

FULTON COUNTY S-126 SULLIVAN WASTEWATER PUMPING STATIONS IMPROVEMENTS FULTON COUNTY, GEORGIA PUMPING STATIONS 1-4

JUNE, 2013

SHAW E&I, INC. (A CB&I COMPANY) PROJECT NO. 147024

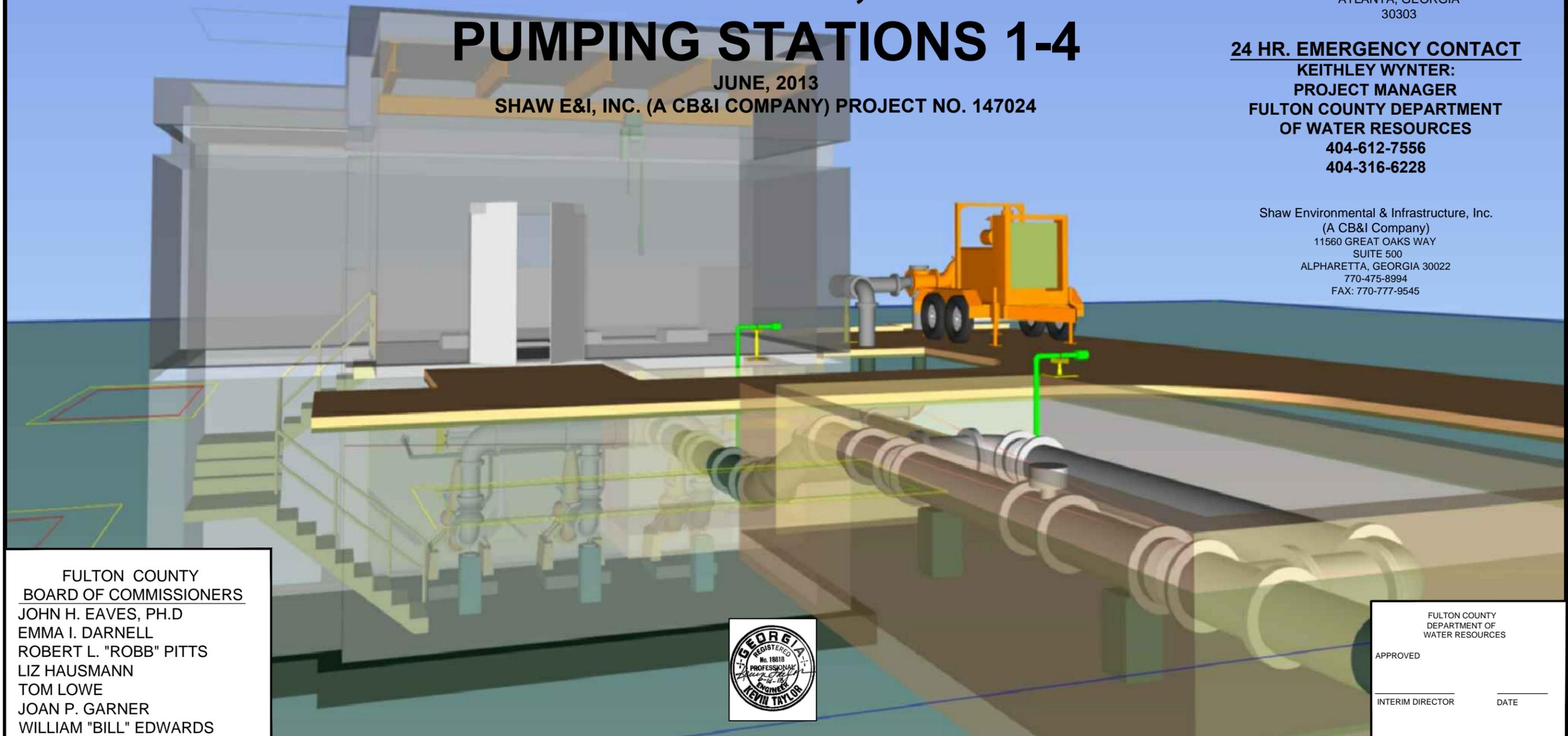


DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
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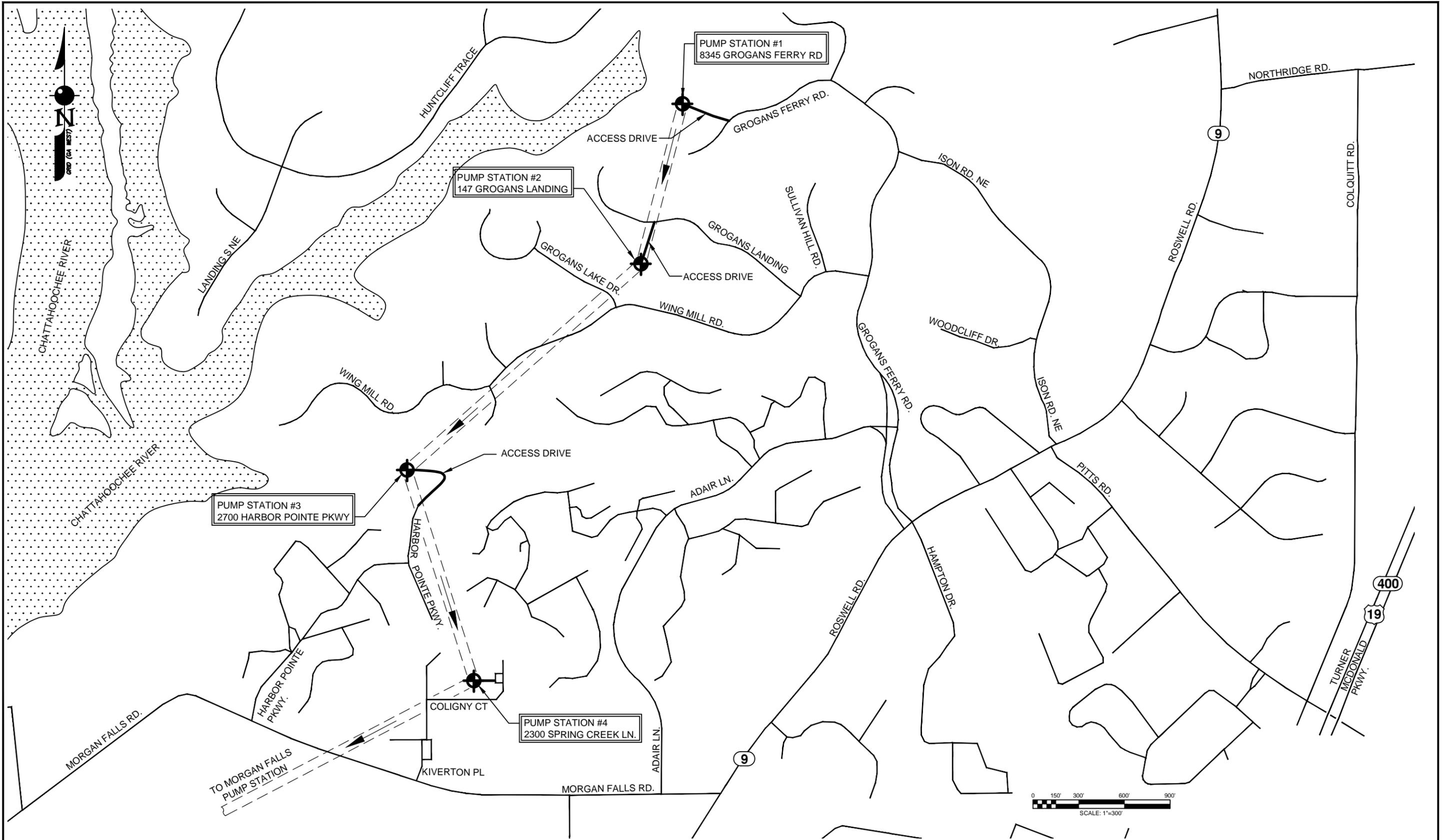
FULTON COUNTY
DEPARTMENT OF
WATER RESOURCES

APPROVED

INTERIM DIRECTOR

DATE

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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
LOCATION PLAN

DRAWING NO.
G-0.1
REV. NO.
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DATE:
06/14/13

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EQUIPMENT NUMBER PREFIXES

AHC	AIR HANDLING UNIT, WITH COIL
AHU	AIR HANDLING UNIT (SELF CONTAINED)
ARV	AIR RELEASE VALVE
AVV	AIR VACUUM VALVE
ASD	ADJUSTABLE SPEED DRIVE (MECHANICAL)
ATS	AUTOMATIC TRANSFER SWITCH
B	BLOWER
BP	BACKFLOW PREVENTER
BSN	BAR SCREEN
BUB	BUBBLE SYSTEM
CFR	CHEMICAL FEEDER (LIME SLAKER, POLYMER, CHLORINATOR, ETC.)
COL	COLLECTOR
CON	CONVEYOR (BELT, BUCKET ELEVATOR, SCREW) OR COMPACTOR
CP	COMPRESSOR
CRN	CRANE
CV	CHECK VALVE
DS	DISCONNECT SWITCH
DSN	DRUM SCREEN
EF	EXHAUST FAN
F	FILTER, STATIC
FOP	FURNISHED WITH EQUIPMENT CONTROL PANEL
FE	FLOW ELEMENT
FLT	FILTER
GDR	GRINDER
H	HOIST
HP	HEAT PUMP
HPU	HYDRAULIC POWER UNIT
HPR	HOPPER
HTT	HEAT TRACE TAPE
HV	HAND OPERATED VALVE (MANUAL)
INJ	INJECTOR (CHLORINE, STEAM, CHEMICAL, ETC.)
LCP	LOCAL CONTROL PANEL
LVR	LOUVER (ADJUSTABLE ONLY)
M	MOTOR
MCC	MOTOR CONTROL CENTER
MOP	MOTOR OPERATOR
MP	METERING PUMP
MX	MIXER (FLASH, EDUCTOR, ETC)
P	PUMP
PCV	PRESSURE CONTROL VALVE
PDC	POWER DISTRIBUTION CENTER
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
PRV	PRESSURE REDUCING VALVE
PSV	PRESSURE SAFETY VALVE
PV	PLUG VALVE
REC	RECEIVER
RG	ROLLER GATE
SCN	SCREEN
SCR	SCRUBBER
SEP	SEPARATOR
SF	SUPPLY FAN
SG	SLUICE GATE
SLG	SLIDE GATE
SMP	SAMPLER
SV	SOLENOID VALVE
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
T	TANK (NONPRESSURE TYPE: E.G. STORAGE, FUEL, ETC.)
TFR	TRANSFORMER
TM	TIMER
TS	TRANSFER SWITCH
UH	UNIT HEATER
VFD	VARIABLE FREQUENCY DRIVE
VP	VACUUM PUMP
WH	WATER HEATER
WHP	WASHER (GRIT, ETC.)

PIPING ABBREVIATIONS

CD	CHEMICAL DRAIN
CLS	CHLORINE SOLUTION
CP	COPPER PIPE
CPVC	CHLORINATED POLYVINYL CHLORIDE PIPE
CS	CAUSTIC SODA
CV	CHEMICAL VENT
CW	COLD WATER
D	DRAIN
DI	DUCTILE IRON PIPE
FEFF	FINAL EFFLUENT
GR	GRIT
HYD	HYDRAULIC FLUID
HW	HOT WATER
NBS	SODIUM BISULFITE OF OVERFLOW
OPA	ODOROUS PROCESS AIR
PCCP	PRECAST CONCRETE CYLINDER PIPE
PD	PUMPED DRAINAGE
PE	POLYETHYLENE PIPE
POL	POLYMER
PVC	POLYVINYL CHLORIDE PIPE
RFA	FLANGE ADAPTER
RCP	REINFORCED CONCRETE PIPE
RS	RAW SEWAGE
SAN	SANITARY SEWER
SFW	SOFTENED WATER
SH	SODIUM HYPOCHLORITE
SL	SLUDGE
SS	STAINLESS STEEL
STL	STEEL PIPE
SW	SEAL WATER
TPA	TREATED PROCESS AIR
VSO	VORTEX SEPARATOR OVERFLOW
W1	WATER (POTABLE)
W2	WATER (POTABLE-BACKFLOW PREVENTER)
W3	WATER (NON-POTABLE PLANT WATER)
VT	VENT

DRAWING AND PROCESS AREA DESIGNATION SYSTEMS

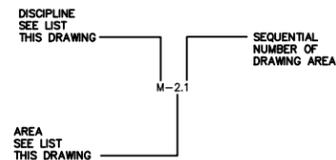
DRAWINGS ARE SUBDIVIDED BY DISCIPLINE AS FOLLOWS

G	GENERAL	MD	MECHANICAL DEMOLITION
C	CIVIL	H	HEATING, VENTILATION AND AIR CONDITIONING
S	STRUCTURAL	HD	HVAC DEMOLITION
A	ARCHITECTURAL	E	ELECTRICAL
M	MECHANICAL	I	INSTRUMENTATION

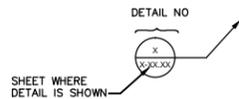
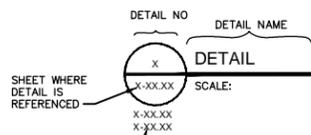
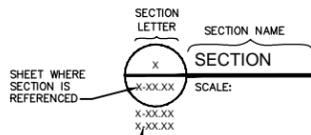
DRAWINGS NUMBERS ARE SUBDIVIDED AS FOLLOWS

AREA	DESCRIPTION
0	GENERAL
1	SULLIVAN PUMP STATION NO. 1
2	SULLIVAN PUMP STATION NO. 2
3	SULLIVAN PUMP STATION NO. 3
4	SULLIVAN PUMP STATION NO. 4
5	SULLIVAN PUMP STATIONS 1-4

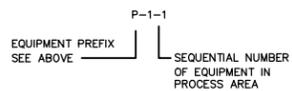
DRAWING NUMBERS



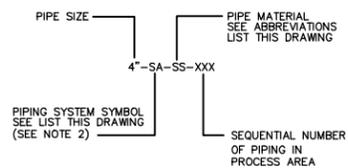
SECTION AND DETAIL DESIGNATIONS



NEW EQUIPMENT



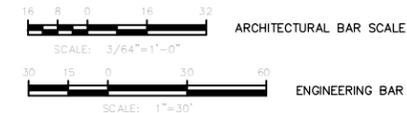
NEW PIPING



GENERAL LEGEND

	ROAD		WETLAND AREAS AS SHOWN ON NWI MAPS
	DIRT ROAD		100 YR FLOOD LINE
	BUILDING		FLOODWAY
	FREE-STANDG WALL		APPROX LAND LOT LINE
	RETAINING WALL		75' COUNTY STREAM BUFFER
	INDEX CONTOUR		25' STATE STREAM BUFFER
	INTER CONTOUR		APPROX PROPERTY LINE
	INDEX DEPRESSION		ELECTRIC
	INTER DEPRESSION		GUARD POST
	STORAGE TANK		TREE
	FENCE		SIGNPOST
	GUARD RAIL		DIGI SPOT ELEV
	LAKES, PONDS, CREEKS, & RIVERS		POWERPOLE
	TREE LINE		TRANSTOWER
	CULVERT		LIGHTPOLE
	EXIST ROAD & SIDEWALK		MANHOLE
	GEORGIA POWER EASEMENT		DROPINLET
	EDGE OF PAVEMENT		FIREHYDRANT
	AGGREGATE BASE		WATER VALVE
	GRAVEL		IRON PIN FOUND
	ASPHALT CONCRETE PAVING		GRASS
	PROPOSED CONCRETE		SILT FENCE
	MASONRY OR CONCRETE BLOCK		LIMITS OF CONSTRUCTION
	GRATING		CHECK DAM
	CHECKER PLATE		CONSTRUCTION ENTRANCE/EXIT
	STEEL		
	ALUMINUM		
	OPENING OR DEPRESSION IN SLAB OR WALL		
	GROUND LINE		
	TO BE DEMOLISHED		
	TO BE ABANDONED		
	TO BE MODIFIED		
	PROPOSED FLEXIBLE PAVEMENT		
	EXISTING		
	FUTURE		

NOTES:
1. THIS DRAWING IS GENERAL IN NATURE, SOME DESIGNATIONS SHOWN HEREON MAY NOT BE USED ON THE CONTRACT DRAWINGS.



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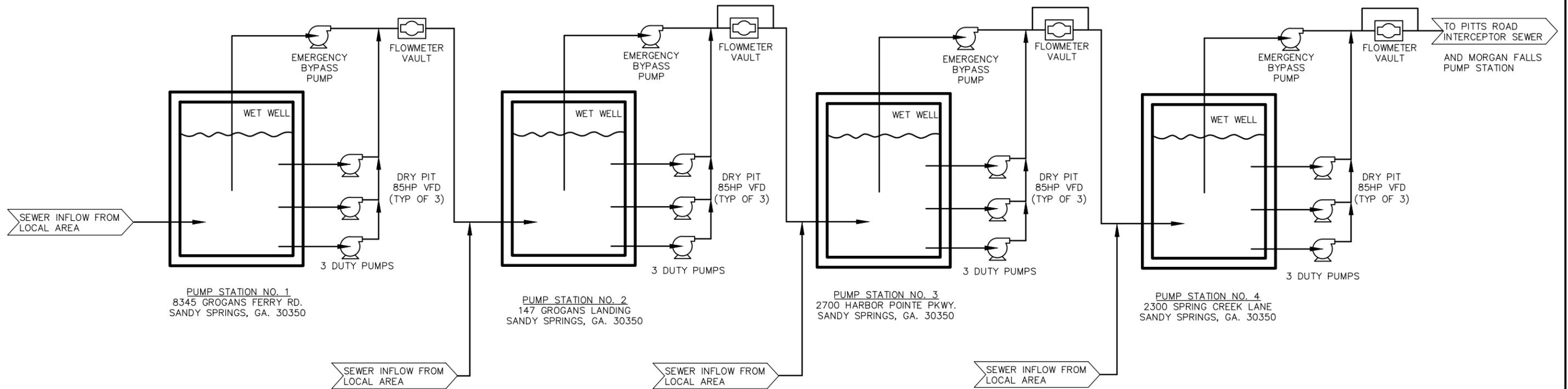
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SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
NOTES, ABBREVIATIONS & SYMBOLS

DRAWING NO.	G-0.3
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
PROCESS FLOW DIAGRAM

DRAWING NO.
G-0.5
REV. NO.
0
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PHASE I- INITIAL EROSION CONTROL NOTES:

- PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE FULTON COUNTY CONSTRUCTION INSPECTOR.
- THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.
- NO CONCRETE WASH OUT AREAS, OR DEBRIS BURN AND BURIAL HOLES SHALL BE LOCATED WITHIN 50 FEET OF DESIGNATED TREE PROTECTION AREAS.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.
- THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY:
 - THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM OF 6" THICK STONE. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAD ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION REQUIREMENTS.
 - IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED.
 - TYPE "C" SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA AS SHOWN ON THE PLAN. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA, TABLE 6-20.2. THE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
 - ROCK FILTER DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN.
- AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.
- NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.
- ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATIONS ARE CONSTRUCTED AS SHOWN ON THE DRAWING.
- ALL SILT FENCE MUST MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE FOR THE GEORGIA D.O.T., STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL ITEMS IN THIS SECTION OF THE SPECIFICATIONS SHALL MEET THE REQUIREMENTS AS SET FORTH IN SECTION 161, 162, 163, AND 164 OF THE GEORGIA D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
- MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.
- ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.
- SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
- THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
- CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS DIRECTED BY THE ON SITE INSPECTOR OR THE ENGINEER OF RECORD.
- FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

PHASE II- INTERMEDIATE EROSION CONTROL NOTES:

- DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED. NOTE SUB PHASES SHOWN ON PLANS.
- EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.
- THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE PRELIMINARY GRADING PHASE OF CONSTRUCTION:
 - EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING BARRIERS AT THE TOE OF SLOPES UNDER CONSTRUCTION. THESE BARRIERS SHALL BE AS SHOWN IN THE PLANS. THESE BARRIERS MAY BE RELOCATED AND REUSED AFTER PERMANENT SLOPE STABILIZATION BECOMES FULLY ESTABLISHED. AS THEY ARE RELOCATED, ANY DEFECTIVE MATERIALS IN THE BARRIER SHALL BE REPLACED. IN ADDITION, ALL DEBRIS AND SILT AT THE PREVIOUS LOCATION SHALL BE REMOVED.
 - CUT AND FILL SLOPES ARE NOT TO EXCEED "2H:1V"
 - ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKETS. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.
 - TYPE "C" SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS.
 - INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL STORM STRUCTURES AS THEY ARE CONSTRUCTED. SEE PLAN VIEW FOR SPECIFIC TYPE AND SEPARATE DETAILS FOR ADDITIONAL INFORMATION ON TYPE OF INLET PROTECTION SPECIFIED.
 - ROCK FILTER DAMS SHALL BE INSTALLED IN AREAS CONCENTRATED FLOWS AS SHOWN ON THE PLAN. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.
 - ALL DRAINAGE SWALES SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.
 - ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.
 - MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.
 - SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
 - THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE OR CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
 - CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
 - EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS DIRECTED BY THE ON SITE INSPECTOR OR THE ENGINEER OF RECORD.
 - FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

CRITICAL WORK ZONE:

AT THE END OF EACH WORK DAY ALL SLOPES 2:1 OR STEEPER AND HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, POLYMERS, AND EROSION CONTROL MATTING. ADDITIONALLY, ALL FILL SLOPES SHALL RECEIVE A DIVERSION DIKE (BERM) AND TEMPORARY DOWN DRAINS ALONG THE TOP OF THE SLOPE PREVENTING DRAINAGE SPILLING OVER THE EDGE AND DOWN THE FACE OF THE SLOPE. THE TEMPORARY DOWN DRAINS SHALL BE CONSTRUCTED WITH PERFORATED STAND PIPES AT THE TOP OF THE SLOPE AND RECONSTRUCTED EACH DAY AS THE SLOPE INCREASES IN HEIGHT. ALSO ALONG ANY STATE WATER BUFFERS OR OTHER DESIGNATED BUFFERS INSPECT TO ENSURE EROSION CONTROL MEASURES ARE IN PLACE AND FUNCTIONING PROPERLY.

NOTE TO CONTRACTOR:

- CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO AND MAINTAINING THE REQUIREMENTS OF THE EROSION, SEDIMENTATION POLLUTION CONTROL PLAN (ESPCP) AS SHOWN ON THE DRAWINGS AND INCLUDED IN THE GENERAL PERMIT DOCUMENT NO., THIS PROJECT FALLS UNDER NUMBER AS NOTED (): (PERMIT DOCUMENTS CAN BE OBTAINED FROM ABOVE ADDRESS)
- ** - GAR100001 - STAND ALONE CONSTRUCTION PROJECTS
- GAR100002 - INFRASTRUCTURE CONSTRUCTION PROJECTS
- GAR100003 - COMMON DEVELOPMENTS

OWNER/OPERATOR SHALL NOTIFY THE ENGINEER OF THE STARTING DATE OF CONSTRUCTION. THE ENGINEER IS REQUIRED TO INSPECT THE INSTALLATION OF THE EROSION CONTROL MEASURES (BMP'S) AS SHOWN ON THE DRAWINGS AND IN THE ESPCP WITHIN ONE WEEK AFTER INITIAL CONSTRUCTION ACTIVITIES COMMENCE.

PERMIT COVERAGE:

THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION AGENCY (EPA), GENERAL PERMIT NO. GAR 100003, 100002, 100001, FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR INFRASTRUCTURE.

AUTHORIZED DISCHARGES:

- ALL DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART I.C.1.4.c
- ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER EXCEPT AS PROVIDED IN PART I.C.2 AND PART III.A.2 OF THE PERMIT. PART III.A.1
- AUTHORIZED MIXED STORMWATER DISCHARGES: PART I.C.2
 - THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY.
 - THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THIS PERMIT.
 - STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ARE OCCURRING ARE COVERED BY A DIFFERENT NPDES GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.
- AUTHORIZING NON-STORMWATER DISCHARGES: PART III.A.2
 - FIRE FIGHTING ACTIVITIES
 - FIRE HYDRANT FLUSHING
 - POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING
 - IRRIGATION DRAINAGE
 - AIR CONDITIONING CONDENSATE
 - SPRINGS
 - UNCONTAMINATED GROUND WATER
 - FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS

LIMITATIONS ON COVERAGE: PART I.C.3

- THE FOLLOWING STORMWATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:
 - STORMWATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATES FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION.
 - DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORMWATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART III.A.2 OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.5 (NON-STORMWATER DISCHARGES) OF THIS PERMIT.
 - STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT ESTABLISH NUMERIC LIMITATION FOR SUCH DISCHARGES.
 - STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE OR MAY REASONABLY BE EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.
- THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL IN THE STORM WATER DISCHARGE(S) FROM A SITE SHALL BE PREVENTED. THIS PERMIT DOES NOT RELIEVE THE PERMITTEE OF THE REPORTING REQUIREMENTS OF GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A. §§12-14-2, ET SEQ.), 40 CFR PART 117 AND 40 CFR PART 302, WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTING QUANTITY ESTABLISHED UNDER EITHER GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A. §§12-14-2, ET SEQ.), 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD, THE PERMITTEE IS REQUIRED TO NOTIFY EPD AT (404) 856-4863 OR (800) 241-4113 AND THE NATIONAL RESPONSE CENTER (NRC) AT (800) 424-8802 IN ACCORDANCE WITH THE REQUIREMENTS OF GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A. §§12-14-2, ET SEQ.), 40 CFR 117 AND 40 CFR 302 AS SOON AS HE/SHE HAS KNOWLEDGE OF THE DISCHARGE.
- THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL RESULTING FROM AN ONSITE SPILL.

WATER COMPLIANCE: PART I.C.4

NO DISCHARGES AUTHORIZED BY THIS PERMIT SHALL CAUSE VIOLATIONS OF GEORGIA'S IN-STREAM WATER QUALITY STANDARDS AS PROVIDED BY THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6-.03.

THE INSTALLATION OF EROSION CONTROL MEASURES AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN 25 FOOT BUFFER OR 50 FOOT BUFFER FOR TROUT STREAMS ALONG THE BANKS OF ALL STATE WATERS, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, EXCEPT WHERE THE DIRECTOR HAS APPROVED A VARIANCE.

PORTIONS OF THESE FACILITIES OR PROPERTIES ARE IN THE 100 YR. FLOOD PLAIN.

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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

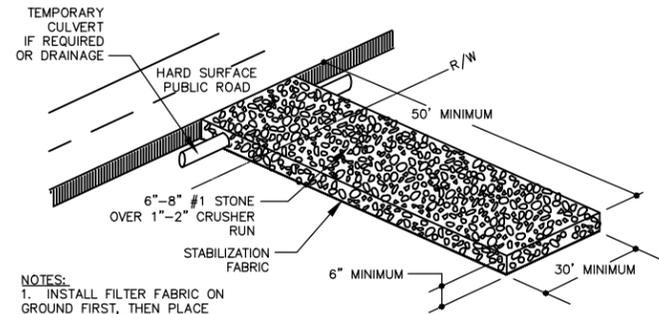


Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: KT
DRAWN BY: DKS
CHECKED BY: SH
JOB NO. 147024

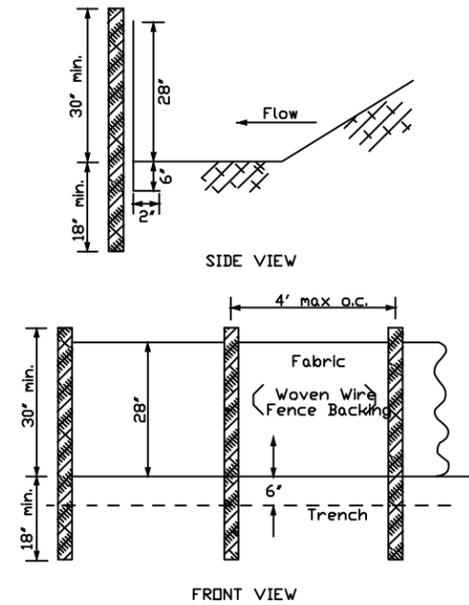
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
ES&C AND NPDES NOTES 1

DRAWING NO. C-0.1
REV. NO. 0
DATE: 06/14/13



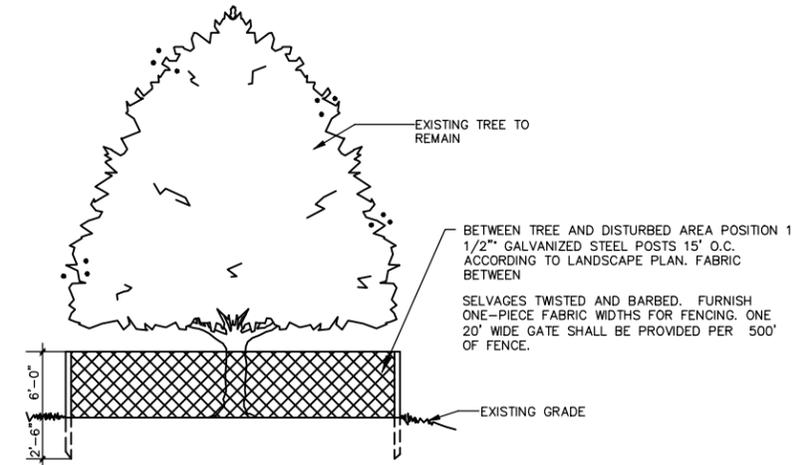
- NOTES:**
1. INSTALL FILTER FABRIC ON GROUND FIRST, THEN PLACE CRUSHER RUN.
 2. THEN PLACE #1 STONE, SIZE (ASTM D448) 1.5"-3.5" DIAMETER.
 3. PAD THICKNESS TO BE 6" MINIMUM.
 4. PAD SIZE 30'X50' MINIMUM.
 5. IF NECESSARY, INCLUDE WASHING FACILITY.
 6. MAINTAIN IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH #2 STONE.
 7. DO NOT PLACE PAD ON TOP OF WATER METERS, CATCH BASINS, ETC.

Co CONSTRUCTION EXIT
SCALE: NONE



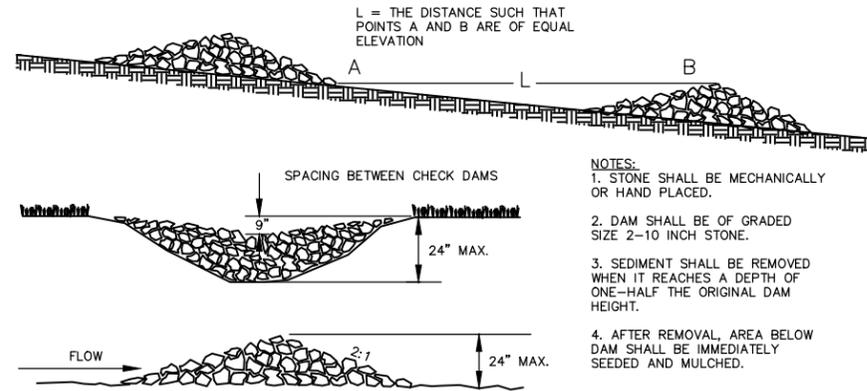
NOTE:
Use 36" D.D.T. approved fabric.
Use steel posts- only

Sd1-C SEDIMENT BARRIER SILT FENCE DETAIL - TYPE 'C'
SCALE: NONE



NOTE:
ALL TREE PROTECTION DEVICES ARE TO BE INSTALLED PRIOR TO START OF LAND DISTURBANCE AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. NO PARKING, STORAGE OR OTHER CONSTRUCTION SITE ACTIVITIES ARE TO OCCUR WITHIN THE TREE PROTECTION AREA. ALL TREE PROTECTION FENCING TO BE INSPECTED DAILY AND REPLACED OR REPAIRED AS NEEDED.

Tf TREE FENCE PROTECTION
SCALE: NONE



- NOTES:**
1. STONE SHALL BE MECHANICALLY OR HAND PLACED.
 2. DAM SHALL BE OF GRADED SIZE 2-10 INCH STONE.
 3. SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE ORIGINAL DAM HEIGHT.
 4. AFTER REMOVAL, AREA BELOW DAM SHALL BE IMMEDIATELY SEEDED AND MULCHED.

Cd CHECKDAM-STONE
SCALE: NONE

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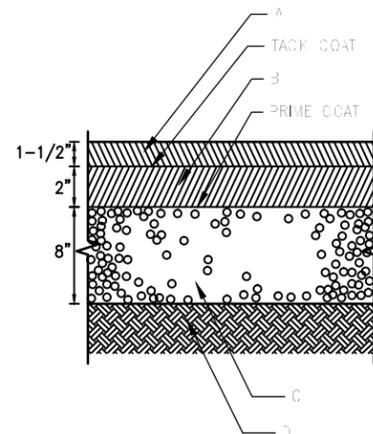


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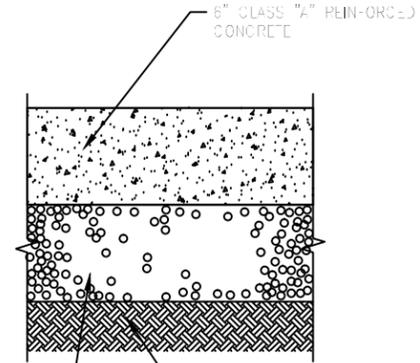
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
ES&C DETAILS 2

DRAWING NO. C-0.3
REV. NO. 0
DATE: 06/14/13



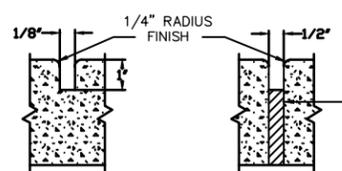
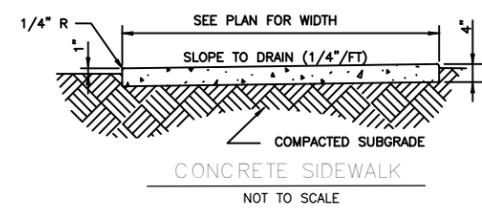
- PAVEMENT REQUIREMENTS
- A - 1.5" ASPHALTIC CONCRETE "F" TOPPING
 - B - 2" ASPHALTIC CONCRETE "B" MODIFIED
 - C - 8" GRADED AGGREGATE BASE COMPACTED TO A MINIMUM 100% STANDARD PROCTOR
 - D - 6" SUBGRADE STABILIZED WITH STONE (UNLESS WEIGHS 95 LBS. PER CU. FT.)

HEAVY DUTY ASPHALT PAVEMENT SECTION
SCALE: NONE



- 6" CLASS "A" PLAIN-ORCED CONCRETE
- 6" GRADED AGGREGATE BASE COMPACTED TO A MINIMUM 100% STANDARD PROCTOR
- 6" SUBGRADE STABILIZED WITH STONE (UNLESS WEIGHS 95 LBS. PER CU. FT. COMPACTED SUBGRADE)

CONCRETE PAVEMENT
SCALE: NONE



- NOTE: CONTRACTION JOINT SHALL DIVIDE SIDEWALK INTO SQUARE PANELS. SPACING OF CONTRACTION JOINTS SHALL EQUAL THE WIDTH OF THE SIDEWALK.
- NOTE: EXPANSION JOINTS @ 25' MAX. SPACING AND AT JUNCTIONS WITH OTHER STRUCTURES AND RIGID PAVING.

CONTRACTION JOINT **EXPANSION JOINT**

SIDEWALK JOINT DETAILS
SCALE: NONE

4" CONCRETE SIDEWALK
SCALE: NONE

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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303



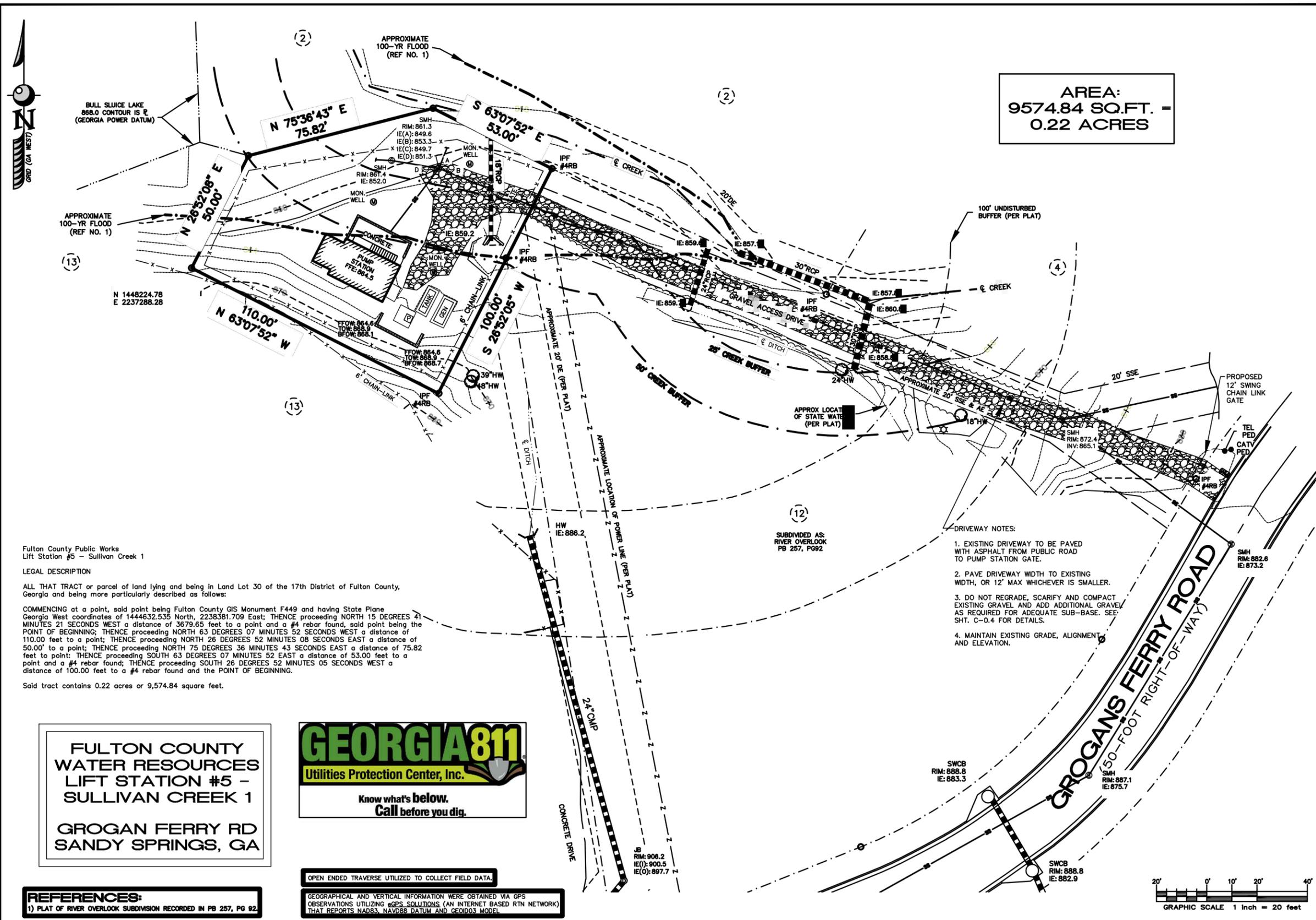
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

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JOB NO.	147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
CONSTRUCTION DETAILS

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AREA:
9574.84 SQ.FT. =
0.22 ACRES

LEGEND:			
IPF	IRON PIN FOUND	DE	DRAINAGE EASEMENT
OTF	OPEN TOP PIPE	JTB	JUNCTION BOX
CTP	CRIMP TOP PIPE	DI	DROP INLET
RB	REINFORCING BAR	HW	HEAD WALL
CL	CENTERLINE	FLS	FLARED END SECTION (FES)
R/W	RIGHT-OF-WAY	TMH	TELEPHONE MAN HOLE
LL	LAND LOT	TP	TELEPHONE PEDESTAL
LLL	LAND LOT LINE	TB	TELEPHONE BOX
L	LINE	SMH	SEWER MAN HOLE
A	ARC	SSE	SANITARY SEWER EASEMENT
R	RADIUS	SC	SEWER CLEANOUT
CH	CHORD	FR	FIRE HYDRANT
C	CURVE	WV	WATER VALVE
CONC	CONCRETE	WM	WATER METER
GP	GLY POLE	WS	WATER SEEP
GV	GAS VALVE	WSP	WATER SPIGOT
GM	GAS METER	TR	TRAFFIC SIGN
GMK	GAS MARKER	TS	TRAFFIC SIGNAL
LP	LAMP POLE	B	BOLLARD (ROUND)
PP	POWER POLE	BQ	BOLLARD (SQUARE)
FOM	FIBER OPTIC MARKER	CL	CENTERLINE
ICV	IRRIGATION CONTROL VALVE	BH	BORE HOLE
MW	MONITORING WELL	FRV	FENCE POST
PRV	PRESSURE RELEASE VALVE	EM	ELECTRIC METER
PVC	PVC STUB	POB	POINT OF BEGINNING
PS	POWER STUB	POC	POINT OF COMMENCEMENT
EM	ELECTRIC METER	PI	POINT OF INTERSECTION
WFL	WETLAND FLAG		
CMP	CORRUGATED METAL PIPE		
RCP	REINFORCED CONCRETE PIPE		
CD	CROSS DRAIN		
SS	SANITARY SEWER		
F	FENCE		
CMF	CONCRETE MONUMENT FOUND		
Z	OVERHEAD UTILITY LINE(S)		

GENERAL NOTES:

- PURSUANT TO RULE 180-6.09 OF THE GEORGIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, THE TERM "CERTIFY" OR "CERTIFICATION" RELATING TO LAND SURVEYING SERVICES SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE LAND SURVEYOR AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.
- INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER, AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE RELYING ON THIS PLAT. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, ITS EMPLOYEES, ITS CONSULTANTS, ITS CONTRACTORS, AND/OR ITS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON AS TO SUCH UNDERGROUND INFORMATION.
- UNLESS OTHERWISE STATED HEREON, ONLY EVIDENCE OF EASEMENTS OR STRUCTURES THERETO WHICH ARE READILY APPARENT FROM A CASUAL ABOVE GROUND VIEW OF PREMISES ARE SHOWN. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO THE EXISTENCE OF ANY EASEMENT NOT DISCOVERED FROM MY CASUAL ABOVE GROUND VIEW OF THE PREMISES.
- UNLESS STATED OTHERWISE, GOVERNMENTAL JURISDICTIONAL AREAS OR NEGATIVE EASEMENTS, IF ANY, WHICH MIGHT IMPACT ON THE USE OF THE PREMISES WERE NOT LOCATED. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR ANY LOSS RESULTING FROM THE EXERCISE OF ANY GOVERNMENTAL JURISDICTION AFFECTING THE USE OF THE PREMISES.
- ACCEPTANCE OF THIS SURVEY PLAT OR USE OF THE CORNER MONUMENTS FOUND OR SET DURING THE PERFORMANCE OF THE FIELD SURVEY HEREBY LIMIT THE UNDERSIGNED LIABILITY RELATED TO PROFESSIONAL NEGLIGENCE ACTS, ERRORS, OMISSIONS OR BREACH OF CONTRACT TO AN AMOUNT NOT TO EXCEED THE FEE CHARGED. FOR ADDITIONAL LIABILITY COVERAGE FROM THE UNDERSIGNED, A FEE OF 2% OF THE LIABILITY AMOUNT REQUESTED MUST BE PAID TO THE UNDERSIGNED PRIOR TO COMMENCEMENT OF THIS PROJECT.
- REPRODUCTIONS OF THIS PLAT ARE NOT VALID UNLESS THE SEAL IS SIGNED WITH A "LIVE" SIGNATURE.
- UNLESS OTHERWISE STATED HEREON, THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF AN ABSTRACT OF TITLE. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO ANY MATTER THAT MIGHT BE DISCOVERED BY AN ABSTRACT OR TITLE SEARCH OF THE PROPERTY.

Fulton County Public Works
Lift Station #5 - Sullivan Creek 1

LEGAL DESCRIPTION

ALL THAT TRACT or parcel of land lying and being in Land Lot 30 of the 17th District of Fulton County, Georgia and being more particularly described as follows:

COMMENCING at a point, said point being Fulton County GIS Monument F449 and having State Plane Georgia West coordinates of 1444632.535 North, 2238361.709 East; THENCE proceeding NORTH 15 DEGREES 41 MINUTES 21 SECONDS WEST a distance of 3679.65 feet to a point and a #4 rebar found, said point being the POINT OF BEGINNING; THENCE proceeding NORTH 63 DEGREES 07 MINUTES 52 SECONDS WEST a distance of 110.00 feet to a point; THENCE proceeding NORTH 26 DEGREES 52 MINUTES 08 SECONDS EAST a distance of 50.00' to a point; THENCE proceeding NORTH 75 DEGREES 36 MINUTES 43 SECONDS EAST a distance of 75.82 feet to a point; THENCE proceeding SOUTH 63 DEGREES 07 MINUTES 52 EAST a distance of 53.00 feet to a point and a #4 rebar found; THENCE proceeding SOUTH 26 DEGREES 52 MINUTES 05 SECONDS WEST a distance of 100.00 feet to a #4 rebar found and the POINT OF BEGINNING.

Said tract contains 0.22 acres or 9,574.84 square feet.

**FULTON COUNTY
WATER RESOURCES
LIFT STATION #5 -
SULLIVAN CREEK 1**

**GROGAN FERRY RD
SANDY SPRINGS, GA**

GEORGIA811
Utilities Protection Center, Inc.

Know what's below.
Call before you dig.

OPEN ENDED TRAVERSE UTILIZED TO COLLECT FIELD DATA.

GEOGRAPHICAL AND VERTICAL INFORMATION WERE OBTAINED VIA GPS OBSERVATIONS UTILIZING GPS SOLUTIONS (AN INTERNET BASED RTN NETWORK) THAT REPORTS NAD83, NAVD88 DATUM AND GEOID03 MODEL.

REFERENCES:
1) PLAT OF RIVER OVERLOOK SUBDIVISION RECORDED IN PG 257, PG 92.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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SEI
SOUTHEASTERN ENGINEERING

Civil & Environmental Engineering, Land Surveying and Planning
2470 Sandy Plains Rd. • Suite A
Marietta, Georgia 30066
tel: 770-321-3936 fax: 770-321-3935

DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

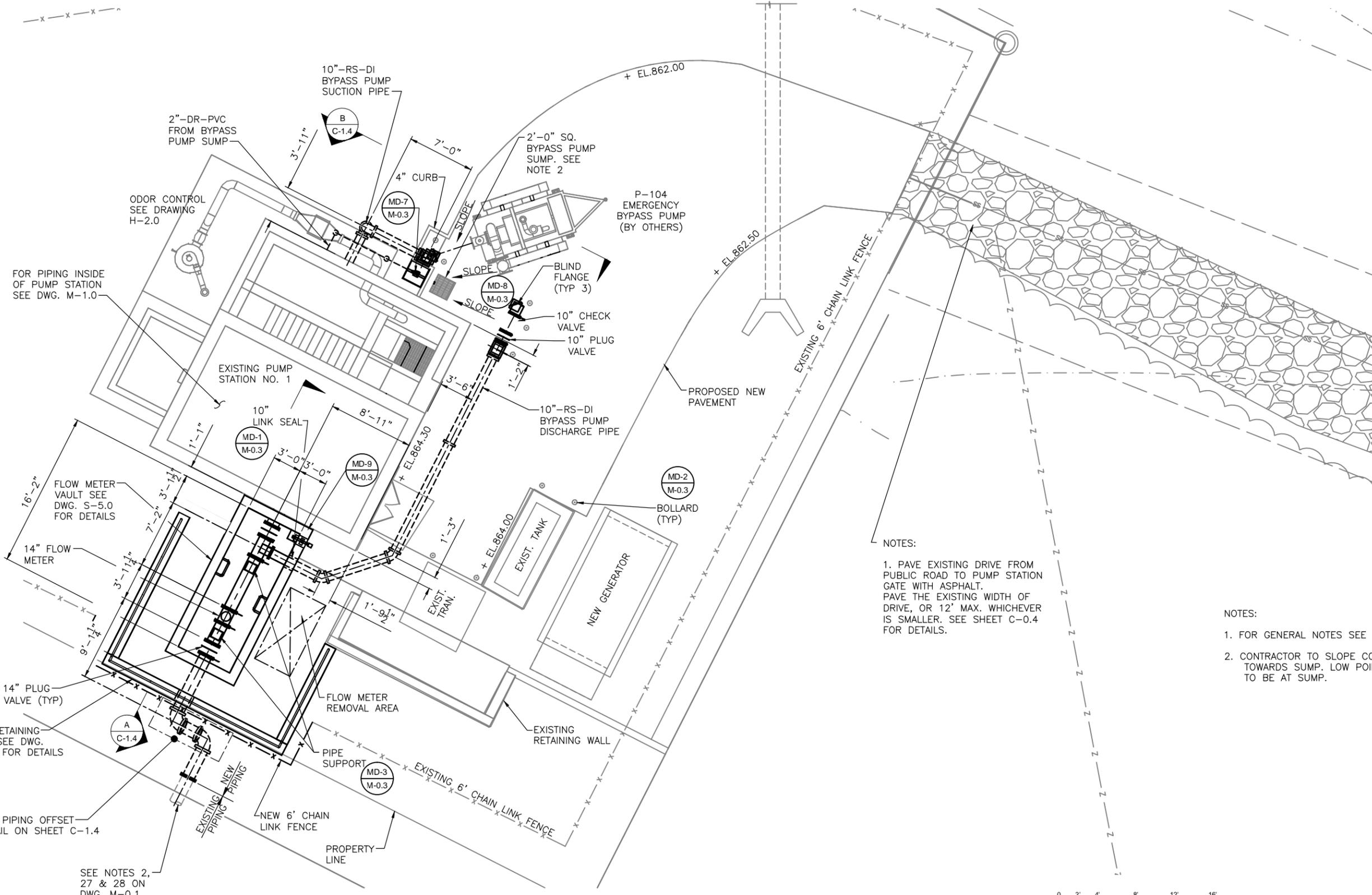


Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
SITE PLAN

DRAWING NO.
C-1.1
REV. NO.
0
DATE:
06/14/13



NOTES:
 1. PAVE EXISTING DRIVE FROM PUBLIC ROAD TO PUMP STATION GATE WITH ASPHALT. PAVE THE EXISTING WIDTH OF DRIVE, OR 12' MAX. WHICHEVER IS SMALLER. SEE SHEET C-0.4 FOR DETAILS.

NOTES:
 1. FOR GENERAL NOTES SEE DRAWING M-0.1
 2. CONTRACTOR TO SLOPE CONCRETE PAD TOWARDS SUMP. LOW POINT OF CONCRETE TO BE AT SUMP.



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DEPARTMENT OF
 WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA
 30303



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FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 PUMP STATION NO. 1
 SITE LAYOUT PLAN

DRAWING NO.
C-1.2
 REV. NO.
 0
 DATE:
 06/14/13



BULL SLUCE LAKE
868.0 CONTOUR IS 2
(GEORGIA POWER DATUM)

APPROXIMATE
100-YR FLOOD
(REF NO. 1)

N 1448224.78
E 2237288.28

STAGING AND STORAGE AREA
(STAGING AREA IS LOCATED
WITHIN 100-YR FLOOD PLAIN.
CONTRACTOR SHALL BE RESPONSIBLE
FOR DAMAGE TO EQUIPMENT AND
GOODS STORED IN AREA.)

AREA:
9574.84 SQ.FT. =
0.22 ACRES

EROSION CONTROL LEGEND

- Sd1 SILT FENCE — C — C —
- Rd ROCK FILTER DAM
- Co CONSTRUCTION EXIT
- Ds1 DISTURBED AREA — MULCH
- Ds2 DISTURBED AREA — TEMP SEEDING
- Ds3 DISTURBED AREA — PERMANENT SEEDING

NOTES:

1. FOR GENERAL NOTES SEE DRAWING M-0.1
2. FOR EROSION CONTROL CODES SEE SHEET C-0.2.
3. PROVIDE TEMPORARY AND PERMANENT SEEDING (DS1, DS2, DS3) AS NECESSARY TO MAINTAIN GROUND COVER.
4. DO NOT REGRADE ROAD. SCARIFY AND COMPACT EXISTING GRAVEL AND ADD ADDITIONAL GRAVEL AS REQUIRED FOR ADEQUATE SUBBASE. SEE SHT. C-0.4 FOR DETAILS.

FULTON COUNTY
WATER RESOURCES
LIFT STATION #5 -
SULLIVAN CREEK 1

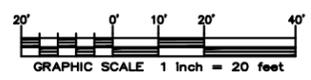
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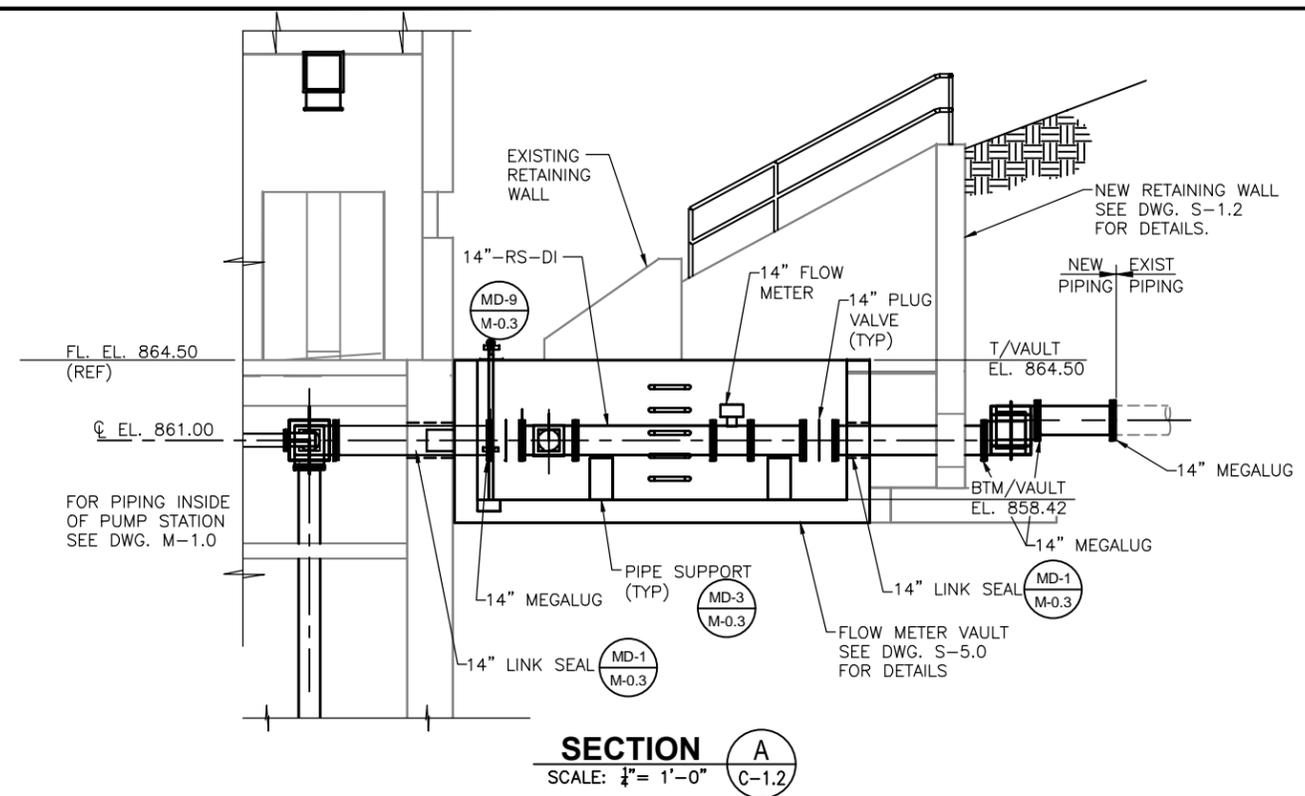
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JOB NO.
147024

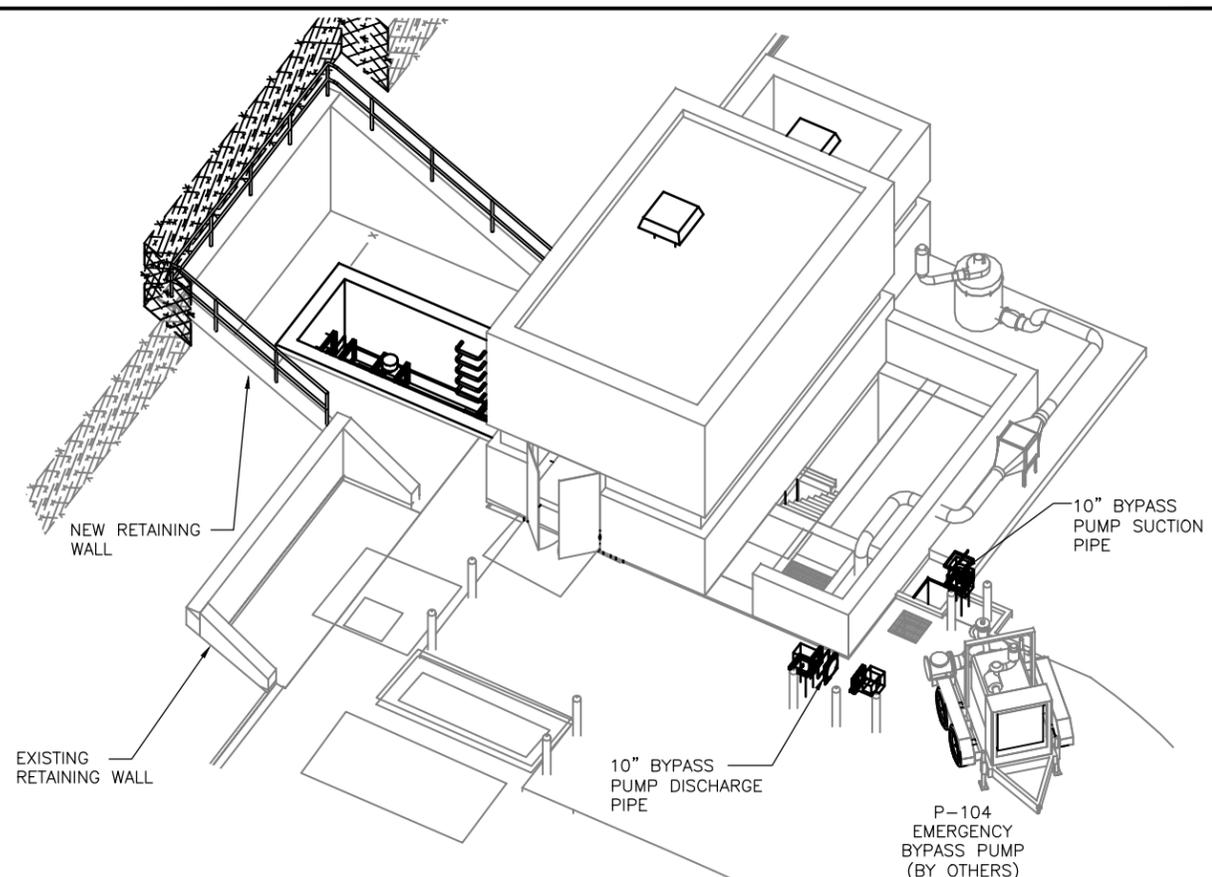
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
EROSION CONTROL & ROAD PAVING PLN.

DRAWING NO.
C-1.3
REV. NO.
0
DATE:
06/14/13

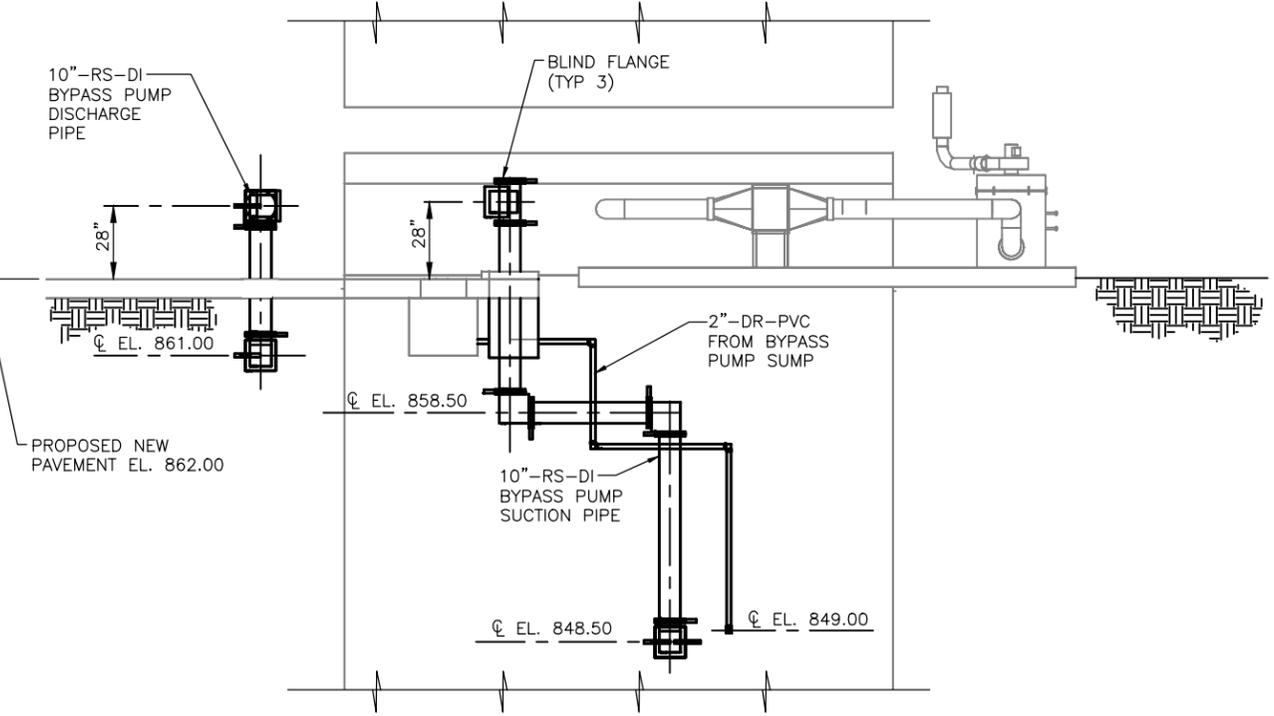
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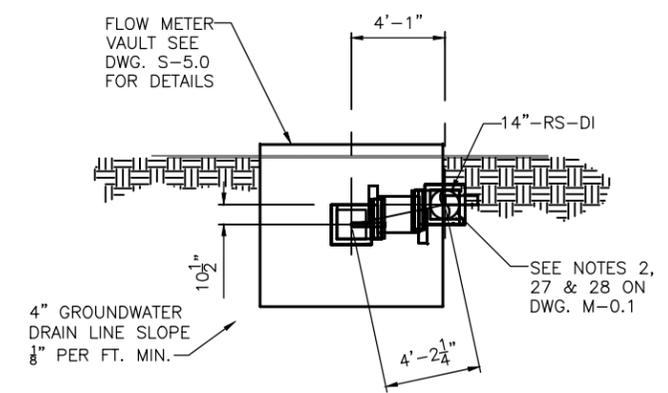
SECTION A
SCALE: 1/4" = 1'-0"
C-1.2



ISOMETRIC VIEW
SCALE: NONE

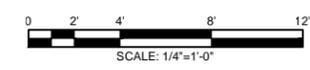


SECTION B
SCALE: 1/4" = 1'-0"
C-1.2



PIPING OFFSET DETAIL LOOKING NORTH

NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DKS	KT	SH	SH



DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

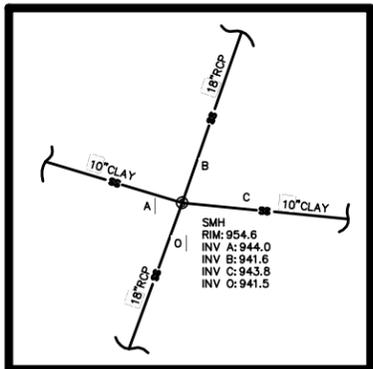
DESIGN BY:
KT
DRAWN BY:
DKS
CHECKED BY:
SH
JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
SITE LAYOUT SECTIONS

DRAWING NO.
C-1.4
REV. NO.
0
DATE:
06/14/13



SANITARY SEWER MANHOLE GROGANS LANDING



AREA:
9345.00 SQ.FT. =
0.21 ACRES

- DRIVEWAY NOTES:
- EXISTING DRIVEWAY TO BE PAVED WITH ASPHALT FROM PUBLIC ROAD TO PUMP STATION GATE.
 - PAVE DRIVEWAY WIDTH TO 12' MAX.
 - REPLACE ANY PLANTS OR TREES DAMAGED BY THE CONTRACTOR AT NO COST TO THE OWNER.
 - REPAVE EXISTING DRIVEWAY WITH ASPHALT, SEE SHEET C-0.4 FOR DETAILS.

Fulton County Public Works
Lift Station #6 - Sullivan Creek 2

LEGAL DESCRIPTION

ALL THAT TRACT or parcel of land lying and being in Land Lot 30 of the 17th District of Fulton County, Georgia and being more particularly described as follows:

COMMENCING at a point, said point being Fulton County GIS Monument F449 and having State Plane Georgia West coordinates of 1444632.535 North, 2238381.709 East; THENCE proceeding NORTH 26 DEGREES 49 MINUTES 05 SECONDS WEST a distance of 2,842.01 feet to a point and a #4 rebar found, said point being the POINT OF BEGINNING; THENCE proceeding NORTH 15 DEGREES 33 MINUTES 29 SECONDS EAST a distance of 95.64 feet to point; THENCE proceeding SOUTH 71 DEGREES 53 MINUTES 17 SECONDS EAST a distance of 100.50 feet to a point; THENCE proceeding SOUTH 18 DEGREES 06 MINUTES 43 SECONDS WEST a distance of 75.00 feet to a point; THENCE proceeding SOUTH 71 DEGREES 04 MINUTES 53 SECONDS WEST a distance of 45.00 feet to a point; THENCE proceeding NORTH 65 DEGREES 40 MINUTES 49 SECONDS WEST a distance of 60.67 feet to a point and a #4 rebar found, said point being the POINT OF BEGINNING.

Said tract contains 0.21 acres or 9,345.00 square feet.

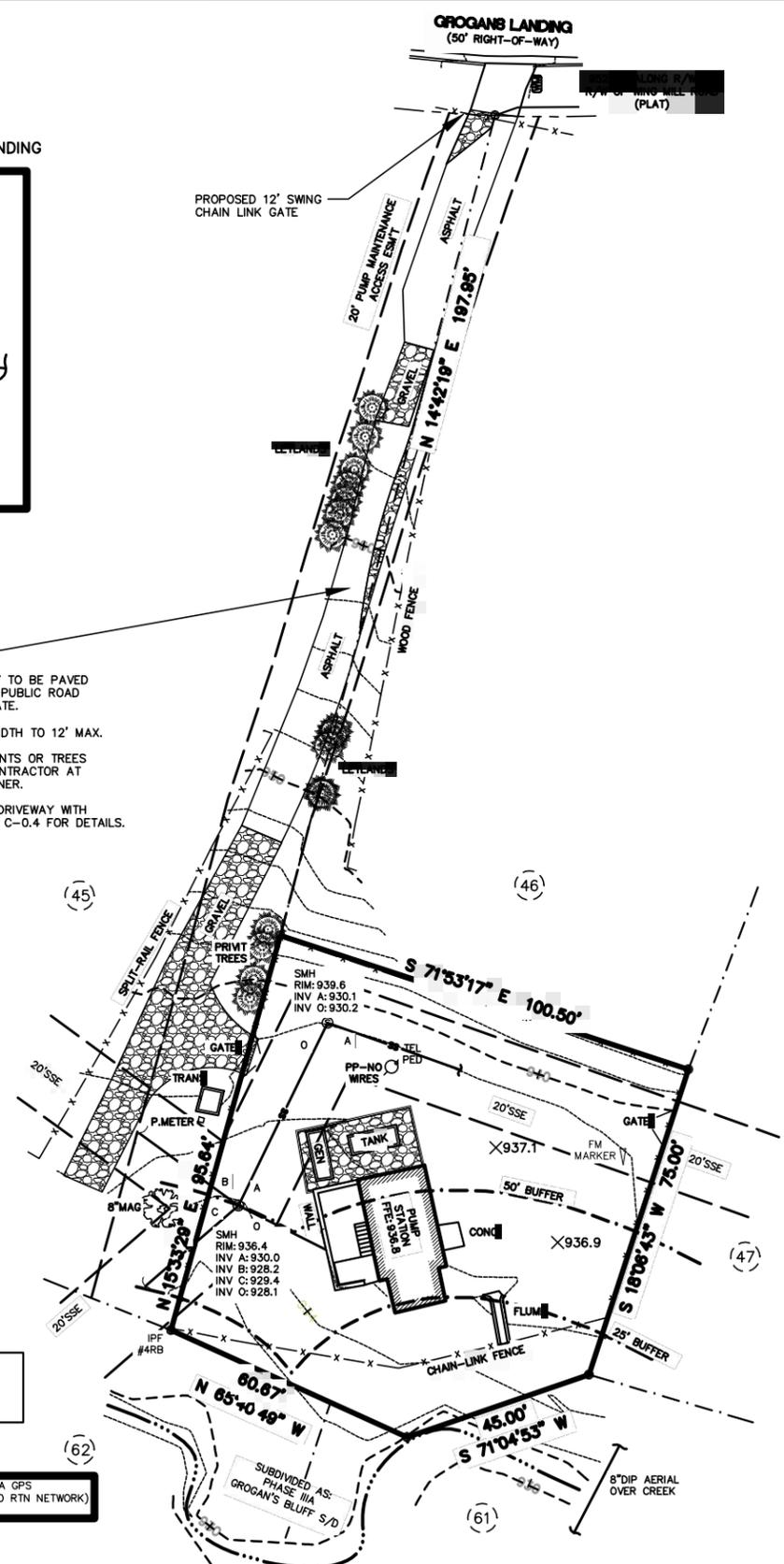
**FULTON COUNTY
WATER RESOURCES
LIFT STATION #6 -
SULLIVAN 2**

**147 GROGAN'S LANDING
SANDY SPRINGS, GA**

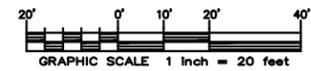
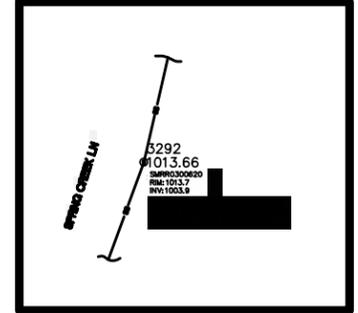
C:\Sullivan pump station\Pictures\GEORGIA811.JPG

- REFERENCES:**
- PLAT OF BLOCK C, PHASE 1-A, GROGAN'S BLUFF IN PB 136, PG 42 & PB 136, PG 105
 - PLAT OF BLOCK C, PHASE 1-B, GROGAN'S BLUFF IN PB 145, PG 4

OPEN ENDED TRAVERSE UTILIZED TO COLLECT FIELD DATA.
GEOGRAPHICAL AND VERTICAL INFORMATION WERE OBTAINED VIA GPS OBSERVATIONS UTILIZING eGPS SOLUTIONS (AN INTERNET BASED RTN NETWORK) THAT REPORTS NAD83, NAVD88 DATUM AND GEOID03 MODEL



SANITARY SEWER MANHOLE SMRRO300620



LEGEND:

IPS	IRON PIN SET	DE	DRAINAGE EASEMENT
IPF	IRON PIN FOUND	CB	CATCH BASIN
OTP	OPEN TOP PIPE	JCB	JUNCTION BOX
CTP	CRIMP TOP PIPE	DI	DROP INLET
RB	REINFORCING BAR	HW	HEAD WALL
CL	CENTERLINE	FE	FLARED END SECTION (FES)
R/W	RIGHT-OF-WAY	TMH	TELEPHONE MAN HOLE
LL	LAND LOT	TP	TELEPHONE PEDESTAL
LLL	LAND LOT LINE	TL	TELEPHONE LOT
L	LINE	TMH	TELEPHONE BOX
A	ARC	SMH	SEWER MAN HOLE
R	RADIUS	SSE	SANITARY SEWER EASEMENT
CH	CHORD	SC	SEWER CLEANOUT
C	CURVE	FX	FIRE HYDRANT
CONC	CONCRETE	WV	WATER VALVE
GUY	GUY POLE	WM	WATER METER
GV	GAS VALVE	WS	WATER SEEP
GM	GAS METER	WSP	WATER SPIGOT
GM	GAS MARKER	SI	SIGN
LP	LAMP POLE	TB	TRAFFIC BOX
CP	CROSS POLE	PS	PEDESTRIAN SIGNAL
FOM	FIBER OPTIC MARKER	BR	BOLLARD (ROUND)
ICV	IRRIGATION CONTROL VALVE	BS	BOLLARD (SQUARE)
MW	MONITORING WELL	CL	CENTERLINE
PRV	PRESSURE RELEASE VALVE	BH	BORE HOLE
PVC	PVC STUB	FP	FENCE POST
PS	POWER STUB	POB	POINT OF BEGINNING
EM	ELECTRIC METER	POC	POINT OF COMMENCEMENT
WLF	WETLAND FLAG	PI	POINT OF INTERSECTION
CMP	CORRUGATED METAL PIPE		
RCP	REINFORCED CONCRETE PIPE		
CD	CROSS DRAIN		
SS	SANITARY SEWER		
X-X	FENCE		
CMF	CONCRETE MONUMENT FOUND		
Z-Z	OVERHEAD UTILITY LINE(S)		

- GENERAL NOTES:**
- PURSUANT TO RULE 180-6.09 OF THE GEORGIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, THE TERM "CERTIFY" OR "CERTIFICATION" RELATING TO LAND SURVEYING SERVICES SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE LAND SURVEYOR AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.
 - INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER, AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE RELYING ON THIS PLAT. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, ITS EMPLOYEES, ITS CONSULTANTS, ITS CONTRACTORS, AND/OR ITS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON AS TO SUCH UNDERGROUND INFORMATION.
 - UNLESS OTHERWISE STATED HEREON, ONLY EVIDENCE OF EASEMENTS OR STRUCTURES THERETO WHICH ARE READILY APPARENT FROM A CASUAL ABOVE GROUND VIEW OF PREMISES ARE SHOWN. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO THE EXISTENCE OF ANY EASEMENT NOT DISCOVERED FROM MY CASUAL ABOVE GROUND VIEW OF THE PREMISES.
 - UNLESS STATED OTHERWISE, GOVERNMENTAL JURISDICTIONAL AREAS OR NEGATIVE EASEMENTS, IF ANY, WHICH MIGHT IMPACT ON THE USE OF THE PREMISES WERE NOT LOCATED. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR ANY LOSS RESULTING FROM THE EXERCISE OF ANY GOVERNMENTAL JURISDICTION AFFECTING THE USE OF THE PREMISES.
 - ACCEPTANCE OF THIS SURVEY PLAT OR USE OF THE CORNER MONUMENTS FOUND OR SET DURING THE PERFORMANCE OF THE FIELD SURVEY HEREBY LIMIT THE UNDERSIGNED LIABILITY RELATED TO PROFESSIONAL NEGLIGENCE, ACTS, ERRORS, OMISSIONS OR BREACH OF CONTRACT TO AN AMOUNT NOT TO EXCEED THE FEE CHARGED. FOR ADDITIONAL LIABILITY COVERAGE FROM THE UNDERSIGNED, A FEE OF 2% OF THE LIABILITY AMOUNT REQUESTED MUST BE PAID TO THE UNDERSIGNED PRIOR TO COMMENCEMENT OF THIS PROJECT.
 - REPRODUCTIONS OF THIS PLAT ARE NOT VALID UNLESS THE SEAL IS SIGNED WITH A "LIVE" SIGNATURE.
 - UNLESS OTHERWISE STATED HEREON, THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF AN ABSTRACT OF TITLE. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO ANY MATTER THAT MIGHT BE DISCOVERED BY AN ABSTRACT OR TITLE SEARCH OF THE PROPERTY.

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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

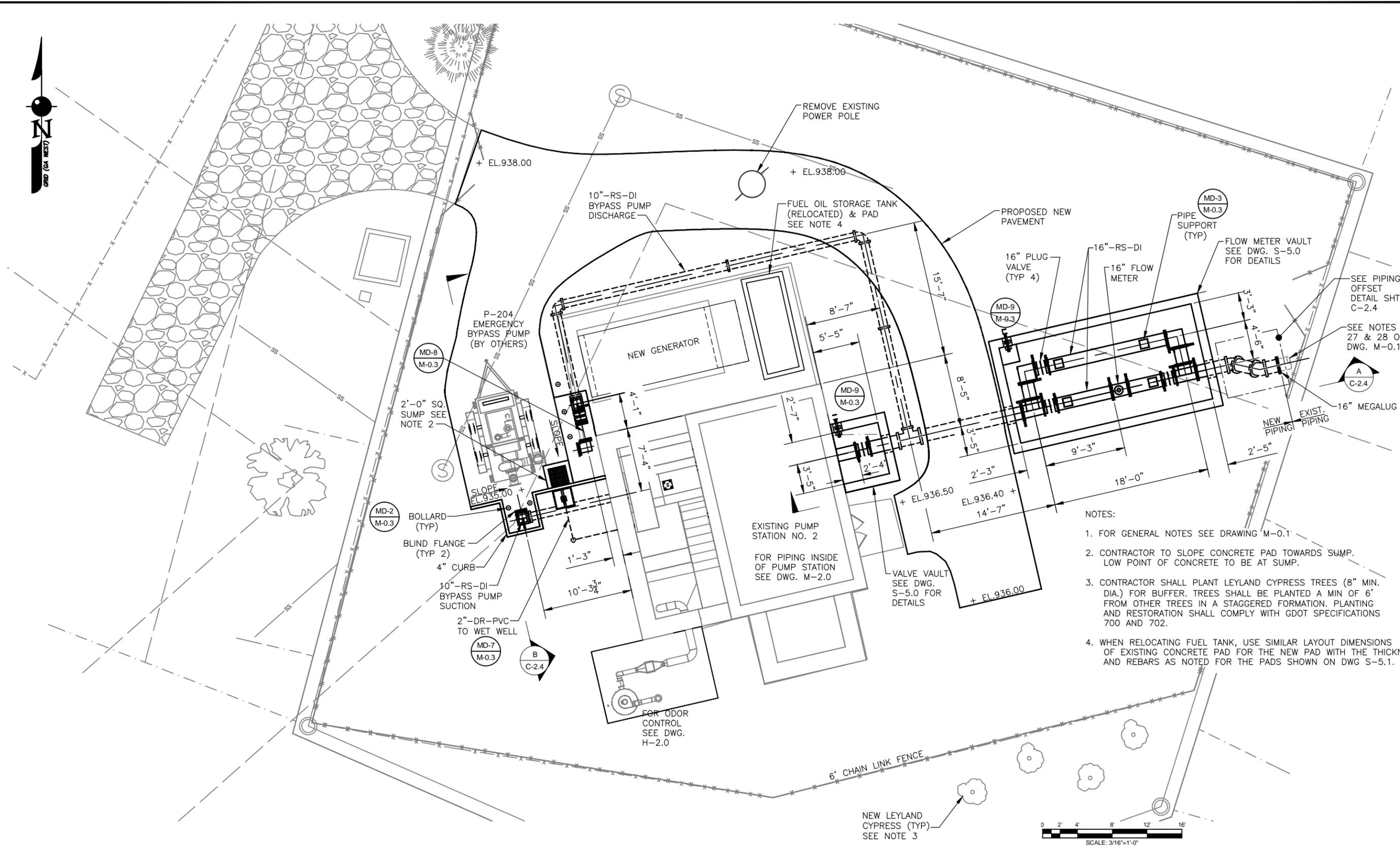


Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

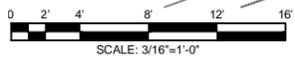
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DRAWN BY:
CHECKED BY:
JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
SITE PLAN

DRAWING NO.
C-2.1
REV. NO.
0
DATE:
06/14/13



- NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1
 2. CONTRACTOR TO SLOPE CONCRETE PAD TOWARDS SUMP. LOW POINT OF CONCRETE TO BE AT SUMP.
 3. CONTRACTOR SHALL PLANT LEYLAND CYPRESS TREES (8" MIN. DIA.) FOR BUFFER. TREES SHALL BE PLANTED A MIN OF 6' FROM OTHER TREES IN A STAGGERED FORMATION. PLANTING AND RESTORATION SHALL COMPLY WITH GDOT SPECIFICATIONS 700 AND 702.
 4. WHEN RELOCATING FUEL TANK, USE SIMILAR LAYOUT DIMENSIONS OF EXISTING CONCRETE PAD FOR THE NEW PAD WITH THE THICKNESS AND REBARS AS NOTED FOR THE PADS SHOWN ON DWG S-5.1.



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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



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770-475-8994
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DESIGN BY:
KT
DRAWN BY:
DKS
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
SITE LAYOUT PLAN

DRAWING NO.
C-2.2
REV. NO.
0
DATE:
06/14/13



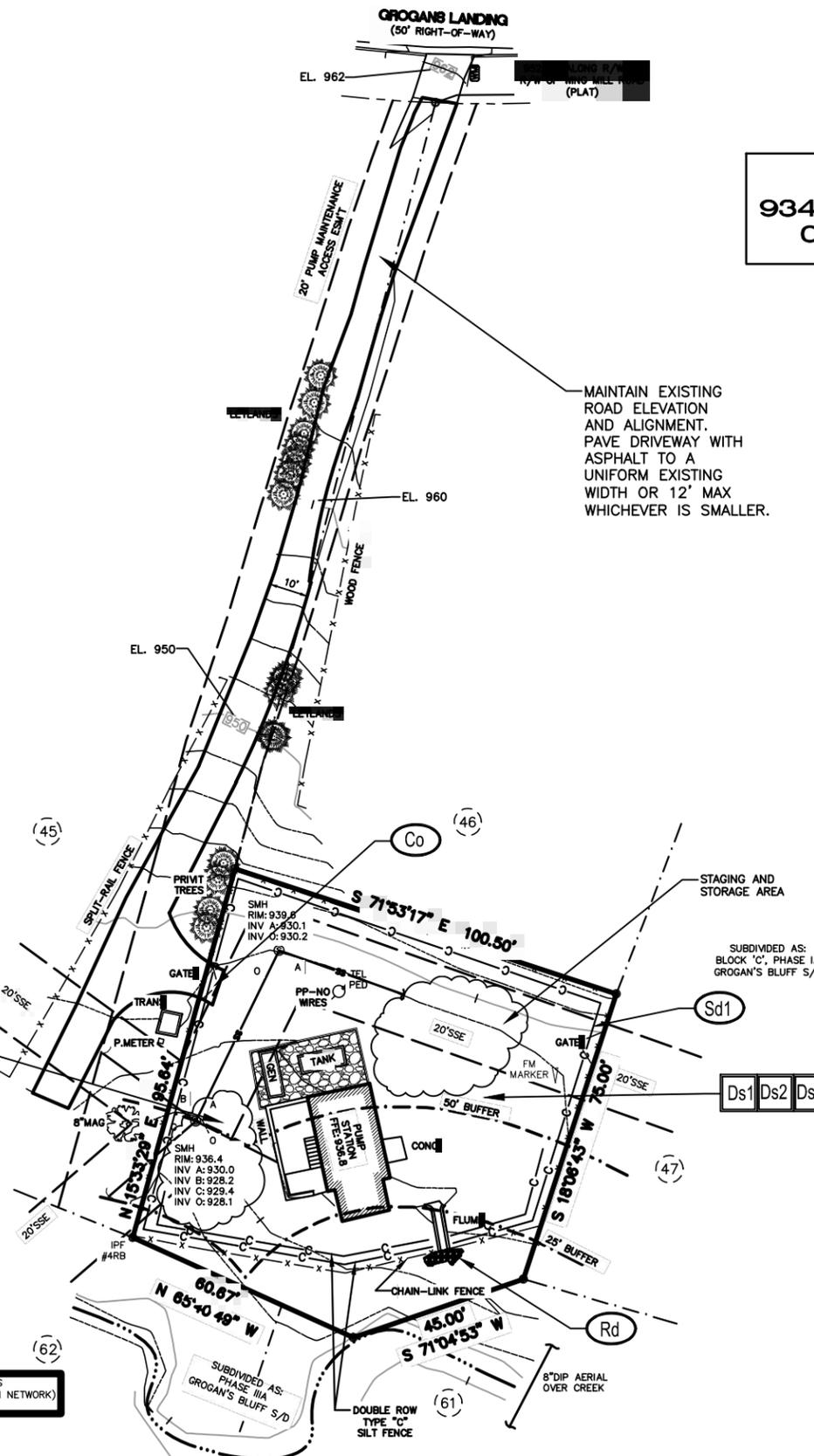
**AREA:
9345.00 SQ.FT. =
0.21 ACRES**

EROSION CONTROL LEGEND

- (Sd1)** SILT FENCE ——— C ——— C ———
- (Rd)** ROCK FILTER DAM
- (Co)** CONSTRUCTION EXIT
- [Ds1]** DISTURBED AREA — MULCH
- [Ds2]** DISTURBED AREA — TEMP SEEDING
- [Ds3]** DISTURBED AREA — PERMANENT SEEDING

NOTES:

1. FOR GENERAL NOTES SEE DRAWING M-0.1.
2. FOR EROSION CONTROL CODES SEE SHEET C-0.2.
3. PROVIDE TEMPORARY AND PERMANENT SEEDING (DS1, DS2, DS3) AS NECESSARY TO MAINTAIN GROUND COVER.

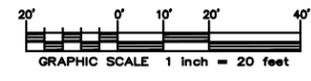


**FULTON COUNTY
WATER RESOURCES
LIFT STATION #6 -
SULLIVAN 2**

147 GROGAN'S LANDING
SANDY SPRINGS, GA



OPEN ENDED TRAVERSE UTILIZED TO COLLECT FIELD DATA.
GEOGRAPHICAL AND VERTICAL INFORMATION WERE OBTAINED VIA GPS OBSERVATIONS UTILIZING eGPS SOLUTIONS (AN INTERNET BASED RTN NETWORK) THAT REPORTS NAD83, NAVD88 DATUM AND GEOID03 MODEL



REFERENCES:
1) PLAT OF BLOCK C, PHASE 1-A, GROGAN'S BLUFF IN PB 136, PG 42 & PB 139, PG 105
2) PLAT OF BLOCK C, PHASE 1-B, GROGAN'S BLUFF IN PB 145, PG 4

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



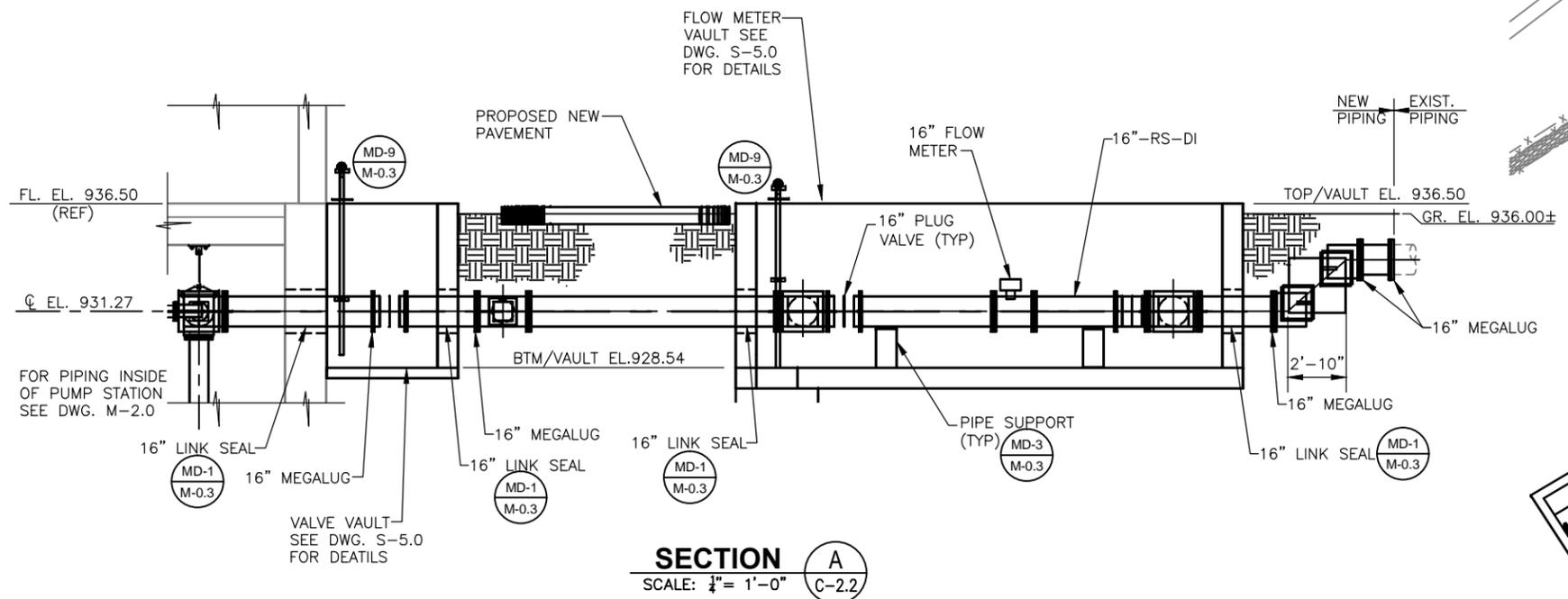
Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY:
KT
DRAWN BY:
DKS
CHECKED BY:
SH
JOB NO.
147024

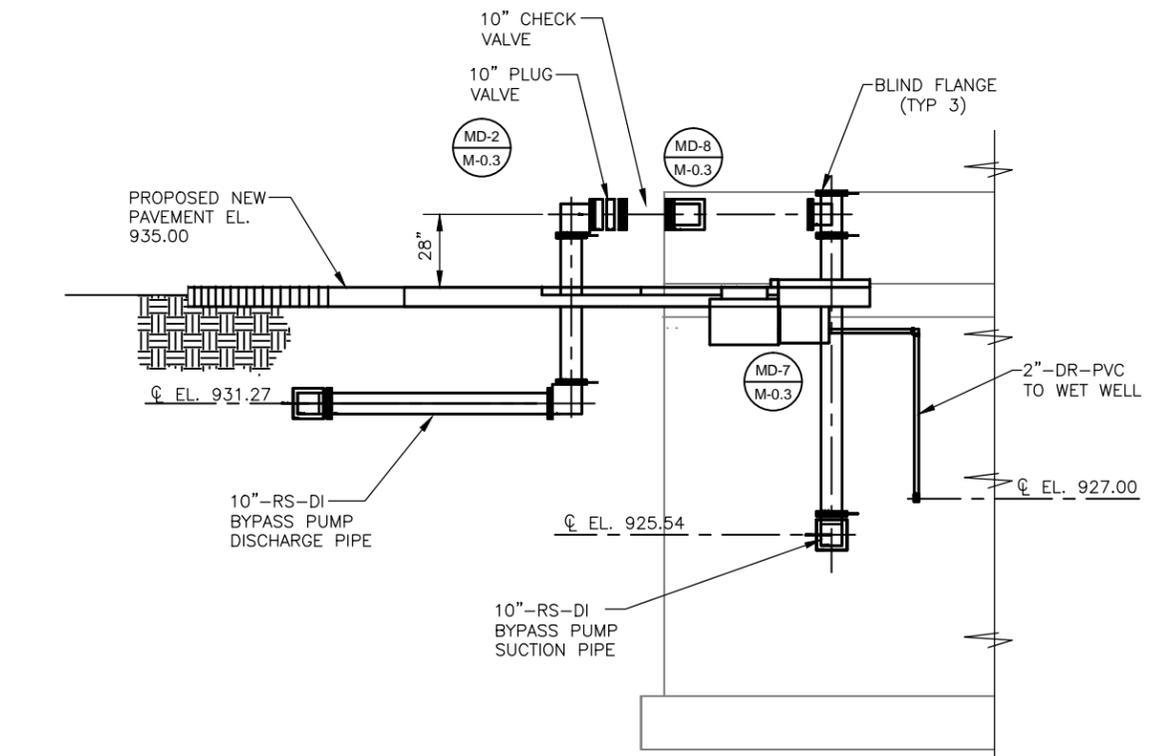
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
EROSION CONTROL & ROAD PAVING PLN.

DRAWING NO.
C-2.3
REV. NO.
0
DATE:
06/14/13

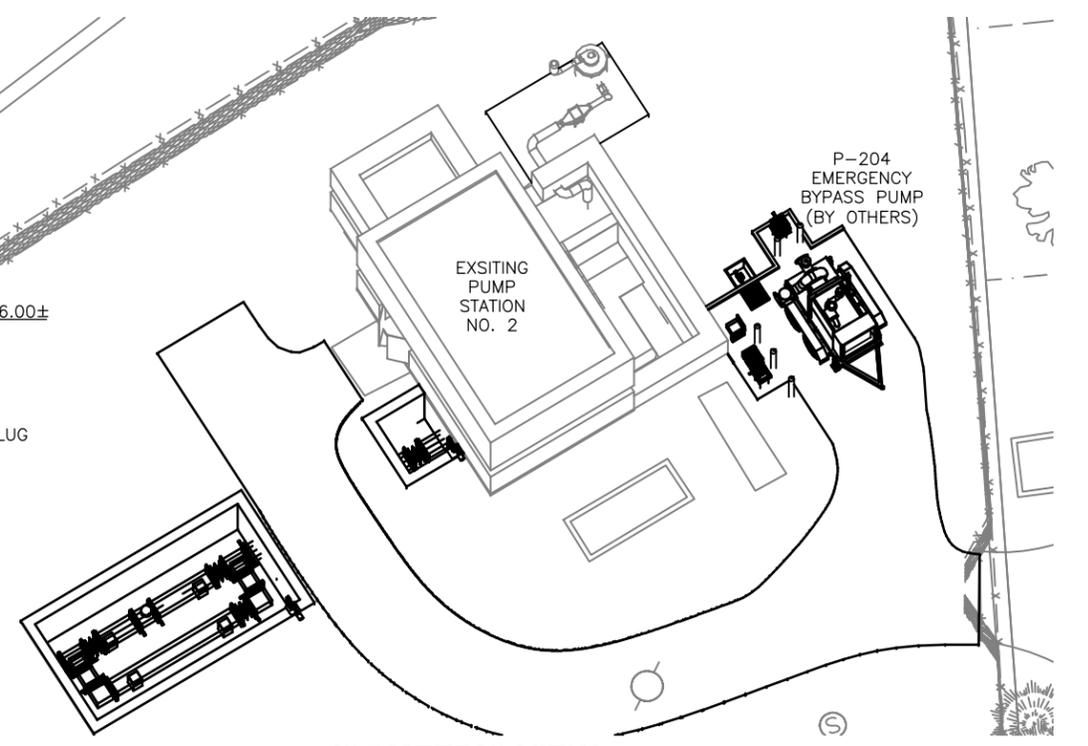
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SECTION A
SCALE: 1/4" = 1'-0"
C-2.2

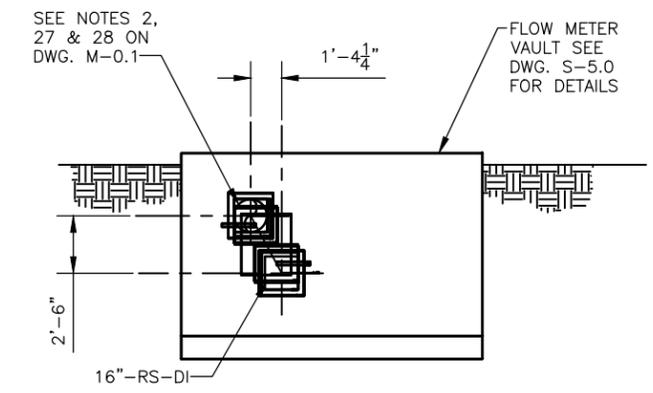


SECTION B
SCALE: 1/4" = 1'-0"
C-2.2



ISOMETRIC VIEW
SCALE: NONE

NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1



PIPING OFFSET DETAIL LOOKING WEST
SCALE: 1/4" = 1'-0"



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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DKS	KT	SH	SH



DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



Shaw Environmental & Infrastructure, Inc.
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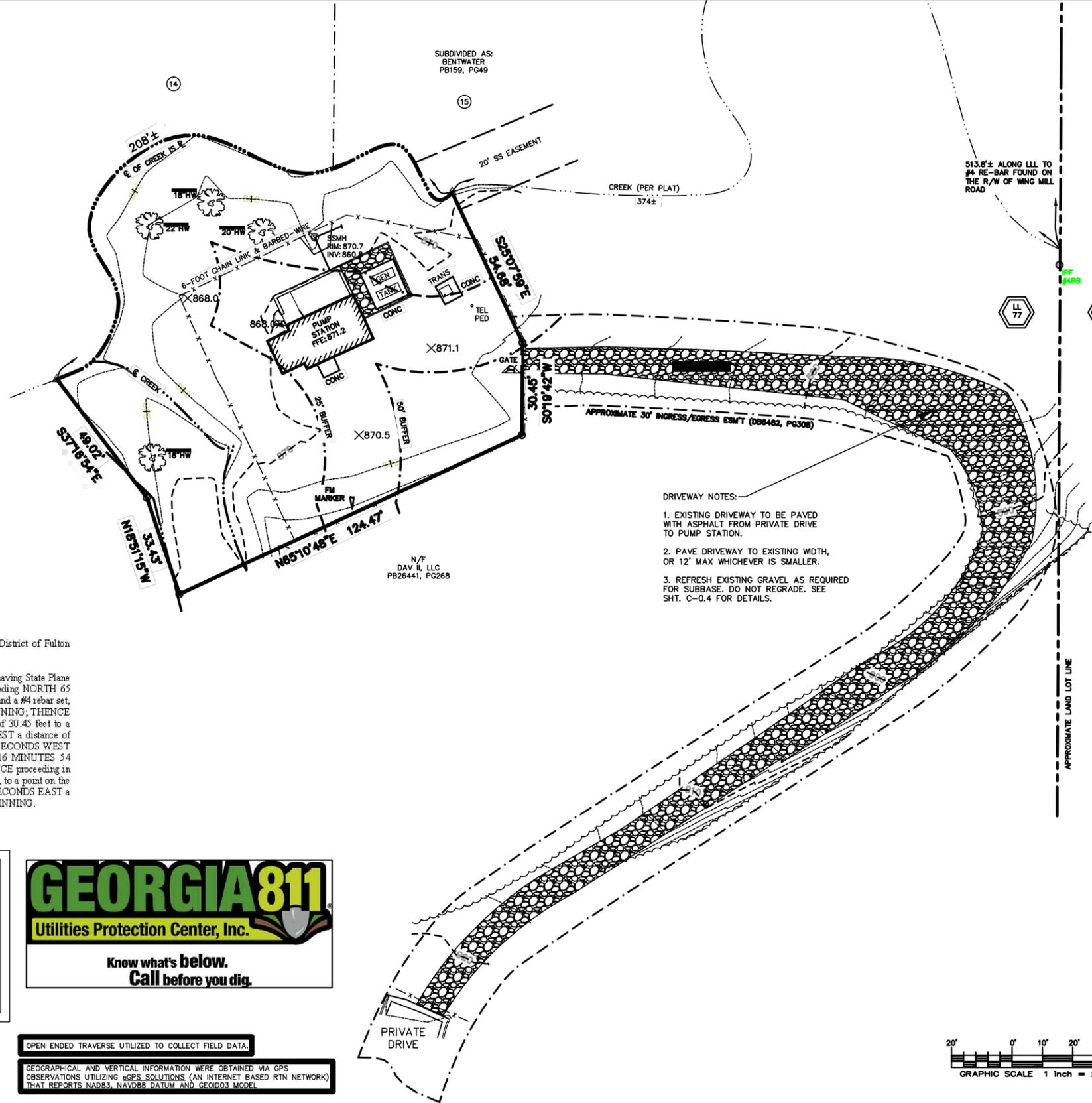
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KT
DRAWN BY:
DKS
CHECKED BY:
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
SITE LAYOUT SECTIONS

DRAWING NO.
C-2.4
REV. NO.
0
DATE:
06/14/13



AREA:
15515.9 SQ.FT. =
0.36 ACRES



LEGEND:

IPS	IRON PIN SET	DE	DRAINAGE EASEMENT
IPF	IRON PIN FOUND	CB	CATCH BASIN
OTF	OPEN TOP PIPE	JB	JUNCTION BOX
CTF	CRIMP TOP PIPE	DR	DROP WILET
RB	REINFORCING BAR	HW	HEAD WALL
CL	CENTERLINE	FES	FLARED END SECTION (FES)
R/W	RIGHT-OF-WAY	TMH	TELEPHONE MAN HOLE
LL	LAND LOT	TFE	TELEPHONE FEDESTAL
LLL	LAND LOT LINE	TB	TELEPHONE BOX
L	LINE	SMH	SEWER MAN HOLE
A	ARC	SSE	SANITARY SEWER EASEMENT
R	RADIUS	SC	SEWER CLEANOUT
CH	CHORD	FH	FIRE HYDRANT
CONC	CONCRETE	WV	WATER VALVE
GUY	GUY POLE	WM	WATER METER
GM	GAS METER	WS	WATER SEEP
GM	GAS MARKER	WS	WATER SPIGOT
LAMP	LAMP POLE	TR	TRAFFIC BOX
POW	POWER POLE	PS	PEDESTRIAN SIGNAL
FOM	FIBER OPTIC MARKER	BOL	BOLLARD (ROUND)
ICV	IRRIGATION CONTROL VALVE	BOL	BOLLARD (SQUARE)
MW	MONITORING WELL	CP	CENTERLINE
PRV	PRESSURE RELEASE VALVE	BHP	BONE HOLE
PVC	PVC STUB	FP	FENCE POST
PS	POWER STUB	POB	POINT OF BEGINNING
EM	ELECTRIC METER	POC	POINT OF COMMENCEMENT
WFL	WETLAND FLAG	PI	POINT OF INTERSECTION

GENERAL NOTES:

- PURSUANT TO RULE 180-6.09 OF THE GEORGIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, THE TERM "CERTIFY" OR "CERTIFICATION" RELATING TO LAND SURVEYING SERVICES SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE LAND SURVEYOR AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.
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- REPRODUCTIONS OF THIS PLAT ARE NOT VALID UNLESS THE SEAL IS SIGNED WITH A "JIVE" SIGNATURE.
- UNLESS OTHERWISE STATED HEREON, THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF AN ABSTRACT OF TITLE. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO ANY MATTER THAT MIGHT BE DISCOVERED BY AN ABSTRACT OR TITLE SEARCH OF THE PROPERTY.

DRIVEWAY NOTES:

- EXISTING DRIVEWAY TO BE PAVED WITH ASPHALT FROM PRIVATE DRIVE TO PUMP STATION.
- PAVE DRIVEWAY TO EXISTING WIDTH, OR 12' MAX WHICHEVER IS SMALLER.
- REFRESH EXISTING GRAVEL AS REQUIRED FOR SUBBASE. DO NOT REGRADE. SEE SHT. C-0.4 FOR DETAILS.

Fulton County Public Works
Lift Station #7 - Sullivan Creek 3

LEGAL DESCRIPTION

ALL THAT TRACT or parcel of land lying and being in Land Lot 30 of the 17th District of Fulton County, Georgia and being more particularly described as follows:

COMMENCING at a point, said point being Fulton County GIS Monument F449 and having State Plane Georgia West coordinates of 1444632.535 North, 2238381.709 East, THENCE proceeding NORTH 65 DEGREES 47 MINUTES 19 SECONDS WEST a distance of 2,950.33 feet to a point and a #4 rebar set, said point being the north side of a gravel drive and also being the POINT OF BEGINNING, THENCE proceeding SOUTH 00 DEGREES 19 MINUTES 42 SECONDS WEST a distance of 30.45 feet to a point, THENCE proceeding SOUTH 65 DEGREES 10 MINUTES 48 SECONDS WEST a distance of 124.47 feet to a point, THENCE proceeding NORTH 18 DEGREES 51 MINUTES 15 SECONDS WEST a distance of 33.43 feet to a point, THENCE proceeding NORTH 37 DEGREES 16 MINUTES 54 SECONDS WEST a distance of 49.02 feet to a point on the centerline of a creek; THENCE proceeding in a Northeasterly direction along the meanderings of the creek 208.00 feet, plus or minus, to a point on the centerline of a creek; THENCE proceeding SOUTH 25 DEGREES 07 MINUTES 59 SECONDS EAST a distance of 54.68 feet to a point and a #4 rebar set, said point being the POINT OF BEGINNING.

Said contains 0.36 acres or 15,515.9 square feet.

**FULTON COUNTY
WATER RESOURCES
LIFT STATION #7 -
SULLIVAN CREEK 3**

2700 HARBOR POINTE PKWY
SANDY SPRINGS, GA

GEORGIA 811
Utilities Protection Center, Inc.

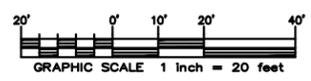
Know what's below.
Call before you dig.

OPEN ENDED TRAVERSE UTILIZED TO COLLECT FIELD DATA.

GEOGRAPHICAL AND VERTICAL INFORMATION WERE OBTAINED VIA GPS OBSERVATIONS UTILIZING eGPS SOLUTIONS (AN INTERNET BASED RTN NETWORK) THAT REPORTS NAD83, NAVD88 DATUM AND GEOID03 MODEL.

REFERENCES:

1) BOUNDARY SURVEY FOR OXFORD GREEN II, LTD BY BENCHMARK ENGINEERING DATE 08/11/04.



\\Selp\p00\Common\Sullivan WW Pump Stations\100% Bld Submittal\Drawings\Cad Files\Sheets\147024-C-3.1.DWG, 7/11/2013 1:20:09 PM

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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SOUTHEASTERN ENGINEERING

Civil & Environmental Engineering, Land Surveying and Planning
2470 Sandy Plains Rd. • Suite A
Marietta, Georgia 30066
tel: 770-321-3936 fax: 770-321-3935

DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



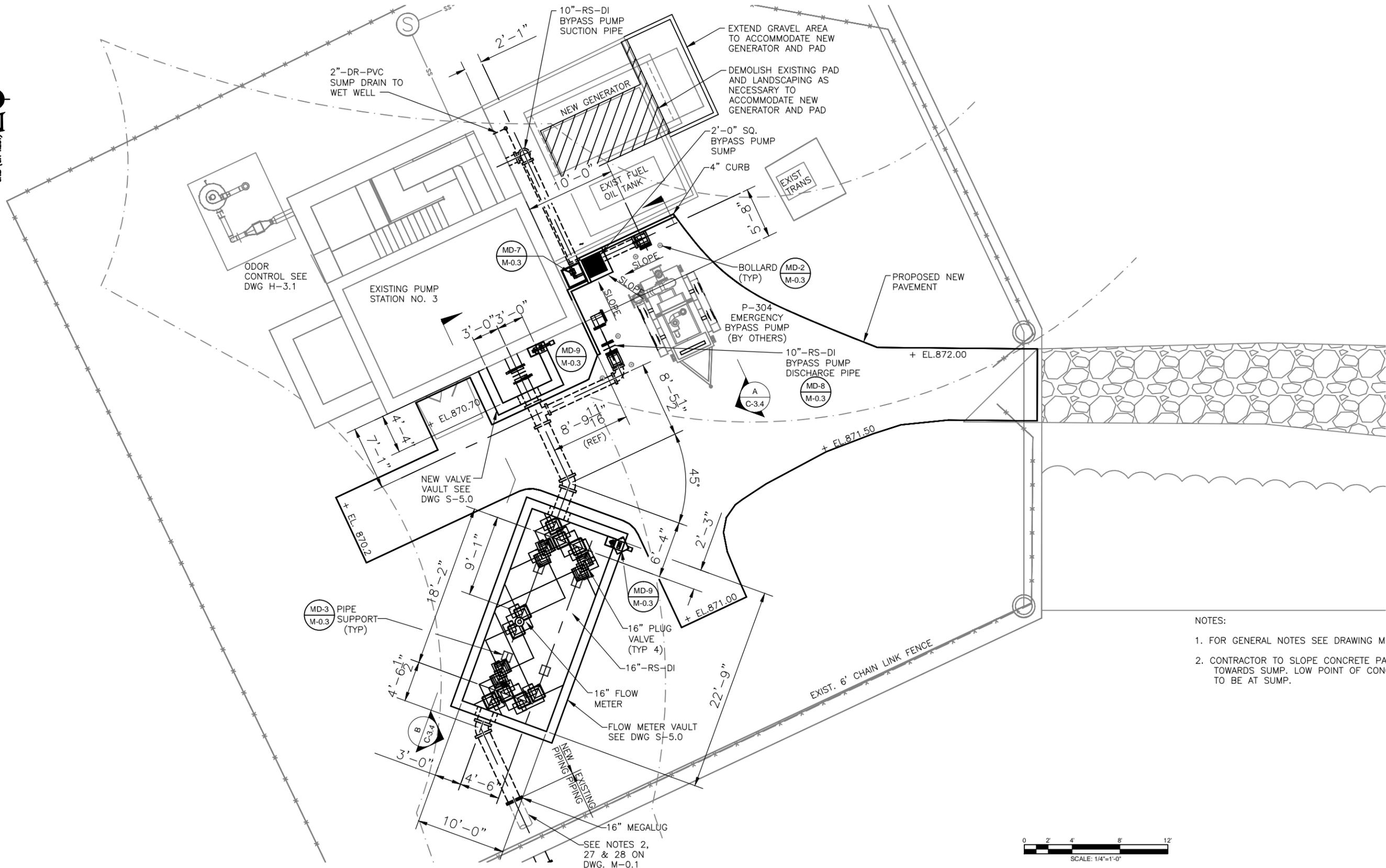
Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

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DRAWN BY:
CHECKED BY:
JOB NO.
147024

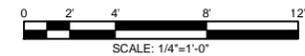
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA

PUMP STATION NO. 3
SITE PLAN

DRAWING NO.
C-3.1
REV. NO.
0
DATE:
06/14/13



- NOTES:
- FOR GENERAL NOTES SEE DRAWING M-0.1
 - CONTRACTOR TO SLOPE CONCRETE PAD TOWARDS SUMP. LOW POINT OF CONCRETE TO BE AT SUMP.



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30303



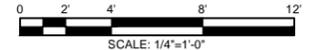
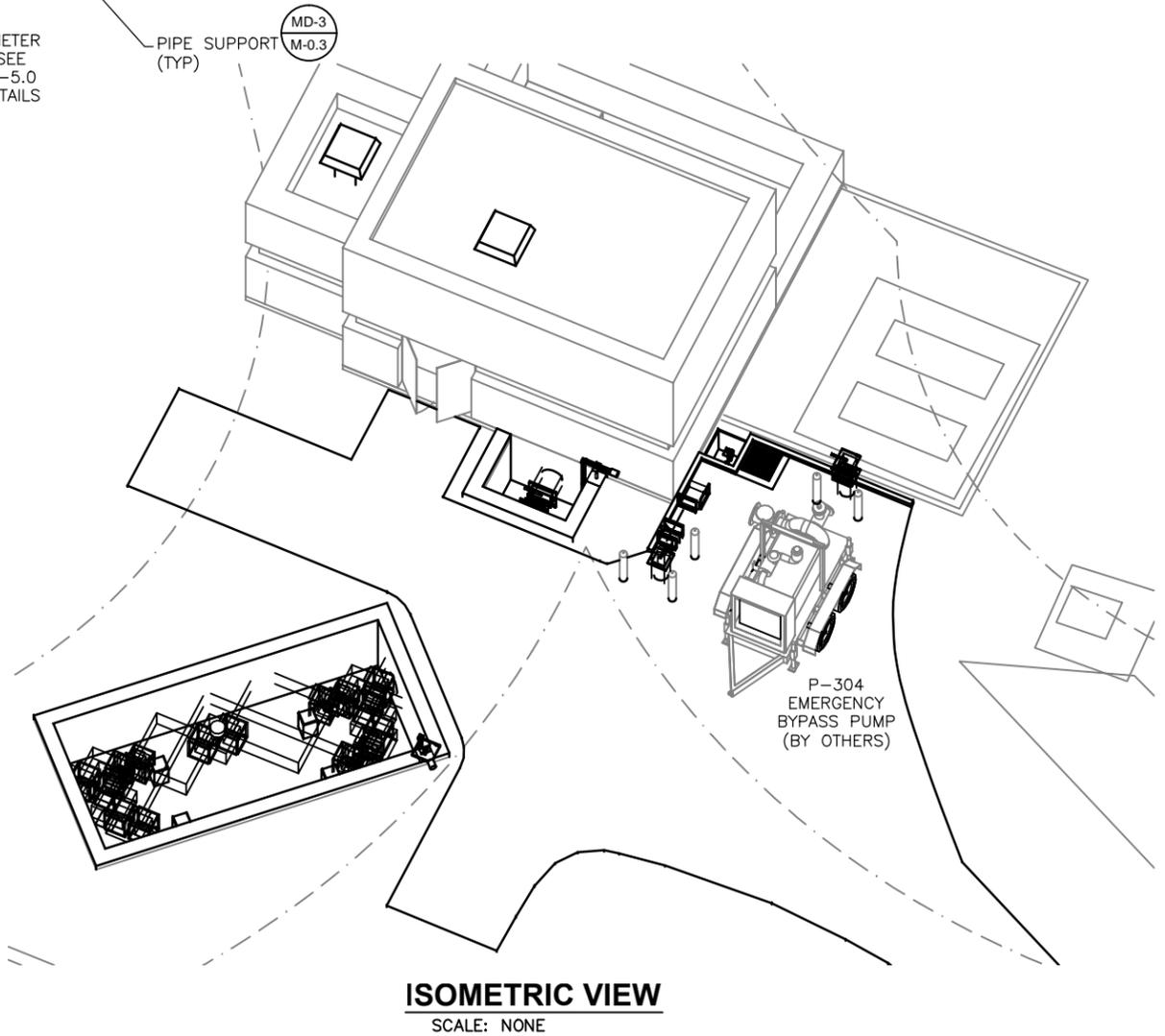
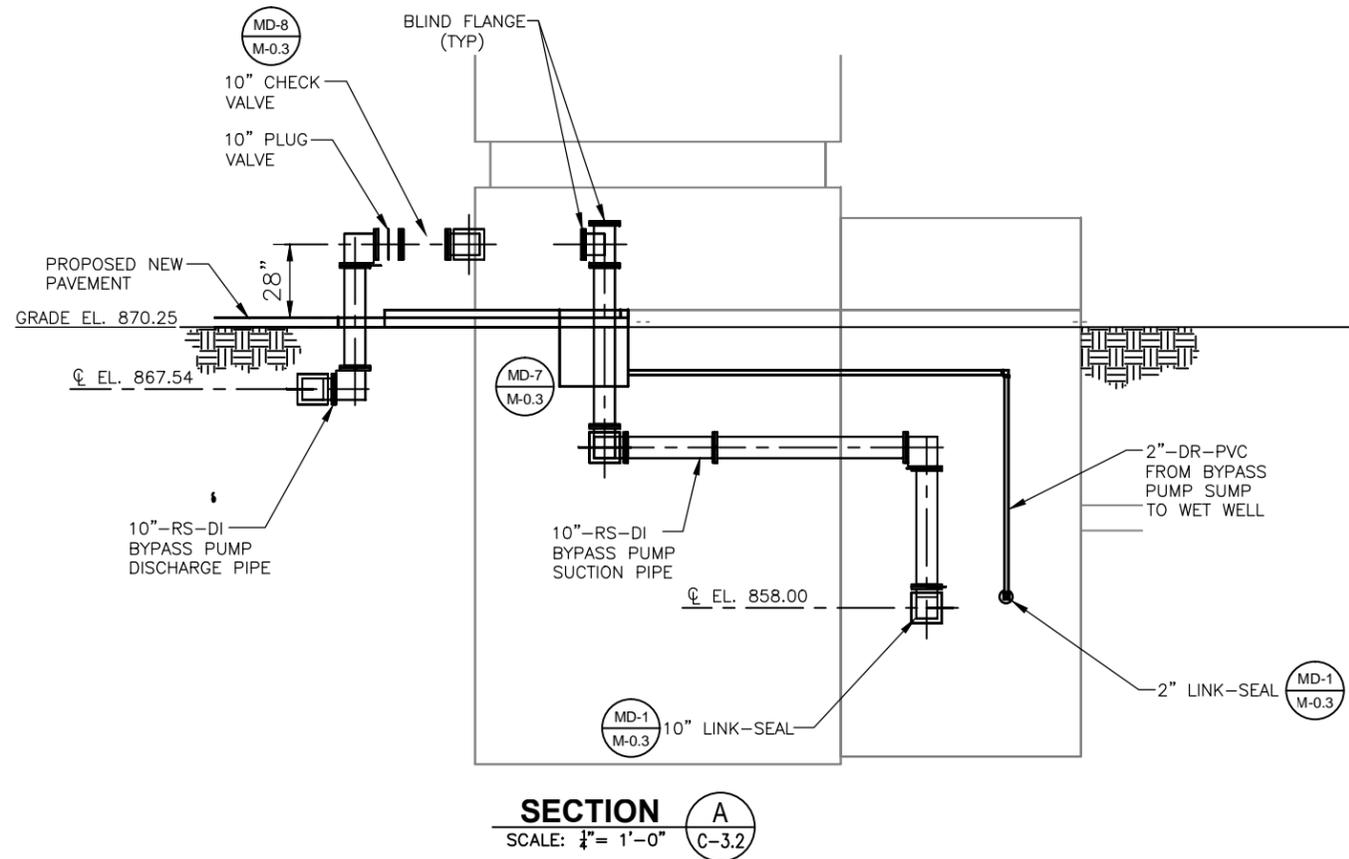
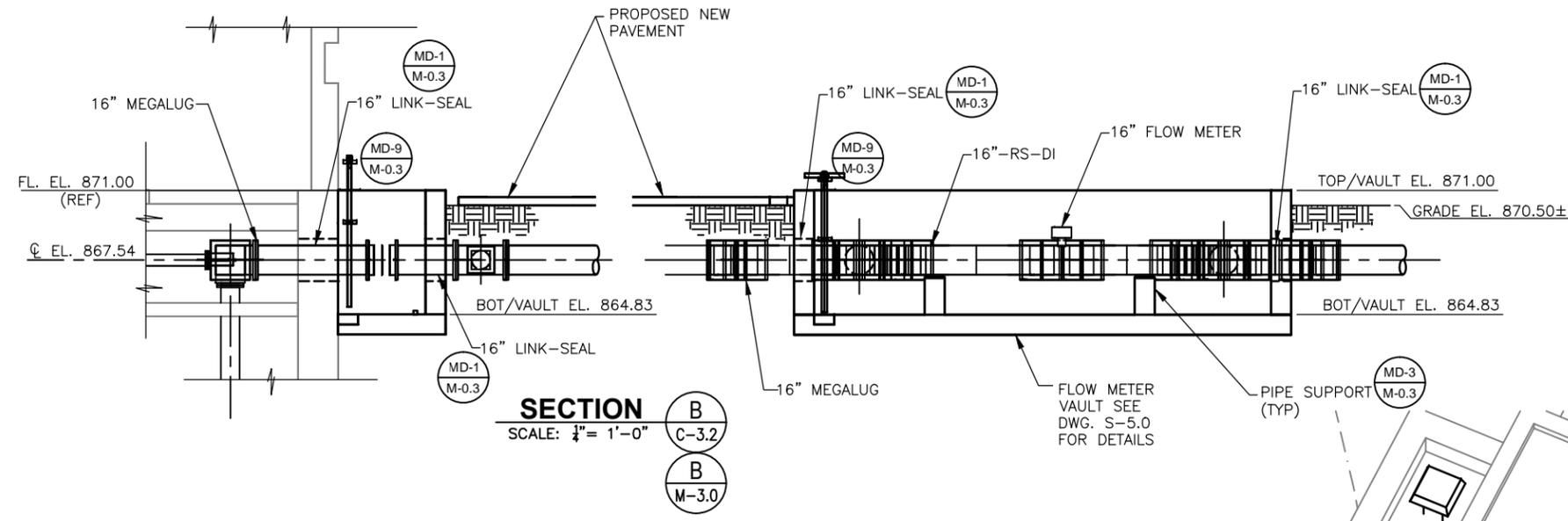
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 3
SITE LAYOUT PLAN

DRAWING NO.
C-3.2
REV. NO.
0
DATE:
06/14/13

NOTES:
 1. FOR GENERAL NOTES SEE DRAWING M-0.1



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DEPARTMENT OF
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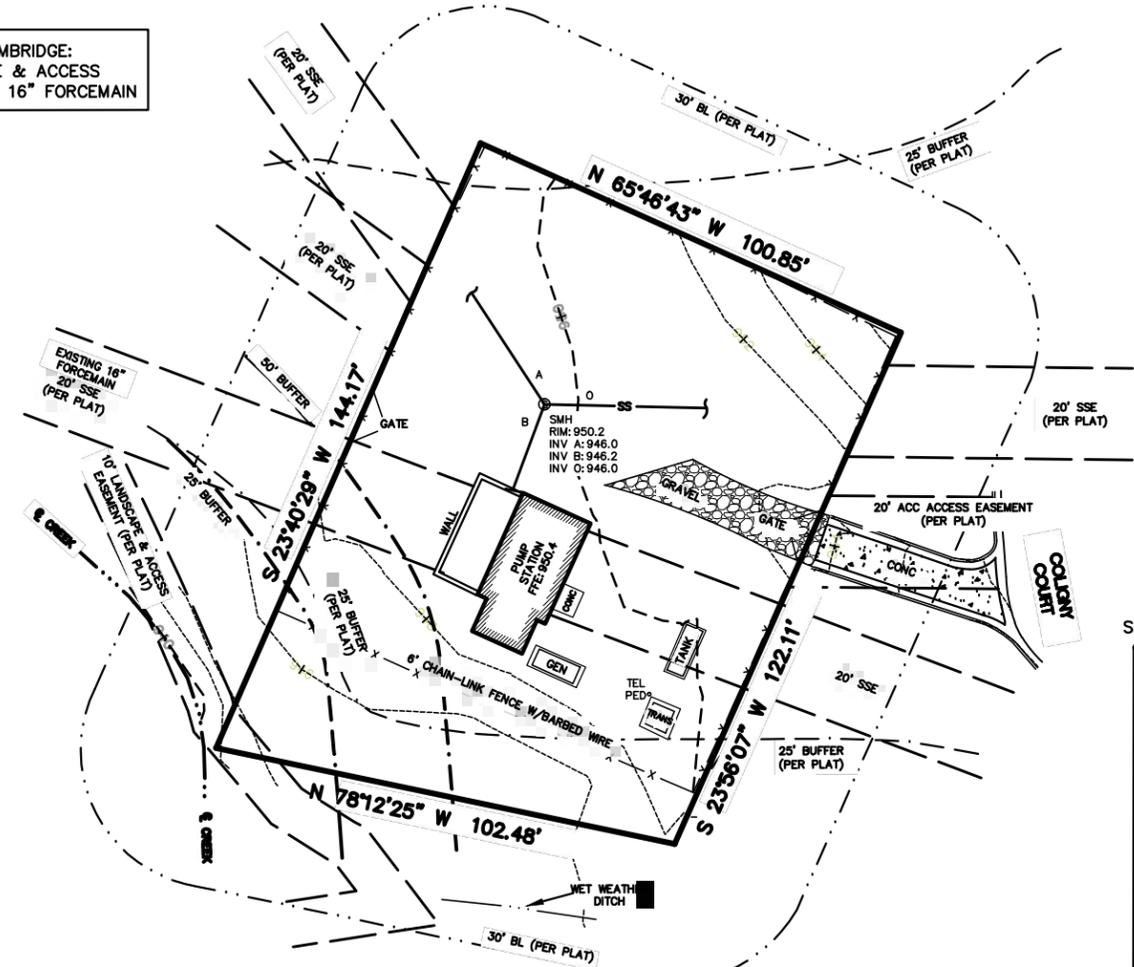
FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 PUMP STATION NO. 3
 SITE LAYOUT SECTIONS

DRAWING NO.
C-3.4
 REV. NO.
 0
 DATE:
 06/14/13



AREA:
13386.00 SQ.FT. =
0.31 ACRES

THE FOLLOWING WERE TAKEN FROM PLAT OF CAMBRIDGE:
25' BUFFER, 20' SS EASEMENTS, 10' LANDSCAPE & ACCESS
EASEMENT, ACCESS EASEMENT, 35' BL, EXISTING 16" FORCEMAIN



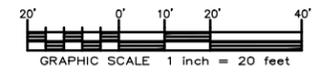
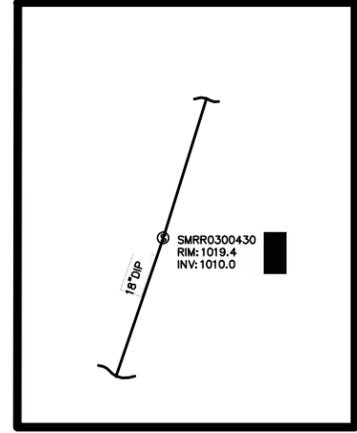
LEGEND:

PS	IRON PIN SET	DC	DRAINAGE EASEMENT
IPF	IRON PIN FOUND	CB	CATCH BASIN
OTF	OPEN TOP PIPE	JB	JUNCTION BOX
CTP	CRIMP TOP PIPE	DI	DROP INLET
RB	REINFORCING BAR	HW	HEAD WALL
CL	CENTERLINE	FE	FLARED END SECTION (FES)
R/W	RIGHT-OF-WAY	TMH	TELEPHONE MAN HOLE
LL	LAND LOT	TP	TELEPHONE PEDESTAL
LLL	LAND LOT LINE	TS	TELEPHONE BOX
L	LINE	SMH	SEWER MAN HOLE
A	ARC	SSE	SANITARY SEWER EASEMENT
R	RADIUS	SC	SEWER CLEANOUT
CH	CHORD	FR	FIRE HYDRANT
C	CURVE	WV	WATER VALVE
CONC	CONCRETE	WM	WATER METER
GP	GUY POLE	WS	WATER SEEP
GV	GAS VALVE	WSPT	WATER SPROUT
GM	GAS METER	SI	SIGN
GMK	GAS MARKER	TB	TRAFFIC BOX
LP	LAMP POLE	PS	PEDESTRIAN SIGNAL
PP	POWER POLE	BR	BOLLARD (ROUND)
FOM	FIBER OPTIC MARKER	BS	BOLLARD (SQUARE)
ICV	IRRIGATION CONTROL VALVE	CB	CABLE BOX
MW	MONITORING WELL	CL	CENTERLINE
PRV	PRESSURE RELEASE VALVE	BM	BORER HOLE
PST	PVC STUB	POB	POINT OF BEGINNING
PSM	POWER STUB	POC	POINT OF COMMENCEMENT
EM	ELECTRIC METER	PI	POINT OF INTERSECTION
WF	WETLAND FLAG		
CMP	CORRUGATED METAL PIPE		
RCP	REINFORCED CONCRETE PIPE		
CD	CROSS DRAIN		
SS	SANITARY SEWER		
X-X	FENCE		
CMF	CONCRETE MONUMENT FOUND		
Z-Z	OVERHEAD UTILITY LINE(S)		

GENERAL NOTES:

- PURSUANT TO RULE 180-8.09 OF THE GEORGIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, THE TERM "CERTIFY" OR "CERTIFICATION" RELATING TO LAND SURVEYING SERVICES SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE LAND SURVEYOR AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.
- INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER, AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE RELYING ON THIS PLAT. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, ITS EMPLOYEES, ITS CONSULTANTS, ITS CONTRACTORS, AND/OR ITS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON AS TO SUCH UNDERGROUND INFORMATION.
- UNLESS OTHERWISE STATED HEREON, ONLY EVIDENCE OF EASEMENTS OR STRUCTURES THERETO WHICH ARE READILY APPARENT FROM A CASUAL ABOVE GROUND VIEW OF PREMISES ARE SHOWN. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO THE EXISTENCE OF ANY EASEMENT NOT DISCOVERED FROM MY CASUAL ABOVE GROUND VIEW OF THE PREMISES.
- UNLESS STATED OTHERWISE, GOVERNMENTAL JURISDICTIONAL AREAS OR NEGATIVE EASEMENTS, IF ANY, WHICH MIGHT IMPACT ON THE USE OF THE PREMISES WERE NOT LOCATED. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR ANY LOSS RESULTING FROM THE EXERCISE OF ANY GOVERNMENTAL JURISDICTION AFFECTING THE USE OF THE PREMISES.
- ACCEPTANCE OF THIS SURVEY PLAT OR USE OF THE CORNER MONUMENTS FOUND OR SET DURING THE PERFORMANCE OF THE FIELD SURVEY HEREBY LIMIT THE UNDERSIGNED LIABILITY RELATED TO PROFESSIONAL NEGLIGENCE ACTS, ERRORS, OMISSIONS OR BREACH OF CONTRACT TO AN AMOUNT NOT TO EXCEED THE FEE CHARGED. FOR ADDITIONAL LIABILITY COVERAGE FROM THE UNDERSIGNED, A FEE OF 2% OF THE LIABILITY AMOUNT REQUESTED MUST BE PAID TO THE UNDERSIGNED PRIOR TO COMMENCEMENT OF THIS PROJECT.
- REPRODUCTIONS OF THIS PLAT ARE NOT VALID UNLESS THE SEAL IS SIGNED WITH A "LIVE" SIGNATURE.
- UNLESS OTHERWISE STATED HEREON, THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF AN ABSTRACT OF TITLE. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO ANY MATTER THAT MIGHT BE DISCOVERED BY AN ABSTRACT OR TITLE SEARCH OF THE PROPERTY.

SANITARY SEWER MANHOLE SMRR0300430



Fulton County Public Works
Lift Station #8 - Sullivan Creek 4

LEGAL DESCRIPTION

ALL THAT TRACT or parcel of land lying and being in Land Lot 30 of the 17th District of Fulton County, Georgia and being more particularly described as follows:

COMMENCING at a point, said point being Fulton County GIS Monument F849 and having State Plane Georgia West coordinates of 1444632.535 North, 2238381.709 East; THENCE proceeding SOUTH 87 DEGREES 21 MINUTES 27 SECONDS WEST a distance of 2,250.91 feet to a point and a #4 rebar set, said point being the POINT OF BEGINNING; THENCE proceeding SOUTH 23 DEGREES 56 MINUTES 07 SECONDS WEST a distance of 122.11 feet to a point; THENCE proceeding NORTH 78 DEGREES 12 MINUTES 25 SECONDS WEST a distance of 102.48 feet to a point; THENCE proceeding NORTH 23 DEGREES 40 MINUTES 29 SECONDS EAST a distance of 144.17 feet to a point; THENCE proceeding SOUTH 65 DEGREES 46 MINUTES 43 SECONDS EAST a distance of 100.85 feet to a point and #4 rebar set, said point being the POINT OF BEGINNING.

Said tract contains 0.31 acres or 13,386.00 square feet.

**FULTON COUNTY
WATER RESOURCES
LIFT STATION #8 -
SULLIVAN CREEK 4**

**2300 SPRING CREEK LANE
DUNWOODY, GA**

GEORGIA811
Utilities Protection Center, Inc.

Know what's below.
Call before you dig.

OPEN ENDED TRAVERSE UTILIZED TO COLLECT FIELD DATA.

GEOGRAPHICAL AND VERTICAL INFORMATION WERE OBTAINED VIA GPS OBSERVATIONS UTILIZING gcps SOLUTIONS (AN INTERNET BASED RTN NETWORK) THAT REPORTS NAD83, NAVD88 DATUM AND GEOID03 MODEL.

REFERENCES:

1) PLAT OF CAMBRIDGE (F.K.A. MORGAN FALLS TOWNHOMES) RECORDED IN PB 2587, PG 33.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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DEPARTMENT OF
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ATLANTA, GEORGIA
30303



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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: -
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JOB NO. 147024

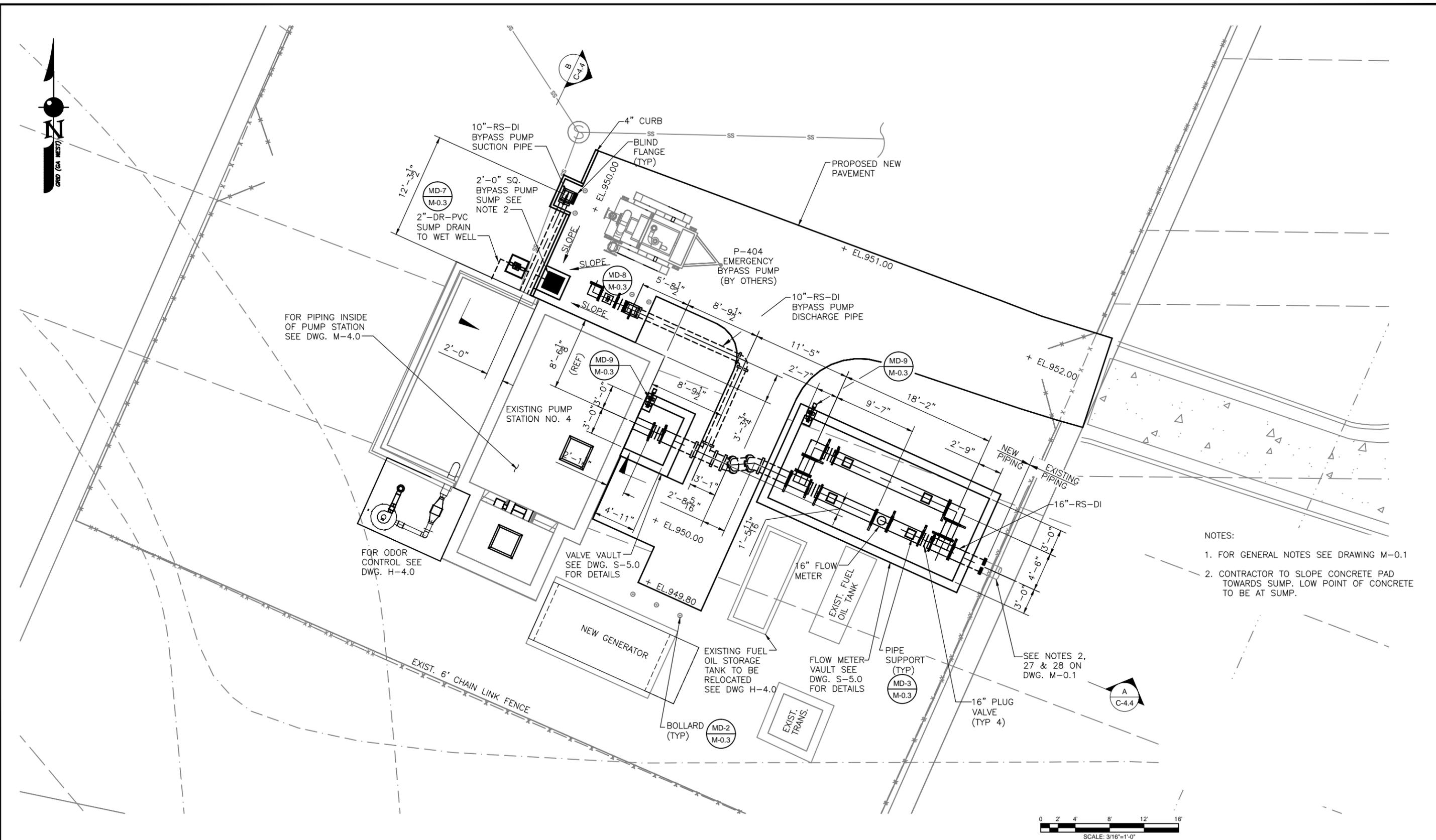
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA

PUMP STATION NO. 4
SITE PLAN

DRAWING NO. C-4.1
REV. NO. 0
DATE: 06/14/13

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- NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1
 2. CONTRACTOR TO SLOPE CONCRETE PAD TOWARDS SUMP. LOW POINT OF CONCRETE TO BE AT SUMP.

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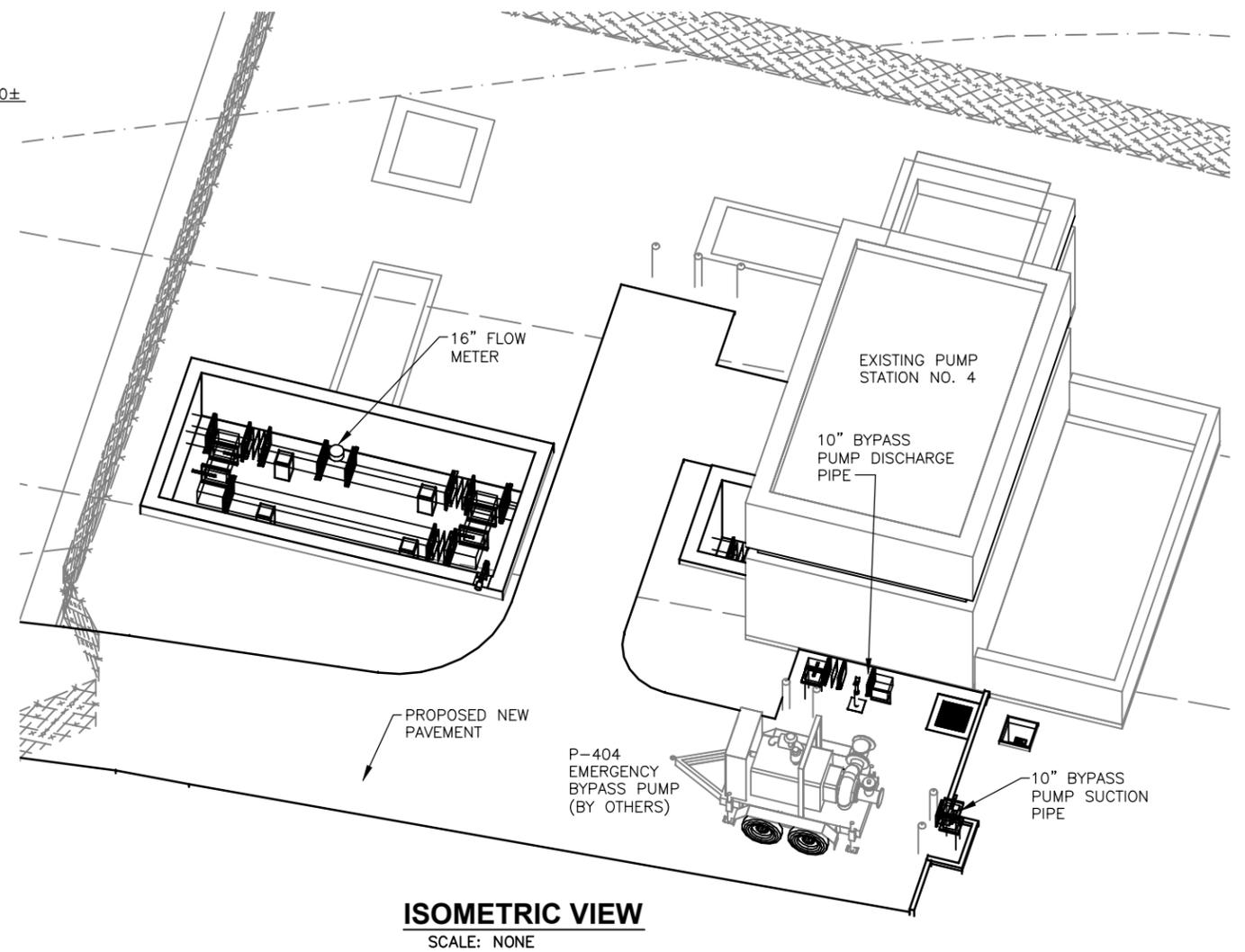
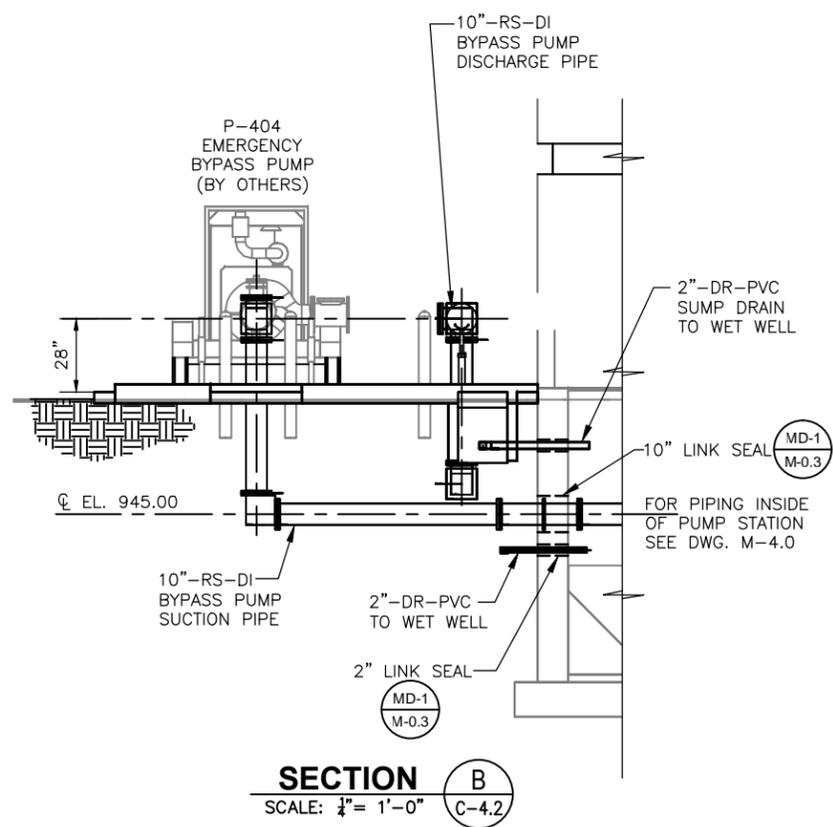
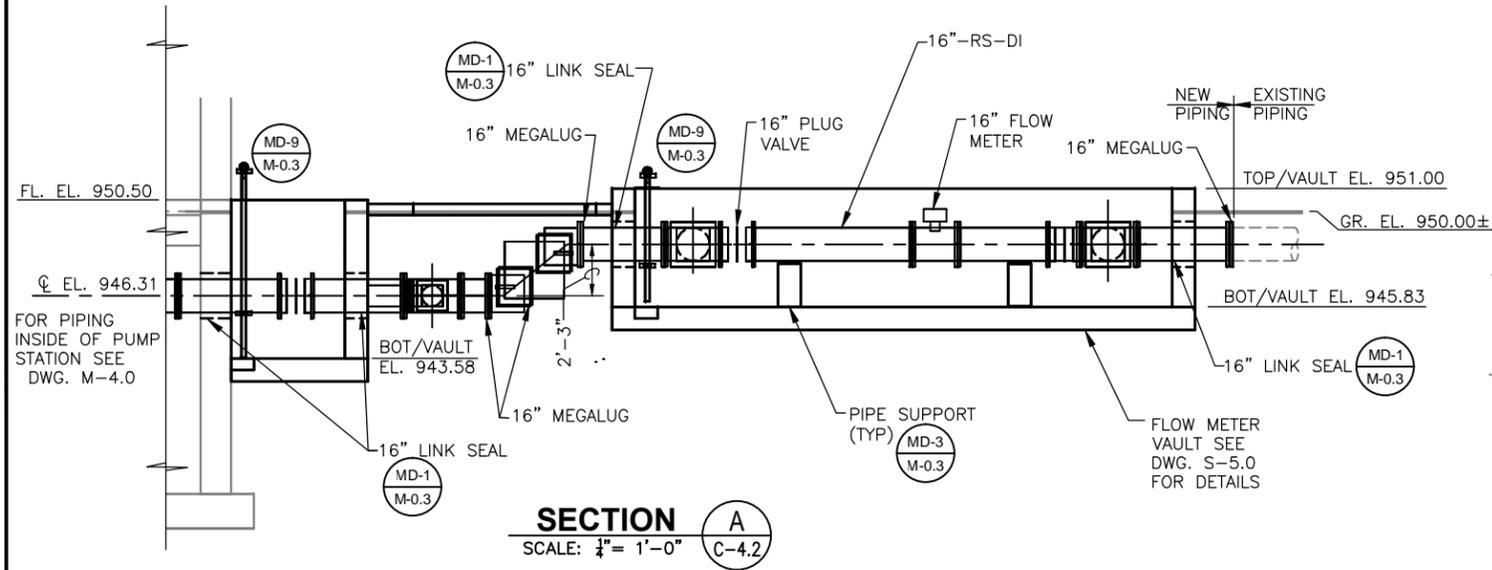
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770-475-8994
FAX: 770-777-9545

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DRAWN BY:
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JOB NO.
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
SITE LAYOUT PLAN

DRAWING NO.
C-4.2
REV. NO.
0
DATE:
06/14/13

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NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1



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ATLANTA, GEORGIA
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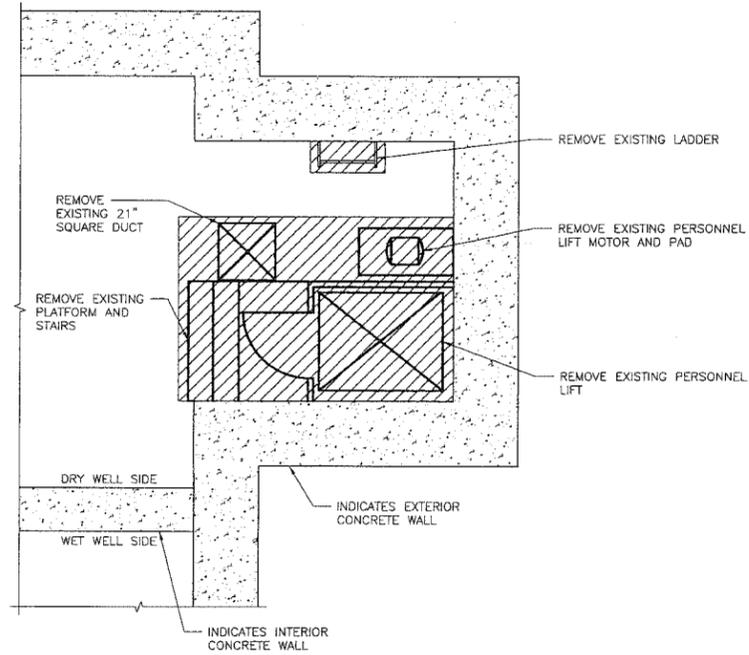


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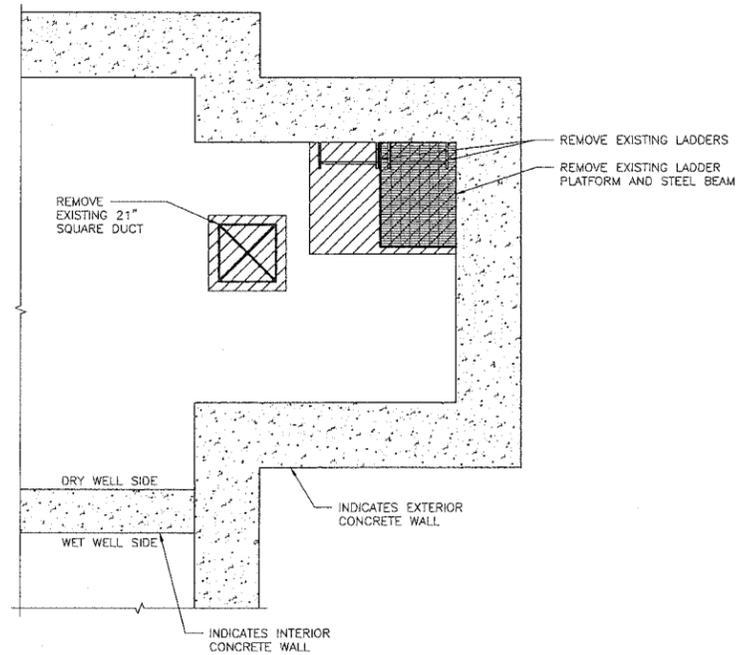
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JOB NO.
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
SITE LAYOUT SECTIONS

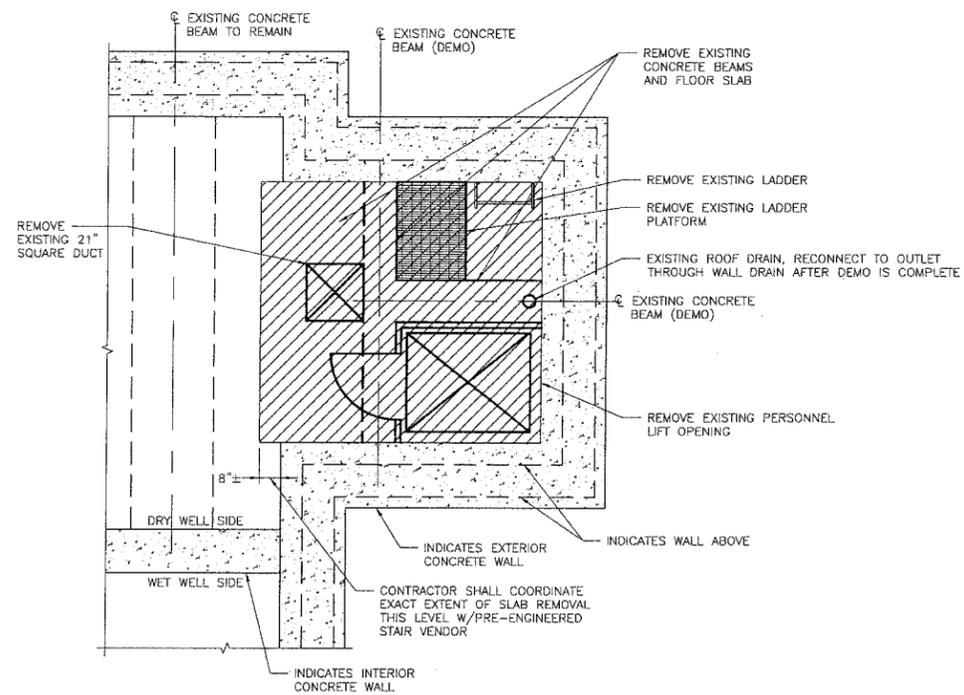
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C-4.4
REV. NO.
0
DATE:
06/14/13



PLAN @ EL. 839.67
SCALE: 3/8" = 1'-0"



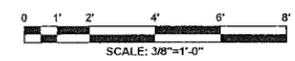
PLAN @ EL. 850.00
SCALE: 3/8" = 1'-0"



PLAN @ EL. 864.50
SCALE: 3/8" = 1'-0"

GENERAL NOTES:

- CONTRACTOR TO TAKE CARE THAT EQUIPMENT USED IN DEMOLITION PROCESS AS WELL AS FALLING DEBRIS DO NOT DAMAGE THE EXISTING WALLS AND STRUCTURAL FRAMING THAT IS TO REMAIN. CONTRACTOR TO PROVIDE TEMPORARY SUPPORTS AS REQUIRED TO ENSURE ADEQUATE SUPPORT OF EXISTING STRUCTURAL FRAMING MEMBERS TO BE REMOVED ONCE CONNECTIONS TO EXISTING STRUCTURE ARE DISABLED. THE DESIGN AND SAFETY OF BRACING, TEMPORARY SUPPORTS, MEANS AND METHODS OF CONSTRUCTION AND SEQUENCES OF DEMOLITION AND ERECTION FOR ALL WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION.
- EXISTING MATERIAL SIZES AND DIMENSIONS USED IN GENERATION OF THIS DRAWING WERE TAKEN FROM SULLIVAN'S CREEK PUMPING STATION DRAWINGS DATED JANUARY 1976. NOTIFY OWNER/ENGINEER OF ANY DISCREPANCIES ENCOUNTERED.
- PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURE OR ELEMENTS TO BE DEMOLISHED, AND ADJACENT FACILITIES OR WORK TO REMAIN.
- PROTECT FLOORS WITH SUITABLE COVERINGS WHEN NECESSARY.
- MAINTAIN EXISTING UTILITIES TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS INCLUDING ELECTRICAL AND FIBER COMMUNICATION LINES. DEMOLITION CONTRACTOR TO TAKE EXTREME CARE AND CONSTRUCT AND MAINTAIN TEMPORARY BARRICADES TO PROTECT THESE AREAS FROM DAMAGE DURING DEMOLITION.
- DO NOT INTERRUPT UTILITIES SERVING OCCUPIED FACILITIES EXCEPT AS PREVIOUSLY AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES AS ACCEPTABLE BY GOVERNING AUTHORITIES.
- CEASE OPERATIONS AND NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IF SAFETY OF STRUCTURE APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO SUPPORT STRUCTURE UNTIL A DETERMINATION IS MADE FOR CONTINUING OPERATIONS.
- DEMOLISH CONCRETE IN SMALL SECTIONS. CUT CONCRETE AT JUNCTURES WITH CONSTRUCTION TO REMAIN USING POWER-DRIVEN MASONRY SAWS OR HAND TOOLS; DO NOT USE POWER-DRIVEN IMPACT TOOLS.
- IF UNANTICIPATED MECHANICAL, ELECTRICAL OR STRUCTURAL ELEMENTS WHICH CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE BOTH NATURE AND EXTENT OF THE CONFLICT. SUBMIT REPORT TO OWNER'S REPRESENTATIVE IN WRITING, ACCURATE DETAIL. PENDING RECEIPT OF DIRECTIVE FROM OWNER'S REPRESENTATIVE, REARRANGE SELECTIVE DEMOLITION SCHEDULE AS NECESSARY TO CONTINUE OVERALL JOB PROGRESS.
- CUT WORK BY METHODS LEAST LIKELY TO DAMAGE WORK TO BE RETAINED AND WORK ADJOINING. IN GENERAL, WHERE PHYSICAL CUTTING ACTION IS REQUIRED, CUT WORK WITH SAWING AND GRINDING TOOLS, NOT WITH HAMMERING AND CHIPPING TOOLS.
- WHERE SELECTIVE DEMOLITION TERMINATES AT A SURFACE, FINISH OR SUBSTRATE TO REMAIN, COMPLETELY REMOVE ALL TRACES OF MATERIAL SELECTIVELY DEMOLISHED. PROVIDE SMOOTH EVEN SUBSTRATE TRANSITION.
- IF HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION OPERATIONS, IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER'S REPRESENTATIVE IN WRITING. IF OWNER'S REPRESENTATIVE DETERMINES THE HAZARDOUS MATERIALS ARE ASBESTOS, PCB'S OR OTHER TOXIC SUBSTANCES, DO NO FURTHER WORK IN THE AREA UNTIL THE MATERIALS ARE EITHER REMOVED OR RENDERED HARMLESS AND THE AREA HAS BEEN CERTIFIED SAFE BY THE APPROPRIATE AUTHORITIES.



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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
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ATLANTA, GEORGIA
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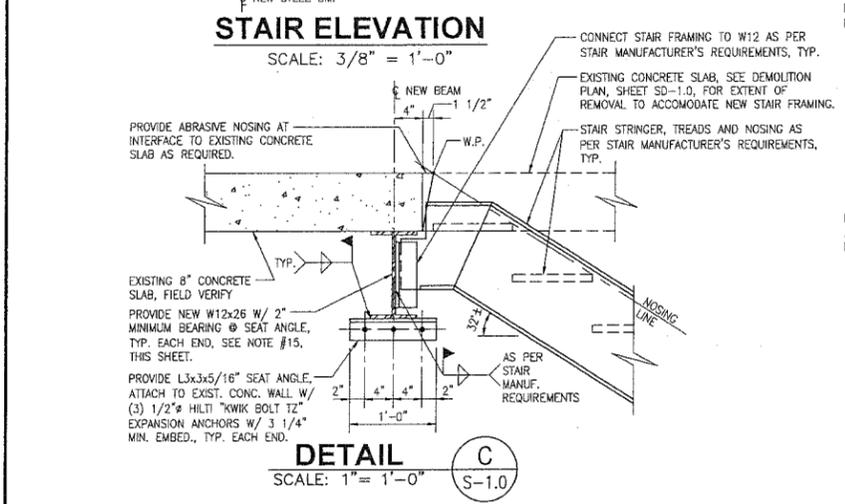
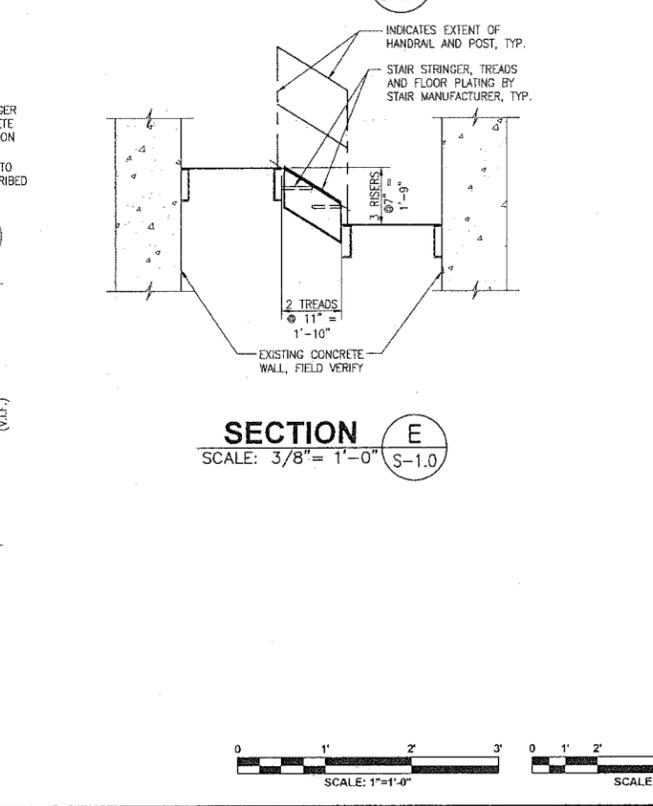
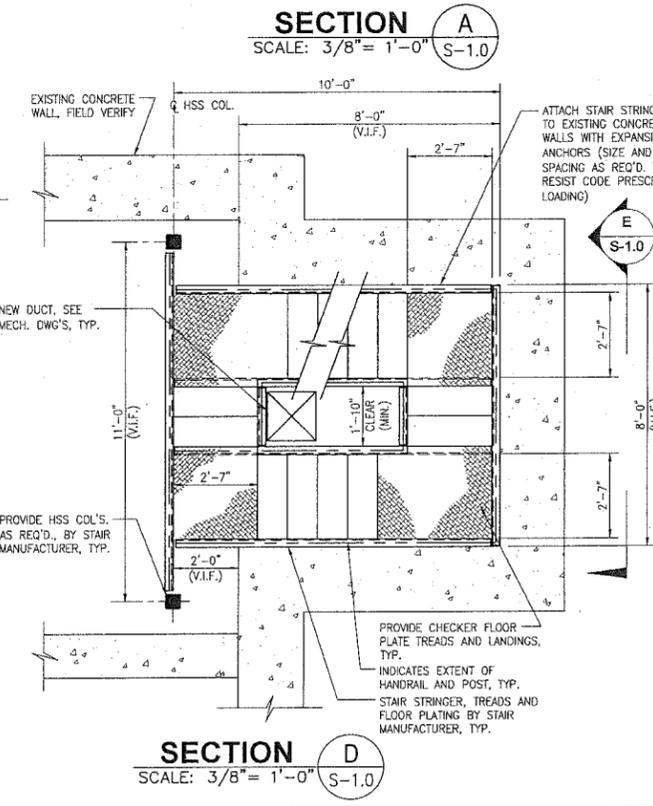
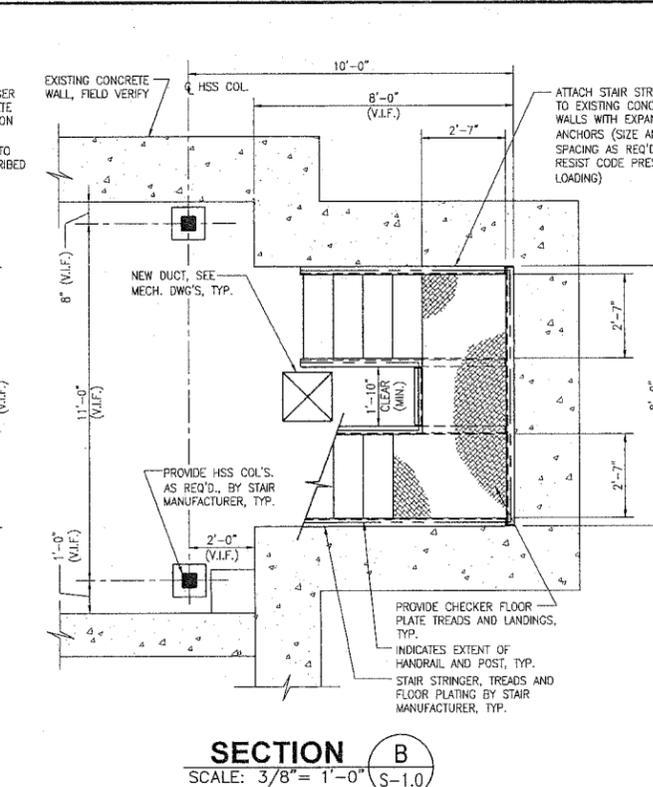
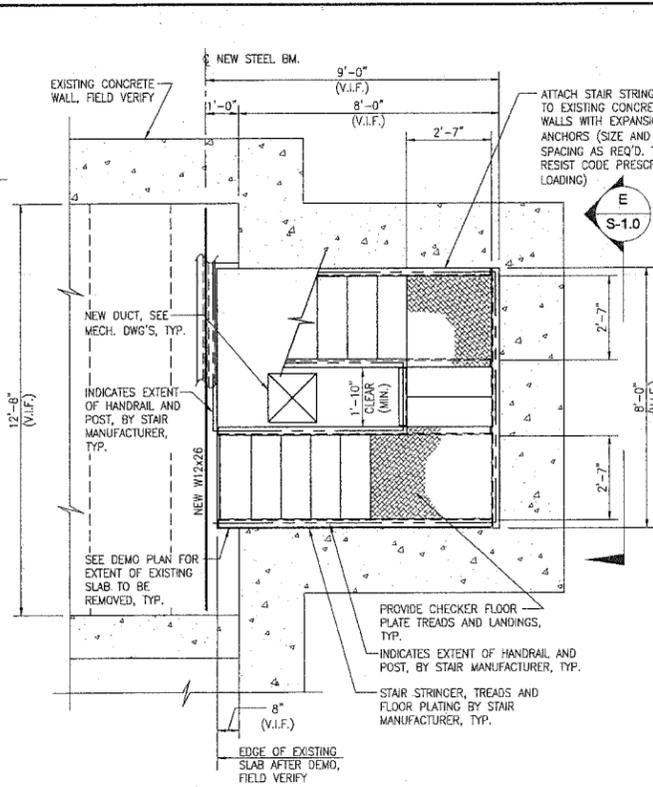
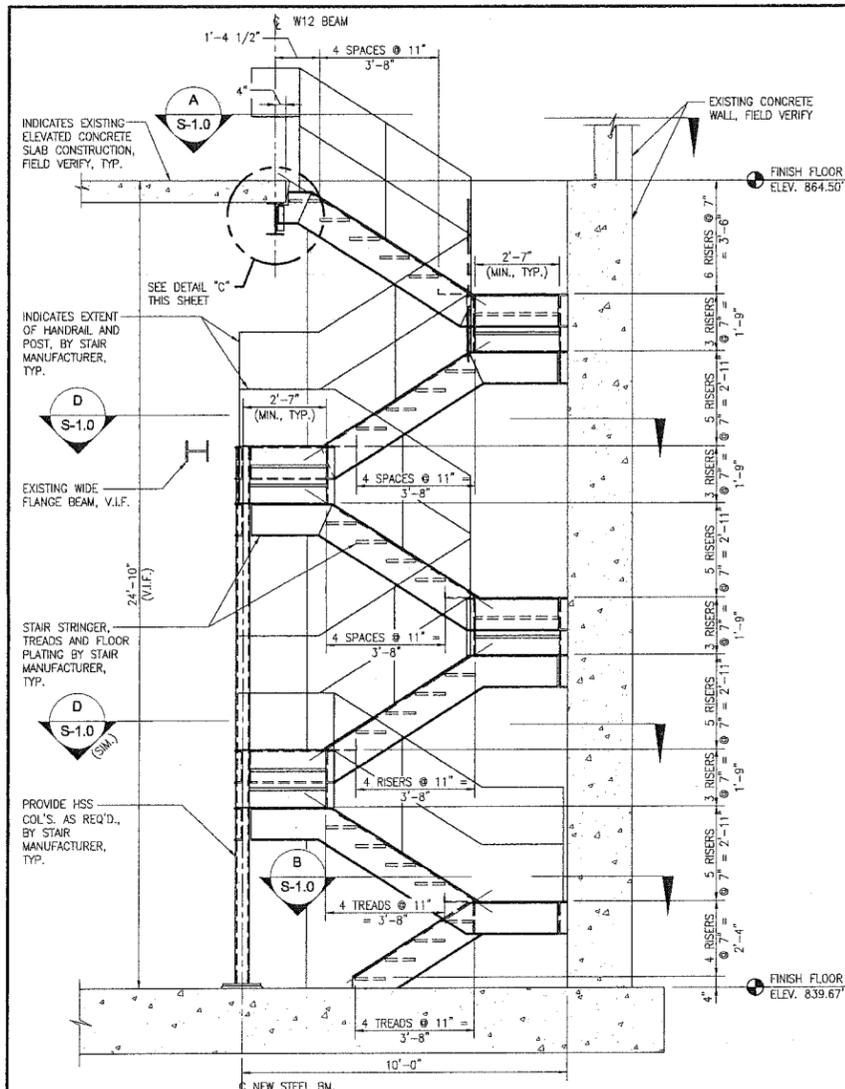


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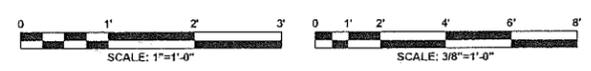
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DRAWN BY:	CFB
CHECKED BY:	CLL
JOB NO.	147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
STAIR DEMOLITION PLAN

DRAWING NO.	SD-1.0
REV. NO.	0
DATE:	06/14/13



- NOTES**
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO ORDERING OR FABRICATION OF MATERIALS FOR STAIRS. NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - V.L.F. = VERIFY IN FIELD.
 - STAIR SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER, LICENSED AND IN GOOD STANDING IN THE STATE OF GEORGIA. STAIR SUBMITTALS SHALL BE SEALED AND SHALL INCLUDE ALL PERTINENT INFORMATION FOR FABRICATION, CONSTRUCTION AND ERECTION OF STAIRS. STAIR DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS LISTED HEREIN AND THE GOVERNING BUILDING CODE. SEE SHEET S1.2 FOR LOADS.
 - ALL STAIR AND HANDRAIL DESIGN SHALL CONFORM TO OSHA 3124-12R, 29 CFR 1917 AND THE GEORGIA STATE BUILDING CODE REQUIREMENTS FOR FIXED STAIRS.
 - STAIR PLATFORMS, TREAD AND RISERS TO BE CONSTRUCTED WITH A CHECKERED FLOOR PLATE (OR EQUIVALENT) SURFACE. APPROPRIATE MATERIALS FOR TREAD NOSING, TOE PLATE, ETC. SHALL BE INCLUDED IN DESIGN AND DETAILED ON STAIR SHOP DRAWING SUBMITTALS.
 - STAIR STRINGERS ADJACENT TO EXISTING CONCRETE WALLS SHALL BE ATTACHED TO WALLS WITH EXPANSION ANCHORS (SIZE AND QUANTITY AS REQUIRED TO RESIST CODE PRESCRIBED LOADING).
 - ALL HANDRAIL AND POST TO BE 1 1/2" (NOMINAL) STANDARD PIPE, FIELD WELD TO STAIR STRINGERS AND PLATFORM FRAMING. PROVIDE TOE PLATE 1/4"x4"xCONT. WITH ALL HANDRAIL AT PLATFORMS.
 - STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO THE ANS/AISC 360-05 STEEL CONSTRUCTION MANUAL (THIRTEENTH EDITION, 2005), "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND CONSTRUCTION OF STRUCTURAL STEEL FOR BUILDINGS".
 - STRUCTURAL STEEL PIECES SHALL MEET THE FOLLOWING MATERIAL STRENGTH REQUIREMENTS:
 - WIDE FLANGE SHAPES ASTM A992 (YIELD STRENGTH = 50 KSI)
 - ANGLES ASTM A36 (YIELD STRENGTH = 36 KSI)
 - WELDING SHALL CONFORM TO THE CURRENT SPECIFICATION OF THE AMERICAN WELDING SOCIETY, AWS. WELDING ELECTRODES SHALL BE E-70 SERIES WITH A MINIMUM FILLET WELD SIZE OF 3/16".
 - ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS FOR APPLICABLE WELD TYPE.
 - STEEL MEMBERS SHALL NOT BE FIELD CUT OR MODIFIED WITHOUT PERMISSION OF THE STRUCTURAL ENGINEER.
 - FABRICATION AND ERECTION SHALL BE IN CONFORMANCE WITH THE AISC CODE OF STANDARD PRACTICE.
 - ALL STRUCTURAL STEEL SHALL BE CLEANED TO MEET THE REQUIREMENTS OF SSPC-SP2 AND RECEIVED ONE COAT OF SHOP PRIMER (MIN. 2.0 MILS D.F.T.).
 - CONTRACTOR TO COORDINATE LOCATION OF NEW W12 WITH STAIR MANUFACTURER.
 - STAIR MANUFACTURER IS RESPONSIBLE FOR VERIFICATION OF ALL EXISTING CONDITIONS AND DIMENSIONS OF EXISTING CONCRETE CONSTRUCTION PRIOR TO DESIGN OR FABRICATION OF STEEL STAIR. FIELD VERIFY PLUMBNESS OF CONCRETE WALLS, LOCATION OF EXISTING EQUIPMENT AND/OR FRAMING MEMBERS THAT MAY REQUIRE RELOCATION OR DEMOLITION. NOTIFY ENGINEER OF ANY DISCREPANCIES FOUND IN THE FIELD PRIOR TO CONSTRUCTION.



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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303



Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: DGM
DRAWN BY: TLC
CHECKED BY: CLL
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
NEW STAIR ELEVATION & SECTIONS

DRAWING NO. S-1.0
REV. NO. 0
DATE: 06/14/13

DESIGN LOADS:

DEAD LOADS:
 CONCRETE = 150 PCF
 SOIL WEIGHT = 125 PCF
 STAIRS = 20 PCF

LIVE LOADS:
 ACTIVE SOIL PRESSURE AGAINST WALLS = 33 PCF
 SURCHARGE LOADING AGAINST PRECAST VAULT WALLS = HS-20 TRUCKS
 STAIRS AND VAULT PANEL SYSTEM = 100 PSF

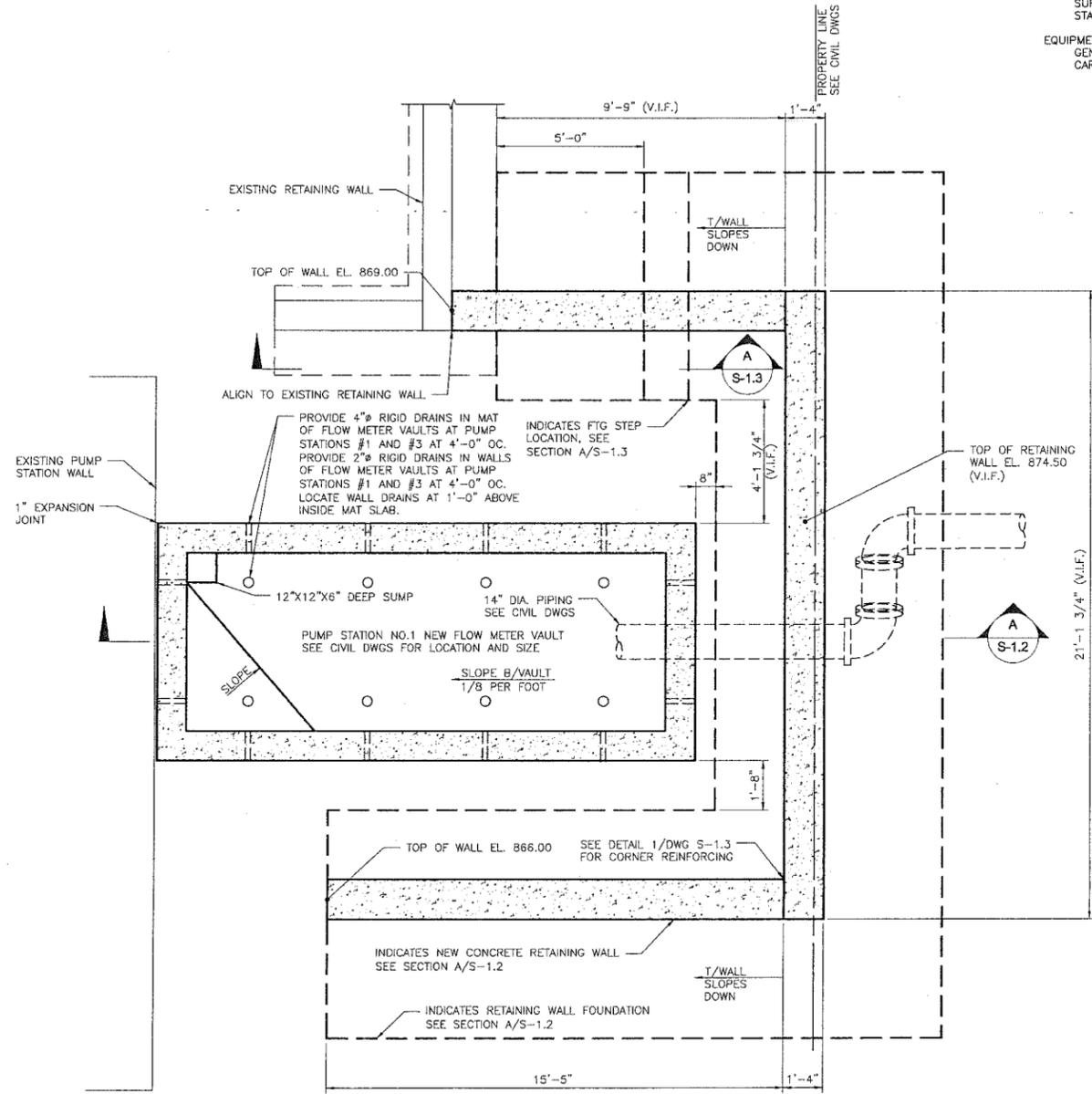
EQUIPMENT WEIGHTS:
 GENERATOR = 19,850 LBS
 CARBON SCRUBBER = 2,500 LBS

GENERAL NOTES:

- ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF GEORGIA BUILDING CODE, 2006.
- THE DESIGN AND SAFETY OF BRACING, TEMPORARY SUPPORTS, OPEN EXCAVATIONS, MEANS AND METHODS OF CONSTRUCTION AND SEQUENCES OF CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
- CONTRACTOR SHALL FIELD VERIFY ACTUAL EXISTING DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURAL COMPONENTS WITH STRUCTURAL DRAWINGS PRIOR TO FABRICATION OF ANY MATERIALS.
- V.I.F. = VERIFY IN FIELD.
- ALL DIMENSIONS, REINFORCING, AND MATERIAL SPECIFICATIONS OF EXISTING STRUCTURES FOR ANALYSIS AND DETAILING OF NEW COMPONENTS WERE TAKEN FROM SULLIVAN'S CREEK PUMPING STATION DRAWINGS DATED JANUARY 1976. NOTIFY OWNER/ENGINEER OF ANY DISCREPANCIES ENCOUNTERED.
- CONTRACTOR SHALL COORDINATE ALL PLANS, SECTIONS, AND DETAILS SHOWN ON DRAWING PACKAGE WITH PROJECT SPECIFICATIONS.
- SEE DWG S-5.1 FOR TYPICAL VAULT DETAILS.
- PROVIDE FILTER FABRIC ON GRAVEL SIDE OF VAULT/RETAINING WALLS AND FLOOR MATS AT RIGID DRAINAGE PIPING LOCATIONS. FABRIC SHALL EXTEND A MINIMUM OF 1'-0" ON ALL SIDES OF DRAINAGE PIPING.

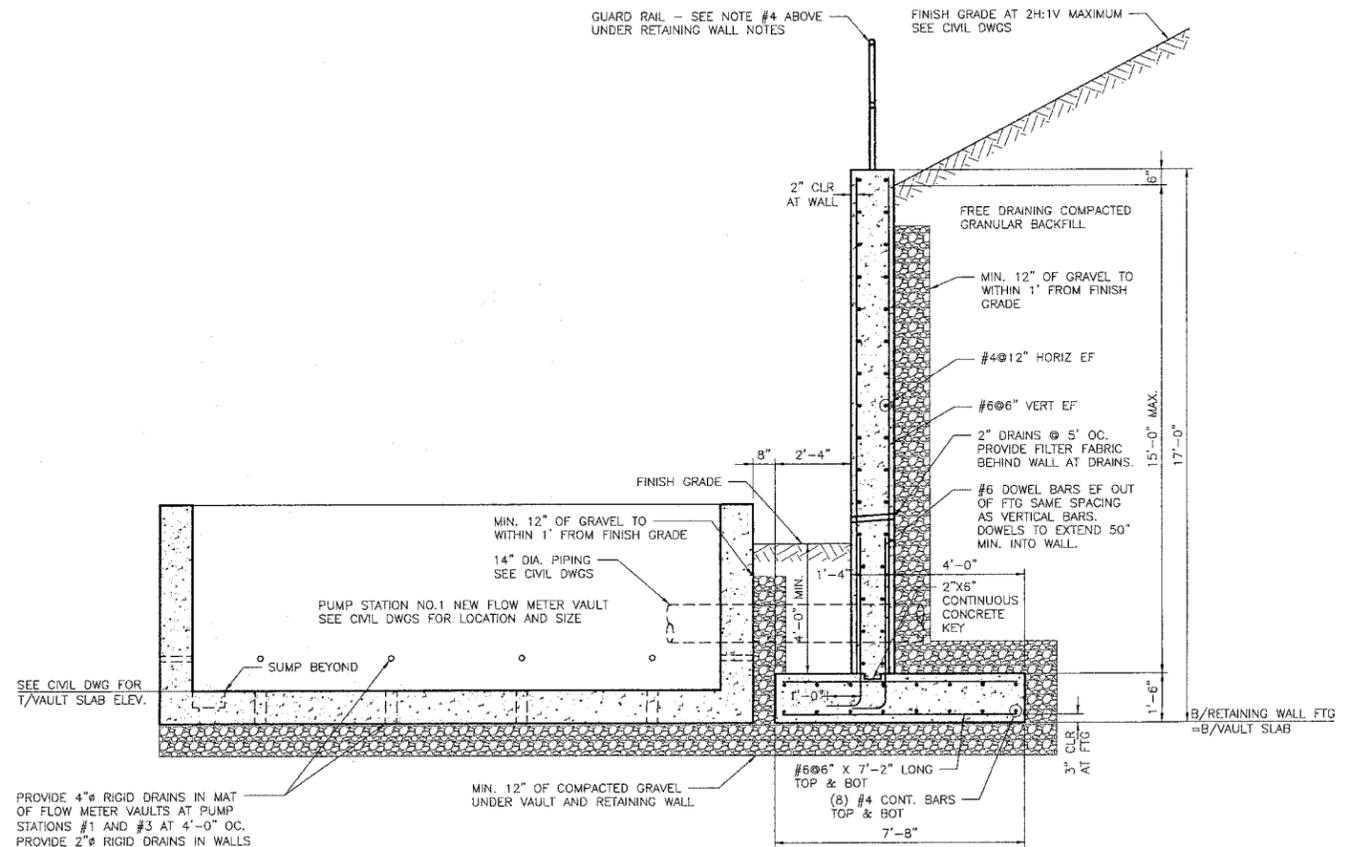
RETAINING WALL NOTES:

- SEE CIVIL DRAWINGS FOR LOCATION OF PRECAST VAULTS AND PIPING.
- THE RETAINING WALL DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING CAPACITY OF 3,000 PSF. THE CONTRACTOR MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA TO VERIFY THE ALLOWABLE BEARING CAPACITY PRIOR TO CONSTRUCTION.
- THE CONCRETE COMPRESSIVE STRENGTH IS 4,000 PSI AT 28 DAYS. THE REINFORCING STEEL IS GRADE 60 PSI.
- PROVIDE GUARD RAILS AT THE TOP OF THE WALL IF NOT PROTECTED BY A FENCE FOR WALL HEIGHTS 3'-0" OR MORE ABOVE GRADE. SEE CIVIL DWGS FOR FENCING/GUARD RAILS.
- THE RETAINING WALL MUST BE CONTINUOUS AND INTEGRAL WITH THE SIDE WING WALLS BEFORE BACKFILLING. PROVIDE CORNER BARS IN WALL AND FOOTING AS PER DETAIL 1/S-1.3.
- FOR PIPE PENETRATIONS THROUGH RETAINING WALL SEE DETAILS ON DWGS M-0.3 AND S-1.3.



RETAINING WALL PLACEMENT PLAN

SCALE: 3/8" = 1'-0"



SECTION A
 SCALE: 3/8" = 1'-0"



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DEPARTMENT OF
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 141 PRYOR ST. SW
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 30303

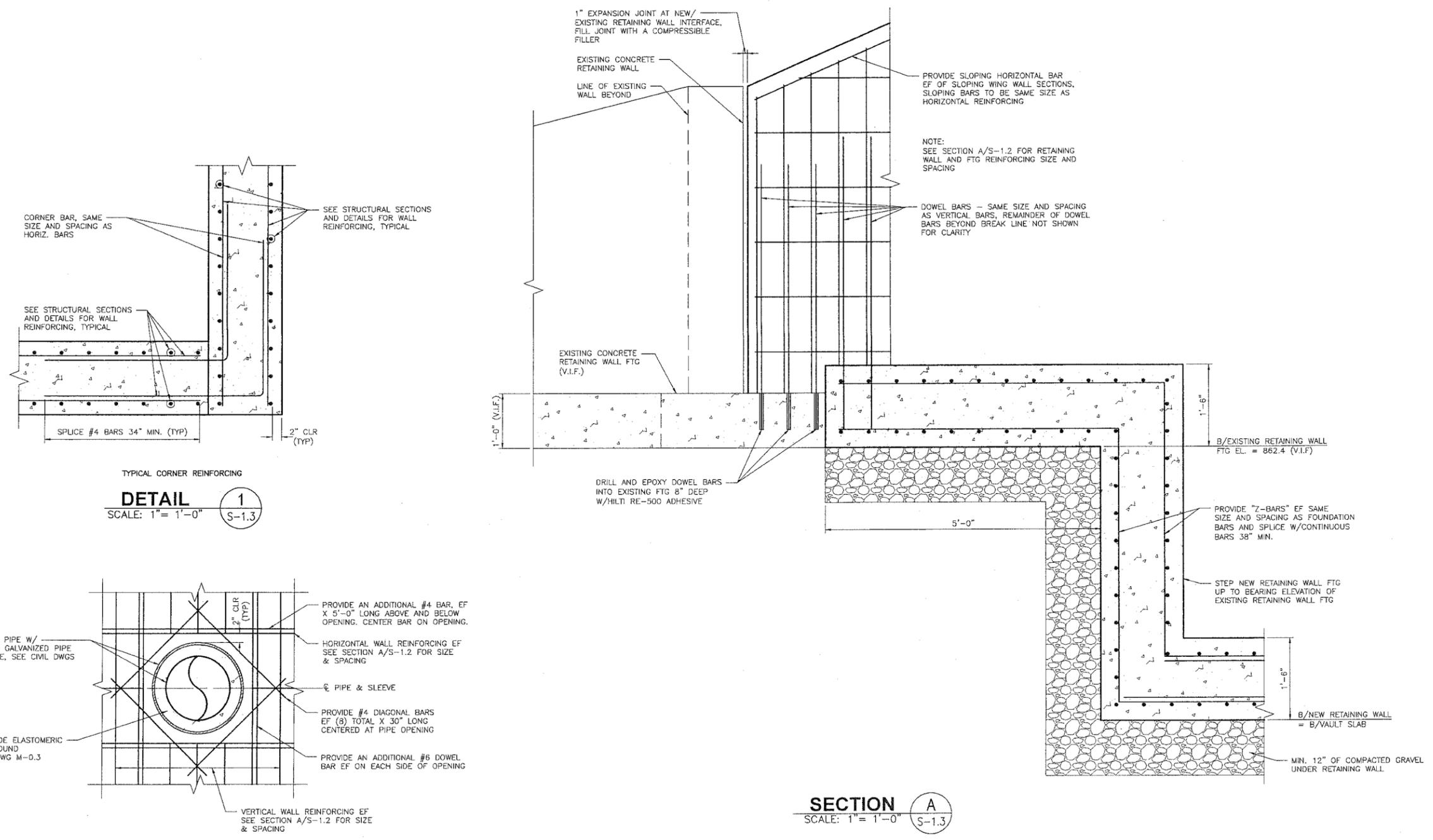


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 770-475-8994
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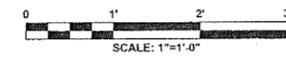
DESIGN BY:
 DGM
 DRAWN BY:
 CFB
 CHECKED BY:
 CLL
 JOB NO.
 147024

FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 PUMP STATION NO. 1
 RETAINING WALL DETAILS SHT. 1

DRAWING NO.
S-1.2
 REV. NO.
 0
 DATE:
 06/14/13

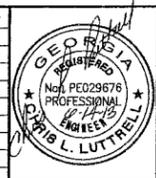


NEW RETAINING WALL PENETRATION DETAIL
SCALE: 1" = 1'-0"



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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
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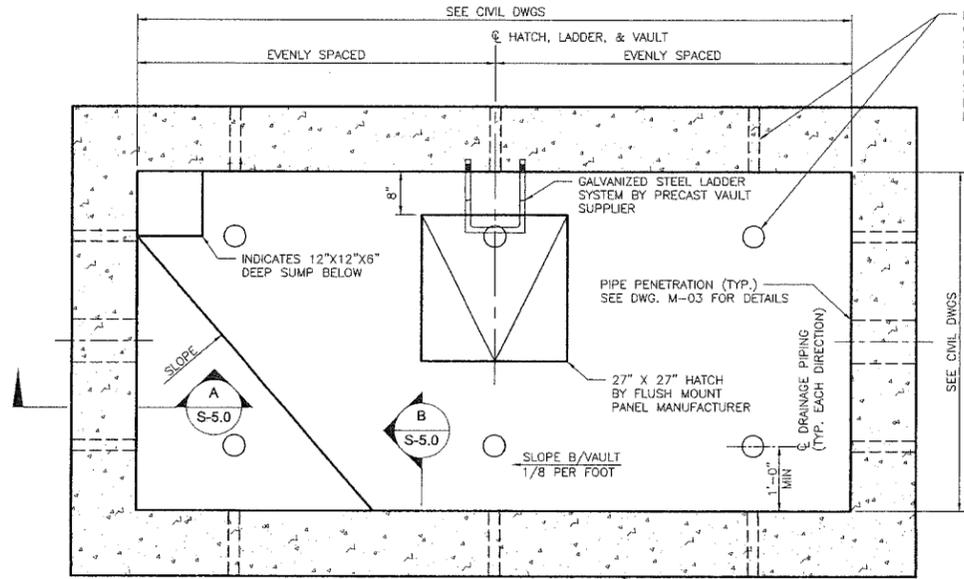
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DRAWN BY: CFB
CHECKED BY: CLL
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
RETAINING WALL DETAILS SHT. 2

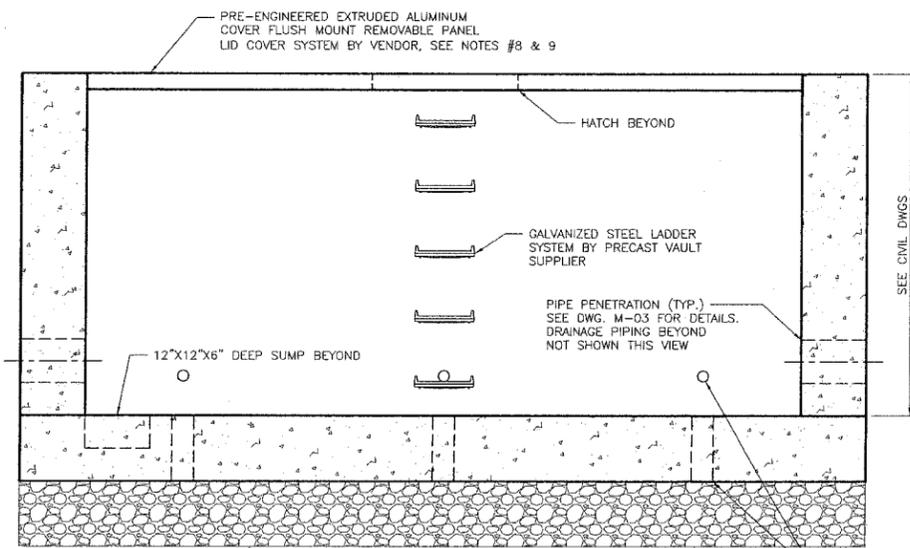
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REV. NO. 0
DATE: 06/14/13

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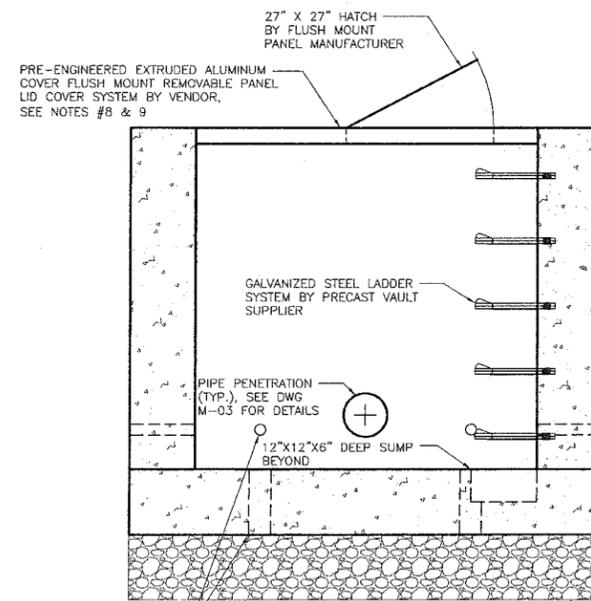
1. SEE CIVIL DRAWINGS FOR LOCATIONS AND SIZES OF VAULTS.
2. VAULTS TO BE ENGINEERED AND STAMPED BY AN ENGINEER LICENSED IN THE STATE OF GEORGIA TO SUIT THE SOIL CONDITIONS (PRESUMED TO BE CAPABLE OF 3,000 PSF).
3. THE CONCRETE EQUIPMENT SLABS DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING CAPACITY OF 3,000 PSF. THE CONTRACTOR MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA TO VERIFY THE ALLOWABLE BEARING CAPACITY PRIOR TO CONSTRUCTION.
4. VAULT SIDEWALLS MUST BE CAPABLE OF HS-20 TRUCK LOADING.
5. VAULTS MUST HAVE A 12"x12"x6" DEEP SUMP.
6. VAULTS MUST HAVE EMBEDDED LIFTING LUGS.
7. VAULTS MAY BE MADE IN MULTIPLE PIECES TO SUIT SHIPPING BUT MUST HAVE SEALS TO PREVENT LEAKAGE WHEN ASSEMBLED.
8. VAULT COVERS TO BE ALUMINUM FLAT PANELS ENGINEERED BY THE SUPPLIER AND STAMPED BY AN ENGINEER LICENSED IN THE STATE OF GEORGIA. THE COVERS MUST USE LEAK TIGHT CONSTRUCTION DETAILS. SEE SPECIFICATIONS FOR LOADING REQUIREMENTS.
9. PANELS TO BE INSTALLED SUCH THAT ACCESS HATCHES ARE LOCATED ALONG SIDE OF VAULT ADJACENT TO FLOW METER VALVES.
10. SEE DWG S-1.2 FOR GENERAL NOTES AND DESIGN LOAD.



TYPICAL PRECAST VAULT PLAN



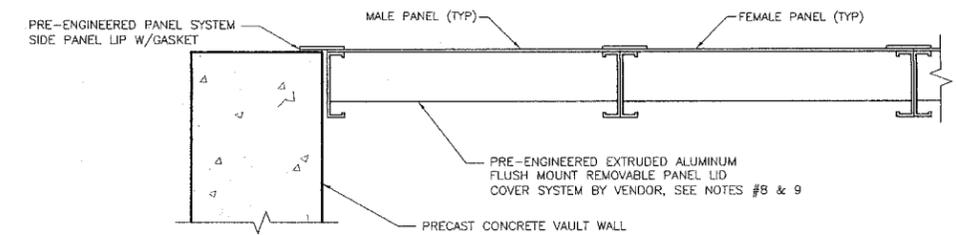
FRONT ELEVATION



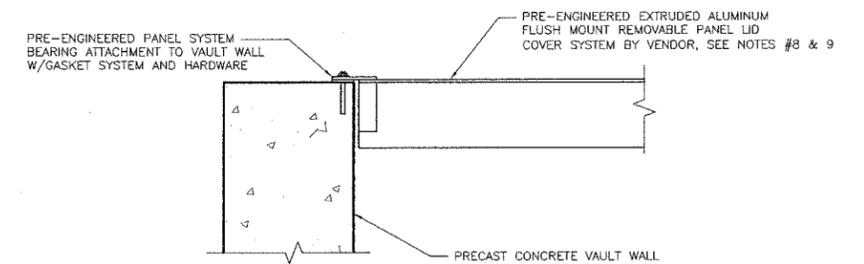
RIGHT ELEVATION

TYPICAL VAULT

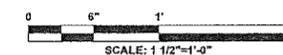
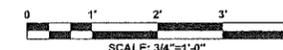
SCALE: 3/4" = 1'-0"



SECTION A
SCALE: 1-1/2" = 1'-0" S-5.0



SECTION B
SCALE: 1-1/2" = 1'-0" S-5.0



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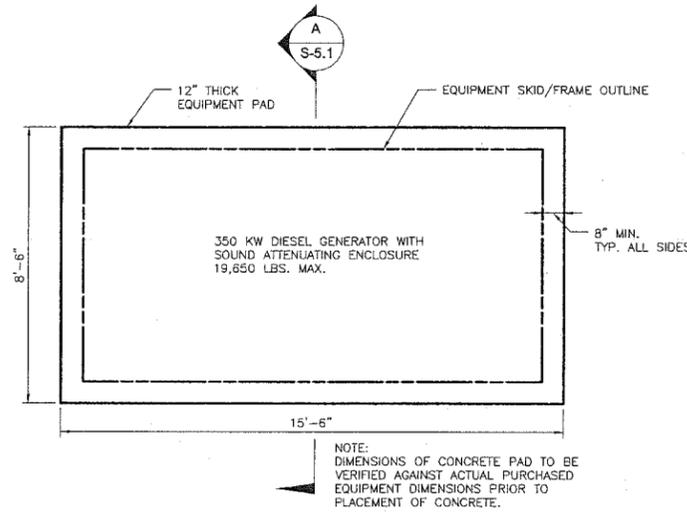
DESIGN BY: DGM
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JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
TYPICAL STRUCTURAL DETAILS SHT. 1

DRAWING NO. S-5.0
REV. NO. 0
DATE: 06/14/13

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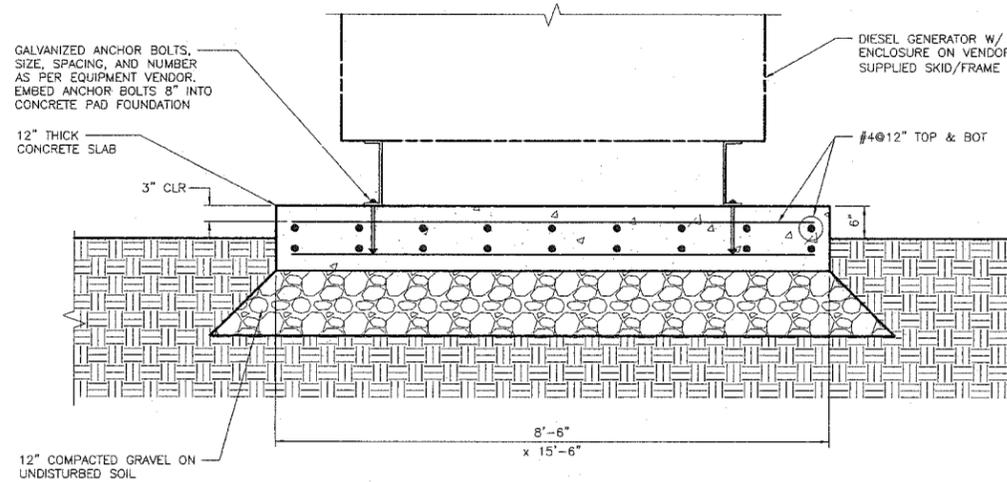
1. SEE CIVIL DRAWINGS FOR LOCATION OF THE GENERATORS.
2. CONTRACTOR TO VERIFY SLAB DIMENSIONS WITH ACTUAL EQUIPMENT PURCHASED.
3. THE CONCRETE EQUIPMENT SLABS DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING CAPACITY OF 3,000 PSF. THE CONTRACTOR MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA TO VERIFY THE ALLOWABLE BEARING CAPACITY PRIOR TO CONSTRUCTION.
4. THE CONCRETE COMPRESSIVE STRENGTH IS 4,000 PSI AT 28 DAYS. THE REINFORCING STEEL IS GRADE 60 KSI.
5. SEE DWG S-1.2 FOR GENERAL NOTES AND DESIGN LOADS FOR EQUIPMENT.



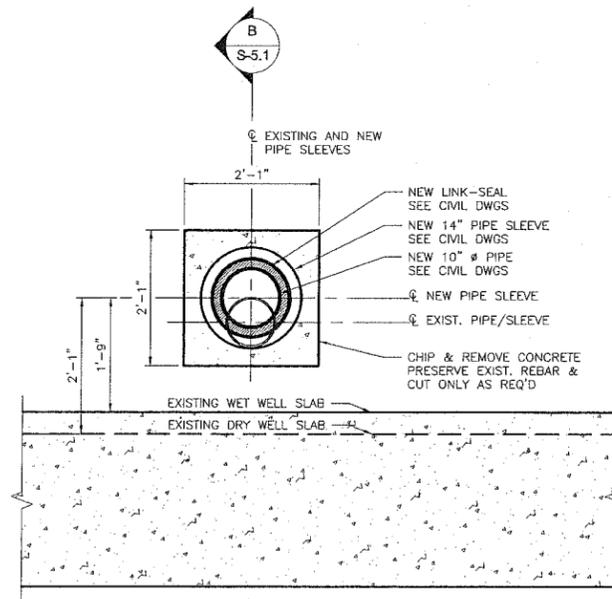
TYPICAL EMERGENCY GENERATOR SLAB

PLAN

SCALE: 3/8" = 1'-0"

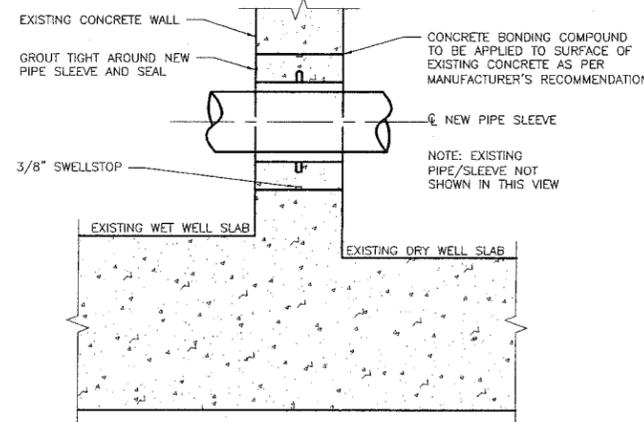


SECTION A
SCALE: 3/4" = 1'-0" S-5.1

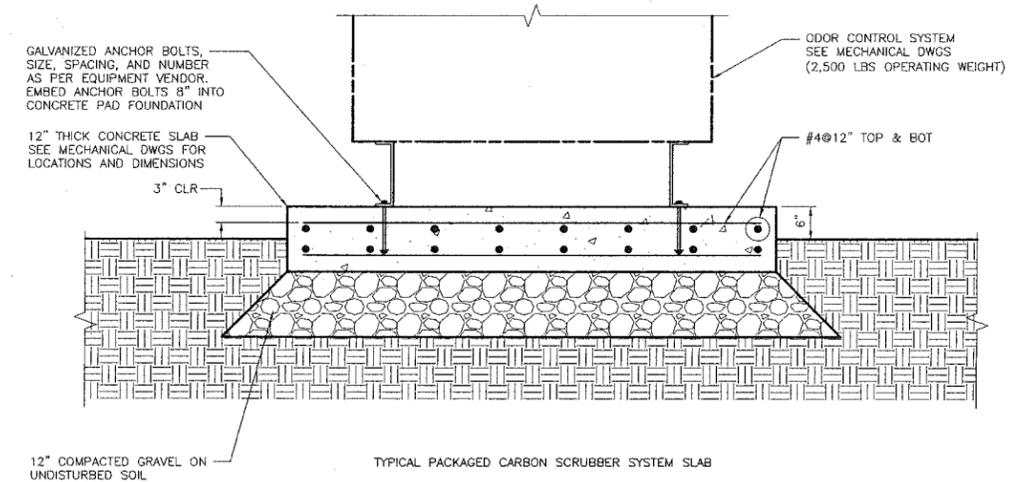


TYPICAL PUMP DISCHARGE PENETRATION IN COMMON WALL

DETAIL 1
SCALE: 3/4" = 1'-0" S-5.1

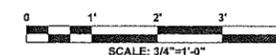


SECTION B
SCALE: 3/4" = 1'-0" S-5.1



TYPICAL PACKAGED CARBON SCRUBBER SYSTEM SLAB

SECTION C
SCALE: 3/4" = 1'-0" S-5.1



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DESIGN BY:
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CFB
CHECKED BY:
CLL
JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
TYPICAL STRUCTURAL DETAILS SHT. 2

DRAWING NO.
S-5.1
REV. NO.
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DATE:
06/14/13

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VALVE SCHEDULE											
TAG NUMBER	SERVICE	LOCATION	TYPE	SIZE (in)	MAXIMUM FLOW (GPM)	MAXIMUM PRESSURE (PSIG)	OPERATOR TYPE	ELECTRICAL REQUIREMENTS	THROTTLING	ENDS	REMARKS
PV-1011		PUMP STATION #1	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-1012		PUMP STATION #1	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-1021		PUMP STATION #1	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-1022		PUMP STATION #1	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-1031		PUMP STATION #1	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-1032		PUMP STATION #1	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-1041		PUMP STATION #1	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-1042		PUMP STATION #1	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-1051		PUMP STATION #1	ECCENTRIC PLUG	2			MANUAL	NA	NO	FLANGED	
PV-1061		PUMP STATION #1	ECCENTRIC PLUG	14	3000		MANUAL	NA	NO	FLANGED	
PV-2011		PUMP STATION #2	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-2012		PUMP STATION #2	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-2021		PUMP STATION #2	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-2022		PUMP STATION #2	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-2031		PUMP STATION #2	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-2032		PUMP STATION #2	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-2041		PUMP STATION #2	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-2042		PUMP STATION #2	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-2051		PUMP STATION #2	ECCENTRIC PLUG	2			MANUAL	NA	NO	FLANGED	
PV-2061		PUMP STATION #2	ECCENTRIC PLUG	14	3000		MANUAL	NA	NO	FLANGED	
PV-3011		PUMP STATION #3	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-3012		PUMP STATION #3	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-3021		PUMP STATION #3	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-3022		PUMP STATION #3	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-3031		PUMP STATION #3	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-3032		PUMP STATION #3	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-3041		PUMP STATION #3	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-3042		PUMP STATION #3	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-3051		PUMP STATION #3	ECCENTRIC PLUG	2			MANUAL	NA	NO	FLANGED	
PV-3061		PUMP STATION #3	ECCENTRIC PLUG	16	3000		MANUAL	NA	NO	FLANGED	
PV-4011		PUMP STATION #4	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-4012		PUMP STATION #4	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
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PV-4032		PUMP STATION #4	ECCENTRIC PLUG	8	1500		MANUAL	NA	NO	FLANGED	
PV-4041		PUMP STATION #4	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-4042		PUMP STATION #4	ECCENTRIC PLUG	10	1100		MANUAL	NA	NO	FLANGED	
PV-4051		PUMP STATION #4	ECCENTRIC PLUG	2			MANUAL	NA	NO	FLANGED	
PV-4061		PUMP STATION #4	ECCENTRIC PLUG	16	3000		MANUAL	NA	NO	FLANGED	
CV-1011		PUMP STATION #1	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-1021		PUMP STATION #1	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-1031		PUMP STATION #1	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
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CV-1051		PUMP STATION #1	CHECK VALVE	2			MANUAL	NA	NO	FLANGED	
CV-2011		PUMP STATION #2	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-2021		PUMP STATION #2	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-2031		PUMP STATION #2	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-2041		PUMP STATION #2	CHECK VALVE	10	1100		MANUAL	NA	NO	FLANGED	
CV-2051		PUMP STATION #2	CHECK VALVE	2			MANUAL	NA	NO	FLANGED	
CV-3011		PUMP STATION #3	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-3021		PUMP STATION #3	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
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CV-3041		PUMP STATION #3	CHECK VALVE	10	1100		MANUAL	NA	NO	FLANGED	
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CV-4011		PUMP STATION #4	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-4021		PUMP STATION #4	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-4031		PUMP STATION #4	CHECK VALVE	8	1500		MANUAL	NA	NO	FLANGED	
CV-4041		PUMP STATION #4	CHECK VALVE	10	1100		MANUAL	NA	NO	FLANGED	
CV-4051		PUMP STATION #4	CHECK VALVE	2			MANUAL	NA	NO	FLANGED	
		PUMP STATION #1,#2,#3 AND #4	BALL VALVE	1							

LEGEND	SYSTEM DESIGN CONDITIONS				PIPING				VALVING		TEST REQUIREMENTS		REMARKS
	SYSTEM	TEMP (deg F)	PRESSURE (psi)	MATERIAL	DIAMETER RANGE	SCH / CLASS	LINING / COATING	JOINT TYPE	BLOCK	CHECK	MINIMUM PRESSURE (psi)	MEDIUM	
SW	SEWER WATER			PVC	2"	80	NA	SOCKET WELD	BALL	BALL CHECK	15	WATER	120
SW	SEWER WATER	60	80	Ductile iron pipe	6" and larger	350	EPOXY/PAINT	FLANGED	PLUG	SWING CHECK	150	WATER	120
PW	POTABLE WATER			COPPER	1"	L	NA	SOLDER	BALL	BALL CHECK	120	WATER	120
NPW	NONPOTABLE WATER			COPPER	1" AND SMALLER	L	NA	SOLDER	BALL	CHECK	120	WATER	120

PROCESS PUMP SCHEDULE												
TAG NUMBER	NAME	LOCATION	PUMP TYPE	RATING POINT			MINIMUM SUCTION DISCHARGE SIZE (IN)	PUMP RPM (MAX)	SEAL TYPE	MOTOR (hp)	DRIVE TYPE	REMARKS
				CAPACITY (GPM)	HEAD (FEET)	NP/SHR (FEET)						
PUMP P-101	PROCESS PUMP 101	PUMP STATION #1	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-102	PROCESS PUMP 102	PUMP STATION #1	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-103	PROCESS PUMP 103	PUMP STATION #1	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-104	SUMP PUMP 104	PUMP STATION #1	SUBMERSIBLE		30		NA			1		
PUMP P-201	PROCESS PUMP 201	PUMP STATION #2	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-202	PROCESS PUMP 202	PUMP STATION #2	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-203	PROCESS PUMP 203	PUMP STATION #2	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-204	SUMP PUMP 204	PUMP STATION #2	SUBMERSIBLE		30		NA			1		
PUMP P-301	PROCESS PUMP 301	PUMP STATION #3	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-302	PROCESS PUMP 302	PUMP STATION #3	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-303	PROCESS PUMP 303	PUMP STATION #3	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-304	SUMP PUMP 304	PUMP STATION #3	SUBMERSIBLE		30		NA			1		
PUMP P-401	PROCESS PUMP 401	PUMP STATION #4	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-402	PROCESS PUMP 402	PUMP STATION #4	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-403	PROCESS PUMP 403	PUMP STATION #4	DRY-PIT SUBMERSIBLE	1500	129	19.4	10	1775	MECH	85	VFD	
PUMP P-404	SUMP PUMP 404	PUMP STATION #4	SUBMERSIBLE		30		NA			1		

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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303



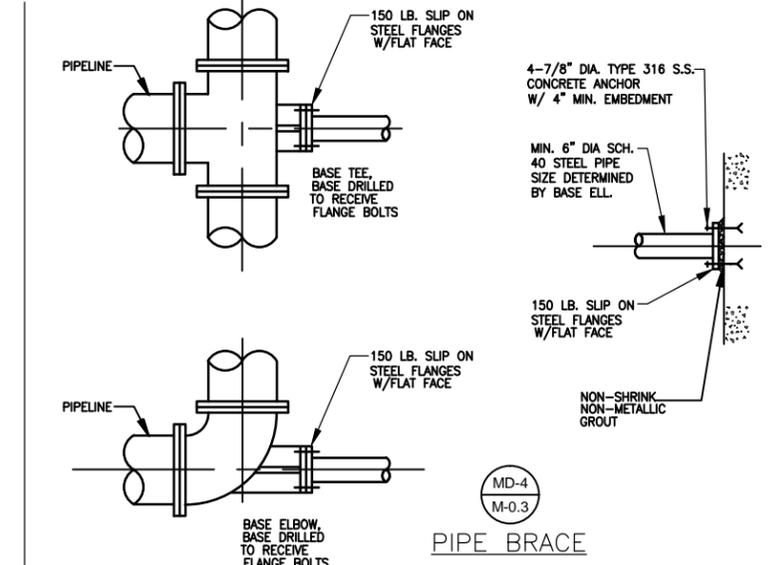
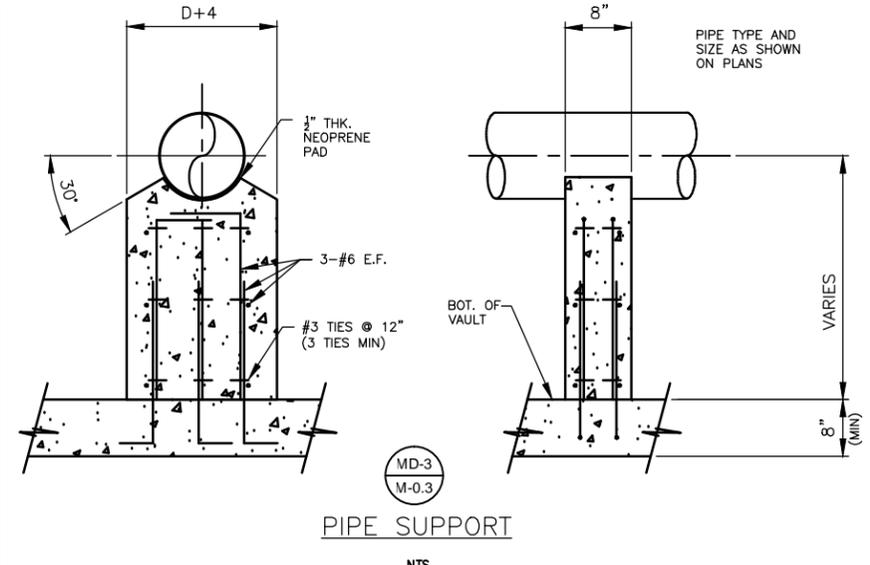
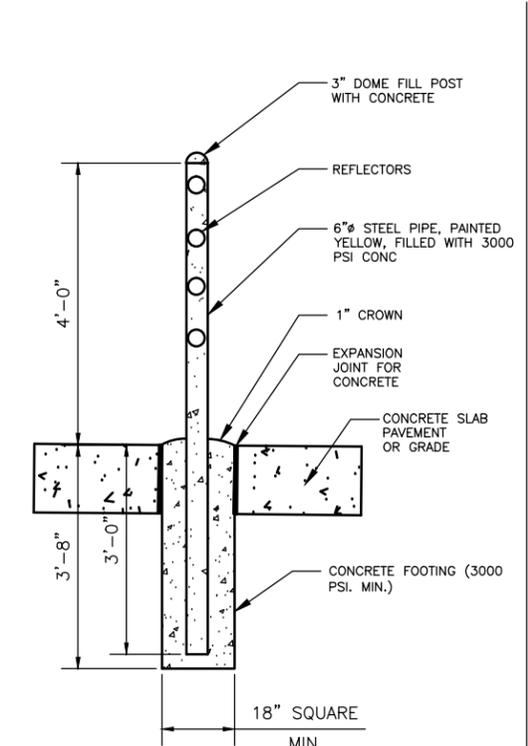
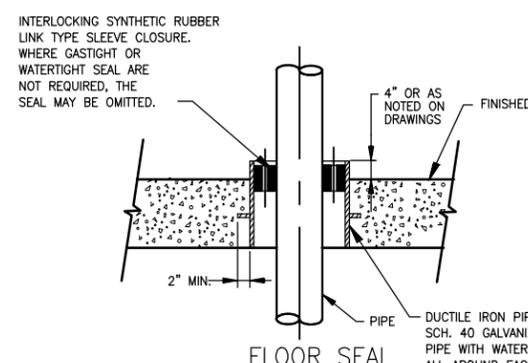
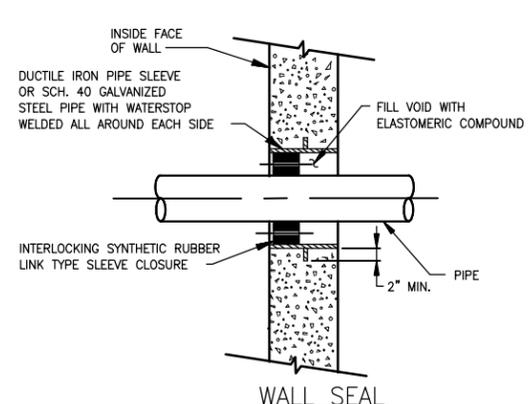
Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: KT
DRAWN BY: DKS
CHECKED BY: SH
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS 1-4
PIPING & EQUIPMENT SCHEDULES

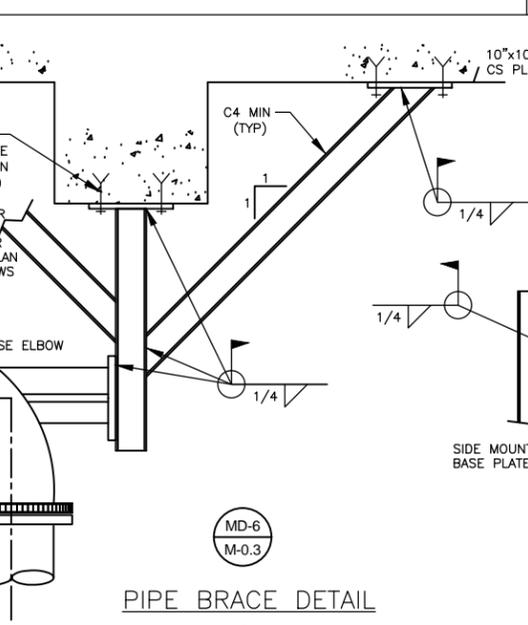
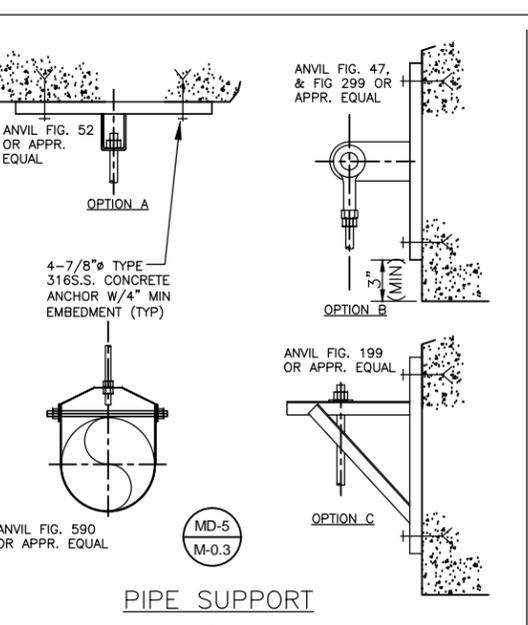
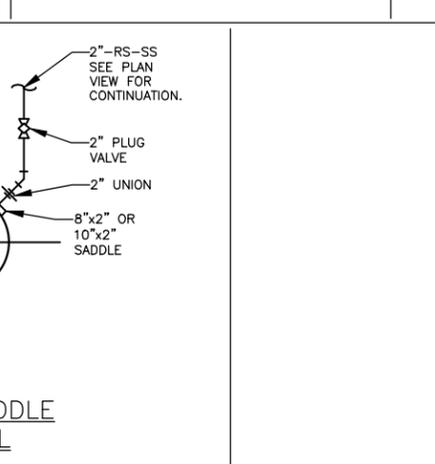
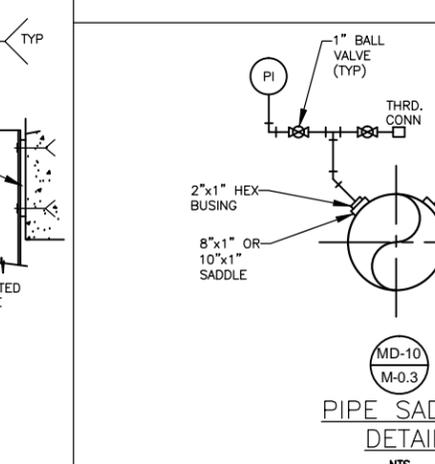
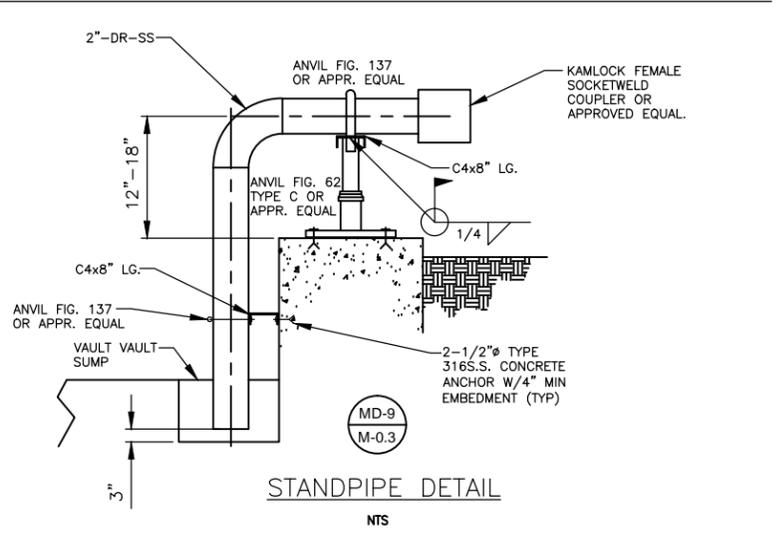
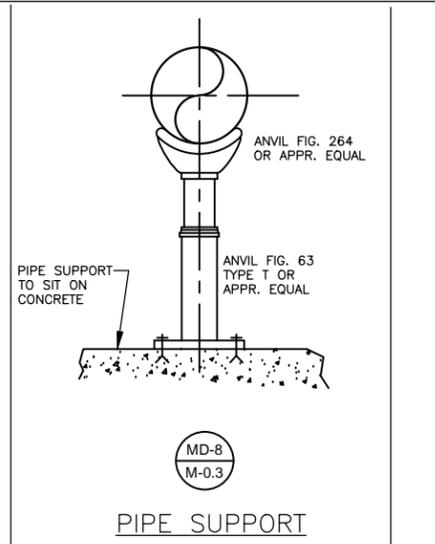
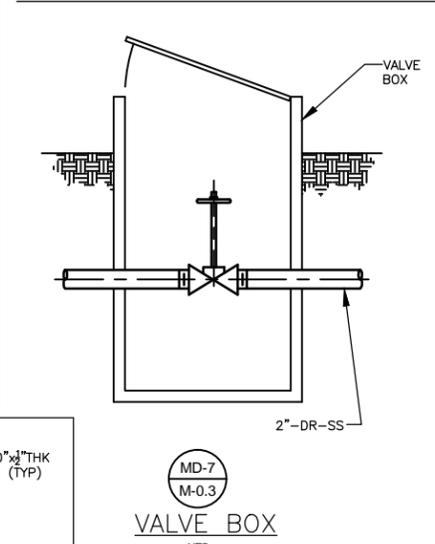
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REV. NO. 0
DATE: 06/14/13

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LINK TYPE WALL AND FLOOR SLEEVE CLOSURE
NTS

6" DIA. SCH 40 STEEL PIPE BOLLARD
CONCRETE FILLED
NTS



VALVE BOX
NTS

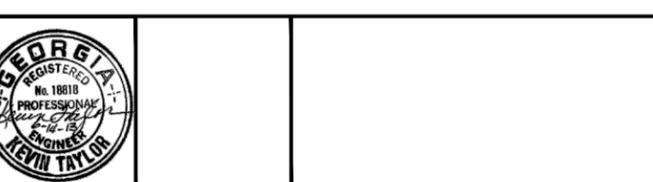
PIPE SUPPORT
NTS

PIPE SADDLE
DETAIL
NTS

PIPE SUPPORT
NTS

PIPE BRACE
DETAIL
NTS

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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

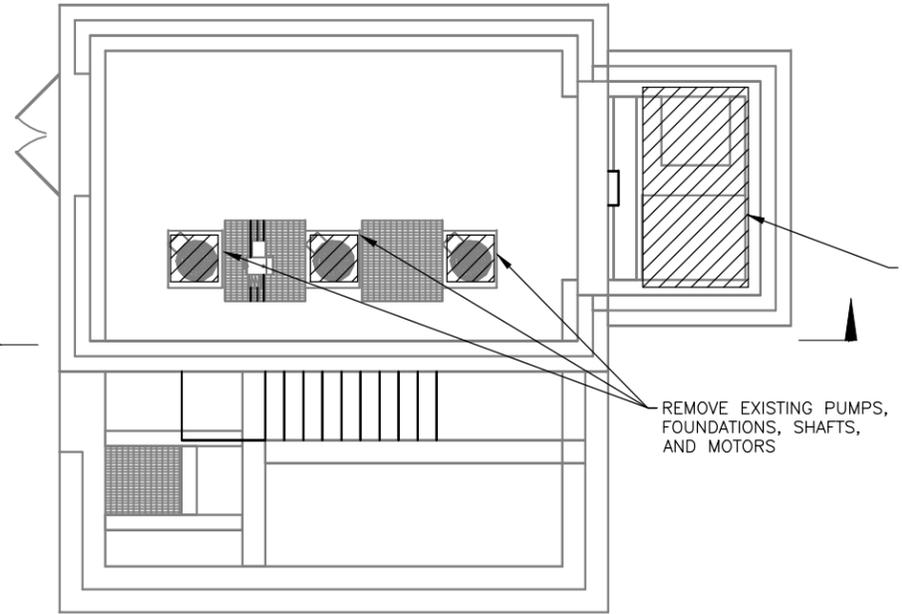
DESIGN BY:
KT
DRAWN BY:
DKS
CHECKED BY:
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATIONS NO. 1-4
DETAILS

DRAWING NO.
M-0.3
REV. NO.
0
DATE:
06/14/13



A
MD-1.1



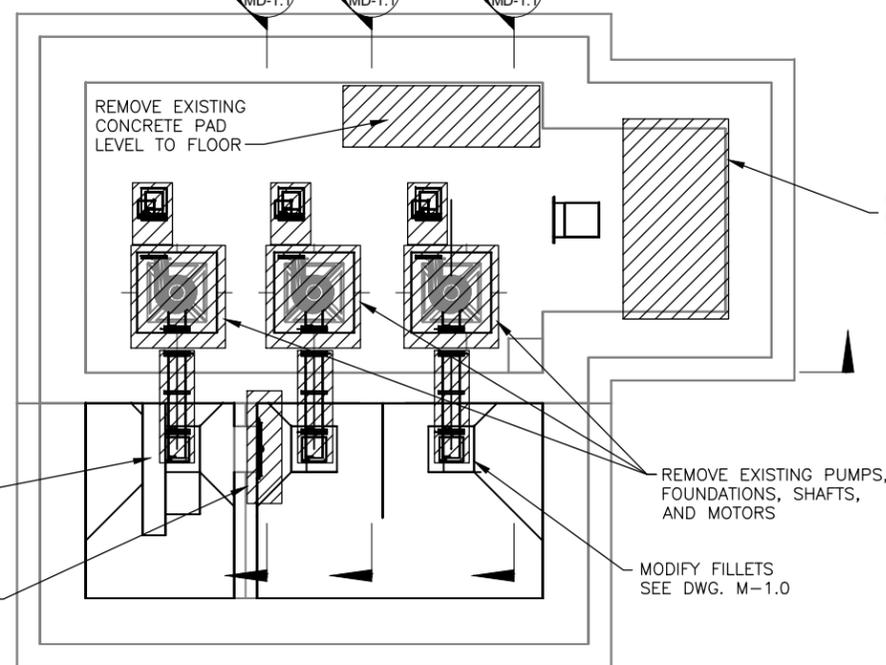
PLAN @ EL. 864.50
SCALE: 1/4" = 1'-0"

REMOVE EXISTING LADDER, PLATFORMS, AND LIFT SEE DWG. SD-1.0

REMOVE EXISTING PUMPS, FOUNDATIONS, SHAFTS, AND MOTORS

D MD-1.1
C MD-1.1
B MD-1.1

A
MD-1.1



PLAN @ EL. 839.67
SCALE: 1/4" = 1'-0"

REMOVE EXISTING LADDER, PLATFORMS, AND LIFT SEE DWG. SD-1.0

REMOVE EXISTING PUMPS, FOUNDATIONS, SHAFTS, AND MOTORS

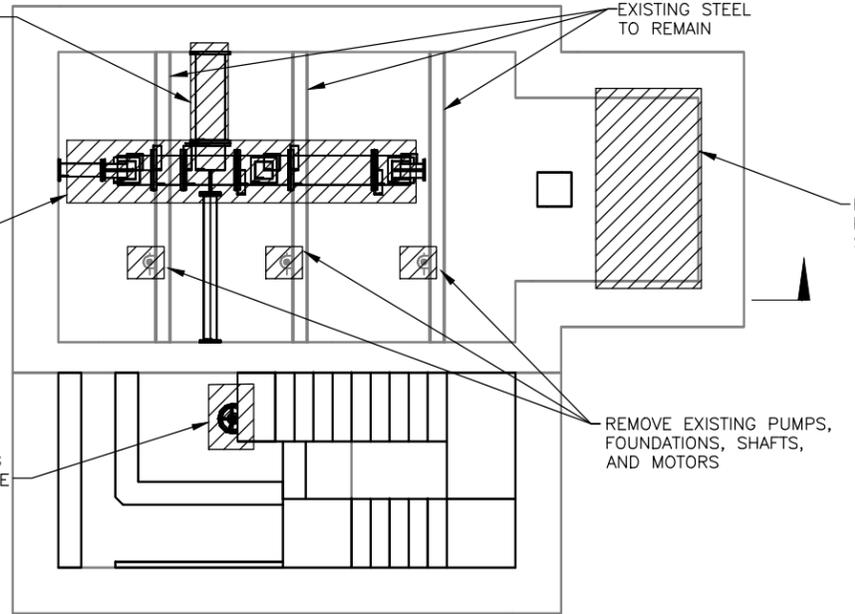
MODIFY FILLETS SEE DWG. M-1.0

REMOVE EXISTING SLIDE GATE VALVE

- NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1

REMOVE EXISTING PIPING

A
MD-1.1



PLAN @ EL. 855.75
SCALE: 1/4" = 1'-0"

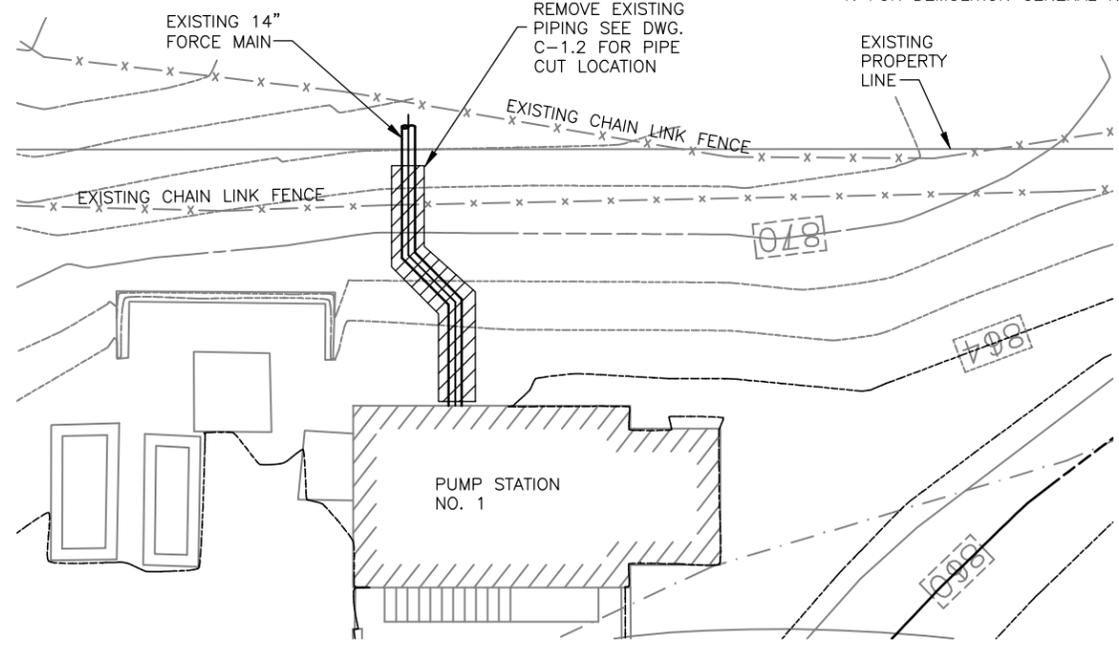
REMOVE EXISTING LADDER, PLATFORMS, AND LIFT SEE DWG. SD-1.0

REMOVE EXISTING PUMPS, FOUNDATIONS, SHAFTS, AND MOTORS

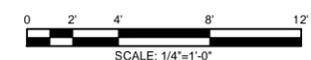
EXISTING STEEL TO REMAIN

REMOVE EXISTING PIPING AND SUPPORTS

REMOVE EXISTING SLIDE GATE VALVE



YARD PIPING DEMOLITION
SCALE: 1/8" = 1'-0"



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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303



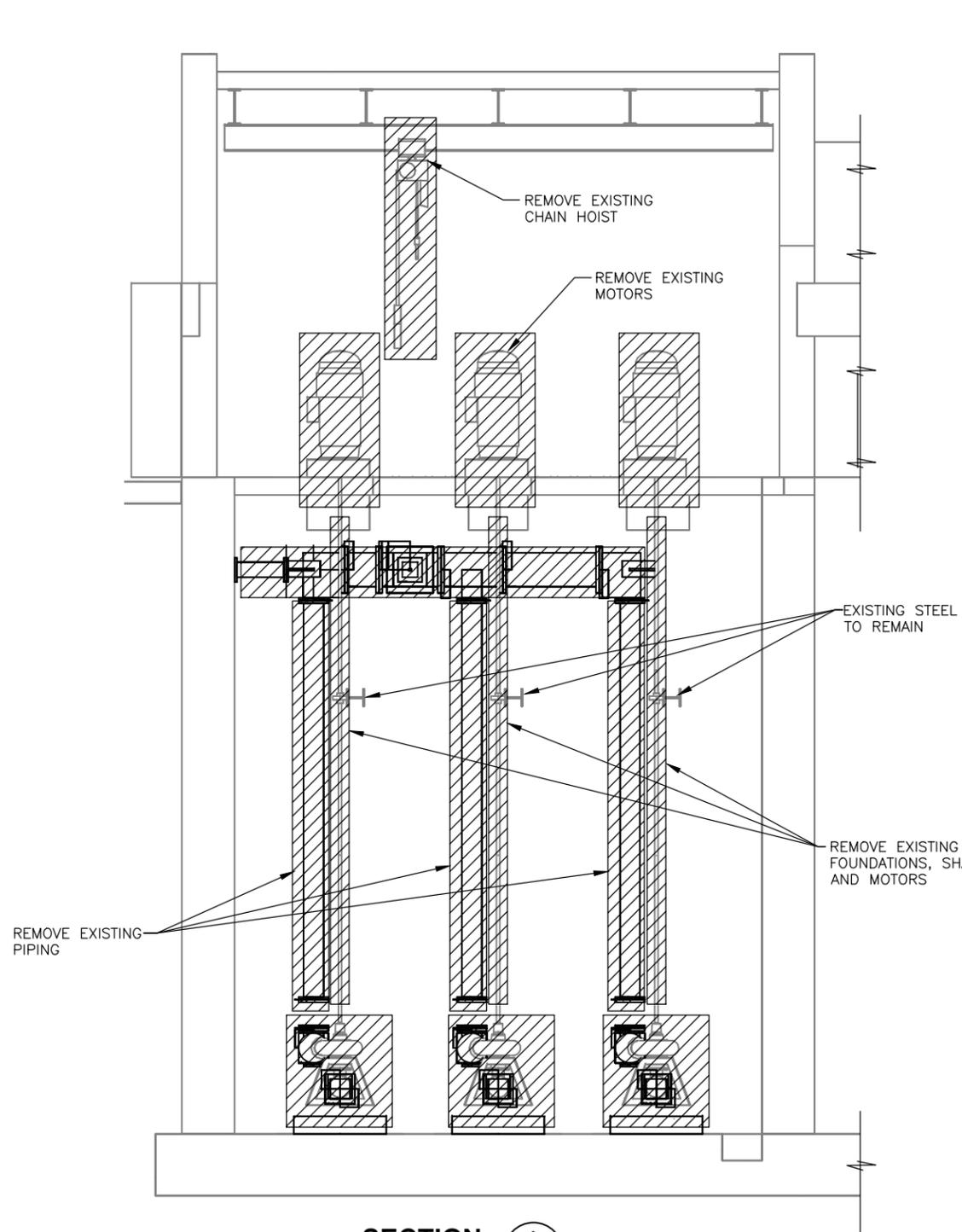
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
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DESIGN BY: KT
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JOB NO. 147024

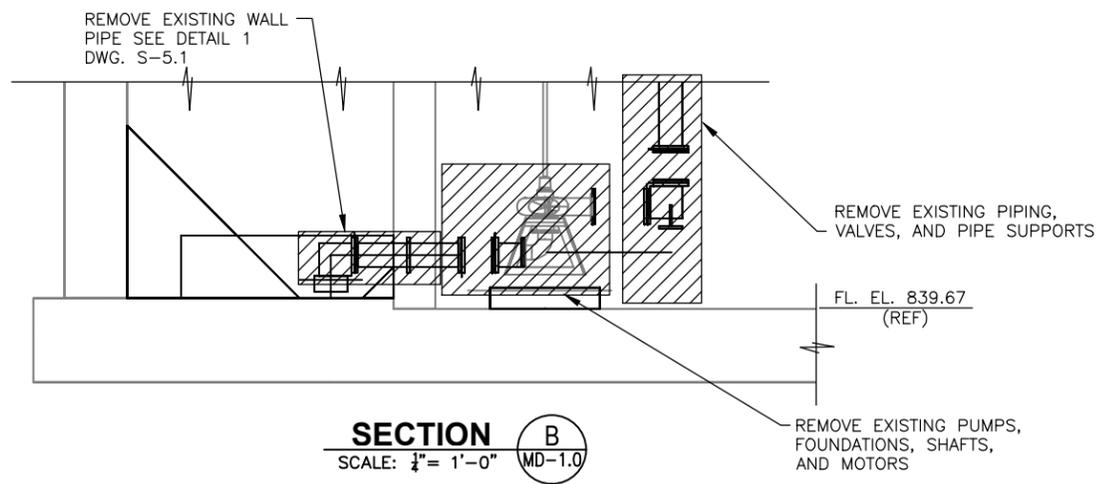
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
MECHANICAL DEMOLITION PLANS

DRAWING NO. MD-1.0
REV. NO. 0
DATE: 06/14/13

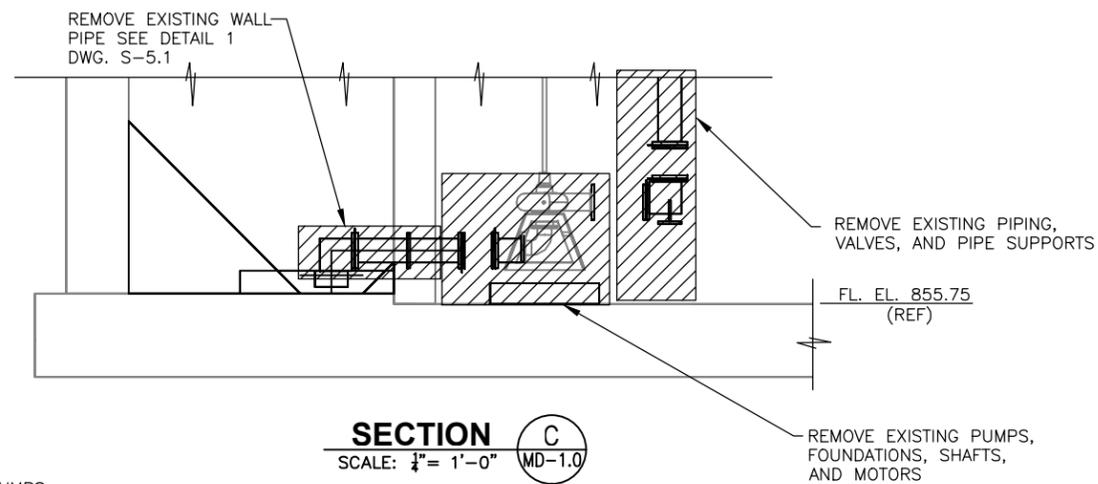
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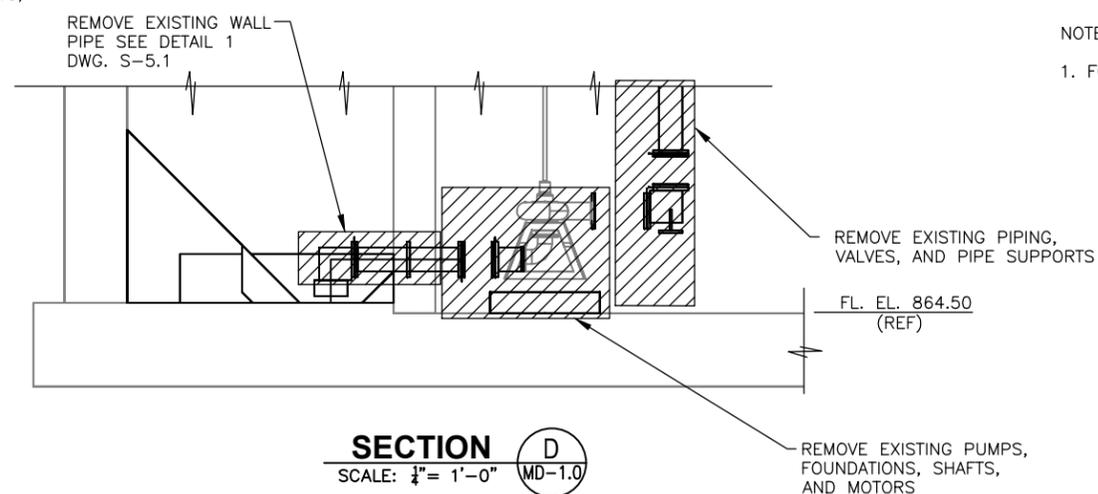
SECTION A
SCALE: 1/4" = 1'-0" MD-1.0



SECTION B
SCALE: 1/4" = 1'-0" MD-1.0

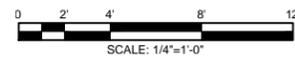


SECTION C
SCALE: 1/4" = 1'-0" MD-1.0



SECTION D
SCALE: 1/4" = 1'-0" MD-1.0

NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



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DEPARTMENT OF
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SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
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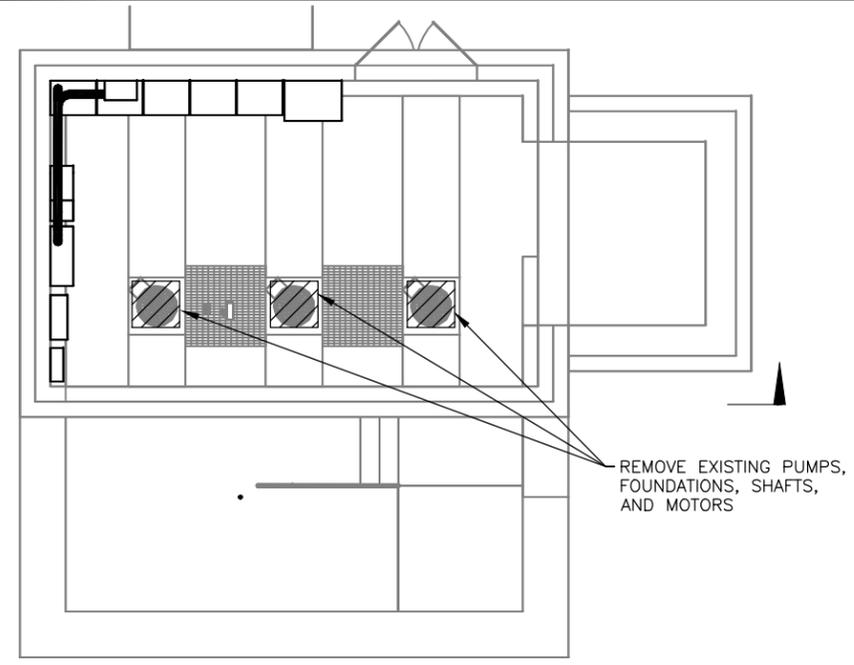
DESIGN BY:
KT
DRAWN BY:
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
MECHANICAL DEMOLITION SECTIONS

DRAWING NO.
MD-1.1
REV. NO.
0
DATE:
06/14/13

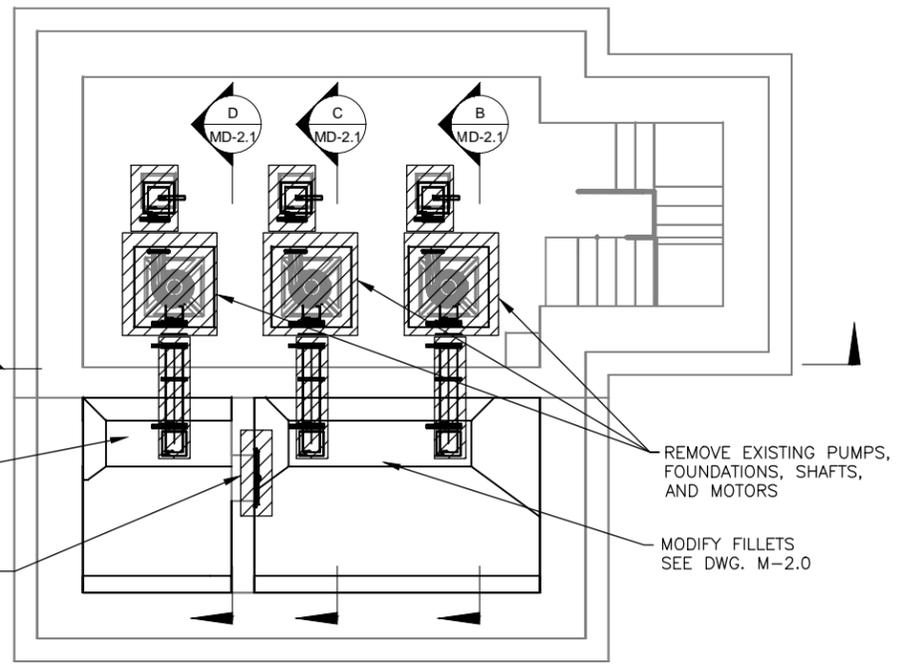


A
MD-2.1



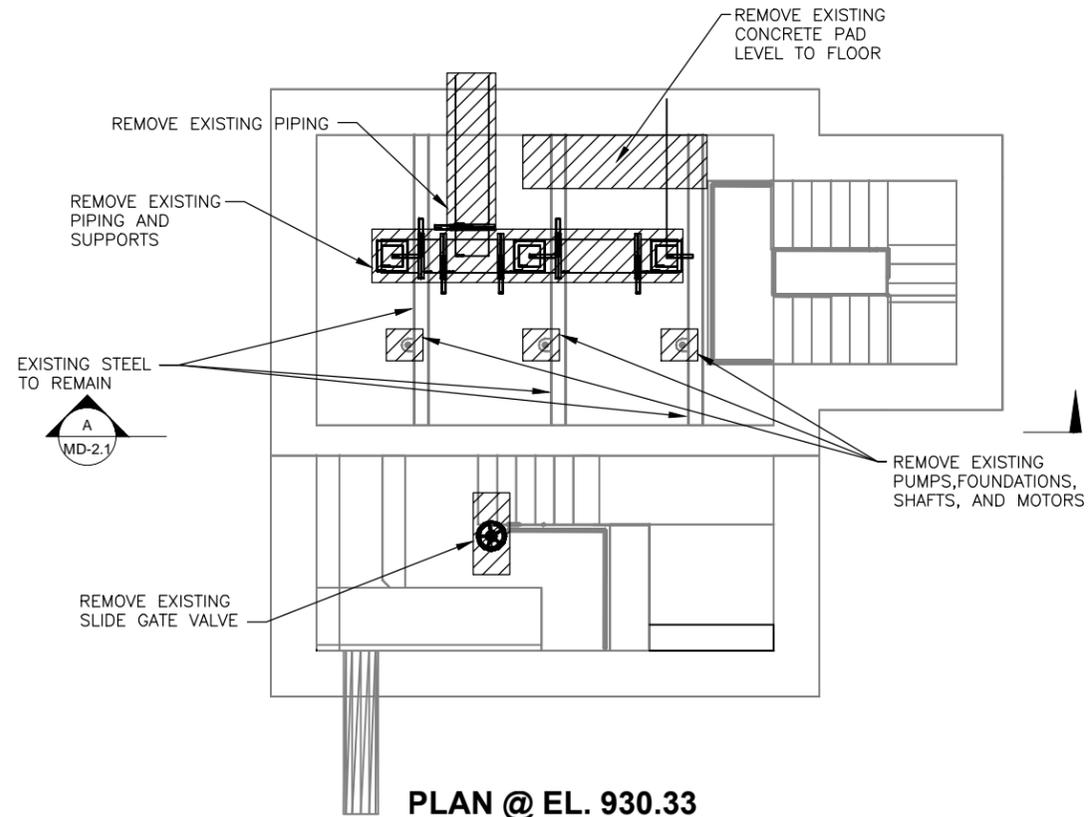
PLAN @ EL. 936.50
SCALE: 1/4" = 1'-0"

A
MD-2.1

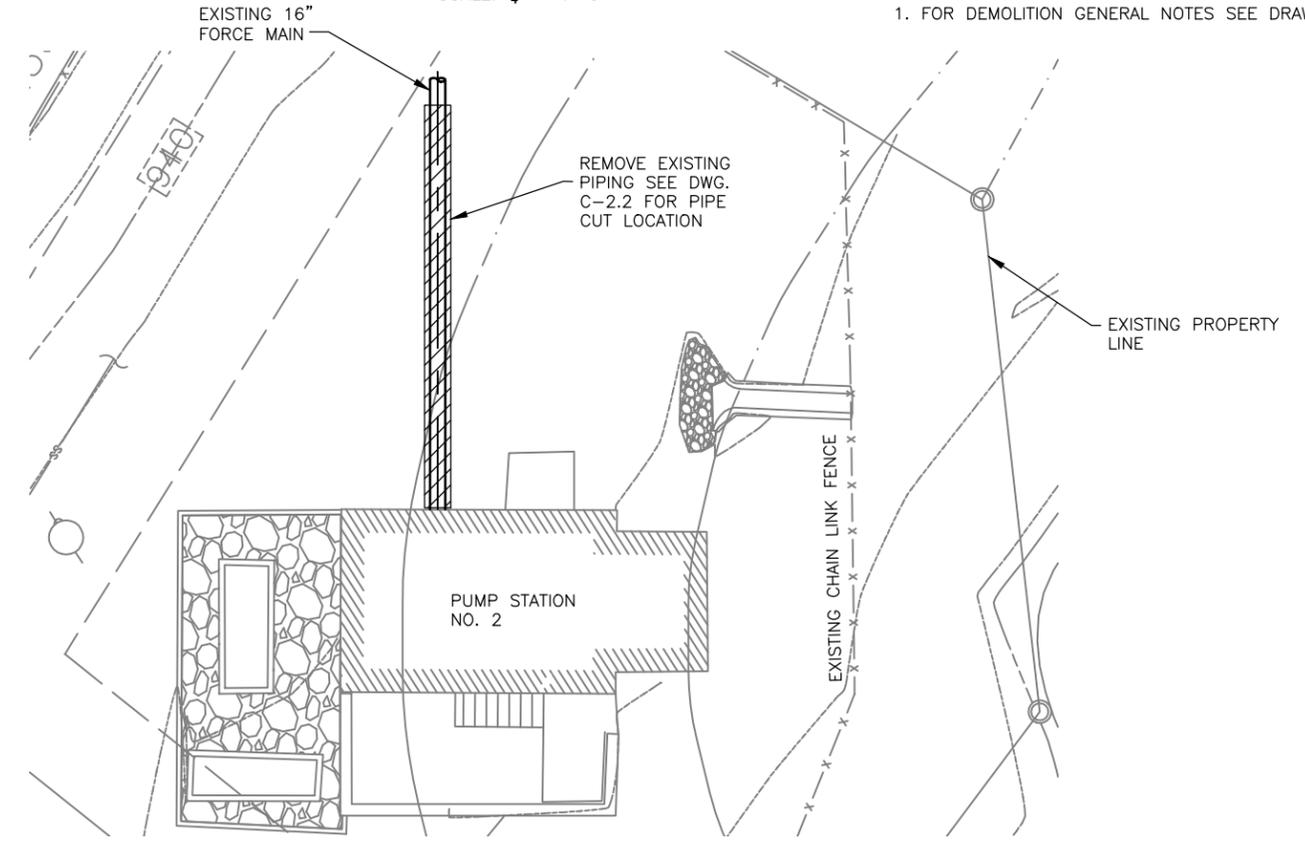


PLAN @ EL. 918.08
SCALE: 1/4" = 1'-0"

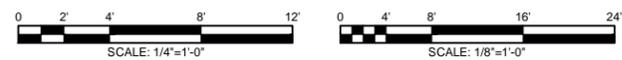
NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



PLAN @ EL. 930.33
SCALE: 1/4" = 1'-0"



YARD PIPING DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



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WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
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30303

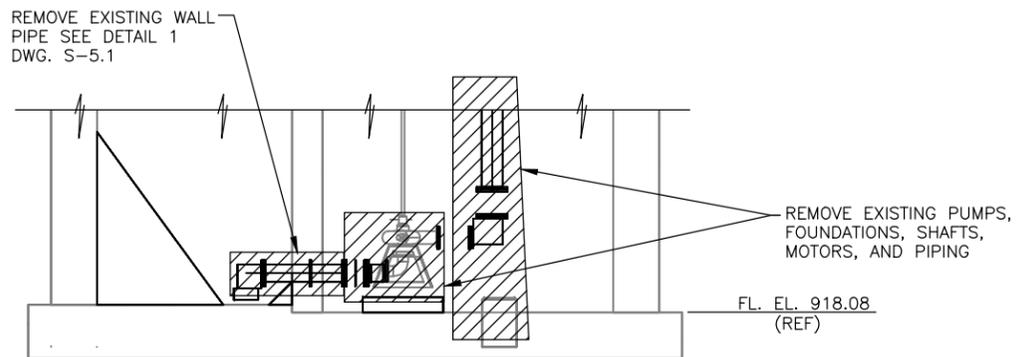


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ALPHARETTA, GEORGIA 30022
770-475-8994
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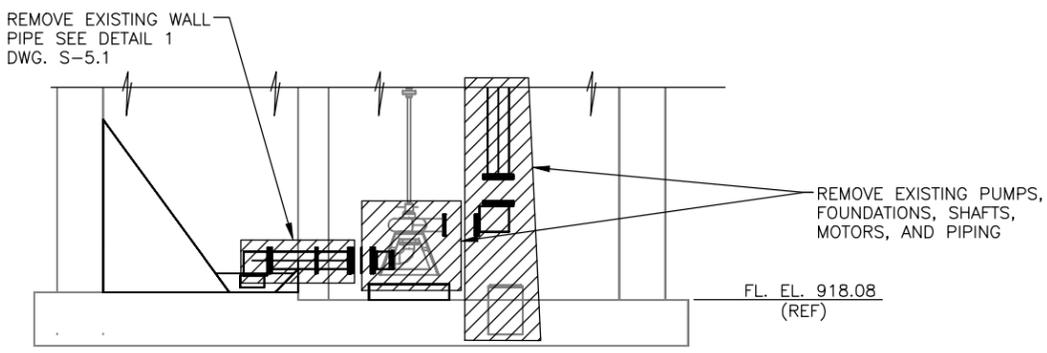
DESIGN BY:
KT
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
MECHANICAL DEMOLITION PLANS

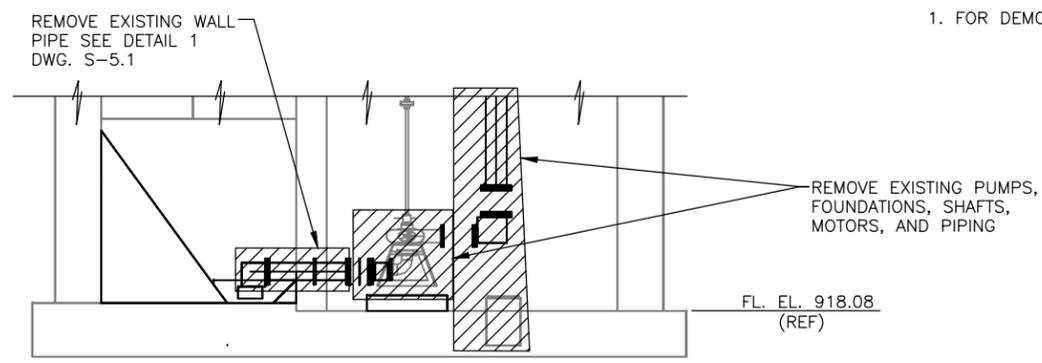
DRAWING NO.
MD-2.0
REV. NO.
0
DATE:
06/14/13



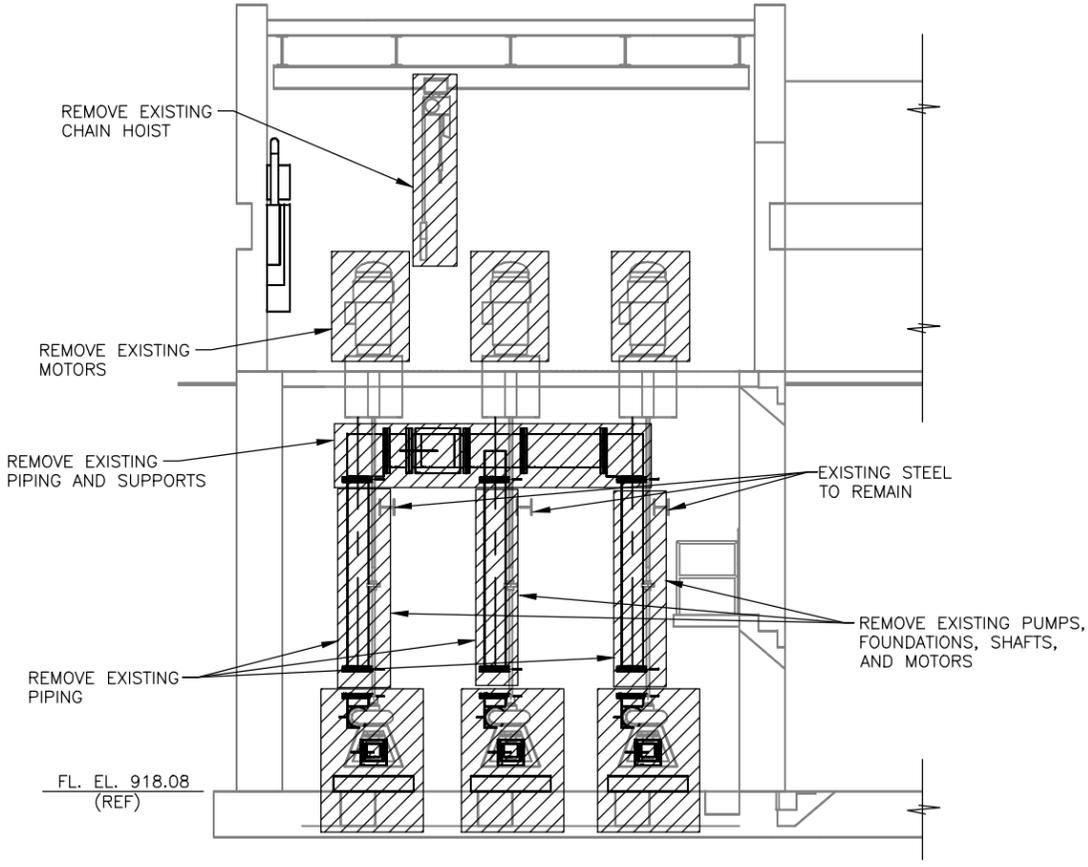
SECTION B
SCALE: 1/4" = 1'-0" MD-2.0



SECTION C
SCALE: 1/4" = 1'-0" MD-2.0

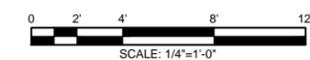


SECTION D
SCALE: 1/4" = 1'-0" MD-2.0



SECTION A
SCALE: 1/4" = 1'-0" MD-2.0

NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



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DEPARTMENT OF
WATER RESOURCES
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SUITE 600
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11560 GREAT OAKS WAY
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ALPHARETTA, GEORGIA 30022
770-475-8994
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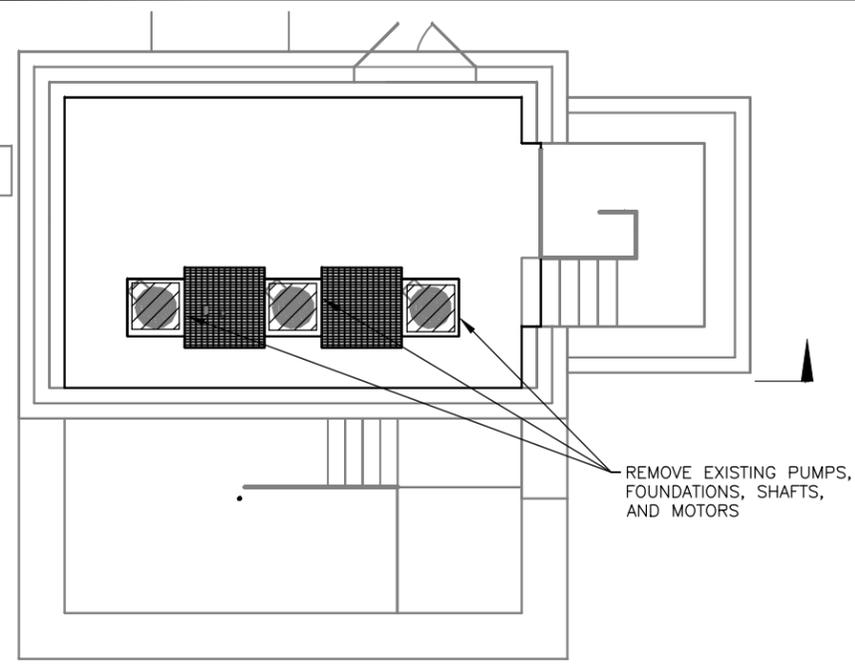
DESIGN BY:
KT
DRAWN BY:
DKS
CHECKED BY:
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
MECHANICAL DEMOLITION SECTIONS

DRAWING NO.
MD-2.1
REV. NO.
0
DATE:
06/14/13

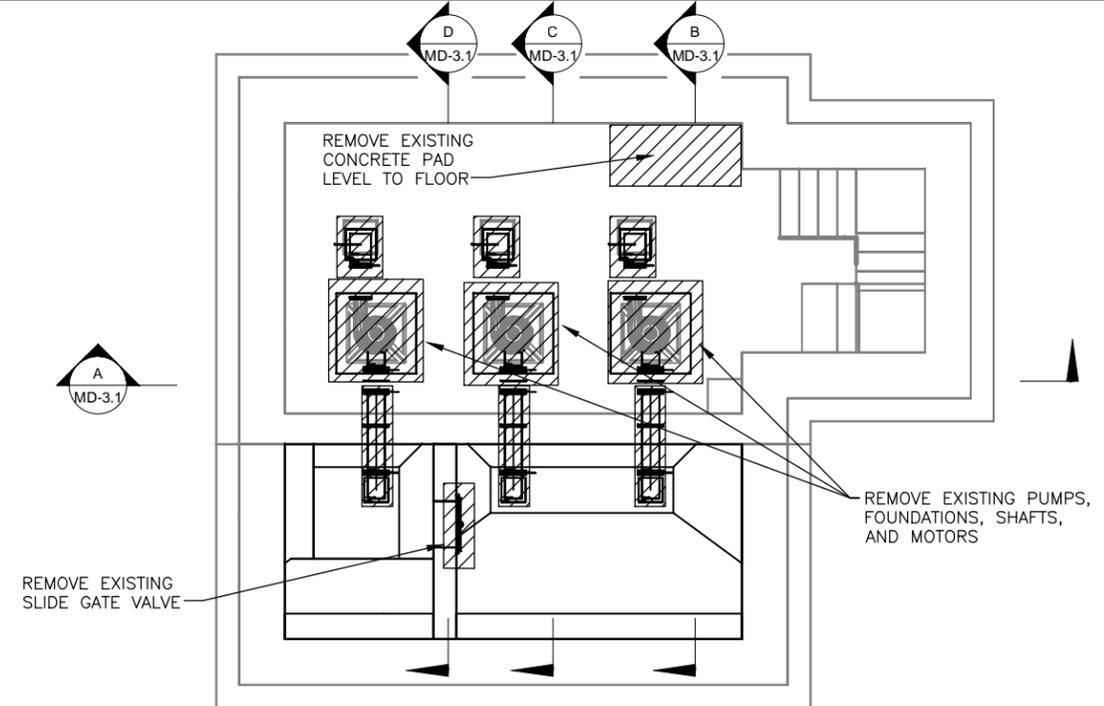


A
MD-3.1

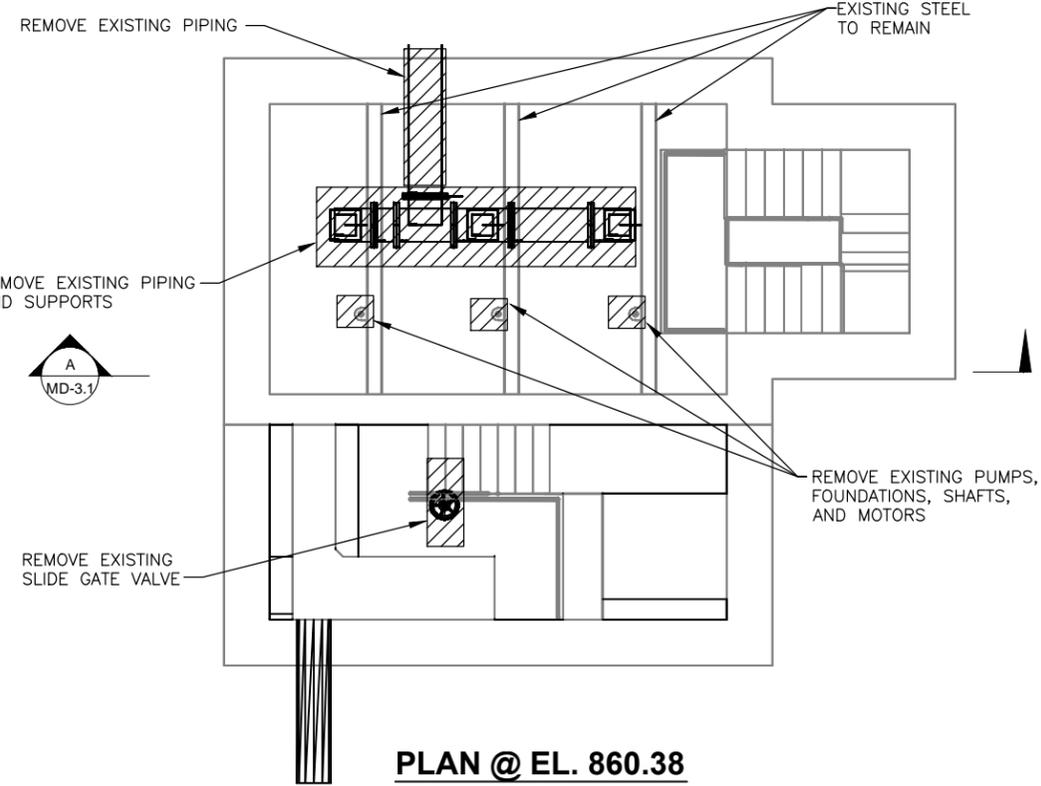


PLAN @ EL. 871.00
SCALE: 1/4" = 1'-0"

A
MD-3.1

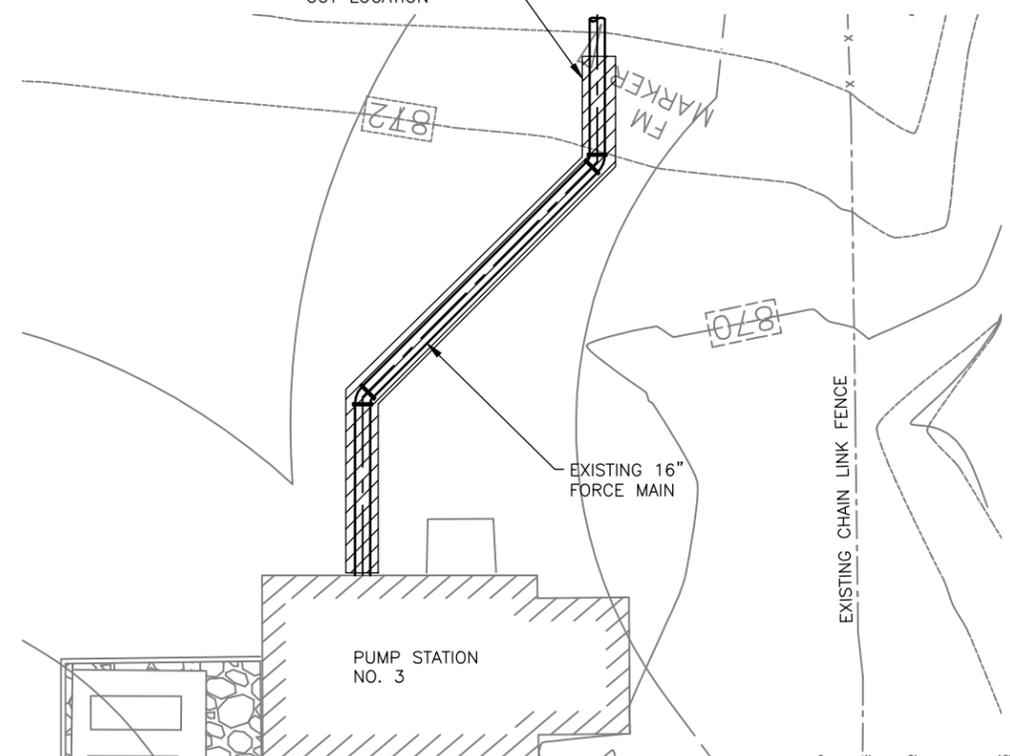


PLAN @ EL. 851.17
SCALE: 1/4" = 1'-0"



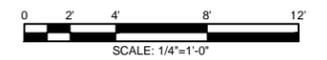
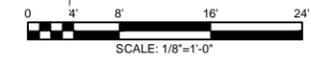
PLAN @ EL. 860.38
SCALE: 1/4" = 1'-0"

REMOVE EXISTING PIPING SEE DWG. C-3.2 FOR PIPE CUT LOCATION



YARD PIPING DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



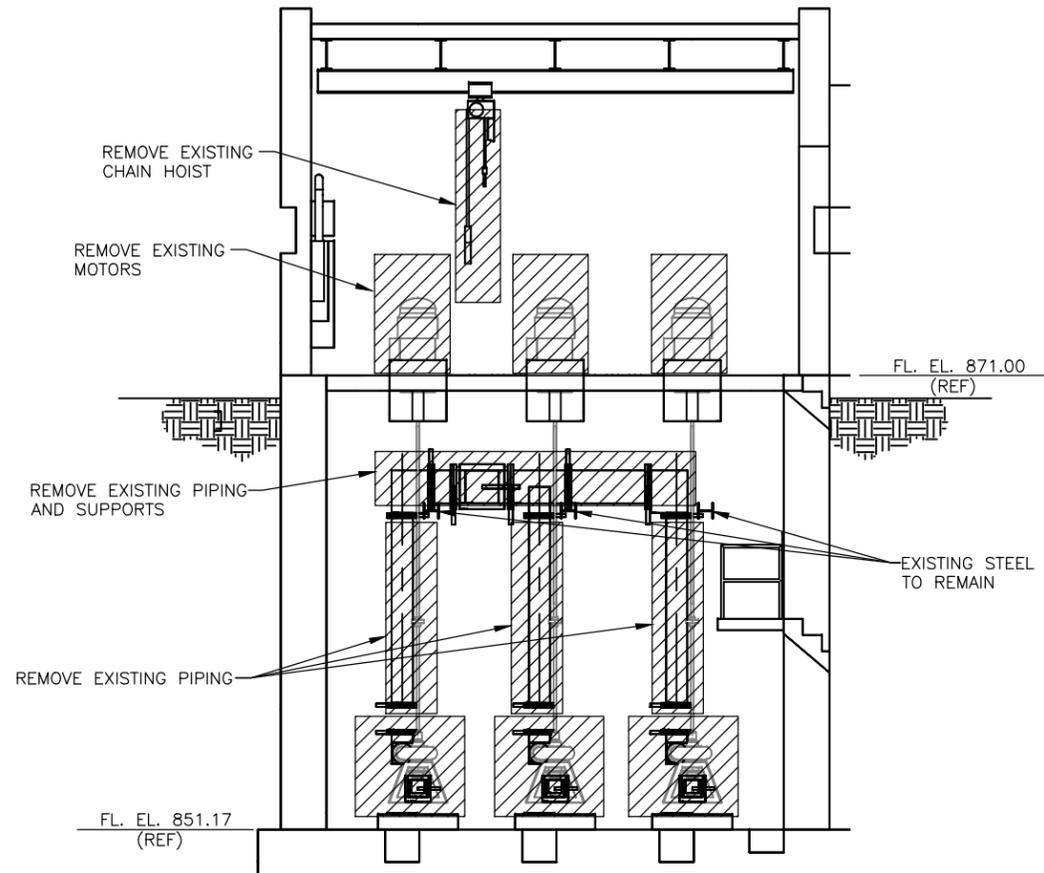
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
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770-475-8994
FAX: 770-777-9545

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DRAWN BY:
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CHECKED BY:
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JOB NO.
147024

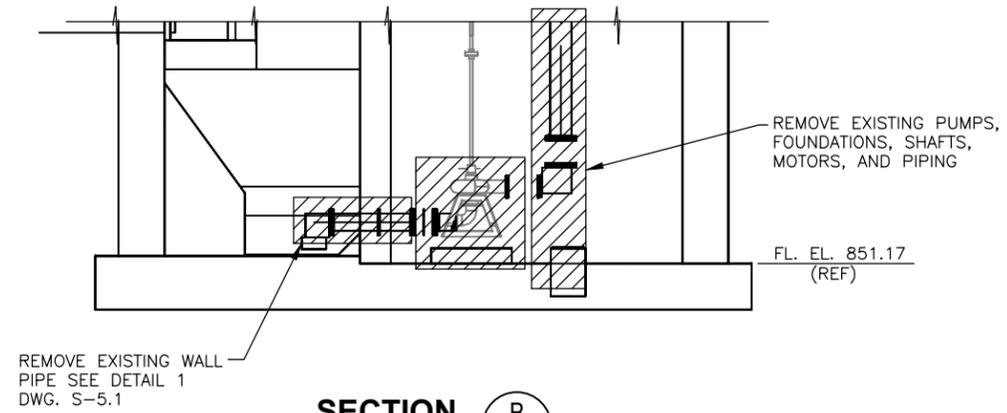
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 3
MECHANICAL DEMOLITION PLANS

DRAWING NO.
MD-3.0
REV. NO.
0
DATE:
06/14/13

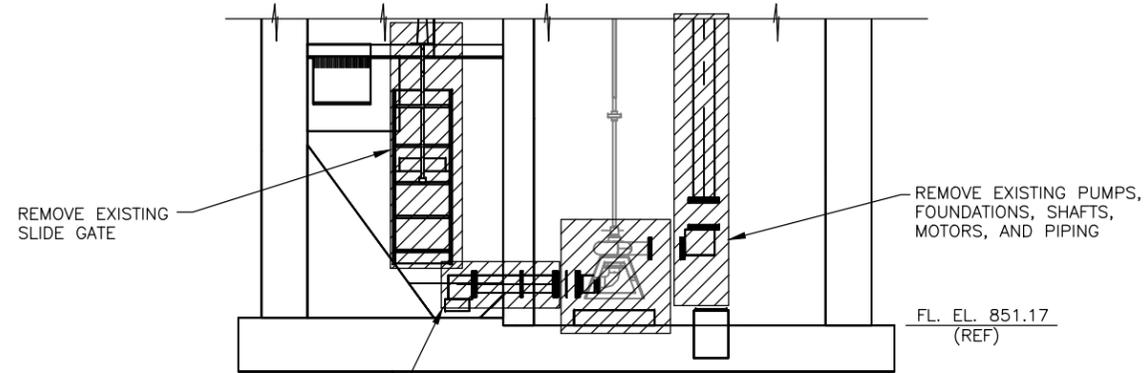
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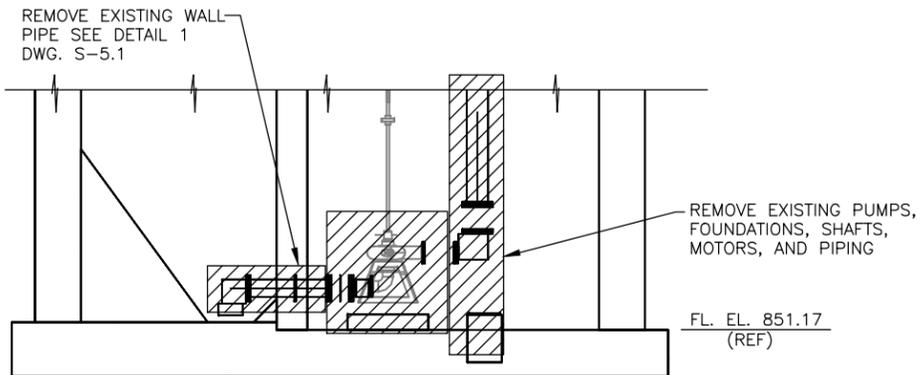
SECTION A
SCALE: 1/4" = 1'-0"
MD-3.0



SECTION B
SCALE: 1/4" = 1'-0"
MD-3.0



SECTION C
SCALE: 1/4" = 1'-0"
MD-3.0



SECTION D
SCALE: 1/4" = 1'-0"
MD-3.0

NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DKS	KT	SH	SH



DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

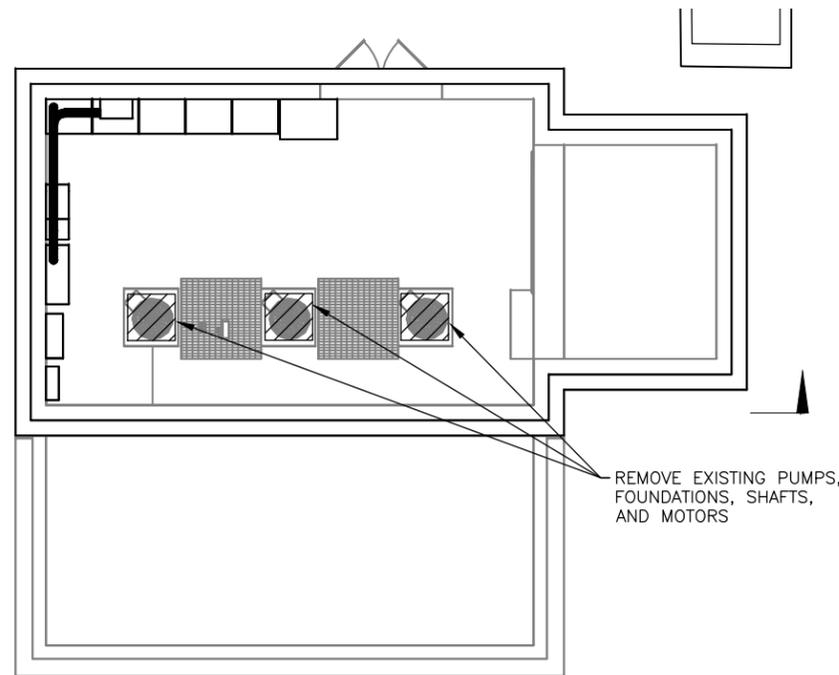
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KT
DRAWN BY:
DKS
CHECKED BY:
SH
JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 3
MECHANICAL DEMOLITION SECTIONS

DRAWING NO.
MD-3.1
REV. NO.
0
DATE:
06/14/13



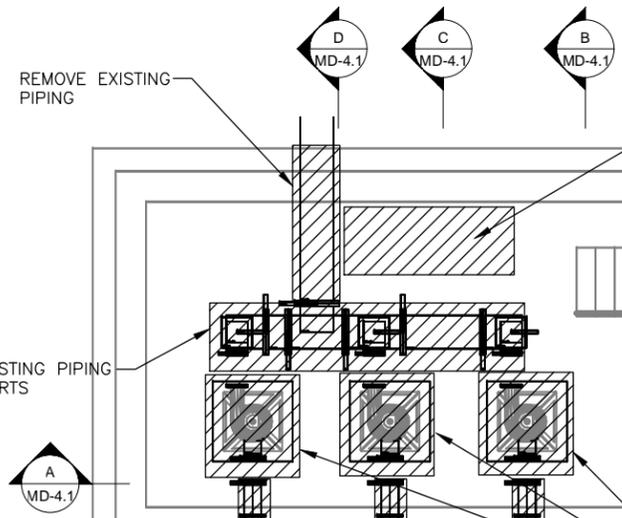
A
MD-4.1



PLAN @ EL. 950.50

SCALE: 1/4" = 1'-0"

REMOVE EXISTING PUMPS,
FOUNDATIONS, SHAFTS,
AND MOTORS



PLAN @ EL. 937.66

SCALE: 1/4" = 1'-0"

REMOVE EXISTING PIPING
AND SUPPORTS

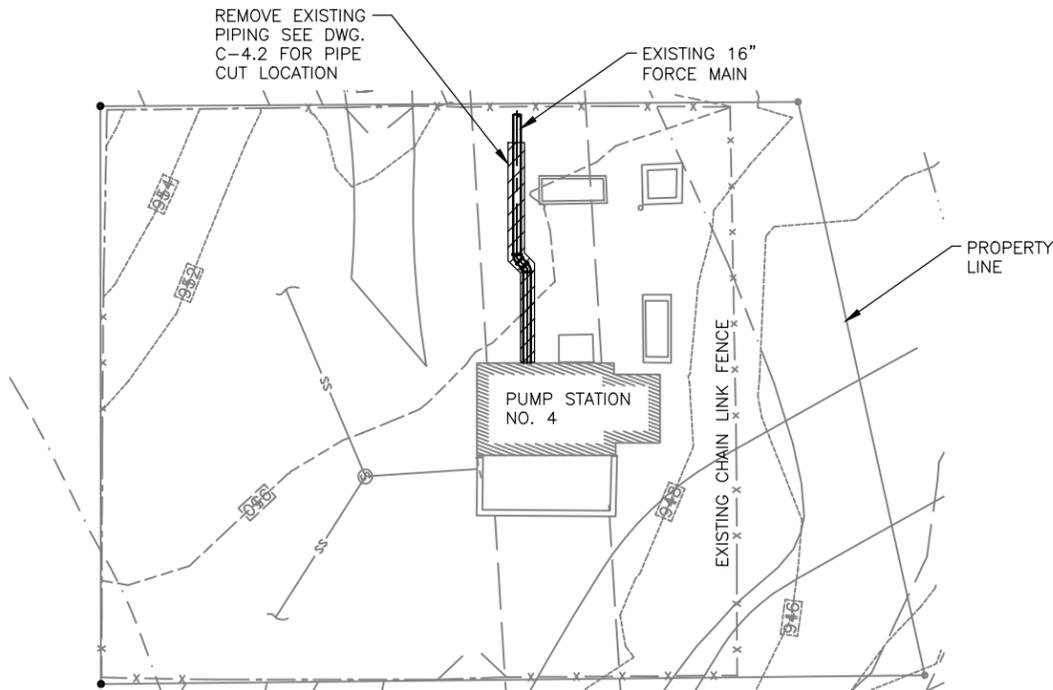
A
MD-4.1

REMOVE EXISTING
CONCRETE PAD
TO FLOOR

REMOVE EXISTING PUMPS,
FOUNDATIONS, SHAFTS,
AND MOTORS

REMOVE EXISTING
PIPING SEE DWG.
C-4.2 FOR PIPE
CUT LOCATION

EXISTING 16"
FORCE MAIN



PROPERTY
LINE

PUMP STATION
NO. 4

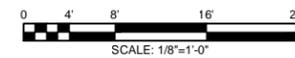
EXISTING CHAIN LINK FENCE

YARD PIPING DEMOLITION PLAN

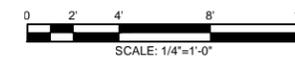
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NOTES:

- FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



SCALE: 1/8"=1'-0"



SCALE: 1/4"=1'-0"

\\Selp\p00\Common\Shullvan WW Pump Stations\100% Bid Submittal\Drawings\Card Files\Sheets\147024-MD-4.0.DWG, 7/8/2013 3:09:21 PM

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141 PRYOR ST. SW
SUITE 600
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30303



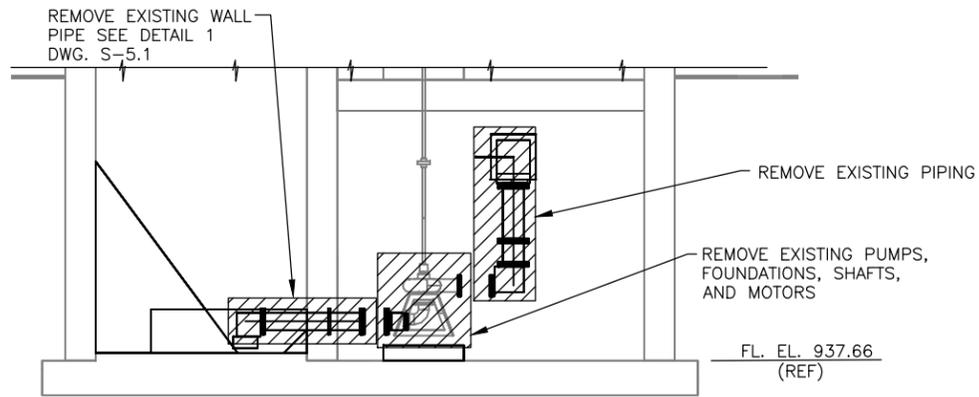
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

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CHECKED BY:
SH
JOB NO.
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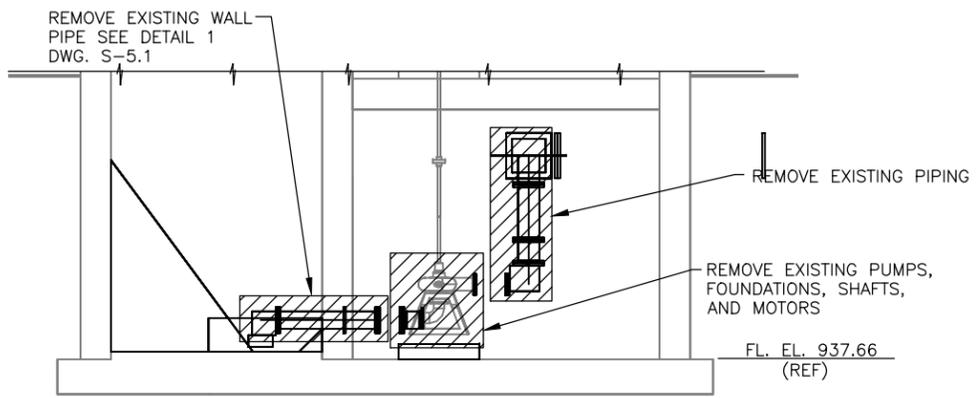
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
MECHANICAL DEMOLITION PLANS

DRAWING NO.
MD-4.0
REV. NO.
0
DATE:
06/14/13

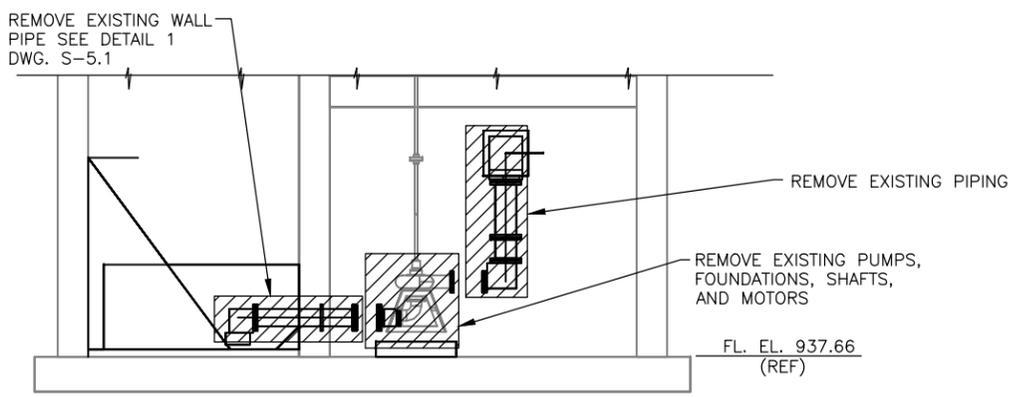
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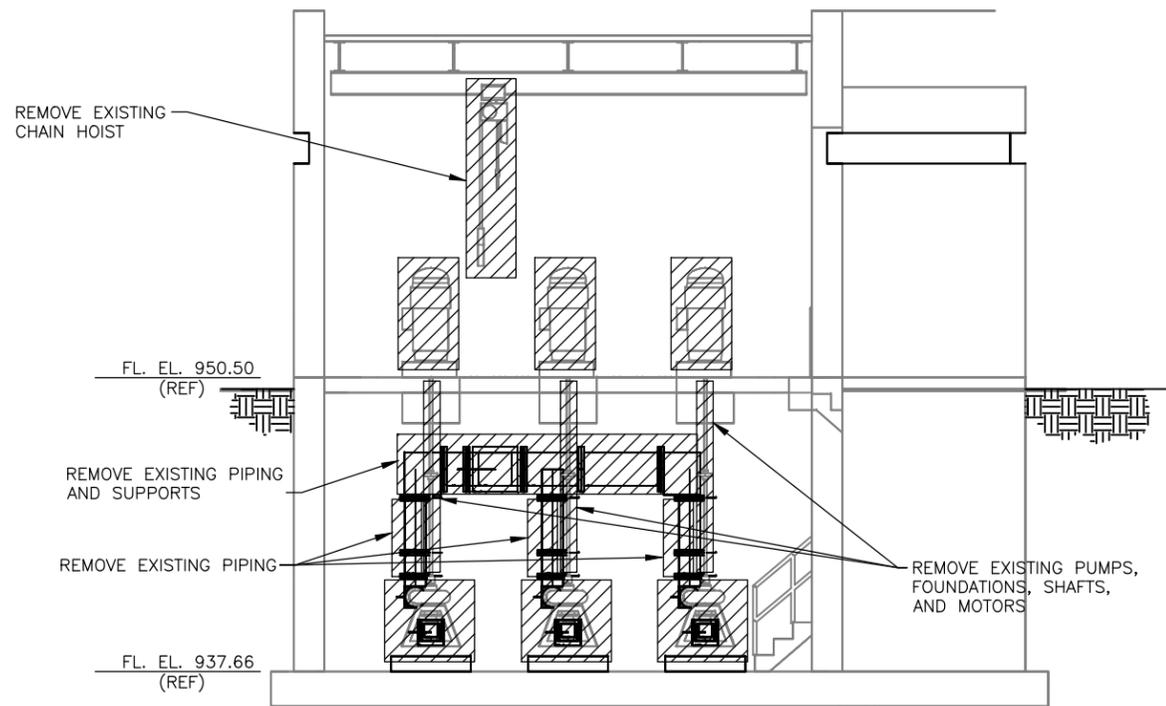
SECTION B
SCALE: 1/4" = 1'-0" MD-4.0



SECTION C
SCALE: 1/4" = 1'-0" MD-4.0



SECTION D
SCALE: 1/4" = 1'-0" MD-4.0



SECTION A
SCALE: 1/4" = 1'-0" MD-4.0

NOTES:
1. FOR DEMOLITION GENERAL NOTES SEE DRAWING M-0.1



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SUITE 600
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30303

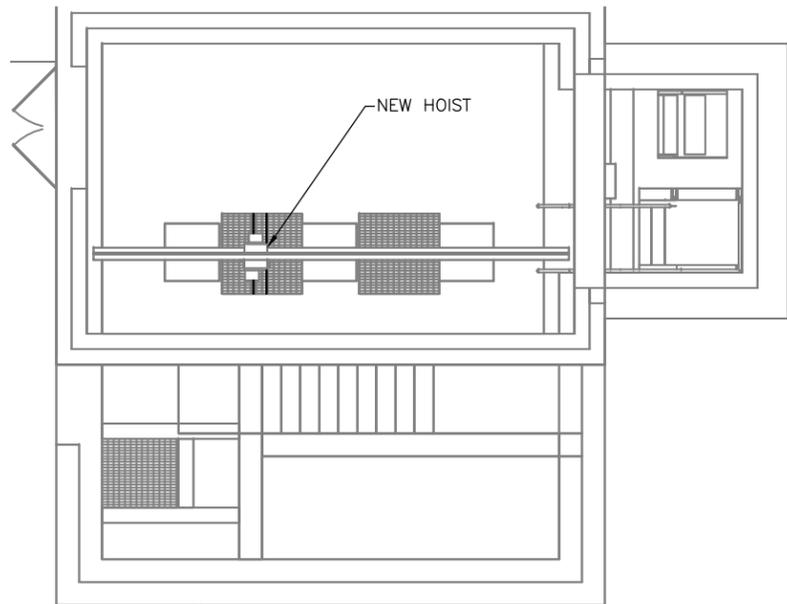


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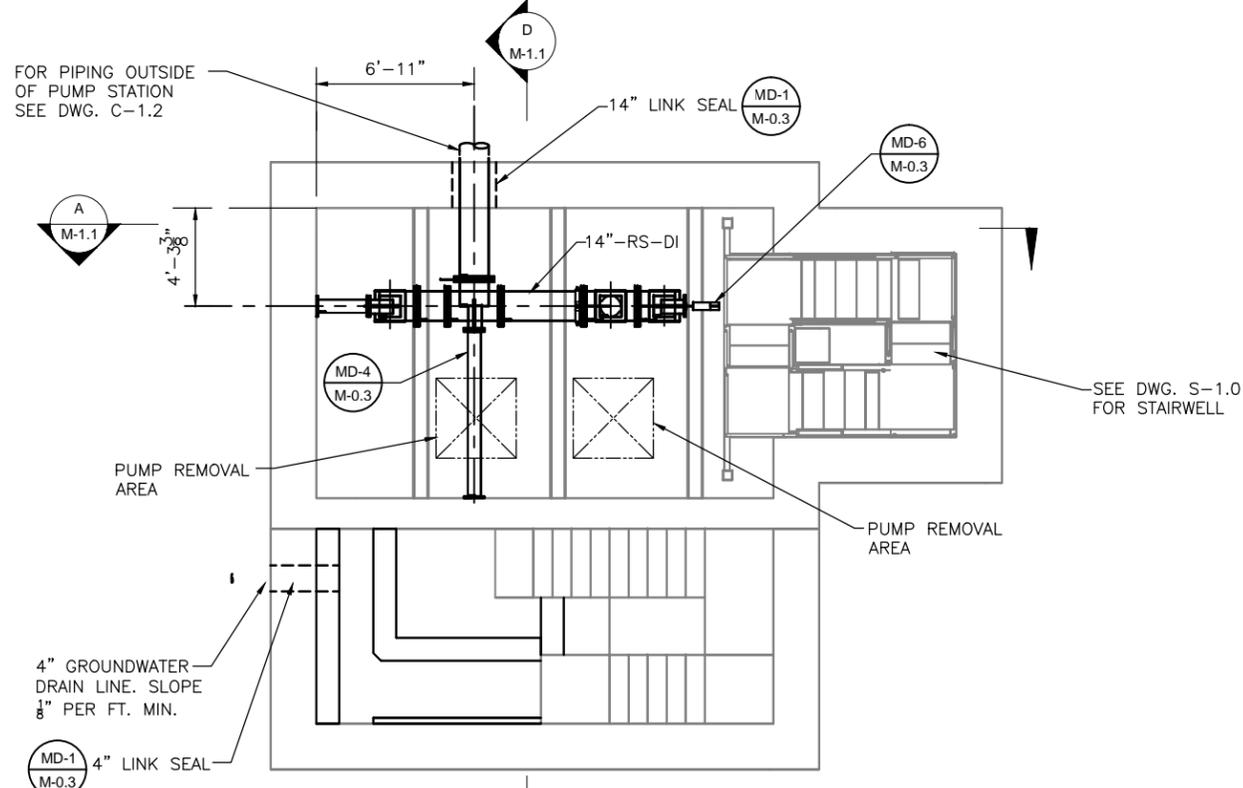
DESIGN BY: KT
DRAWN BY: DKS
CHECKED BY: SH
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
MECHANICAL DEMOLITION SECTIONS

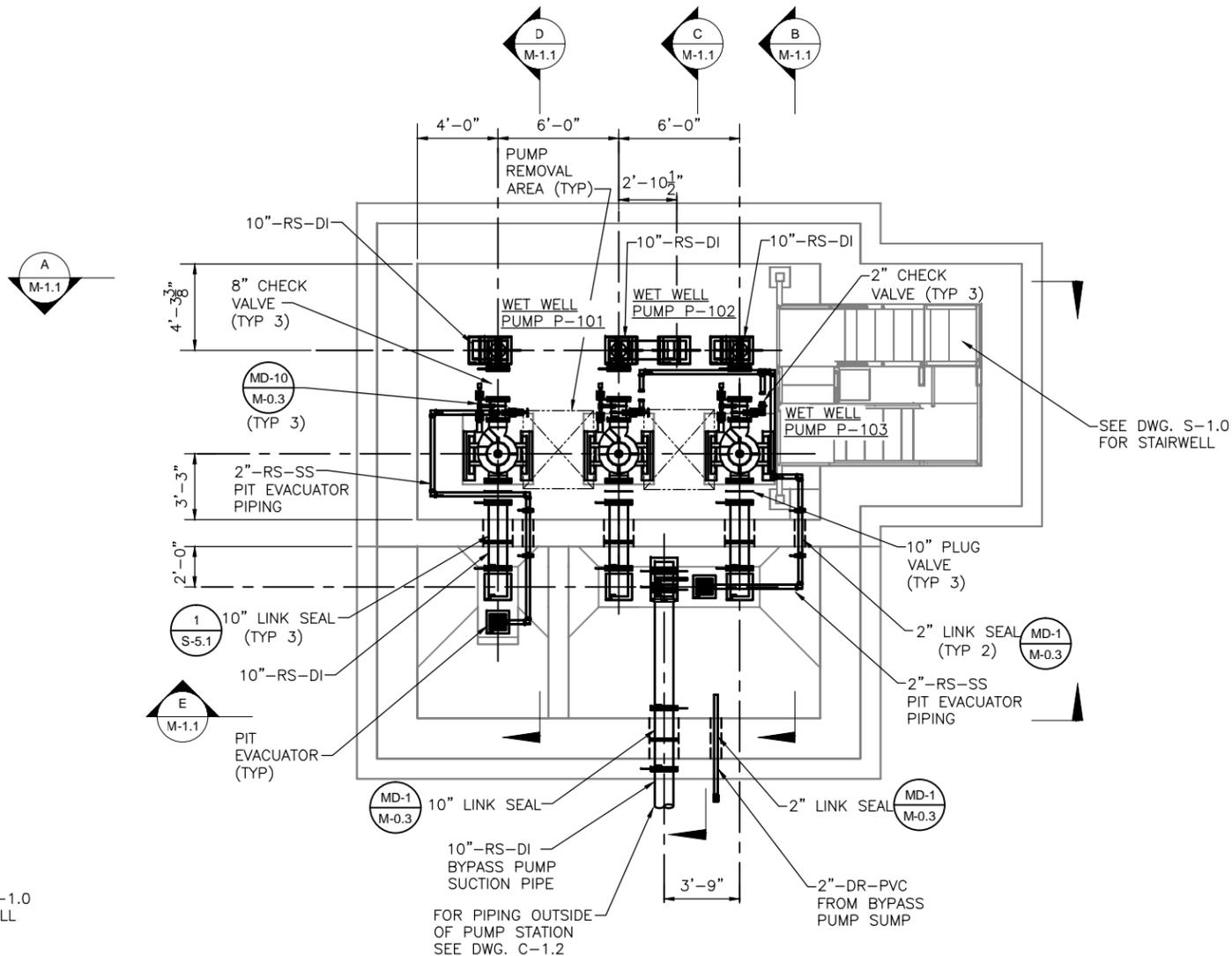
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REV. NO. 0
DATE: 06/14/13



PLAN @ EL. 864.50
SCALE: 1/4" = 1'-0"

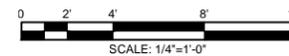


PLAN @ EL. 855.75
SCALE: 1/4" = 1'-0"



PLAN @ EL. 839.67
SCALE: 1/4" = 1'-0"

NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1



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141 PRYOR ST. SW
SUITE 600
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30303



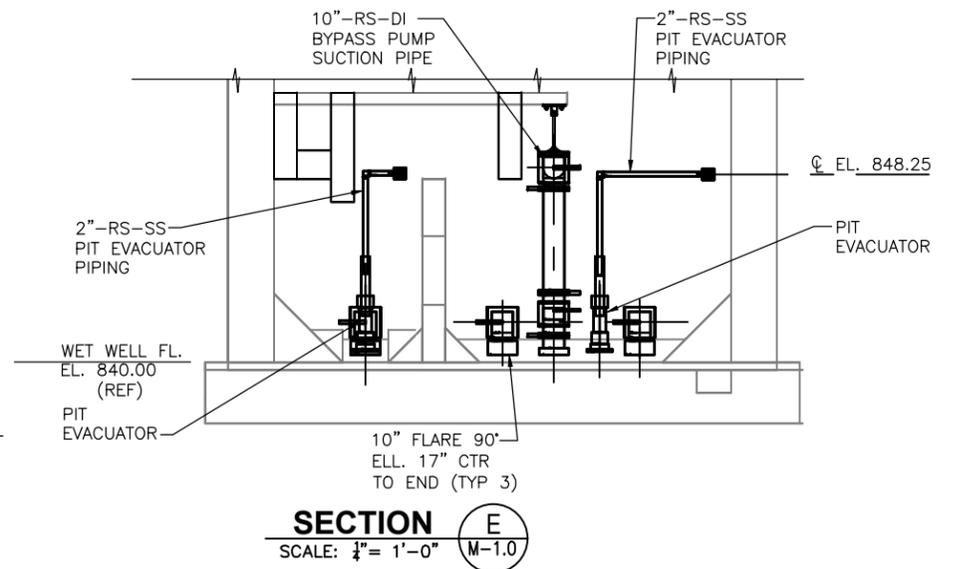
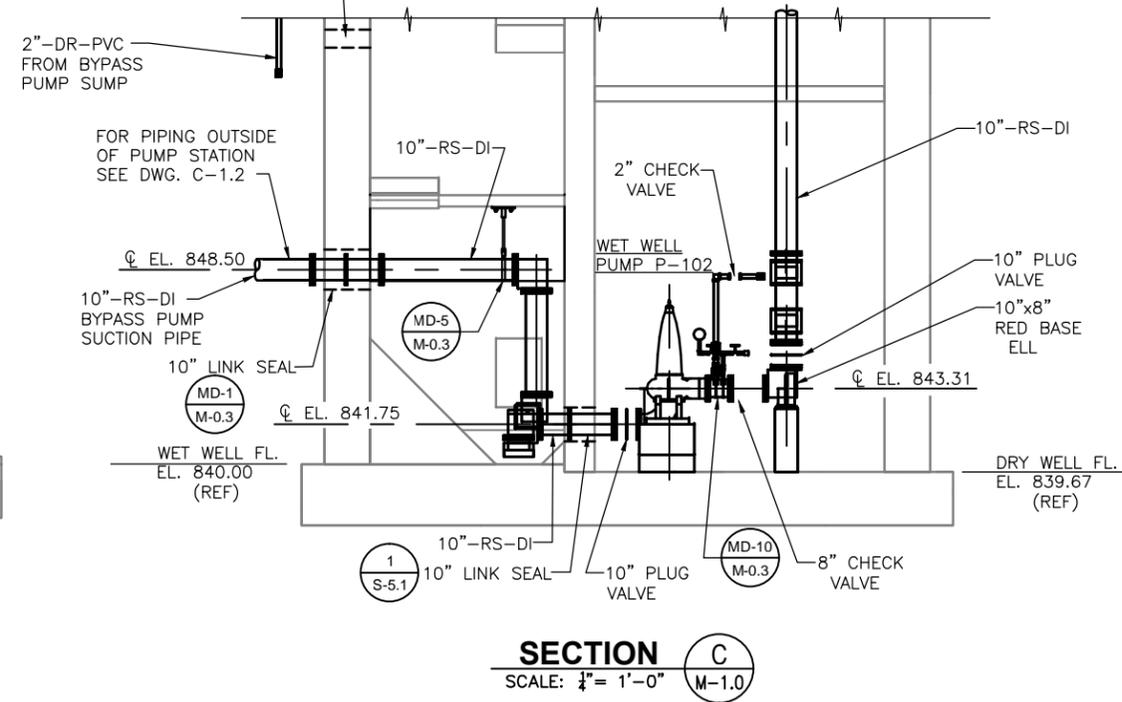
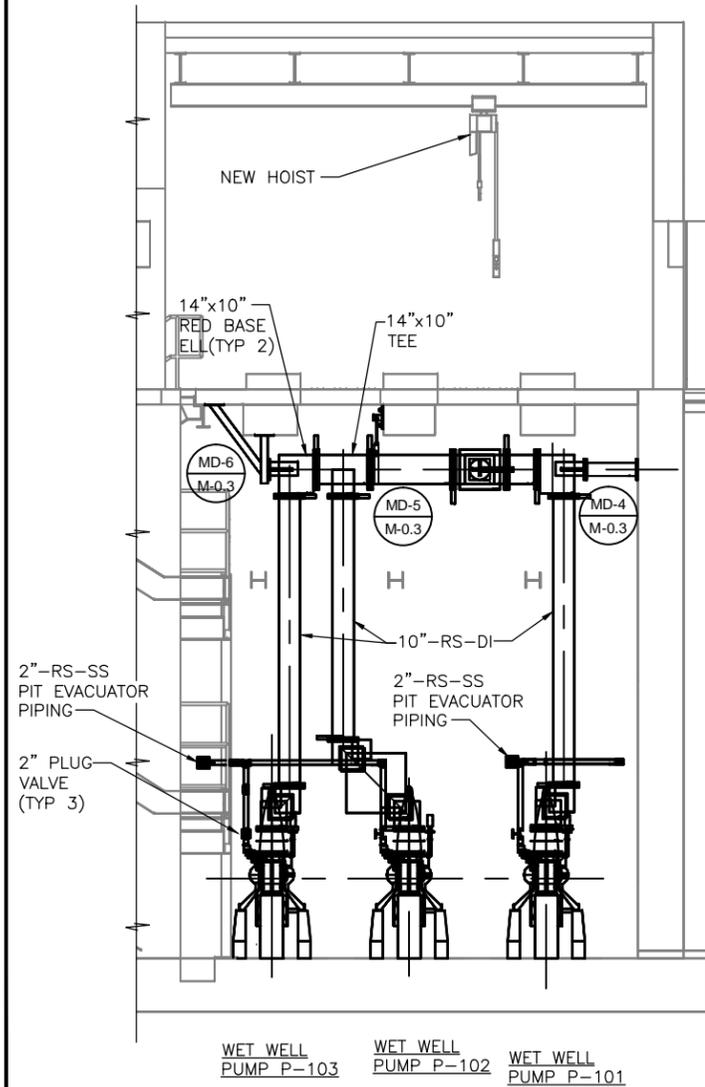
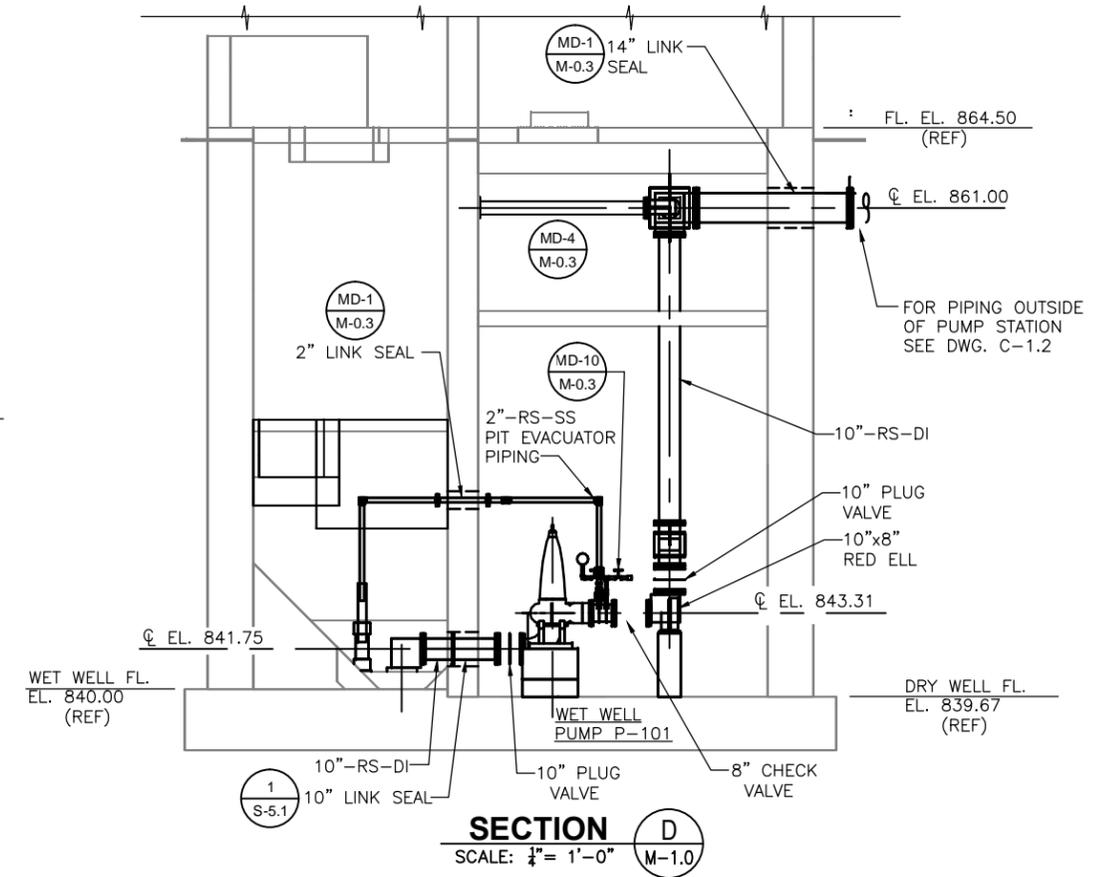
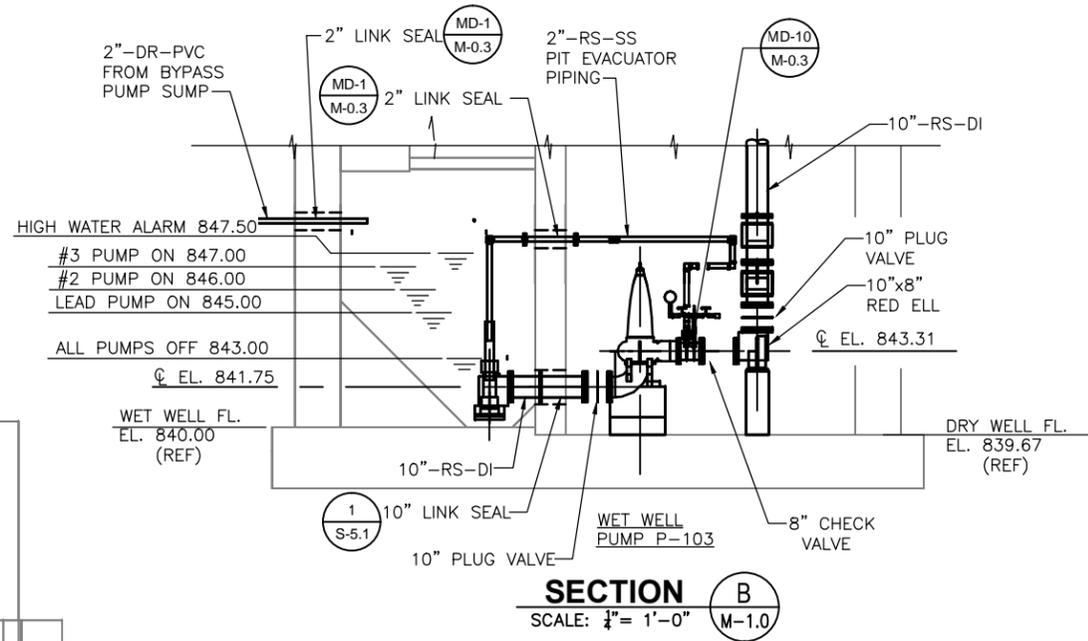
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY:
KT
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CHECKED BY:
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
MECHANICAL PLANS

DRAWING NO.
M-1.0
REV. NO.
0
DATE:
06/14/13

\\Selp\p00\Common\Shullvan WW Pump Stations\100% Bid Submittal\Drawings\Cad Files\Sheets\M-1.1.DWG, 7/8/2013 1:27:45 PM



- NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1
 2. BELL FLOOR CLEARANCE AND SUBMERGENCE MUST CONFORM TO ANSI/HI-9.8 AND MANUFACTURERS SPECIFICATIONS.



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141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

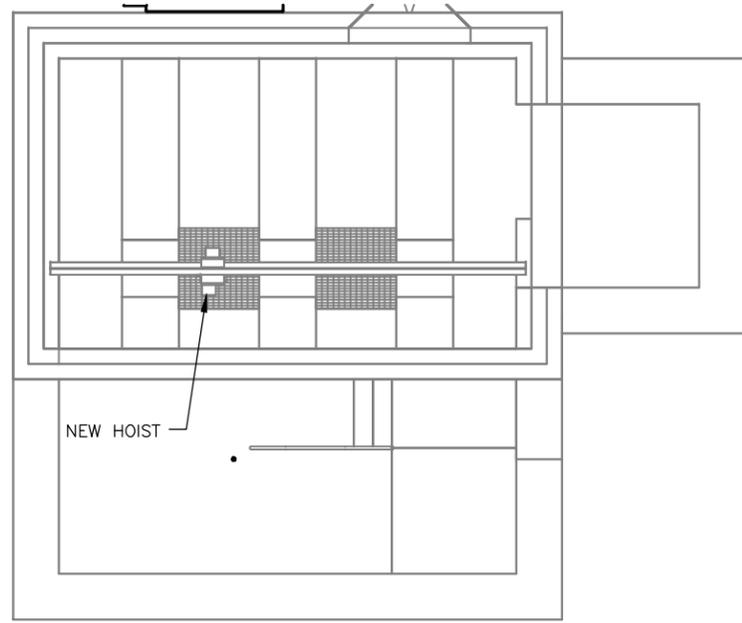


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FAX: 770-777-9545

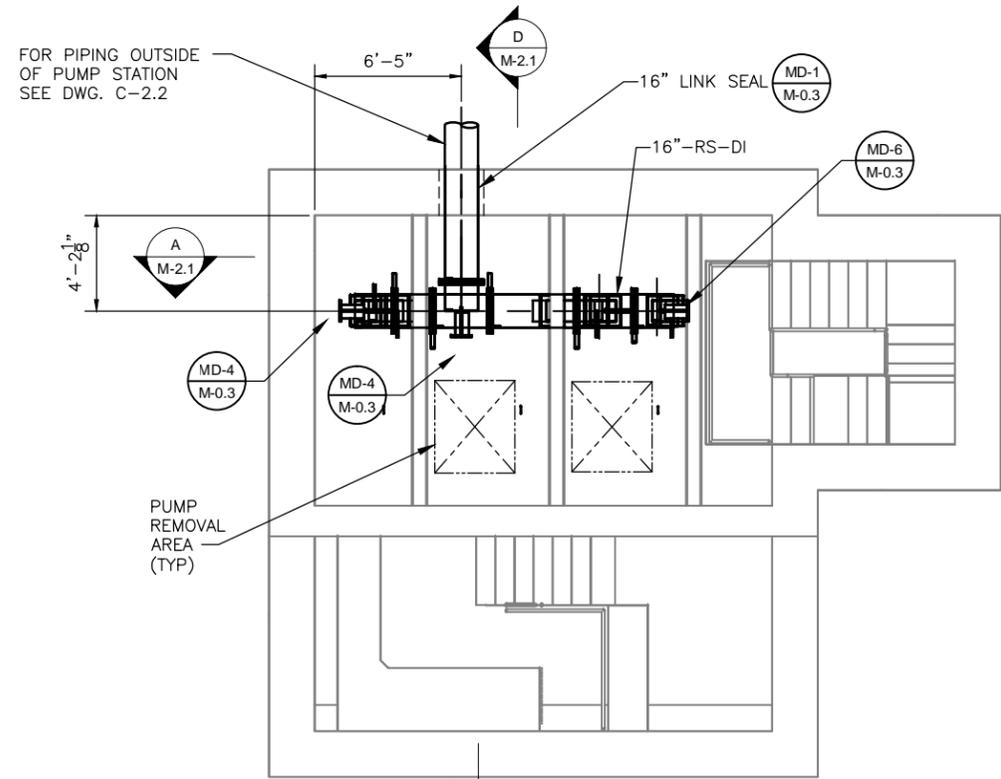
DESIGN BY:
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DRAWN BY:
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CHECKED BY:
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
MECHANICAL SECTIONS

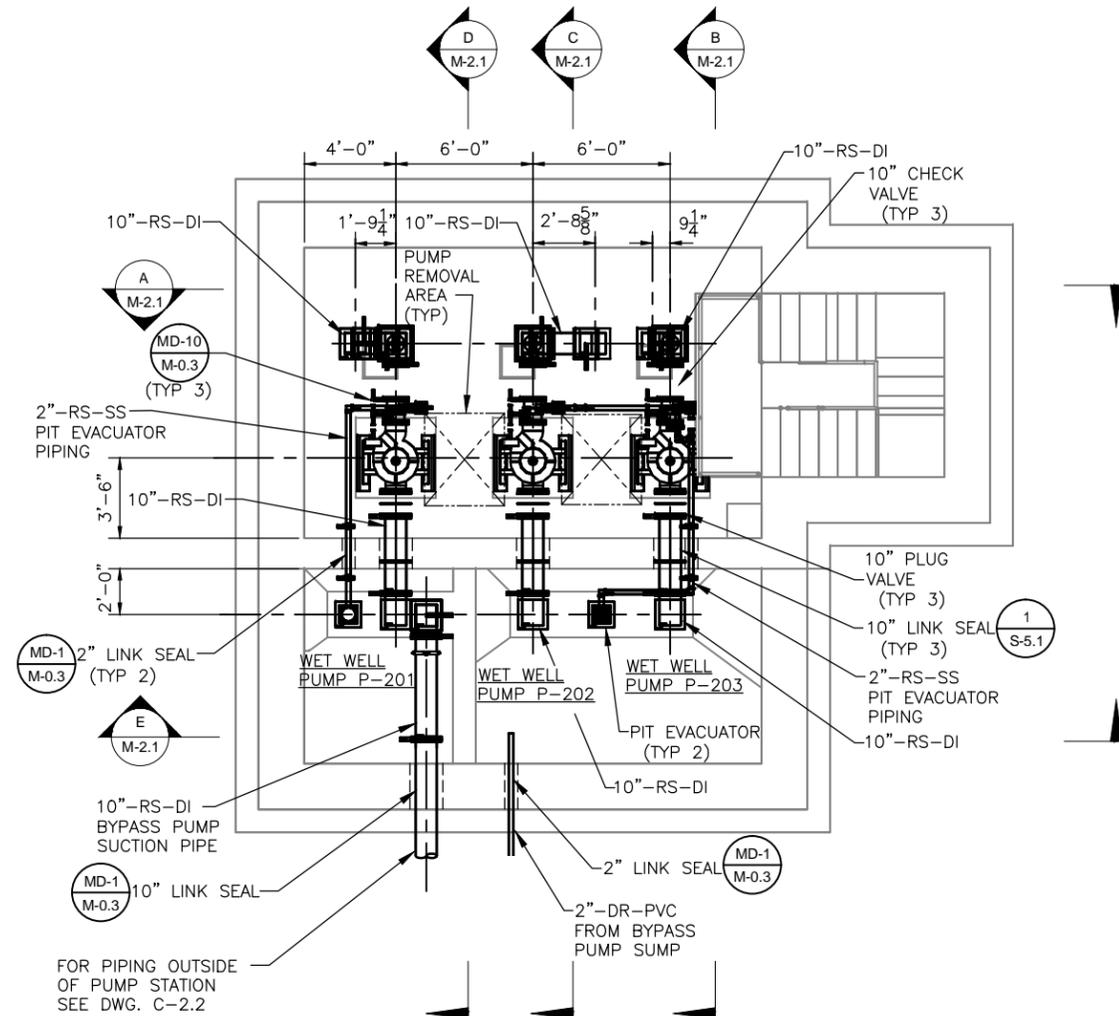
DRAWING NO.
M-1.1
REV. NO.
0
DATE:
06/14/13



PLAN @ EL. 936.50
SCALE: 1/4" = 1'-0"

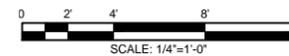


PLAN @ EL. 930.33
SCALE: 1/4" = 1'-0"



PLAN @ EL. 918.08
SCALE: 1/4" = 1'-0"

NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1



\\Selp\p00\Common\Shullvan WW Pump Stations\100% Bid Submittal\Drawings\Card Files\Sheets\147024-M-2.0.DWG, 7/8/2013 1:33:26 PM

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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
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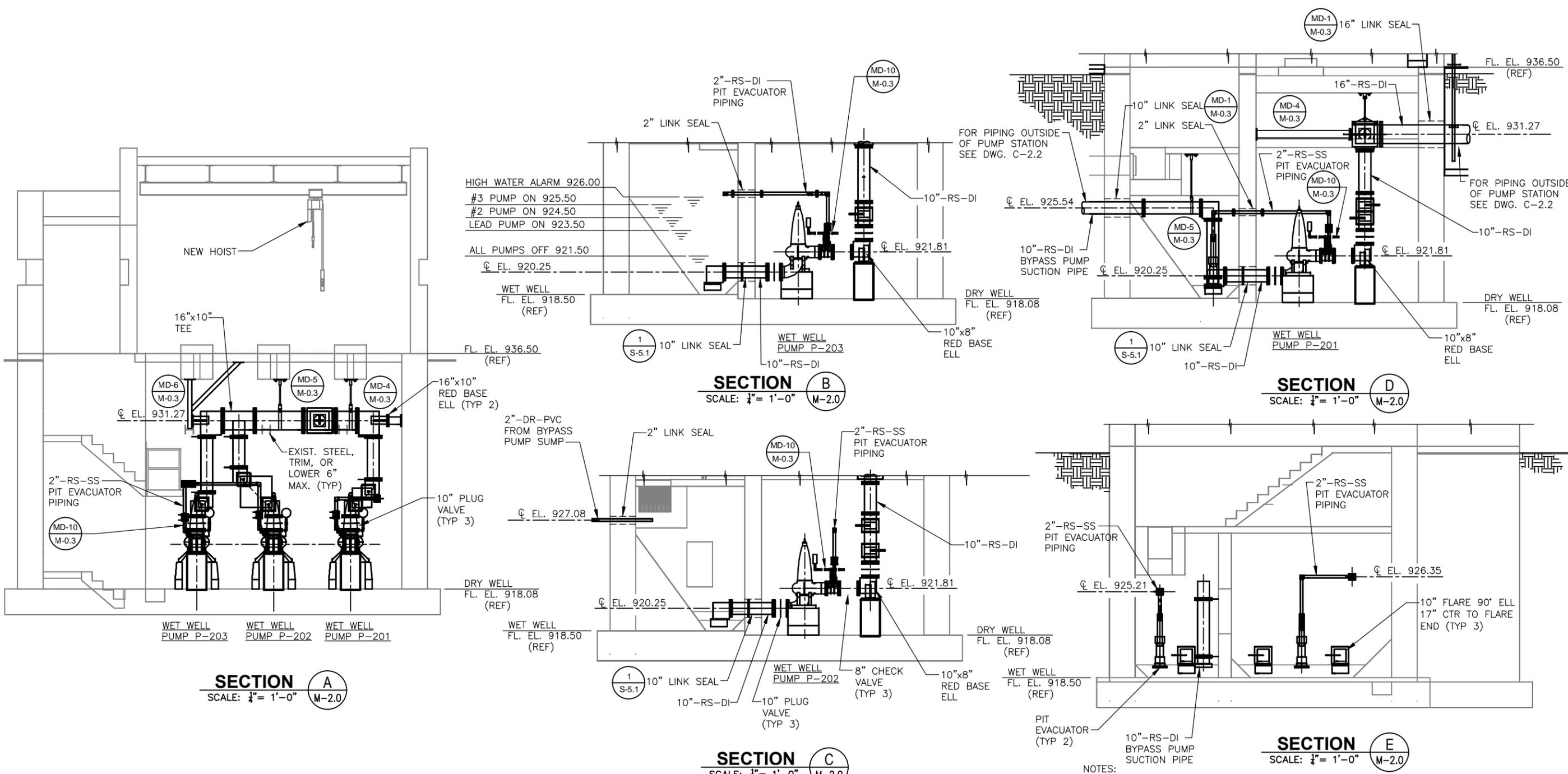
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

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JOB NO.
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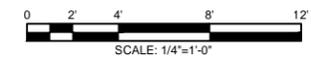
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
MECHANICAL PLANS

DRAWING NO.
M-2.0
REV. NO.
0
DATE:
06/14/13

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NOTES:
 1. FOR GENERAL NOTES SEE DRAWING M-0.1
 2. BELL FLOOR CLEARANCE AND SUBMERGENCE MUST CONFORM TO ANSI/HI-9.8 AND MANUFACTURERS SPECIFICATIONS.



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DKS	KT	SH	SH



DEPARTMENT OF
 WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA
 30303

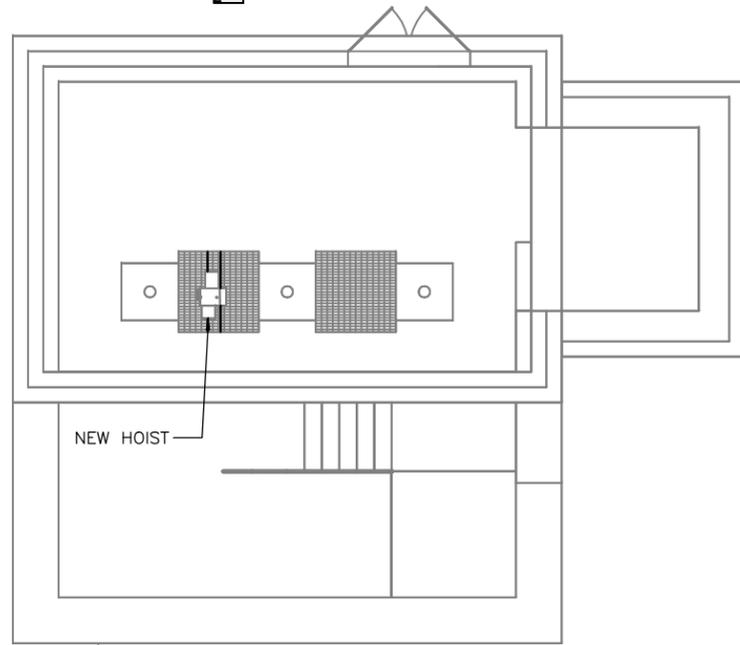


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 770-475-8994
 FAX: 770-777-9545

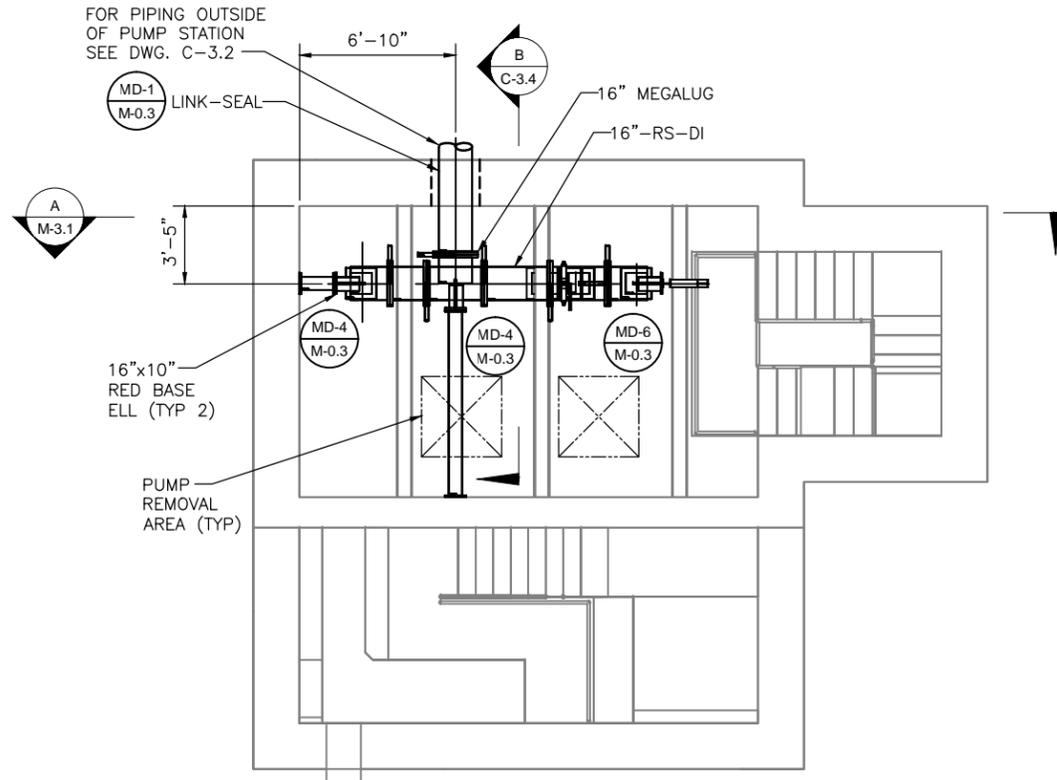
DESIGN BY:
 KT
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 CHECKED BY:
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 JOB NO.
 147024

FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 PUMP STATION NO. 2
 MECHANICAL SECTIONS

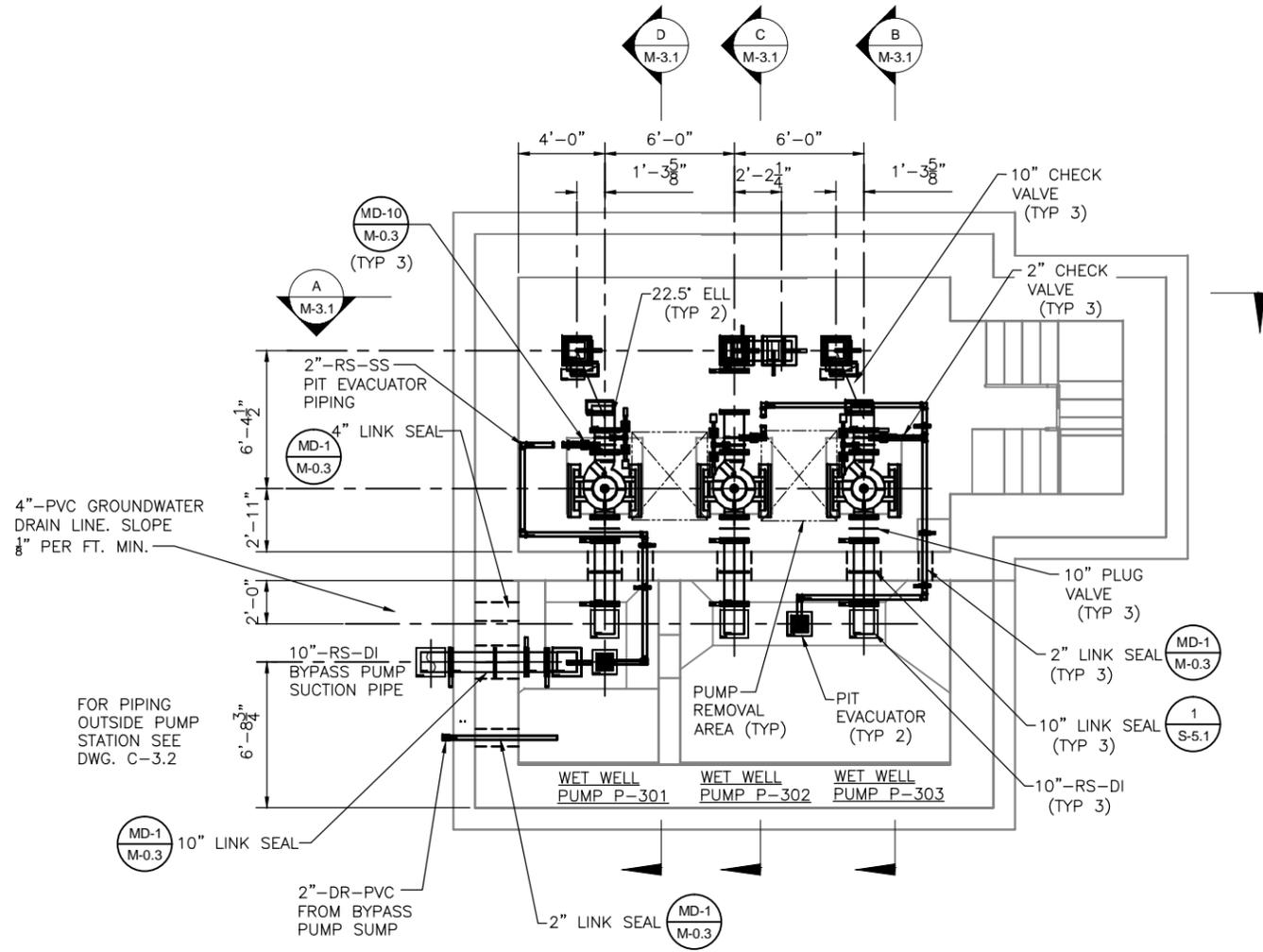
DRAWING NO.
M-2.1
 REV. NO.
0
 DATE:
 06/14/13



PLAN @ EL. 871.00
SCALE: 1/4" = 1'-0"



PLAN @ EL. 860.38
SCALE: 1/4" = 1'-0"



PLAN @ EL. 851.17
SCALE: 1/4" = 1'-0"

NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1



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WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
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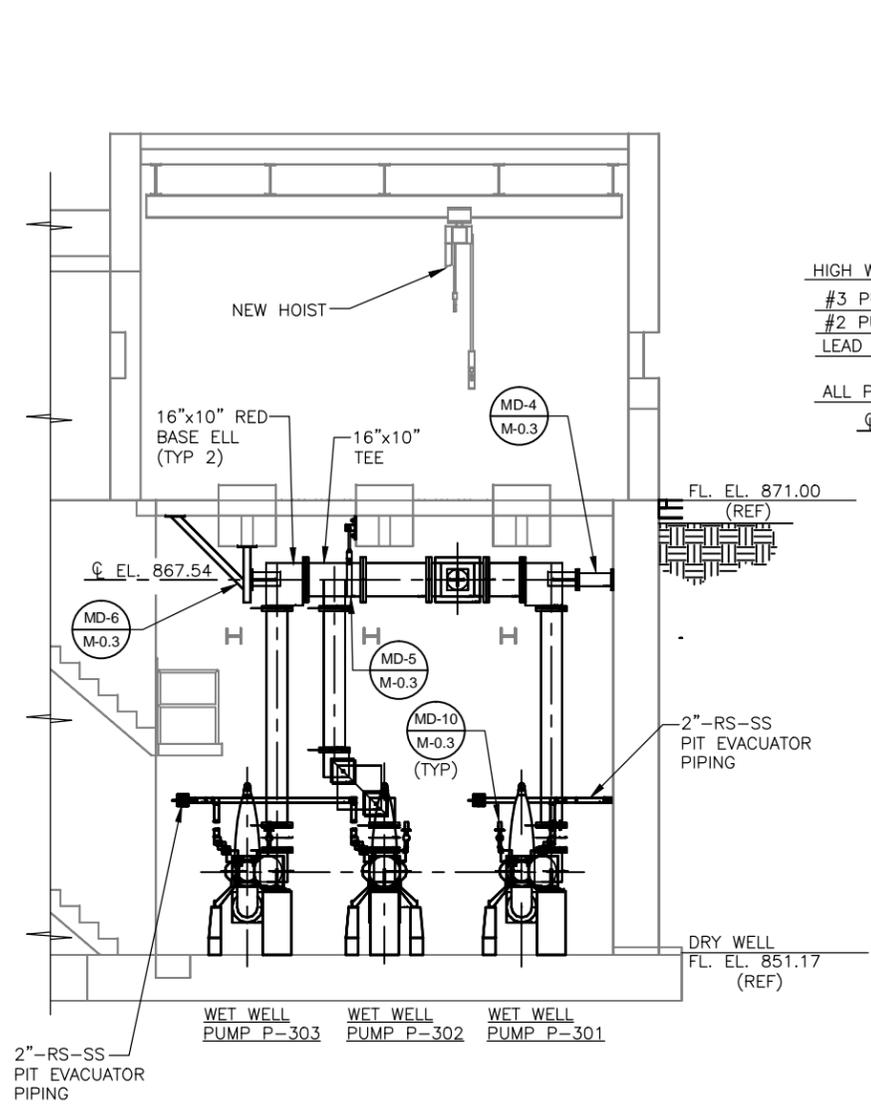
Shaw Environmental & Infrastructure, Inc.
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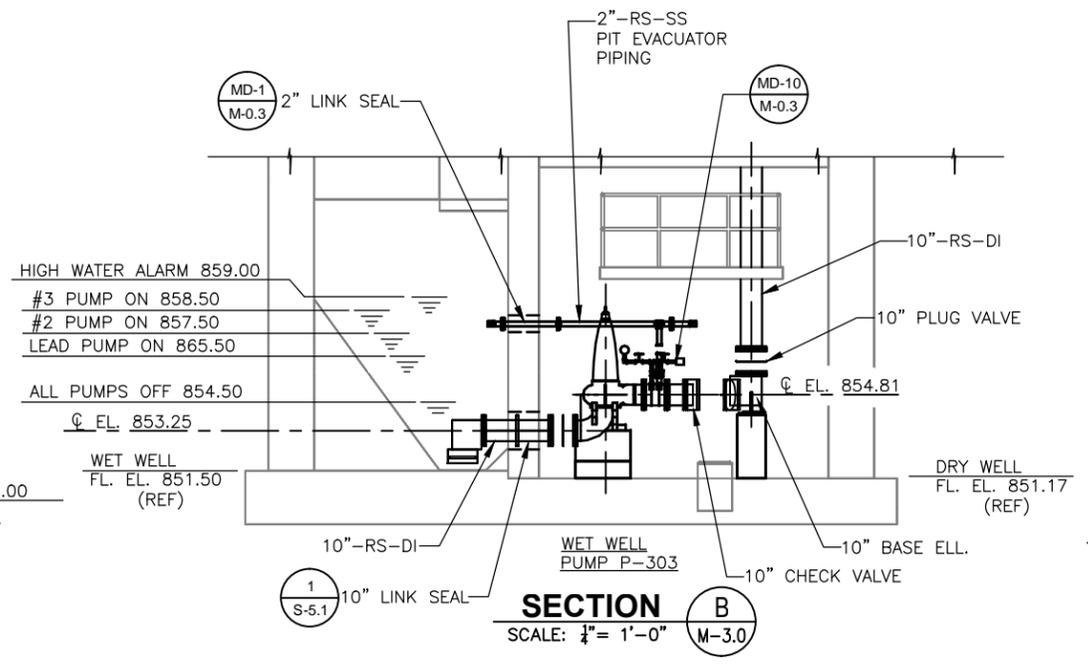
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 3
MECHANICAL PLANS

DRAWING NO.
M-3.0
REV. NO.
0
DATE:
06/14/13

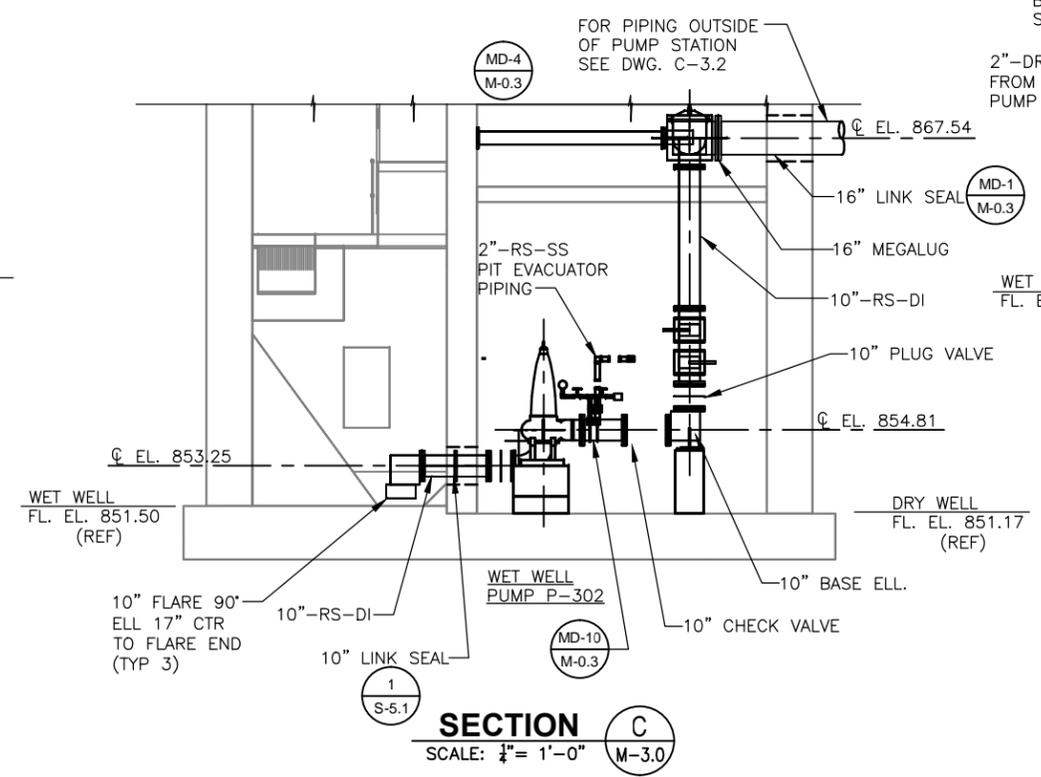
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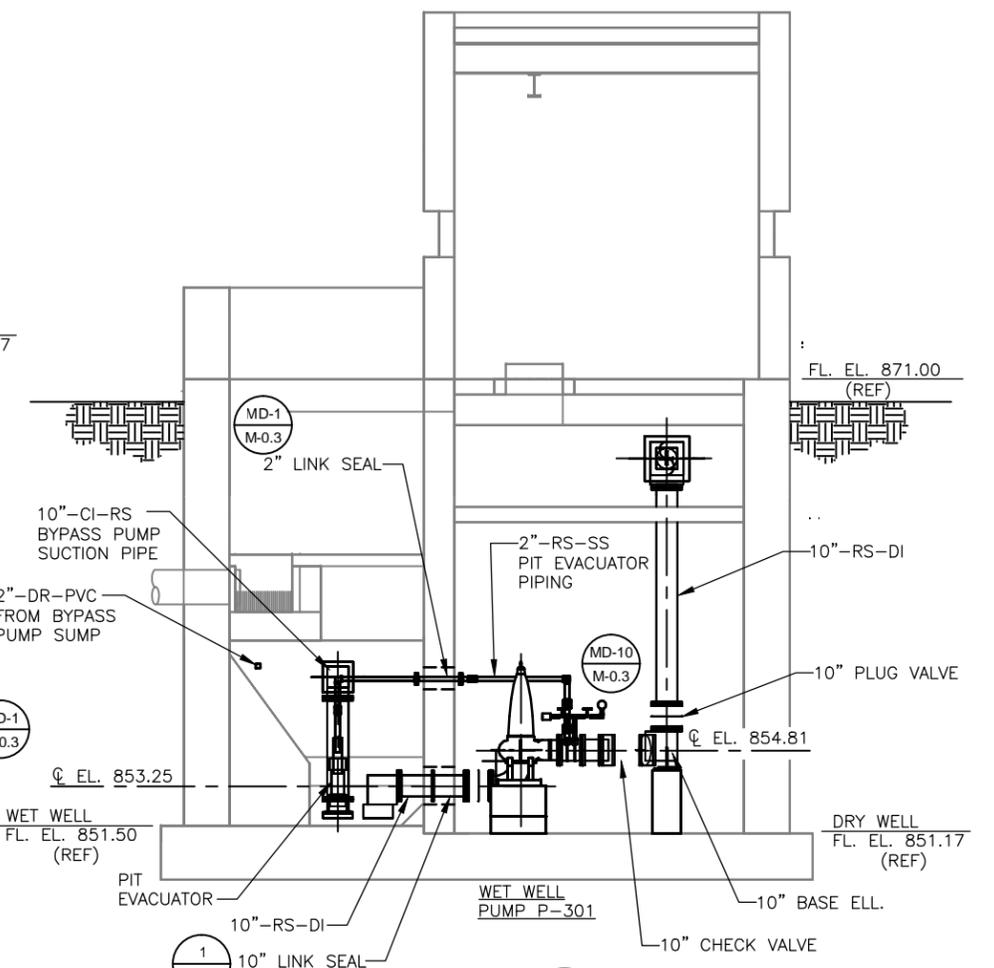
SECTION A
SCALE: 1/4" = 1'-0" M-3.0



SECTION B
SCALE: 1/4" = 1'-0" M-3.0

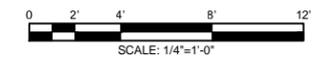


SECTION C
SCALE: 1/4" = 1'-0" M-3.0



SECTION D
SCALE: 1/4" = 1'-0" M-3.0

- NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1
 2. BELL FLOOR CLEARANCE AND SUBMERGENCE MUST CONFORM TO ANSI/HI-9.8 AND MANUFACTURERS SPECIFICATIONS.



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DEPARTMENT OF
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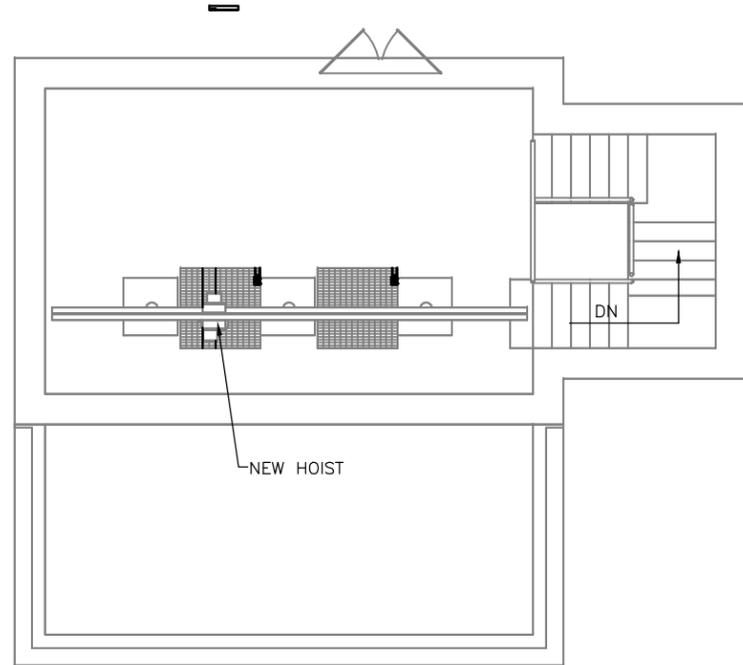


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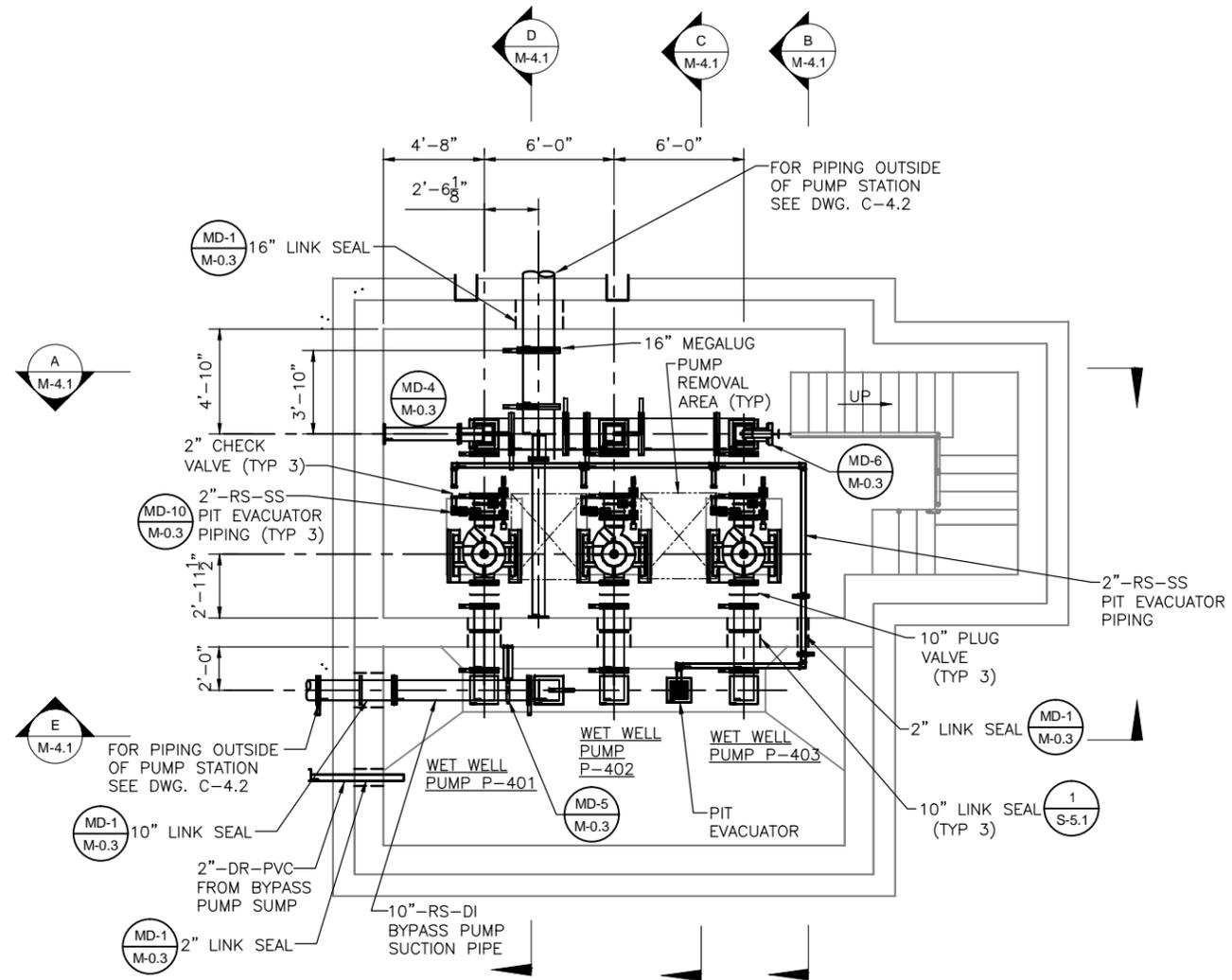
DESIGN BY:
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 3
MECHANICAL SECTIONS

DRAWING NO.
M-3.1
REV. NO.
0
DATE:
06/14/13



PLAN @ EL. 950.50
SCALE: 1/4" = 1'-0"



PLAN @ EL. 937.66
SCALE: 1/4" = 1'-0"

NOTES:
1. FOR GENERAL NOTES SEE DRAWING M-0.1

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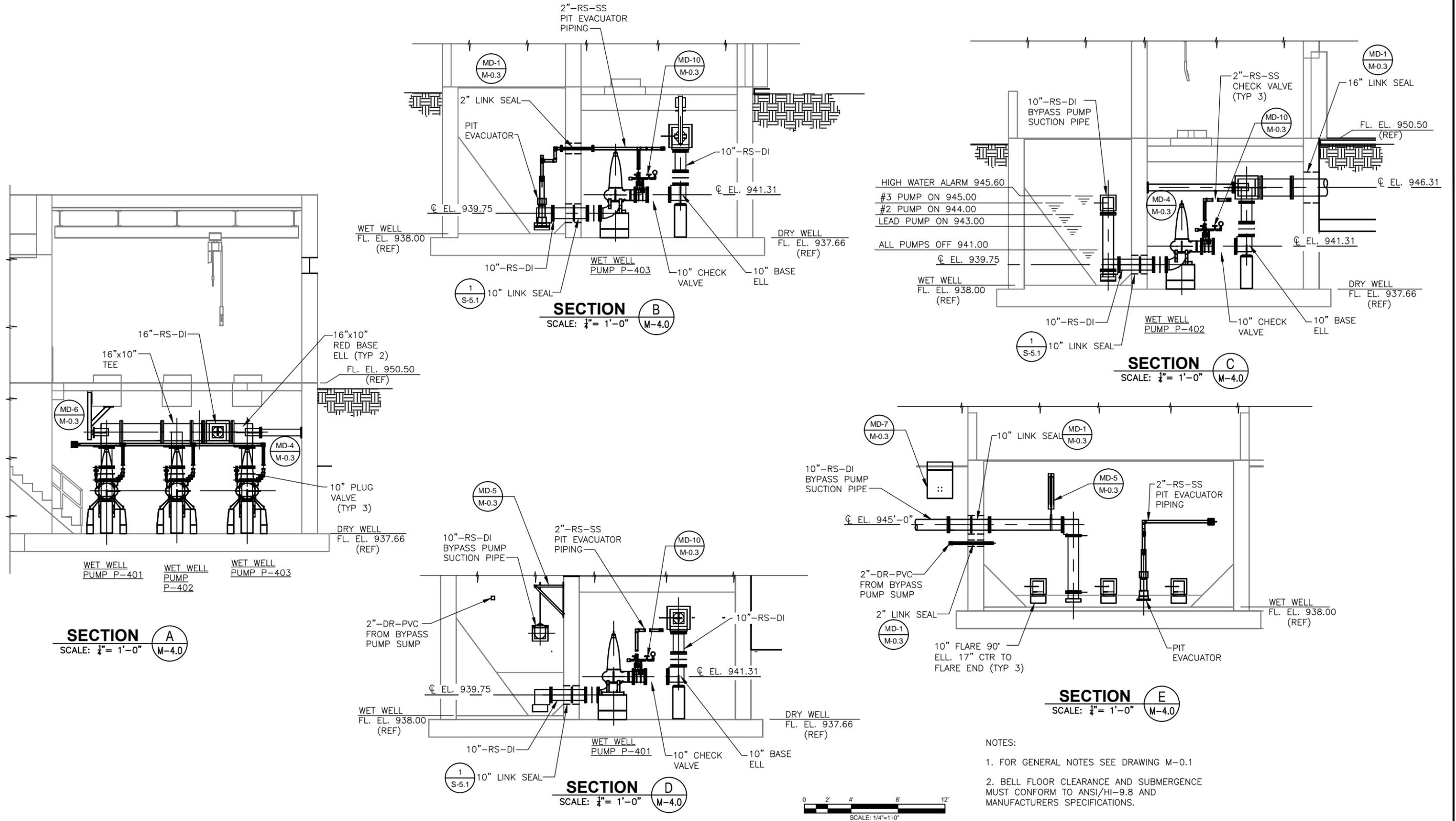
Shaw Environmental & Infrastructure, Inc.
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ALPHARETTA, GEORGIA 30022
770-475-8994
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PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
MECHANICAL PLANS

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06/14/13

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SUITE 600
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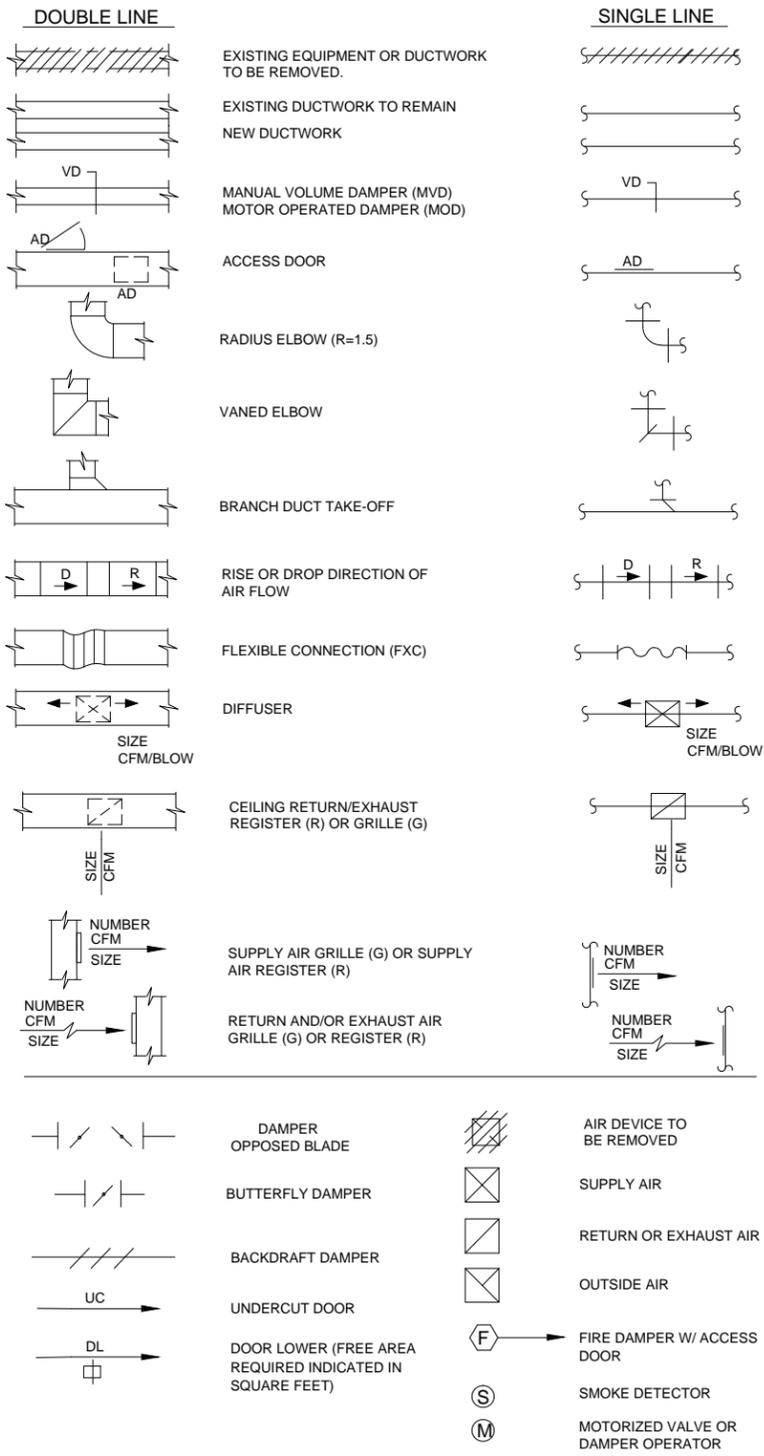
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ALPHARETTA, GEORGIA 30022
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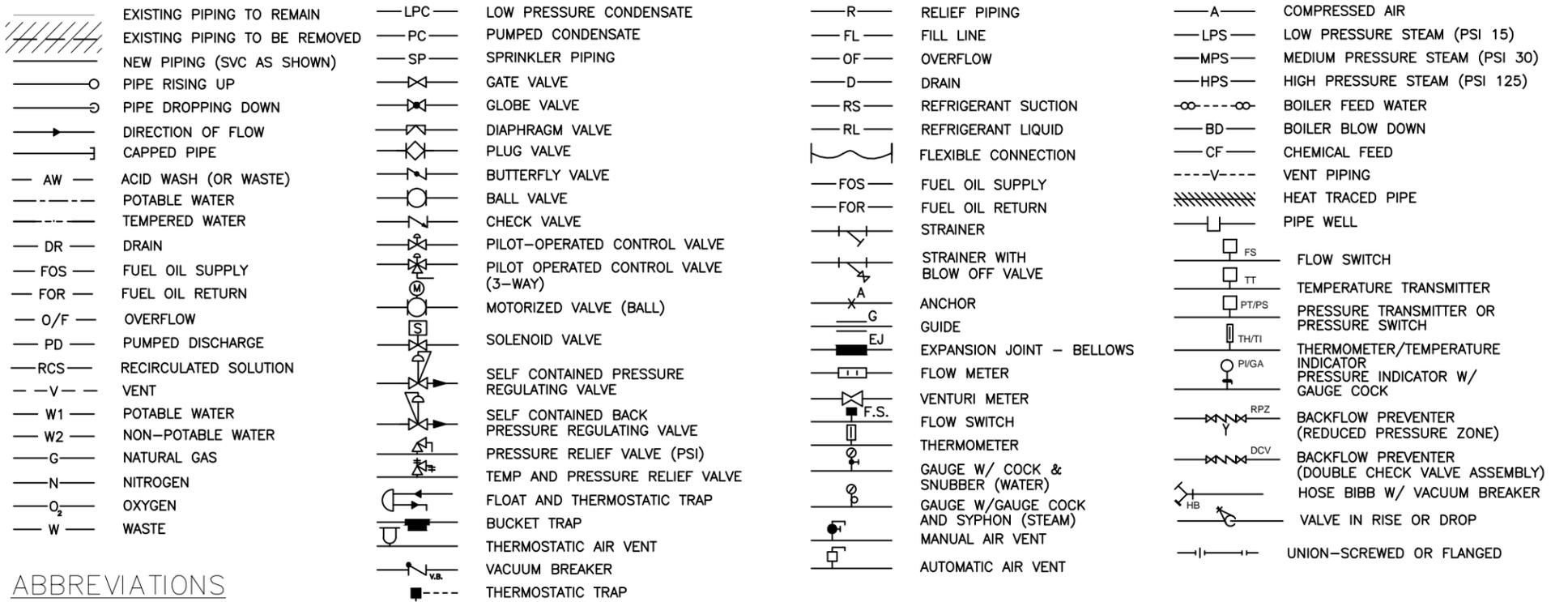
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
MECHANICAL SECTIONS

DRAWING NO.
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DUCTWORK SYMBOLS



PIPING SYMBOLS



ABBREVIATIONS

AC	AIR CONDITIONING UNIT	DB	DRY BULB	HD	HUB DRAIN	PBD	PARALLEL BLADE DAMPER
AD	ACCESS DOOR	DS	DUCT SILENCER	HP	HEAT PUMP	HV	HEATING AND VENTILATING UNIT
AFF	ABOVE FINISHED FLOOR	DWP	DOMESTIC WATER PUMP	HWC	HOT WATER CONVERTER	PRV	PRESSURE REDUCING VALVE
AH	AIR HANDLER (SPLIT REFRIG)	EAT	ENTERING AIR TEMPERATURE	HWP	HOT WATER PUMP	PTAC	PACKAGED TERMINAL AIR CONDITIONER
AHU	AIR HANDLING UNIT	EC	ELECTRICAL CONTRACTOR	HWR	HEATING HOT WATER RETURN	PY	POLYETHYLENE TUBING
AL	ACOUSTICAL LINING	ECO	EXTERIOR CLEANOUT	HWS	HEATING HOT WATER SUPPLY	RA	RETURN AIR
AP	ACCESS PANEL	EDH	ELECTRIC DUCT HEATER	HX	HEAT EXCHANGER	RAG	RETURN AIR GRILLE
B	BOILER	EF	EXHAUST FAN	HZ	HERTZ	RAR	RETURN AIR REGISTER
BB	ELECTRIC BASEBOARD RADIATION	EJ	EXPANSION JOINT	ID	INSIDE DIAMETER	RCP	REFLECTED CEILING PLAN
BDD	BACKDRAFT DAMPER	ESH	EMERGENCY SHOWER	IHT	INSULATE & HEAT TRACE	RF	RETURN FAN
BOL	BOTTOM OF LOUVER	ESP	EXTERNAL STATIC PRESSURE	LAT	LEAVING AIR TEMPERATURE	RHC	REHEAT COIL
B/F	BELOW FLOOR	ET	EXPANSION TANK	LD	LINEAR DIFFUSER	SA	SUPPLY AIR
BFC	BELOW FINISHED CEILING	EWC	ELECTRIC WATER COOLER	LF	LINEAR FEET	SAR	SUPPLY AIR REGISTER
BOB	BOTTOM OF BEAM	EWT	ENTERING WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE	SCG	SMOKE CONTROL GRILLE
BOD	BOTTOM OF DUCT	FA	FREE AREA	MC	MECHANICAL CONTRACTOR	SD	SMOKE DAMPER
BOP	BOTTOM OF PIPE	FC	FAN COIL UNIT	MC	MECHANICAL CONTRACTOR	SEF	SMOKE EXHAUST FAN
C	CHILLER	FD	FIRE DAMPER	MD	MANUAL DAMPER	SF	SUPPLY FAN
CD	CEILING DIFFUSER	FLR	FLOOR	MOD	MOTOR OPERATED DAMPER	SP	STATIC PRESSURE
CFM	CUBIC FEET PER MINUTE	FOB	FLAT ON BOTTOM	MTD	MOUNTED	SSTL	STAINLESS STEEL
CHWP	CHILLED WATER PUMP	FOP	FUEL OIL PUMP	MUA	MAKE-UP AIR UNIT	TG	TRANSFER GRILLE
CHWR	CHILLED WATER RETURN	FOT	FLAT ON TOP	NC	NORMALLY CLOSED	TPA	TREATED PROCESS AIR
CHWS	CHILLED WATER SUPPLY	FP	FIRE PUMP	NIC	NOT IN CONTRACT	TYP	TYPICAL
CLR	CLEAR	FPM	FEET PER MINUTE	NK	NECK	UH	UNIT HEATER
CP	CONDENSATE PUMP	FRP	FIBERGLASS REINFORCED PLASTIC	NO	NORMALLY OPEN	UNO	UNLESS NOTED OTHERWISE
CO	CLEAN OUT	FTR	FINNED TUBE RADIATION	OA	OUTSIDE AIR	VAV	VARIABLE AIR VOLUME UNIT
CPVC	CHLORINATED POLYVINYL CHLORIDE	FX	FLEXIBLE CONNECTION	OAI	OUTSIDE AIR INTAKE	VV	VOLUME DAMPER
CT	COOLING TOWER	GC	GENERAL CONTRACTOR	OAT	OUTSIDE AIR TEMPERATURE	VTR	VENT THRU ROOF
CU	CONDENSING UNIT	GPH	GALLONS PER HOUR	OBD	OPPOSED BLADE DAMPER	WB	WET BULB
CUH	CABINET UNIT HEATER	GPM	GALLONS PER MINUTE	OD	OUTSIDE DIAMETER	WMS	WIRE MESH SCREEN
CVB	CONSTANT VOLUME BOX	GS	GALVANIZED STEEL	OPA	ODOROUS PROCESS AIR	W	WASTE

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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SCALE:

**ENGINEERED
SYSTEMS &
SERVICES**



DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
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CHECKED BY:	JLR
JOB NO.	147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
BUILDING MECHANICAL
LEGEND AND ABBREVIATIONS

DRAWING NO.	H-0.1
REV. NO.	0
DATE:	06/14/13

FAN SCHEDULE										
EQUIPMENT NO.	SERVICE	TYPE	MAX AIR FLOW (CFM)	STATIC PRESSURE (IN. W.G.)	MIN AIR FLOW (CFM)	ELECTRICAL			DESIGN BASIS MANUFACTURER & MODEL	OPTIONS & ACCESSORIES
						MAX HP	MAX RPM	VOLT/PH/HZ		
SF-101	OA SUPPLY	INLINE	1,950	0.650	1,950	3/4	1700	120/1/60	Greenheck SQ-130-VG	1, 3
SF-201	OA SUPPLY	INLINE	1,950	0.650	1,950	3/4	1700	120/1/60	Greenheck SQ-130-VG	1, 3
SF-301	OA SUPPLY	INLINE	1,950	0.650	1,950	3/4	1700	120/1/60	Greenheck SQ-130-VG	1, 3
SF-401	OA SUPPLY	INLINE	1,950	0.650	1,950	3/4	1700	120/1/60	Greenheck SQ-130-VG	1, 3
EF-101	EXHAUST	INLINE	1900	0.650	475	3/4	1680	120/1/60	Greenheck SQ-130-VG	1, 2, 3
EF-201	EXHAUST	INLINE	1900	0.650	475	3/4	1680	120/1/60	Greenheck SQ-130-VG	1, 2, 3
EF-301	EXHAUST	INLINE	1900	0.650	475	3/4	1680	120/1/60	Greenheck SQ-130-VG	1, 2, 3
EF-401	EXHAUST	INLINE	1900	0.650	475	3/4	1680	120/1/60	Greenheck SQ-130-VG	1, 2, 3

NOTES:

- UNIT SHALL BE DIRECT DRIVEN.
- PROVIDE WITH VARIABLE SPEED DC MOTOR, SOLID STATE SPEED CONTROLLER WITH INTEGRAL TRANSFORMER & WALL-MOUNTED PANEL BY FAN MANUFACTURER.
- PROVIDE DISCONNECT SWITCH & VIBRATION ISOLATORS FOR SUSPENDED INSTALLATION.

AIR DEVICE SCHEDULE												
TAG	MODEL	SERVICE	MODULE SIZE	FACE SIZE (IN.)	NECK SIZE (IN.)	MAX AIR FLOW (CFM)	MAX S.P. (IN. W.G.)	MAX NC	DAMPER	MATERIAL	REMARKS	
												S1-18X18
E1-18x18	50F	EXHAUST GRILLE	18X18	18X18	18X18	1900	0.125	31	OBVD	ALUM	1, 2, 3	
E1-16x16	50F	EXHAUST GRILLE	16X16	16X16	16X16	1460	0.075	19	OBVD	ALUM	1, 2, 3	

NOTES:

- SELECTION BASED UPON TITUS.
- 1/2-INCH BLADE SPACING.
- SINGLE DEFLECTION, 3/4-INCH BLADE SPACING.

DUCT HEATER SCHEDULE								
TAG NO	INSIDE DUCT SIZE W" X H"	CFM (min.)	KW	VOLTS/PH/HZ	TYPE OF CONTROL	HORIZONTAL OR VERTICAL AIRFLOW	MANUFACTURER & MODEL	NOTES
EDH-201	18X18	310	7.5	480/3/60	SCR	VERT. DOWN	EQUAL TO CHROMALOX MODEL ADH	1, 2
EDH-301	18X18	310	7.5	480/3/60	SCR	VERT. DOWN	EQUAL TO CHROMALOX MODEL ADH	1, 2
EDH-401	18X18	250	7.5	480/3/60	SCR	VERT. DOWN	EQUAL TO CHROMALOX MODEL ADH	1, 2

NOTES:

- SUPPLY NEMA 12 SCR POWER CONTROL ENCLOSURE WITH PROCESS CONTROLLER, OVERTEMPERATURE CONTROLLER, MAIN DISCONNECT SWITCH AND ENCLOSURE HEATER.

SUMP PUMP SCHEDULE										
TAG	MODEL	SERVICE	TYPE	GPM	TOTAL HEAD (FT)	MAX HP	MAX RPM	ELECTRICAL (V/PH/HZ)	BODY MATERIAL	REMARKS
P-205	BN153	SUMP DRAINAGE	VERTICAL SUMP	30	32	1/2	3450	120/1/60	CAST IRON	1
P-305	BN153	SUMP DRAINAGE	VERTICAL SUMP	30	32	1/2	3450	120/1/60	CAST IRON	1
P-405	M98	SUMP DRAINAGE	VERTICAL SUMP	25	20	1/3	1725	120/1/60	CAST IRON	1

NOTES:

- SELECTION IS BASED UPON ZOELLER.
- PUMP SHALL BE CAPABLE OF PASSING A 3/4-INCH SOLID.
- PUMP SHALL HAVE A COMBINATION START-STOP FLOAT SWITCH.
- PROVIDE A FACTORY CONTROL PANEL WITH HAND-OFF-AUTO CONTROL AND DRY CONTACT CONTACT OUTPUTS FOR FLOAT SWITCH POSITION AND RUN STATUS.

WATER HEATER SCHEDULE									
TAG	SERVICE	TYPE	ENERGY SOURCE			STORAGE CAPACITY (GAL)	GPM	MAX TEMP RISE (°F)	NOTES
			SOURCE	VOLTS/PHASE/HZ	KW				
EW-101	EYEWASH	INSTANTANEOUS	ELEC	240/1/60	3.5	-	0.5	20	1, 2
EW-201	EYEWASH	INSTANTANEOUS	ELEC	240/1/60	3.5	-	0.5	20	1, 2
EW-301	EYEWASH	INSTANTANEOUS	ELEC	240/1/60	3.5	-	0.5	20	1, 2
EW-401	EYEWASH	INSTANTANEOUS	ELEC	240/1/60	3.5	-	0.5	20	1, 2

NOTE:

- DESIGN BASIS IS EEMAX MODEL EX35TEE.
- PROVIDE SOLID STATE TEMPERATURE CONTROLLER FOR DELIVERY OF 90°F WATER WITH VARIABLE SUPPLY WATER TEMPERATURE.
- PROVIDE WITH INTEGRAL CONTACTOR, CONTROL POWER AND DISCONNECT.

PLUMBING FIXTURE SCHEDULE					
TAG	FIXTURE	PIPING CONNECTION SIZE (INCHES)			
		HW	TW	NPW	SOR W
EEW-1	EMERGENCY EYEWASH	-	3/4	-	-
HB-1	1" WALL MOUNTED HOSE BIBB W/ HOSE RACK AND 50 FT OF HOSE	-	-	1	-
NFP-1	1" NON-FREEZE POST HYDRANT W/ HOSE RACK AND 75 FT OF HOSE	-	-	1	-

UNIT HEATER SCHEDULE									
TAG	TYPE	Kw	VOLTS/PH/HZ	FAN		T'STAT	CFM	MIN THROW (FT)	NOTES
				HP	VOLTS/PH				
UH-101	ELEC	7.5	480/3/60	1/15	480/3	INTEGRAL	850	27	1, 2, 3
UH-201	ELEC	7.5	480/3/60	1/15	480/3	INTEGRAL	850	27	1, 2, 3
UH-301	ELEC	7.5	480/3/60	1/15	480/3	INTEGRAL	850	27	1, 2, 3
UH-401	ELEC	7.5	480/3/60	1/15	480/3	INTEGRAL	850	27	1, 2, 3

NOTES:

- SELECTION BASED UPON CHROMALOX LUH-07-43-32.
- PROVIDE WITH INTEGRAL THERMOSTAT, CONTACTOR, CONTROL POWER TRANSFORMER & DISCONNECT SWITCH.
- PROVIDE WALL MOUNTING BRACKET.

GRAVITY HOOD SCHEDULE							
TAG	THROAT SIZE	SERVICE	DAMPER TYPE	MATL	CFM	MAX S.P. (in. w.c.)	NOTES
GH-101	16X16	SUPPLY	-	ALUM	1470	0.12	1
GH-102	16X16	EXHAUST	GRAVITY	ALUM	1420	0.11	2
GH-201	16X16	SUPPLY	-	ALUM	1260	0.08	1
GH-202	16X16	EXHAUST	GRAVITY	ALUM	1210	0.07	2
GH-301	16X16	SUPPLY	-	ALUM	1260	0.08	1
GH-302	16X16	EXHAUST	GRAVITY	ALUM	1210	0.07	2
GH-401	16X16	SUPPLY	-	ALUM	1050	0.05	1
GH-402	16X16	EXHAUST	GRAVITY	ALUM	1000	0.04	2

NOTES:

- DESIGN BASIS IS GREENHECK MODEL FGI.
- DESIGN BASIS IS GREENHECK MODEL FGR.

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Fax: 770-825-9295

DEPARTMENT OF WATER RESOURCES
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ATLANTA, GEORGIA
30303

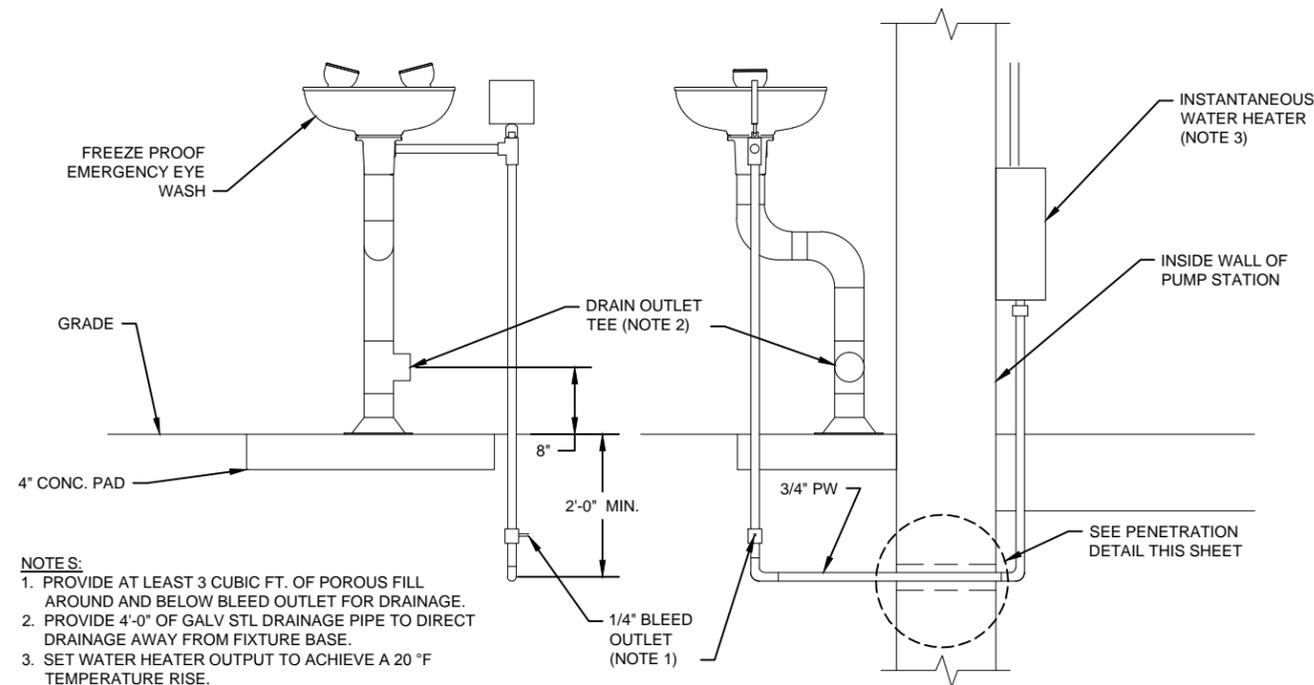
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770-475-8994
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JOB NO.	147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
BUILDING MECHANICAL
SCHEDULES

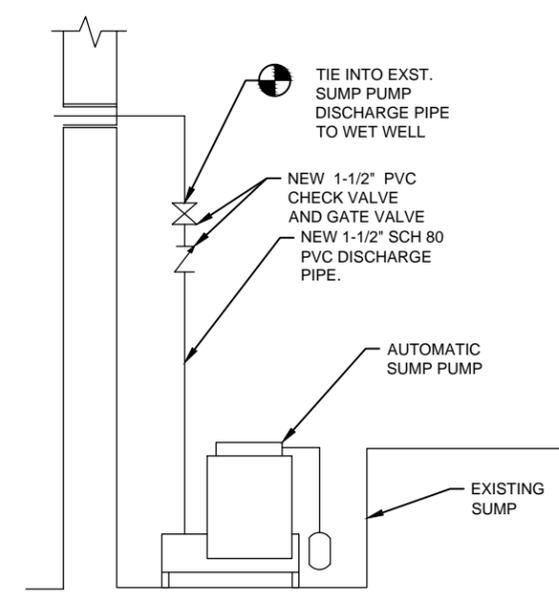
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DATE:	06/14/13

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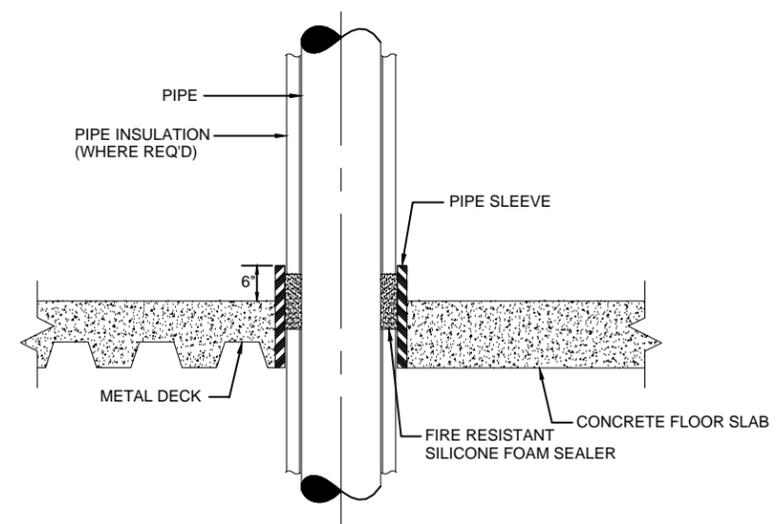


- NOTES:**
1. PROVIDE AT LEAST 3 CUBIC FT. OF POROUS FILL AROUND AND BELOW BLEED OUTLET FOR DRAINAGE.
 2. PROVIDE 4'-0" OF GALV STL DRAINAGE PIPE TO DIRECT DRAINAGE AWAY FROM FIXTURE BASE.
 3. SET WATER HEATER OUTPUT TO ACHIEVE A 20 °F TEMPERATURE RISE.

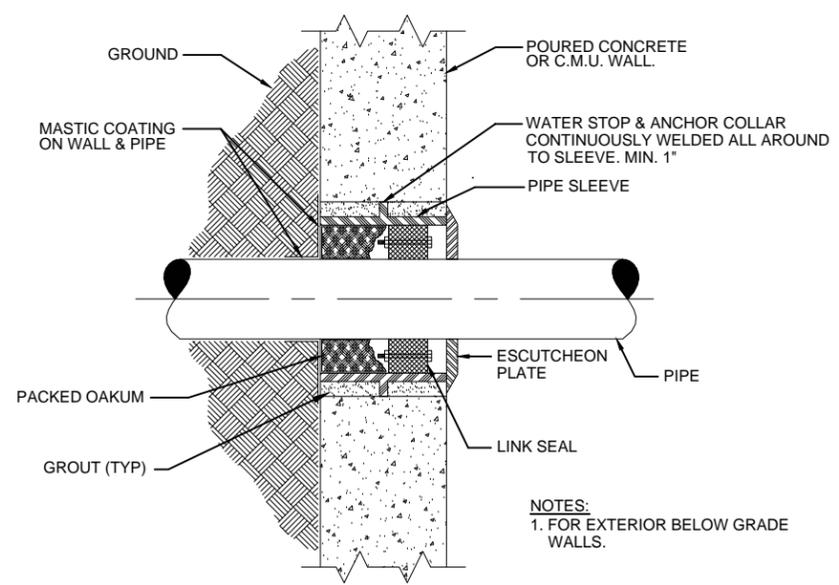
1 EMERGENCY EYE WASH DETAIL
NOT TO SCALE



2 SUMP PUMP DETAIL
NOT TO SCALE



3 PIPE SLEEVE THROUGH FLOOR DETAIL
NOT TO SCALE



4 PIPE SLEEVE THROUGH WALL DETAIL
NOT TO SCALE

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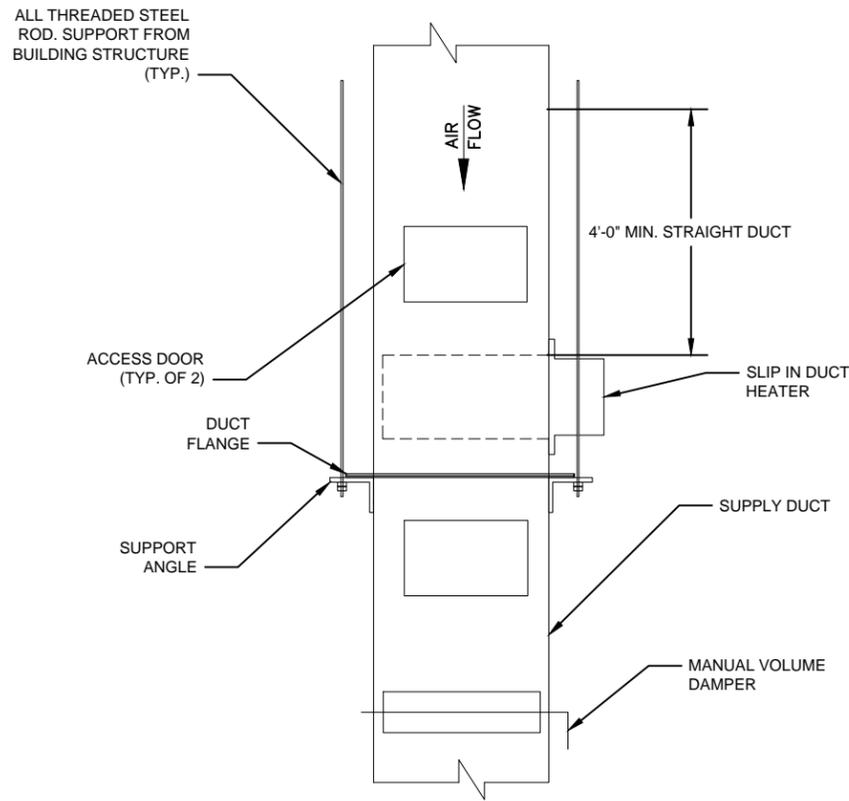
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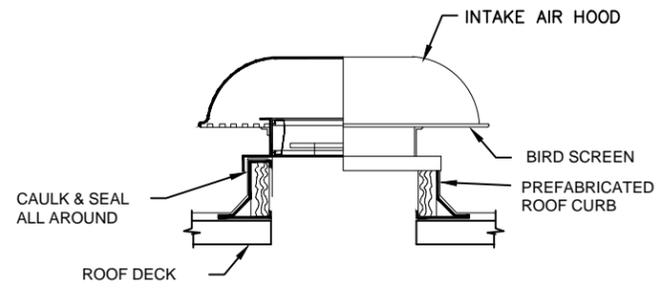
FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
BUILDING MECHANICAL
PLUMBING DETAILS

DRAWING NO.	H-0.3
REV. NO.	0
DATE:	06/14/13

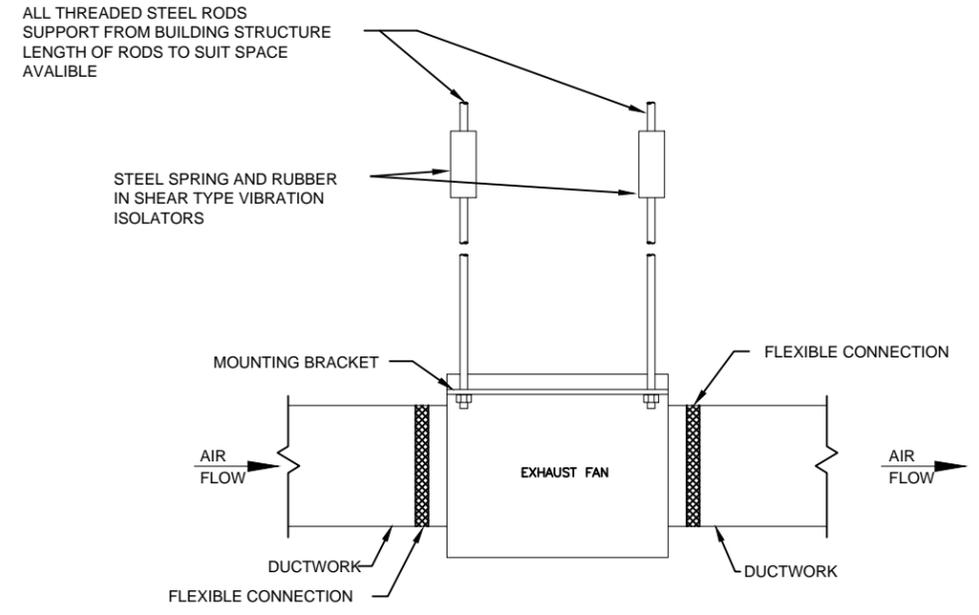
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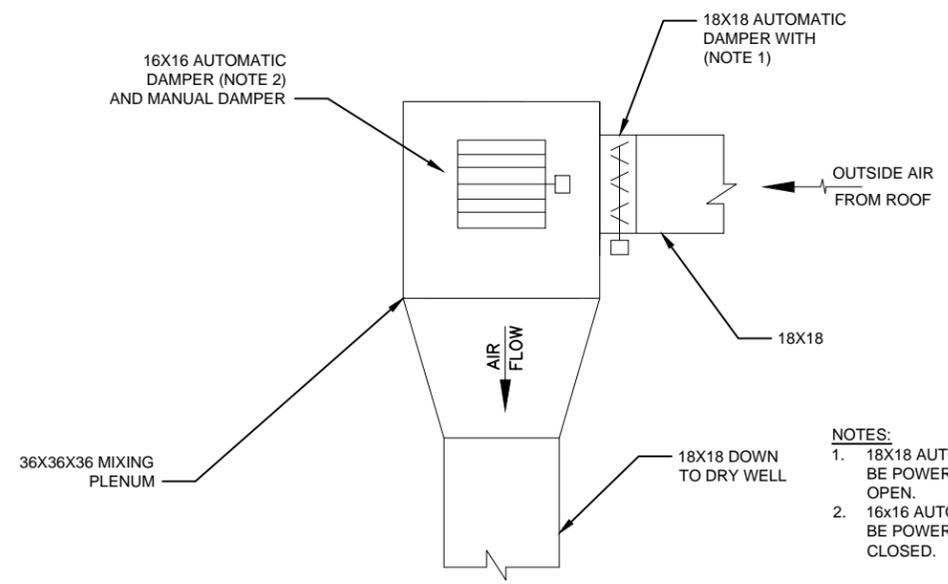
1 ELECTRIC DUCT HEATER ELEVATION DETAIL
NOT TO SCALE



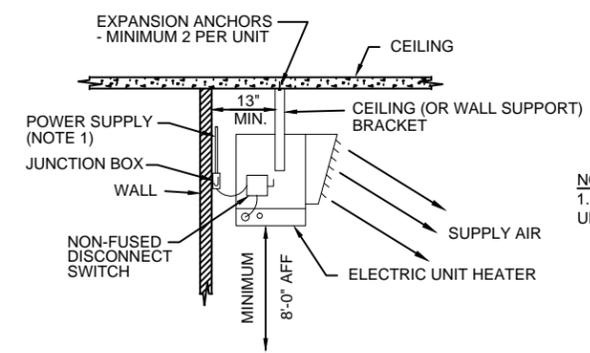
2 INTAKE AIR HOOD
N.T.S.



3 CENTRIFUGAL IN-LINE FAN DETAIL
N.T.S.



4 AIR MIXING PLENUM ELEVATION
NOT TO SCALE



5 ELECTRIC UNIT HEATER MOUNTING DETAIL
NOT TO SCALE

NOTES:
1. PROVIDE CONTACTOR, CONTROL POWER TRANSFORMER & UNIT MOUNTED THERMOSTAT FOR HEATER.

NOTES:
1. 18X18 AUTOMATIC DAMPER SHALL BE POWER TO CLOSE, SPRING TO OPEN.
2. 16X16 AUTOMATIC DAMPER SHALL BE POWER TO OPEN, SPRING CLOSED.

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ENGINEERED SYSTEMS & SERVICES

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141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303

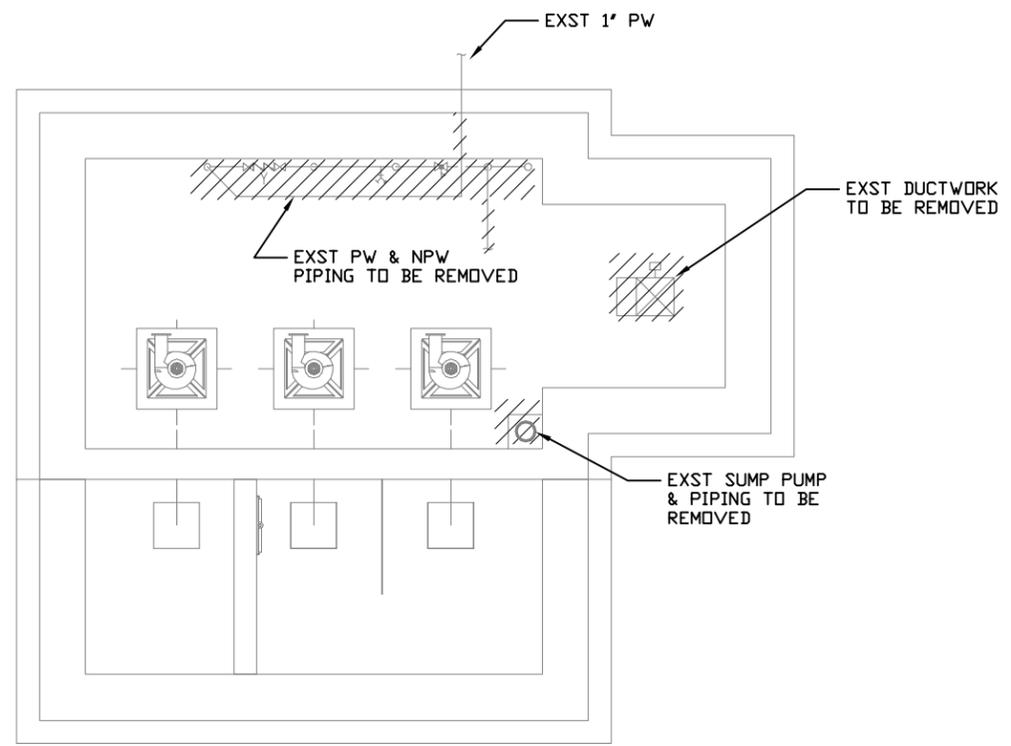
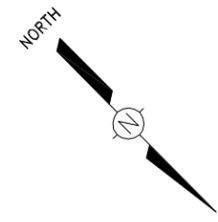


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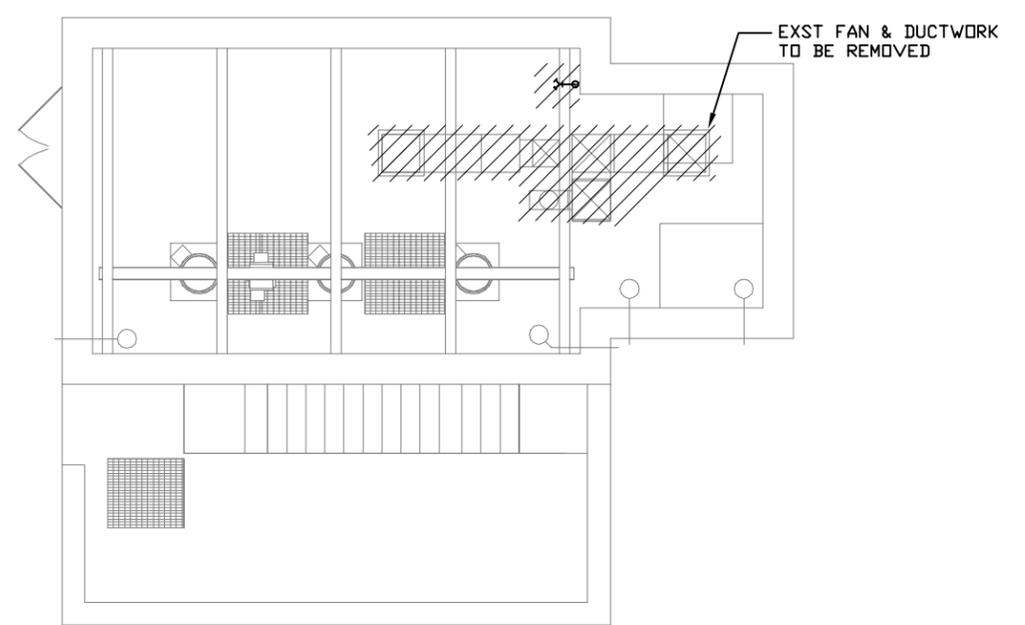
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JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
BUILDING MECHANICAL
HVAC DETAILS

DRAWING NO. H-0.4
REV. NO. 0
DATE: 06/14/13

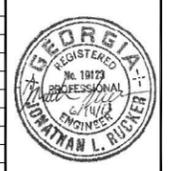


PLAN @ EL. 839.67
SCALE: 1/4" = 1'-0"



PLAN @ EL. 864.50
SCALE: 1/4" = 1'-0"

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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
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ATLANTA, GEORGIA
30303



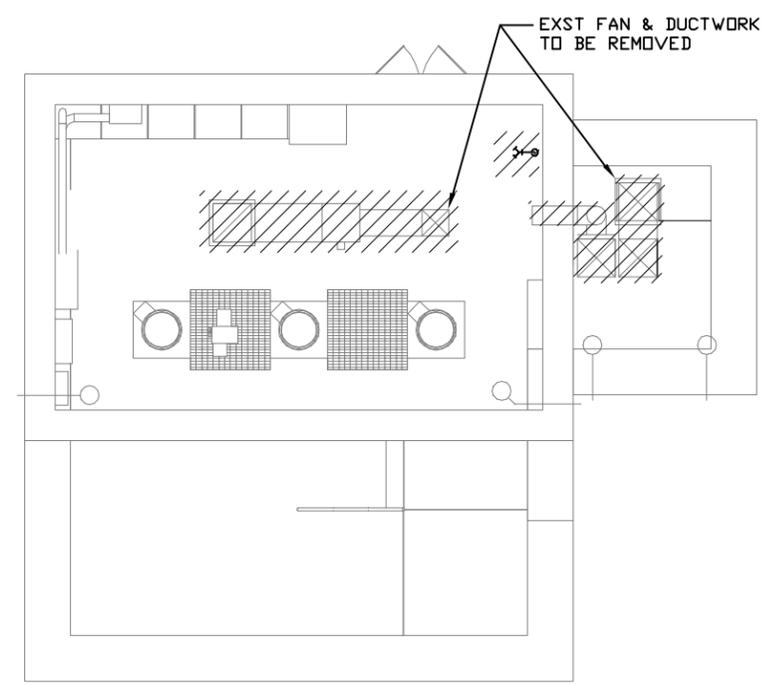
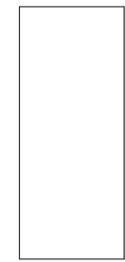
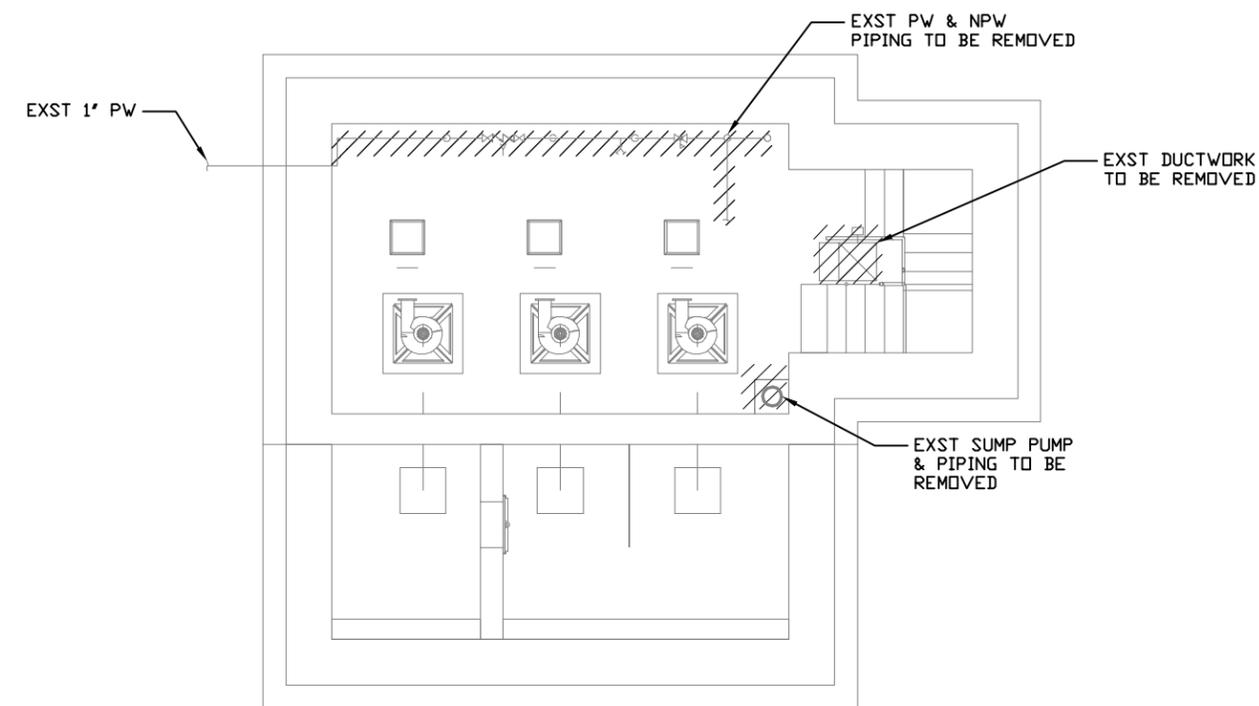
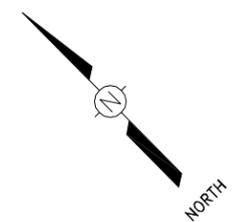
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA

PUMP STATION NO. 1
BLDG MECHANICAL DEMOLITION

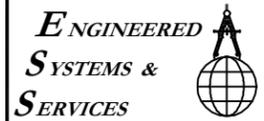
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DEPARTMENT OF
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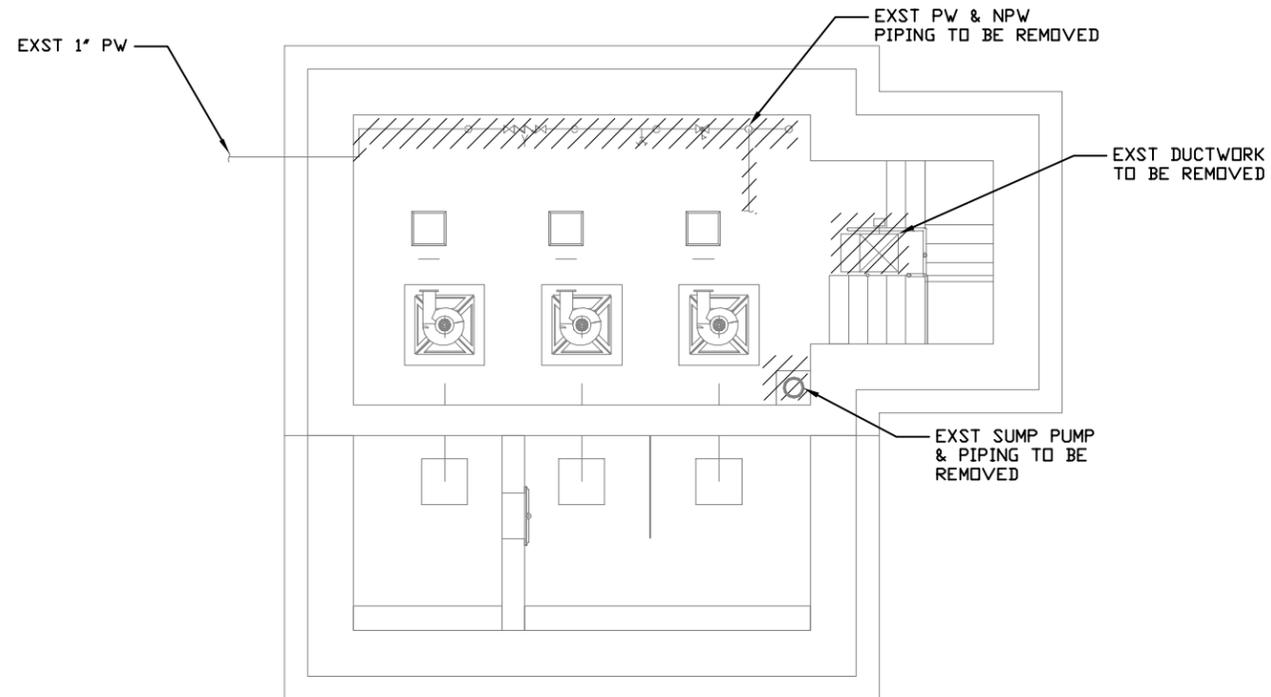
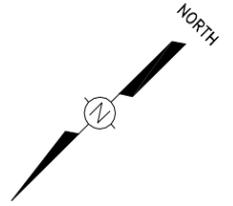


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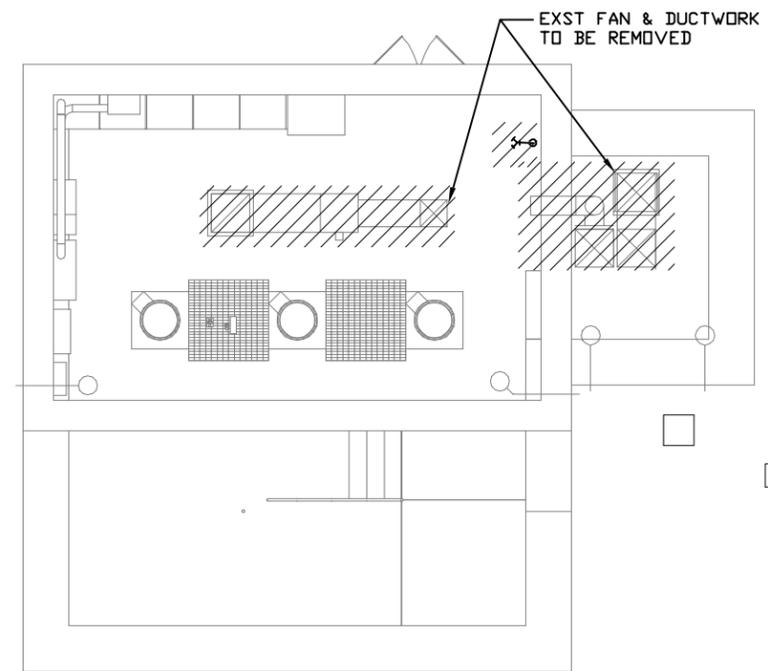
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
BLDG MECHANICAL DEMOLITION

DRAWING NO.
HD-2.0
REV. NO.
0
DATE:
06/14/13



PLAN @ EL. 851.17
SCALE: 1/4" = 1'-0"



PLAN @ EL. 871.00
SCALE: 1/4" = 1'-0"

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FAX: 770-777-9545

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JLR
DRAWN BY:
EQR
CHECKED BY:

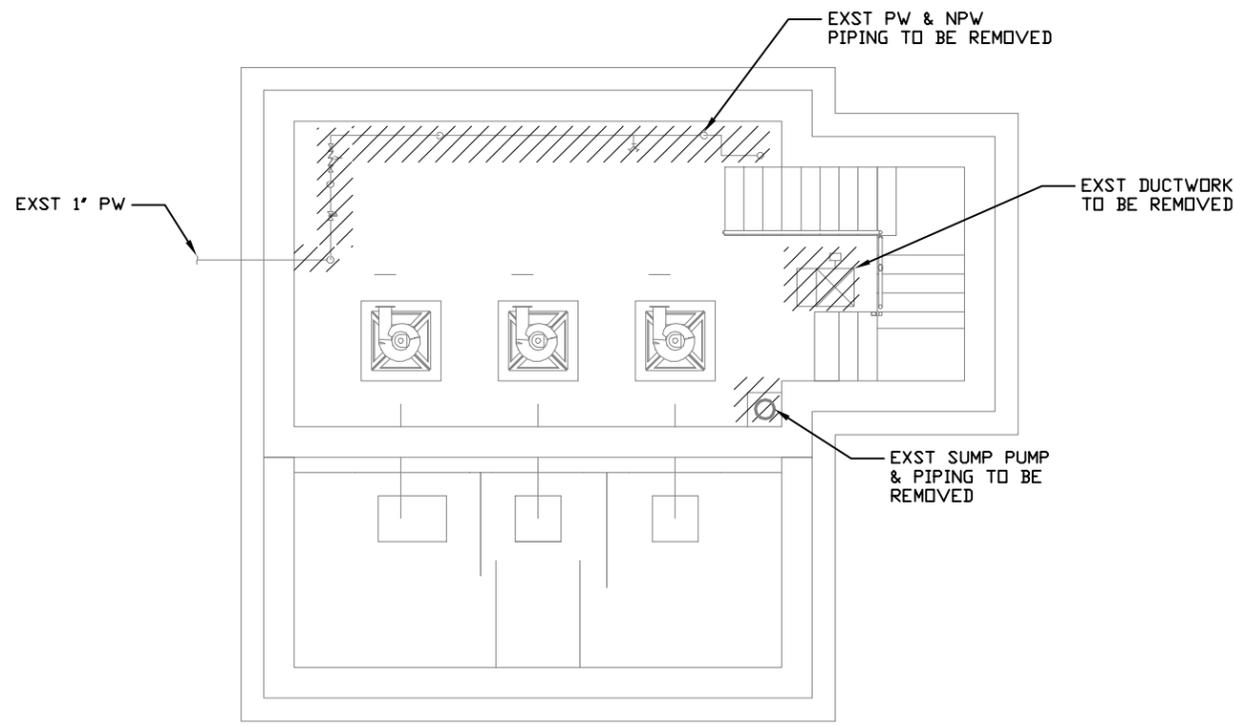
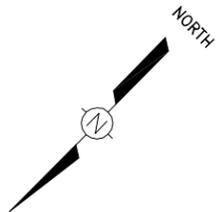
JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA

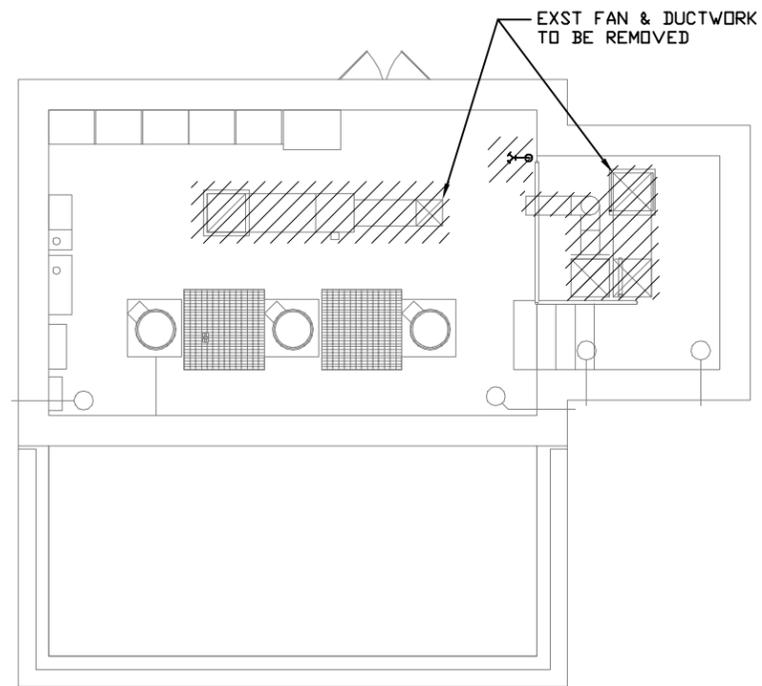
PUMP STATION NO. 3
BLDG MECHANICAL DEMOLITION

DRAWING NO.
HD-3.0
REV. NO.
0
DATE:
06/14/13

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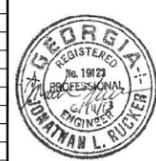


PLAN @ EL. 937.66
SCALE: 1/4" = 1'-0"

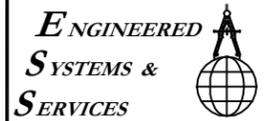


PLAN @ EL. 950.50
SCALE: 1/4" = 1'-0"

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2950 Horizon Park Drive
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Phone: 770-810-5700
Fax: 770-825-9295

DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303



Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

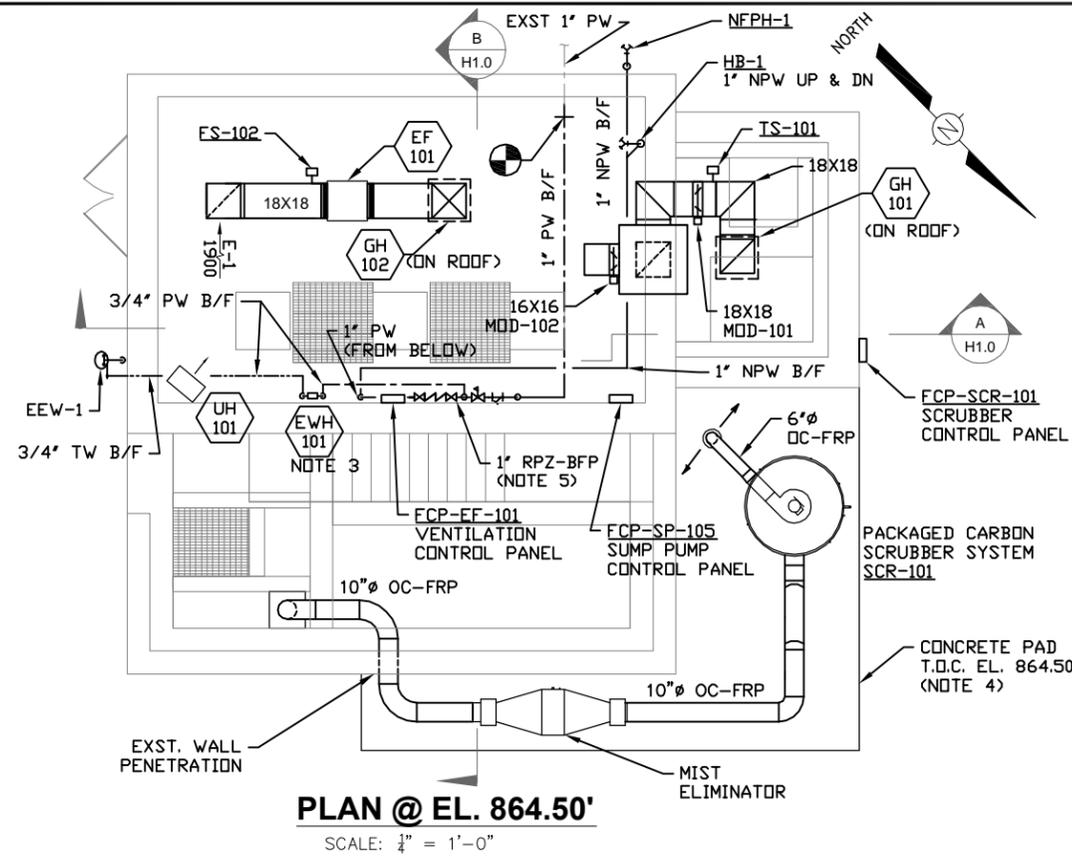
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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
BLDG MECHANICAL DEMOLITION

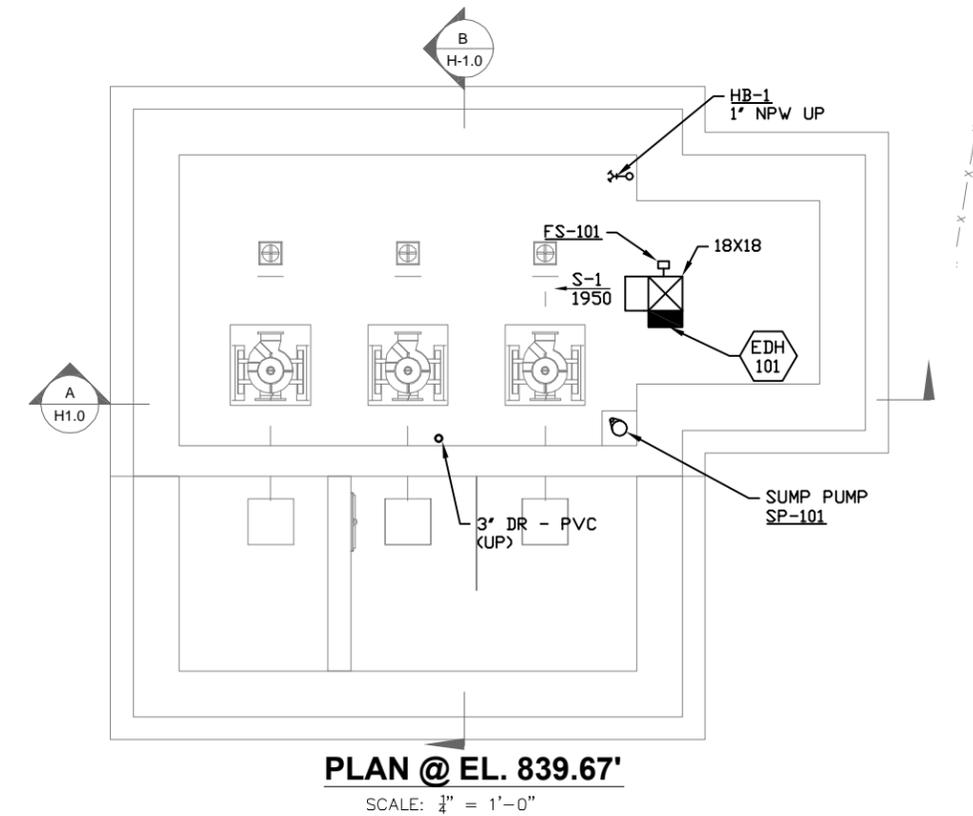
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HD-4.0
REV. NO.
0
DATE:
06/14/13

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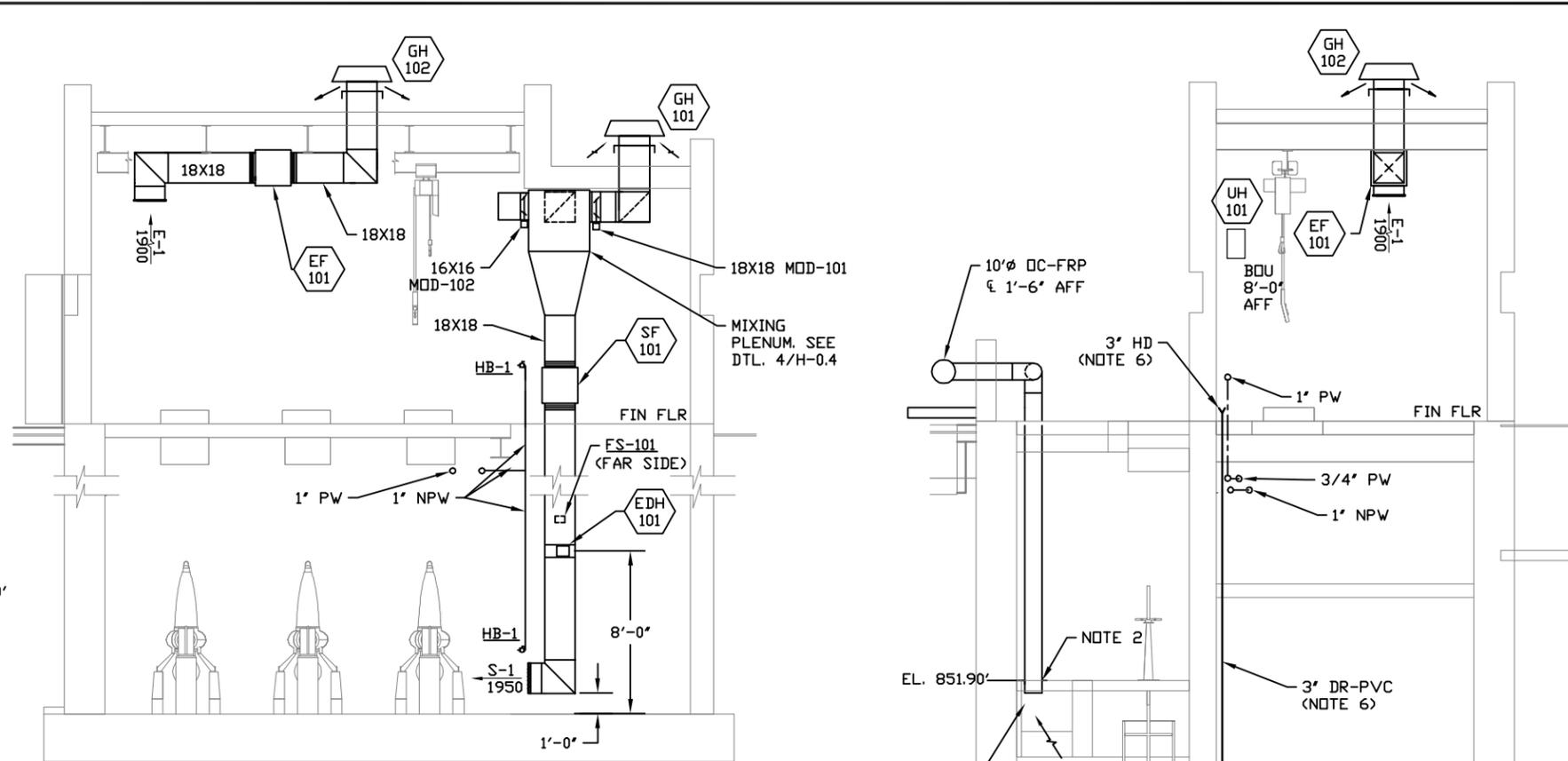
PLAN @ EL. 864.50'

SCALE: 1/4" = 1'-0"



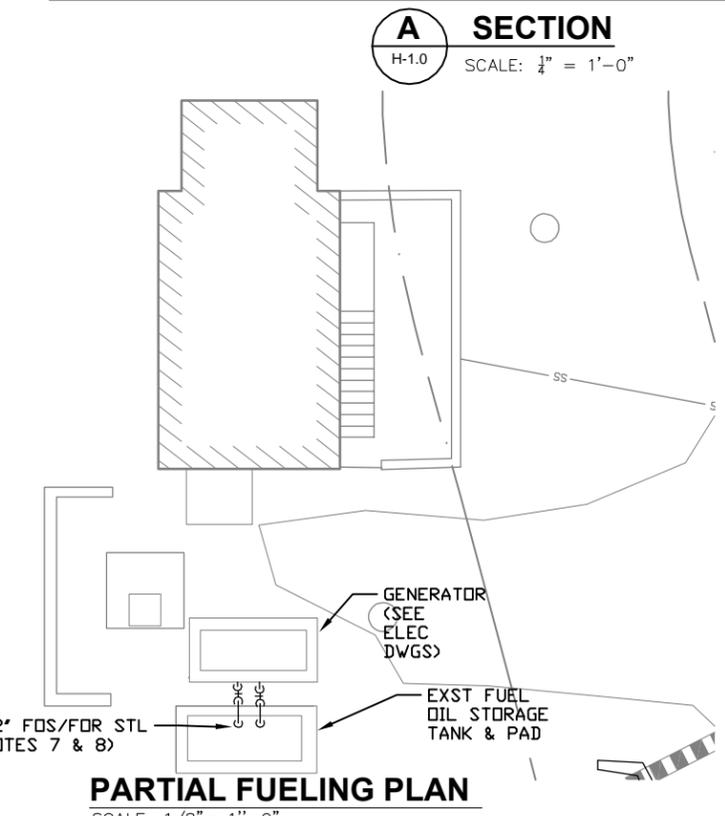
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SCALE: 1/4" = 1'-0"



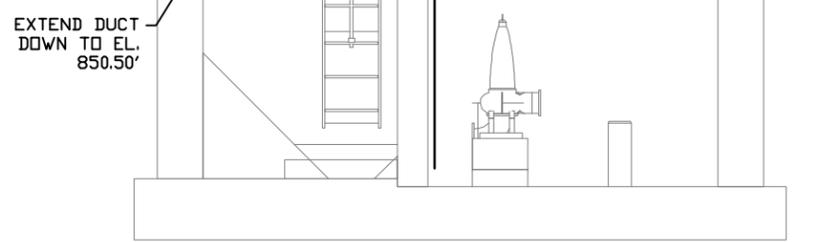
A SECTION

H-1.0 SCALE: 1/4" = 1'-0"



PARTIAL FUELING PLAN

SCALE: 1/8" = 1'-0"



B SECTION

H-1.0 SCALE: 1/4" = 1'-0"

- NOTES:**
1. INSTALL SUPPLY DUCT TIGHT TO UNDERSIDE OF ROOF.
 2. PROVIDE 18"X18"X1/4" FRP PLATE WITH COLLAR FOR SUPPORT OF 10" OC DUCT PENETRATION INTO WET WELL COVER.
 3. MOUNT BOTTOM OF WATER HEATER 16" AFF. PROVIDE 8-INCH WIDE, 20 GAUGE, GALV STL SPRAY SHIELDS AROUND SIDES AND TOP OF WATER HEATER. SEE DTL 1/H-0.3.
 4. SEE STRUCTURAL DWGS FOR PAD DETAIL.
 5. MOUNT RPZBFP AT A ± ELEV OF 24" AFF. PROVIDE A 10-INCH WIDE X 30-INCH LONG GALV STL SPLASH SHIELD ABOVE RPZBFP FOR PROTECTION OF ELECTRICAL PANELS ABOVE.
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 8. MOUNT PIPING ON GALVANIZED STEEL UNISTRUT THAT IS ANCHORED TO THE CONCRETE SLAB. ATTACH PIPING TO UNISTRUT W/ GALVANIZED STEEL U-BOLTS

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SCALE: **ENGINEERED SYSTEMS & SERVICES**

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Phone: 770-810-5700
Fax: 770-825-9295

DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303



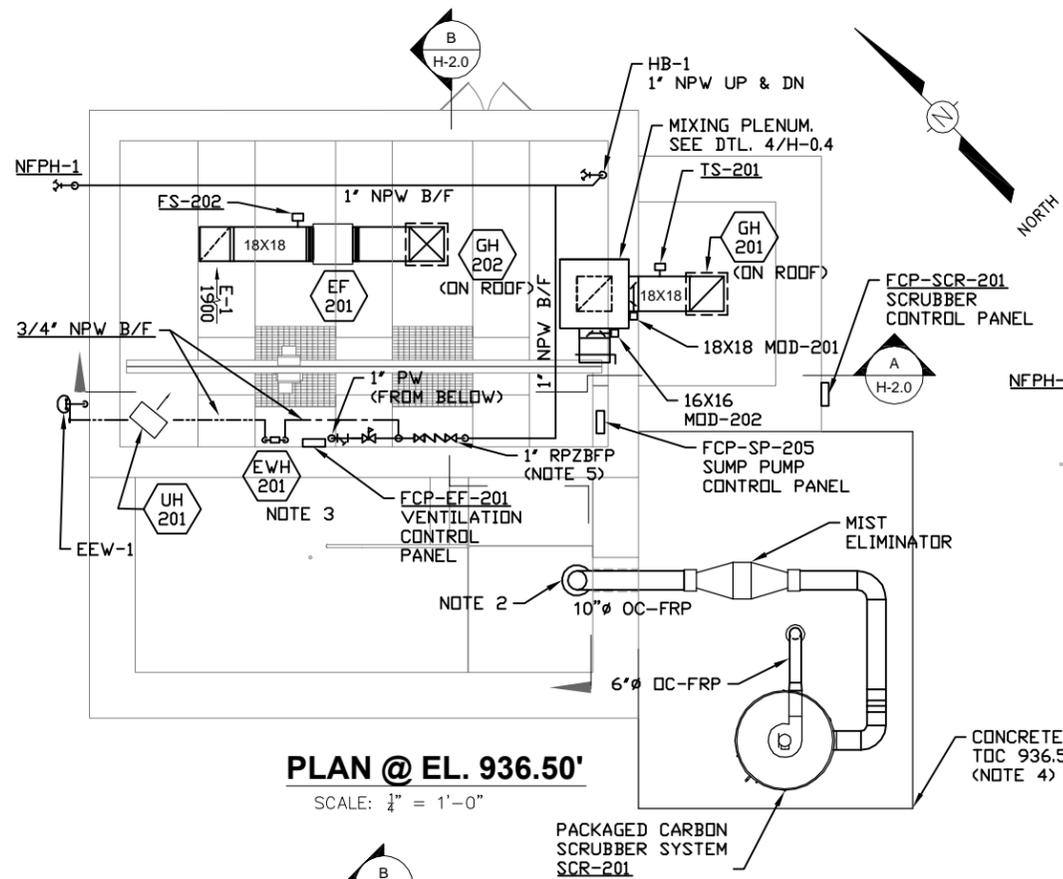
Shaw Environmental & Infrastructure, Inc.
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11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
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JOB NO. 147024

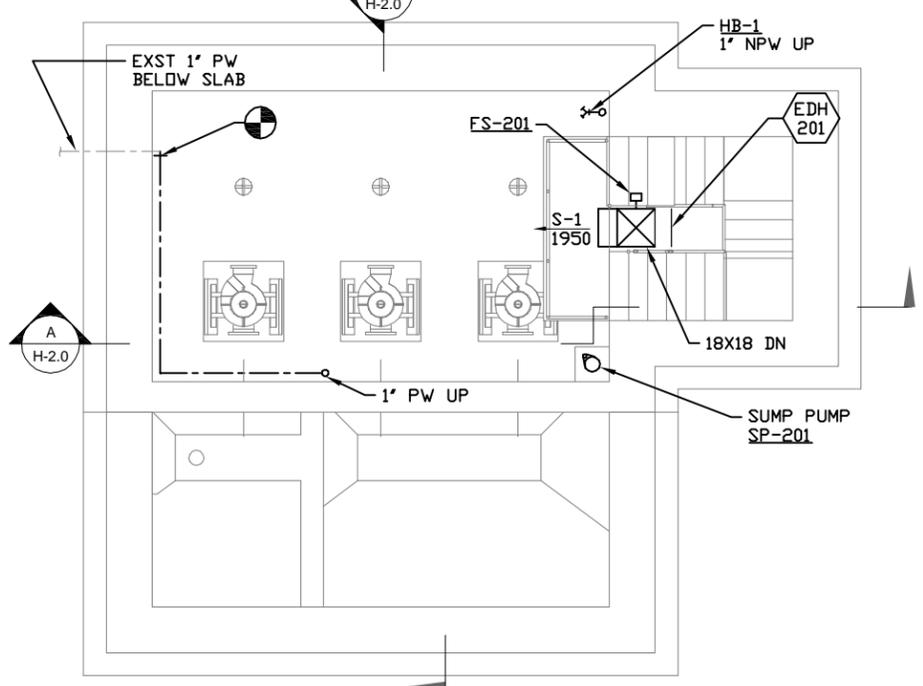
FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMPING STATION NO. 1
BLDG MECH PLAN & SECTIONS

DRAWING NO. H-1.0
REV. NO. 0
DATE: 06/14/13

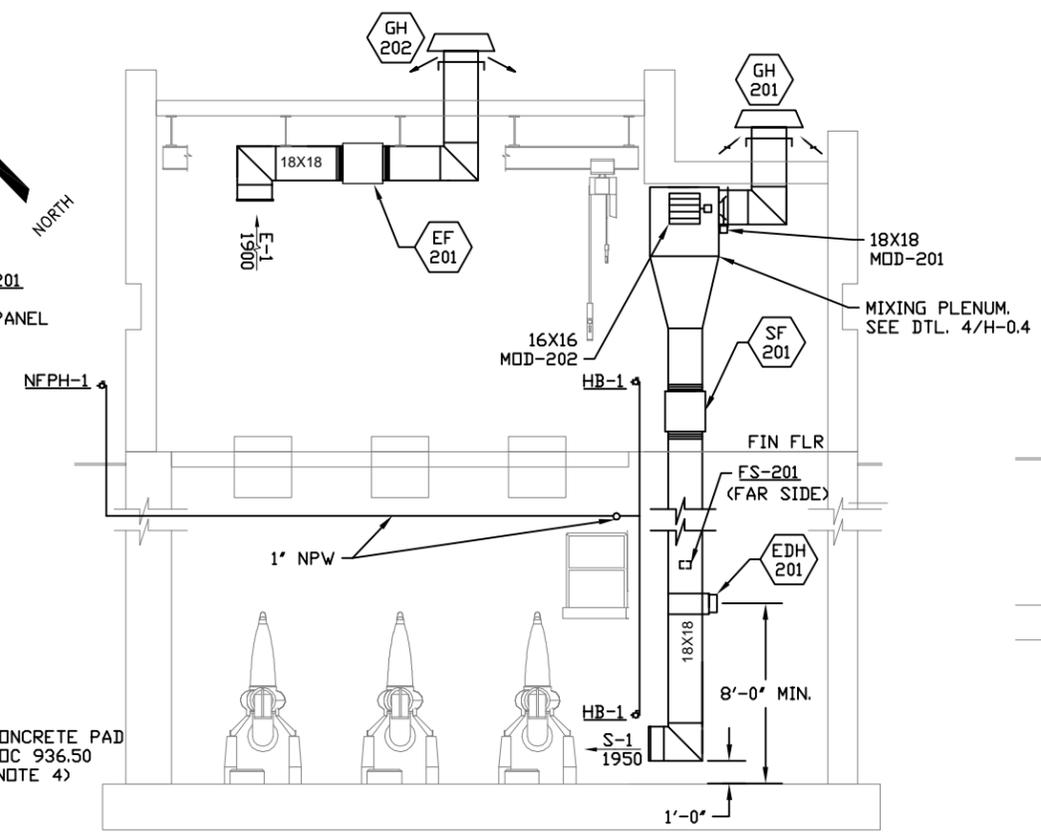
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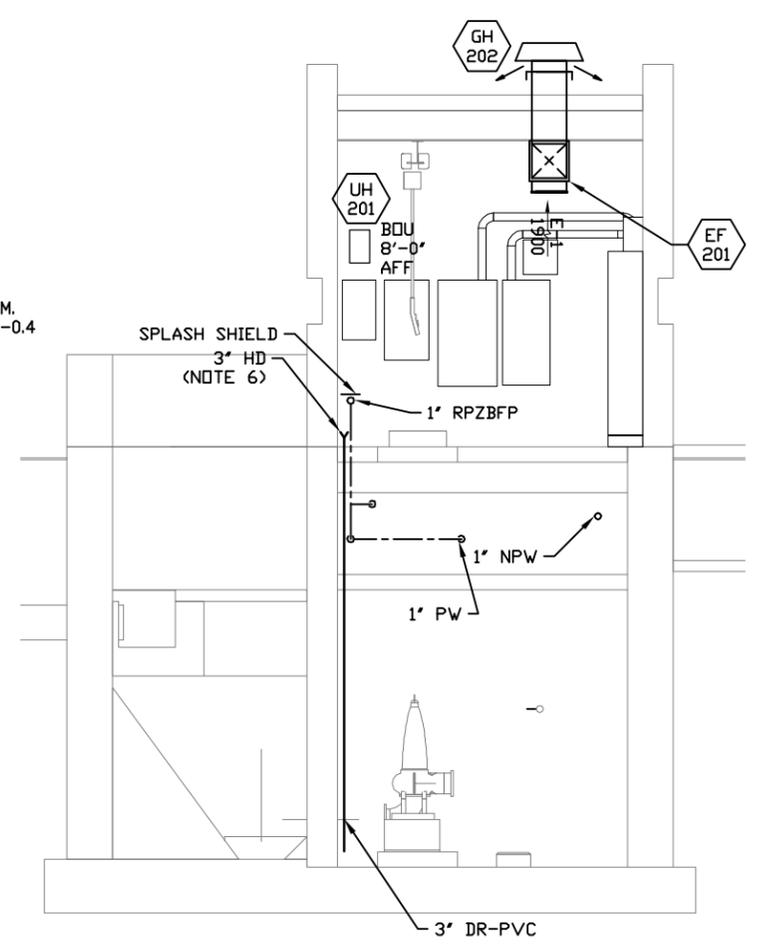
PLAN @ EL. 936.50'
SCALE: 1/4" = 1'-0"



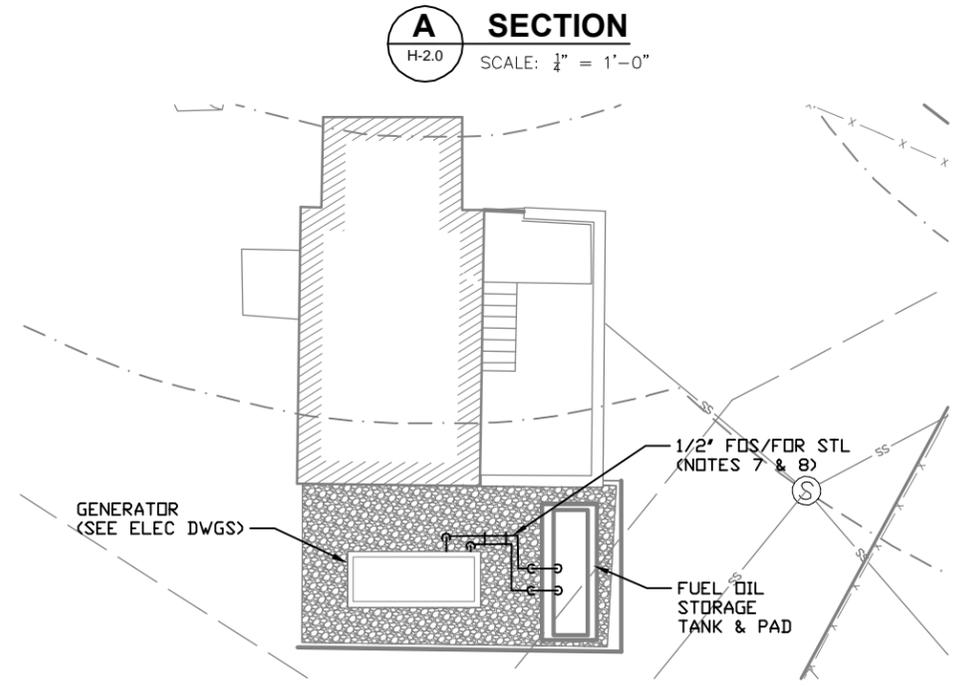
PLAN @ EL. 918.08'
SCALE: 1/4" = 1'-0"



A SECTION
SCALE: 1/4" = 1'-0"



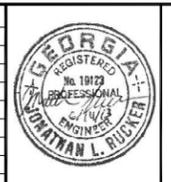
B SECTION
SCALE: 1/4" = 1'-0"



PARTIAL FUELING PLAN
SCALE: 1/8" = 1'-0"

- NOTES:**
1. INSTALL SUPPLY DUCT TIGHT TO UNDERSIDE OF ROOF.
 2. PROVIDE 18"x18"x1/4" FRP PLATE WITH COLLAR FOR SUPPORT OF 10" OC DUCT PENETRATION INTO WET WELL COVER.
 3. MOUNT BOTTOM OF WATER HEATER 16" AFF. PROVIDE 8-INCH WIDE, 20 GAUGE, GALV STL SPRAY SHIELDS AROUND SIDES AND TOP OF WATER HEATER. SEE DTL 1/H-0.3.
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SCALE: **ENGINEERED SYSTEMS & SERVICES**

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Suite B
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Phone: 770-810-5700
Fax: 770-825-9295

DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

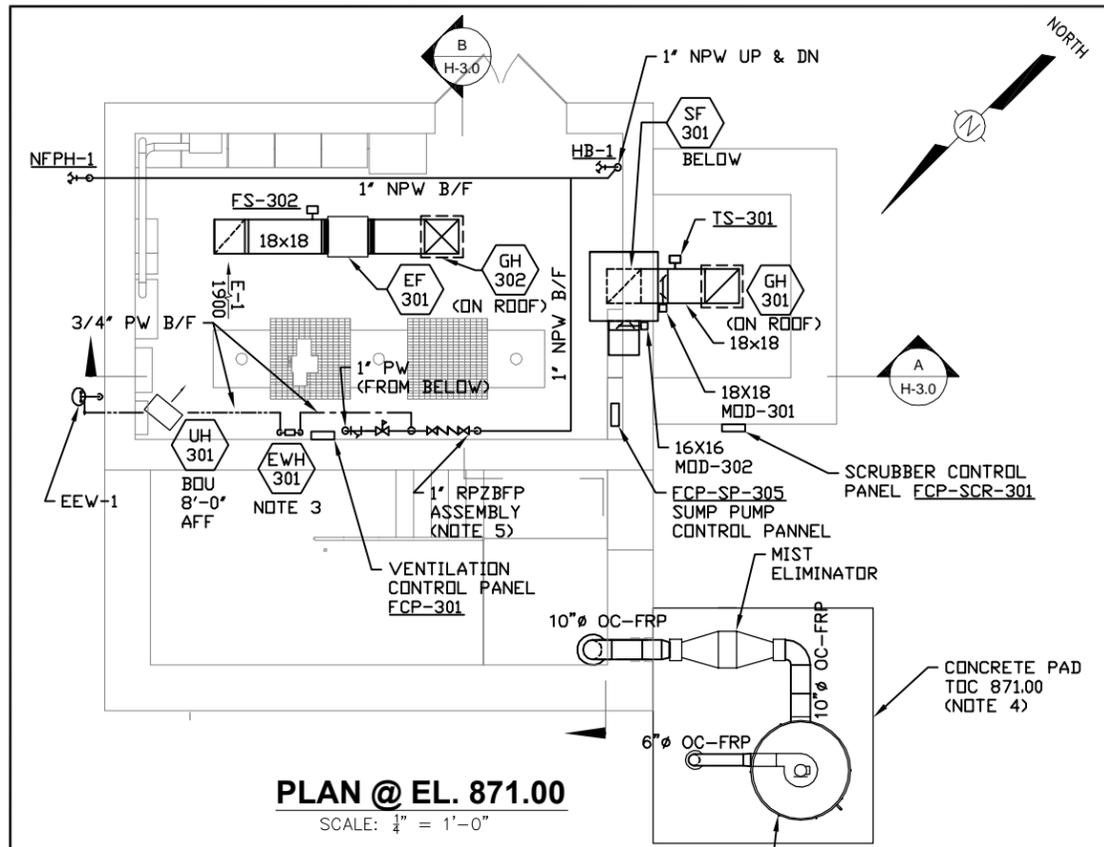
Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY:	ABA
DRAWN BY:	ABA
CHECKED BY:	
JOB NO.	147024

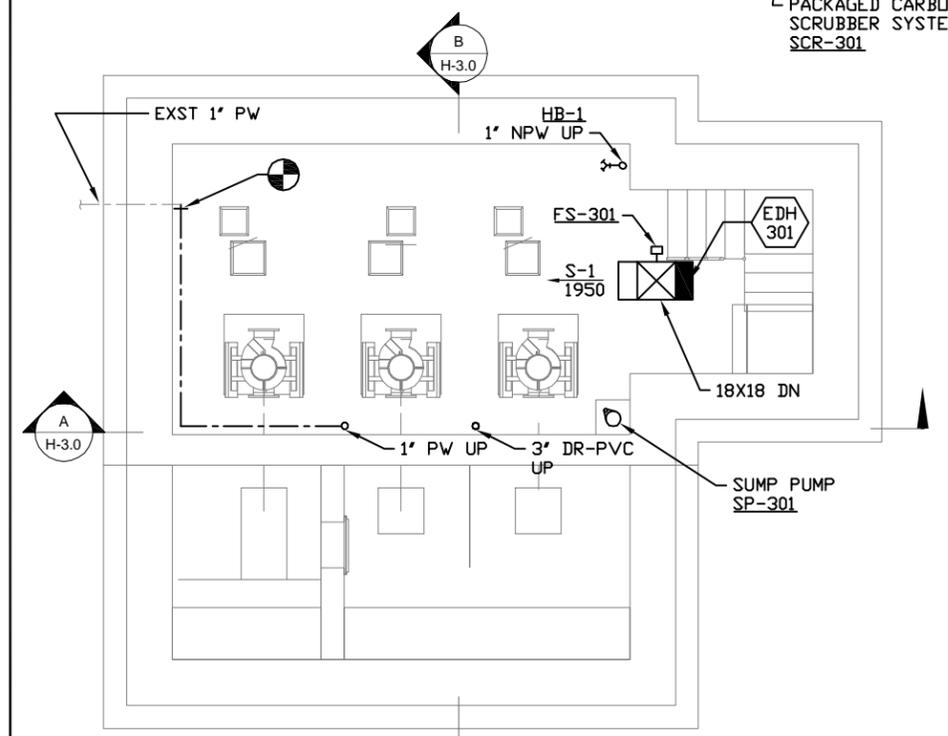
FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMPING STATION NO. 2
BLDG MECH HVAC PLAN & SECTIONS

DRAWING NO.	H-2.0
REV. NO.	0
DATE:	06/14/2013

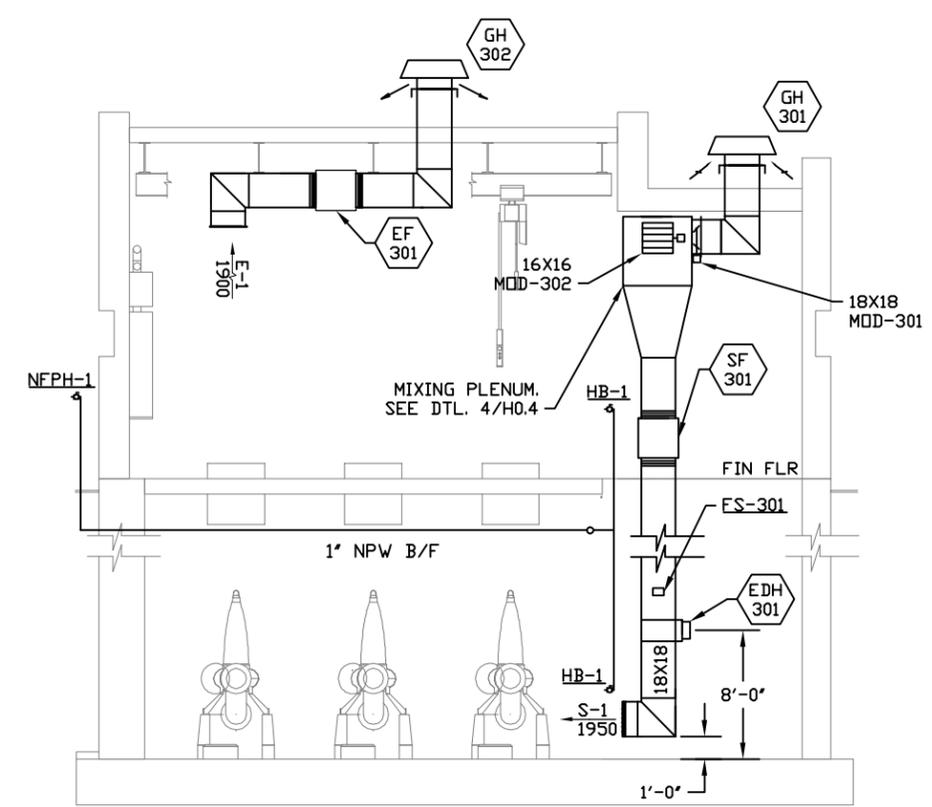
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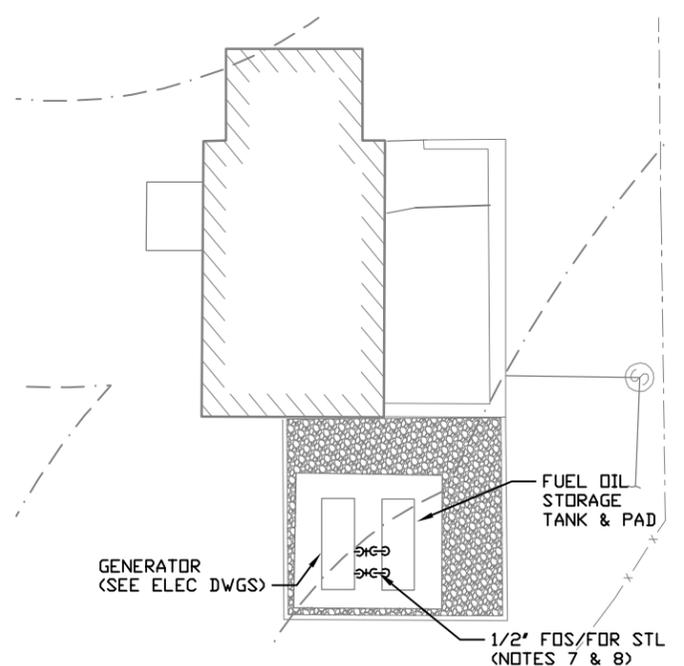
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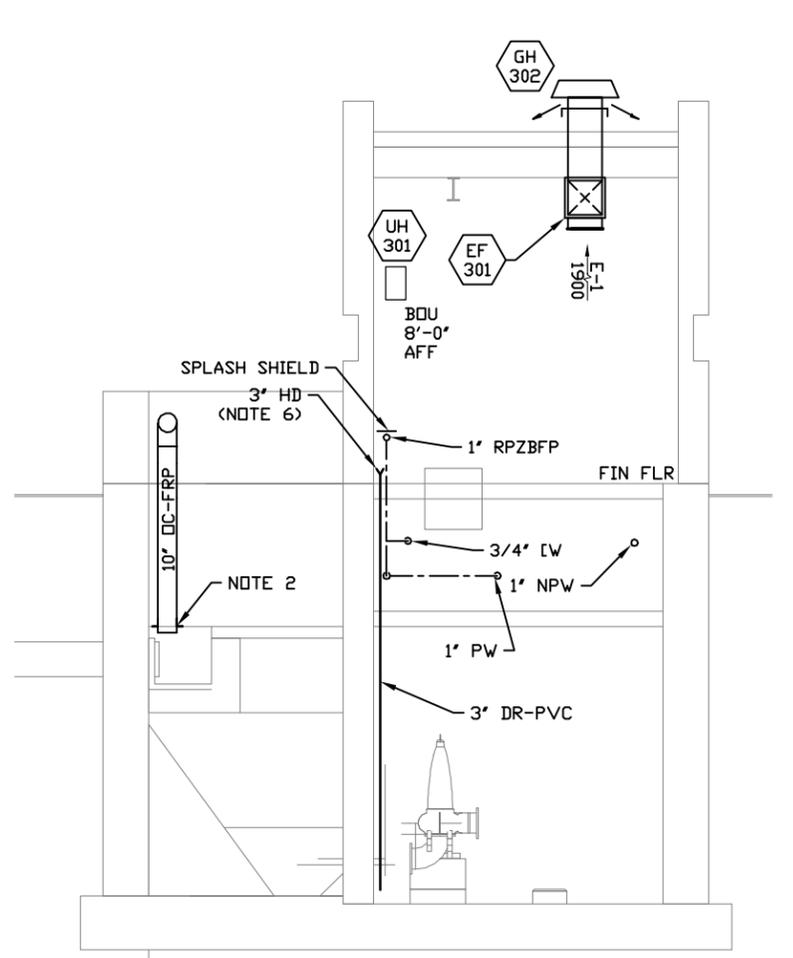
PLAN @ EL. 851.17
SCALE: 1/4" = 1'-0"



A SECTION
SCALE: 1/4" = 1'-0"



PARTIAL FUELING PLAN
SCALE: 1/8" = 1'-0"



B SECTION
SCALE: 1/4" = 1'-0"

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ENGINEERED SYSTEMS & SERVICES

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Suite B
Suwanee, GA 30024
Phone: 770-810-5700
Fax: 770-825-9295

DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303



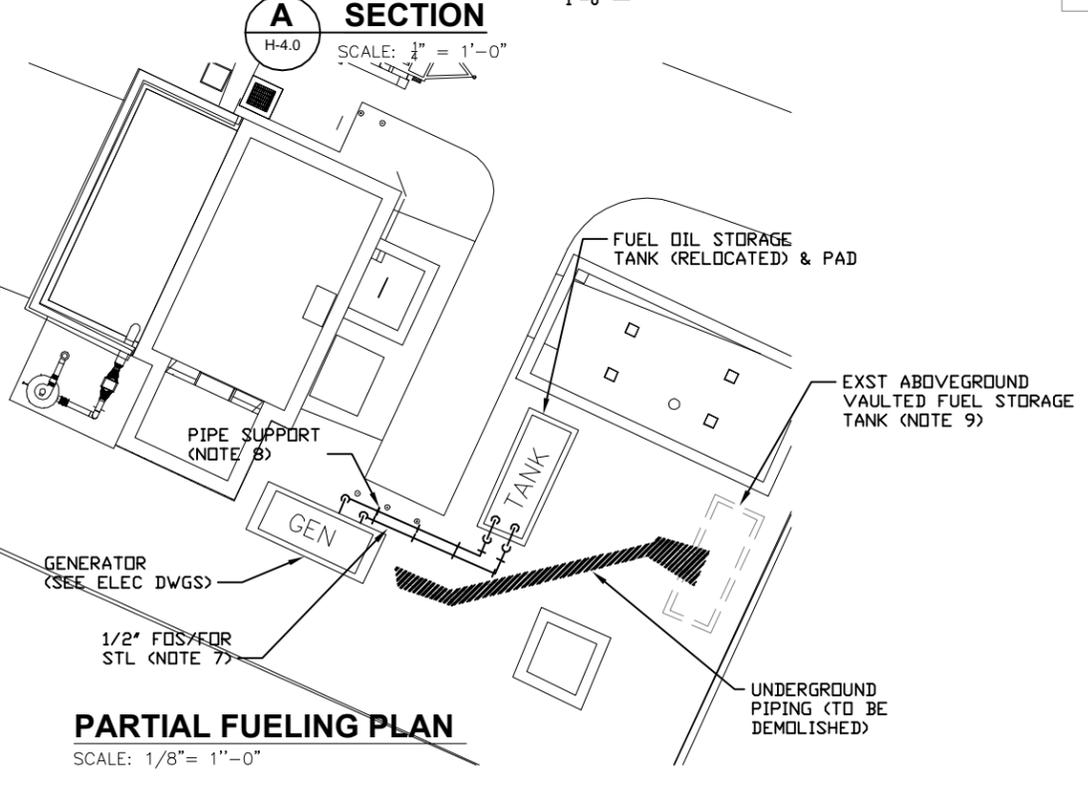
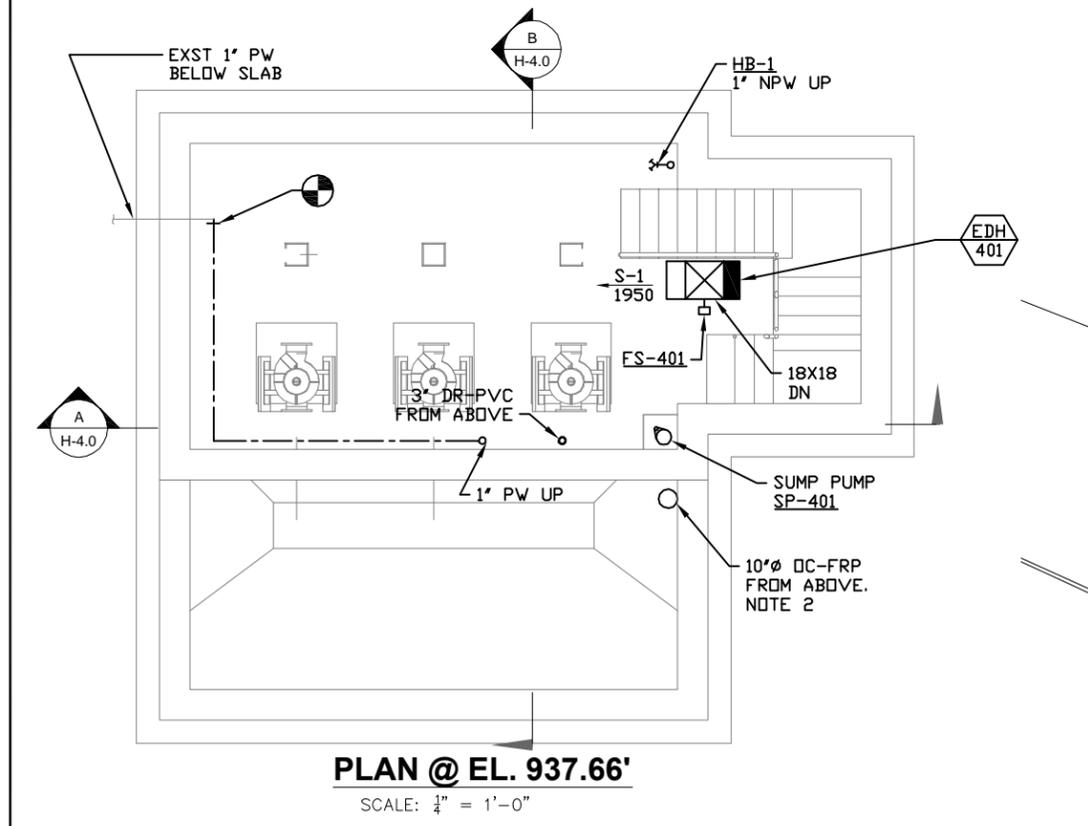
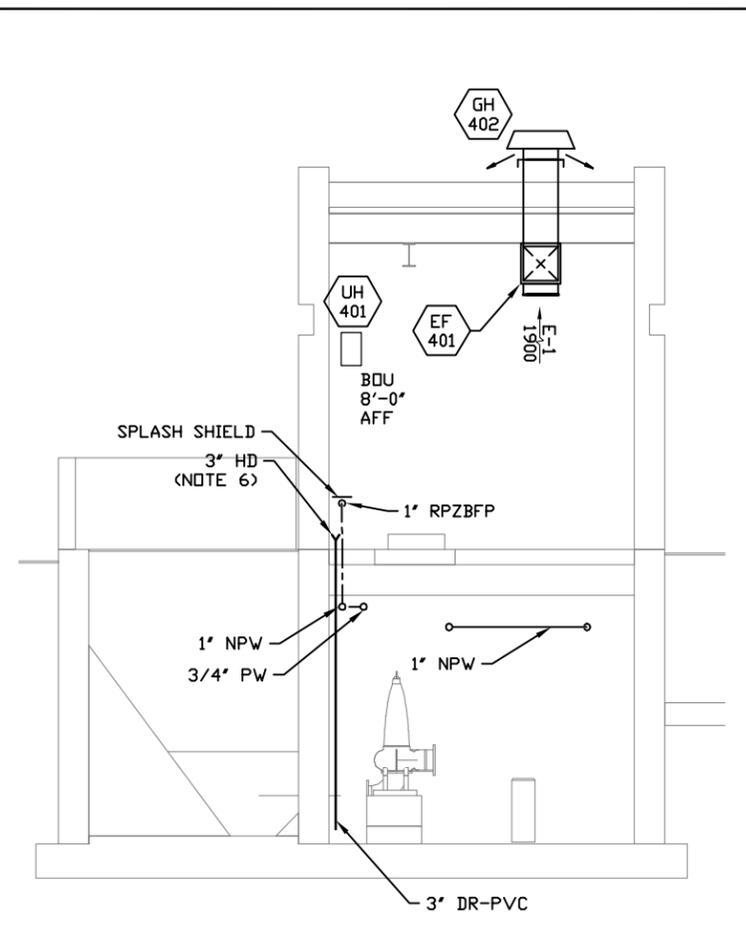
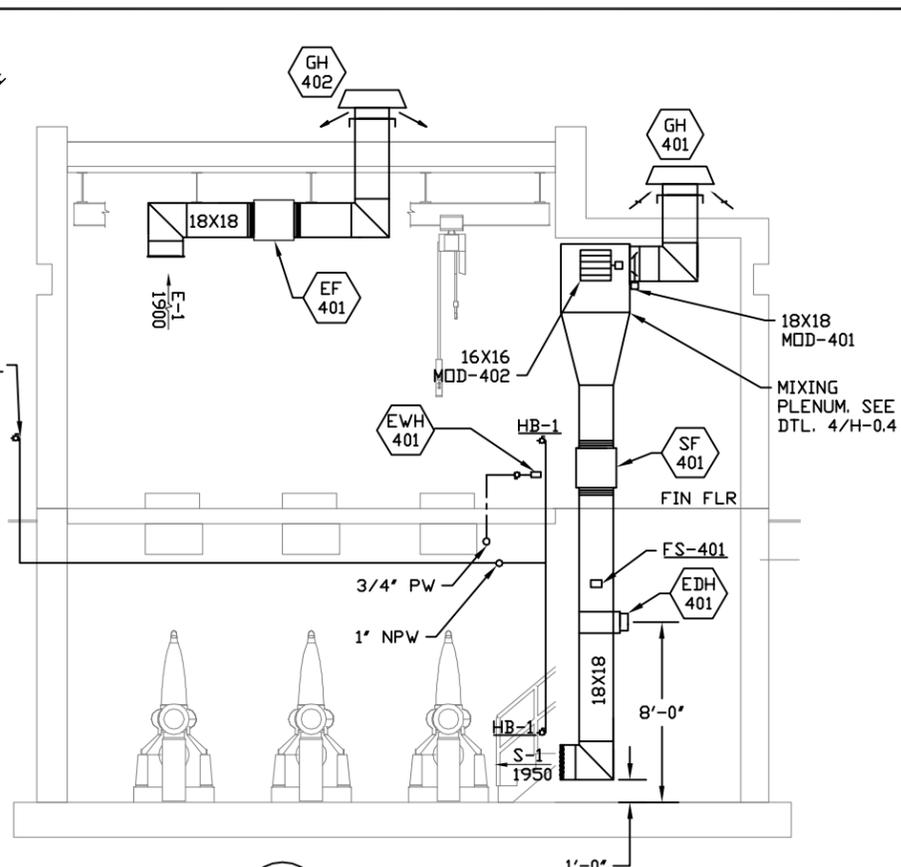
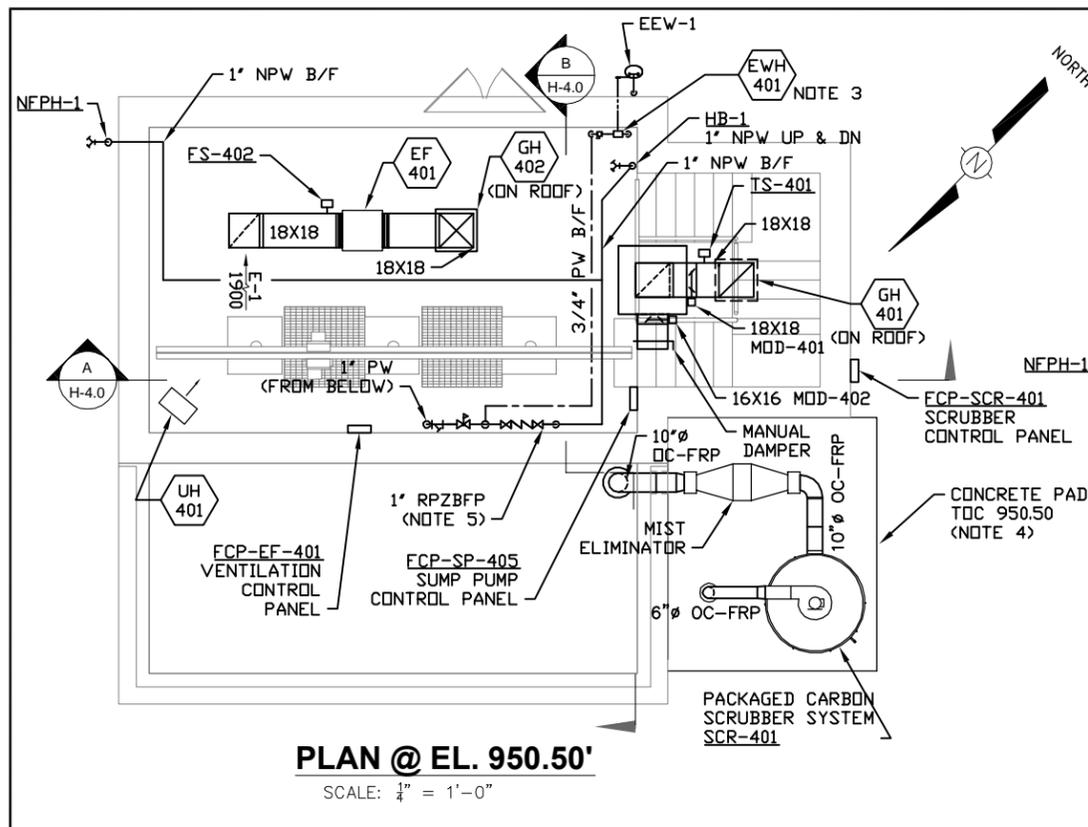
Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: JLR/ABA
DRAWN BY: EQR/ABA
CHECKED BY: JLR
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMPING STATION NO. 3
BLDG MECH HVAC PLAN & SECTIONS

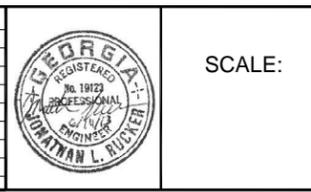
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REV. NO. 0
DATE: 06/14/13

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 9. RELOCATE FUEL STORAGE TANK AS SHOWN. DEMOLISH EXISTING CONCRETE PAD & UNDERGROUND PIPING FOLLOWING RELOCATION. TAKE ALL NECESSARY MEASURES TO ENSURE CONTAINMENT OF FUEL AND PREVENTION OF LEAKS IN ACCORDANCE WITH GA EPD AND US EPA REQUIREMENTS.

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SCALE: **ENGINEERED SYSTEMS & SERVICES**

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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303

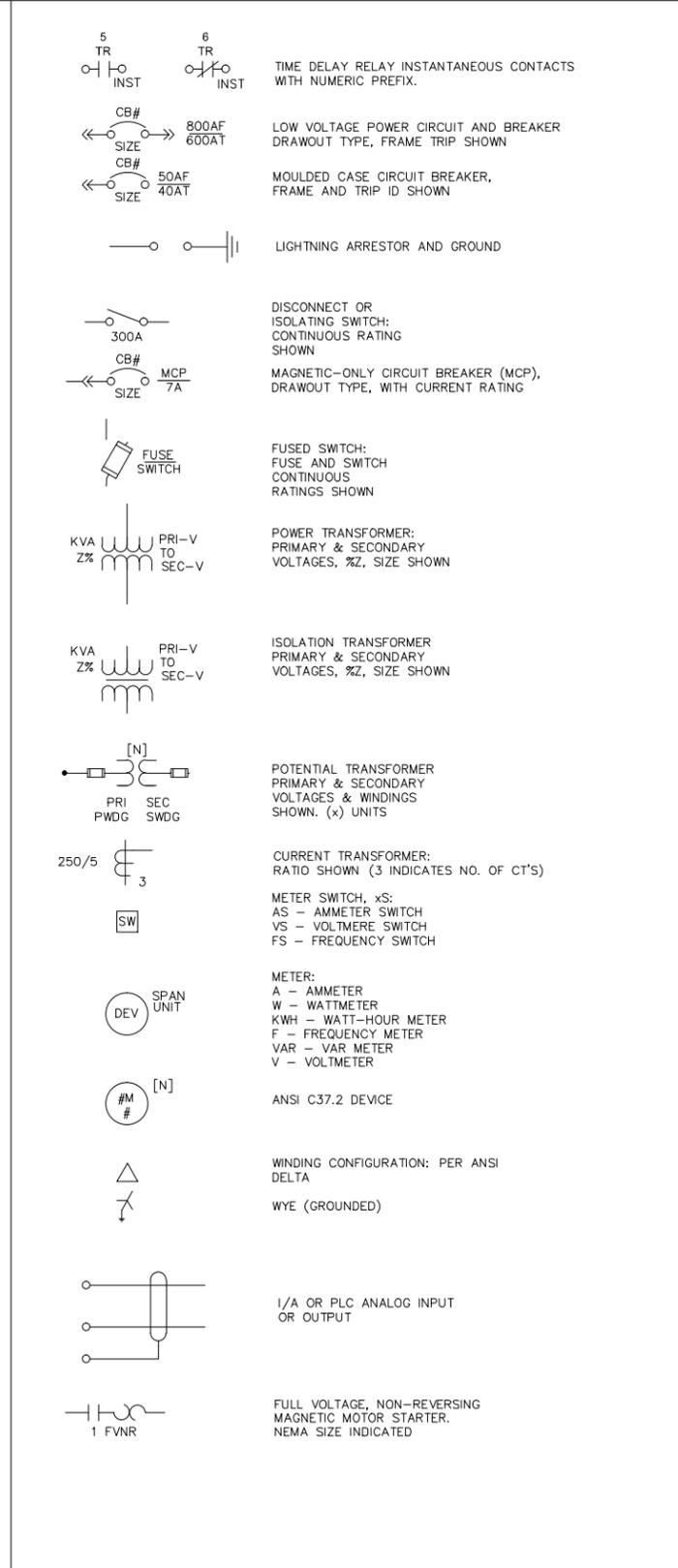
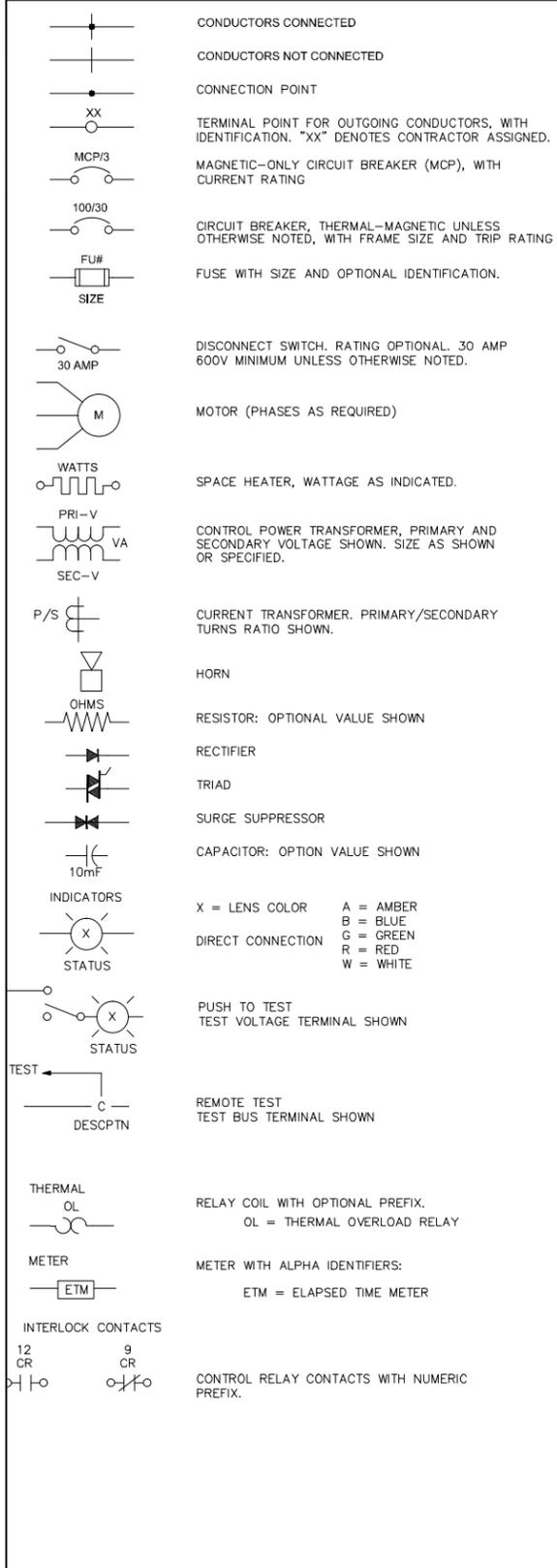
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMP STATION IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMPING STATION NO. 4
BLDG MECH HVAC PLAN & SECTIONS

DRAWING NO. H-4.0
REV. NO. 0
DATE: 06/14/13

CONTROL AND ONE LINE DIAGRAM SYMBOLS



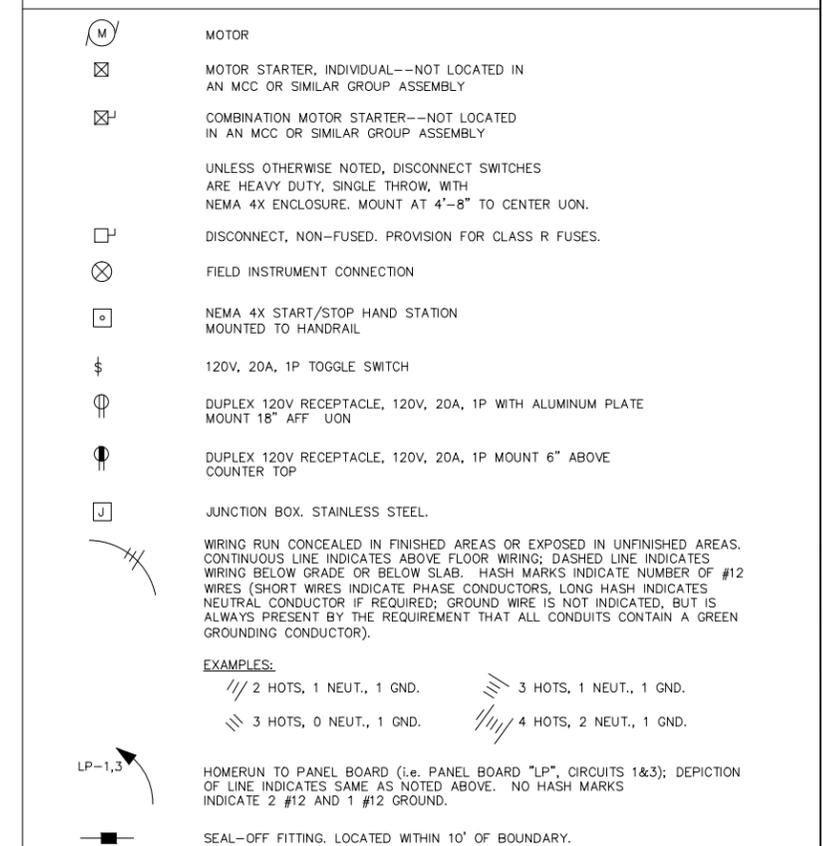
GENERAL ABBREVIATIONS

AR	ALARM RELAY	M	MOTOR CONTACTOR
AS	AMMETER SELECTOR SWITCH	mA	MILLIAMPERE
A, AMP	AMPERE(S)	MAX	MAXIMUM
AC	ALTERNATING CURRENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AHAP	AS HIGH AS POSSIBLE	MCP	MOTOR CONTROL PANEL/ MOTOR CIRCUIT PROTECTOR
AIC	AMPS INTERRUPTING CAPACITY, SYMM.	MECH	MECHANICAL
AL	ALUMINUM	MFR	MANUFACTURE(R)
AT	AMPERE TRIP	MH	MANHOLE
AF	AMPERE FRAME	MIC	MICROPHONE
AUTO	AUTOMATIC	MIN	MINIMUM
AUX	AUXILIARY	MISC	MISCELLANEOUS
AWG	AMERICAN WIRE GAUGE	mM	MILLIMETER
BC	BARE COPPER CONDUCTOR	mV	MILLIVOLT
BKR	BREAKER	MCM	MILLI CIRCULAR MILLS
C	CONDUCTOR/CONTACTOR	MOP	MOTOR OPERATOR PANEL
CAP	CAPACITOR	MPR	MOTOR PROTECTION RELAY
CB	CIRCUIT BREAKER	MCB	MAIN CIRCUIT BREAKER
CBK	CIRCUIT BREAKER	MTR	MOTOR
CKT	CIRCUIT	MVS	MEDIUM VOLTAGE STARTER
CLG	CEILING	N/A	NOT APPLICABLE
CR	CONTROL RELAY	NC	NORMALLY CLOSED
CND	CONDUIT	NEUT,N	NEUTRAL
CONC	CONCRETE	NOT IN CONTRACT	NOT IN CONTRACT
CS	CONTROL SWITCH	NO	NORMALLY OPEN
CONT	CONTROL	NOM	NOMINAL
CPT	CONTROL POWER TRANSFORMER	NP	NAMEPLATE
CT	CURRENT TRANSFORMER	NTS	NOT TO SCALE
CU	COPPER	OC	ON CENTER
D	DIAMETER	OD	OUTSIDE DIAMETER
DB	DUCT BANK	OH	OVERHEAD
DC	DIRECT CURRENT	OL'S	OVERLOADS
DET	DETAIL	OT	OIL TIGHT
DIAG	DIAGRAM	P	POLE
DPSH	DIFFERENTIAL PRESSURE SWITCH	PA	PUBLIC ADDRESS
DS	DISCONNECT SWITCH	PB	PUSHBUTTON, PULLBOX
DWG	DRAWING	PE	PHOTO ELECTRIC CELL
EA	EACH	PF	POWER FACTOR
EC	ELECTRICAL CONTRACTOR	PH	PHASE
EF	EXHAUST FAN	PLC	PROGRAMMABLE LOGIC CONTROLLER
EL	ELEVATION	PM	PHASE MONITOR
ELEC	ELECTRIC(AL)	PNL	PANEL
EMER	EMERGENCY	PP	POWER PANEL
ENCL	ENCLOSURE/ENCLOSED	PR	PAIR
EP	EXPLOSION PROOF	PRI	PRIMARY
EQUIP	EQUIPMENT	PS	PRESSURE SWITCH
EX	EXISTING	PT	POTENTIAL TRANSFORMER
FCP	FURNISHED WITH EQUIPMENT PANEL	PVC	POLYVINYL CHLORIDE
FDR	FEEDER	PWR	POWER
FLA	FULL LOAD AMPS	QSH	SHEAR PIN LIMIT SWITCH
FPF	FIBER OPTIC DISTRIBUTION PANEL	RCPT	RECEPTACLE
FS	FLOW SWITCH	RCT	REACTOR
FU	FUSE	REF	REFERENCE
FUT	FUTURE	REQD	REQUIRED
FVNR	FULL VOLTAGE NON-REVERSING	RMS	ROOT MEAN SQUARE
FVR	FULL VOLTAGE REVERSING	RTD	RESISTANCE TEMPERATURE DETECTOR
GALV	GALVANIZED	SCH	SCHEDULE
GEN	GENERATOR	SEC	SECONDARY
GFR	GROUND FAULT RELAY	SEL	SELECTOR
GRD	GROUND	SPDT	SINGLE POLE DOUBLE THROW
GRS	GALVANIZED RIGID STEEL	SPEC	SPECIFICATION
H	HIGH	SPHTR	MOTOR SPACE HEATER
HGT	HEIGHT	SPKR	SPEAKER
HH	HANDHOLE	SS	SPEED SWITCH
HID	HIGH INTENSITY DISCHARGE	SUB	SUBSTATION
HP	HORSEPOWER	SW	SWITCH
HS	HAND STATION (SWITCH)	SYMM	SYMMETRICAL
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	SVS	SOLENOID OPERATED VALVE
HZ	HERTZ (CYCLES PER SECOND)	SPB	SIGNAL PULL BOX
HOA	HAND/OFF/AUTO	TCB	TERMINAL CABINET
HMH	HIGH VOLTAGE MANHOLE	TB	TERMINAL BOX
ID	INSIDE DIAMETER	TEL	TELEPHONE
IMC	INDIVIDUAL MOTOR CONTROLLER	TEMP	TEMPERATURE
INTLK	INTERLOCK	TFR	TRANSFORMER
INST	INSTANTANEOUS	TH	THERMOSTAT
INSTR	INSTRUMENT	TJB	TERMINAL JUNCTION BOX
I/O	INPUT-OUTPUT	TSH	TEMPERATURE SWITCH HIGH
JB	JUNCTION BOX	TYP	TYPICAL
KV	KILOVOLT	TSP	TWISTED SHIELDED PAIR
KVA	KILOVOLT-AMPERE	UG	UNDERGROUND
KVAR	KILOVOLT-AMPERE REACTIVE	UH	UNIT HEATER
KW	KILOWATT	UON	UNLESS OTHERWISE NOTED
KWH	KILOWATT-HOUR	V	VOLT
KAIC	KILO AMPERE INTERRUPTING CURRENT	VA	VOLT AMPERE
L-O-R	LOCAL-OFF-REMOTE	VAR	VOLT AMPERE REACTIVE
L	LONG	VFD	VARIABLE FREQUENCY DRIVE
LC	LIGHTING CONTACTOR	VSH	VIBRATION SWITCH
LCS	LOCAL CONTROL STATION	W	WATT, WIRE, WIDE
LP	LIGHTING PANEL	W/	WITH
LOS	LOCK-OUT STOP	W/O	WITHOUT
LSL	LEVEL SWITCH LOW	WP	WEATHERPROOF
LSO	LIMIT SWITCH OPEN	WSH	OVERLOAD TORQUE SWITCH
LSC	LIMIT SWITCH CLOSED	ZS	POSITION (LIMIT) SWITCH
LTG	LIGHTING	ZSH	POSITION (LIMIT) SWITCH OPEN
LV	LOW VOLTAGE	ZSL	POSITION (LIMIT) SWITCH CLOSED
LSH	LEVEL SWITCH HIGH		

GENERAL NOTES

- ALL OUTSIDE DEVICES SHALL BE NEMA 4X STAINLESS STEEL INCLUDING BOXES, PANELS, ETC. UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING WITH UNDERGROUND PIPING, CONDUITS, AND UTILITIES. ALL COSTS NECESSARY FOR CONDUIT ROUTING SHALL BE INCLUDED IN BID PRICE AS WELL AS COSTS FOR RE-ROUTING DUE TO ANY FIELD OBSTRUCTIONS.
- ALL WORK SHALL CONFORM TO THE 2011 NATIONAL ELECTRICAL CODE AND NFPA 820.
- IN CASE OF DISCREPANCY BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE CONTRACTOR SHALL PRICE THE MOST EXPENSIVE ITEM AND REQUEST APPROPRIATE DIRECTION FROM THE OWNER AND ENGINEER. UNDER NO CIRCUMSTANCES SHALL SUCH DISCREPANCIES RESULT IN ADDITIONAL COSTS TO THE OWNER OR RESULT IN ANY CHANGE ORDERS.
- THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL INSTRUMENT/CONTROL PANEL TERMINATIONS AND INSTALLATION.
- THE ELECTRICAL EQUIPMENT (PANELBOARD, VFD, MAIN BREAKER, CONTROL PANEL, ATS) SHALL FIT THE SPACE INDICATED.
- CONTRACTOR SHALL DEMOLISH AND REMOVE THE FOLLOWING EXISTING EQUIPMENT FROM EACH OF THE FOUR PUMP STATION: MOTOR CONTROL CENTER, AUTOMATIC TRANSFER SWITCH, GENERATOR, LIGHTS, RECEPTACLES, PUMP CONTROL PANEL, SUMP PUMP CONTROL PANEL, INSTRUMENTS, AND ANY OTHER EQUIPMENT IDENTIFIED TO BE REMOVED IN OTHER DIVISIONS. CONTRACTOR SHALL REMOVE ALL CONDUIT/CONDUCTORS/BOXES/EQUIPMENT ASSOCIATED WITH DEMOLISHED EQUIPMENT AND ANY ABANDONED RACEWAYS NOT IN USE. ALL DEMOLISHED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE SITE.
- THE PUMP STATIONS ARE SERVED BY GEORGIA POWER WITH A 150 KVA, 277/480V, 3 PHASE PAD MOUNTED TRANSFORMER. THE CONTRACTOR SHALL PAY ALL COSTS ASSOCIATED WITH GEORGIA POWER FOR ANY UPGRADES/MODIFICATIONS TO THE EXISTING TRANSFORMER AND/OR PAD TO ACCOMMODATE THE INCREASE IN CAPACITY. CONTACT MR. SAM WILLS OF GEORGIA POWER AT 770-821-2393 FOR ASSOCIATED COSTS. CONTRACTOR SHALL REMOVE EXISTING SERVICE LATERAL INCLUDING THE CONCRETE ENCASED DUCTBANK BETWEEN MCC AND TRANSFORMER AND REPLACE WITH NEW.
- THE EXISTING 155KW GENERATORS AT EACH SITE WILL BE REPLACED WITH NEW 350KW GENERATORS. CONTRACTOR SHALL DEMOLISH EXISTING GENERATORS, ASSOCIATED DUCTBANKS, AND INCREASE PAD SIZE (OR REPLACE WITH NEW) AS REQUIRED. SEE STRUCTURAL DRAWINGS FOR PAD REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE A 4" HOUSEKEEPING PAD FOR ALL FREE STANDING EQUIPMENT.
- UNLESS OTHERWISE NOTED, ALL EXISTING LIGHT FIXTURES SHALL BE REPLACED WITH NEW. NEW FIXTURES SHALL BE LOCATED IN THE SAME LOCATION AS EXISTING FIXTURES BEING REPLACED.
- CONTRACTOR SHALL FIELD LOCATE THE EXACT LOCATION OF THE TRANSDUCER AND STILLING WELL. STILLING WELL SHALL BE LOCATED SUCH THAT THE TRANSDUCER IS 12" ABOVE THE LOWEST PART OF THE WETWELL.

MOTOR AND EQUIPMENT SYMBOLS



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:

WOMACK LUMSDEN & ASSOCIATES, LLC
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Atlanta, Georgia 30341
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Fax: 770-458-8388

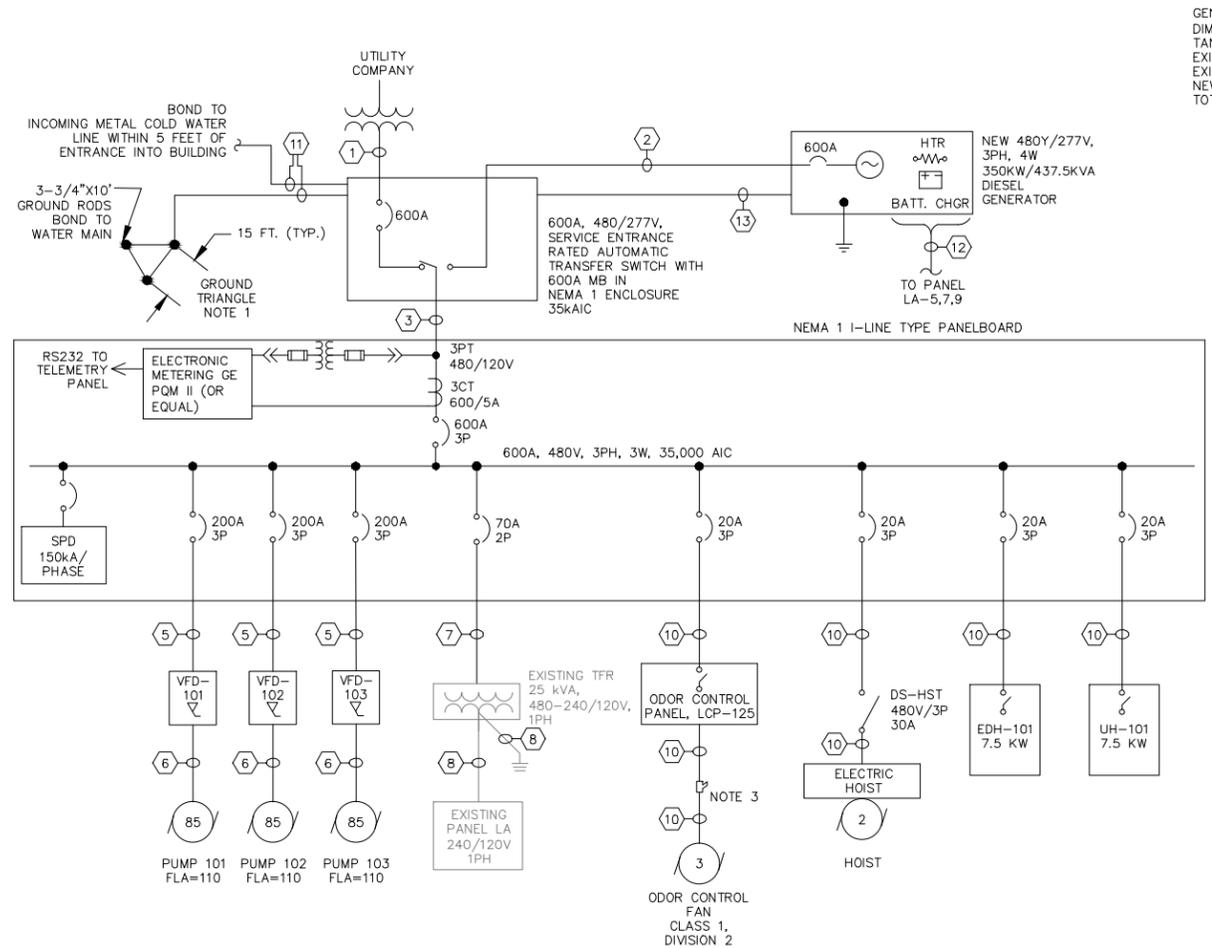
DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

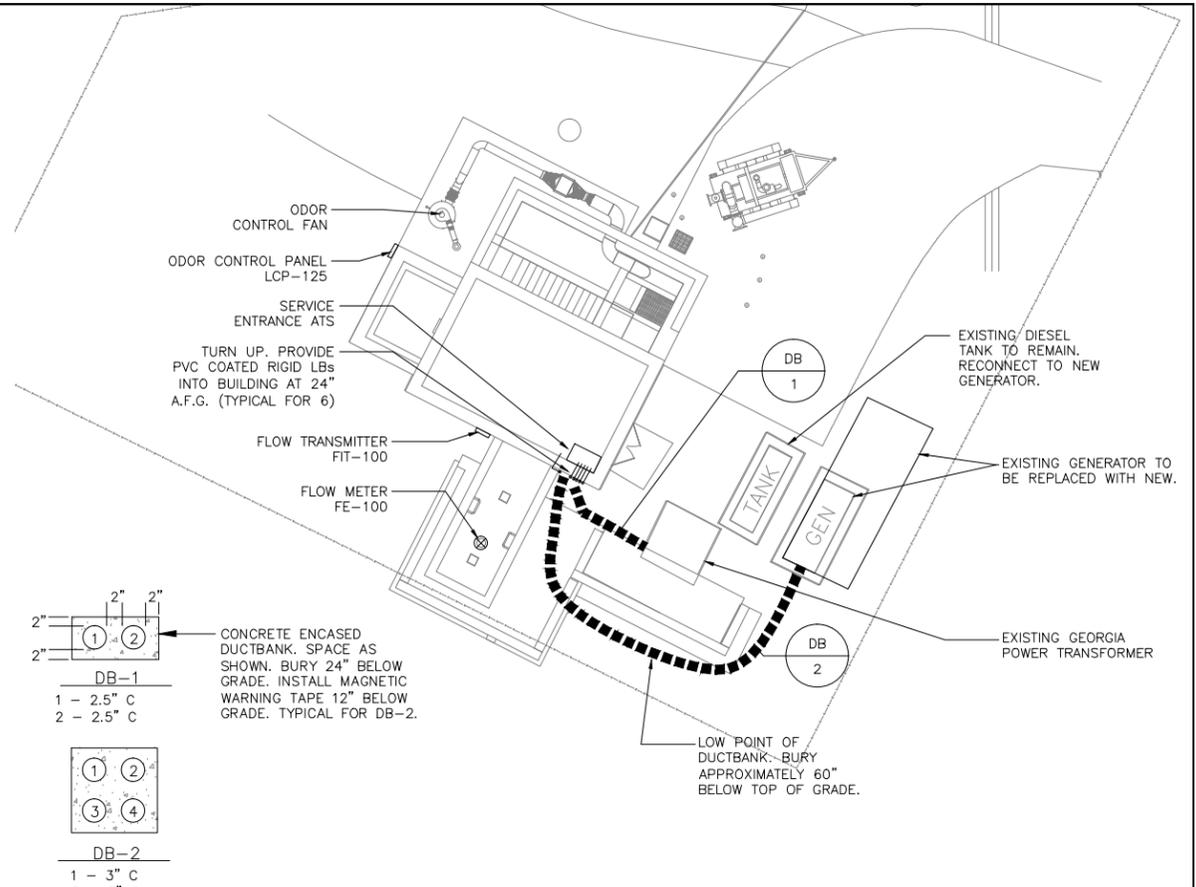
DESIGN BY:	DMZ
DRAWN BY:	DMZ
CHECKED BY:	GWL
JOB NO.	147024

FULTON COUNTY SULLIVAN WASTEWATER PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
ELECTRICAL LEGEND, ABBREVIATIONS AND NOTES

DRAWING NO.	E-0.1
REV. NO.	0
DATE:	06/14/13



GENERATOR INFO:
 DIM: 7'-2"W x 18'-6"L x 9'-0"H
 TANK: INTEGRAL 500 GALLON DAYTANK CONNECTED TO EXISTING 500GAL TANK.
 EXISTING TANK BACKUP TIME: 19.00 HRS
 NEW TANK BACKUP TIME: 19 HRS
 TOTAL BACKUP TIME: 38 HRS



SULLIVAN ROAD PS #1 - ELECTRICAL SITE PLAN

SCALE: 1" = 10'-0"

ONE LINE DIAGRAM SULLIVAN ROAD PS #1

SERVICE 120/240V, 1Ø, 3W		EXISTING PANEL LA		MAIN 100A M.B.	
MTG SURFACE		A.I.C. 10,000		REMARKS SULLIVAN ROAD PS #1	
BRANCH CIRCUIT NO.	LOAD DESCRIPTION	PHASE			BRANCH CIRCUIT NO.
		A	B	TRIP	
1	LIGHTS-ELEC. ROOM AND OUTSIDE (7)	0.7	0.7	20	2
3	RECEPTACLES - PUMP ROOM (3)	0.54	0.54	20	4
5	GENERATOR BLOCK HEATER (2000)	1.0	1.0	20	6
7	↓	1.0	1.0	20	8
9	GENERATOR BATTERY CHARGER	0.5	0.5	20	10
11	EXHAUST FAN EF-101 (3/4HP)	1.7	1.7	20	12
13	LIGHTS (2 - CLASS 1/DIVISION 2)	0.2	0.2	20	14
15	SPARE			20	16
17	RECEPTACLES - DRYWELL (3)	0.54	0.54	20	18
19	SPARE			20	20
21	SPACE			20	22
23	SPACE			20	24
25	SPACE			20	26
27	SPACE			20	28
29	SPACE			20	30

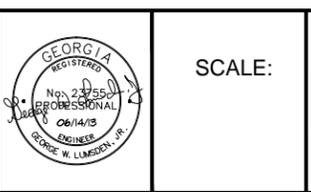
CONNECTED LOAD: A 9.04 kVA B 6.94 kVA TOTAL 15.98 kVA

SQUARE D TYPE NQOB NOTE: EXISTING PANEL BOARD. CONTRACTOR MAY UTILIZE EXISTING CIRCUIT BREAKERS IF AVAILABLE. INSTALL NEW BREAKERS AS REQUIRED TO MATCH BREAKER SIZE AND POLES SHOWN. NEW BREAKERS SHALL BE OF THE SAME MANUFACTURER AND HAVE SAME AIC RATING AS EXISTING.

- NOTES:
1. THE GROUNDING TRIANGLE SHALL CONSIST OF 3 10"x3/4" DIAMETER COPPER CLAD GROUND RODS PLACED 10' APART IN A TRIANGLE AND CONNECTED WITH #3/0 BARE COPPER GROUND CONDUCTORS. ONE OF THE GROUND RODS SHALL BE PLACED IN A GROUND WELL WITH ACCESS COVER FOR GROUND TESTING.
 2. PUMP MOTOR CABLE SHOULD BE SUPPLIED WITH SUFFICIENT LENGTH OF SUBMERSIBLE CABLE TO REACH VFD ABOVE WITHOUT BEING SPLICED.
 3. CONTRACTOR SHALL NOTE THAT ALL AREAS WITHIN 3'-0" OF THE ODOR CONTROL FAN IS RATED CLASS 1, DIVISION 2. INSTALL SEAL-OFF FITTING DIRECTLY BELOW ODOR CONTROL PANEL.

CONDUCTOR/CONDUIT SCHEDULE	
1	2 RUNS 4-350kcmil IN 2.5" C. EA. IN "DB-1"
2	2 RUNS 4-350kcmil & 1 #1 GND IN 3" C. EA. IN "DB-2"
3	2 RUNS 3-350kcmil & 1 #1 GND IN 3" C. EA.
4	3 #4 & 1 #10 GND IN 1" C.
5	3 #3/0 & 1 #6 GND IN 2" C.
6	2.5" C. (CABLE BY PUMP MANUFACTURER - SEE NOTE 2)
7	2 #4 & 1 #8 IN 1" C.
8	EXISTING TO REMAIN. REPLACE CONDUCTORS WITH NEW.
9	NOT USED.
10	3 #12 & 1 #12 IN 3/4" C.
11	1 #3/0 GND IN 1" PVC C.
12	4 #10 & 1 #10 IN 1" C. IN "DB-2"
13	8 #14 & 1 RS-485 IN 1" C. IN "DB-2"

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:

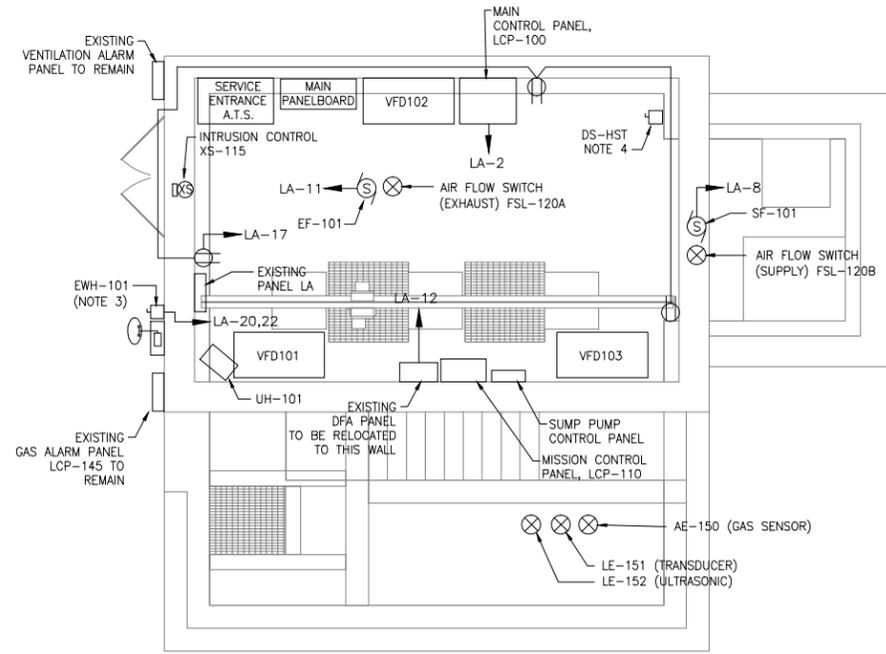
DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
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 11560 GREAT OAKS WAY
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DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

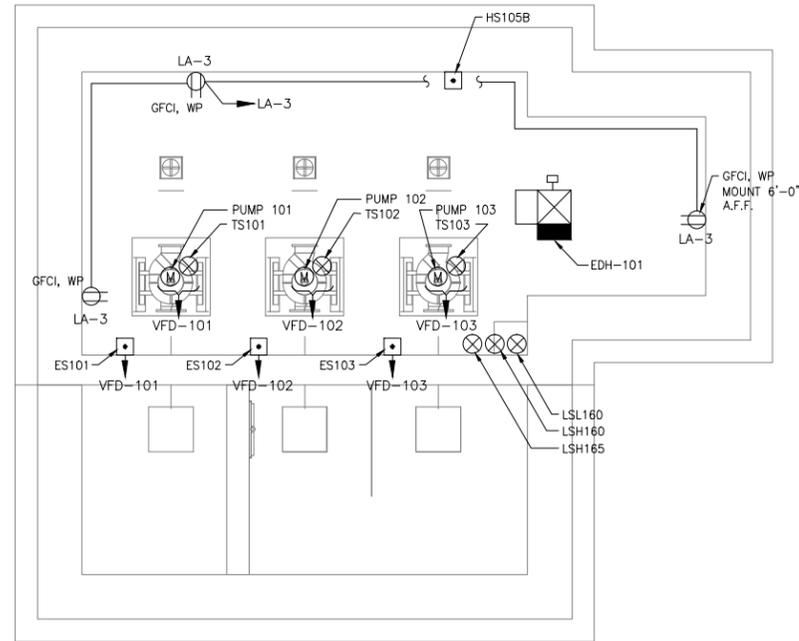
FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #1 ONE LINE,
 SCHEDULES & SITE PLAN

DRAWING NO. E-1.1
REV. NO. 0
DATE: 06/14/13



SULLIVAN ROAD PS #1 - FIRST FLOOR POWER

SCALE: 1/4" = 1'-0"

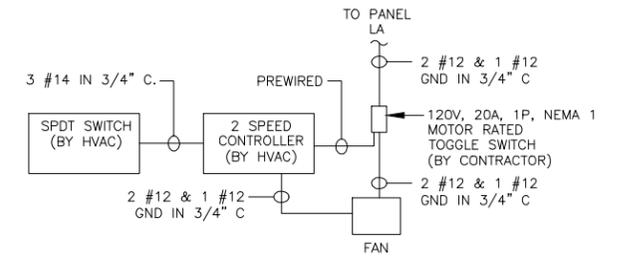


SULLIVAN ROAD PS #1 - BOTTOM FLOOR POWER

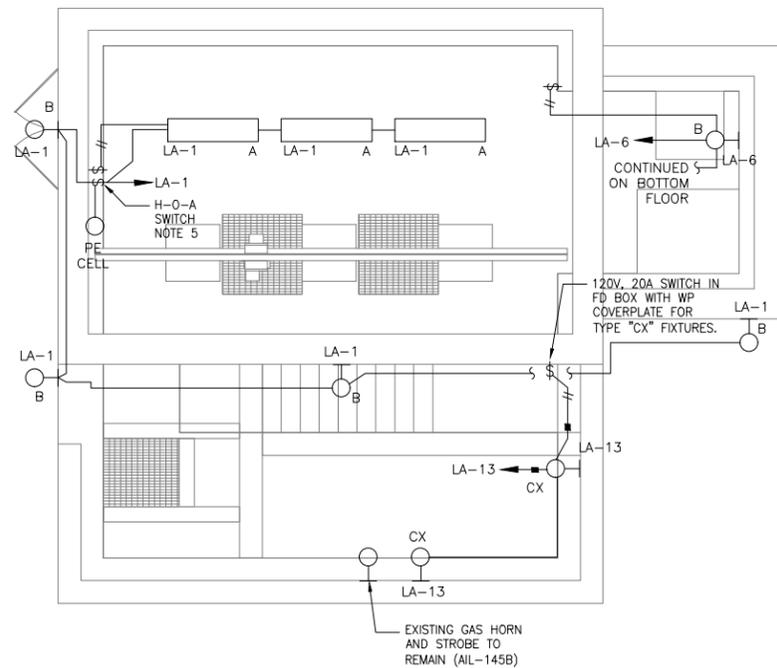
SCALE: 1/4" = 1'-0"

NOTES:

1. ALL HANDSTATIONS LOCATED ON THE BOTTOM FLOOR SHALL BE A WATERPROOF (NEMA 6P) TOGGLE SWITCH.
2. SEE SCHEMATIC DIAGRAM ON DRAWING ES.2 FOR ADDITIONAL CONDUCTOR/CONDUIT REQUIREMENTS. ALL CONDUIT SHALL BE SURFACE MOUNTED ON THE INTERIOR OF THE BUILDING. EXTERIOR MOUNTED CONDUIT IS NOT ACCEPTABLE.
3. CONTRACTOR SHALL FURNISH AND INSTALL A NEMA 4X, 240V, 1PHASE, 30A DISCONNECT SWITCH FOR EWH-101. LOCATE SWITCH ADJACENT TO HEATER.
4. FIELD VERIFY EXACT LOCATION WITH HOIST.
5. PROVIDE AN H-O-A SWITCH AND PHOTOCCELL FOR EXTERIOR TYPE "B" LIGHTS. SEE DETAIL E5.1/H.

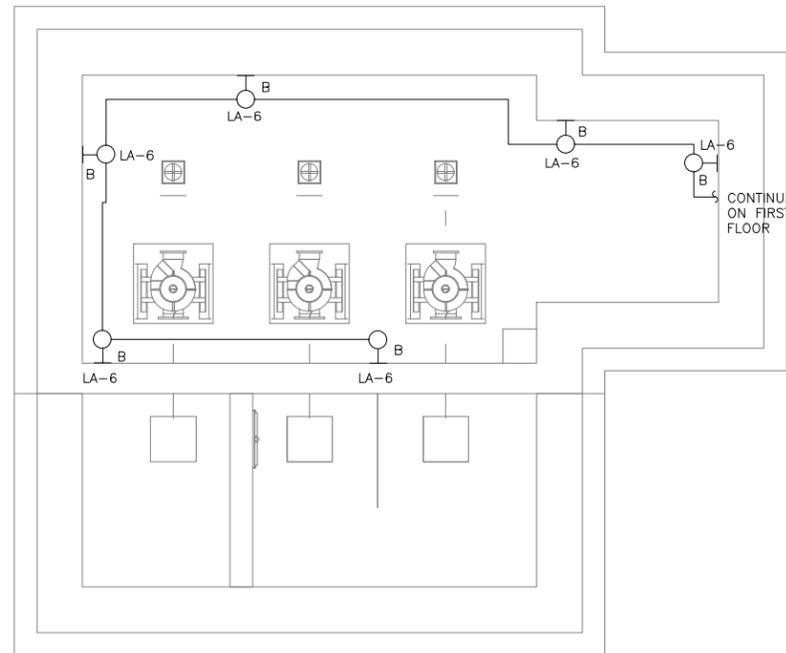


EXHAUST AND SUPPLY FAN SCHEMATIC
(TYPICAL FOR 2)



SULLIVAN ROAD PS #1 - FIRST FLOOR LIGHTING

SCALE: 1/4" = 1'-0"



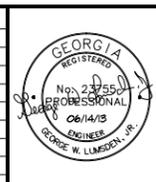
SULLIVAN ROAD PS #1 - BOTTOM FLOOR LIGHTING

SCALE: 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & CATALOG NUMBER	MOUNTING	NO./LAMPS	LOAD
A	HOLOPHANE #HB14-2-32-N1-D20-A12125 MVOLT-GEB101S-LP841-THSD	PENDANT	2-F32T8	65W
B	GARDCO #121-MT-75LA-NW-UNIV-BRP-F	SURFACE	32-LED	80W
CX	HOLOPHANE #PETL-100HPS-MT-545-WL CLASS 1, DIVISION 2	SURFACE	100W HPS	120W

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



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 ALPHARETTA, GEORGIA 30022
 770-475-8994
 FAX: 770-777-9545

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DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #1
 ELECTRICAL POWER PLANS

DRAWING NO. E-1.2
REV. NO. 0
DATE: 06/14/13



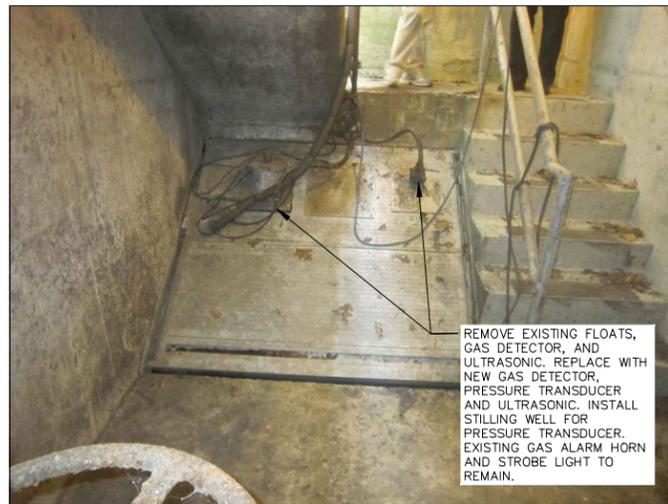
EXISTING MCC, ATS, AND SPD

DETAIL **A**
E1.3
SCALE: NONE



EXISTING TRANSFORMER, PANELBOARD, AND DFA PANEL

DETAIL **B**
E1.3
SCALE: NONE



EXISTING INSTRUMENTS

DETAIL **C**
E1.3
SCALE: NONE



EXISTING VENTILATION ALARM PANEL

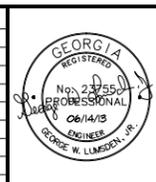
DETAIL **D**
E1.3
SCALE: NONE



EXISTING GAS ALARM PANEL

DETAIL **E**
E1.3
SCALE: NONE

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
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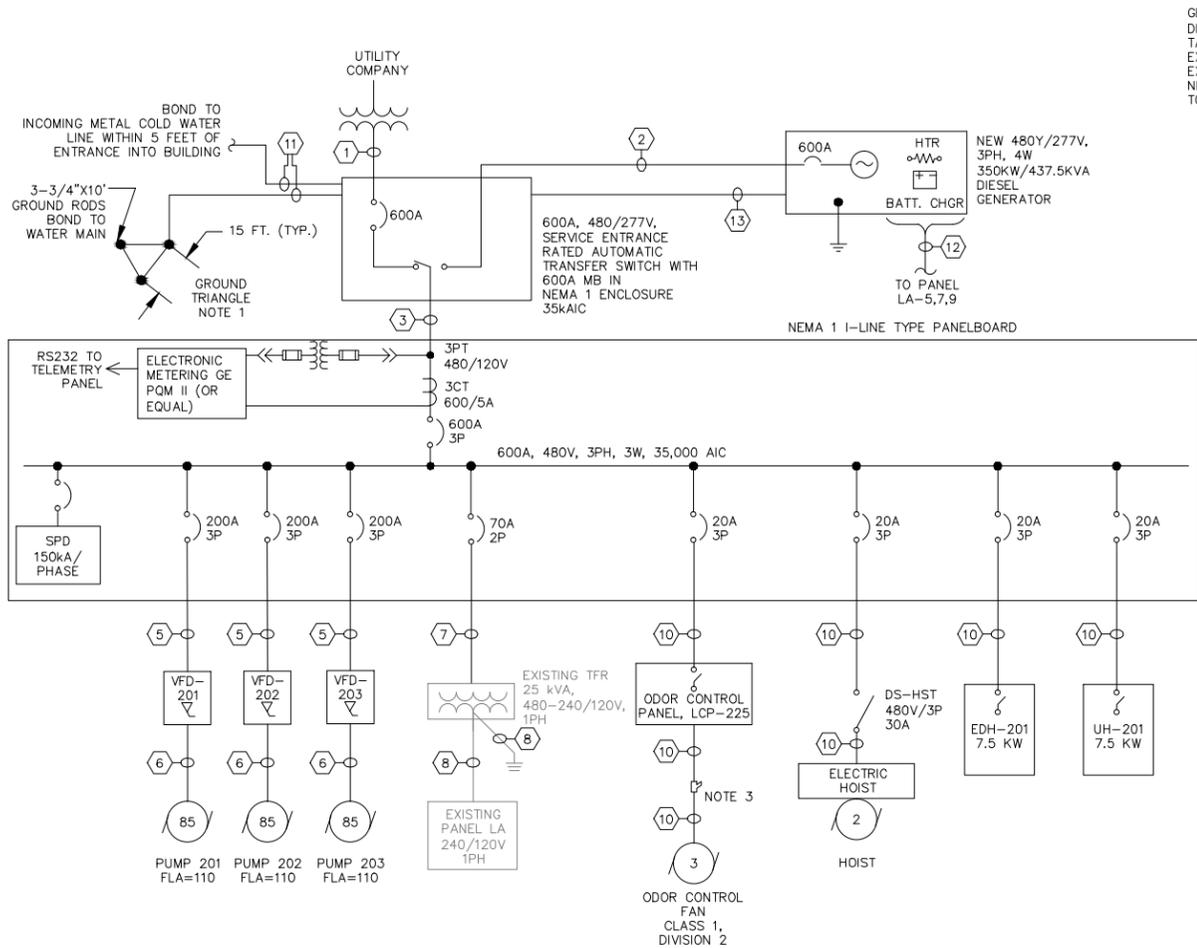
DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
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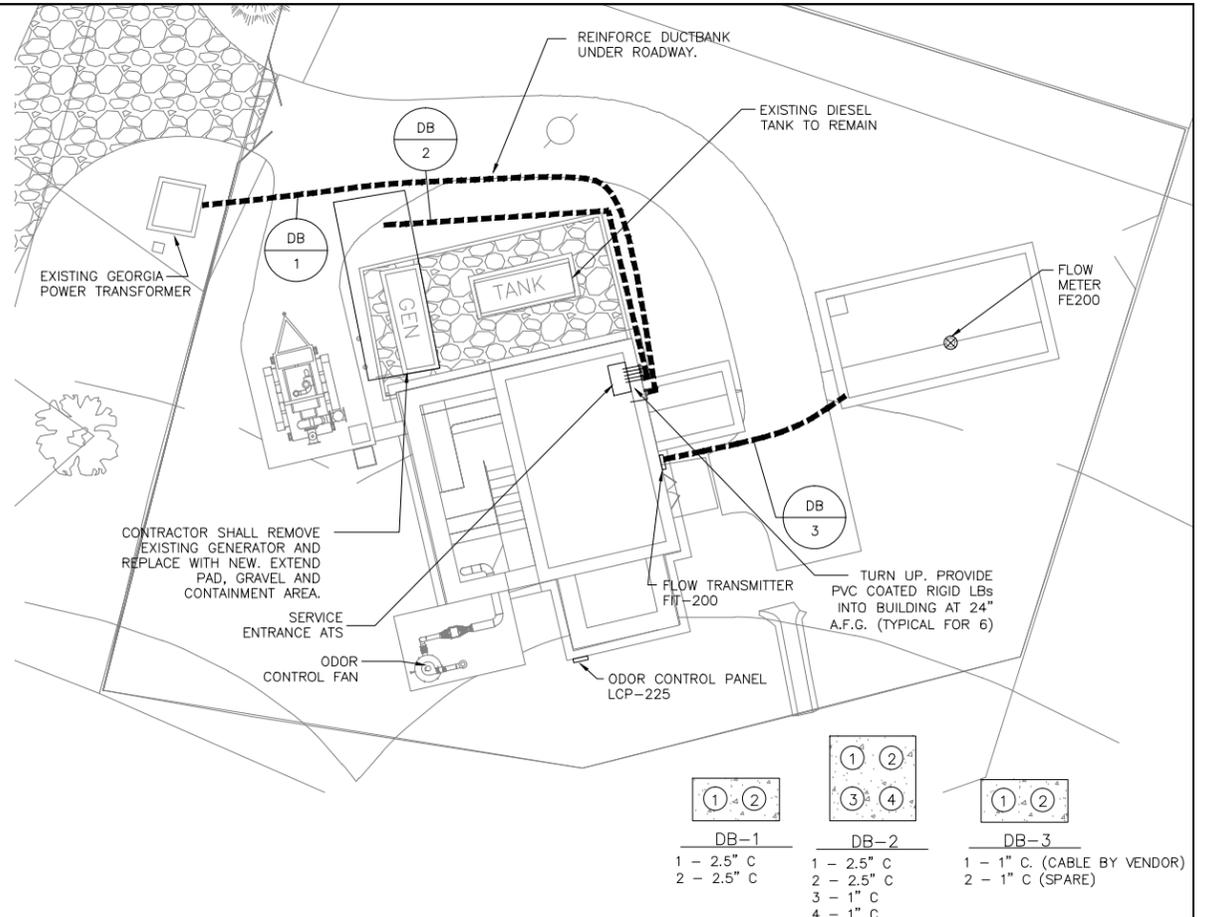
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JOB NO. 147024

FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #1
 DETAILS

DRAWING NO. E-1.3
REV. NO. 0
DATE: 06/14/13



GENERATOR INFO:
 DIM: 7'-2"W x 18'-6"L x 9'-0"H
 TANK: INTEGRAL 500 GALLON DAYTANK CONNECTED TO EXISTING 500GAL TANK.
 EXISTING TANK BACKUP TIME: 19.00 HRS
 NEW TANK BACKUP TIME: 19 HRS
 TOTAL BACKUP TIME: 38 HRS



SULLIVAN ROAD PS #2 - ELECTRICAL SITE PLAN

SCALE: 1" = 10'-0"

ONE LINE DIAGRAM SULLIVAN ROAD PS #2

SERVICE		EXISTING PANEL LA		MAIN 100A M.B.	
120/240V, 1Ø, 3W		A.I.C. 10,000		SULLIVAN ROAD PS #1	
BRANCH CIRCUIT		PHASE		BRANCH CIRCUIT	
Ø	LOAD DESCRIPTION	LOAD (kVA)	Ø	LOAD DESCRIPTION	Ø
1	LIGHTS-ELEC. ROOM AND OUTSIDE (7)	0.7	20	MAIN CONTROL PANEL, LCP-200	2
3	RECEPTACLES - PUMP ROOM (3)	0.54	20	MISSION CONTROL PANEL, LCP-210	4
5	GENERATOR BLOCK HEATER (2000)	1.0	20	PUMP ROOM LIGHTS (7)	6
7		1.0	20	SUPPLY FAN SF-201 (3/4HP)	8
9	GENERATOR BATTERY CHARGER	0.5	20	AIR FLOW SWITCHES (FSL220A/220B)	10
11	EXHAUST FAN EF-201 (3/4HP)	1.7	20	EXISTING DFA RTU	12
13	LIGHTS (2 - CLASS 1/DIVISION 2)	0.2	20	GAS ALARM PANEL, LCP-245	14
15	SPARE		20	VENTILATION ALARM PANEL, LCP-235	16
17	RECEPTACLES - DRYWELL (3)	0.54	20	SUMP PUMP CONTROL PANEL (1.5HP)	18
19	SPARE		20	ELECT. WATER HTR EWH-201 (3.5KW)	20
21	SPACE		20	SPARE	22
23	SPACE		20	SPARE	24
25	SPACE		20	SPARE	26
27	SPACE		20	SPARE	28
29	SPACE		20	SPARE	30

CONNECTED LOAD: A 9.04 kVA B 6.94 kVA TOTAL 15.98 kVA

NOTE: EXISTING PANEL BOARD. CONTRACTOR MAY UTILIZE EXISTING CIRCUIT BREAKERS IF AVAILABLE. INSTALL NEW BREAKERS AS REQUIRED TO MATCH BREAKER SIZE AND POLES SHOWN. NEW BREAKERS SHALL BE OF THE SAME MANUFACTURER AND HAVE SAME AIC RATING AS EXISTING.

NOTES:

- THE GROUNDING TRIANGLE SHALL CONSIST OF 3 10'x3/4" DIAMETER COPPER CLAD GROUND RODS PLACED 10' APART IN A TRIANGLE AND CONNECTED WITH #3/0 BARE COPPER GROUND CONDUCTORS. ONE OF THE GROUND RODS SHALL BE PLACED IN A GROUND WELL WITH ACCESS COVER FOR GROUND TESTING.
- PUMP MOTOR CABLE SHOULD BE SUPPLIED WITH SUFFICIENT LENGTH OF SUBMERSIBLE CABLE TO REACH VFD ABOVE WITHOUT BEING SPLICED.
- CONTRACTOR SHALL NOTE THAT ALL AREAS WITHIN 3'-0" OF THE ODOR CONTROL FAN IS RATED CLASS 1, DIVISION 2. INSTALL SEAL-OFF FITTING DIRECTLY BELOW ODOR CONTROL PANEL.

CONDUCTOR/CONDUIT SCHEDULE

1	2 RUNS 4-350Kcmil IN 2.5" C. EA. IN "DB-1"	9	NOT USED.
2	2 RUNS 4-350Kcmil & 1 #1 GND IN 3" C. EA. IN "DB-2"	10	3 #12 & 1 #12 IN 3/4" C.
3	2 RUNS 3-350Kcmil & 1 #1 GND IN 3" C. EA.	11	1 #3/0 GND IN 1" PVC C.
4	3 #4 & 1 #10 GND IN 1" C.	12	4 #10 & 1 #10 IN 1" C. IN "DB-2"
5	3 #3/0 & 1 #6 GND IN 2" C.	13	8 #14 & 1 RS-485 IN 1" C. IN "DB-2"
6	2.5" C. (CABLE BY PUMP MANUFACTURER - SEE NOTE 2)		
7	2 #4 & 1 #8 IN 1" C.		
8	EXISTING TO REMAIN. REPLACE CONDUCTORS WITH NEW.		

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:

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DEPARTMENT OF WATER RESOURCES
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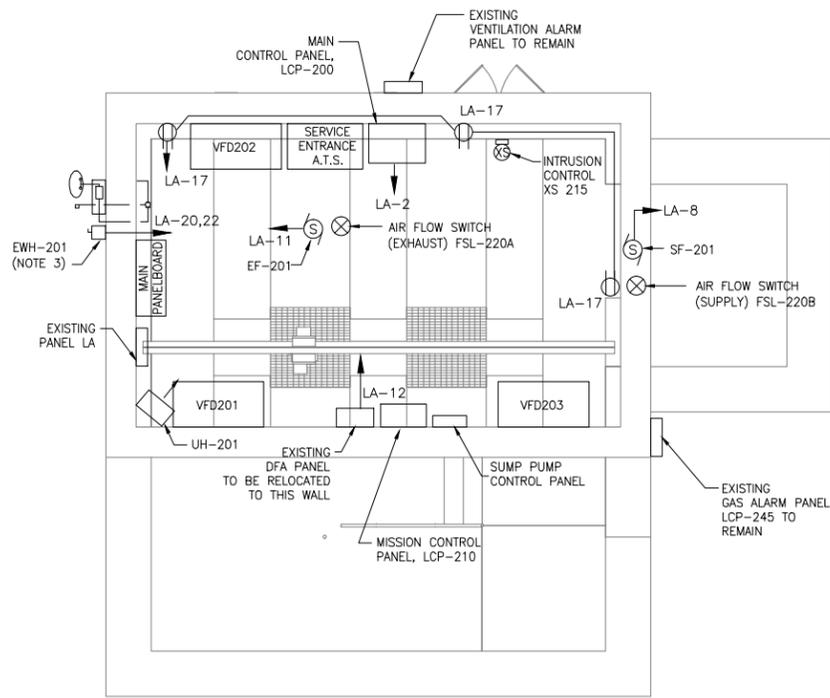


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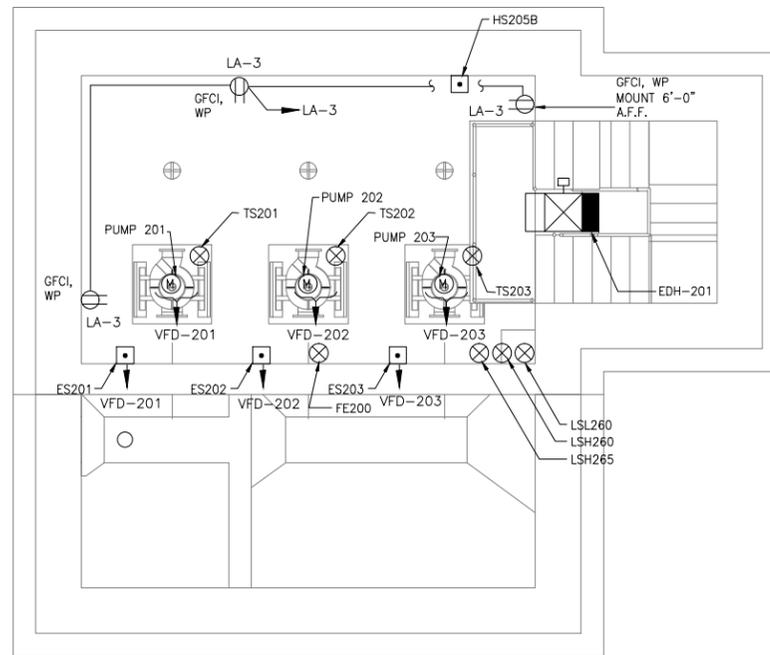
FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #2 ONE LINE
 SCHEDULES & SITE PLAN

DRAWING NO.	E-2.1
REV. NO.	0
DATE:	06/14/13



SULLIVAN ROAD PS #2 - FIRST FLOOR POWER

SCALE: 1/4" = 1'-0"

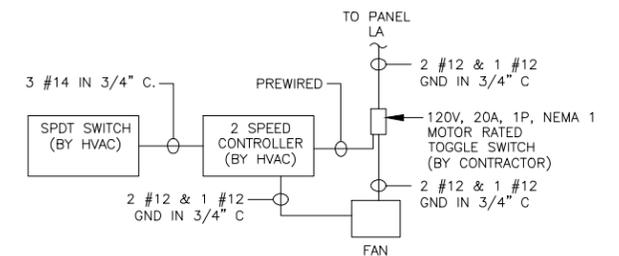


SULLIVAN ROAD PS #2 - BOTTOM FLOOR POWER

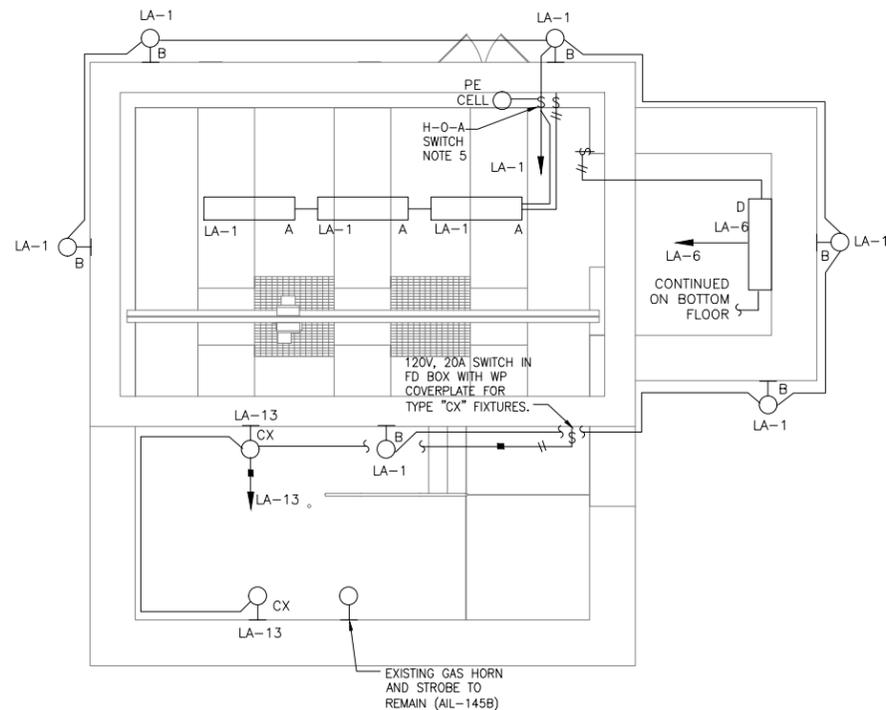
SCALE: 1/4" = 1'-0"

NOTES:

1. ALL HANDSTATIONS LOCATED ON THE BOTTOM FLOOR SHALL BE A WATERPROOF (NEMA 6P) TOGGLE SWITCH.
2. SEE SCHEMATIC DIAGRAM ON DRAWING ES.2 FOR ADDITIONAL CONDUCTOR/CONDUIT REQUIREMENTS. ALL CONDUIT SHALL BE SURFACE MOUNTED ON THE INTERIOR OF THE BUILDING. EXTERIOR MOUNTED CONDUIT IS NOT ACCEPTABLE.
3. CONTRACTOR SHALL FURNISH AND INSTALL A NEMA 4X, 240V, 1PHASE, 30A DISCONNECT SWITCH FOR EWH-101. LOCATE SWITCH ADJACENT TO HEATER.
4. FIELD VERIFY EXACT LOCATION WITH HOIST.
5. PROVIDE AN H-O-A SWITCH AND PHOTOCELL FOR EXTERIOR TYPE "B" LIGHTS. SEE DETAIL E5.1/H.

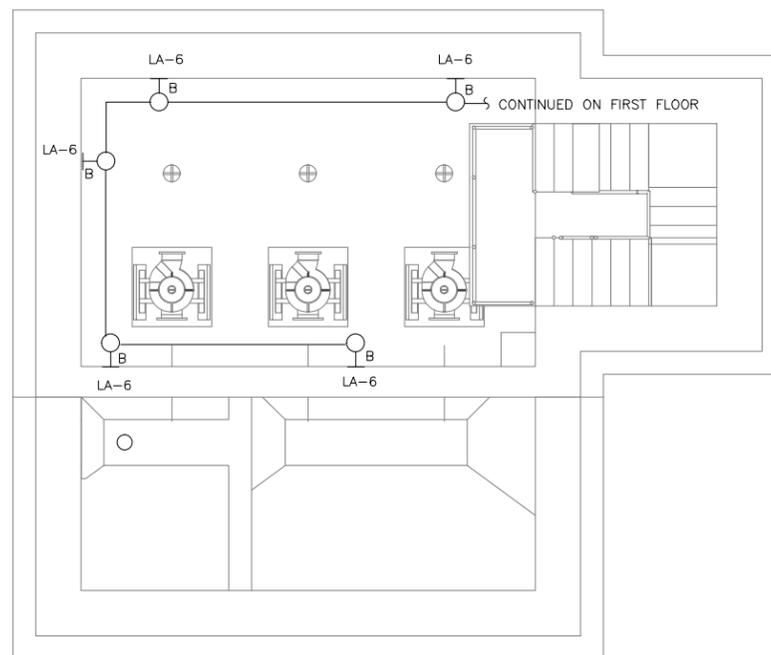


EXHAUST AND SUPPLY FAN SCHEMATIC
(TYPICAL FOR 2)



SULLIVAN ROAD PS #2 - FIRST FLOOR LIGHTING

SCALE: 1/4" = 1'-0"



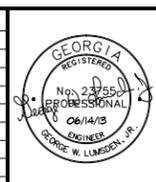
SULLIVAN ROAD PS #2 - BOTTOM FLOOR LIGHTING

SCALE: 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & CATALOG NUMBER	MOUNTING	NO./LAMPS	LOAD
A	HOLOPHANE #HB14-2-32-N1-D20-A12125 MVOLT-GEB10IS-LP841-THSD	PENDANT	2-F32T8	65W
B	GARDCO #121-MT-75LA-NW-UNIV-BRP-F	SURFACE	32-LED	80W
CX	HOLOPHANE #PETL-100HPS-MT-545-WL CLASS 1, DIVISION 2	SURFACE	100W HPS	120W

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:

WOMACK LUMSDEN & ASSOCIATES, LLC
4200 Perimeter Park South
Suite 225
Atlanta, Georgia 30341
Voice: 770-458-3005
Fax: 770-458-8388

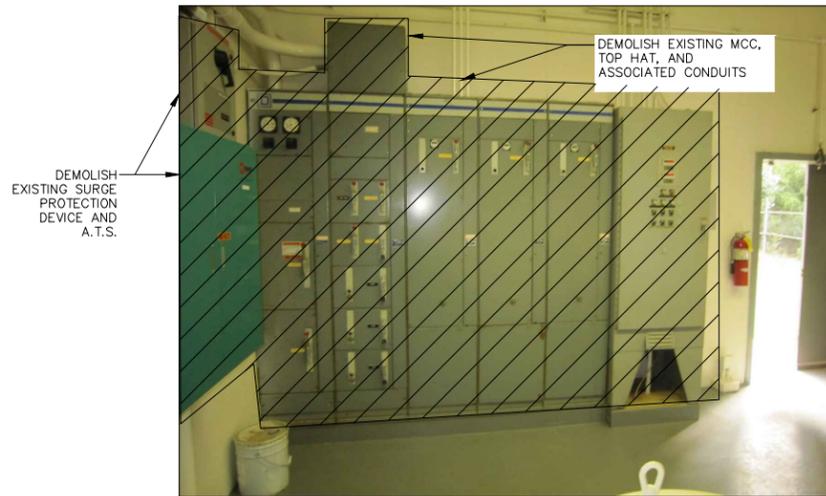
DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: DMZ
DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

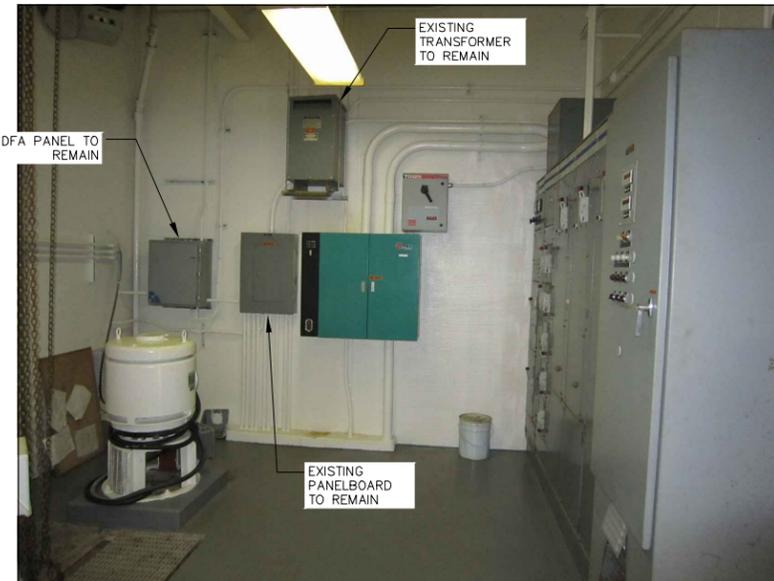
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PS #2
ELECTRICAL POWER PLANS

DRAWING NO. E-2.2
REV. NO. 0
DATE: 06/14/13



EXISTING MCC, ATS, AND SPD

DETAIL **A**
E2.3
SCALE: NONE



EXISTING TRANSFORMER, PANELBOARD, AND DFA PANEL

DETAIL **B**
E2.3
SCALE: NONE



EXISTING INSTRUMENTS

DETAIL **C**
E2.3
SCALE: NONE



EXISTING VENTILATION ALARM PANEL

DETAIL **D**
E2.3
SCALE: NONE



EXISTING GAS ALARM PANEL

DETAIL **E**
E2.3
SCALE: NONE

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:



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DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

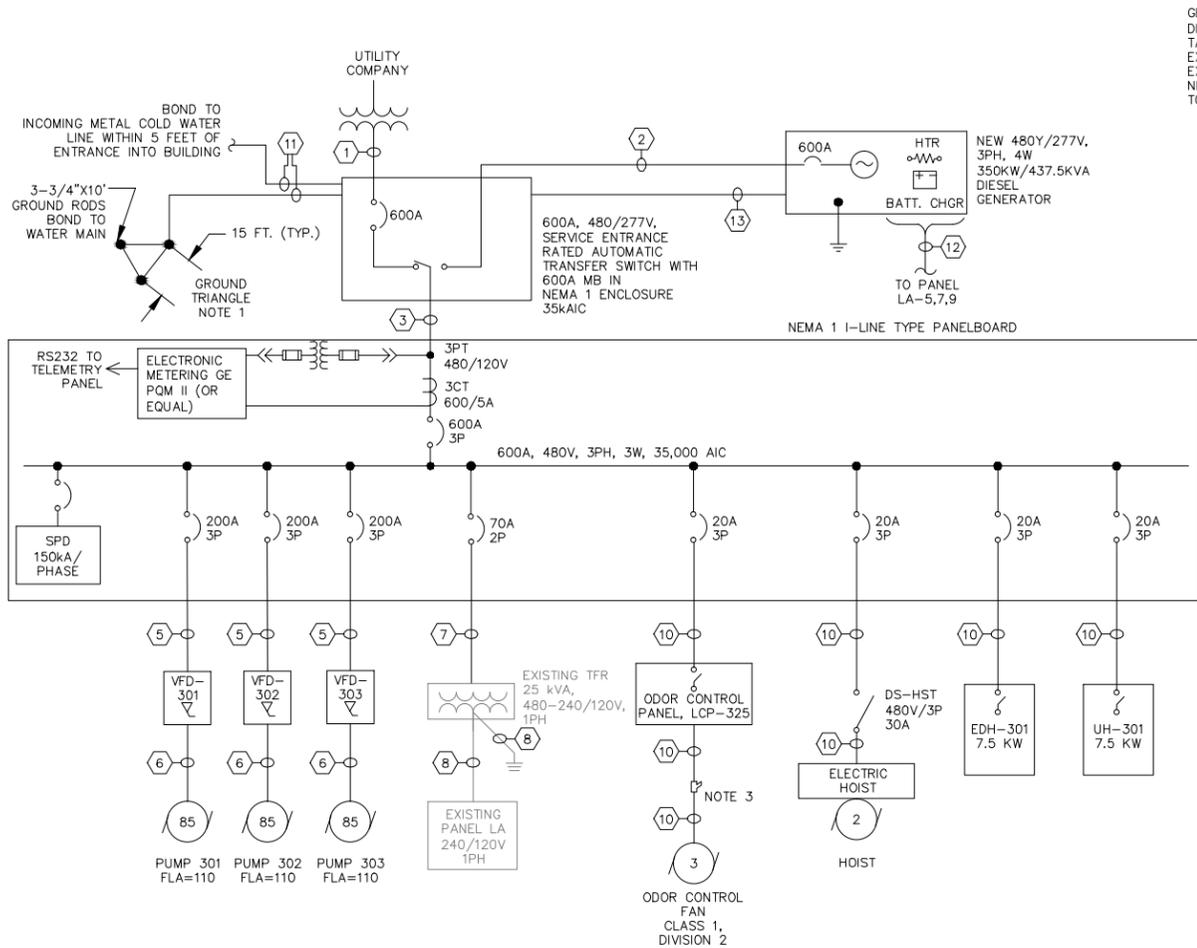


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DESIGN BY: DMZ
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JOB NO. 147024

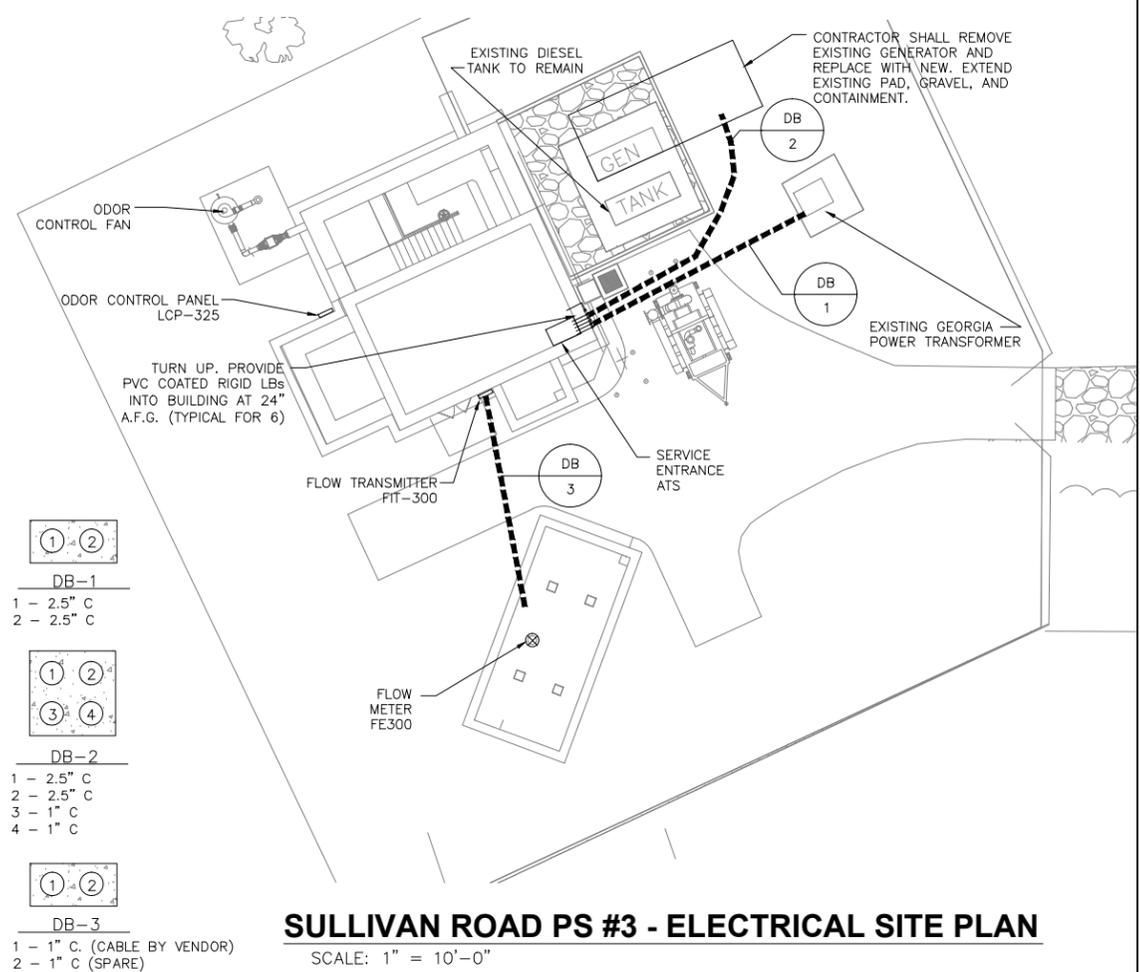
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PS #2
DETAILS

DRAWING NO. E-2.3
REV. NO. 0
DATE: 06/14/13



GENERATOR INFO:
 DIM: 7'-2"W x 18'-6"L x 9'-0"H
 TANK: INTEGRAL 500 GALLON DAYTANK CONNECTED TO EXISTING 500GAL TANK.
 EXISTING TANK BACKUP TIME: 19.00 HRS
 NEW TANK BACKUP TIME: 19 HRS
 TOTAL BACKUP TIME: 38 HRS

ONE LINE DIAGRAM SULLIVAN ROAD PS #3



SULLIVAN ROAD PS #3 - ELECTRICAL SITE PLAN

SCALE: 1" = 10'-0"

SERVICE 120/240V, 1Ø, 3W		EXISTING PANEL LA		MAIN 100A M.B.	
MTG SURFACE		A.I.C. 10,000		REMARKS SULLIVAN ROAD PS #1	
BRANCH CIRCUIT	LOAD DESCRIPTION	LOAD (kVA)	PHASE	BRANCH CIRCUIT	LOAD DESCRIPTION
1	LIGHTS-ELEC. ROOM AND OUTSIDE (7)	0.7	A B	30	MAIN CONTROL PANEL, LCP-300
3	RECEPTACLES - PUMP ROOM (3)	0.54	A B	20	MISSION CONTROL PANEL, LCP-310
5	GENERATOR BLOCK HEATER (2000)	1.0	A B	20	PUMP ROOM LIGHTS (7)
7		1.0	A B	20	SUPPLY FAN SF-301 (3/4HP)
9	GENERATOR BATTERY CHARGER	0.5	A B	20	AIR FLOW SWITCHES (FSL320A/320B)
11	EXHAUST FAN EF-301 (3/4HP)	1.7	A B	20	EXISTING DFA RTU
13	LIGHTS (2 - CLASS 1/DIVISION 2)	0.2	A B	20	GAS ALARM PANEL, LCP-345
15	SPARE		A B	20	VENTILATION ALARM PANEL, LCP-335
17	RECEPTACLES - DRYWELL (3)	0.54	A B	40	SUMP PUMP CONTROL PANEL (1.5HP)
19	SPARE		A B	20	ELECT. WATER HTR EWH-301 (3.5KW)
21	SPACE		A B	20	SPARE
23	SPACE		A B	20	SPARE
25	SPACE		A B	20	SPARE
27	SPACE		A B	20	SPARE
29	SPACE		A B	20	SPARE
CONNECTED LOAD: A 9.04 kVA		B 6.94 kVA		TOTAL 15.98 kVA	

SQUARE D TYPE NQOB NOTE: EXISTING PANEL BOARD. CONTRACTOR MAY UTILIZE EXISTING CIRCUIT BREAKERS IF AVAILABLE. INSTALL NEW BREAKERS AS REQUIRED TO MATCH BREAKER SIZE AND POLES SHOWN. NEW BREAKERS SHALL BE OF THE SAME MANUFACTURER AND HAVE SAME AIC RATING AS EXISTING.

NOTES:

- THE GROUNDING TRIANGLE SHALL CONSIST OF 3 10'x3/4" DIAMETER COPPER CLAD GROUND RODS PLACED 10' APART IN A TRIANGLE AND CONNECTED WITH #3/0 BARE COPPER GROUND CONDUCTORS. ONE OF THE GROUND RODS SHALL BE PLACED IN A GROUND WELL WITH ACCESS COVER FOR GROUND TESTING.
- PUMP MOTOR CABLE SHOULD BE SUPPLIED WITH SUFFICIENT LENGTH OF SUBMERSIBLE CABLE TO REACH VFD ABOVE WITHOUT BEING SPLICED.
- CONTRACTOR SHALL NOTE THAT ALL AREAS WITHIN 3'-0" OF THE ODOR CONTROL FAN IS RATED CLASS 1, DIVISION 2. INSTALL SEAL-OFF FITTING DIRECTLY BELOW ODOR CONTROL PANEL.

CONDUCTOR/CONDUIT SCHEDULE

1	2 RUNS 4-350Kcmil IN 2.5" C. EA. IN "DB-1"	9	NOT USED.
2	2 RUNS 4-350Kcmil & 1 #1 GND IN 3" C. EA. IN "DB-2"	10	3 #12 & 1 #12 IN 3/4" C.
3	2 RUNS 3-350Kcmil & 1 #1 GND IN 3" C. EA.	11	1 #3/0 GND IN 1" PVC C.
4	3 #4 & 1 #10 GND IN 1" C.	12	4 #10 & 1 #10 IN 1" C. IN "DB-2"
5	3 #3/0 & 1 #6 GND IN 2" C.	13	8 #14 & 1 RS-485 IN 1" C. IN "DB-2"
6	2.5" C. (CABLE BY PUMP MANUFACTURER - SEE NOTE 2)		
7	2 #4 & 1 #8 IN 1" C.		
8	EXISTING TO REMAIN. REPLACE CONDUCTORS WITH NEW.		

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:



DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA 30303

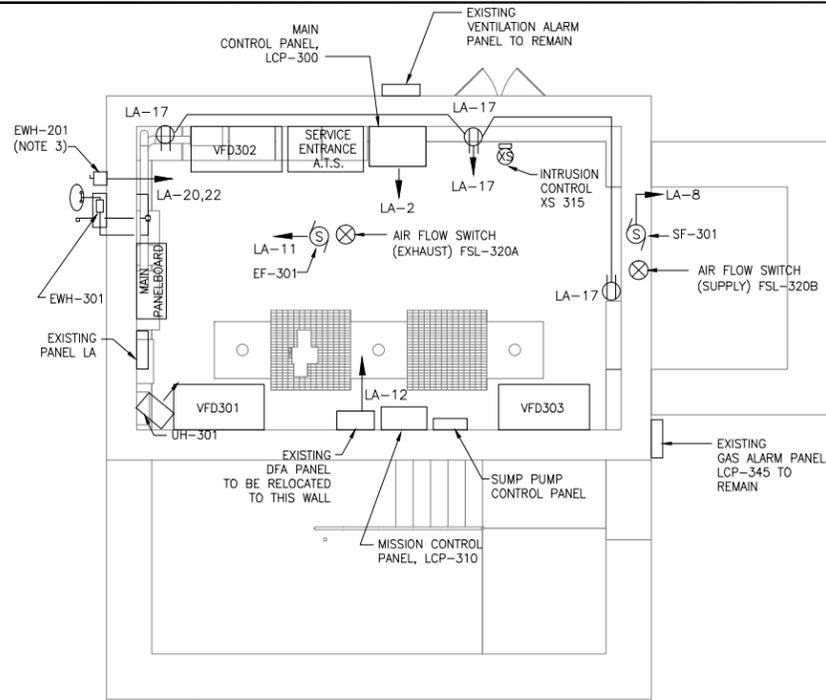


Shaw Environmental & Infrastructure, Inc.
 (A CB&I Company)
 11560 GREAT OAKS WAY
 SUITE 500
 ALPHARETTA, GEORGIA 30022
 770-475-8994
 FAX: 770-777-9545

DESIGN BY:	DMZ
DRAWN BY:	DMZ
CHECKED BY:	GWL
JOB NO.	147024

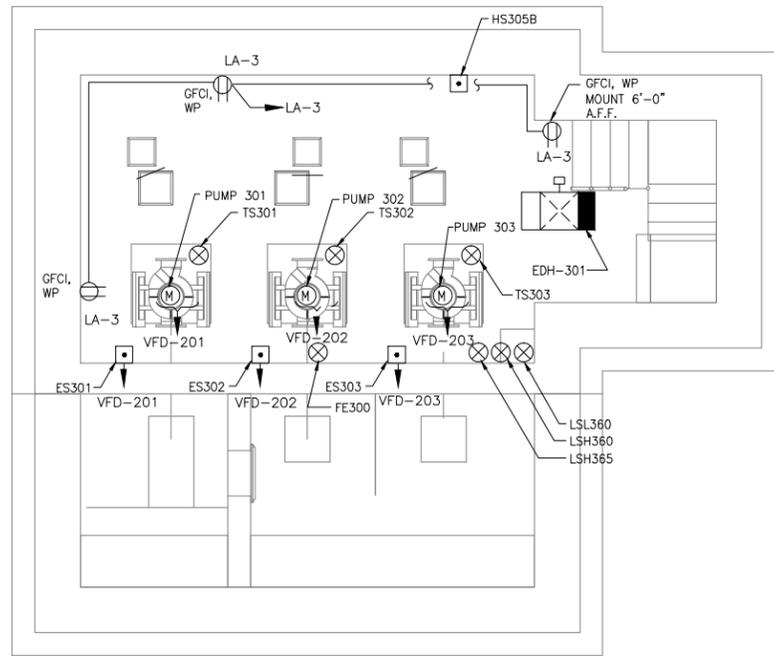
FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #3 ONE LINE,
 SCHEDULES & SITE PLAN

DRAWING NO.	E-3.1
REV. NO.	0
DATE:	06/14/13



SULLIVAN ROAD PS #3 - FIRST FLOOR POWER

SCALE: 1/4" = 1'-0"

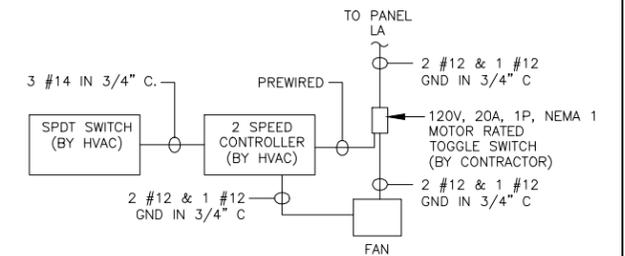


SULLIVAN ROAD PS #3 - BOTTOM FLOOR POWER

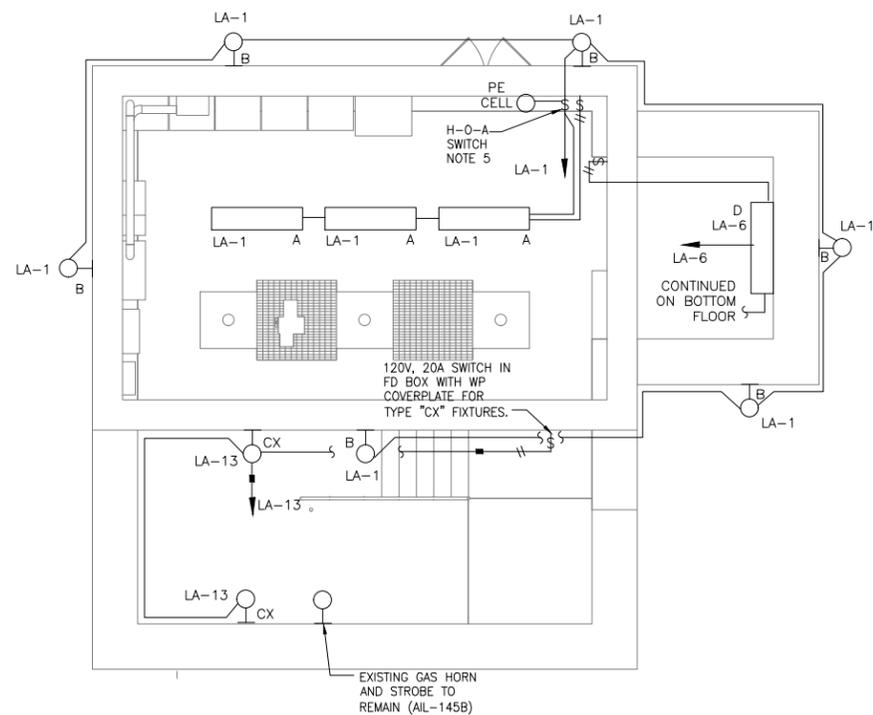
SCALE: 1/4" = 1'-0"

NOTES:

1. ALL HANDSTATIONS LOCATED ON THE BOTTOM FLOOR SHALL BE A WATERPROOF (NEMA 6P) TOGGLE SWITCH.
2. SEE SCHEMATIC DIAGRAM ON DRAWING E5.2 FOR ADDITIONAL CONDUCTOR/CONDUIT REQUIREMENTS. ALL CONDUIT SHALL BE SURFACE MOUNTED ON THE INTERIOR OF THE BUILDING. EXTERIOR MOUNTED CONDUIT IS NOT ACCEPTABLE.
3. CONTRACTOR SHALL FURNISH AND INSTALL A NEMA 4X, 240V, 1PHASE, 30A DISCONNECT SWITCH FOR EWH-101. LOCATE SWITCH ADJACENT TO HEATER.
4. FIELD VERIFY EXACT LOCATION WITH HOIST.
5. PROVIDE AN H-O-A SWITCH AND PHOTOCELL FOR EXTERIOR TYPE "B" LIGHTS. SEE DETAIL E5.1/H.

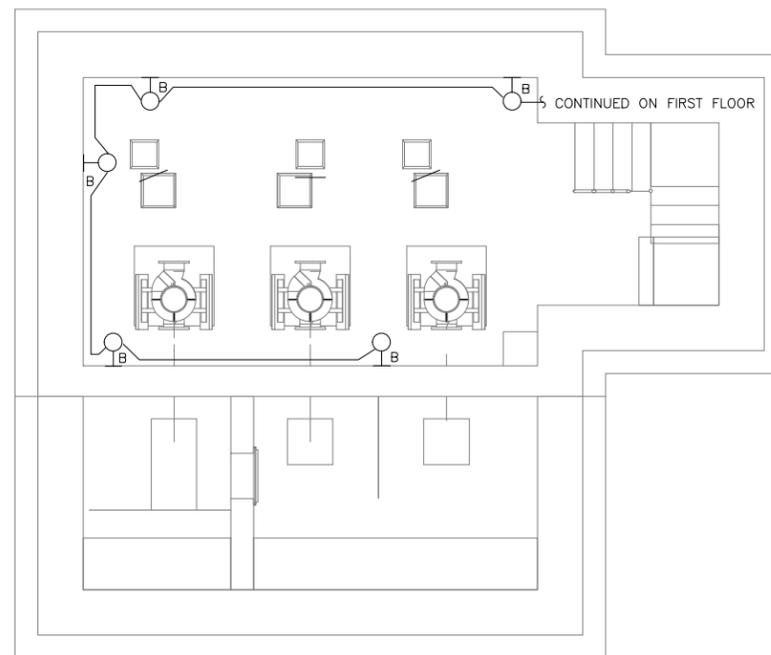


EXHAUST AND SUPPLY FAN SCHEMATIC (TYPICAL FOR 2)



SULLIVAN ROAD PS #3 - FIRST FLOOR LIGHTING

SCALE: 1/4" = 1'-0"



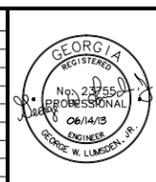
SULLIVAN ROAD PS #3 - BOTTOM FLOOR LIGHTING

SCALE: 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & CATALOG NUMBER	MOUNTING	NO./LAMPS	LOAD
A	HOLOPHANE #HB14-2-32-N1-D20-A12125 MVOLT-GEB10IS-LP841-THSD	PENDANT	2-F32T8	65W
B	GARDCO #121-MT-75LA-NW-UNIV-BRP-F	SURFACE	32-LED	80W
CX	HOLOPHANE #PETL-100HPS-MT-545-WL CLASS 1, DIVISION 2	SURFACE	100W HPS	120W

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:

WOMACK LUMSDEN & ASSOCIATES, LLC
 4200 Perimeter Park South Suite 225
 Atlanta, Georgia 30341
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 Fax: 770-458-8388

DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW SUITE 600
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Shaw Environmental & Infrastructure, Inc.
 (A CB&I Company)
 11560 GREAT OAKS WAY SUITE 500
 ALPHARETTA, GEORGIA 30022
 770-475-8994
 FAX: 770-777-9545

DESIGN BY: DMZ
DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

FULTON COUNTY
 SULLIVAN WASTEWATER PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #3
 ELECTRICAL POWER PLANS

DRAWING NO. E-3.2
REV. NO. 0
DATE: 06/14/13



EXISTING MCC, ATS, AND SPD

DETAIL A
E3.3
SCALE: NONE



EXISTING TRANSFORMER, PANELBOARD, AND DFA PANEL

DETAIL B
E3.3
SCALE: NONE



EXISTING INSTRUMENTS

DETAIL C
E3.3
SCALE: NONE



EXISTING VENTILATION ALARM PANEL

DETAIL D
E3.3
SCALE: NONE



EXISTING GAS ALARM PANEL

DETAIL E
E3.3
SCALE: NONE

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:



WOMACK LUMSDEN & ASSOCIATES, LLC
4200 Perimeter Park South
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Atlanta, Georgia 30341
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Fax: 770-458-8388

DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

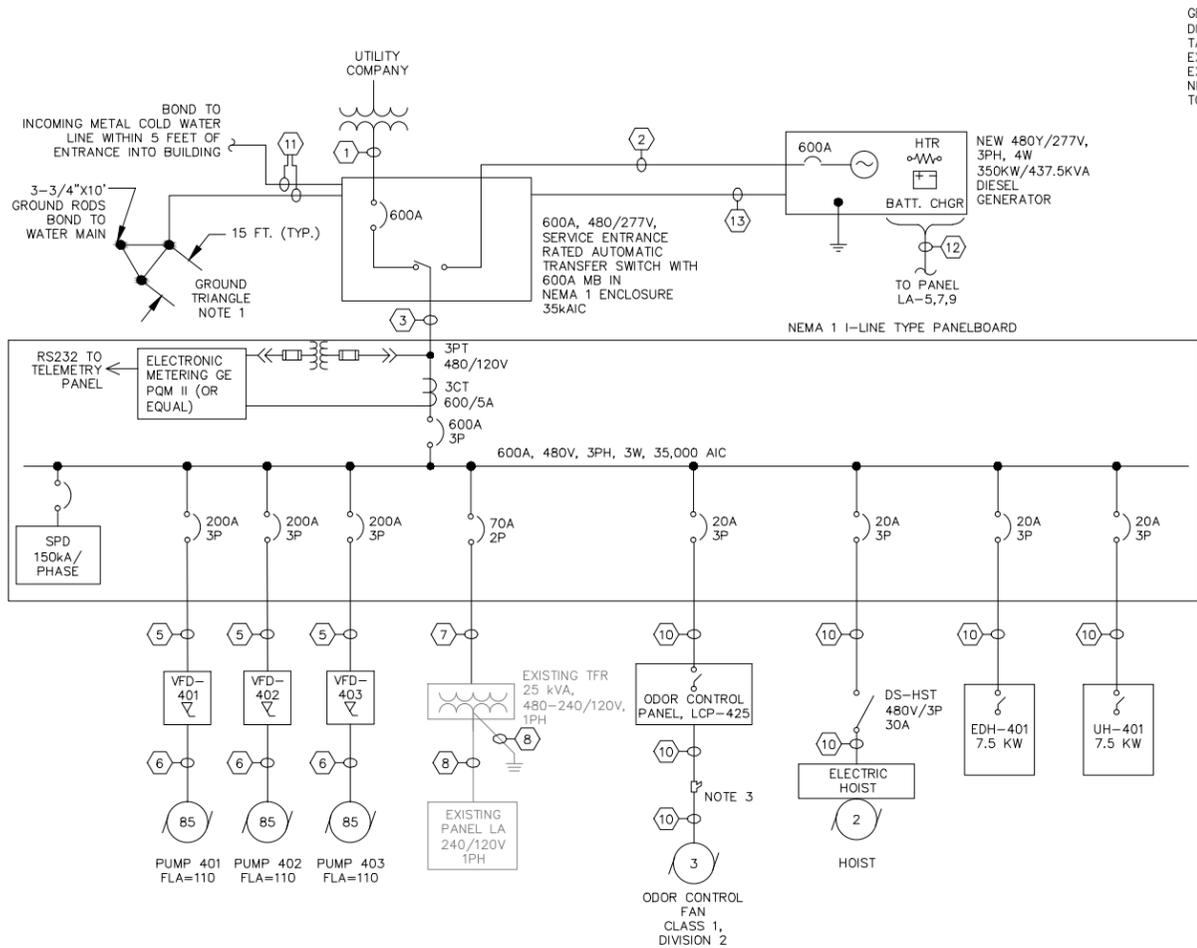


Shaw Environmental & Infrastructure, Inc.
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SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: DMZ
DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

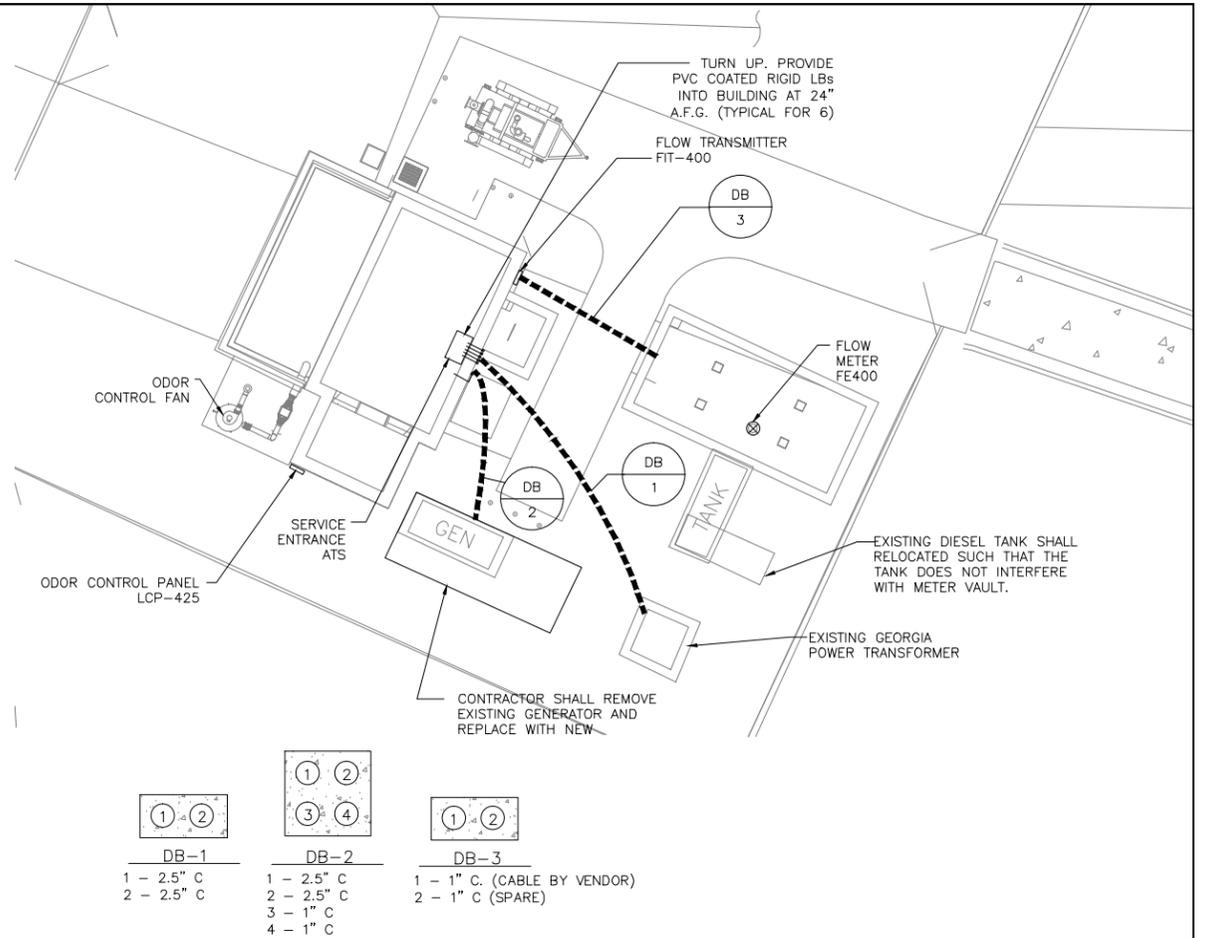
FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PS #3
DETAILS

DRAWING NO. E-3.3
REV. NO. 0
DATE: 06/14/13



GENERATOR INFO:
 DIM: 7'-2"W x 18'-6"L x 9'-0"H
 TANK: INTEGRAL 500 GALLON DAYTANK CONNECTED TO EXISTING 500GAL TANK.
 EXISTING TANK BACKUP TIME: 19.00 HRS
 NEW TANK BACKUP TIME: 19 HRS
 TOTAL BACKUP TIME: 38 HRS

ONE LINE DIAGRAM SULLIVAN ROAD PS #4



SULLIVAN ROAD PS #4 - ELECTRICAL SITE PLAN

SCALE: 1" = 10'-0"

SERVICE 120/240V, 1Ø, 3W		EXISTING PANEL LA		MAIN 100A M.B.	
MTG SURFACE		A.I.C. 10,000		REMARKS SULLIVAN ROAD PS #1	
BRANCH CIRCUIT	LOAD DESCRIPTION	LOAD (kVA)	PHASE	BRANCH CIRCUIT	LOAD DESCRIPTION
1	LIGHTS-ELEC. ROOM AND OUTSIDE (7)	0.7	A B	2	MAIN CONTROL PANEL, LCP-400
3	RECEPTACLES - PUMP ROOM (3)	0.54	A B	4	MISSION CONTROL PANEL, LCP-410
5	GENERATOR BLOCK HEATER (2000)	1.0	A B	6	PUMP ROOM LIGHTS (7)
7		1.0	A B	8	SUPPLY FAN SF-401 (3/4HP)
9	GENERATOR BATTERY CHARGER	0.5	A B	10	AIR FLOW SWITCHES (FSL420A/420B)
11	EXHAUST FAN EF-401 (3/4HP)	1.7	A B	12	EXISTING DFA RTU
13	LIGHTS (2 - CLASS 1/DIVISION 2)	0.2	A B	14	GAS ALARM PANEL, LCP-445
15	SPARE		A B	16	VENTILATION ALARM PANEL, LCP-435
17	RECEPTACLES - DRYWELL (3)	0.54	A B	18	SUMP PUMP CONTROL PANEL (1.5HP)
19	SPARE		A B	20	ELECT. WATER HTR EWH-401 (3.5KW)
21	SPACE		A B	22	SPARE
23	SPACE		A B	24	SPARE
25	SPACE		A B	26	SPACE
27	SPACE		A B	28	SPACE
29	SPACE		A B	30	SPACE

CONNECTED LOAD: A 9.04 kVA B 6.94 kVA TOTAL 15.98 kVA

NOTE: EXISTING PANEL BOARD. CONTRACTOR MAY UTILIZE EXISTING CIRCUIT BREAKERS IF AVAILABLE. INSTALL NEW BREAKERS AS REQUIRED TO MATCH BREAKER SIZE AND POLES SHOWN. NEW BREAKERS SHALL BE OF THE SAME MANUFACTURER AND HAVE SAME AIC RATING AS EXISTING.

- NOTES:**
- THE GROUNDING TRIANGLE SHALL CONSIST OF 3 10'x3/4" DIAMETER COPPER CLAD GROUND RODS PLACED 10' APART IN A TRIANGLE AND CONNECTED WITH #3/0 BARE COPPER GROUND CONDUCTORS. ONE OF THE GROUND RODS SHALL BE PLACED IN A GROUND WELL WITH ACCESS COVER FOR GROUND TESTING.
 - PUMP MOTOR CABLE SHOULD BE SUPPLIED WITH SUFFICIENT LENGTH OF SUBMERSIBLE CABLE TO REACH VFD ABOVE WITHOUT BEING SPLICED.
 - CONTRACTOR SHALL NOTE THAT ALL AREAS WITHIN 3'-0" OF THE ODOR CONTROL FAN IS RATED CLASS 1, DIVISION 2. INSTALL SEAL-OFF FITTING DIRECTLY BELOW ODOR CONTROL PANEL.

CONDUCTOR/CONDUIT SCHEDULE	
1	2 RUNS 4-350Kcmil IN 2.5" C. EA. IN "DB-1"
2	2 RUNS 4-350Kcmil & 1 #1 GND IN 3" C. EA. IN "DB-2"
3	2 RUNS 3-350Kcmil & 1 #1 GND IN 3" C. EA.
4	3 #4 & 1 #10 GND IN 1" C.
5	3 #3/0 & 1 #6 GND IN 2" C.
6	2.5" C. (CABLE BY PUMP MANUFACTURER - SEE NOTE 2)
7	2 #4 & 1 #8 IN 1" C.
8	EXISTING TO REMAIN. REPLACE CONDUCTORS WITH NEW.
9	NOT USED.
10	3 #12 & 1 #12 IN 3/4" C.
11	1 #3/0 GND IN 1" PVC C.
12	4 #10 & 1 #10 IN 1" C. IN "DB-2"
13	8 #14 & 1 RS-485 IN 1" C. IN "DB-2"

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-

SCALE:

WOMACK LUMSDEN & ASSOCIATES, LLC
 4200 Perimeter Park South
 Suite 225
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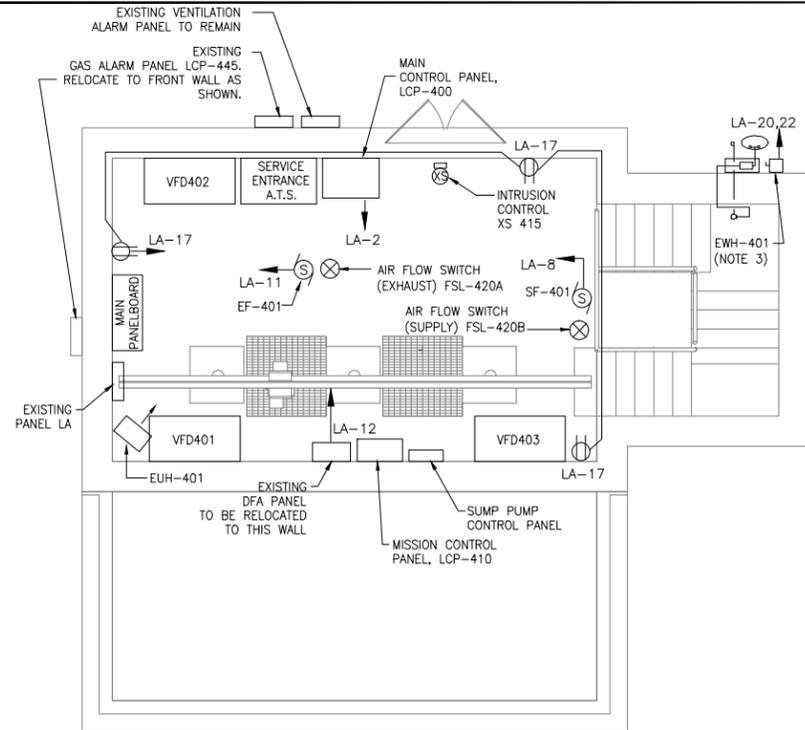
DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
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 11560 GREAT OAKS WAY
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 ALPHARETTA, GEORGIA 30022
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DESIGN BY: DMZ
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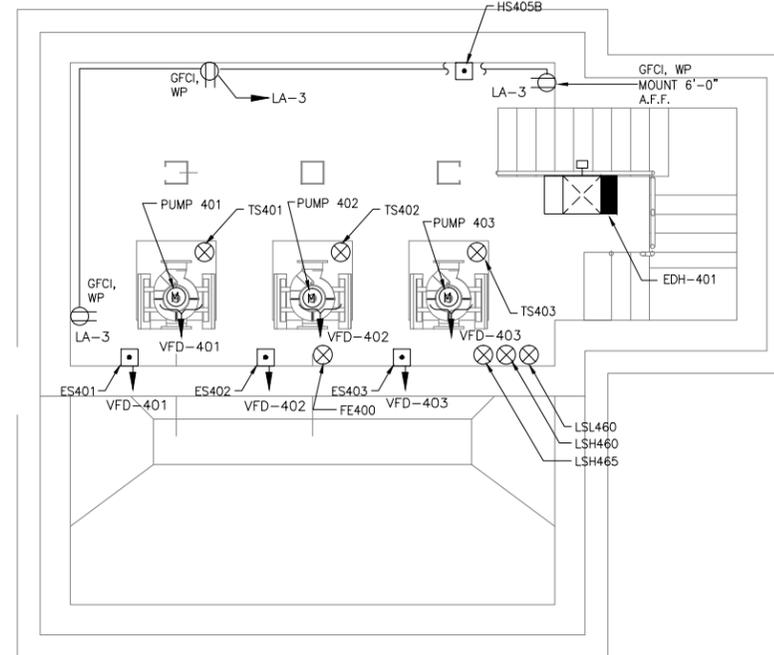
FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #4 ONE LINE,
 SCHEDULES & SITE PLAN

DRAWING NO. E-4.1
 REV. NO. 0
 DATE: 06/14/13



SULLIVAN ROAD PS #4 - FIRST FLOOR POWER

SCALE: 1/4" = 1'-0"

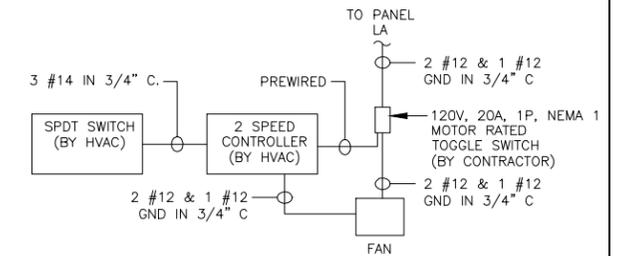


SULLIVAN ROAD PS #4 - BOTTOM FLOOR POWER

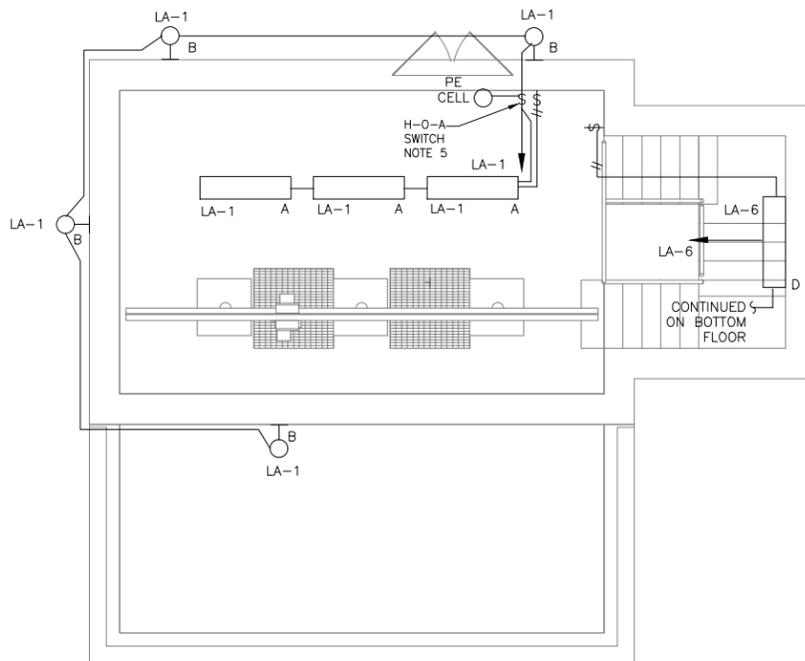
SCALE: 1/4" = 1'-0"

NOTES:

1. ALL HANDSTATIONS LOCATED ON THE BOTTOM FLOOR SHALL BE A WATERPROOF (NEMA 6P) TOGGLE SWITCH.
2. SEE SCHEMATIC DIAGRAM ON DRAWING E5.2 FOR ADDITIONAL CONDUCTOR/CONDUIT REQUIREMENTS. ALL CONDUIT SHALL BE SURFACE MOUNTED ON THE INTERIOR OF THE BUILDING. EXTERIOR MOUNTED CONDUIT IS NOT ACCEPTABLE.
3. CONTRACTOR SHALL FURNISH AND INSTALL A NEMA 4X, 240V, 1PHASE, 30A DISCONNECT SWITCH FOR EWH-101. LOCATE SWITCH ADJACENT TO HEATER.
4. FIELD VERIFY EXACT LOCATION WITH HOIST.
5. PROVIDE AN H-O-A SWITCH AND PHOTOCCELL FOR EXTERIOR TYPE "B" LIGHTS. SEE DETAIL E5.1/H.

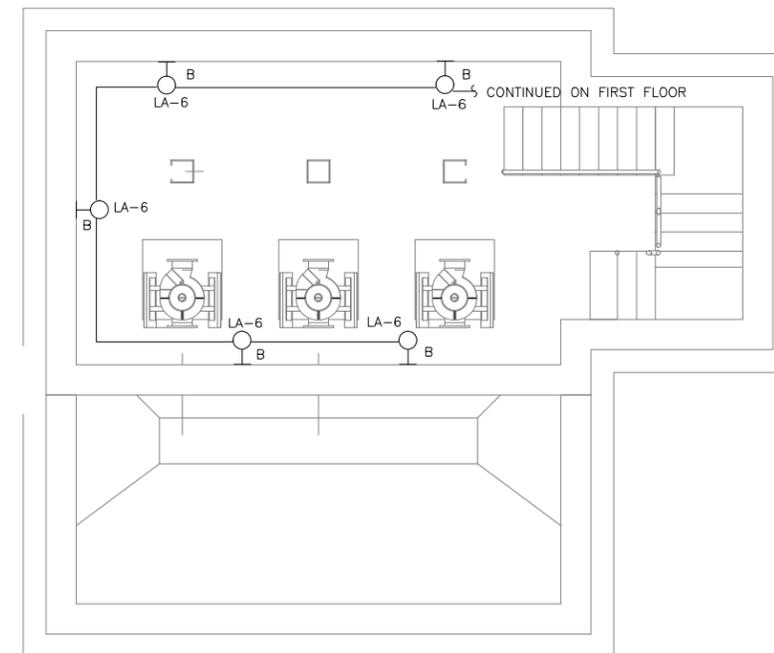


EXHAUST AND SUPPLY FAN SCHEMATIC
(TYPICAL FOR 2)



SULLIVAN ROAD PS #4 - FIRST FLOOR POWER

SCALE: 1/4" = 1'-0"



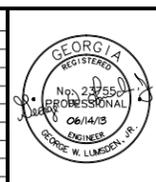
SULLIVAN ROAD PS #4 - BOTTOM FLOOR POWER

SCALE: 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & CATALOG NUMBER	MOUNTING	NO./LAMPS	LOAD
A	HOLOPHANE #HB14-2-32-N1-D20-A12125 MVOLT-GEB10IS-LP841-THSD	PENDANT	2-F32T8	65W
B	GARDCO #121-MT-75LA-NW-UNIV-BRP-F	SURFACE	32-LED	80W
CX	HOLOPHANE #PETL-100HPS-MT-545-WL CLASS 1, DIVISION 2	SURFACE	100W HPS	120W

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



SCALE:

WOMACK LUMSDEN & ASSOCIATES, LLC
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Suite 225
Atlanta, Georgia 30341
Voice: 770-458-3005
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ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: DMZ
DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PS #4
ELECTRICAL POWER PLANS

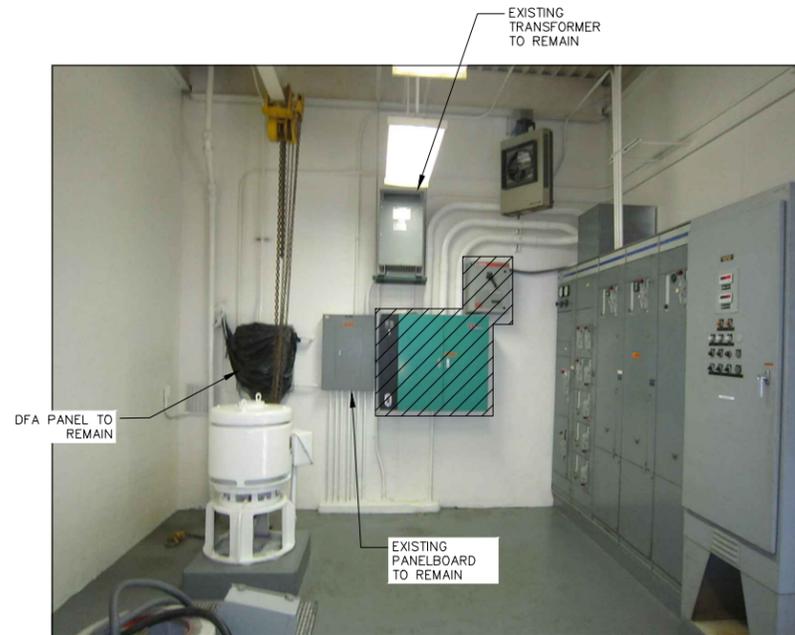
DRAWING NO. E-4.2
REV. NO. 0
DATE: 06/14/13



EXISTING MCC, ATS, AND SPD

DETAIL A
E4.3

SCALE: NONE



EXISTING TRANSFORMER, PANELBOARD, AND DFA PANEL

DETAIL B
E4.3

SCALE: NONE



EXISTING INSTRUMENTS

DETAIL C
E4.3

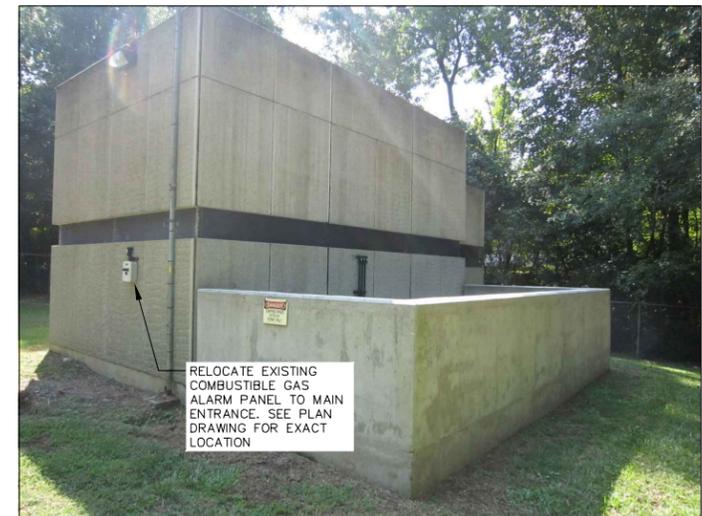
SCALE: NONE



EXISTING VENTILATION ALARM PANEL

DETAIL D
E4.3

SCALE: NONE

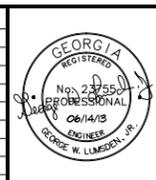


EXISTING GAS ALARM PANEL

DETAIL E
E4.3

SCALE: NONE

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WOMACK LUMSDEN & ASSOCIATES, LLC
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 Fax: 770-458-8388

DEPARTMENT OF
 WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA
 30303

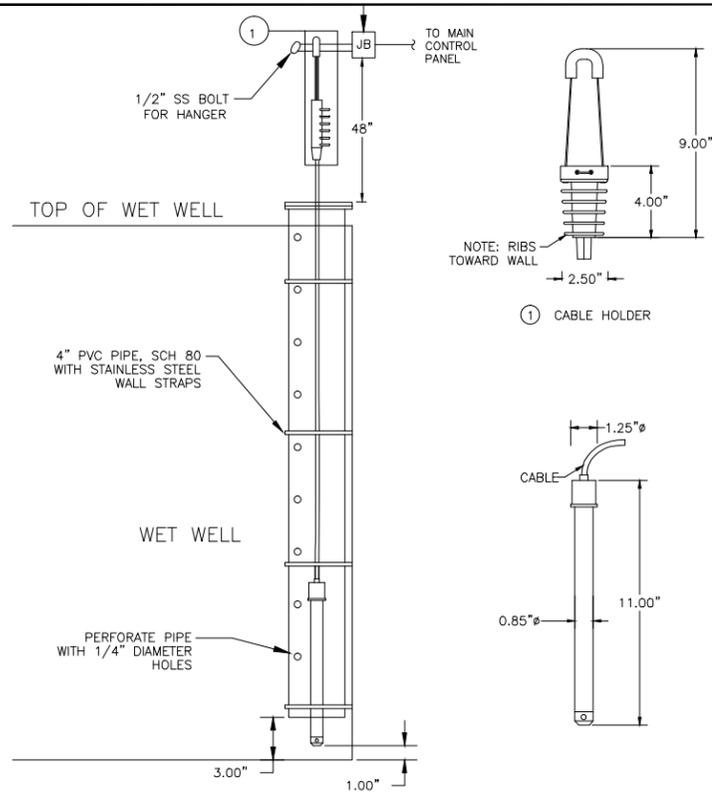


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 11560 GREAT OAKS WAY
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 770-475-8994
 FAX: 770-777-9545

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DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PS #4
 DETAILS

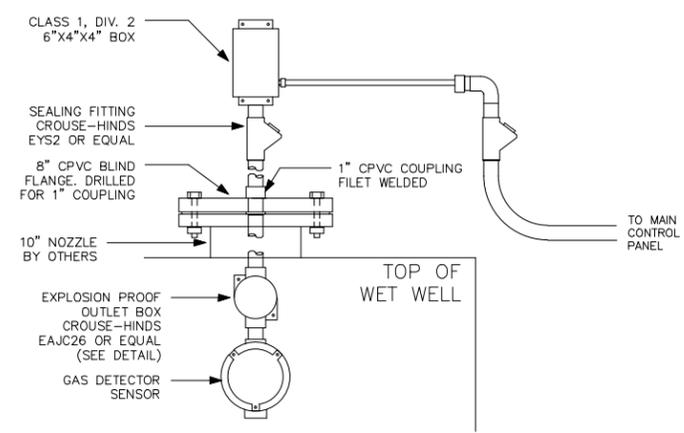
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REV. NO. 0
DATE: 06/14/13



PRESSURE TRANSDUCER INSTALLATION DETAIL

DETAIL **A**
E5.1

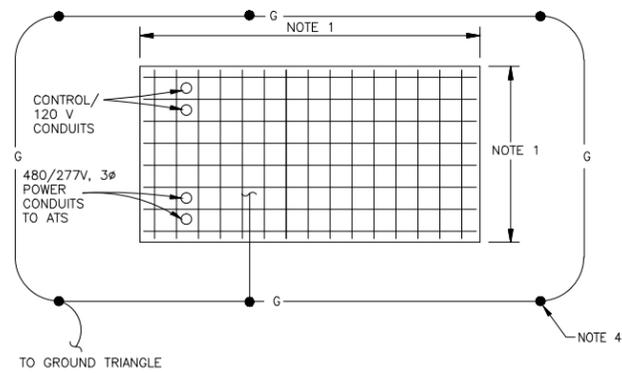
SCALE: NONE



GAS DETECTOR MOUNTING DETAIL

DETAIL **B**
E5.1

SCALE: NONE

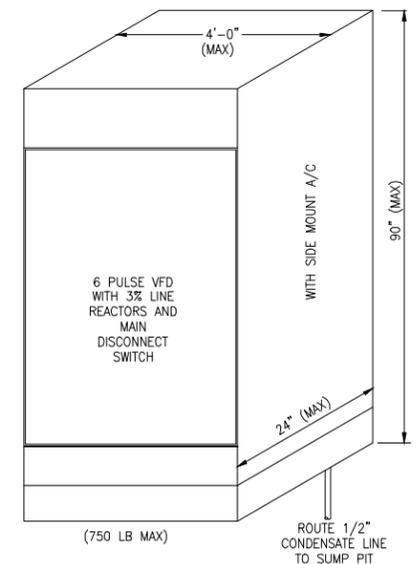


GENERATOR GROUND DETAIL

DETAIL **C**
E5.1

SCALE: NONE

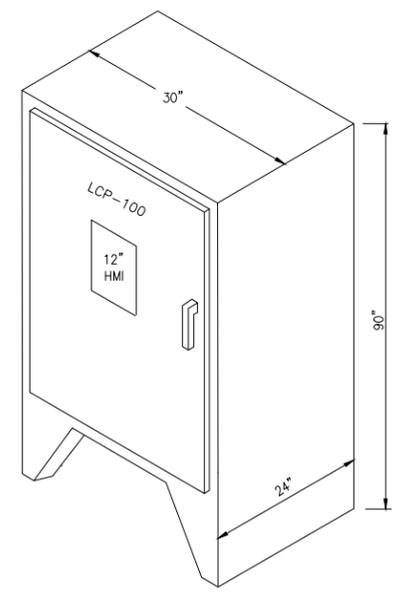
- NOTES:
1. REVIEW DIMENSIONS OF GEN. SET, INCLUDING W.P. HOUSING, TO DETERMINE ACTUAL DIMENSIONS OF GEN. PAD. THE PAD SHALL BE INSTALLED AS RECOMMENDED BY THE GENERATOR MANUFACTURER AND AS SHOWN ON THE STRUCTURAL DRAWING S-5.1.
 2. THE PAD SHALL BE 0-8" LARGER ON ALL SIDES THAN THE GENERATOR BASE AND ENCLOSURE.
 3. VERIFY CONDUIT PENETRATIONS WITH GENERATOR MANUFACTURER.
 4. PROVIDE FOUR (4) 10"x3/4" COPPER CLAD STEEL GROUND RODS AS SHOWN WITH #3/0 BARE COPPER GROUND WIRE AROUND THE GENERATOR PAD. CONNECT GROUND WIRE TO THE GENERATOR ENCLOSURE.
 5. THE EXACT GENERATOR PAD SIZE SHALL BE DETERMINED BY THE GENERATOR MANUFACTURER'S SHOP DRAWING PRIOR TO INSTALLATION.
 6. THE GENERATOR HOUSING SHALL BE GROUNDED, NOT THE NEUTRAL.



85HP VFD WITH SIDE MOUNT A/C (FREE STANDING)

DETAIL **D**
E5.1

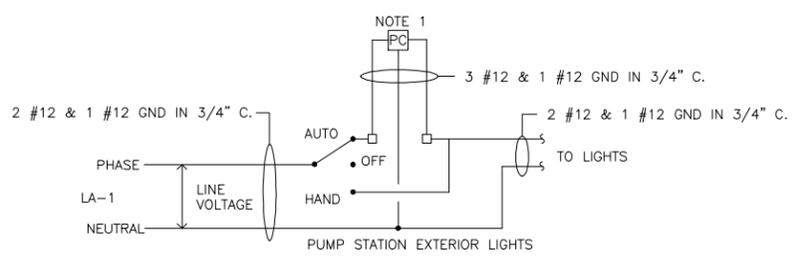
SCALE: NONE



MAIN CONTROL PANEL (FREE STANDING)

DETAIL **E**
E5.1

SCALE: NONE



PHOTOCELL/H-O-A SWITCH LIGHTING CONTROL SCHEMATIC DETAIL

DETAIL **F**
E5.1

SCALE: NONE

- NOTES:
1. "PC" - PHOTOCCELL, 120V, 20A. LOCATE ON THE ROOF FACING NORTH.
 2. INSTALL LIGHTING H-O-A SWITCH IN FD BOX. PROVIDE LABEL.
 3. H-O-A SWITCH SHALL BE RATED 120V, 20A.

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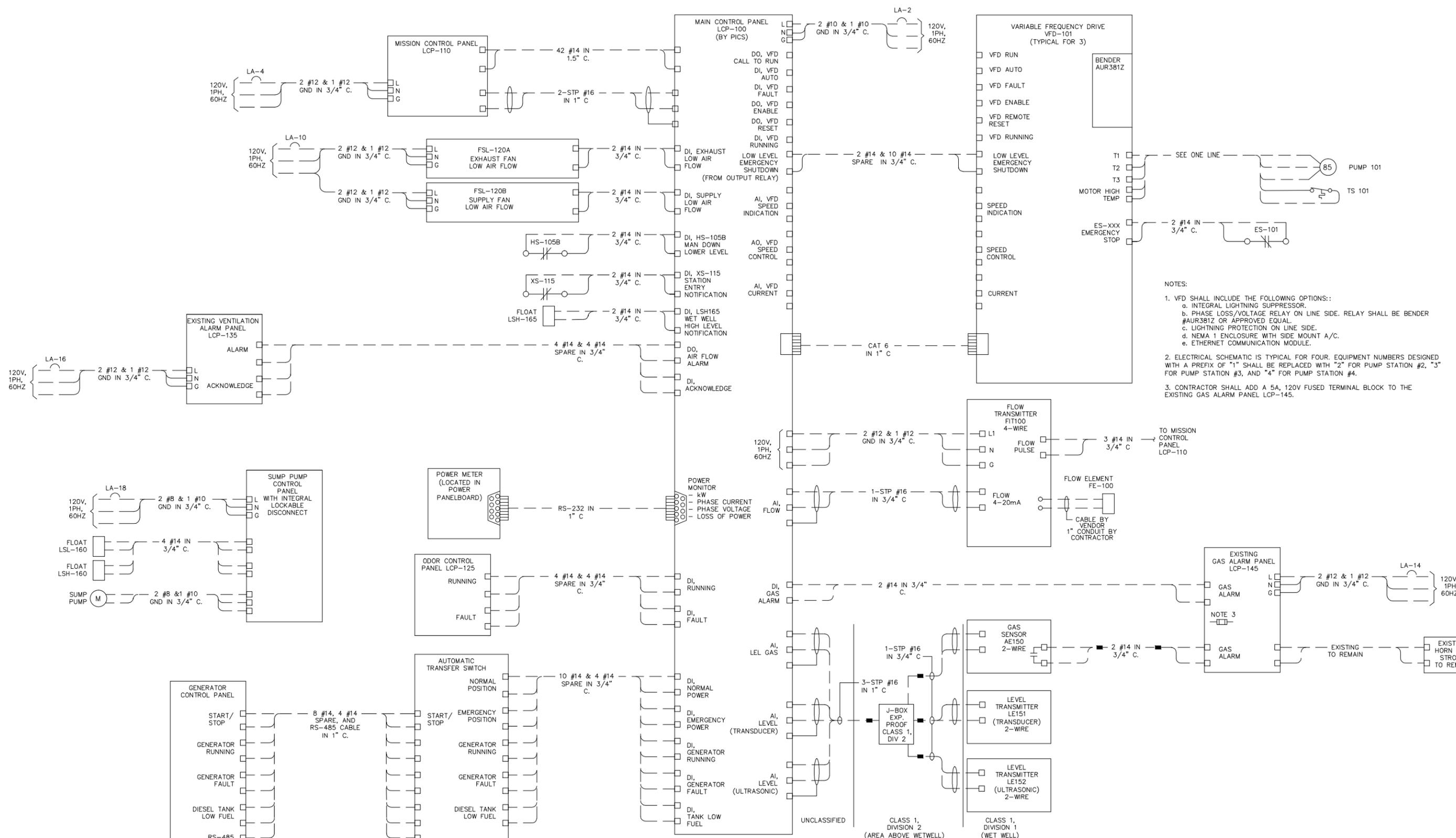
DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PUMP STATIONS
DETAILS 1

DRAWING NO. E-5.1
REV. NO. 0
DATE: 06/14/13



- NOTES:
- VFD SHALL INCLUDE THE FOLLOWING OPTIONS:
 - INTEGRAL LIGHTNING SUPPRESSOR.
 - PHASE LOSS/VOLTAGE RELAY ON LINE SIDE. RELAY SHALL BE BENDER #AUR381Z OR APPROVED EQUAL.
 - LIGHTNING PROTECTION ON LINE SIDE.
 - NEMA 1 ENCLOSURE WITH SIDE MOUNT A/C.
 - ETHERNET COMMUNICATION MODULE.
 - ELECTRICAL SCHEMATIC IS TYPICAL FOR FOUR. EQUIPMENT NUMBERS DESIGNED WITH A PREFIX OF "1" SHALL BE REPLACED WITH "2" FOR PUMP STATION #2, "3" FOR PUMP STATION #3, AND "4" FOR PUMP STATION #4.
 - CONTRACTOR SHALL ADD A 5A, 120V FUSED TERMINAL BLOCK TO THE EXISTING GAS ALARM PANEL LCP-145.

ELECTRICAL SCHEMATIC
SCHEMATIC (TYPICAL FOR 4 PUMP STATIONS)

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
0	06/14/13	ISSUE FOR BID	DMZ	DMZ	GWL	-



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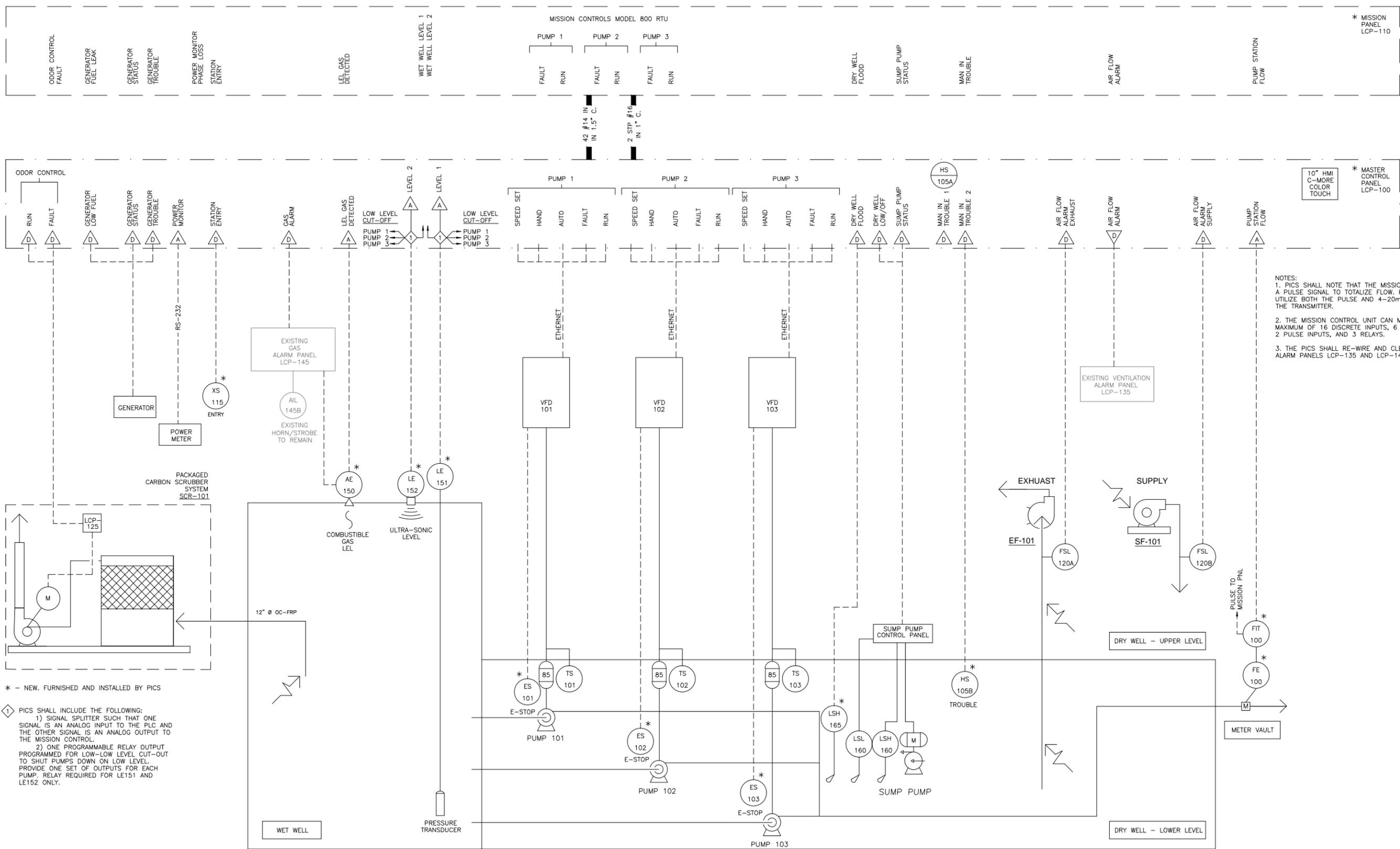
DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW SUITE 600
ATLANTA, GEORGIA 30303

Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY SUITE 500
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770-475-8994
FAX: 770-777-9545

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CHECKED BY: GWL
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FULTON COUNTY SULLIVAN WASTEWATER PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PUMP STATIONS SCHEMATICS

DRAWING NO. E-5.2
REV. NO. 0
DATE: 06/14/13



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DEPARTMENT OF WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA 30303

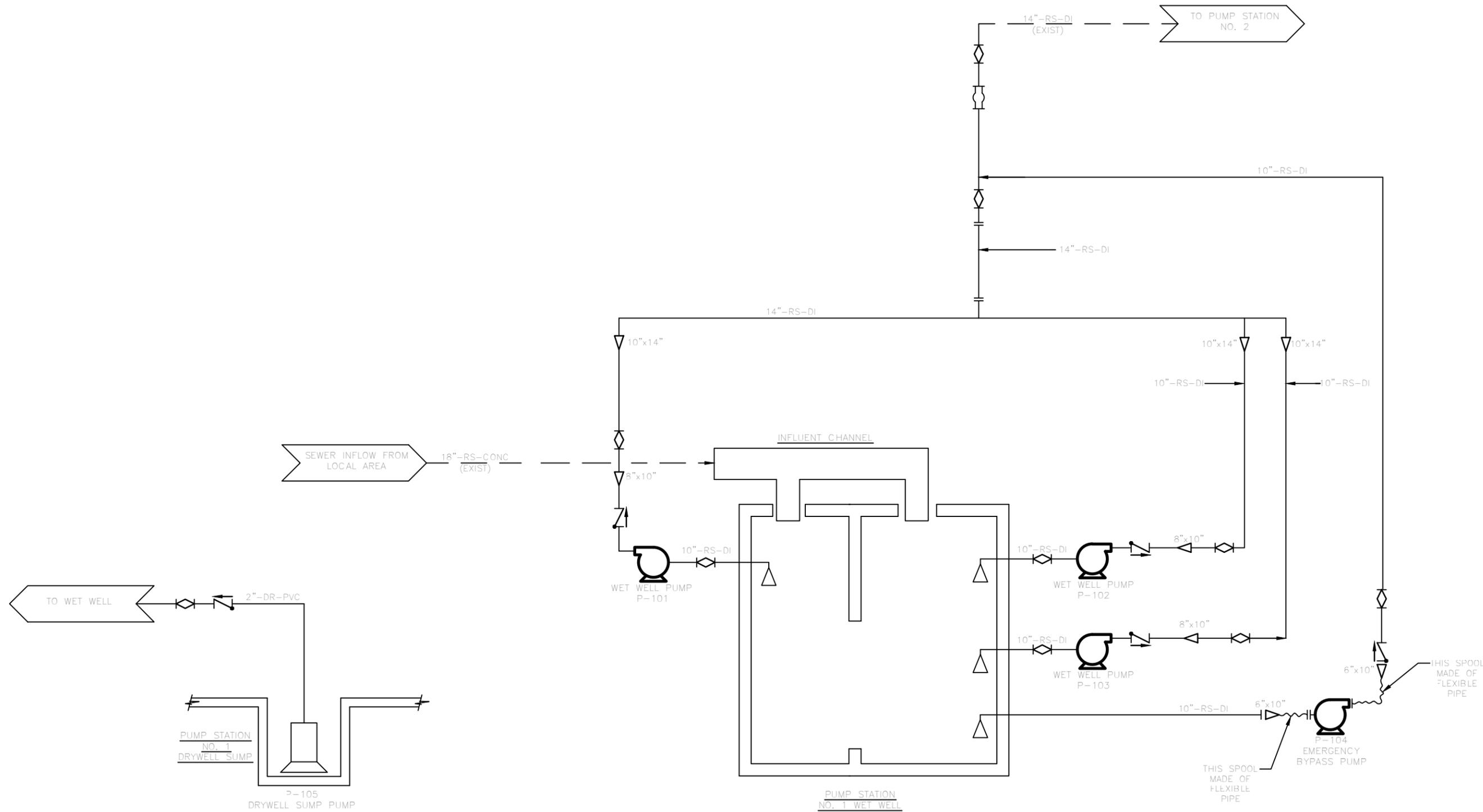
Shaw Environmental & Infrastructure, Inc.
(A CB&I Company)
11560 GREAT OAKS WAY
SUITE 500
ALPHARETTA, GEORGIA 30022
770-475-8994
FAX: 770-777-9545

DESIGN BY: DMZ
DRAWN BY: DMZ
CHECKED BY: GWL
JOB NO. 147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
SULLIVAN ROAD PUMP STATION #1
P&ID

DRAWING NO. I-1.1
REV. NO. 0
DATE: 06/14/13

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141 PRYOR ST. SW
SUITE 600
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30303

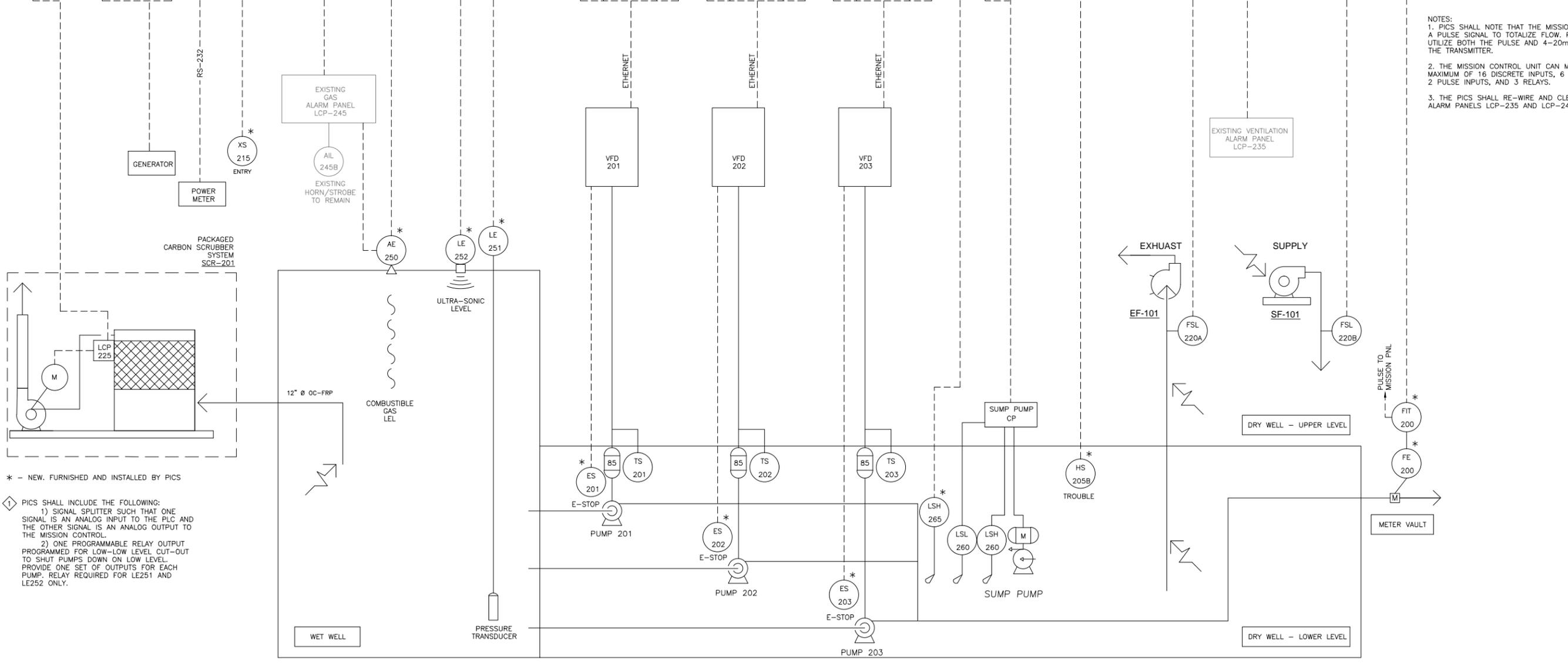
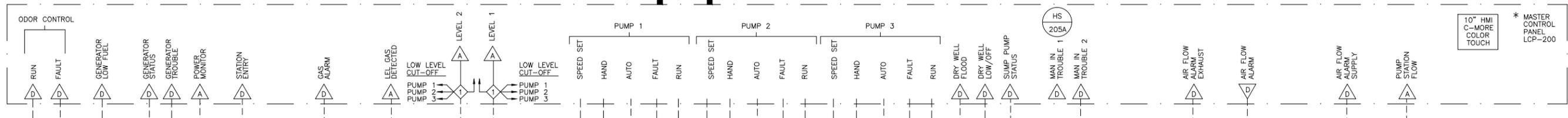
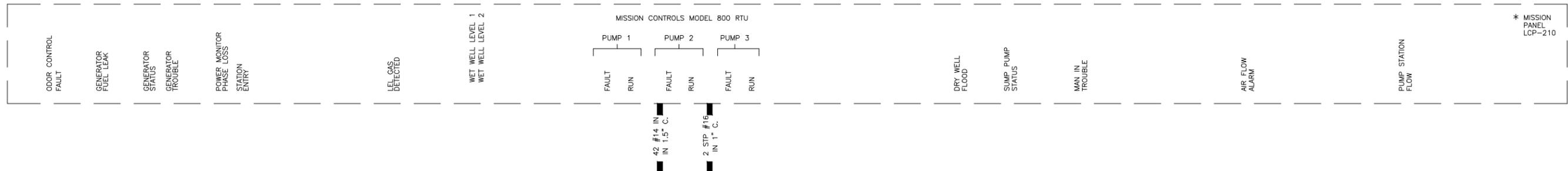


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SUITE 500
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770-475-8994
FAX: 770-777-9545

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JOB NO.
147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 1
PIPING

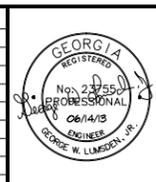
DRAWING NO.
I-1.2
REV. NO.
0
DATE:
06/14/13



NOTES:
 1. PICS SHALL NOTE THAT THE MISSION PANEL UTILIZES A PULSE SIGNAL TO TOTALIZE FLOW. PICS SHALL UTILIZE BOTH THE PULSE AND 4-20mA SIGNALS OF THE TRANSMITTER.
 2. THE MISSION CONTROL UNIT CAN MONITOR A MAXIMUM OF 16 DISCRETE INPUTS, 6 ANALOG INPUTS, 2 PULSE INPUTS, AND 3 RELAYS.
 3. THE PICS SHALL RE-WIRE AND CLEAN THE EXISTING ALARM PANELS LCP-235 AND LCP-245.

* - NEW, FURNISHED AND INSTALLED BY PICS
 1 PICS SHALL INCLUDE THE FOLLOWING:
 1) SIGNAL SPLITTER SUCH THAT ONE SIGNAL IS AN ANALOG INPUT TO THE PLC AND THE OTHER SIGNAL IS AN ANALOG OUTPUT TO THE MISSION CONTROL.
 2) ONE PROGRAMMABLE RELAY OUTPUT PROGRAMMED FOR LOW-LOW LEVEL CUT-OUT TO SHUT PUMPS DOWN ON LOW LEVEL. PROVIDE ONE SET OF OUTPUTS FOR EACH PUMP. RELAY REQUIRED FOR LE251 AND LE252 ONLY.

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 Fax: 770-458-8388

DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
 ATLANTA, GEORGIA 30303

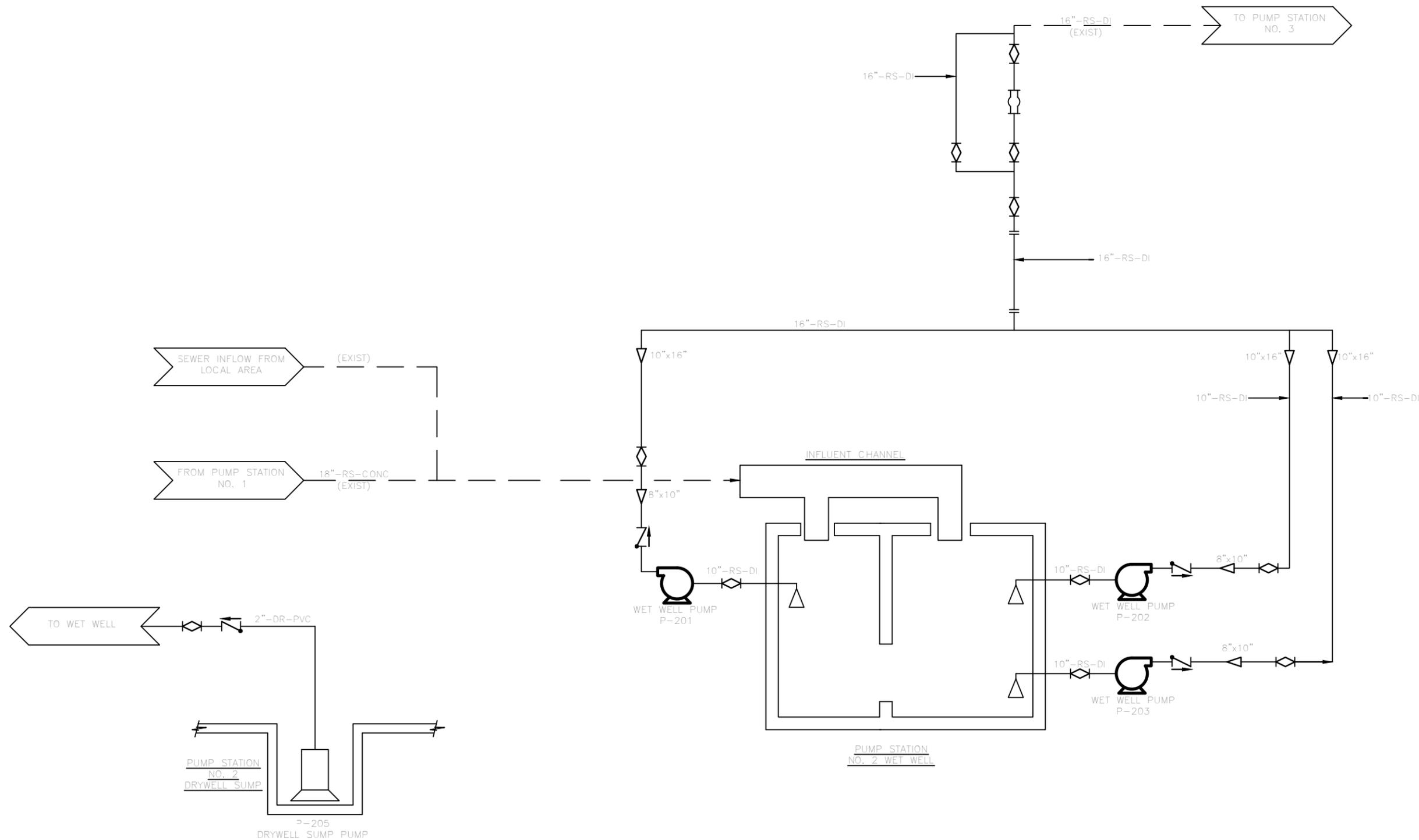
Shaw Environmental & Infrastructure, Inc.
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 11560 GREAT OAKS WAY
 SUITE 500
 ALPHARETTA, GEORGIA 30022
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FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PUMP STATION #2
 P&ID

DRAWING NO. I-2.1
REV. NO. 0
DATE: 06/14/13

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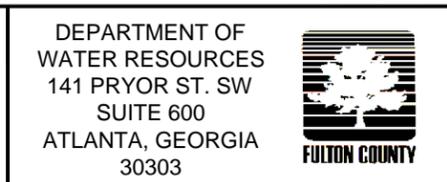


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SCALE:

DEPARTMENT OF
WATER RESOURCES
141 PRYOR ST. SW
SUITE 600
ATLANTA, GEORGIA
30303

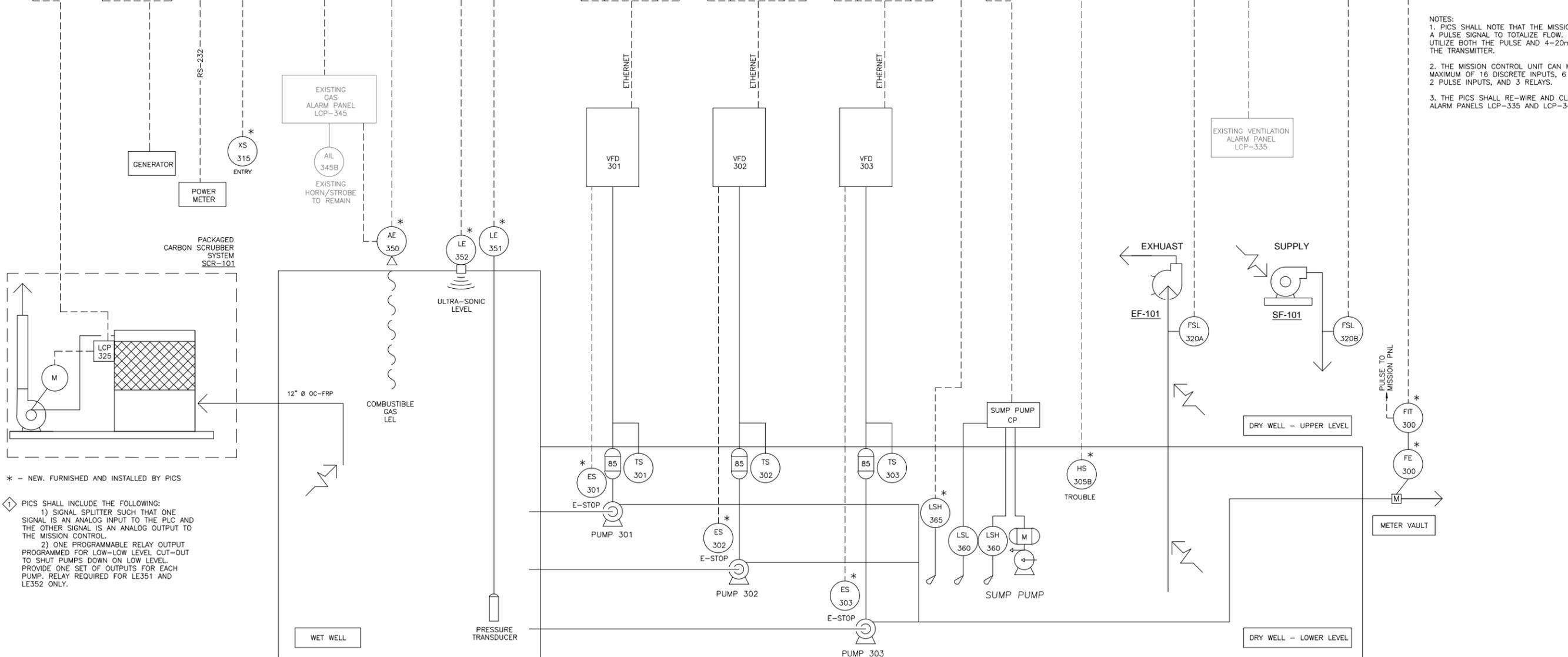
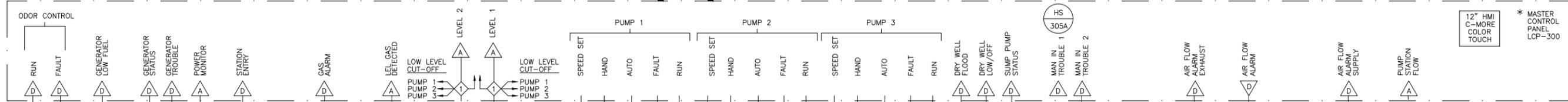
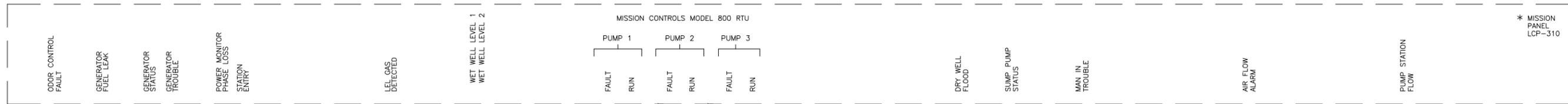


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SUITE 500
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FAX: 770-777-9545

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147024

FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 2
PIPING

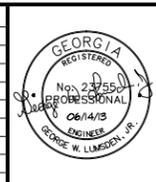
DRAWING NO.
I-2.2
REV. NO.
0
DATE:
06/14/13



- NOTES:
1. PICS SHALL NOTE THAT THE MISSION PANEL UTILIZES A PULSE SIGNAL TO TOTALIZE FLOW. PICS SHALL UTILIZE BOTH THE PULSE AND 4-20mA SIGNALS OF THE TRANSMITTER.
 2. THE MISSION CONTROL UNIT CAN MONITOR A MAXIMUM OF 16 DISCRETE INPUTS, 6 ANALOG INPUTS, 2 PULSE INPUTS, AND 3 RELAYS.
 3. THE PICS SHALL RE-WIRE AND CLEAN THE EXISTING ALARM PANELS LCP-335 AND LCP-345.

- * - NEW, FURNISHED AND INSTALLED BY PICS
- 1 PICS SHALL INCLUDE THE FOLLOWING:
- 1) SIGNAL SPLITTER SUCH THAT ONE SIGNAL IS AN ANALOG INPUT TO THE PLC AND THE OTHER SIGNAL IS AN ANALOG OUTPUT TO THE MISSION CONTROL.
 - 2) ONE PROGRAMMABLE RELAY OUTPUT PROGRAMMED FOR LOW-LOW LEVEL CUT-OUT TO SHUT PUMPS DOWN ON LOW LEVEL. PROVIDE ONE SET OF OUTPUTS FOR EACH PUMP. RELAY REQUIRED FOR LE351 AND LE352 ONLY.

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DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
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 ATLANTA, GEORGIA 30303

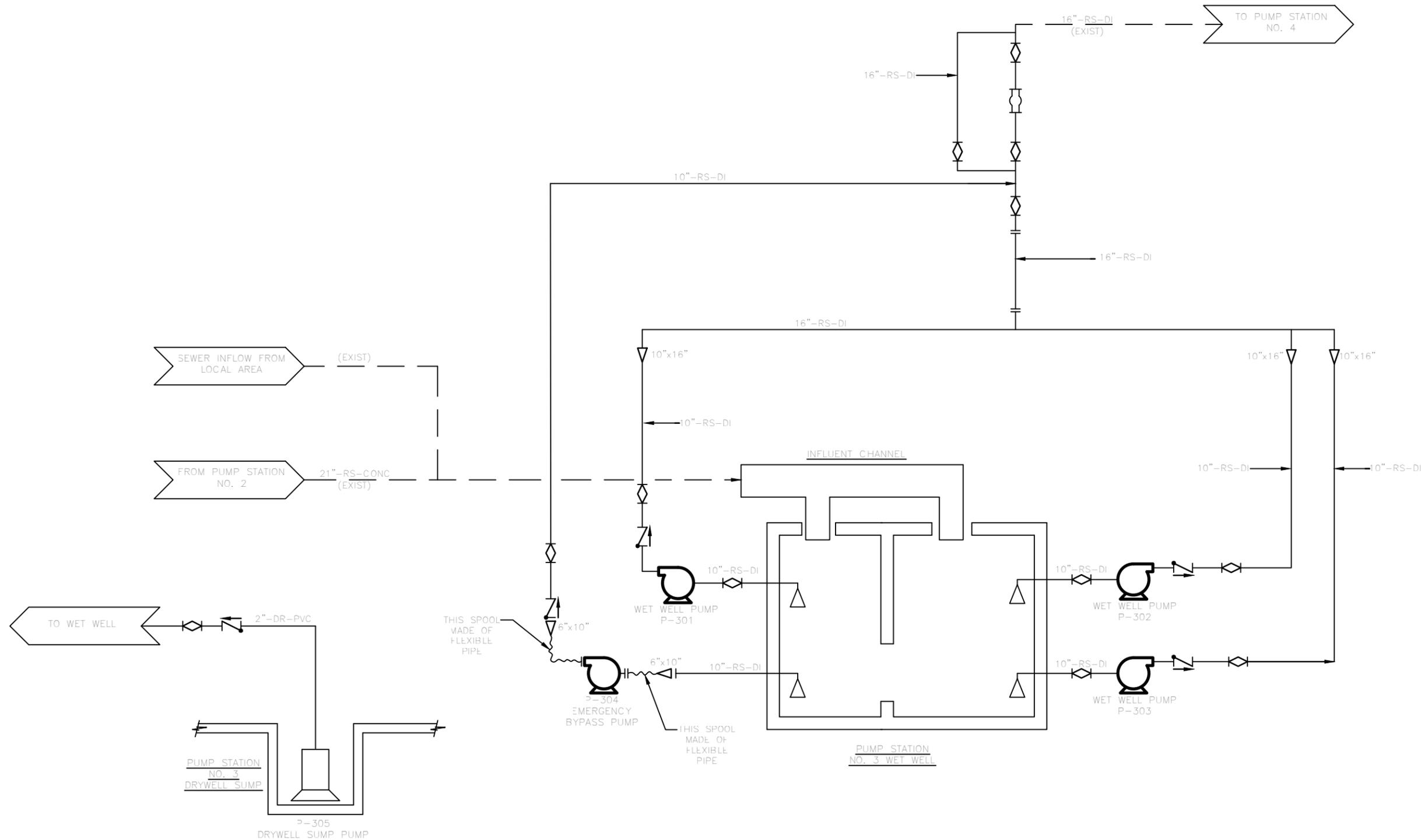
Shaw Environmental & Infrastructure, Inc.
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 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PUMP STATION #3
 P&ID

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SCALE:

DEPARTMENT OF
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141 PRYOR ST. SW
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30303

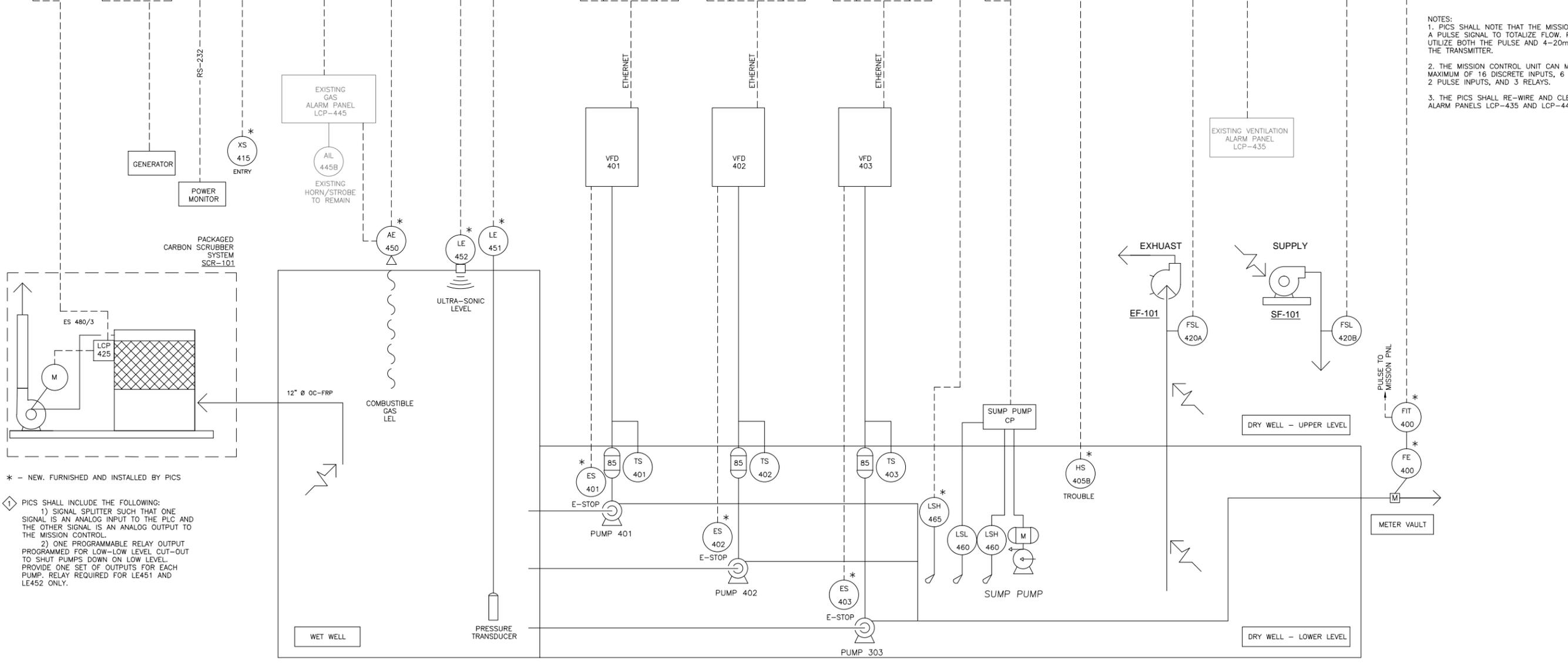
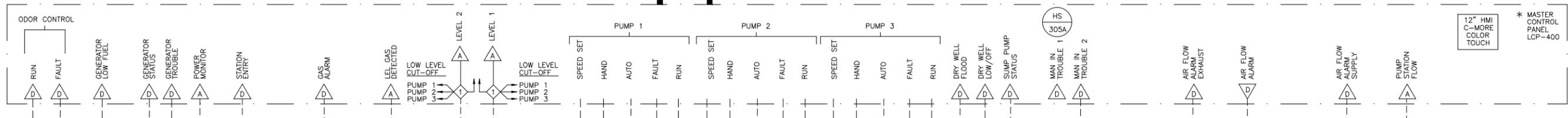
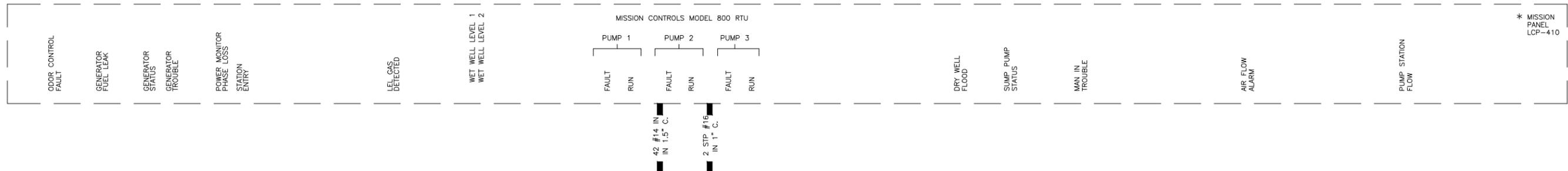


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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 3
PIPING

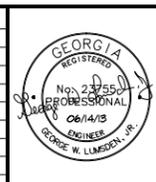
DRAWING NO.
I-3.2
REV. NO.
0
DATE:
06/14/13



NOTES:
 1. PICS SHALL NOTE THAT THE MISSION PANEL UTILIZES A PULSE SIGNAL TO TOTALIZE FLOW. PICS SHALL UTILIZE BOTH THE PULSE AND 4-20mA SIGNALS OF THE TRANSMITTER.
 2. THE MISSION CONTROL UNIT CAN MONITOR A MAXIMUM OF 16 DISCRETE INPUTS, 6 ANALOG INPUTS, 2 PULSE INPUTS, AND 3 RELAYS.
 3. THE PICS SHALL RE-WIRE AND CLEAN THE EXISTING ALARM PANELS LCP-435 AND LCP-445.

* - NEW, FURNISHED AND INSTALLED BY PICS
 1 PICS SHALL INCLUDE THE FOLLOWING:
 1) SIGNAL SPLITTER SUCH THAT ONE SIGNAL IS AN ANALOG INPUT TO THE PLC AND THE OTHER SIGNAL IS AN ANALOG OUTPUT TO THE MISSION CONTROL.
 2) ONE PROGRAMMABLE RELAY OUTPUT PROGRAMMED FOR LOW-LOW LEVEL CUT-OUT TO SHUT PUMPS DOWN ON LOW LEVEL. PROVIDE ONE SET OF OUTPUTS FOR EACH PUMP. RELAY REQUIRED FOR LE451 AND LE452 ONLY.

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DEPARTMENT OF WATER RESOURCES
 141 PRYOR ST. SW
 SUITE 600
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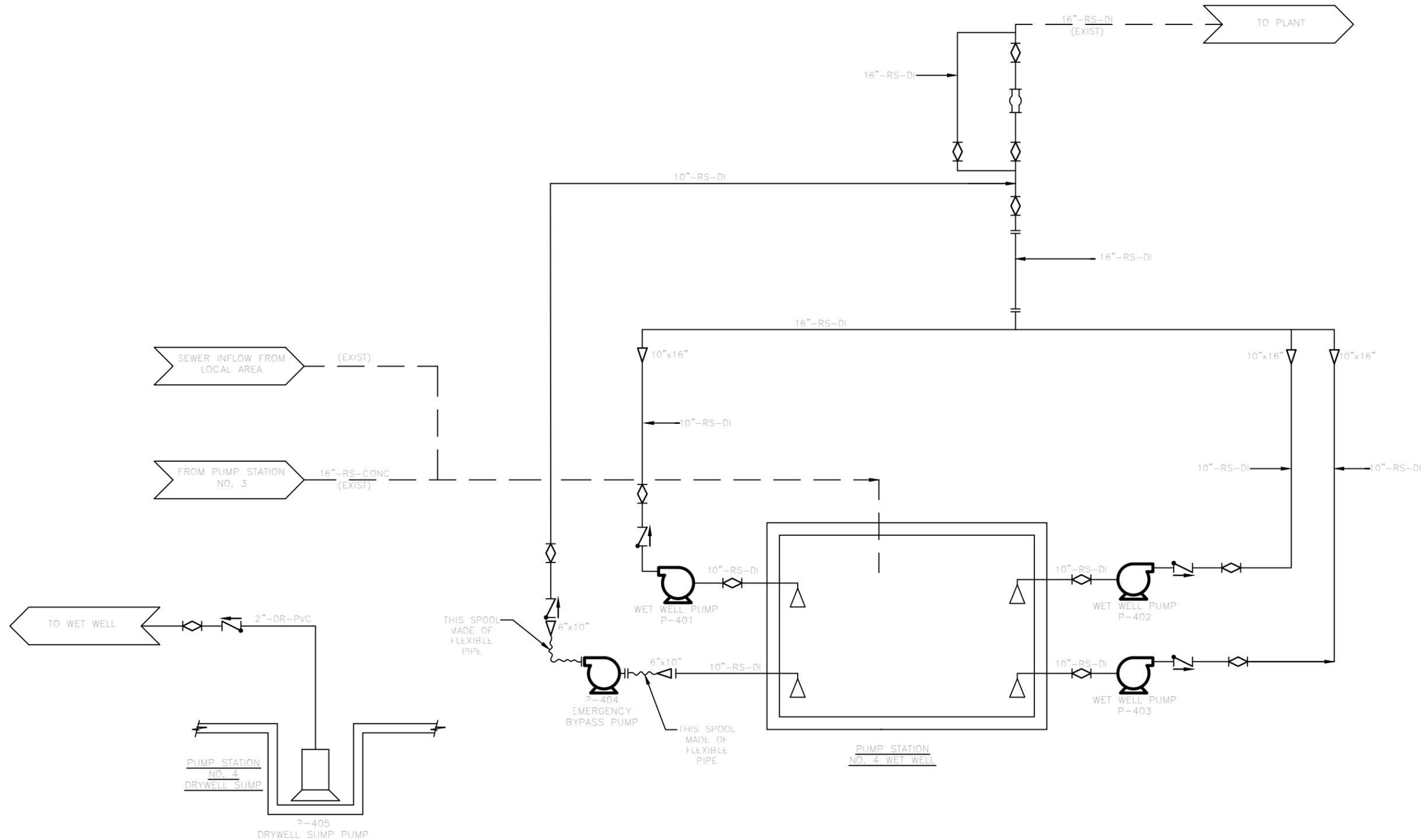
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FULTON COUNTY
 SULLIVAN WASTEWATER
 PUMPING STATIONS IMPROVEMENTS
 FULTON COUNTY, GEORGIA
 SULLIVAN ROAD PUMP STATION #4
 P&ID

DRAWING NO.	I-4.1
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FULTON COUNTY
SULLIVAN WASTEWATER
PUMPING STATIONS IMPROVEMENTS
FULTON COUNTY, GEORGIA
PUMP STATION NO. 4
PIPING

DRAWING NO.
I-4.2
REV. NO.
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DATE:
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