ON CONSTRUCTION PLANS. SURVEY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED UPON COMPLETION OF THE WORK BY A REGISTERED LAND SURVEYOR.
- THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS AND PERMITS ON THE JOB SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TWO (2) SETS OF RECORD DRAWINGS TO THE ENGINEER OF RECORD WITHIN ONE MONTH AFTER CONSTRUCTION HAS BEEN COMPLETED.
- PLANS AND SPECIFICATIONS REQUIRE THAT COMPACTED BACKFILL BE PLACED ALONG SIDE OF AND OVER ALL UTILITIES. THE ENGINEER DEC REQUIRE THAT COMPACTION TESTS BE TAKEN TO VERIFY BACKFILL COMPACTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY TESTING TO ASSURE THAT THE PROPER COMPACTION HAS BEEN ACHIEVED ON THE SUBGRADE, BASE, AND ALL OTHER PERTINENT AREAS THAT HAVE BEEN COMPLETED. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH TESTING AND RETESTING OF THE AREAS AND SHALL PROVIDE THE OWNER AND THE ENGINEER WITH COPIES OF THE CERTIFICATION OF COMPACTION FROM THE TESTING COMPANIES.
- ALL EXCESS FILL FROM SITE SHALL BE STOCKPILED BY THE CONTRACTOR, IN A LOCATION DETERMINED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE ENGINEER.
- CONCRETE SIDEWALKS SHALL CONFORM TO FDOT INDEX 310.
- BENCHMARK FOR CONSTRUCTION HAS BEEN PROVIDED ON SITE PLAN.
- ALL SITE DATUMS ARE IN NAVD 88, EXCEPT WHERE OTHERWISE NOTED

SITE WORK

- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE, AS REQUIRED, TO REMOVE ROOTS, BRANCHES, ROCKS, ETC. AT NO TIME SHALL CONSTRUCTION, CLEARING, OR WORK TAKE PLACE OUTSIDE THOSE AREAS SHOWN ON THE PLANS FOR CONSTRUCTION. ALL UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL GRADE THE SITE TO PROVIDE POSITIVE SURFACE DRAINAGE AS INDICATED ON THE PLANS. ANY AREAS BEING FILLED TO ACHIEVE PROPER DRAINAGE FLOW SHALL BE COMPACTED TO A MINIMUM NINETY-FIVE (95%) MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180).
- ALL GRASSED AREAS WITHIN THE RIGHT OF WAY DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY SODDING. SEEDING AND MULCHING IS NOT ACCEPTABLE.

EROSION AND SEDIMENTATION CONTROL

- THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO INSTALL, OPERATE, AND MAINTAIN EROSION, SEDIMENT, AND TURBIDITY CONTROL DEVICES AND STRUCTURES AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATERBODY EXISTS DUE TO THE PROPOSED WORK. THE EROSION, SEDIMENT, AND TURBIDITY CONTROL DEVICES SHALL BE IN ACCORDANCE WITH FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX #102, LATEST VERSION. AT NO TIME SHALL THERE BE AN OFFSITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTERS 62-302 AND 62-4, FLORIDA ADMINISTRATIVE CODE.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL OPERATE AND MAINTAIN EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE REGULATIONS SET FORTH IN THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), AS SHOWN ON THE STORMWATER POLLUTION PREVENTION PLAN. (SWPPP)
- THE CONTRACTOR SHALL INSTALL SILT FENCES AROUND THE PERIMETER OF THE WORK TO PREVENT TRANSPORTATION OF SEDIMENT TO OFFSITE PROPERTIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROJECT COMPLYING WITH APPLICABLE STATE WATER QUALITY STANDARDS DURING CONSTRUCTION AS SPECIFIED IN THE PERMITS. ALL WATER AND WIND EROSION SHALL BE MINIMIZED AS DEFINED IN THE SPECIFICATIONS AND PERMITS. THE SPECIFICATIONS PROVIDE ONLY A MINIMUM REQUIREMENT FOR EROSION AND SEDIMENTATION CONTROL, IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT CONTROL MEASURES NOT SHOWN IN SPECIFICATIONS. ALL COSTS ASSOCIATED WITH TURBIDITY CONTROL AND SEDIMENT STABILIZATION SHALL BE BORNE BY THE CONTRACTOR.
- THE REMOVAL OF DEBRIS AND ANY OTHER MATERIAL INCLUDING PIPES, CONCRETE STRUCTURES AND PAVEMENT LAYERS FROM CLEARING AND GRADING OPERATIONS SHALL BE HAULED AWAY BY THE CONTRACTOR IN A LEGAL FASHION TO AN AUTHORIZED DUMPING FACILITY.
- THE CONTRACTOR MUST INSTALL AND MAINTAIN SOD ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETED FINAL GRADES, AND AT ANY OTHER TIME AS NECESSARY TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES TO ANY DOWNSTREAM WATER BODY, WETLAND, OR OFFSITE PROPERTY. SODDING ON SLOPES 3:1 AND STEEPER SHALL BE STAKED.
- THE CONTRACTOR MUST MAINTAIN CONTINUOUS RESTORATION BEHIND THE UTILITY WORK ON A DAILY BASIS.

DEMOLITION

- THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND LICENSES FOR PERFORMING ANY DEMOLITION WORK AND SHALL FURNISH A COPY OF SAME TO THE ENGINEER PRIOR TO COMMENCING THE WORK. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE PERMITS.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OR LOCAL AUTHORITIES FURNISHING GAS, WATER, ELECTRICAL, TELEPHONE, OR SEWER SERVICE SO THEY CAN REMOVE, RELOCATE, DISCONNECT, CAP OR PLUG THEIR EQUIPMENT IN ORDER TO FACILITATE DEMOLITION.
- THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS AND UTILITIES AND OTHER IMPROVEMENTS NOT SHOWN. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS OF UTILITIES AND OTHER IMPROVEMENTS DAMAGED DURING CONSTRUCTION AND SHALL MAINTAIN SUFFICIENT PROTECTION FOR ALL UTILITIES REQUIRED TO PROTECT THEM FROM DAMAGE AND TO PROTECT THE PUBLIC DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL TREES, STRUCTURES, AND UTILITIES NOT MARKED FOR REMOVAL OR DEMOLITION AND SHALL PROMPTLY REPAIR ANY DAMAGE AS DIRECTED BY THE ENGINEER AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL REMOVE BUILDING STRUCTURES MARKED FOR DEMOLITION WHICH INCLUDES FOOTERS ASSOCIATED WITH THE STRUCTURE, WATER LINES TO THE METER LOCATION, LATERALS TO THE RIGHT-OF-WAY LINE (CAP PRIOR TO BACKFILLING THE TRENCH), AND UNDERGROUND ELECTRICAL WIRING NOT ASSOCIATED WITH THE APPROPRIATE POWER COMPANY.
- THE CONTRACTOR SHALL REMOVE PAVING MARKED FOR DEMOLITION WHICH INCLUDES ALL ASPHALT, CONCRETE, BASE, AND RETAINING WALLS (INCLUDING THE FOOTERS).
- THE CONTRACTOR SHALL REMOVE TREES MARKED FOR REMOVAL WHICH INCLUDES THE ROOTS ASSOCIATED WITH THE TREE. TREES NOT MARKED FOR REMOVAL SHALL BE PROTECTED IN ACCORDANCE WITH NASSAU COUNTY REGULATIONS.
- THE CONTRACTOR SHALL REMOVE UNSALVAGEABLE MATERIALS AND YARD WASTE FROM THE SITE IMMEDIATELY AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL SAW-CUT A SMOOTH STRAIGHT EDGE ON ANY PAVEMENT PROPOSED FOR DEMOLITION PRIOR TO ITS REMOVAL. PRIOR TO CONNECTING PROPOSED PAVEMENT TO EXISTING PAVEMENT, THE CONTRACTOR SHALL ENSURE THAT THE EDGE OF THE EXISTING PAVEMENT IS STRAIGHT AND UNIFORM.

GENERAL NOTES

GENERATOR REPLACEMENT
NASSAU COUNTY

REVISIONS

DESCRIPTION

APPRO

CHNG

OWN

DATE

NO.

SCALE: N.T.S

DATE: MARCH 2020

DRAWN: SAH

CHECKED: JJA

APPROVED: JJA

SEAL

Jules J. Ameno Jr., P.E.
Florida Registration #31049


gai consultants
EB 9951

1301 RIVERPLACE BLVD, SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
A170003.04

SHEET

G-2

== == == BID SET == == ==

LIST OF STANDARD ABBREVIATIONS

TITLE

SECTION

DENOTES SECTION LETTER IDENTIFICATION

DENOTES DRAWING NO. SECTION TAKEN FROM

SECTION TITLE

DENOTES SECTION LETTER IDENTIFICATION

DENOTES DRAWING NO. WHERE SECTION IS LOCATED

SECTION REFERENCE

DENOTES DETAIL NUMBER IDENTIFICATION

DENOTES DRAWING NO. WHERE DETAIL IS LOCATED

DETAIL REFERENCE

SECTIONAL CUT

SECTIONAL CUT

	ELECTRIC BOX		GUY ANCHOR		TELEPHONE MANHOLE
	FIRE HYDRANT		MAIL BOX		MONITOR WELL
	POWER POLE		MANHOLE		WATER METER
	GUY POLE		SIGN/LOCATOR POLE		WATER VALVE
	LIGHT POLE		SPRINKLER HEAD		GAS VALVE
	TRAFFIC SIGNAL CONTROL BOX		TELEPHONE RISER		WELL
	BENCH MARK		CONTROL ELEVATION		MONITORING WELL
			MONUMENT		

* SEE LIST OF STANDARD ABBREVIATIONS

[illegible][illegible]SCALE: **N.T.S**DATE: **MARCH 2020**DRAWN: **SAH**

CHECKED: JJA

APPROVED: JJA

GENERATOR REPLACEMENT NASSAU COUNTY

SEAL



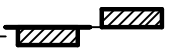
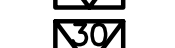
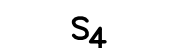
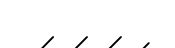
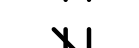
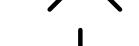
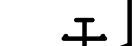
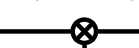
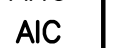
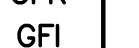
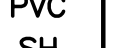
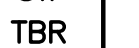
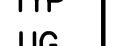
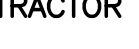
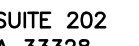
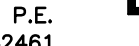
gai consultants
EB 9951

1301 RIVERPLACE BLVD. SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

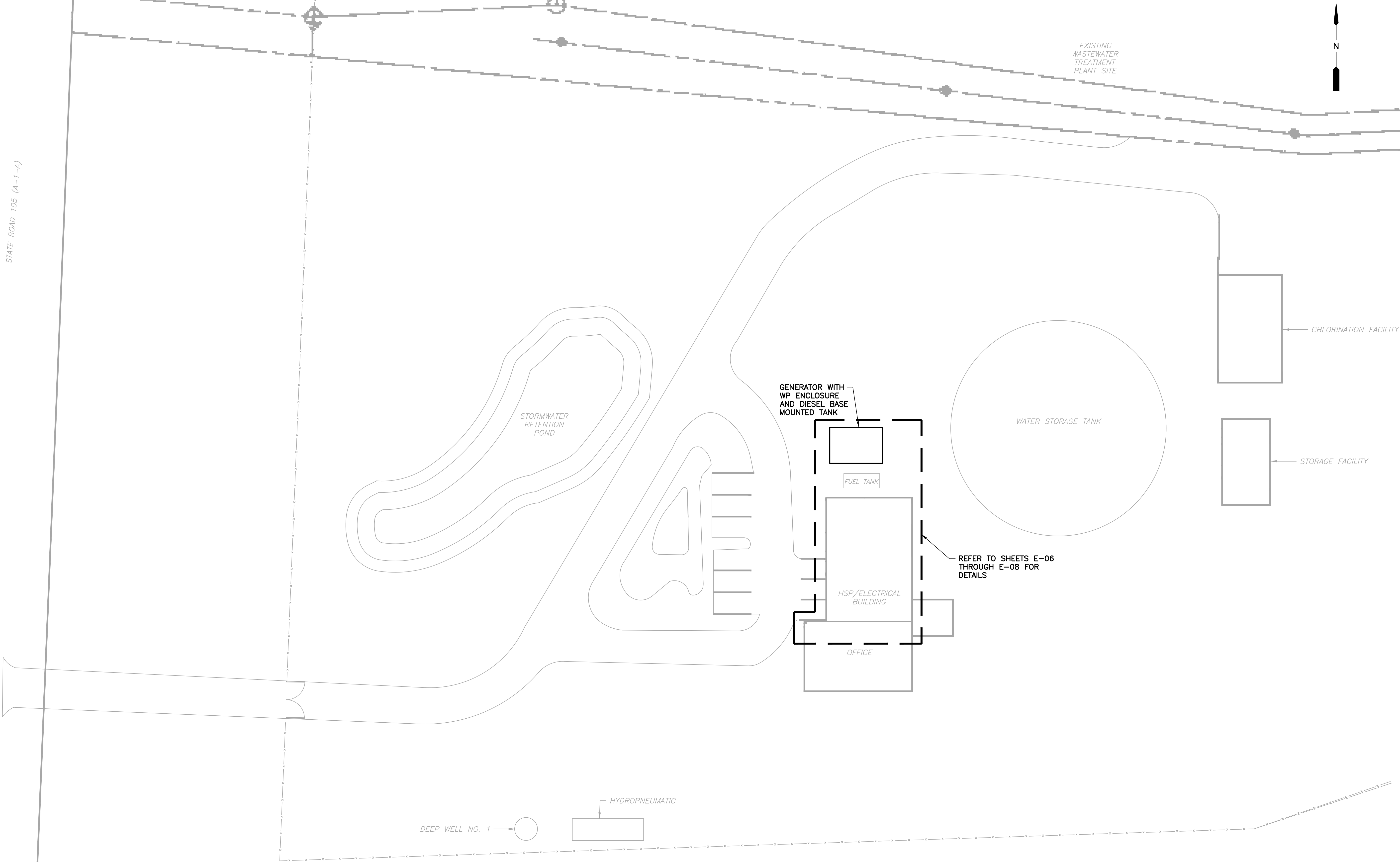
PROJECT NO./DASH NO.
A170003.04

SHEET

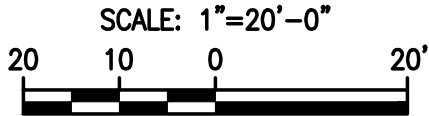
G-3

PLAN SYMBOLS		SINGLE LINE DIAGRAM SYMBOLS		CONTROL DIAGRAM SYMBOLS		ABBREVIATIONS	NOTES													
                                     	HOME RUN TO PANELBOARD. NO. OF ARROWS INDICATE NO. OF CIRCUITS, HASH MARKS INDICATE NO. OF #12 AWG. CONDUCTORS. NO HASH MARKS INDICATE 2 #12 CONDUCTORS.	                                     	COMBINATION MOTOR STARTER	                                     	GROUND FAULT INTERRUPTER	                                     	FUSE	                                     	CAPACITOR	                                     	MOLDED CASE CIRCUIT BREAKER	 	TYPICAL SELECTOR SWITCH AND CONTROL. SEE ELEMENTARY DIAGRAMS FOR EXACT TYPE.	 	ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER.	 	SERVICE OR EQUIPMENT GROUND.	 	NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS OTHERWISE INDICATED.	

STATE ROAD 105 (A-1-A)



ELECTRICAL SITE PLAN



APPROXIMATE ADDRESS
5300 1ST COAST HIGHWAY
FERNANDINA BEACH, FL 32034

10620 GRIFFIN ROAD, SUITE 202
COOPER CITY, FLORIDA 33328
PHONE: (954) 448-7930
C.O.A. NO. 6783
Stephen E. Bailey, P.E.
Florida P.E. No. 42461

BIDSET



ELECTRICAL SITE PLAN

WTP GENERATOR INSTALLATION
NASSAU COUNTY

SEAL

Stephen E. Bailey, P.E.
Florida Registration #42461



GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD., SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

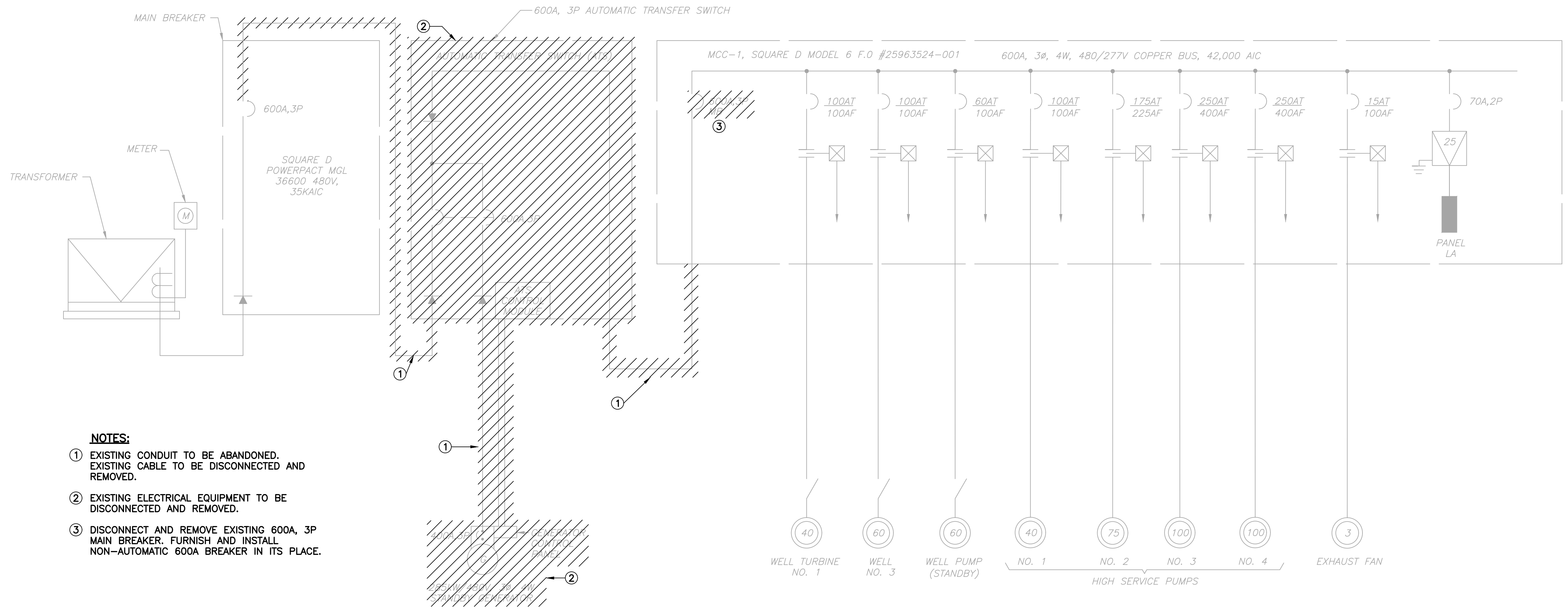
PROJECT NO./DASH NO.

SHEET

E-02

REVISIONS				DESCRIPTION
NO.	DATE	DWN	CHKD	APPRO

SCALE:	AS NOTED
DATE:	FEB 2020
DRAWN:	DRM
CHECKED:	JPL
APPROVED:	SEB



- NOTES:**
- ① EXISTING CONDUIT TO BE ABANDONED. EXISTING CABLE TO BE DISCONNECTED AND REMOVED.
 - ② EXISTING ELECTRICAL EQUIPMENT TO BE DISCONNECTED AND REMOVED.
 - ③ DISCONNECT AND REMOVE EXISTING 600A, 3P MAIN BREAKER. FURNISH AND INSTALL NON-AUTOMATIC 600A BREAKER IN ITS PLACE.

EXISTING SINGLE LINE DIAGRAM
(SEE PLAN VIEW FOR STEPS AND SEQUENCE OF CONSTRUCTION ON THIS SHEET)

- SEQUENCE OF CONSTRUCTION (SEE PLAN VIEWS FOR ADDITIONAL REQUIREMENTS)**
- ① INSTALL NEW OWNER PROVIDED GENERATOR. TEST AND LOAD BANK GENERATOR.
 - ② DISCONNECT EXISTING GENERATOR FROM EXISTING ATS AND CONNECT NEW GENERATOR TO EXISTING ATS.
 - ③ INSTALL NEW ATS.
 - ④ INSTALL ASSOCIATED CONDUIT AND WIRE FROM NEW ATS TO EXISTING MAIN BREAKER, NEW GEN AND EXISTING MCC. DO NOT TERMINATE. TEST CABLES
 - ⑤ OPERATE PLANT ON EXISTING GENERATOR WHILE NEW ATS IS BEING INSTALLED
 - ⑥ CONNECT EXISTING MAIN BREAKER TO NORMAL SIDE OF NEW ATS. CONNECT NEW GENERATOR TO NEW ATS
 - ⑦ RE-ENERGIZE PLANT.
 - ⑧ DISCONNECT EXISTING MCC FROM EXISTING ATS, RECONNECT TO NEW ATS. OPERATE ALL HSPs ON NEW SERVICE AND EXISTING CONTROLS.
 - ⑨ COMPLETE INSTALLATION.

BIDSET

10620 GRIFFIN ROAD, SUITE 202
COOPER CITY, FLORIDA 33328
PHONE: (954) 448-7930
C.O.A. NO. 6783
Stephen E. Bailey, P.E.
Florida P.E. No. 42461



EXISTING SINGLE LINE DIAGRAM
WTP GENERATOR INSTALLATION
NASSAU COUNTY

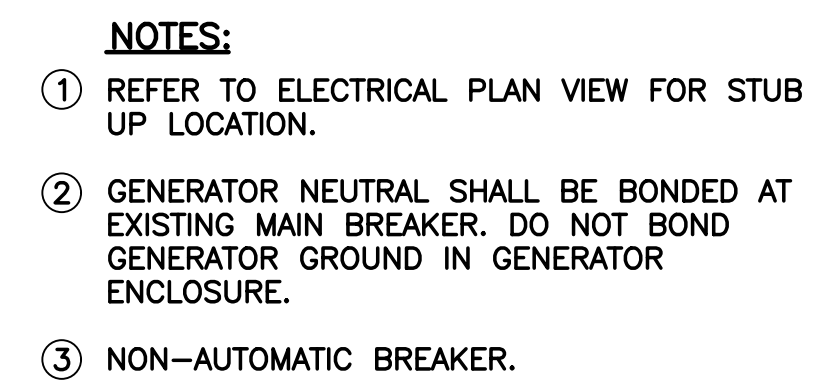
SEAL
Stephen E. Bailey, P.E.
Florida Registration #42461



GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD. SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
—

SHEET
E-03



(SEE PLAN VIEWS FOR STEPS AND SEQUENCE OF
CONSTRUCTION ON SHEET E-07)

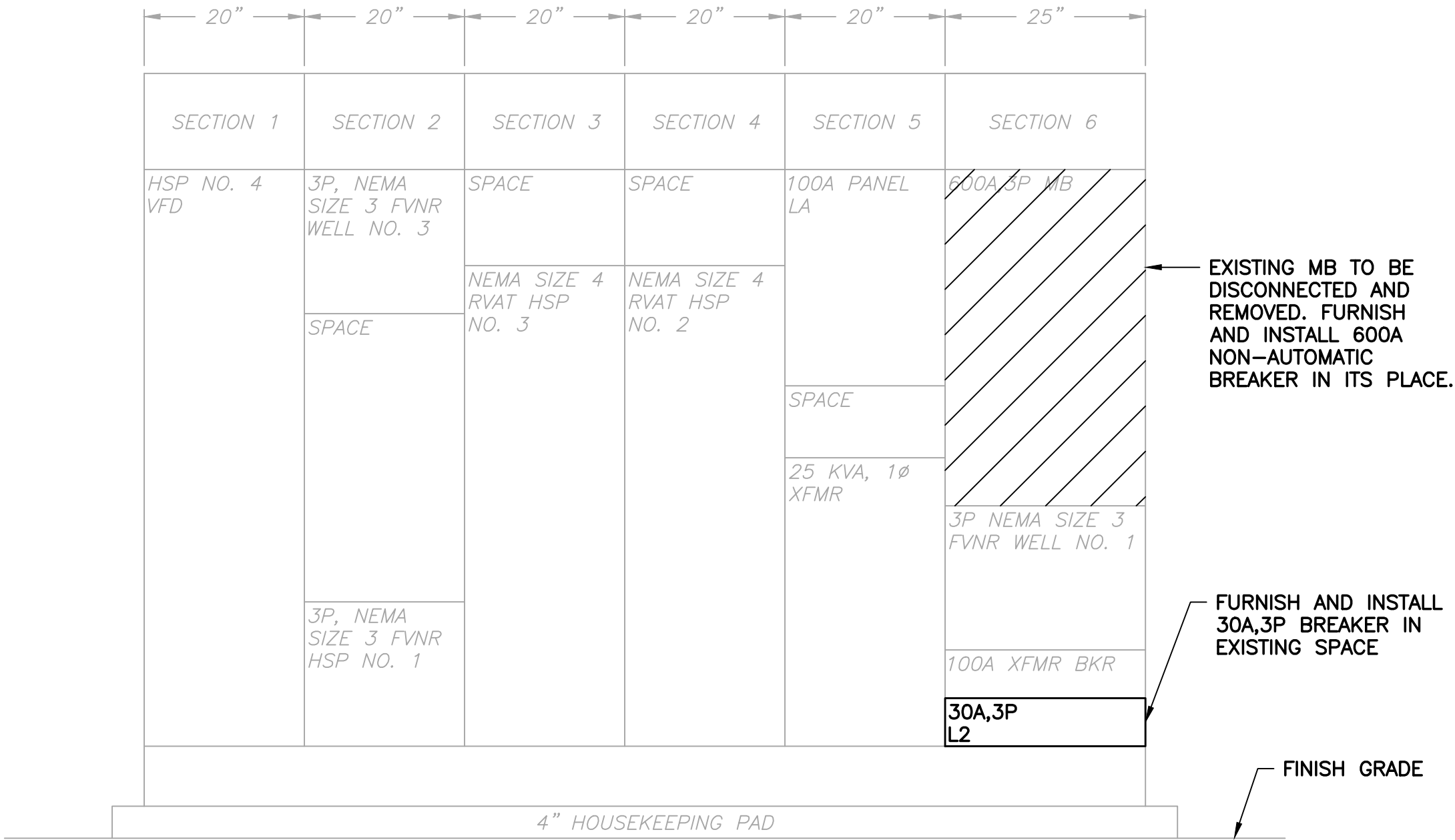
WTP GENERATOR INSTALLATION
NASSAU COUNTY

PROPOSED SINGLE LINE DIAGRAM
WTP GENERATOR INSTALLATION NASSAU COUNTY

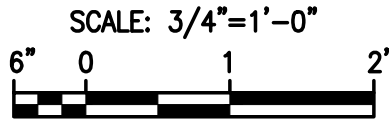
E 04



BIDSET



EXISTING MCC-1 FRONT VIEW



MCC-1 LOAD TABULATION				
480V, 3Ø, 3W				
DESCRIPTION	LOAD		AMPACITY	
HSP NO. 1	1 @	40 HP	=	52.00 AMPS
HSP NO. 2	1 @	75 HP	=	96.00 AMPS
HSP NO. 3	1 @	100 HP	=	124.00 AMPS
FUTURE HSP NO. 4	1 @	100 HP	=	124.00 AMPS
WELL PUMP NO. 1	1 @	40 HP	=	52.00 AMPS
WELL PUMP (STANDBY)	1 @	20 HP	=	27.00 AMPS
FUTURE WELL TURBINE	1 @	50 HP	=	65.00 AMPS
EXHAUST FAN	1 @	3 HP	=	4.80 AMPS
MISC LOADS			=	20.00 AMPS
CONNECTED LOAD			=	564.80 AMPS
Ⓢ SERVICE ENTRANCE = 564.80 AMPS + (0.25)(124.00) = 595.80 AMPS				
NOTES:				
Ⓢ AMPACITIES PER TABLE 430-250 OF THE NATIONAL ELECTRICAL CODE.				
Ⓢ SERVICE ENTRANCE MINIMUM SIZE AS PER ARTICLE 230 OF THE NATIONAL ELECTRICAL CODE.				

EXISTING MCC-1 FRONT VIEW AND LOAD
TABULATION
WTP GENERATOR INSTALLATION
NASSAU COUNTY

REVISIONS	
NO.	DESCRIPTION

SCALE:	AS NOTED
DATE:	FEB 2020
DRAWN:	DRM
CHECKED:	JPL
APPROVED:	SEB

SEAL

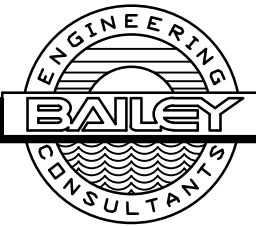
Stephen E. Bailey, P.E.
Florida Registration #42461

Nassau-Amelia Utilities

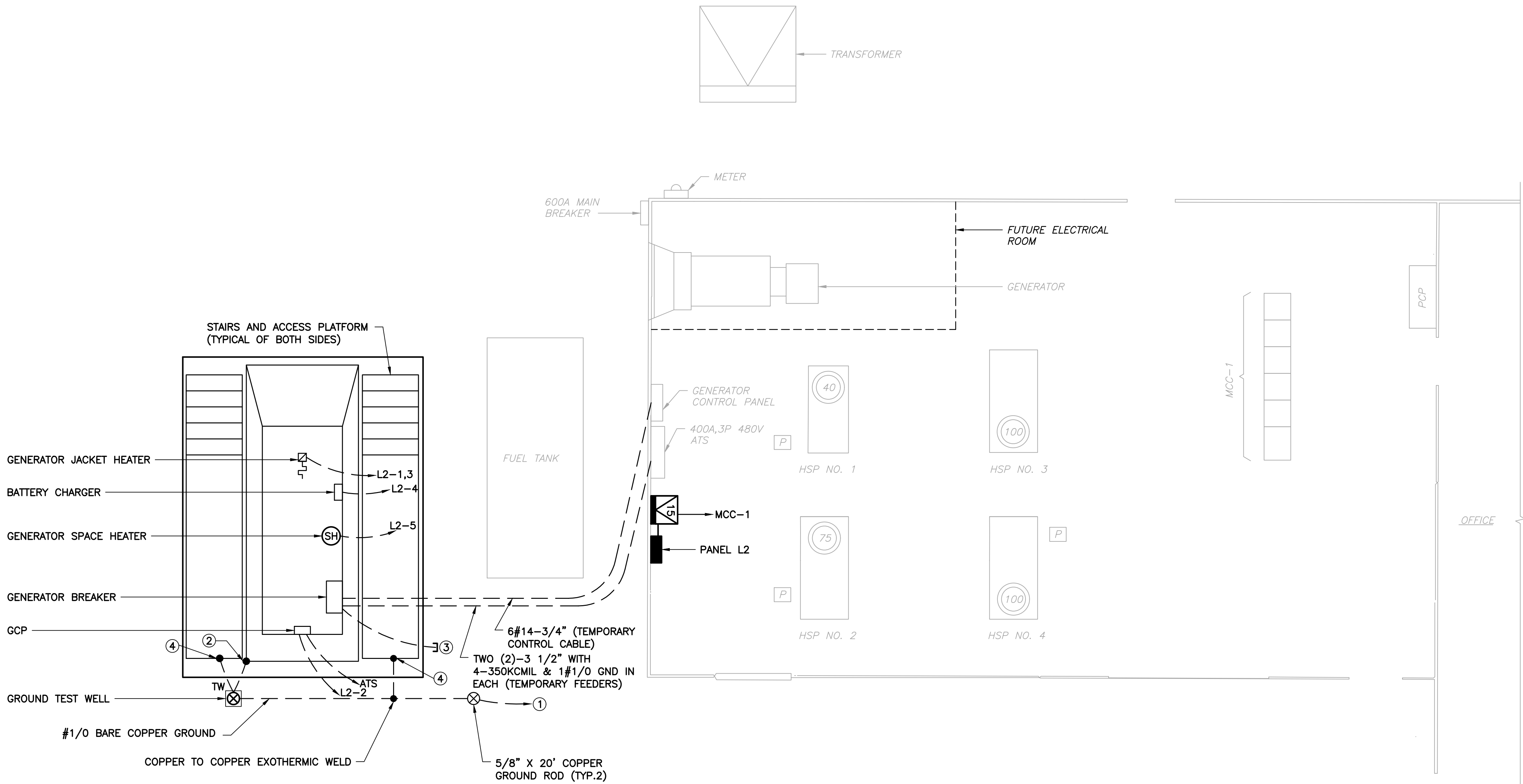
GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD., SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
—
SHEET
E-05

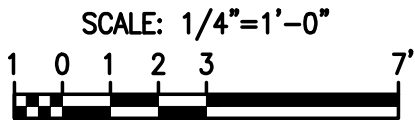
10620 GRIFFIN ROAD, SUITE 202
COOPER CITY, FLORIDA 33328
PHONE: (954) 448-7930
C.O.A. NO. 6783
Stephen E. Bailey, P.E.
Florida P.E. No. 42461



BIDSET



STEP 1-ELECTRICAL PLAN

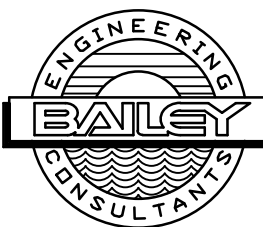


NOTES:

- ① TIE INTO EXISTING GROUND GRID.
- ② BOND TO FUEL TANK GROUNDING LUGS.
- ③ STUB UP FOR FUTURE CONNECTION.
- ④ BOND TO STAIRS/PLATFORM.

BIDSET

10620 GRIFFIN ROAD, SUITE 202
COOPER CITY, FLORIDA 33328
PHONE: (954) 448-7930
C.O.A. NO. 6783
Stephen E. Bailey, P.E.
Florida P.E. No. 42461



STEP 1-ELECTRICAL PLAN
WTP GENERATOR INSTALLATION
NASSAU COUNTY

SEAL

Stephen E. Bailey, P.E.
Florida Registration #42461



GAI
GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD., SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.

SHEET

E-06

REVISIONS		DESCRIPTION
NO.	DATE	APPD

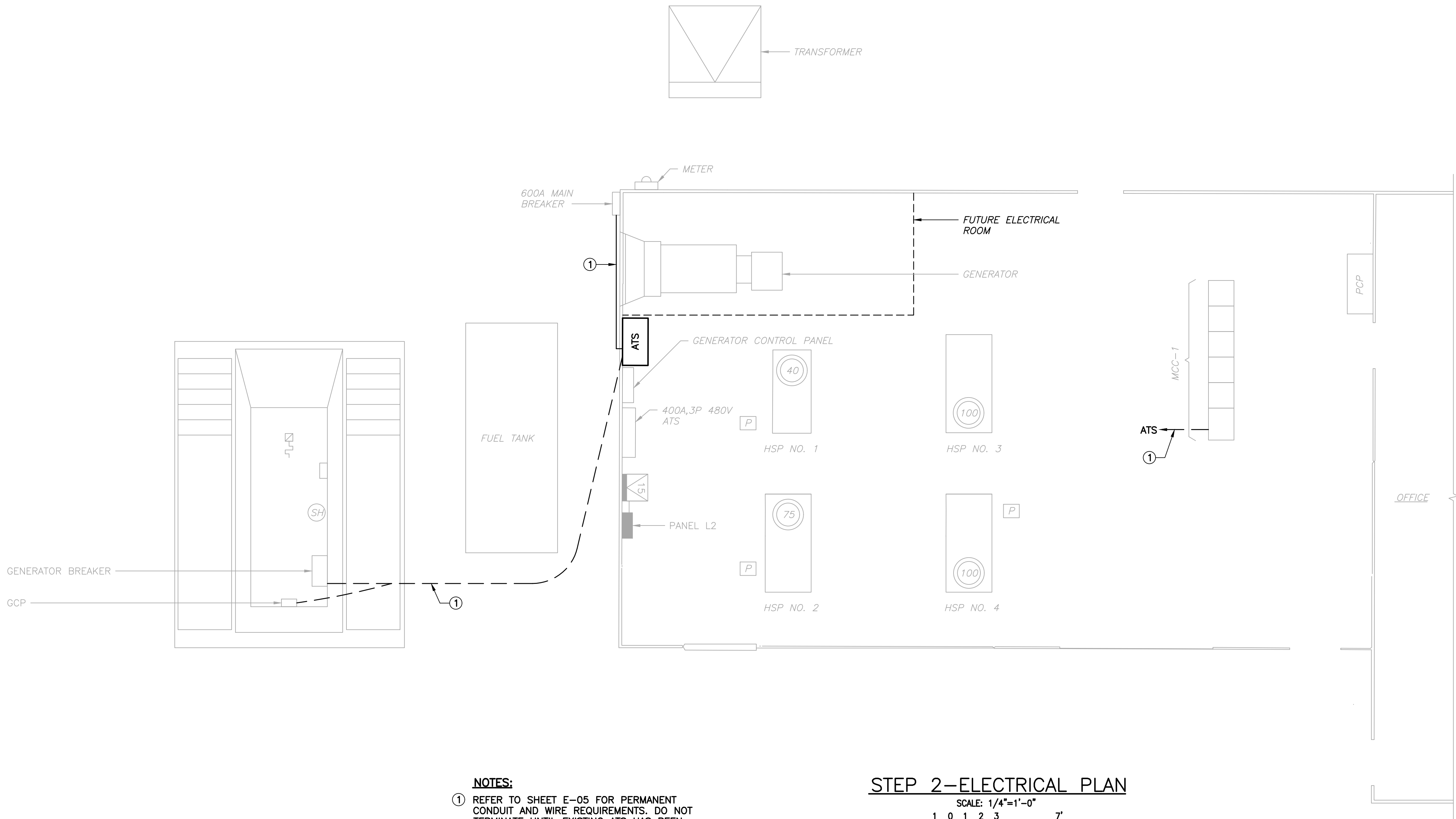
SCALE: AS NOTED

DATE: FEB 2020

DRAWN: DRM

CHECKED: JPL

APPROVED: SEB

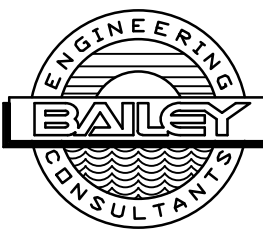


NOTES:
① REFER TO SHEET E-05 FOR PERMANENT CONDUIT AND WIRE REQUIREMENTS. DO NOT TERMINATE UNTIL EXISTING ATS HAS BEEN DISCONNECTED FROM EXISTING MAIN BREAKER, EXISTING MCC AND NEW GENERATOR

STEP 2-ELECTRICAL PLAN
SCALE: 1/4"=1'-0"
1 0 1 2 3 7'

BIDSET

10620 GRIFFIN ROAD, SUITE 202
COOPER CITY, FLORIDA 33328
PHONE: (954) 448-7930
C.O.A. NO. 6783
Stephen E. Bailey, P.E.
Florida P.E. No. 42461



STEP 2-ELECTRICAL PLAN
WTP GENERATOR INSTALLATION
NASSAU COUNTY

SEAL
Stephen E. Bailey, P.E.
Florida Registration #42461



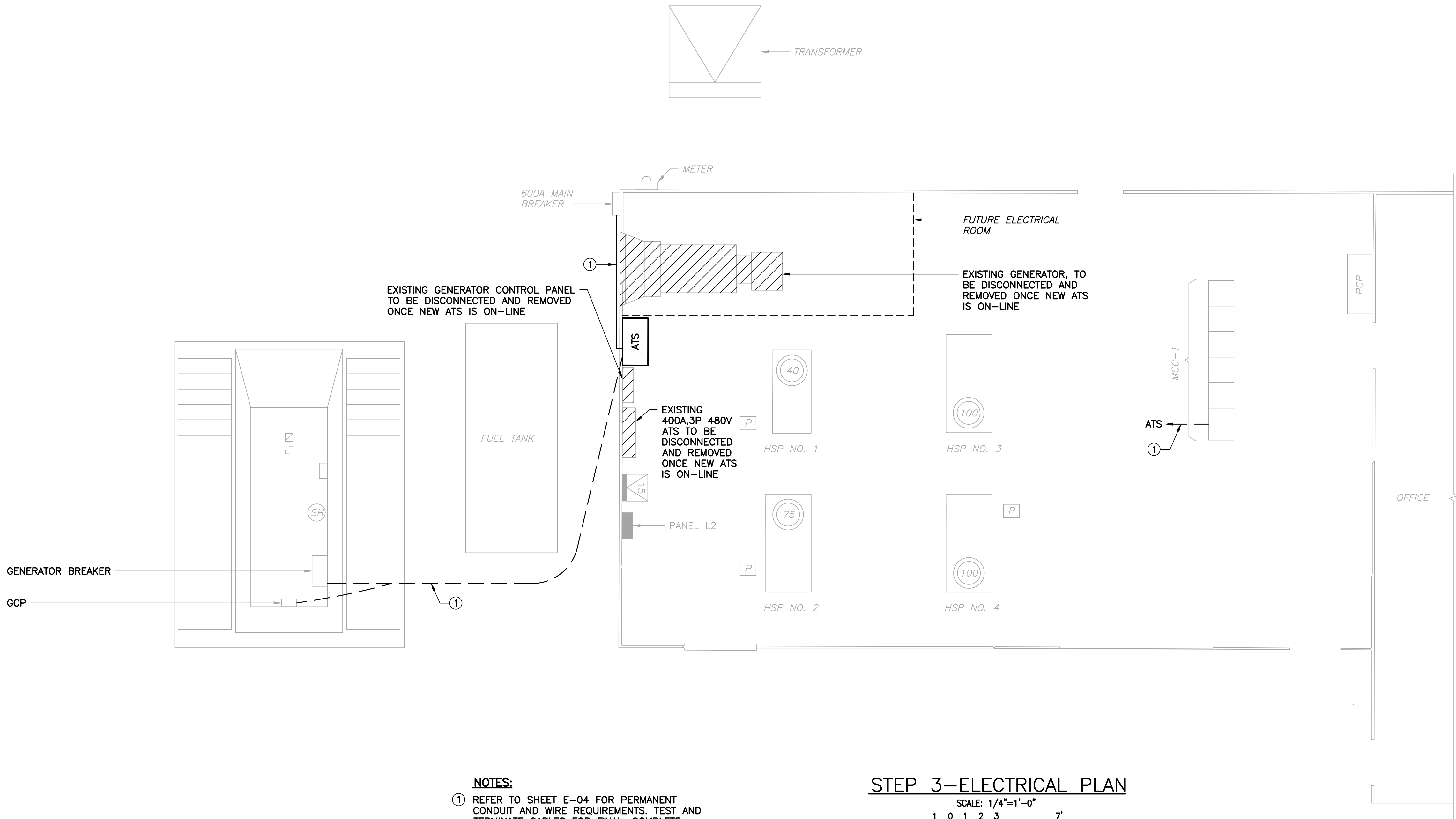
GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD., SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.

SHEET
E-07

REVISIONS					DESCRIPTION
NO.	DATE	DWN	CHKD	APPROD	

SCALE: AS NOTED
DATE: FEB 2020
DRAWN: DRM
CHECKED: JPL
APPROVED: SEB



NOTES:
① REFER TO SHEET E-04 FOR PERMANENT CONDUIT AND WIRE REQUIREMENTS. TEST AND TERMINATE CABLES FOR FINAL COMPLETE INSTALLATION

STEP 3-ELECTRICAL PLAN
SCALE: 1/4"=1'-0"
1 0 1 2 3 7'

REVISIONS				DESCRIPTION
NO.	DATE	DWN	CHKD	APPROD

SCALE:	AS NOTED
DATE:	FEB 2020
DRAWN:	DRM
CHECKED:	JPL
APPROVED:	SEB

STEP 3-ELECTRICAL PLAN
WTP GENERATOR INSTALLATION
NASSAU COUNTY

SEAL

Stephen E. Bailey, P.E.
Florida Registration #42461


Nassau-Amelia Utilities


GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD., SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.
—

SHEET
E-08

PANEL: LA					BUS: 225 AMP					VOLT: 120/240V, 1Ø, 3W							
LOCATION: MCC-1					MAINS: M.L.O.					REMARKS: -							
MOUNTING: SURFACE					POLES: -					A.I.C. SYMM: -							
AMPS	POLE	WIRE	GND.	COND.	LOAD SERVED	BUS KVA		BUS		BUS KVA		LOAD SERVED	WIRE	GND.	COND.	POLE	AMPS
						A	B	A	B	A	B						
-	-	-	-	-	PUMP ROOM LIGHTING	-	-	1	●	2	-	CHLORINATOR & SOLENOID VALVES	-	-	-	-	-
-	-	-	-	-	CHLORINE & STOR. RM. LTG & FAN	-	-	3	-	●	4	-	RECEPTACLE CIRCUIT PUMP ROOM	-	-	-	-
-	-	-	-	-	CHLORINE STORAGE LIGHTING	-	-	5	●	6	-	RECEPTACLE CIRCUIT PUMP ROOM	-	-	-	-	-
-	-	-	-	-	LEVEL & PRESSURE TRANSMITTERS	-	-	7	-	●	8	-	INSTRUMENT & CONTROL PANEL CKT.	-	-	-	-
-	-	-	-	-	GENERATOR CONTROL PANEL	-	-	9	●	10	-	SPARE	-	-	-	-	-
-	-	-	-	-	SPARE	-	-	11	-	●	12	-	SPARE	-	-	-	-
-	-	-	-	-	FEEDER FOR OFFICE PANELBOARD	-	-	13	●	14	-		-	-	-	-	-
TOTAL (PHASE):						-	-			-	-	NOTES:	-				
TOTAL KVA:								0.00									
TOTAL AMPS:								0.00									
TOTAL DEMAND AMPS:								0.00									

PANEL: L2						BUS: 100 AMP						VOLT: 208Y/120V,3Ø,4W									
LOCATION: ELECTRICAL ROOM						MAINS: 60 AMP 3 POLE BREAKER						REMARKS: PROVIDE SURGE SUPPRESSOR									
MOUNTING: SURFACE						POLES: 30						A.I.C. SYMM: 10,000 AIC									
AMPS	POLE	WIRE	GND.	COND.	LOAD SERVED	BUS KVA			BUS A B C			BUS KVA			LOAD SERVED	WIRE	GND.	COND.	POLE	AMPS	
						A	B	C	A	B	C	A	B	C							
30	2	10	10	1"	GEN JACKET HEATER	1.25			1	●		2	0.20			GEN CP	12	12	3/4"	1	20
-	-	-	-	-	-		1.25		3		●		4	0.20		GEN BATTERY CHARGER	12	12	3/4"	1	20
20	1	12	12	3/4"	GEN SPACE HEATER			0.20	5		●	6		-		SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-			7	●		8	-			SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-		-	9		●	10	-	-		SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-		-	11		●	12	-	-	-	SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-		-	13	●		14	-			SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-		-	15		●	16	-	-		SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-		-	17		●	18	-	-	-	SPARE	-	-	-	1	20
20	1	-	-	-	SPARE	-		-	19	●		20	-			SPACE	-	-	-	-	-
20	1	-	-	-	SPARE	-		-	21		●	22	-	-		-	-	-	-	-	-
20	1	-	-	-	SPARE	-		-	23		●	24	-	-	-	-	-	-	-	-	-
30	2	-	-	-	SPARE	-		-	25		●	26	-			SPD	8	10	-	3	40
-	-	-	-	-	-	-		-	27		●	28	-	-		-	-	-	-	-	-
-	-	-	-	-	SPACE	-		-	29		●	30	-	-	-	-	-	-	-	-	-
TOTAL (PHASE):						1.25	1.25	0.20				2.10	2.10	0.10	NOTES:						
TOTAL KVA:									7.00												
TOTAL AMPS:									19.45												
TOTAL DEMAND AMPS:									19.45												

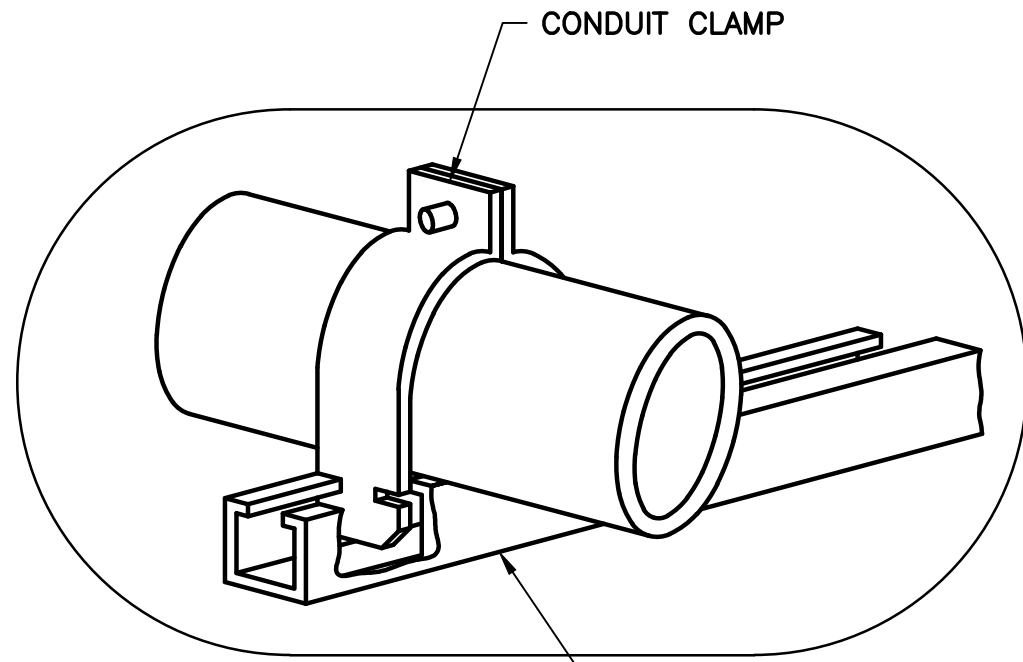
ASCO 430 SERIES
RATED 100KA PER
PHASE

SPD

1
E-09

DETAIL OF CONDUIT
TERMINATION STUB OUT

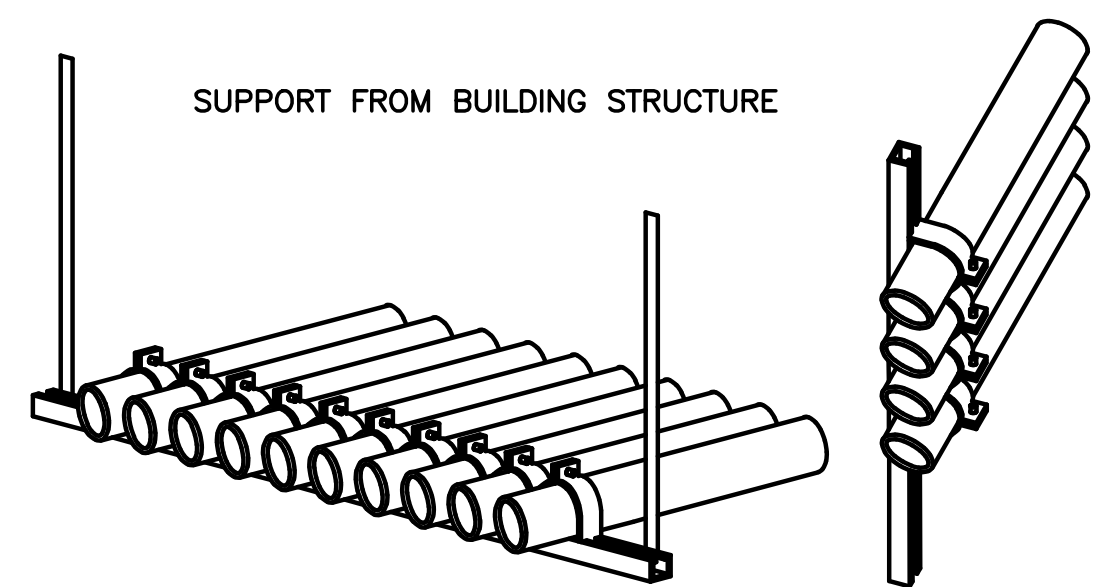
N.T.S.



3
E-09

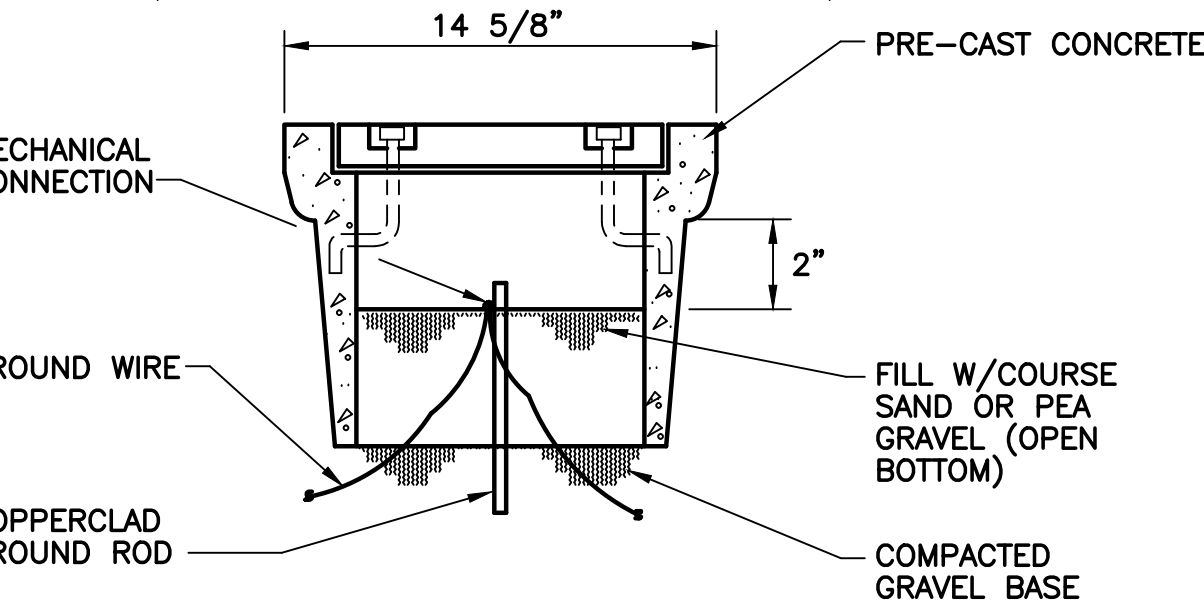
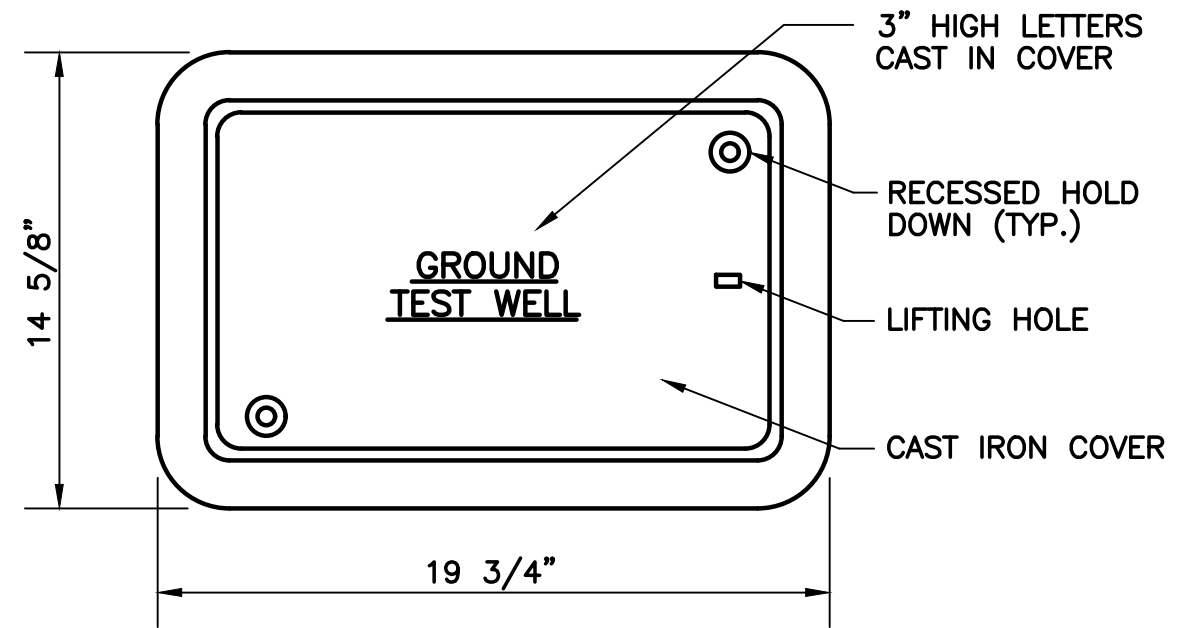
CONDUIT PIPE STRAP MOUNTING DETAILS

N.T.S.



TRAPEZE ASSEMBLY

WALKWAY AND
WALL MOUNTED



2
E-09

GROUND TEST WELL

N.T.S.

BIDSET

10620 GRIFFIN ROAD, SUITE 202
COOPER CITY, FLORIDA 33328
PHONE: (954) 448-7930
C.O.A. NO. 6783
Stephen E. Bailey, P.E.
Florida P.E. No. 42461



PANEL SCHEDULES AND ELECTRICAL

DETAILS

WTP GENERATOR INSTALLATION
NASSAU COUNTY

SEAL

Stephen E. Bailey, P.E.
Florida Registration #42461



GAI CONSULTANTS
EB 9951
1301 RIVERPLACE BLVD., SUITE 900
JACKSONVILLE, FLORIDA 32207
PHONE: (407) 423-8398

PROJECT NO./DASH NO.

SHEET

E-09

REVISIONS

NO. DATE DWN CNO APPD

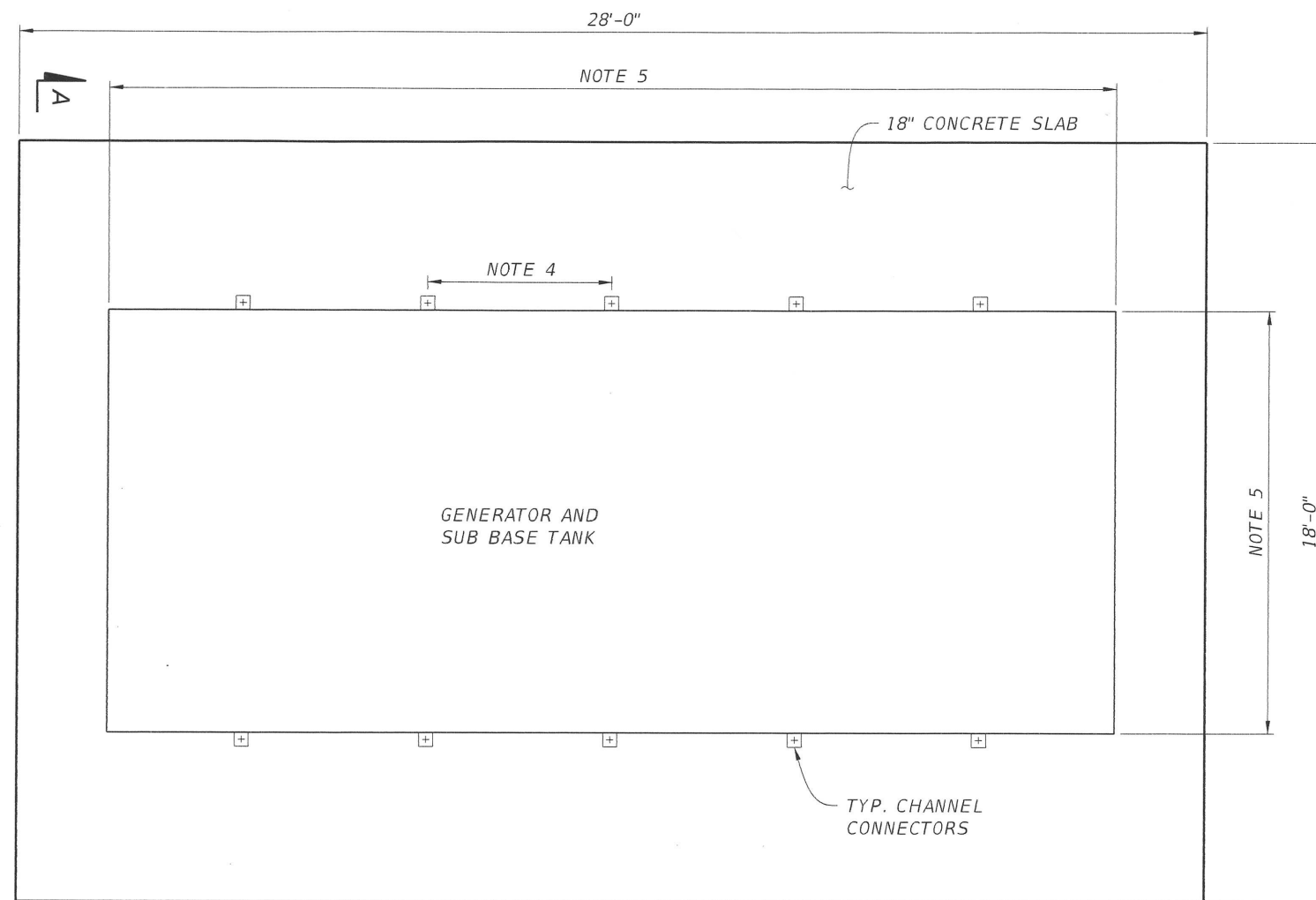
SCALE: AS NOTED

DATE: FEB 2020

DRAWN: DRM

CHECKED: JPL

APPROVED: SEB



PLAN

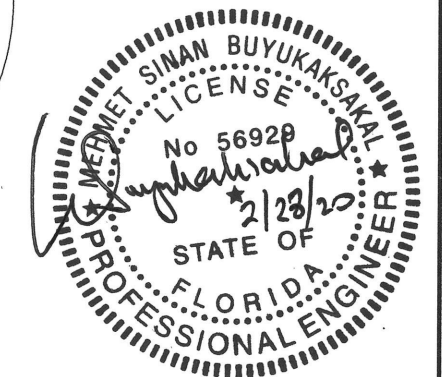
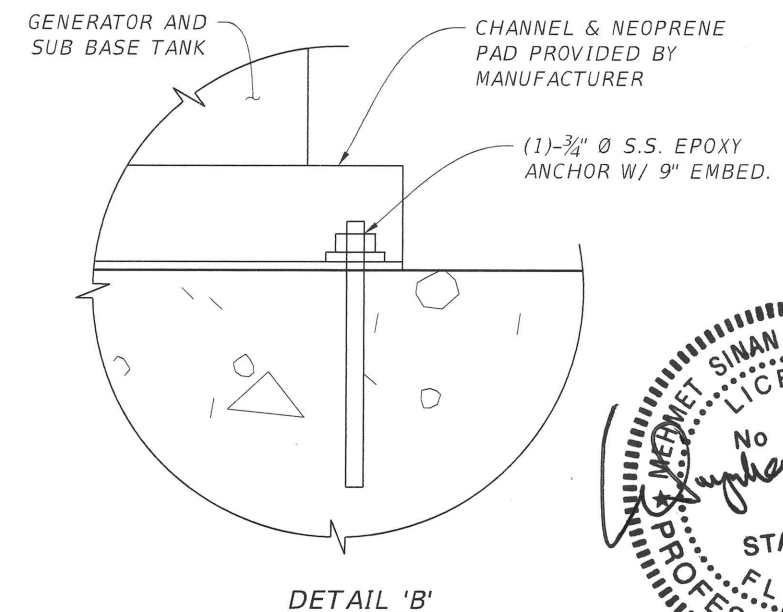
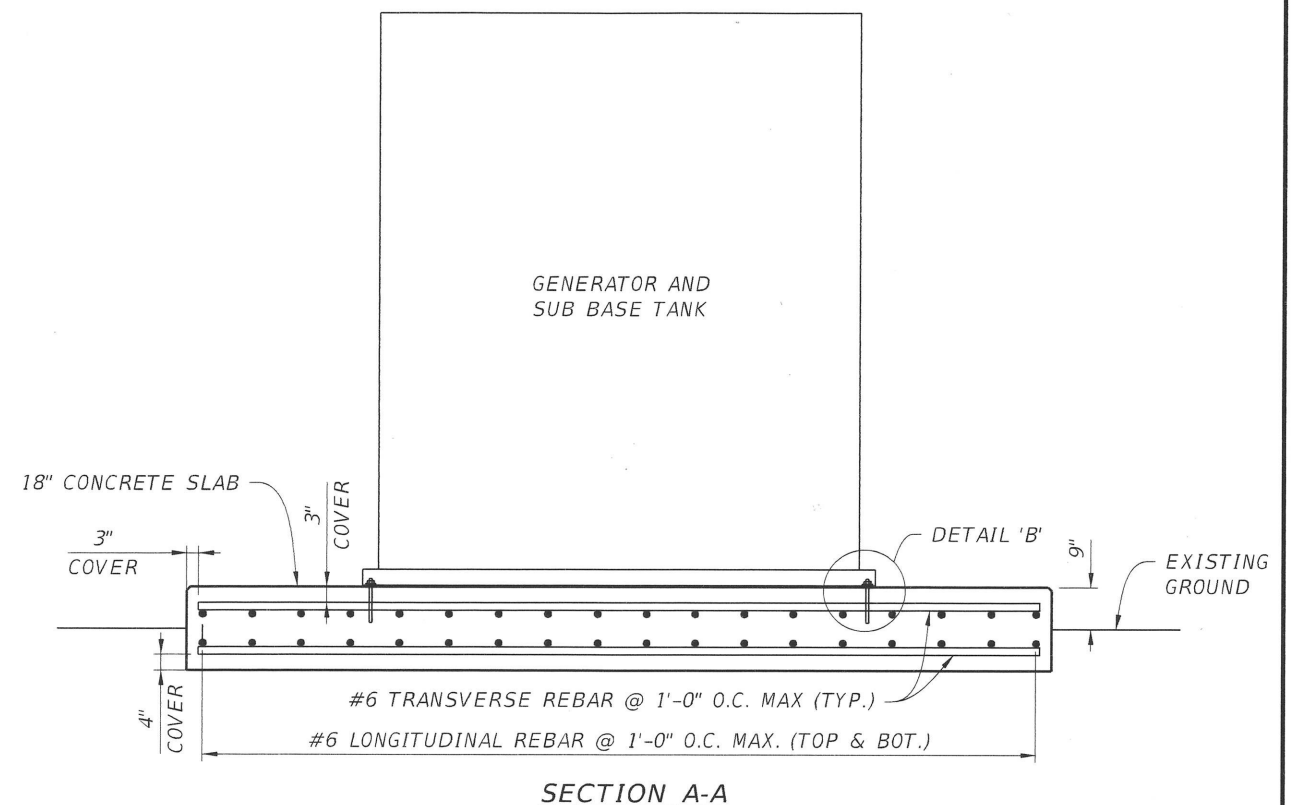
PROVIDE $\frac{3}{4}$ " CHAMFER
ON ALL EXPOSED EDGES

NOTES

- ALL CONSTRUCTION TO BE DONE PER FLORIDA BUILDING CODE 6TH EDITION (2017).
- WIND LOADS:
WIND SPEED = 140 MPH
EXPOSURE D
CATEGORY III
DESIGN PRESSURE = + 50.5 PSF
- GENERATOR AND SUB BASE TANK CHANNEL SUPPORT ACCORDING TO MANUFACTURER. CONNECT WITH (1) - $\frac{3}{4}$ " $\emptyset$ STAINLESS STEEL EPOXY ANCHORS WITH 9" EMBEDMENT AT EACH CHANNEL CONNECTOR.
- NUMBER OF CHANNEL CONNECTORS AND SPACING SHALL BE PER MANUFACTURER'S DETAILS. DESIGN ASSUMES MINIMUM 5 CONNECTORS ON EACH SIDE. IF NUMBER OF CONNECTORS IS LESS THAN 5 FOR THE SELECTED GENERATOR BRAND, PROVIDE SHOP DRAWINGS FOR A NEW ANCHOR BOLT DESIGN.
- GENERATOR AND THE SUB BASE TANK SHALL BE CENTERED ON THE CONCRETE PAD.
- GENERATOR PAD DIMENSIONS WERE SET WITH THE FOLLOWING GENERATOR AND SUB BASE TANK DIMENSIONS:

285"X120"X128" (LENGTH X WIDTH X HEIGHT).

IF THE SELECTED GENERATOR AND SUB BASE TANK DIMENSIONS ARE LARGER THAN THIS ASSUMPTION, COORDINATE WITH THE ENGINEER.
- CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 PSI AND A SLUMP OF 4" (+/- 1"). CONCRETE WORK SHALL CONFORM TO ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- REINFORCING SHALL CONFORM TO ASTM-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064 AND SHELL BE LAPPED MINIMUM ONE MESH + 2" WHERE SPLICED. ALL REINFORCING SHALL BE DOMESTICALLY PRODUCED.
- ANCHOR SHALL BE HILTI HIT-Z-R 316 SS OR APPROVED EQUAL. INSTALLATION SHALL BE PER MANUFACTURER RECOMMENDATION.



REVISIONS						DATE	BY	DESCRIPTION	M. SINAN BUYUKAKSAKAL, P.E. P.E. LICENSE NUMBER 56929 GAI CONSULTANTS, INC. 618 E. SOUTH STREET - SUITE 700 ORLANDO, FL 32801 CERTIFICATE OF AUTHORIZATION 9951	DRAWN BY: ALL 12/19 CHECKED BY: MSB 12/19 DESIGNED BY: MSB 12/19 WORK AUTHORIZATION NUMBER: CM2452-WA08	NASSAU COUNTY NASSAU AMELIA UTILITIES 5390 FIRST COAST HIGHWAY FERNANDINA BEACH, FL 32054	SHEET TITLE: GENERATOR PAD DETAIL	PROJECT NAME: WATER TREATMENT PLANT EMERGENCY STANDBY GENERATOR REPLACEMENT	REF. DWG. NO.	SHEET NO. S-1
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION										

10-1113

buyukms

2/28/2020

8:08:41 AM

...CAD\MiscStr01.dgn