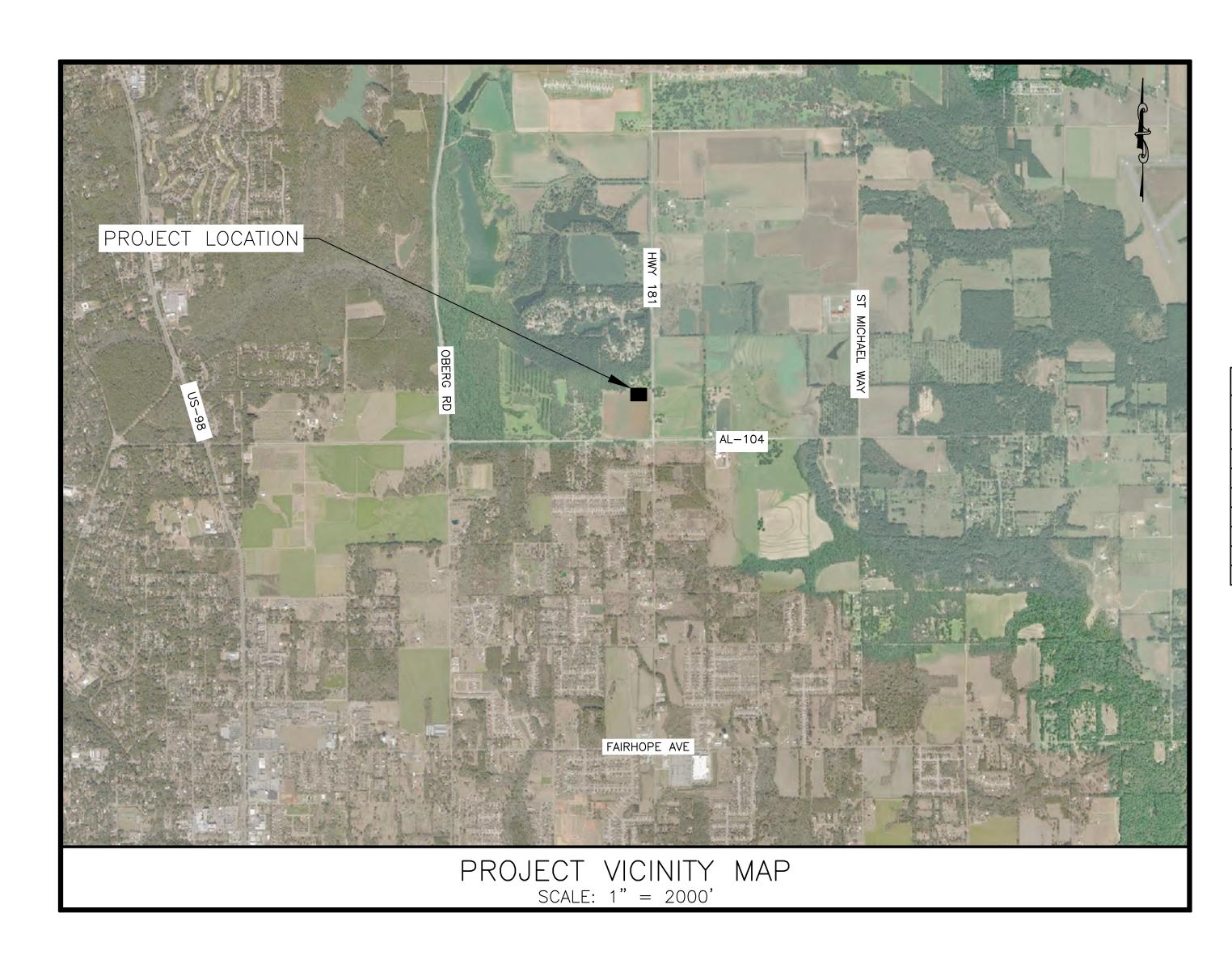
PLANTER'S POINTE LIFT STATION PREPARED FOR CITY OF FAIRHOPE UTILITIES

MARCH 2023 PROJECT NUMBER 21-1101-0257





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COTTAGE HILL RD., STE. 190 TEL: (251) 666-24





MATTHEW C. ROGERS, P.E.

GENERAL NOTES

- 1. ALL ELEVATIONS REFER TO UNITED STATES GEOLOGICAL SURVEY DATUM. EXISTING TOPOGRAPHIC SURVEY PREPARED BY THOMPSON ENGINEERING DATED 07/29/2021. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE CONSTRUCTION DRAWINGS.
- 2. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF THE LOCATIONS SHOWN ARE CORRECT AND TO DETERMINE IF THERE ARE ADDITIONAL UTILITY LINES THAT ARE NOT SHOWN ON THE PLANS. ALSO, ANY SAFETY MEASURES OR METHODS THAT ARE NECESSARY TO PROTECT ALL EXISTING UTILITY LINES DURING CONSTRUCTION WILL BE THE CONTRACTOR'S RESPONSIBILITY WITH NO ADDITIONAL COMPENSATION.
- 3. STANDARD SPECIFICATIONS FOR STREETS AND DRAINAGE: REFERENCE IS MADE TO THE ALABAMA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", 2018 EDITION. ALL PROVISIONS OF SAID STANDARD SPECIFICATIONS SHALL APPLY TO THIS CONTRACT AND ARE HEREBY MADE A PART OF THIS CONTRACT, EXCEPT WHEN THE PROVISIONS HEREON OR THE PLANS ARE CLEARLY IN CONFLICT WITH THE PROVISIONS OF SAID STANDARD SPECIFICATIONS, THE PROVISIONS HEREON AND THE PLANS SHALL GOVERN.
- 4. THE CONTRACTOR IS TO FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS PRIOR TO CONSTRUCTION OR FABRICATION.
- 5. THE CIVIL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND ANY APPLICABLE SPECIFICATIONS.

 CONTRACTOR IS DIRECTED TO NOTIFY THE ENGINEER OF RECORD IMMEDIATELY IF ANY CONFLICT IS FOUND BETWEEN THE CIVIL PLANS AND THE PLANS OF OTHER DISCIPLINES.
- 6. THE CONTRACTOR SHALL OBTAIN THE PERMISSION AND APPROVAL FOR ALL PROPOSED SUBCONTRACTORS AND SHALL BE RESPONSIBLE FOR ALL PHASES OF THE PROJECT INCLUDING THE SUBCONTRACTORS' WORK.
- 7. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY CALLED FOR ON THE DRAWINGS.
- 8. ALL UNPAVED AREAS THAT HAVE BEEN GRADED, CUT, OR FILLED SHALL BE TREATED WITH A SUITABLE COMMERCIAL FERTILIZER IN ACCORDANCE WITH ALABAMA DEPARTMENT OF TRANSPORTATION 2018 STANDARD SPECIFICATIONS, AND SEEDED WITH A MIXTURE TO SUIT THE PLANTING ZONE (652.03) AND DATE OF PLANTING (860.01) PER ALABAMA DEPARTMENT OF TRANSPORTATION 2018 STANDARD SPECIFICATIONS. A FIRM STAND OF PERMANENT GRASS WILL BE REQUIRED.
- 9. ALL CONCRETE USED ON THE PROJECT SHALL BE 3,000 PSI MINIMUM COMPRESSIVE STRENGTH REQUIRED IN 28 DAYS, UNLESS SPECIFICATIONS REQUIRE CONCRETE OF GREATER STRENGTH.
- 10. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON INFORMATION PROVIDED. THE UTILITIES SHOWN MAY NOT BE A COMPLETE REPRESENTATION OF ALL UTILITY LINES IN THE PROJECT AREA. CONTRACTOR IS REQUIRED TO CONTACT ALABAMA ONE CALL PRIOR TO DIGGING (611) (WWW.ALICALL.COM). OTHER UTILITIES (INCLUDING PRIVATE UTILITIES OUTSIDE A PUBLIC RIGHT—OF—WAY) THAT DO NOT PARTICIPATE IN THE ALABAMA ONE CALL LINE LOCATION SERVICE NEED TO BE CONTACTED INDIVIDUALLY AND/OR PHYSICALLY LOCATED BY THE CONTRACTOR.
- 11. SUB-GRADE AND BASE SHALL BE COMPACTED TO THE REQUIREMENTS OF ALABAMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
- 12. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROPER COMPACTION ON ANY AND ALL UTILITY DITCHES.
- 13. ALL FILL AND EMBANKMENT CONSTRUCTION SHALL BE COMPACTED AS REQUIRED IN LAYERS NOT TO EXCEED 8".
- 14. ALL EXCESS UNCLASSIFIED EXCAVATION IS TO BE UTILIZED FOR CONSTRUCTION OF EMBANKMENTS AND SLOPES NOT DIRECTLY UNDER THE TRAVEL WAY OR PARKING AREAS PRIOR TO USING ANY OFFSITE BORROW EXCAVATION. AFTER CONSTRUCTION OF SUCH AREAS IS COMPLETED, EXCESS EXCAVATION SHALL BE SPREAD AS DIRECTED BY THE ENGINEER, OR AT THE ENGINEER'S DIRECTION, HAULED FROM THE SITE AT NO ADDITIONAL PAYMENT.
- 15. ALL SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED AND FULLY FUNCTIONING PRIOR TO ANY OTHER CONSTRUCTION OR GRADING ACTIVITY.
- 16. ALL SLOPES MUST BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EXCESSIVE EROSION.

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UNDER STATE AND FEDERAL LAW.

TO APPROVE THIS USE. UNAUTHORIZED USE IS SUBJECT TO LEGAL ACTION

- 17. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER.
- 18. HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC.
- 19. CONTRACTOR IS REQUIRED TO USE "BEST MANAGEMENT PRACTICES" COMPLIANT WITH THE "ALABAMA HANDBOOK FOR EROSION CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS", ALABAMA SOIL AND WATER CONSERVATION COMMITTEE, MONTGOMERY, ALABAMA, VOLUMES 1 & 2, 2018 EDITION, TO PREVENT SEDIMENT LADEN STORM WATER RUNOFF OR ERODED MATERIALS FROM LEAVING THE CONSTRUCTION SITE.
- 20. ALL MATERIALS AND WORKMANSHIP WITHIN A STATE OR COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE ALABAMA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2018 EDITION.
- 21. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE TESTING LABORATORY OF HIS WORKING SCHEDULE IN ORDER THAT THE PROPER SAMPLE MAY BE OBTAINED AND TEST MADE.

LEGEND

EXISTING

P.O.C.	POINT OF COMMENCEMENT	⊞	TELEPHONE BOX (VAULT)
P.O.B.	POINT OF BEGINNING		WATER METER
(A)	ACTUAL	\aleph	SANITARY SEWER VALVE
(R)	RECORD DEED	×	WATER VALVE
(P)	PLAT OF RECORD	ĕ₩	GAS VALVE
(C)	COMPUTED	TR	TRANSFORMER BOX
OTIF	OPEN TOP IRON PIPE FOUND	Ø	LIGHT POLE
IPF	IRON PIN FOUND	CA	CABLE TV BOX
CTIF	CRIMP TOP IRON PIPE FOUND	XZBEX	ELECTRIC BOX
CRF	CAPPED REBAR FOUND	EP	ELECTRIC PANEL
RBF	1/2" REBAR FOUND	×	IRRIGATION CONTROL VALVE
CRS	1/2" CAPPED REBAR SET STAMPED CA#604	S	SANITARY SEWER MANHOLE
CMF	CONCRETE MONUMENT FOUND	lacktriangle	STORM DRAIN MANHOLE
CMS	CONCRETE MONUMENT SET	\bigcirc	TELEPHONE MANHOLE
LS#	LICENSED PROFESSIONAL SURVEYOR'S NUMBER	(SEWER CLEANOUT
CA#	CERTIFICATE OF AUTHORIZATION NUMBER	GP	SEWER GRINDER PUMP
(DIST)	DISTURBED	(O) (G) (G)	GREASE TRAP
(REF)	REFERENCE CORNER SET ON LINE	20	FLAG POLE
(UNR)	UNREADABLE	©	GAS LINE SIGN MARKER
INST #	INSTRUMENT NUMBER	À	TELEPHONE SIGN MARKER
SECT.	SECTION	₩	WATERLINE MARKER
T -	TOWNSHIP	Æ	FIBER OPTIC LINE MARKER
	RANGE	(EX.)	EXCEPTION
-0-	POWER POLE	— FO —	UNDERGROUND FIBER OPTIC LINE
	GUY WIRE	— OE —	OVERHEAD ELECTRIC
,	RIGHT-OF-WAY		BURIED ELECTRIC LINE
	RIGHT-OF-WAY		UNDERGROUND TELEPHONE LINE
\odot	FIRE HYDRANT		UNDERGROUND SEWER LINE
0	SIGN		UNDERGROUND WATERLINE
TP EM	TELEPHONE PEDESTAL		UNDERGROUND GAS LINE
EM	ELECTRIC METER BOX		UNDERGROUND TELEVISION
AC	AIR CONDITIONER	ELEC.	
. JB	JUNCTION BOX (VAULT)		BACK FLOW PREVENTER
*		- — — -	EXISTING GRADE (PROFILE VIEW)
18187	INIVEDT		•

PROPOSED PROPOSED EFFLUENT FORCE MAIN (PLAN VIEW) FM EXISTING INFLUENT/EFFLUENT FORCE MAIN MAJOR CONTOURS MINOR CONTOURS PROPOSED EFFLUENT FORCE MAIN (PROFILE VIEW)

PROPOSED ASPHALT



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	SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :	
	N.T.S.	1:1	KMC	EHB	MCR	MARCH 2023	21-1101-0257	G101	A	

EROSION CONTROL NOTES:

- 1. EROSION AND SEDIMENT CONTROL MEASURES SHOWN ARE CONSIDERED TO BE THE MINIMUM ACCEPTABLE MEASURES. THE CONTRACTOR SHALL UTILIZE "BEST MANAGEMENT PRACTICES" AS NECESSARY TO PREVENT SEDIMENT LADEN STORMWATER RUNOFF OR ERODED MATERIALS FROM LEAVING THE CONSTRUCTION SITE. THE CONTRACTOR SHALL MAINTAIN AND REPAIR EROSION CONTROL MEASURES IN AN EXPEDITIOUS MANNER AFTER EACH RAINFALL EVENT AND INSPECT THEM TWICE WEEKLY IN THE EVENT OF NO RAINFALL. BEST MANAGEMENT PRACTICES (BMPS) ARE DEFINED AS: SCHEDULES OF ACTIVITIES, PROHIBITIONS OF PRACTICES, MAINTENANCE PROCEDURES, AND OTHER MANAGEMENT PRACTICES TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF THE UNITED STATES. BMPS ALSO INCLUDE TREATMENT REQUIREMENTS, OPERATING PROCEDURES, AND PRACTICES TO CONTROL PLANT SITE RUNOFF, SPILLAGE OR LEAKS, SLUDGE OR WASTE DISPOSAL, OR DRAINAGE FROM RAW MATERIAL STORAGE. WITH REGARD TO CONSTRUCTION THESE MAY INCLUDE STRUCTURAL DEVICES OR NONSTRUCTURAL PRACTICES THAT ARE DESIGNED TO PREVENT POLLUTANTS FROM ENTERING WATER OR TO DIRECT THE FLOW OF WATER.
- 2. THE EROSION AND SEDIMENT CONTROL ITEMS SHOWN ON THE PLANS ARE PROVIDED AS A STARTING POINT FOR A COMPREHENSIVE SEDIMENT AND EROSION CONTROL PLAN TO BE IMPLEMENTED THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL BE PREPARED TO ANTICIPATE AND ADJUST BEST MANAGEMENT PRACTICES AS NECESSARY THROUGHOUT CONSTRUCTION TO RESTRICT THE AMOUNT OF SILT LADEN RUNOFF LEAVING THE PROJECT. THE ENGINEER SHALL HAVE THE RIGHT TO REQUIRE INSTALLATION OF ADDITIONAL FACILITIES IF DEEMED NECESSARY TO PROTECT ADJACENT AREAS.
- 3. ALL SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED AND FULLY FUNCTIONING PRIOR TO ANY OTHER CONSTRUCTION OR GRADING ACTIVITY.
- 4. ALL CLEARING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO LIMIT EROSION OF MATERIALS FROM THE CONSTRUCTION AREA.
- 5. TYPE "A" SILT FENCE SHALL BE USED IN AREAS WHERE INDICATED OR AS DIRECTED BY THE ENGINEER.
- 6. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHALL BE ERECTED OPPOSITE ERODABLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
- 7. SILT FENCES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION OPERATION. SILT FENCES SHALL BE CLEANED, SILT REMOVED, AND REPAIRED AS NECESSARY AS PART OF REQUIRED BMP MAINTENANCE.
- 8. AT THE END OF EACH WORK DAY OR PERIOD, THE CONTRACTOR SHALL INSTALL NECESSARY RETENTION BERMS, HAY BALES, OR SILT FENCE TO PREVENT EROSION OF MATERIALS PRIOR TO THE NEXT SCHEDULED WORK OR PERIOD.
- 9. STORM DRAIN INLETS SHALL BE PROTECTED FROM SEDIMENT ENTRY WITH SEDIMENT BARRIERS LIKE "SILT SAVER" UNTIL THE SITE IS STABILIZED BY PAVING OR A FIRM STAND OF GRASS IS OBTAINED.
- 10. CONTRACTOR IS REQUIRED TO STABILIZE DISTURBED AREAS WITH TEMPORARY GRASS OR SOIL STABILIZER IF AREAS WILL REMAIN DISTURBED FOR 14 DAYS OR LONGER.
- 11. THE CONTRACTOR IS HEREBY DIRECTED TO PROVIDE SEDIMENT RUNOFF PROTECTION WHERE NECESSARY TO PREVENT SILT LADEN RUNOFF FROM ENTERING THE STREAMS NEAR THE PROPOSED PROJECT.
- 12. EROSION CONTROL AND SILTATION FACILITIES SHALL BE REMOVED ON AN INDIVIDUAL BASIS ONLY AFTER SPECIFIC AREAS HAVE STABILIZED.
- 13. HAY BALES REMOVED, WHICH ARE IN GOOD CONDITION, SHALL BE DISPERSED AS MULCH IN ADJACENT OR OTHER AREAS, AS APPROVED BY THE ENGINEER, TO FACILITATE ESTABLISHMENT OF A PERMANENT GRASS STAND.
- 14. AFTER THE CONSTRUCTION AREA IS STABILIZED BY PAVING OR A FIRM STAND OF GRASS AND EROSION ACTIVITY CURTAILED, SILT FENCES SHALL BE REMOVED.
- 15. GRASS GROUND COVER SHALL BE MAINTAINED UPON COMPLETION OF CONSTRUCTION.
- 16. SEDIMENT & EROSION CONTROL ITEMS SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE FOLLOWING HANDBOOKS:
- A. ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, LATEST EDITION.
- B. EPA STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES.

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- C. EPA GUIDANCE SPECIFYING MANAGEMENT MEASURES FOR SOURCES OF NON-POINT POLLUTION IN COASTAL WATERS.
- D. AASHTO GUIDELINES FOR EROSION AND SEDIMENT CONTROL IN HIGHWAY CONSTRUCTION.
- E. SOUTH ALABAMA REGIONAL PLANNING COMMISSION BEST MANAGEMENT PRACTICES FOR NON-POINT SOURCE RUNOFF CONTROL, MOBILE & BALDWIN COUNTIES, ALABAMA.
- 17. UNLESS OTHERWISE SET FORTH IN CONTRACT DOCUMENTS WITH THE PROJECT OWNER, WHEN AN ADEM STORMWATER DISCHARGE PERMIT (NOI) HAS BEEN OBTAINED FOR THE SITE, THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE AND MAINTAIN A WRITTEN DAILY LOG OF RAINFALL AMOUNTS AT THE SAME TIME EACH DAY. AT THE END OF EACH MONTH, THE CONTRACTOR MUST PROVIDE A COPY OF THAT MONTH'S RAINFALL RECORDS TO THE ENGINEER. THE RAIN GAUGE MUST BE INSTALLED AT THE TOP OF A POST PLACED AT LEAST 50' FROM TREES, BUILDINGS, OR OTHER OBJECTS THAT COULD IMPEDE THE FREE ENTRY OF RAINFALL INTO THE RAIN GAUGE. THE CONTRACTOR MUST NOTIFY THE ENGINEER WITHIN 8 HOURS OF RECORDING ANY DAILY RAINFALL AMOUNT EXCEEDING 0.75". THE CONTRACTOR SHALL POST THE NOI PERMIT NUMBER IN A HIGHLY VISIBLE LOCATION ON THE SITE AND MAINTAIN IT IN A LEGIBLE CONDITION UNTIL THE PROJECT IS COMPLETED AND A PERMIT TERMINATION HAS BEEN APPROVED BY ADEM. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR MUST NOTIFY THE ENGINEER IN ORDER TO INSPECT THE SITE AND APPLY FOR A TERMINATION OF THE ADEM PERMIT.
- 18. THE CONTRACTOR SHALL REFER TO THE "EROSION CONTROL, DITCHES, AND FLUMES" SECTION OF ALDOT SPECIAL AND STANDARD HIGHWAY DRAWINGS FOR ADDITIONAL METHODS OF EROSION AND SEDIMENT CONTROL.

TRAFFIC CONTROL NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRICT COMPLIANCE WITH PART VI OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND SHALL DEFEND THE ENGINEER AND THE COUNTY OF MOBILE AGAINST ALL LIABILITY, CLAIM OF LIABILITY, LOSS, COST OR DAMAGE, INCLUDING DEATH, AND LOSS OF SERVICES, ON ACCOUNT OF INJURY TO PERSONS OR PROPERTY, OCCURRING FROM ANY CAUSE WHATSOEVER, AS A RESULT OF CONSTRUCTION ACTIVITY INVOLVED IN THIS PROJECT. THE CONTRACTOR WILL, AT HIS EXPENSE, DEFEND ON BEHALF OF THE ENGINEER, COUNTY OF MOBILE AND THEIR OFFICERS AND EMPLOYEES, ALL SUITS BROUGHT AGAINST THEM OR ANY OF THEM, ARISING FROM ANY SUCH CAUSE.
- 2. THE CONTRACTOR SHALL HAVE AVAILABLE ADEQUATE PERSONNEL AND EQUIPMENT FOR TRAFFIC CONTROL AND SHALL NOT PERFORM ANY WORK WITHIN THE RIGHT OF WAY WHEN ADEQUATE PERSONNEL AND EQUIPMENT ARE NOT AVAILABLE.
- TRAFFIC CONTROL DEVICES SHOWN ARE CONSIDERED TO BE THE MINIMUM REQUIRED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ADDITIONAL TRAFFIC CONTROL DEVICES OTHER THAN THOSE SHOWN WHEN ROADWAY AND TRAFFIC CONDITIONS WARRANT.
- 4. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED AT THE COMPLETION OF THE WORK WHEN THE WORK AREA IS OPENED TO TRAFFIC.
- 5. ALL TRAFFIC CONTROL DEVICES THAT ARE NOT APPLICABLE AT ANY SPECIFIC TIME SHALL BE COVERED OR REMOVED.
- 6. A REFLECTORIZED DRUM SHALL BE PLACED IN FRONT OF EACH CONSTRUCTION SIGN THAT IS STORED ON THE SHOULDER AT ANY TIME DURING THE COURSE OF THE PROJECT, INCLUDING BUT NOT LIMITED TO COVERED SIGNS AND TEMPORARY MOUNTED SIGNS THAT HAVE BEEN LAID OVER. THE COST OF THIS REQUIREMENT SHALL BE A SUBSIDIARY OBLIGATION OF ITEM 740B-000 (CONSTRUCTION SIGNS) WHEN A PAY ITEM FOR CHANNELIZING DRUM IS NOT PROVIDED IN THE PLANS.
- 7. ALL VEHICLES, EQUIPMENT, AND WORKERS (EXCLUDING FLAGGERS) AND THEIR ACTIVITIES SHOULD BE RESTRICTED TO ONE SIDE OF THE ROADWAY UNLESS THE NATURE OF THE CONSTRUCTION OR MAINTENANCE OPERATION REQUIRES OTHERWISE.
- 8. ALL SIGNS SHALL BE POST MOUNTED IF THE WORK PERIOD EXCEEDS FOUR DAYS EXCEPT FOR THOSE SIGNS THAT ARE MOUNTED ON BARRICADES.
 FOR REPEATED DAY OPERATIONS, IN THE SAME LOCATION, WHEN ALL DEVICES ARE REMOVED AT NIGHT, SIGNS MAY BE MOUNTED ON TEMPORARY
 SUPPORTS.
- . ANY OBSTACLES OR HAZARDS WITHIN THE WORK AREA SHALL BE MARKED IN ACCORDANCE WITH THE MUTCD, PART VI (LATEST EDITION)
- IO. THE SPACING BETWEEN CHANNELIZING DEVICES IN A WORK AREA SHALL BE 40' (MAXIMUM).
- 11. WARNING LIGHTS SHOULD BE USED TO MARK CHANNELIZING DEVICES AT NIGHT AS NEEDED.
- 12. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
- 13. DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS WITH THE APPROVAL OF THE ENGINEER.
- 14. TYPE I BARRICADES OR DRUMS MAY BE SUBSTITUTED FOR CONES (NO PAY ITEM FOR TYPE I BARRICADES).
- 15. HIGH LEVEL WARNING DEVICES SHOULD BE USED TO SUPPORT ANY SIGNS SHOWN WHEN TRAFFIC CONDITIONS WARRANT.
- 16. TYPE B HIGH INTENSITY WARNING LIGHTS SHOULD BE PLACED ON ADVANCE WARNING SIGNS.
- 17. TRAFFIC CONES SHALL BE PLACED AT 40' O/C PARALLEL TO THE TRAFFIC LANE, 20' O/C IN TAPERS.
- 18. ALL CONSTRUCTION SIGNS SHALL MEET ALABAMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 2018 EDITION.
- . THE CONTRACTOR IS REQUIRED TO MAINTAIN ONE LANE OF TRAFFIC AND TEMPORARY ACCESS TO RESIDENCES AT ALL TIMES.

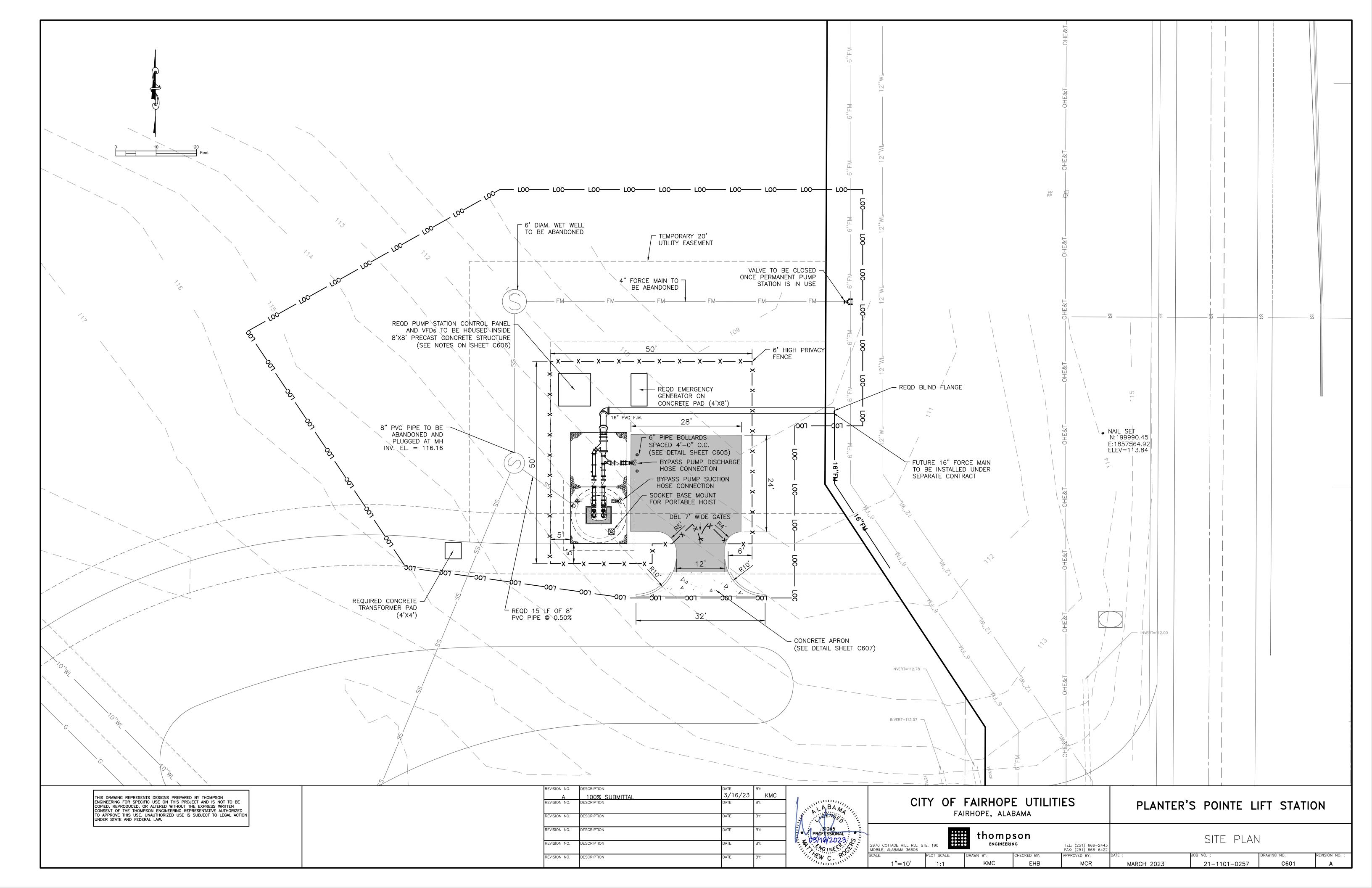


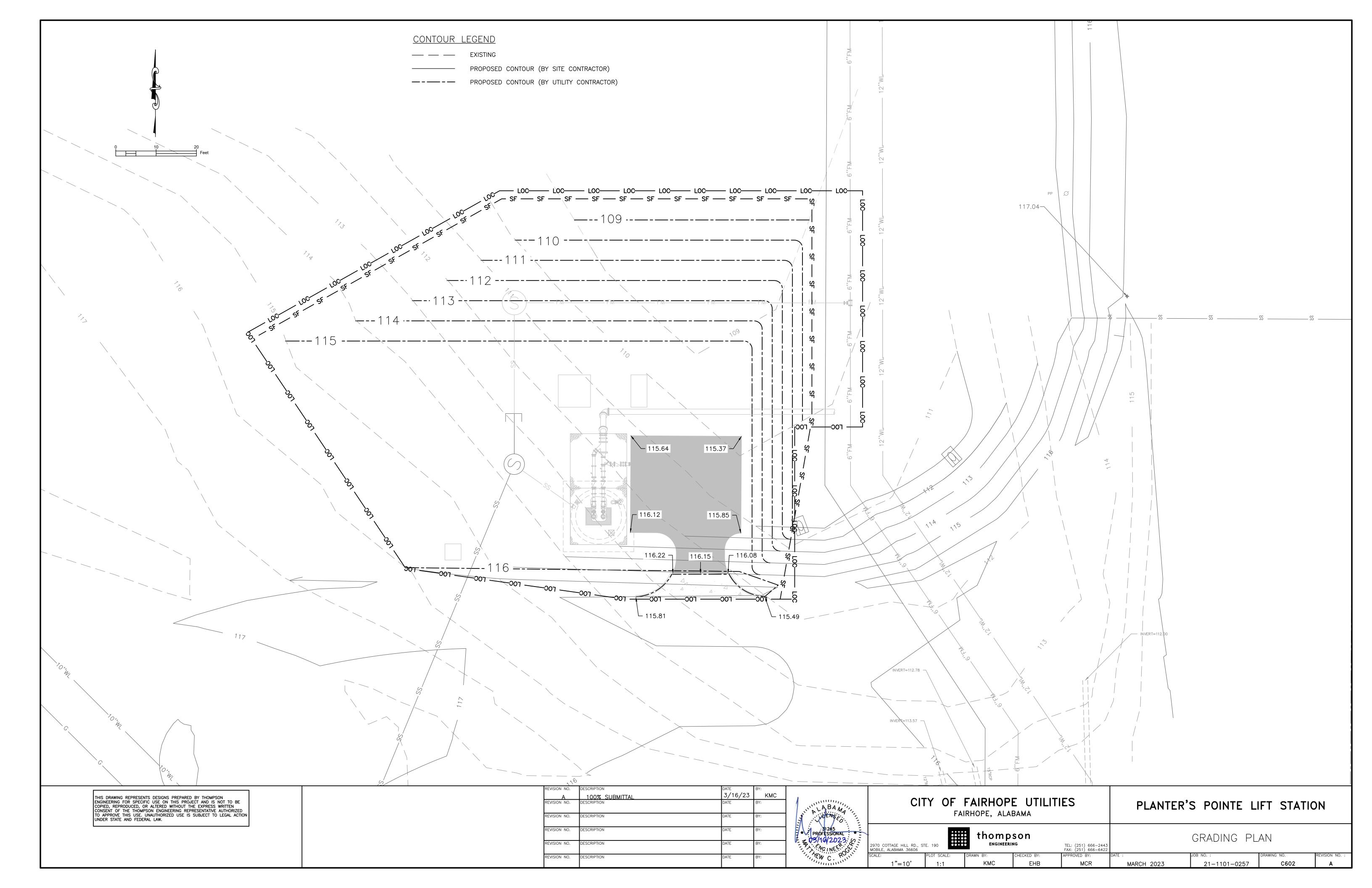
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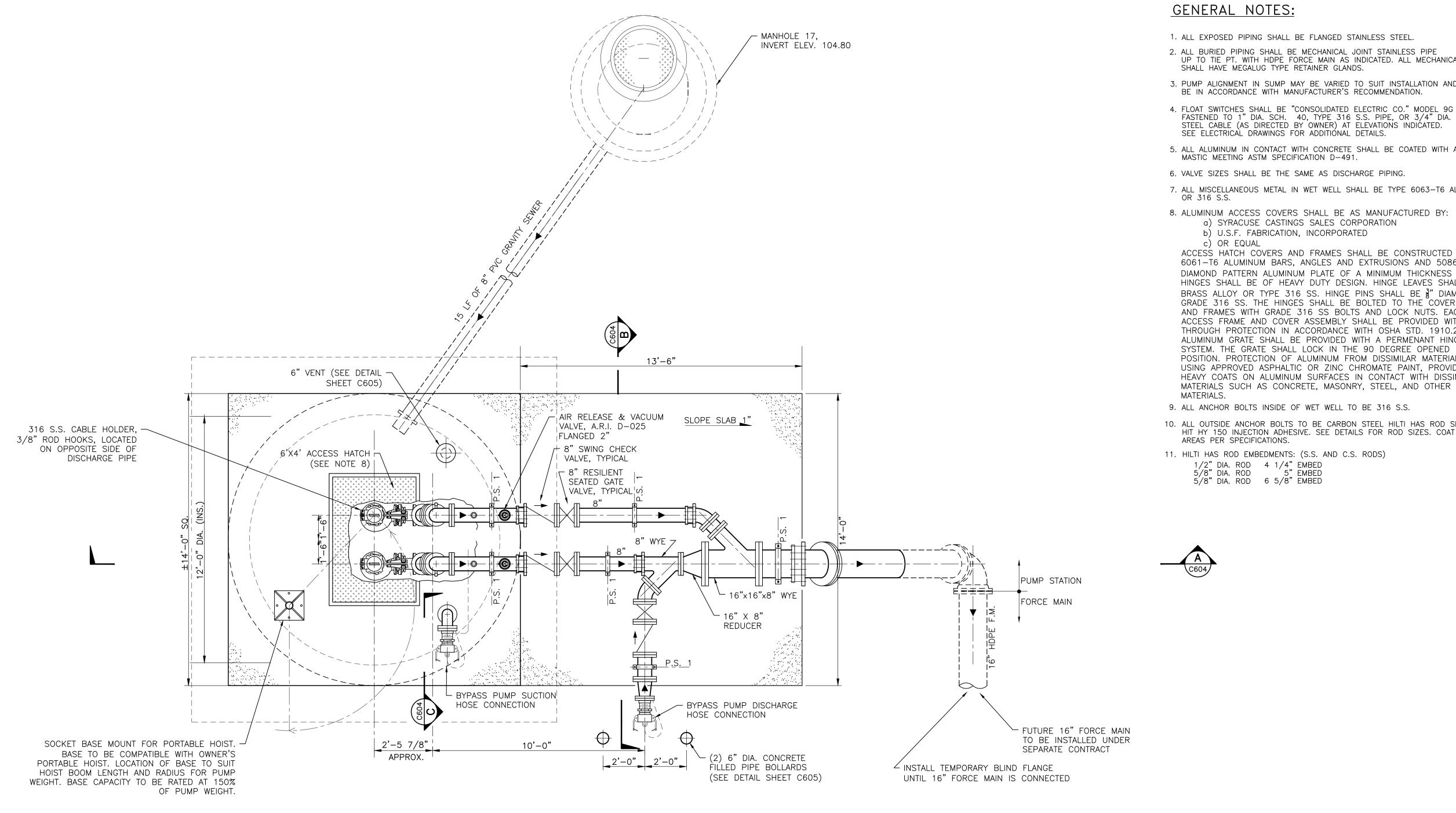


CITY OF FAIRHOPE UTILITIES FAIRHOPE, ALABAMA

PLANTER'S POINTE LIFT STATION







GENERAL NOTES:

c) OR EQUAL

- 1. ALL EXPOSED PIPING SHALL BE FLANGED STAINLESS STEEL.
- 2. ALL BURIED PIPING SHALL BE MECHANICAL JOINT STAINLESS PIPE UP TO TIE PT. WITH HDPE FORCE MAIN AS INDICATED. ALL MECHANICAL JOINTS SHALL HAVE MEGALUG TYPE RETAINER GLANDS.
- 3. PUMP ALIGNMENT IN SUMP MAY BE VARIED TO SUIT INSTALLATION AND SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
- 4. FLOAT SWITCHES SHALL BE "CONSOLIDATED ELECTRIC CO." MODEL 9G (3 EA.) FASTENED TO 1" DIA. SCH. 40, TYPE 316 S.S. PIPE, OR 3/4" DIA. STAINLÉSS STEEL CABLE (AS DIRECTED BY OWNER) AT ELEVATIONS INDICATED. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL DETAILS.
- 5. ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL BE COATED WITH ASPHALT MASTIC MEETING ASTM SPECIFICATION D-491.
- 6. VALVE SIZES SHALL BE THE SAME AS DISCHARGE PIPING.
- 7. ALL MISCELLANEOUS METAL IN WET WELL SHALL BE TYPE 6063-T6 ALUMINUM OR 316 S.S.
- 8. ALUMINUM ACCESS COVERS SHALL BE AS MANUFACTURED BY: a) SYRACUSE CASTINGS SALES CORPORATION b) U.S.F. FABRICATION, INCORPORATED

ACCESS HATCH COVERS AND FRAMES SHALL BE CONSTRUCTED OF 6061-T6 ALUMINUM BARS, ANGLES AND EXTRUSIONS AND 5086 DIAMOND PATTERN ALUMINUM PLATE OF A MINIMUM THICKNESS OF $\frac{1}{4}$ ". HINGES SHALL BE OF HEAVY DUTY DESIGN. HINGE LEAVES SHALL BE BRASS ALLOY OR TYPE 316 SS. HINGE PINS SHALL BE 3" DIAMETER GRADE 316 SS. THE HINGES SHALL BE BOLTED TO THE COVER PLATE AND FRAMES WITH GRADE 316 SS BOLTS AND LOCK NUTS. EACH ACCESS FRAME AND COVER ASSEMBLY SHALL BE PROVIDED WITH FALL THROUGH PROTECTION IN ACCORDANCE WITH OSHA STD. 1910.23. EACH ALUMINUM GRATE SHALL BE PROVIDED WITH A PERMENANT HINGING SYSTEM. THE GRATE SHALL LOCK IN THE 90 DEGREE OPENED POSITION. PROTECTION OF ALUMINUM FROM DISSIMILAR MATERIALS: USING APPROVED ASPHALTIC OR ZINC CHROMATE PAINT, PROVIDE TWO HEAVY COATS ON ALUMINUM SURFACES IN CONTACT WITH DISSIMILAR

- 9. ALL ANCHOR BOLTS INSIDE OF WET WELL TO BE 316 S.S.
- 10. ALL OUTSIDE ANCHOR BOLTS TO BE CARBON STEEL HILTI HAS ROD SET WITH HILTI HIT HY 150 INJECTION ADHESIVE. SEE DETAILS FOR ROD SIZES. COAT EXPOSED AREAS PER SPECIFICATIONS.
- 11. HILTI HAS ROD EMBEDMENTS: (S.S. AND C.S. RODS) 1/2" DIA. ROD 4 1/4" EMBED 5/8" DIA. ROD 5" EMBED 5/8" DIA. ROD 6 5/8" EMBED

PLAN VIEW - PUMP STATION SCALE: 3/8" = 1'-0"

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thompson ENGINEERING

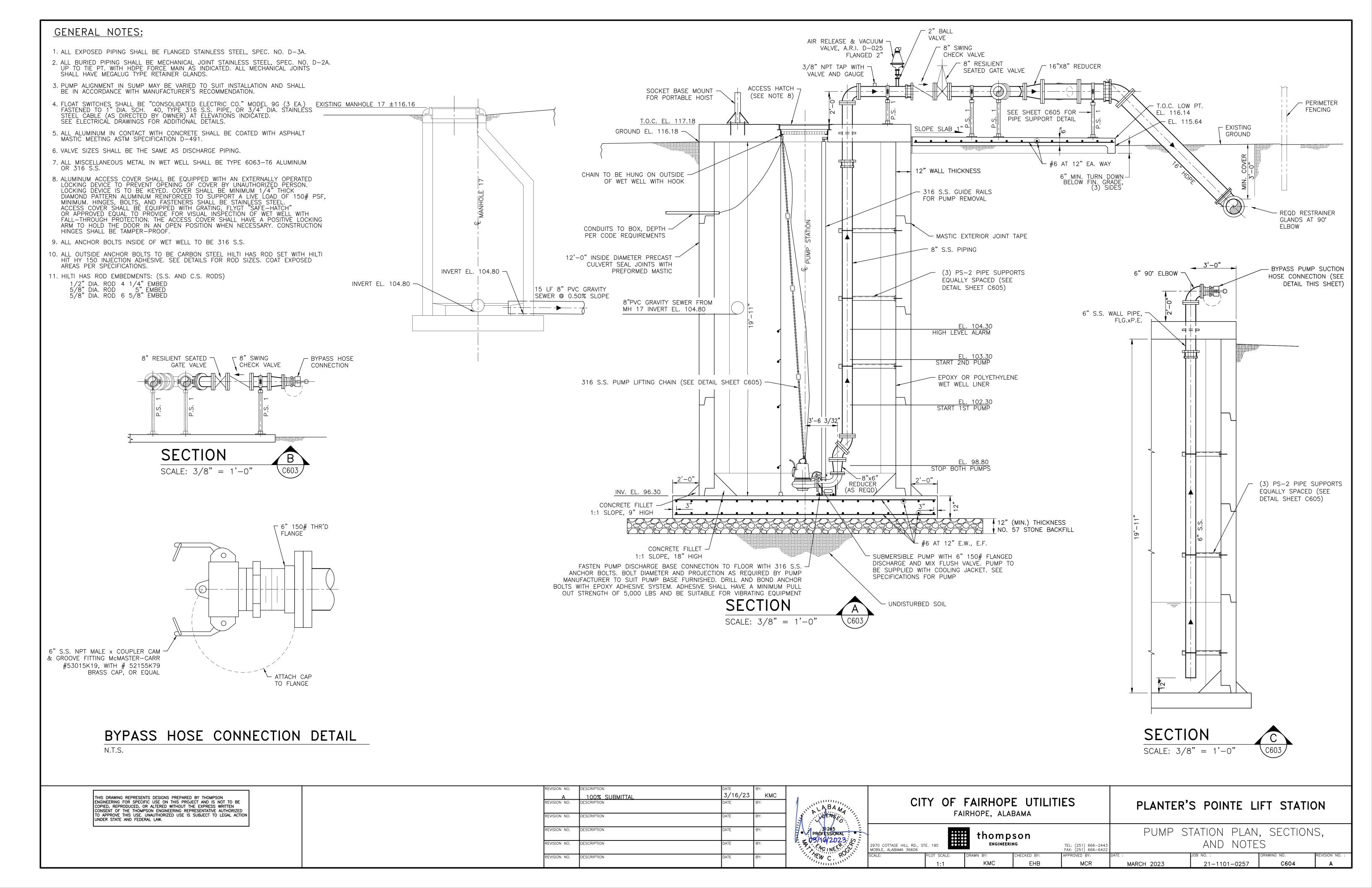
PLANTER'S POINTE LIFT STATION

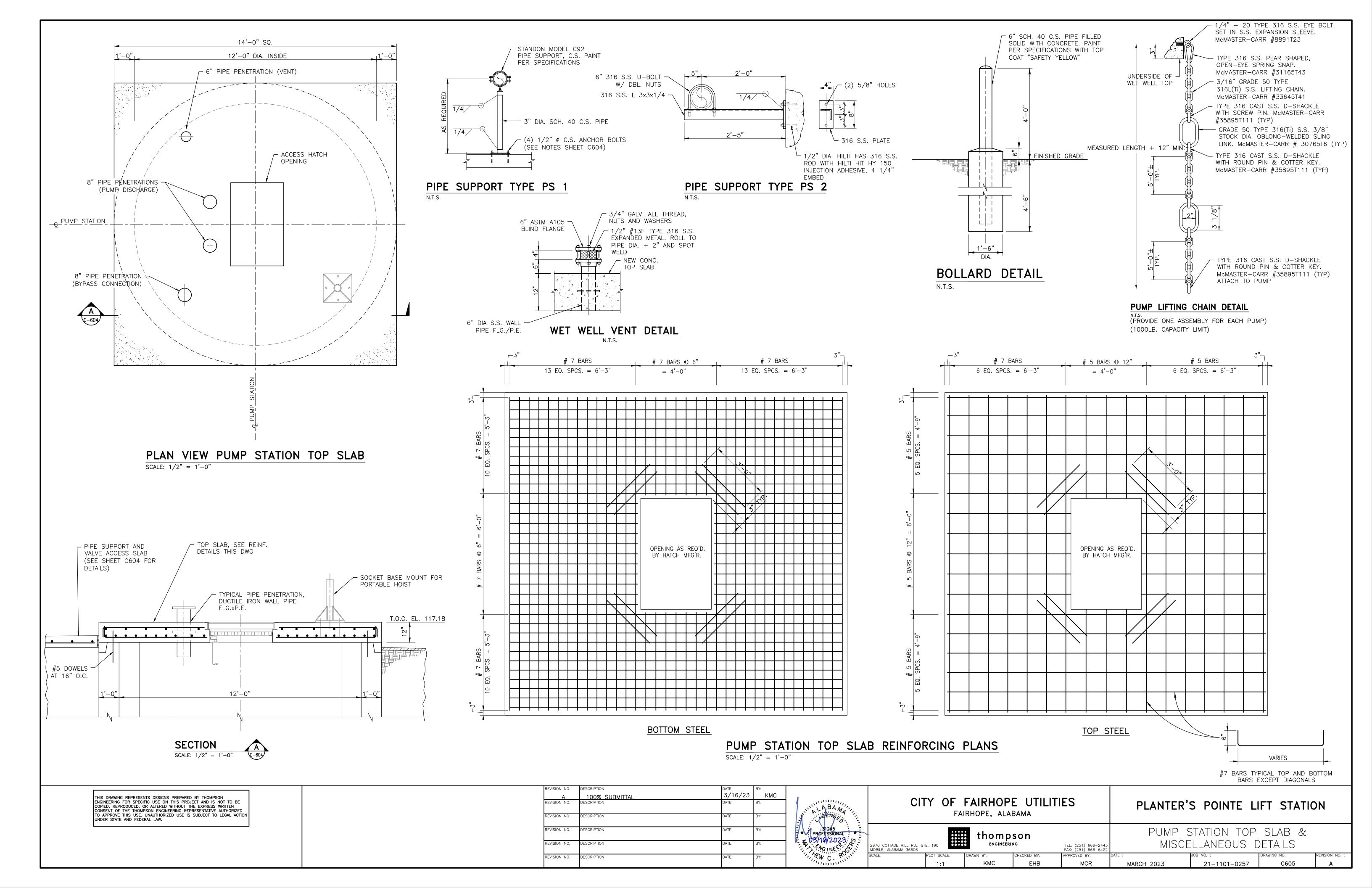
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21-1101-0257

PUMP STATION PLAN AND NOTES 2970 COTTAGE HILL RD., STE. 190 MOBILE, ALABAMA 36606 TEL: (251) 666-2443 FAX: (251) 666-6422

MARCH 2023





ISSUED 1/13/2022 **PUMP SPECIFICATION SHEET** SP-1

P-1 & P-2 Tag No.: Service: Sewage

Planters Pointe Shopping Center Pumping Station Location: Type of Pump: End Suction Centrifugal - Submersible Pump

3" minimum diameter spherical solid Solids Handling Capability:

Materials of Construction:

- 1. Casing Gray cast iron Class 35B
- 2. All Exposed Bolts & Nuts 303/304 stainless steel
- 3. Pump Exterior Coating Factory applied primer and finish coat Epoxy Paint to suit pumped media
- 4. Shaft & Sleeve Stainless Steel
- 5. Impeller Ductile Iron
- 6. O-Rings Buna-N and Fluorocarbon (DuPont Viton or Equivalent)
- 7. Upper Bearing Single row ball bearing/ permanent lubrication
- 8. Lower Bearing Single row ball bearing/ permanent lubrication
- 9. Seal Tandem Mechanical Oil lubrication Upper, self-lubricating lower
- 10. Guide Rails Type 316 Stainless Steel

The pump shall have a 6" cast iron quick-disconnect discharge elbow permanently mounted to the wet well floor. The elbow shall include 316 stainless steel guide-rail guides to allow removal and replacement of pump without personnel entering the wet wall. The guide rails shall be furnished by the contractor and the brackets furnished by the pump supplier.

- <u>Drive Motor</u>: 1. 50 horsepower, 460V, 60Hz, 3 phase
 - 2. Design –squirrel-cage, induction
 - 3. NEMA Design Type B
 - 4. Windings Copper, Class H Insulated rated for 356 °F / 180 °C
 - 5. Service Factor 1.15 continuous
 - 6. Design Temperature 40°C ambient
 - 7. Non-overloading at any point on pump curve
 - 8. Explosion Proof
 - 9. Air filled or oil motor, may have closed, integral, liquid cooling system.
 - 10. Motor Terminal Board
 - 11. Stator shall be heat-shrink fitted
 - 12. Motor Winding Over temperature switches embedded in windings.
- 13. Seal Failure Moisture Probe

Guaranteed Performance:

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CONSENT OF THE THOMPSON ENGINEERING REPRESENTATIVE AUTHORIZED

TO APPROVE THIS USE. UNAUTHORIZED USE IS SUBJECT TO LEGAL ACTION UNDER STATE AND FEDERAL LAW.

1770 Design:

The pump manufacturer shall warrant the unit being supplied to the Owner against defects in workmanship and material for a period of two (2) years unlimited hours.

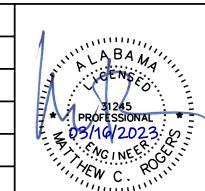
<u>Experience</u>: Pump manufacturer's direct sales and service representative shall have local experience

directly related to the proposed pumps and adjoining equipment.

Manufacturer(s): Pumps complying with the specified parameters and as included on the Owner's list of approved pump manufacturers shall be acceptable.

ACCEPTABLE PUMP EQUIVALENTS					
MANUFACTURER	MODEL	REMARKS			
Wilo	EMU FA15.97Z	Curve FA15.97Z 1740 Impeller 10.63"			

3/16/23 KMC 100% SUBMITTAL DESCRIPTION DESCRIPTION DESCRIPTION



CITY OF FAIRHOPE UTILITIES

PLANTER'S POINTE LIFT STATION

FAIRHOPE, ALABAMA PUMP SPECIFICATIONS & thompson CONCRETE STRUCTURE NOTES ENGINEERING 2970 COTTAGE HILL RD., STE. 190 MOBILE, ALABAMA 36606 TEL: (251) 666-2443 FAX: (251) 666-6422 21-1101-0257 MARCH 2023

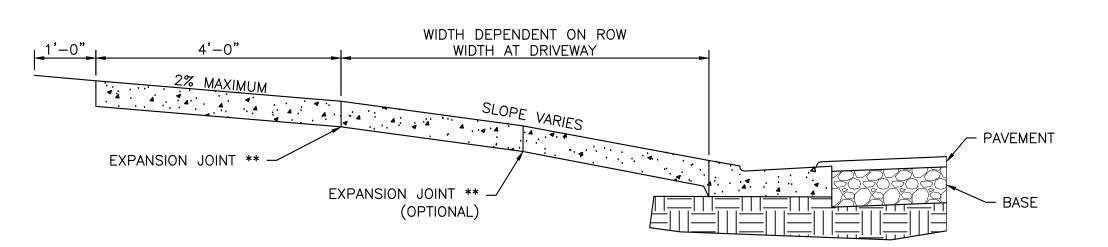
CONCRETE STRUCTURE NOTES:

Modular concrete building shall be solid concrete design with 4" walls and steel rebar reinforced high strength concrete. The standard exterior finish is exposed aggregate. Building shall be designed to be bulletproof to 30.06 rifle from 15 feet per UL-752, provide 2-Hour fire rating per UBC, and be virtually waterproof and maintenance free with internal seals. Building shall be 8' wide by 8' long by 10' 7" high outside dimensions and as follows:

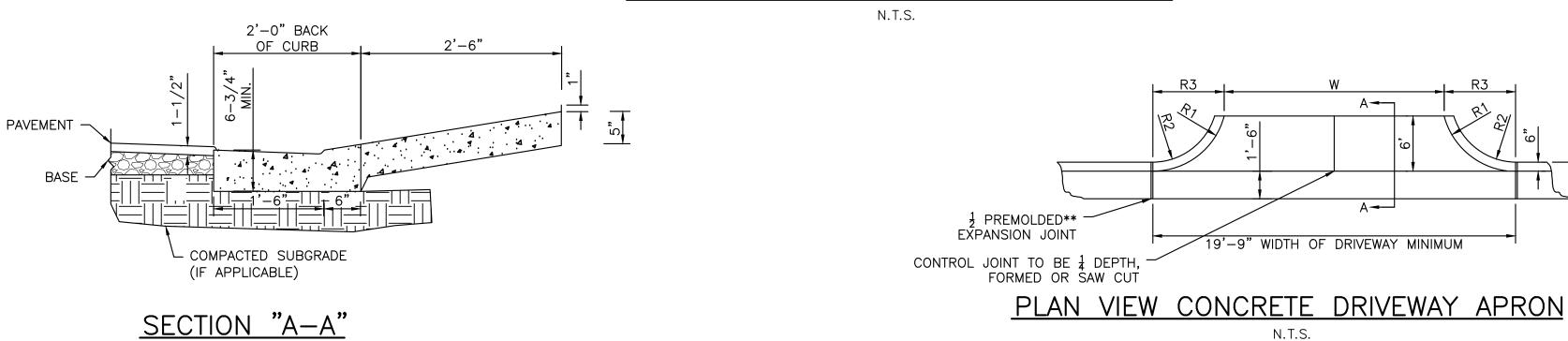
- Four (4) Cast-In Lift Shackles
- Internal (Non-Exposed) Structural Seals
- 1/4" per Foot Roof Slope in All Four Directions with Rubber Membrane Secondary Roof Seal and 2" Roof Overhang on all Four Sides
- 150 PSF Floor Load Uniformly Distributed
- 150 MPH Wind Load
- 3/4" White Coated Plywood Walls and Ceiling
- R-11 Walls and Floor, R-19 Ceiling
- One (1) 3' x 7' Door, Exterior 18 Gauge Galvanized and Painted Steel Door with Cast-In 16 Gauge Galvanized and Painted Steel Door Frame with Non-Corrosive Hinges
- Panic Hardware with Lever Lockset
- Aluminum Threshold and Door Sweep
- Weather-stripping
- Hydraulic Door Closer with Hold Open
- 2" Aluminum Drip Shield

Electrical System

- 30 Circuit Primary Load Center, 120/240 VAC Single Phase, 60 Hz Operation and 100 Amp Main Breaker
- Two (2) 4' Dual Bulb LED Interior Light Fixtures with Switch and Lenses
- One (1) 36 Watt LED Exterior Light Fixture with Photocell
- One (1) Emergency Light with EXIT Sign
- Six (6) Duplex Convenience Receptacles Wall Mounted
- One (1) Exterior Duplex GFCI Receptacle
- Required Conduit, Set Screw Conduit Fittings, Breakers, Wire, and Clamps
- Wall and Floor block out as required for cable entrances.



CROSS SECTION DRIVEWAY & SIDEWALK



MINIMUM* 20' R2 19.5 R3 20' 24'

* IF SITE CONDITIONS PROHIBIT THE USE OF THESE STANDARDS, AN ALTERNATIVE MAY BE SUBMITTED FOR APPROVAL TO THE **ENGINEER**

** EXPANSION JOINT MATERIAL TO MEET ALDOT SPECIFICATIONS 832.01 & 832.02

CONCRETE APRON AND DRIVEWAY TO BE 5" MINIMUM THICKNESS.

SIDEWALK PANELS THAT ABUT THE DRIVEWAY TO BE 5" MINIMUM THICKNESS.

OTHER SIDEWALK PANELS TO BE 4" MIN. THICKNESS.

CONCRETE TO BE 3000 P.S.I. MIX WITH NATURAL COLOR AND BROOM FINISH.

2" x 4" STRINGERS TOP,

CENTER, & BOTTOM

√4"x4" POSTS 6'-0"

WOOD FENCE NOTES:

PLANS).

BY OWNER.

1) ALL POST AND STRINGERS

SHALL BE OSMOSIS TREATED OR PENTA TREATED PINE, TO BE APPROVED BY ENGINEER. 2) ALL FENCE SIDING SHALL BE UNTREATED CEDAR (U.N.O. IN

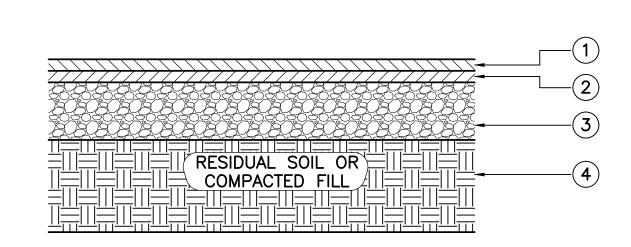
3) ALL METAL FASTENERS SUCH

AS BOLTS, NAILS, HINGES, HASPS, AND ETC. SHALL BE HOT DIPPED GALVANIZED. 4) FENCE LOCATION AS NOTED

ON PLANS OR AS DIRECTED

TO 8'-0" O.C.

CONCRETE DRIVEWAY DETAIL FOR ASPHALT ROADWAY WITH CURB & GUTTER N.T.S.



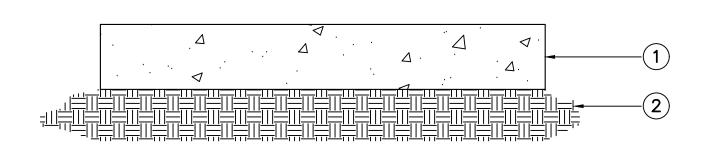
N.T.S.

- 1. (ALDOT 424A-356) SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE,
- 3/8" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE C/D, 1" (125#/SY) 2. (ALDOT 424B-002) SUPERPAVE BITUMINOUS CONCRETE UPPER BINDER LAYER,
- 1/2" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE C/D, 1" (125#/SY) 3. (ALDOT 301A-004) CRUSHED AGGREGATE BASE COURSE, TYPE B, PLANT MIXED, 4" COMPACTED THICKNESS, MINIMUM 95% COMPACTION PER AASHTO
- 4. SUBGRADE, TOP 12" COMPACTED TO 98% STANDARD PROCTOR (ASTM D-1557 AT ±3% O.M.C.)

(REFER TO GEOTECHNICAL REPORT)

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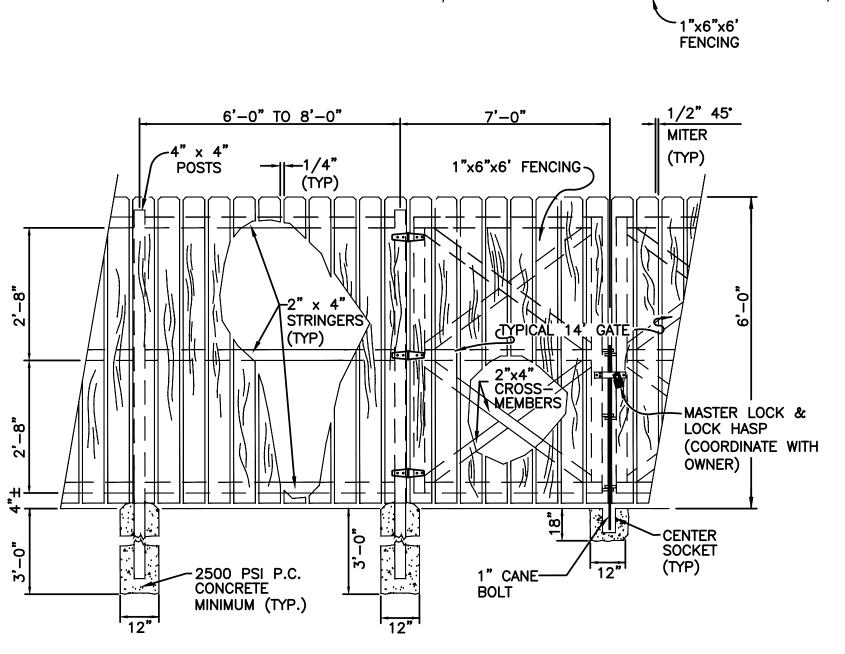
STANDARD DUTY ASPHALT PAVING TYPICAL SECTION



1. 4" THICK, 3000 PSI MIN. CONCRETE (SIZE AS INDICATED ON SHEET C601) 2. SUBGRADE, TOP 12" COMPACTED TO 98% STANDARD PROCTOR (ASTM D-1557 AT ±3% O.M.C.)

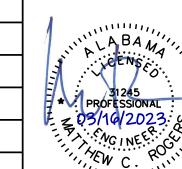
CONCRETE PAD DETAIL N.T.S.

DESCRIPTION



WOOD FENCE & GATE

REVISION NO.	DESCRIPTION	DATE	BY:	
Α	100% SUBMITTAL	3/16/23	KMC	
REVISION NO.	DESCRIPTION	DATE	BY:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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REVISION NO.	DESCRIPTION	DATE	BY:	PROFTS
REVISION NO.	DESCRIPTION	DATE	BY:	1 5 300/19



CI ⁻				IES	PLANTER'S POINTE LIFT STATION				
	STE. 190	thom p ENGINEER		TEL: (251) 666-2443 FAX: (251) 666-6422	1	CELLANEOUS	DETAILS		
SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :	
	1:1	KMC	EHB	MCR	MARCH 2023	21-1101-0257	C607	Α	
ı		2970 COTTAGE HILL RD., STE. 190 MOBILE, ALABAMA 36606 SCALE: PLOT SCALE:	FAIRHOPE, ALA 2970 COTTAGE HILL RD., STE. 190 MOBILE, ALABAMA 36606 SCALE: PLOT SCALE: DRAWN BY:	FAIRHOPE, ALABAMA thompson engineering scale: Plot Scale: Drawn By: Checked By:	### Thompson 2970 COTTAGE HILL RD., STE. 190 ENGINEERING TEL: (251) 666-2443 FAX: (251) 666-6422 SCALE: PLOT SCALE: DRAWN BY: CHECKED BY: APPROVED BY:	FAIRHOPE, ALABAMA thompson 2970 COTTAGE HILL RD., STE. 190 ENGINEERING TEL: (251) 666-2443 FAX: (251) 666-6422 SCALE: PLOT SCALE: DRAWN BY: CHECKED BY: APPROVED BY: DATE:	FAIRHOPE, ALABAMA thompson 2970 COTTAGE HILL RD., STE. 190 ENGINEERING TEL: (251) 666-2443 FAX: (251) 666-6422 SCALE: PLOT SCALE: DRAWN BY: CHECKED BY: APPROVED BY: DATE: JOB NO.:	FAIRHOPE, ALABAMA thompson 2970 COTTAGE HILL RD., STE. 190 ENGINEERING TEL: (251) 666-2443 FAX: (251) 666-6422 SCALE: PLOT SCALE: DRAWN BY: CHECKED BY: APPROVED BY: DATE: JOB NO. : DRAWING NO.	

ELECTRICAL LEGEND POWER, LIGHTING & FIRE ABBREVIATIONS (HS)— WALL MOUNTED EXTERIOR LIGHT, SEE FIXTURE SCHEDULE AIR CONDITIONING EM ABOVE FINISHED FLOOR WALL MOUNTED, SELF-CONTAINED EMERGENCY LIGHT, SEE FIXTURE SCHEDULE AIR HANDLING UNIT AMPS INTERRUPTING CAPACITY (SHORT CIRCUIT) SURGE SUPPRESSOR $\begin{pmatrix} FY \\ XXX \end{pmatrix}$ L.A. ••• 🕕 ALUMINUM AMMETER AUTOMATIC CEILING/WALL MOUNTED EXIT LIGHT, SEE FIXTURE SCHEDULE **AUXILIARY** DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W,, GRDG, NEMA 5-20R, MOUNTED 18" H. ADDITIONAL MARKS FOR RECEPTS: AMERICAN WIRE GAUGE (XXX) CONDUIT CIRCUIT BREAKER G = GROUND FAULT INTERRUPTING TYP WP = GROUND FAULT & WEATHERPROOF BOX & COVER PLATE FOR WET LOCATIONS CHILLED CIRCUIT XX"H. INDICATES HEIGHT ABOVE FINISHED FLOOR IF NOT STANDARD COPPER SINGLE POLE LIGHTING SWITCH, 20A, 120/277VAC, SILENT TOGGLE CONNECTED CONTROL POWER TRANSFORMER CONTROL RELAY CONDUIT ONLY THREE-WAY LIGHTING SWITCH, 20A, 120/277VAC, SILENT TOGGLE CURRENT TRANSFORMER FOUR-WAY LIGHTING SWITCH, 20A, 120/277VAC, SILENT TOGGLE DIRECT CURRENT DISCONNECT Sa "a" INDICATES OUTLET(S) OR LIGHTING CIRCUITS SWITCHED OWN MANUAL MOTOR STARTING SWITCH, WHEN USED FOR THERMAL PROTECTION, INSTALL HEATERS LECTRIC OPERATOR LECTRIC SAFETY DISCONNECT SWITCH, NON-FUSED, SIZE/NO. OF POLES & ENCLOSURE NOTED EMERGENCY EXIST. RELOCATED EQUIPMENT (GROUND) ENCLOSED CIRCUIT BREAKER, SIZE/NO. OF POLES & ENCLOSURE NOTED JUNCTION BOX, 4" SQ. UNLESS NOTED, FURNISH BLANK COVER PLATE INCREASE SIZE AS PER CODE REQUIRED VOLUME GROUND GROUNDING GROUND FAULT INTERRUPTING HIGH, (MOUNTING HEIGHT TO CENTER LINE) HAND-OFF AUTOMATIC SWITCH TS-3 JUNCTION BOX, WALL MOUNTED, 4" SQ. OR LARGER AS REQUIRED GRDG MAIN OR DISTRIBUTION PANEL OR SWITCHBOARD, 277/480V, 3PH., SURFACE TRIM FS-3 LIGHTING OR MISCELLANEOUS POWER PANEL, SURFACE TRIM, SEE SCHEDULES 000 ISOLATED GROUND LS-1 WIRING IN CONDUIT, CONCEALED IN WALLS OR CEILING, HATCH MARKS INDICATE NO. OF CURRENT CARRYING WIRES IF MORE THAN 2. WHEN NOT MARKED 1/2" C. w/2-#12 & 1-#12 GR. (GROUND WIRES NOT MARKED, BUT REQUIRED; MINIMUM SIZE #12, GREEN INSULATED COPPER) ISOLATED INPUT INSULATED INSTALL OR INSTRUMENT JUNCTION BOX WIRING IN EXPOSED CONDUIT, RUN PARALLEL AND PERPENDICULAR TO BUILDING LINES & STRUCTURAL ELEMENTS, WIRES SAME AS NOTES ABOVE KNOCK OUT KILOWATTS WIRING, IN UNDERGROUND PVC CONDUIT, 18" MIN. COVER (GREATER WHEN NOTED) SEE NOTES FOR CONCEALED WIRING ABOVE LIGHTING LIGHTS MAGNETIC (METER or STARTER) HOME RUN TO PANEL, SEE NOTES FOR EXPOSED & CONCEALED WIRING, PANEL-CIRCUIT(S) NOTED MANUAL MAIN BREAKER CONDUIT TURNING UP THOUSAND CIRCULAR MILS MOLDED CASE SWITCH MECHANICALLY (HELD) CONDUIT TURNING DOWN MOUNT MOTOR, AC INDUCTION: HORSEPOWER MARKED, VOLTAGE & PHASE NOTED MOUNTED **NEUTRAL** DRY TYPE TRANSFORMER NORMALLY CLOSED NORMALLY OPEN **THERMOSTAT** OVER HEAD ELECTRICAL LINE OVERLOADS (THERMAL) OPEN/CLOSE/AUTOMATIC (OCA)) STARTER, RELAY OR CONTACTOR; SEE PLANS FOR NOTES (FA = FIRE ALARM, LC = LIGHTING CONTACTOR) PANEL OR PANELBOARD POTENTIAL TRANSFORMER GROUND #(SUFFIX) #(PREFIX) POUNDS WEIGHT GROUND TEST STATION WIRE GAUGE (AWG) RECEPTACLE RECEPTACLE SHORT CIRCUIT (DUTY) KVA LOAD KVA LOAD SOLID NEUTRAL LOAD DESCRIPTION LOAD DESCRIPTION SOLID (CONDUCTOR) SQUARE SHUNT TRIP ØB ØΑ ØB STARTER CNTRL BLDG RECEPTS 12 CONTROL BLDG LIGHTS | 12 | 0.12 20 2 20 0.36 TELEPHONE 0.03 0.18 P.S. CONTROL PANEL 3 20 20 LEVEL XTMR (LIT-100) | 12 [EMPERATURE (CONTROL] 20 TIMED ON ENERGIZAITON 5 | 20 TYP. UPS UG UGP UGS 20 8 UNINTERRUPTIBLE POWER SYSTEM M 9 20 10 UNDERGROUND UNDERGROUND PRIMARY 12 | 11 | UNDERGROUND SECONDARY 13 14 VOLTS ALTERNATING CURRENT 15 16 VOLTMETER 17 18 WATTS OR WIRE (USE CONTEXT) 100W (WATTS) 3W (WIRE) 30 20 SURGE SUPPRESSOR WATER HEATER 21 20 2P 22 AC/HTR UNIT WEATHERPROOF 23 | 2P 24 WIREWAY (or GUTTER) SUBTOTAL VA: 0.12 0.03 0.36 0.18 | SUBTOTAL VA VOLTAGE SOURCE: TRANSFORMER "T-1" 0.48 TOTAL KVA ØA: PANEL " P " CIRCUIT LS VOLTAGE: 120/240 0.21 MAIN: 60 TOTAL KVA ØB: TOTAL CKTS: 42 AMPS: 100 PHASE: 1 QS SCHEDULE 0.69 TRIM: SURFACE TOTAL CONN. KVA: EST. DEMAND: 2.88 INTERRUPT RATING: 10,000 A.I.C. SYMMETRICAL LOC'N: CONTROL BLDG. 90% SUBMITTAL THIS DRAWING REPRESENTS DESIGNS PREPARED BY THOMPSON ENGINEERING FOR SPECIFIC USE ON THIS PROJECT AND IS NOT TO BE COPIED, REPRODUCED, OR ALTERED WITHOUT THE EXPRESS WRITTEN

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UNDER STATE AND FEDERAL LAW.

INSTRUMENT PLAN SYMBOLS

(SHOWN ON ELECTRICAL PLANS) HAND SWITCH LIGHT **TRANSMITTER** TRANSDUCER, I/P, ETC.. LEVEL SWITCH, PRESSURE SWITCH, ETC.. TEMPERATURE WELL AND TRANSMITTER ANALYZER OR FIELD PANEL MAGMETER FLOW TUBE PNEUMATIC CONTROL VALVE

BUTTERFLY VALVE w/PNEUMATIC OPERATOR MOTOR OPERATED PINCH VALVE MOTOR OPERATED PLUG VALVE

MOTOR OPERATED KNIFE GATE VALVE SOLENOID VALVE, 120VAC COIL

TEMPERATURE SWITCH IN MOTOR

LIMIT SWITCH

LEVEL SWITCH

1/8A DIN RAIL MOUNTED FUSE ----- GENERAL CONTROL PATH # PNEUMATIC LINE

> DATA OR LOGIC PERFORMED BY COMPUTER FUNCTION EXPLANATION OR UNITS
> INSTRUMENT CONTROL FUNCTION TAG

-LOOP NUMBER DENOTES MOUNTED INSIDE PANEL (OR REAR)

-w/o LINE DENOTES PRIMARY ELEMENT OR LOCALLY MOUNTED

-PANEL MOUNTED INSTRUMENT —COMPUTER FUNCTION

—INPUT OR OUTPUT

D = DIGITAL I = INPUT I

A = ANALOG O = OUTPUT

-PLC FUNCTION

FUNCTION TAG -LOOP NUMBER

INDICATOR LIGHT (LETTER=COLOR)

MOTOR OR MOTORIZED ACTUATOR

SURGE ARRESTOR

INTERLOCK

VISION NO.

VISION NO.

STATUS OR EVENT POWER ON MOISTURE SWITCH TEMPERATURE SWITCH TEMPERATURE SWITCH ACTIVATED LEVEL SWITCH LEVEL SWITCH ACTIVATED DIGITAL CLOSURE EQUIVALENT

	FIRST-LETTER			SUCCEEDING-LETTERS	
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
Α	ANALYSIS		ALARM		
В	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	
С	USER'S CHOICE			CONTROL	USER'S CHOICE
D	DISSOLVED OXYGEN	DIFFERENTIAL	DENSITY		
Ε	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			
G	USER'S CHOICE		GLASS, VIEWING DEVICE		
Н	HAND (MANUAL)				
ı	CURRENT (ELECT.) OR INTERLOCK		INDICATE		HIGH
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		
М	MOTION OR MOISTURE	MOMENTARY			LOW
N	USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	MIDDLE, INTERMEDIATE
0	USER'S CHOICE		ORIFICE, RESTRICTION		USER'S CHOICE
Р	PRESSURE OR VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY OR EVENT	INTEGRATE, TOTALIZE			
R	RATIO		RECORD		
S	SPEED, FREQUENCY OR SOLENOID	SAFETY		SWITCH	
Т	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	
٧	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	MULTIFUNCTION
W	WEIGHT, FORCE		WELL		
Χ	TORQUE OR USER'S CHOICE	X AXIS	UNCLASSIFIED	UNCLASSIFIED	
Υ	EVENT, STATE OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	UNCLASSIFIED
Z	POSITION, DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED, FINAL CONTROL ELEMENT	

INSTRUMENT IDENTIFICATION LETTERS

(*) pH, CL RES., DO , OR AS NOTED ABOVE BUBBLE

ELECTRICAL NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, THE OCCUPATIONAL SAFETY AND HEALTH ACT, AND ALL ELECTRICAL CODES LOCALLY BEING ENFORCED BY LOCAL AUTHORITY HAVING JURISDICTION (AHJ) IN THE PROJECT AREA.
- CONTRACTOR TO OBTAIN AND PAY FOR ALL PERMITS, INSPECTION AND CONNECTION FEES.
- CONTRACTOR TO PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND SUPERVISION FOR AND INCIDENTAL TO THE COMPLETION OF A FULLY FUNCTIONAL, SAFE AND COMPLETE ELECTRICAL SYSTEM.
- CONTRACTOR TO TEST SYSTEM THOROUGHLY IN THE PRESENCE OF OWNER AND RENDER IT FREE FROM DEFECTS. CONTRACTOR TO PROVIDE OWNER WITH A ONE YEAR WARRANTY AFTER ACCEPTANCE.
- THE CONTRACTOR SHALL PROPERLY SEAL ALL PENETRATIONS.
- ELECTRICAL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY CONFLICTS AND/OR CREATING A SAFETY HAZARD.
- ELECTRICAL CONTRACTOR TO COORDINATE WITH THE OWNER FOR ANY ELECTRICAL REQUIREMENTS FOR SPECIAL EQUIPMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL CIRCUITS ASSOCIATED WITH THE PROJECT WORK AREA.
- ALL EQUIPMENT AND MATERIALS SHALL MEET OR EXCEED THE SCHEDULED AND/OR REQUIRED ITEMS. SUBMIT FOR PRIOR APPROVAL FOR ANY DEVIATIONS.
- 10. NO CHANGES SHALL BE MADE IN MATERIALS OR INSTALLATION WITHOUT ENGINEER AND OWNER'S APPROVAL
- CONTRACTOR SHALL VERIFY CLEARANCE SPACE AVAILABLE, OFFSETS REQUIRED, STRUCTURAL OPENINGS, AND WORK BY OTHER TRADES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PUMP STATIONS IN OPERATION DURING
- 13. CONDUCTORS SHALL BE COPPER. MINIMUM SIZE FOR POWER CONDUCTORS SHALL BE #12 AWG. CONTROL CABLES SHALL BE TYPE THHW STRANDED COPPER, MINIMUM SIZE #14 AWG. "SIGNAL CABLES SHALL BE TWISTED AND SHIELD, #16 AWG MINIMUM. CABLES SHALL BE U.L. LISTED AND SHALL BE MANUFACTURED BY G.E., GENERAL CABLE, ROME, COLLYER, OR AN ENGINEER APPROVED EQUIVALENT.
- SCHEDULE 80 PVC CONDUITS SHALL BE PROVIDED FOR UNDERGROUND INSTALLATION. ALL EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL.
- 15. SPLICING OF CABLES INSIDE CONDUIT AND AREAS THAT ARE DAMP IS NOT PERMITTED
- THE PLC SHALL BE PROGRAMMED TO ACCEPT THE NEW INPUTS AND OUTPUTS SIGNALS AS INDICATED BY THE PLANS.
- ALL ELECTRICAL EQUIPMENT SHALL BE PURCHASED FROM LOCAL DISTRIBUTION WITHIN 100 MILES OF PROJECT UNLESS OTHERWISE SPECIFIED.
- 18. ALL MOTORS HORSEPOWER 50 HP OR GREATER SHALL HAVE SOLID STATE SOFT STARTERS UNLESS OTHERWISE SPECIFIED.
- 19. ALL EXTERIOR RECEPTACLES WITH WEATHERPROOF (WP) COVERS SHALL BE THE "WHILE IN USE" POLYCARBONATE TYPE.

E100

20. THE ELECTRICAL SYSTEM SHALL MEET OR EXCEED THE IEEE 519 REQUIREMENTS FOR HARMONICS.

NRE PUMP STATION AND FORCE MAIN CITY OF FAIRHOPE UTILITIES ALABAMA NRE ISSUED FOR CONSTRUCTION **IMPROVEMENTS** 2/9/22 FAIRHOPE, ALABAMA NRE REVISED SITE PLAN 3/23/22 thompson LEGEND AND SYMBOLS ENGINEERING 2970 COTTAGE HILL RD., STE. 190 MOBILE, ALABAMA 36606 TEL: (251) 666-2443 FAX: (251) 666-6422 21-1101-0257 DECEMBER 2021 STAMP VALID ONLY IF SIGNED & DATED DLU MCR

