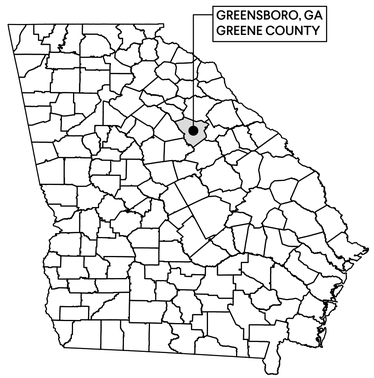
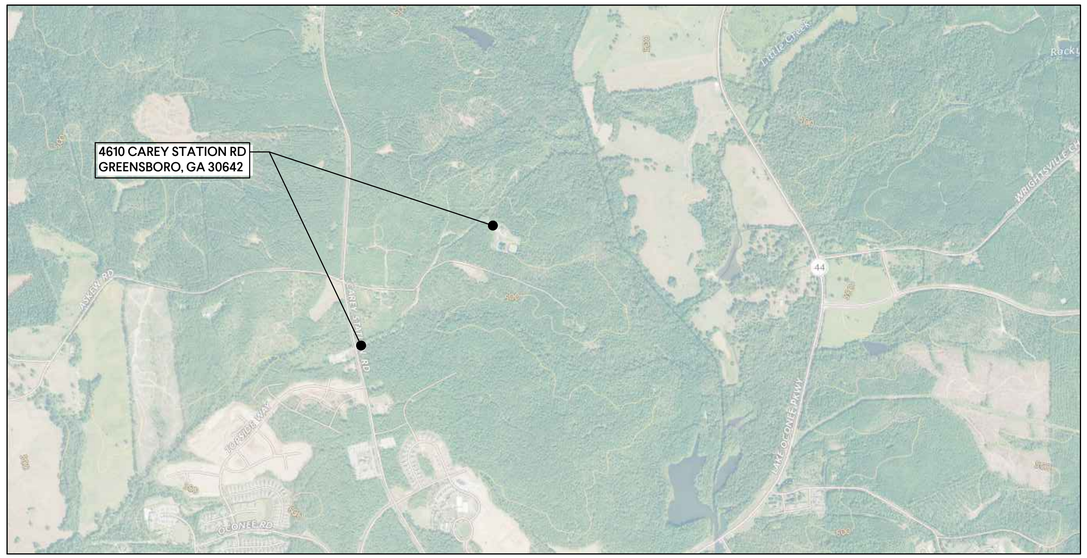
CAREY STATION URBAN WATER REUSE FACILITY 0.5 MGD TO 1.5 MGD EXPANSION

GREENSBORO, GEORGIA
GMC PROJECT #CAUG250007

PIEDMONT WATER COMPANY



LOCATION MAP:
STATE OF GEORGIA



	REVIEWS/PERMITS/ESM'T	SUBMIT	STATUS
1.	LAND DISTURBING ACTIVITY PERMIT	06.03.2024	RETURNED WITH REVIEW COMMENTS
2.	ES&PCP REVISIONS PER REVIEW COMMENTS	07.12.2024	APPROVED
3.	MINOR PLAN REVISIONS	10.04.2024	UNDER REVIEW
4.	MINOR PLAN REVISIONS	07.10.2025	UNDER REVIEW
--	FOR APPROVAL	07.30.2025	APPROVED 08.12.2025
5.	MODIFIED EQ BASIN GRADING	--	NO REVIEW REQUIRED
6.	REVISION - RELOCATE HEADWORKS AND INFLUENT PUMP STATION *UPDATE GRADING ACCORDINGLY*	01.30.2026	APPROVED 02.03.2026
7.	INCREASE CAPACITY TO 1.5MGD & EXPAND LIMITS OF DISTURBANCE FOR PACKAGE PLANT AND EARTHWORK BALANCE / LAYDOWN YARD	##.##.2026	UNDER REVIEW

APRIL 2026

90% Submittal

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PROJECT TEAM

GOODWYN MILLS CAWOOD, LLC	Civil & Process Engineering
EDEC, INC	Electrical Engineering
KORNEGAY ENGINEERING, INC	Structural Engineering

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I certify that I have been in responsible charge of the design of this project in accordance with the rules of the Georgia State Board of Registration for Professional Engineers and Land Surveyors. I further certify, to the best of my knowledge and belief, that these plans and specifications were prepared in accordance with current standard engineering practices and accurately reflect the Design Development Report (DDR) previously reviewed and concurred in by EPD. I further certify that the system as designed can reasonably be expected to consistently meet all currently applicable permit limits, conditions, and regulatory requirements, provided the facility is constructed as designed and properly operated and maintained.

Liang Wang 04/17/2026
Liang Wang, PE

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PEO001186
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager: MP
Engineer: LW
Designer: LW
Drawn By: LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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TITLE SHEET

G-001

DRAWING FILE: C:\Users\tsmith\DocACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\01 General\General WasteWater Treatment.dwg
PLOTTED: Apr 17, 2026 - 8:32am

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G-004	GENERAL NOTES & LEGENDS
G-005	PROCESS FLOW DIAGRAM
G-006	HYDRAULIC PROFILE
G-007	PROCESS PIPING SCHEDULE
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INSTRUMENTATION	
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CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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DRAWING INDEX

G-002

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COMMON ABBREVIATIONS

A	AIR	DISTR	DISTRIBUTION	HP	HORSEPOWER	OD	OUTSIDE DIAMETER	RR	RAILROAD	VERT	VERTICAL
AB	ANCHOR BOLT	DL	DEAD LOAD	HR	HOUR	OF	OUTSIDE FACE OR OVERFLOW	RTN	RETURN	VP	VENT PIPE
AC	AIR CONDITIONING	DMJ	DUCTILE MECHANICAL JOINT	HS	HIGH STRENGTH	OPNG	OPENING	SALV	SALVAGE	VTR	VENT THROUGH ROOF
ACP	ASPHALTIC CONCRETE PAVING	DN	DOWN	HVAC	HEATING, VENTILATION, AIR CONDITIONING	OPP	OPPOSITE	SCFM	STANDARD CUBIC FEET PER MINUTE	W/	WITH
ADDL	ADDITIONAL	DWG	DRAWING	HW	HOT WATER	OPT	OPTIONAL	SCH	SCHEDULE	W/O	WITHOUT
ADDM	ADDENDUM	EA	EACH	HWL	HIGH WATER LEVEL	PC	POINT OF CURVE OF PORTLAND CEMENT	SCN	SCREENINGS	WC	WATER CLOSET
ADJ	ADJUSTABLE	ECC	ECCENTRIC	HWY	HIGHWAY	P&C	PIN AND CAP	SDR	STANDARD DIMENSION RATIO	WCO	WALL CLEANOUT
AFF	ABOVE FINISHED FLOOR	EF	EACH FACE OR ELECTRICAL FAN	HYD	HYDRANT	PCO	PRESSURE CLEAN OUT	SECT	SECTION	WD	WIDTH OR WOOD
AFS	AIR FLOW SWITCH	EJ	EXPANSION JOINT	ID	INSIDE DIAMETER	PCP	PROGRESSIVE CAVITY PUMP	SHLDR	SHOULDER	WDW	WINDOW
AHU	AIR HANDLING UNIT	EL	ELEVATION	IF	INSIDE FACE	PCR	POINT OF CURVE RETURN	SHT	SHEET	WF	WIDE FLANGE
AL	ALUMINUM	ELEC	ELECTRICAL	INCL	INCLUDED	PE	PLAIN END	SIM	SIMILAR	WH	WALL HYDRANT
ALT	ALTERNATE	ENGR	ENGINEER	INCR	INCREASER	PERM	PERMANENT	SOTE	STANDARD OXYGEN TRANSFER EFFICIENCY	WL	WIND LOAD
APPROX	APPROXIMATE	EOA	EDGE OF ASPHALT	INF	INFLUENT	PERP	PERPENDICULAR	SP	SPACE (ING)	WP	WEIR PLATE
ARCH	ARCHITECT(URAL)	EOP	EDGE OF PAVEMENT	INSTL	INSTALLATION	PI	POINT OF INTERSECTION	SPEC	SPECIFICATION	WS	WETTED SURFACE
ARV	AIR RELIEF VALVE	EQ	EQUAL	INSTR	INSTRUMENT	PL	PLATE OR PROPERTY LINE	SQ	SQUARE	WT	WEIGHT
ASME	AMERICAN SOCIETY MECHANICAL ENGINEERS	EQUIP	EQUIPMENT	INSUL	INSULATION	PLBG	PLUMBING	SQ FT	SQUARE FOOT	WWF	WELDED WIRE FABRIC
ASPH	ASPHALT	EQUIV	EQUIVALENT	INV	INVERT	PLYWD	PLYWOOD	SQ IN	SQUARE INCH	WWTP	WASTEWATER TREATMENT PLANT
ASSY	ASSEMBLY	ESMT	EASEMENT	INT	INTERIOR	PNT	PAINT	SQ YD	SQUARE YARD	X SECT	CROSS SECTION
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EST	ESTIMATE	INV EL	INVERT ELEVATION	POC	POINT ON VERTICAL CURVE	SRT	SOLIDS RETENTION TIME	XMR	TRANSFORMER
ATM	ATMOSPHERE	EUH	ELECTRIC UNIT HEATER	ISA	INSTRUMENT SOCIETY OF AMERICA	POLY	POLYETHYLENE	SST	STAINLESS STEEL	YCO	YARD CLEANOUT
ATS	AUTOMATIC TRANSFER SWITCH	EW	EACH WAY	JST	JOIST	PPM	PARTS PER MILLION	SST BT	STAINLESS STEEL BOLT	YH	YARD HYDRANT
AUTO	AUTOMATIC	EWS	EQUIPMENT WATER STATION	JTS	JOINTS	PREFAB	PREFABRICATED	ST	STREET		
AVS	AUTOMATIC VALVE STATION	EXP JT	EXPANSION JOINT	KO	KNOCKOUT	PREFIN	PREFINISHED	STA	STATION		
AWG	AMERICAN WIRE GAGE	EXST	EXISTING	KWY	KEYWAY	PRELIM	PRELIMINARY	STD	STANDARD		
BE	BELL END	EXST GR	EXISTING GRADE	L	LEFT OR LITER	PREP	PREPARATION	STL	STEEL		
BF	BOTTOM FACE	EXT	EXTERIOR	LAB	LABORATORY	PROJ	PROJECT	STL JST	STEEL JOIST		
BFD	BUTTERFLY DAMPER	F/F	FACE TO FACE	LAV	LAVATORY	PROP	PROPERTY	STL PL	STEEL PLATE		
BFV	BUTTERFLY VALVE	FA	FOUL AIR	LB(S)	POUND(S)	PRS	PRESSURE REDUCING STATION	STRUCT	STRUCTURAL		
BLDG	BUILDING	FAD	FOUL AIR DUCT	LEL	LOW EXPLOSIVE LIMIT	PRV	PRESS. REDUCING VALVE OR PRESS. RELIEF VALVE	SV	SOLENOID VALVE		
BLK	BLOCK	FCA	FLANGE COUPLING ADAPTER	LF	LINEAR FOOT	PS	PIPE SUPPORT	SVC	SERVICE		
BLM	BUREAU OF LAND MANAGEMENT	FCS	FLUSH CONTROL STATION	LL	LIVE LOAD OR LOOSE LINTEL	PSF	POUNDS PER SQUARE FOOT	SWD	SIDE WATER DEPTH		
BM	BENCH MARK	FD	FLOOR DRAIN	LOC	LOCATION	PSI	POUNDS PER SQUARE INCH	SYMM	SYMMETRICAL		
BOD	BIOCHEMICAL OXYGEN DEMAND	FDN	FOUNDATION	LP	LOW PRESSURE OR LIGHT POLE	PSIA	POUNDS PER SQUARE INCH ABSOLUTE	SYS	SYSTEM		
BOT	BOTTOM	FES	FLARED END SECTION	LR	LONG RADIUS	PSIG	POUNDS PER SQUARE INCH GAGE	T&B	TOP AND BOTTOM		
BU	BELL UP	FF EL	FINISH FLOOR ELEVATION	LS	LICENSED SURVEYOR	PSV	PRESSURE SUSTAINING VALVE	T&G	TONGUE AND GROOVE		
BV	BALL VALVE	FH	FIRE HYDRANT	LT	LIGHT	PT	POINT OR POINT OF TANGENCY	T&P	TEMPERATURE AND PRESSURE		
C/C	CENTER TO CENTER	FIN	FINISH	LT WT	LIGHTWEIGHT	PV	PLUG VALVE	T	TEE		
CCP	CONCRETE CYLINDER PIPE	FIN FL	FINISH FLOOR	LWL	LOW WATER LEVEL	PVC	POLYVINYL CHLORIDE OR POINT OF VERTICAL CURVE	TB	TOP OF BEAM		
CCW	COUNTER CLOCKWISE	FIN GR	FINISH GRADE	MAINT	MAINTENANCE	PVG	PAVING	TBM	TEMPORARY BENCH MARK		
CFM	CUBIC FEET PER MINUTE	FL	FLANGE	MAN	MANUAL	PVI	POINT OF VERTICAL CURVE INTERSECTION	TE	TOP ELEVATION		
CHKV	CHECK VALVE	FLR	FLOOR	MATL	MATERIAL	PVMT	PAVEMENT	TEMP	TEMPORARY		
CIP	CAST IRON PIPE	FPM	FEET PER MINUTE	MAX	MAXIMUM	Q AVG	AVERAGE DAILY FLOW	TFA	TO FLOOR ABOVE		
CISP	CAST IRON SOIL PIPE	FPS	FEET PER SECOND	MCC	MOTOR CONTROL CENTER	Q MAX	MAXIMUM DAILY FLOW	TFB	TO FLOOR BELOW		
CJ	CONSTRUCTION JOINT	FRP	FIBERGLASS REINFORCED PLASTIC	MECH	MECHANICAL	Q PEAK	PEAK HOUR FLOW	TFF	TOP OF FINISH FLOOW		
CL	CENTER LINE OR CHAIN LINK	FT	FEET	MED	MEDIUM	QTR	QUARTER	TH	TEST HOLE		
CLR	CLEAR	FTG	FOOTING OR FITTING	MFM	MAGNETIC FLOW METER	QTY	QUANTITY	THD	THREAD (ED)		
CMP	CORRUGATED METAL PIPE	G	GAS	MFR	MANUFACTURER	RAD	RADIUS	THK	THICK		
CMU	CONCRETE MASONRY UNIT	GA	GAUGE	MG	MILLION GALLONS OR MILLIGRAMS	RC	REINFORCED CONCRETE	TJ	TOP OF JOIST		
CO	CLEAN OUT	GAL	GALLON	MGD	MILLION GALLONS PER DAY	RCP	REINFORCED CONCRETE PIPE	TOA	TOP OF ASPHALT		
CONC	CONCRETE	GALV	GALVANIZED	MGMT	MANAGEMENT	RD	ROOF DRAIN	TOC	TOP OF CONCRETE OR TOP OF CURB		
CONN	CONNECTION	GND	GROUND	MH	MANHOLE	RECT	RECTANGULAR	TOE	THREADED ONE END		
CONSTR	CONSTRUCTION	GPD	GALLONS PER DAY	MIN	MINIMUM	RED	REDUCER	TOF	TOP OF FOOTING		
CONT	CONTINUOUS(ATION)	GPM	GALONS PER MINUTE	MISC	MISCELLANEOUS	RE:	REFER TO	TOS	TOP OF STEEL		
COR	CORNER	GR	GRIT	MJ	MECHANICAL JOINT	REF	REFERENCE	TOW	TOP OF WALL		
CPLG	COUPLING	GRC	GALVANIZED RIGID CONDUIT	MNPT	MALE NATIONAL PIPE THREAD	REHAB	REHABILITATION	TP	TOP OF PAVEMENT		
CPVC	CHLORINATED POLYVINYL CHLORIDE	GSP	GALVANIZED STEEL PIPE	MO	MASONRY OPENING	REINF	REINFORCE (D) (ING) (MENT)	TSL	TOP OF SLAB		
CTR	CENTER	GV	GATE VALVE	MRGB	MOISTURE RESISTANT GYPSUM WALL BOARD	REQD	REQUIRED	TSS	TOTAL SUSPENDED SOLIDS		
CV	CHECK VALVE	GW	GROUNDWATER	MTG	MOUNTING	RESIL	RESILIENT	TYP	TYPICAL		
CW	COLD WATER	GWB	GYPSUM WALL BOARD	NA	NOT APPLICABLE	RFCA	RESTRAINED FLANGED COUPLING ADAPTER	UBC	UNIFORM BUILDING CODE		
CY	CUBIC YARDS	GYP	GYPSUM	NIC	NOT IN CONTRACT	RH	RIGHT HAND	UGE	UNDERGROUND ELECTRIC		
DBIO	DEWATERED BIOSOLIDS	HB	HOSE BIBB	NPL	NAMEPLATE	RM	ROOM	ULT	ULTIMATE		
DEMO	DEMOLITION	HDWL	HEADWALL	NPT	NATIONAL PIPE THREAD	RO	ROUGH OPENING	UN	UNION		
DIA	DIAMETER	HNDRL	HAND RAIL	NRS	NON-RISING STEM	ROW	RIGHT OF WAY	UNGD	UNDERGROUND		
DIM	DIMENSION	HNDWL	HAND WHEEL	NTS	NOT TO SCALE	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER	VB	VALVE BOX		
DIP	DUCTILE IRON PIPE	HORIZ	HORIZONTAL	OC	ON CENTER	RPM	REVOLUTIONS PER MINUTE	VCP	VITRIFIED CLAY PIPE		

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GOODWYN MILLS CAWOOD, LLC
No.WF000178
Exp.06.30.2026

1" 0" 5" 1"

ISSUE	DATE
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Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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ABBREVIATIONS

G-003

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PLOTTED: Apr 17, 2026 - 8:32am

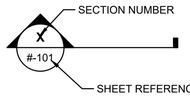
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GRAPHICS LEGEND

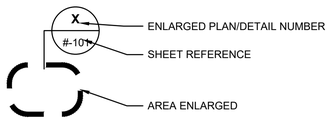
ELEVATION INDICATOR



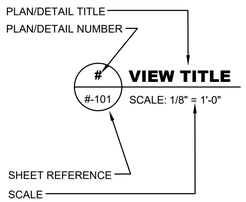
SECTION INDICATOR



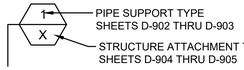
ENLARGED PLAN/DETAIL INDICATOR



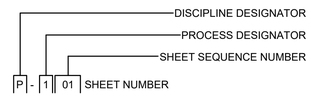
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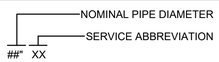
PIPE SUPPORT INDICATOR



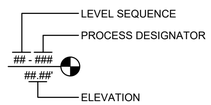
SHEET NUMBERING



PIPE LINE IDENTIFICATION



ELEVATION IDENTIFICATION



PROCESS DESIGNATORS

PROCESS SHEETS (WASTEWATER)	DESIGNATOR
NOTES, LEGEND, ABBREVIATIONS, DEMOLITION, EXISTING CONDITIONS, ETC.	0
PRELIMINARY TREATMENT	1
PRIMARY TREATMENT	2
BIOLOGICAL TREATMENT	3
SECONDARY TREATMENT	4
TERTIARY TREATMENT	5
DISINFECTION AND EFFLUENT PUMPING	6
SLUDGE STORAGE AND PROCESSING	7
MISCELLANEOUS SYSTEMS	8
DETAILS / SCHEDULES	9

CIVIL DESIGNATORS

CIVIL	DESIGNATOR
NOTES, LEGEND, ABBREVIATIONS, DEMOLITION, EXISTING CONDITIONS, ETC.	0
SITE PLAN AND GEOMETRIC CONTROLS	1
GRADING AND DRAINAGE	2
UTILITIES/YARD PIPING	3
ROAD PLAN AND PROFILES (IF REQUIRED)	4
ROAD CROSS SECTIONS (IF REQUIRED)	5
SEDIMENT AND EROSION CONTROL	6
RESERVED	7
RESERVED	8
DETAILS / SCHEDULES	9

OWNER

DESCRIPTION	NAME	PHONE NUMBER	EMAIL ADDRESS
CHIEF OPERATING OFFICER	BRENT HURST	706.484.0848	bhurst@piedmontwater.com
PROJECT MANAGER	MARK PITTARD	770.402.8452	mpittard@piedmontwater.com
OPERATIONS SUPERVISOR	STEVE MORELLI	706.816.0336	smorelli@piedmontwater.com
INSPECTOR	TBD	TBD	TBD

CONTRACTOR

DESCRIPTION	NAME	PHONE NUMBER	EMAIL ADDRESS
PROJECT MANAGER	BRANDON DOW	404.456.2054	bdow@lakeshoreengineering.com
SUPERINTENDENT	MICHAEL BOWEN	404.838.7375	mbowen@lakeshoreengineering.com

ENGINEER

DESCRIPTION	NAME	PHONE NUMBER	EMAIL ADDRESS
PROJECT MANAGER	MARVIN PIERRE	757.636.7859	marvin.pierre@gmcnetwork.com
ENGINEER	LIANG WANG	315.256.3222	liang.wang@gmcnetwork.com
ENGINEER	DANIEL PHILLIPS	706.829.4598	daniel.phillips@gmcnetwork.com

PIPE SYMBOLS

DESCRIPTION	SINGLE LINE	DOUBLE LINE
EXISTING BURIED PIPE		
EXISTING ABOVE GRADE PIPE		
NEW BURIED PIPE		
NEW ABOVE GRADE PIPE		
WELDED JOINT		
FLANGED JOINT		
FLANGED ADAPTOR		
FLANGED COUPLING		
MECHANICAL JOINT		
JOINT		
EXPANSION JOINT		

HATCHING LEGEND

DESCRIPTION	EXISTING	PROPOSED
ASPHALT PAVING (PLAN)		
ALUMINUM GRATING		
CONCRETE (ELEVATION)		
CONCRETE (PLAN)		
CONCRETE (SECTION)		
CRUSHED STONE (SECTION)		
EARTH OR BACKFILL (SECTION)		
GRAVEL DRIVE (PLAN)		
GROUT FILL (PLAN & SECTION)		
LAKE, RIVER OR POND (PLAN)		
REMOVAL OR DEMOLITION (PLAN & SECTION)		
UNPAVED DRIVE (PLAN)		

DISCIPLINE DESIGNATORS

DISCIPLINE	DESIGNATOR
GENERAL	G
HAZARDOUS MATERIALS	H
INSTRUMENTATION	I
DEMOLITION	X
SURVEY/MAPPING	V
GEOTECHNICAL	B
CIVIL	C
LANDSCAPE	L
STRUCTURAL	S
ARCHITECTURAL	A
ARCHITECTURAL ENGINEERING	AE
FIRE PROTECTION	F
MECHANICAL	M
PLUMBING	P
PROCESS	D
ELECTRICAL	E

GENERAL NOTES

1. THE CONTRACTOR IS EXPECTED TO CAREFULLY EXAMINE THE PLANS, PROPOSAL AND SITE OF THE WORK. THEREFORE, IT WILL BE ASSUMED THAT THE BIDDER HAS SATISFIED HIMSELF AS TO THE CONDITIONS TO BE ENCOUNTERED IN REGARDS TO THE CHARACTER, QUALITY, AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED, AND AS TO THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND CONTRACT. THE SUBMISSION OF A PROPOSAL BY A BIDDER WILL BE CONSIDERED PRIMA FACIE EVIDENCE THAT THE BIDDER HAS MADE SUCH AN EXAMINATION.
2. THE CONTRACTOR IS REQUIRED TO MAINTAIN AN AS-BUILT SET OF DRAWINGS DURING PROJECT CONSTRUCTION. THE COMPLETE AS-BUILT MAP WILL CONTAIN ALL INSTALLED ELECTRICAL, STRUCTURAL ENTITIES, LINES, VALVES, METERS, AND CONNECTIONS WITH REFERENCE DISTANCES TO PERMANENT ABOVE GROUND STRUCTURES.
3. ALL EXISTING UTILITIES SHOWN ABOVE AND BELOW GROUND ARE APPROXIMATE AND ARE NOT NECESSARILY ALL THAT EXIST. THE DETERMINATION OF THE EXISTENCE, LOCATION, AND DEPTH OF ALL UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED BY CONTRACTOR FOR ONE YEAR AFTER ACCEPTANCE BY THE OWNER PER SPECIFICATION 01 10 00.
5. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THE CIVIL DRAWINGS AND THE ARCHITECTURAL/STRUCTURAL DRAWINGS, THE ARCHITECTURAL/STRUCTURAL DRAWINGS SHALL HAVE PRECEDENCE. THE CONTRACTOR SHALL ADVISE THE ENGINEER OF ANY CONFLICT IN THE PLANS/SPECS FOR CLARIFICATION PRIOR TO BID. SHOULD CONFLICTING DOCUMENTS NOT BE CLARIFIED AT THE REQUEST OF THE BIDDING CONTRACTOR, THE MORE COSTLY ALTERNATIVE AS IDENTIFIED IN THE PLAN & SPECS SHALL BE INCLUDED IN THE PRICE BID.
6. ALL HAZARDOUS SUBSTANCES USED FOR THIS PROJECT, INCLUDING, BUT NOT LIMITED TO, PAINT, OIL, GREASE, AND OTHER PETROLEUM PRODUCTS SHALL BE STORED IN ACCORDANCE WITH "SPILL PREVENTION, CONTROL & COUNTERMEASURE" REGULATIONS. THESE SUBSTANCES SHALL BE STORED AWAY FROM STORM DRAINS, DITCHES, AND GUTTERS IN WATERTIGHT CONTAINERS. DISPOSAL OF THESE SUBSTANCES SHALL BE IN ACCORDANCE WITH STATE & FEDERAL AGENCY REGULATIONS. CONTRACTOR SHALL PROVIDE ADEQUATE TRASH CONTAINERS ON SITE FOR THE DISPOSAL OF CONSTRUCTION MATERIALS WASTE. CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING ANY TRASH OR OTHER POLLUTANTS FROM ENTERING STORM DRAINS & WATERS OF THE STATE.

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000178RG — Exp.06.30.2026 — NOT VALID UNLESS CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

GENERAL NOTES & LEGENDS

G-004

DRAWING FILE: C:\Users\lsmith\DOACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\01 General\General Waste Water Treatment.dwg
PLOTTED: Apr 17, 2026 - 8:32am

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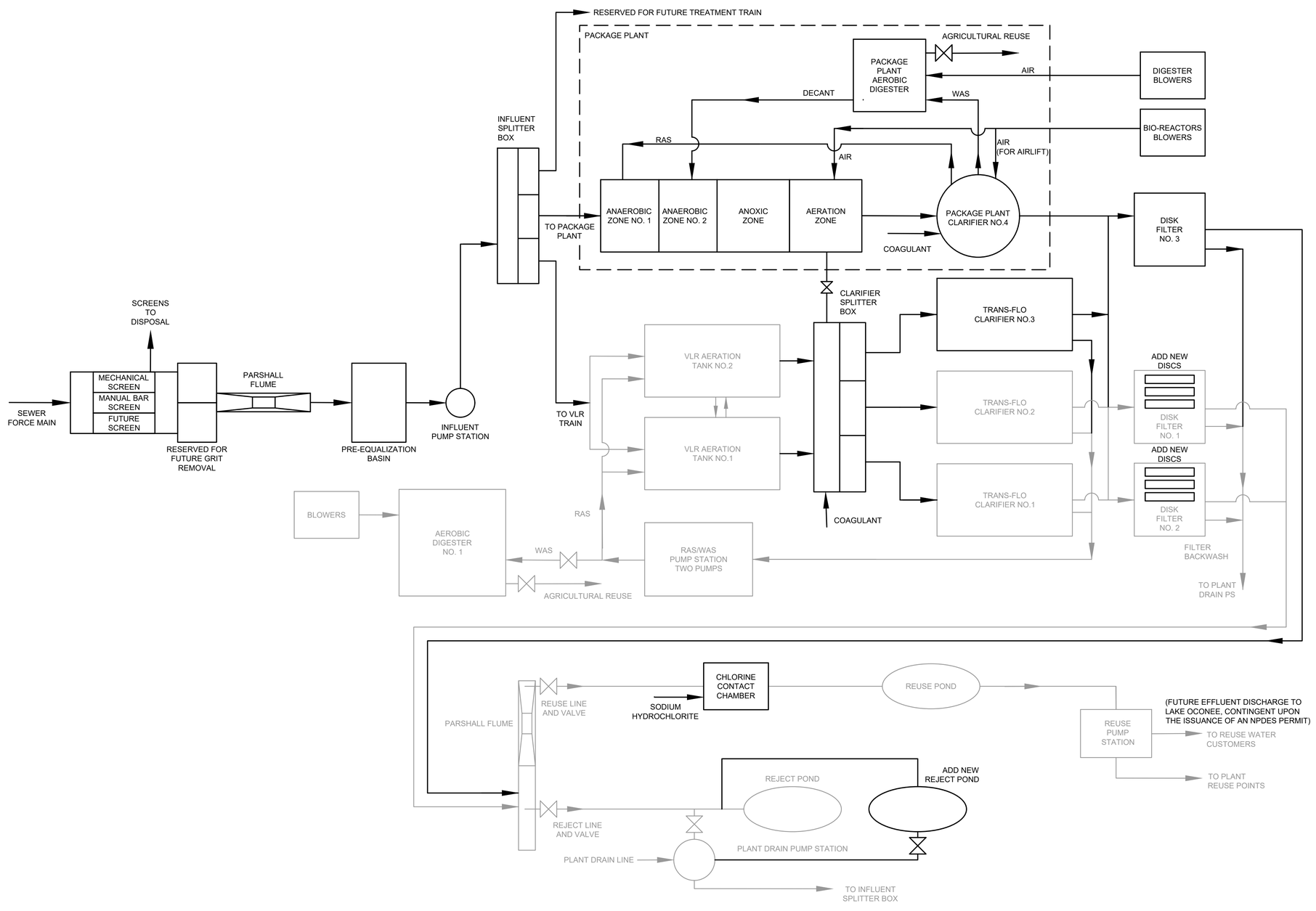
FLOWS									
DESIGN FLOW / TREATMENT PROCESS	MECHANICAL BAR SCREENS	MANUAL BAR SCREEN	INFLUENT PUMP STATION	VERTICAL LOOP REACTORS (VLR)	PACKAGE PLANT BIO-REACTORS	VLR SECONDARY CLARIFIER (EACH)	PACKAGE PLANT SECONDARY CLARIFIER	TERTIARY FILTERS	DISINFECTION
MAX MONTH AVERAGE DAILY FLOW (MGD)	-	-	-	0.5	1.0	0.5	1.0	-	-
MAX DAYLY FLOW (MGD)	-	-	-	-	-	-	-	-	-
PEAK HOURLY FLOW (MGD)	6.30	6.3	3.0	-	-	-	-	3.0	3.0

FLOW LINES

- NEW PRIMARY FLOW PATH
- EXISTING PRIMARY FLOW PATH
- NEW SECONDARY FLOW PATH
- EXISTING SECONDARY FLOW PATH

PROCESS FLOW DIAGRAM NOTES:

1. EQUIPMENT ARRANGEMENTS ARE BASED ON THE EQUIPMENT BASIS OF DESIGN IN THE SPECIFICATIONS. CHANGES TO THE LISTED BASIS OF DESIGN RESULTING IN DIFFERENCES OF THE SHOWN ARRANGEMENT SHALL BE THE CONTRACTORS RESPONSIBILITY. NO PAYMENT WILL BE ISSUED TO THE CONTRACTOR FOR MODIFICATIONS.
2. THE CONFIGURATION SHOWN ON THE PROCESS FLOW SCHEMATIC SHALL NOT BE USED FOR CONSTRUCTION BECAUSE THE LAYOUT IN THE PROCESS FLOW DIAGRAM IS NOT TO SCALE AND IS NOT REPRESENTATIVE OF THE ACTUAL FIELD LAYOUT.



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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — NATHAN P. WOOD — No. PE037886 — Exp.06.30.2026 — NOT VALID UNLESS CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager: MP
Engineer: LW
Designer: LW
Drawn By: LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

PROCESS FLOW DIAGRAM

G-005

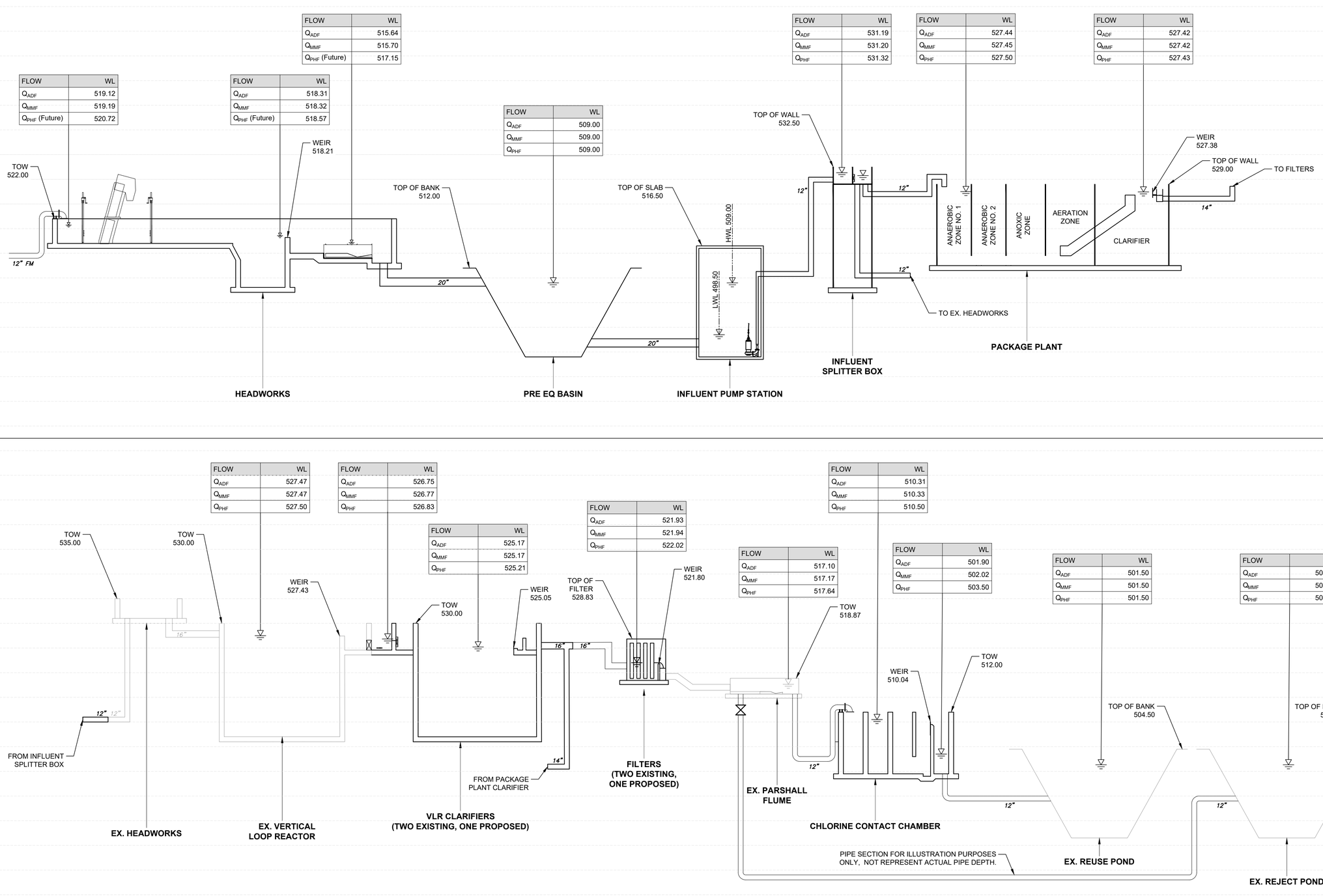
DRAWING FILE: C:\Users\smithD\CACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\01 General\General WasteWater Treatment.dwg
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LEGEND	
FLOW SCENARIO	FLOW (MGD)
AVERAGE DAILY FLOW (Q_{ADF})	1.31
MAXIMUM MONTHLY FLOW (Q_{MMF})	1.5
PEAK HOURLY FLOW (Q_{PHF} Before EQ Basin)	6.3 (8.4 MGD for Future Peak Hourly Flow)
PEAK HOURLY FLOW (Q_{PHF} After EQ Basin)	3.0

HYDRAULIC PROFILE NOTES:

1. THE 100 YEAR FLOOD ELEVATION IS NOT SHOWN ON THE HYDRAULIC PROFILE BECAUSE THERE IS NO BASE FLOOD ELEVATION WITHIN THE TREATMENT FACILITY PROPERTY.
2. THE WATER LEVELS ARE BASED OFF THE PROCESS EQUIPMENT SHOWN ON THE DRAWINGS, BASED ON EQUIPMENT SELECTED BY ENGINEER AND INFORMATION AVAILABLE TO ENGINEER.
3. THE WATER LEVEL ELEVATIONS SHOWN ARE BASED ON FLOW RATES AS INDICATED IN THE TABLE BELOW THROUGH THE TREATMENT FACILITY.



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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — NATHAN P. WILLS — No.PE000171855 — Exp.06.30.2026 — NOT VALID UNLESS CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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HYDRAULIC PROFILE

G-006

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PIPE SCHEDULE

SERVICE ABBREVIATION	DESCRIPTION (SEE NOTE 1)	PIPE MATERIAL (SEE SCHEDULE TO RIGHT)				FIELD TESTING REQUIREMENTS (SEE NOTE 4 & DEVIATION TABLE)		
		EXPOSED PIPING (SEE NOTE 2)		BURIED PIPING (SEE NOTE 3)				
		3" DIA & SMALLER	4" DIA & LARGER	3" DIA & SMALLER	4" DIA & LARGER	MIN TEST PRESSURE (PSI)	TESTING MEDIUM	LEAKAGE ALLOWANCE
A	AIR	8	8	1.8	5	25	AIR	NOTE 8
AL	ALUM	9	9	9	9	125	WATER	NOTE 7
BR	BRINE	-	-	-	-	-	-	-
BW	BACKWASH	-	5	-	5	NOTE 9	WATER	NOTE 7
BWW	BACKWASH WASTE	-	5,8	-	5,8	75	WATER	NOTE 7
C	CARBON	NOTE 11	NOTE 11	NOTE 11	NOTE 11	125	-	NOTE 7,11
CD	CHEMICAL DRAIN	10	10	10	10	NOTE 10	-	-
CEN	CENTRATE	-	4,5	-	4,5	75	WATER	NOTE 7
CL	CHLORINE	4	1	4	1	150	AIR	NOTE 7
CLS	CHLORINE SOLUTION	9	9	9	9	125	WATER	NOTE 7
CPA	COMPRESSED AIR	7,13	2	13	2	200	AIR	NOTE 7,8
CWR	COOLING WATER RETURN	8,13	4,8	2,9,13	4,5	125	WATER	NOTE 7
CWS	COOLING WATER SUPPLY	8,13	4,8	2,9,13	4,5	125	WATER	NOTE 7
D	DRAIN	9	5	9	5	NOTE 10	-	-
DS	DIGESTED SLUDGE	-	5	-	5	125	WATER	NOTE 7
FE	FILTER EFFLUENT	2, 7, 13	5	2,13	5	25	WATER	NOTE 7
FG	FEED GAS	7	7	7	7	125	AIR	NOTE 7
FM	FORCE MAIN	-	5	-	5,12	125	WATER	NOTE 7
FNE	FINAL EFFLUENT	-	5	-	5	125	WATER	NOTE 7
FOG	FOUL AIR GAS	11	11	11	11	125	AIR	NOTE 7
GR	GRIT SLURRY	-	15	-	17	125	WATER	NOTE 10
HCI	HYDROCHLORIC ACID	9	9	9	9	125	WATER	NOTE 7
HOCL	SODIUM HYPOCHLORITE	9	9	9	9	125	WATER	NOTE 7
LS	LIME SYSTEM	NOTE 11	NOTE 11	NOTE 11	NOTE 11	125	-	NOTE 7
LSG	LOW PRESSURE SLUDGE GAS	7	7	7	7	125	AIR	NOTE 7
ML	MIXED LIQUOR	-	4,5	-	4,5	125	WATER	NOTE 7
NAOH	SODIUM HYDROXIDE (CAUSTIC)	9	9	9	9	125	WATER	NOTE 7
NG	NATURAL GAS	2,7,13	1	2,7,13	1	150	AIR	NOTE 7
NPW	NON-POTABLE WATER	-	5	2,9,13	5	125	WATER	NOTE 7
OF	OVERFLOW	-	5	-	5	NOTE 9	WATER	NOTE 7
OFG	OFF GAS	7	7	7	7	125	AIR	NOTE 7
PA	PLANT AIR	1	-	1	-	300	AIR	NOTE 7,8
PAC	POLY ALUMINUM CHLORIDE	9	9	9	9	125	WATER	NOTE 7
PD	PUMPED DRAIN	2,9	2,5	2,9	5,9	125	WATER	NOTE 7
PE	PRIMARY EFFLUENT	-	16	-	16	125	WATER	NOTE 7
POL	POLYMER SOLUTION	9	-	9	-	125	WATER	NOTE 7
PS	PRIMARY SLUDGE	-	15	-	17	125	WATER	NOTE 7
PSC	PRIMARY SCUM	15	15	15	15	125	WATER	NOTE 7
PSW	PLANT SERVICE WATER	-	-	-	-	125	WATER	NOTE 7
RAS	RETURN ACTIVATED SLUDGE	-	5	-	5	125	WATER	NOTE 7
RCS	RECIRCULATED SLUDGE	-	5	-	5	125	WATER	NOTE 7
RUW	REUSE WATER	-	5	-	5	125	WATER	NOTE 7
RWW	RAW WASTEWATER	-	16	-	16	125	WATER	NOTE 7
SA	SAMPLE WATER	8,9,11,13	-	9,11,13	-	125	WATER	NOTE 7
SE	SECONDARY EFFLUENT	-	5	-	5	125	WATER	NOTE 7
SN	SUPERNATANT	9	-	9	5	75	WATER	NOTE 7
SP	SODIUM PERMANGANATE	9	-	9	-	125	WATER	NOTE 7
SS	SANITARY SEWER	6	6	6	6	125	WATER	-
SSC	SECONDARY SCUM	15,17	15,17	15,17	15,17	125	WATER	NOTE 7
SSL	SECONDARY SLUDGE	-	5	-	5	125	WATER	NOTE 7
TD	TANK DRAIN	-	5	-	5	75	WATER	NOTE 7
TWAS	THICKENED WASTED ACTIVATED SLUDGE	-	16	-	16	125	WATER	NOTE 7
V	VENT	9	9	-	-	125	WATER	-
VAC	VACUUM	2,8	3,8	-	-	125	AIR	NOTE 7
W	WATER	2,7,13	5	2,9,13	5	125	WATER	NOTE 7
WAS	WASTE ACTIVATED SLUDGE	-	16	-	16	125	WATER	NOTE 7
WW	WASTE WASHWATER	-	5	-	5	125	WATER	NOTE 7

PROCESS PIPING MATERIAL SCHEDULE (NOTE 5, NOTE 6)

GROUP NO.	PIPE MATERIAL	SPECIFICATION SECTION	FITTINGS	COMMENTS
1	STEEL, ASTM A53, SCH 40, BLACK, WELDED	40 05 24	3" AND SMALLER, MALLEABLE IRON, ANSIB16.3, THREADED BLASK 150 PSI OR STEEL ANSIB16.9 BUTT-WELDED 4" AND LARGER, CAST IRON, ANSIB16.1, FLANGED OR MECH COUPLING	
2	STEEL, ASTM A53, SCH 40, GALVANIZED	40 05 24	3" AND SMALLER, MALLEABLE IRON, ANSIB16.3, THREADED GALVANIZED 150 PSI 4" AND LARGER, CAST IRON, ANSIB16.1, FLANGED OR MECH COUPLING	
3	WELDED STEEL,AWWA C200, UNLINED	40 05 24	WELDED STEEL, AWWA C200 FABRICATED, UNLINED	
4	WELDED STEEL,AWWA C200,	40 05 24	WELDED STEEL, AWWA C200 FABRICATED,	
5	DUCTILE IRON, AWWA C151, 150 PSI, PUSH-ON, MECHANICAL JOINT OR 125 PSI FLANGED, UNLINED FOR AIR LINES	40 05 19	DUCTILE IRON AWWA 110, PUSH-ON, MECHANICAL JOINT 250 PSI (PR), 12" AND SMALLER, 150 SSI (PR). FLANGED JOINTS 125PSI ANSI B16.1	
6	CAST IRON SOIL PIPE ASTM A74, SERVICE WEIGHT, BELL & SPIGOT OR NO-HUB, SYSTEM 5 MAY BE SUBSTITUTED	40 05 19	CAST IRON ASTM A74, SERVICE WEIGHT, BELL & SPIGOT OR NO-HUB, SYSTEM 5 MAY BE SUBSTITUTED	
7	STAINLESS STEEL, TYPE 316, ASTM A312, SCHEDULE 40	40 05 23	STAINLESS STEEL TYPE 316, ANSI B16.3, THREADED, 150 PSI, ANSIB16.9, BUTT-WELDED SCH 40 OR 150 PSI FLANGED	
8	STAINLESS STEEL, TYPE 304, ASTM A312, SCHEDULE 10S	40 05 23	STAINLESS STEEL TYPE 304, ANSIB16.9, BUTT-WELDED SCH 10S OR 150 PSI FLANGED	
9	POLYVINYL CHLORIDE (PVC), SCHEDULE 80, ASTM D1785	40 05 31	PVC SCHEDULE 80, ASTM D2467 SOCKET SOLVENT WELD JOINTS	
10	POLYPROPYLENE, ASTMD2146, SCHEDULE 40, HEAT FUSED JOINTS	40 05 31	POLYPROPYLENE, SCHEDULE 40, DRAINAGE TYPE WITH HEAT FUSED SOCKET JOINTS	
11	FIBERGLASS REINFORCED PLASTIC (FRP), ASTMD2996, FILAMENT WOUND SOCKET AND SPIGOT JOINTS, ADHESIVE BONDED	40 05 36	FRP, FILAMENT WOUND, SOCKET ENDS, ADHESIVE BONDED OR FIBERGLASS FLANGES	
12	POLYVINYL CHLORIDE (PVC) PRESSURE PIPE ASTM D2241, WITH BELL & SPIGOT JOINTS	40 05 31	DUCTILE IRON, AWWA C110, CEMENT LINED, AWWA C104	
13	COPPER, ASTM B88, TYPE K, SOFT TEMPERED WHERE BURIED, HARD TEMPERED WHERE EXPOSED	40 05 17	WROUGHT COPPER ANSIB16.22 SOLDER JOINT, 150 PSI OR COMPRESSION FITTINGS (FOR COMPRESSED AIR USE TIN-ANTIMONY SOLDER)	
14	HDPE DR 9 FOR PRESSURE RATING 150 PSI OR MORE, OTHERWISE DR17	40 05 33	HDPE FABRICATED OR MOLDED	
15	DUCTILE IRON(GLASS LINED), AWWA C151, 150 PSI, PUSH-ON, MECHANICAL JOINT OR 125 PSI FLANGED	40 05 19	DUCTILE IRON AWWA 110, PUSH-ON, MECHANICAL JOINT 250 PSI (PR), 12" AND SMALLER, 150 SSI (PR). FLANGED JOINTS 125PSI ANSI B16.1	
16	DUCTILE IRON(CERAMIC EPOXY LINED), AWWA C151, 150 PSI, PUSH-ON, MECHANICAL JOINT OR 125 PSI FLANGED	40 05 19	DUCTILE IRON AWWA 110, PUSH-ON, MECHANICAL JOINT 250 PSI (PR), 12" AND SMALLER, 150 SSI (PR). FLANGED JOINTS 125PSI ANSI B16.1	
17	STEEL (GLASS LINED), AWWA C200, WELDED	40 05 19	WELDED STEEL, AWWA C200 FABRICATED, UNLINED	

NOTES:

1. THIS SCHEDULE INCLUDES SOME PROCESS DESIGNATIONS NOT USED IN THIS PROJECT.
2. EXPOSED PIPING SHALL BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS. COLORS WILL BE SELECTED BY THE ENGINEER.
3. SEE SPECIFICATIONS FOR PIPE LINING AND COATING.
4. SEE SPECIFICATION SECTION 400513 FOR ADDITIONAL TESTING REQUIREMENTS.
5. DEVIATIONS FROM THIS SCHEDULE OF MATERIALS OR TESTING REQUIREMENTS ARE NOTED IN THE SPECIFICATIONS OR ADDITIONAL NOTATIONS ON THE DRAWINGS.
6. SEE VALVE SCHEDULE FOR VALVE TYPE FOR EACH SERVICE.
7. FOR PIPING THAT IS NOT ABLE TO BE PRESSURE TESTED, NO LEAKAGE SHALL SHOW AT MAXIMUM TANK WATER SURFACE ELEVATIONS. FOR PIPING THAT IS ABLE TO BE PRESSURE TESTED, LEAKAGE SHALL BE NO MORE THAN 0.02 GALLONS PER HOUR PER INCH DIAMETER PER 100 FEET OF BURIED PIPE.
8. LOSS OF PRESSURE SHALL BE LESS THAN 5 PERCENT.
9. PERFORM STATIC WATER TEST WITH SURFACE 5 FEET ABOVE HIGHEST POINT ON PIPE.
10. INSPECTION AND TESTING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODE.
11. PIPING MATERIAL SHALL BE ABRASION RESISTANT FLEXIBLE RUBBER HOSE & QUICK CONNECT COUPLINGS WITH SYSTEM 1 PIPING AT EQUIPMENT CONNECTIONS. PIPE SHALL SHOW ZERO LEAKAGE AT NORMAL OPERATING CONDITIONS.
12. ALL INSTRUMENT SENSING OR GAUGE PIPING SHALL BE 304 SS THREADED TUBING

DEVIATIONS FROM SCHEDULED TEST PRESSURES

LOCATION	OPERATING PRESSURE (PSI)	TEST PRESSURE (PSI)

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE000017486
Exp.06.30.2026
NOT VALID UNLESS SIGNED AND SEALED
CERTIFICATE OF AUTHORIZATION
1" 0" .5" 1"

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90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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PROCESS PIPING SCHEDULE

G-007

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INFLUENT CHARACTERISTICS

PARAMETER	VALUE
FLOW (MGD)	
DESIGN	1.5
MAX DAY	3.0
PEAK HOURLY (BEFORE EQ BASIN)	6.3
PEAK HOURLY (AFTER EQ BASIN)	3.0
BOD (MG/L)	260
TSS (MG/L)	210
NH_3-N (MG/L)	42
TKN (MG/L)	50
TP (MG/L)	21
pH	7.2
SUMMER TEMPERATURE (°C)	20.0
WINTER TEMPERATURE (°C)	12.0

HEADWORKS - SCREEN

PARAMETER	VALUE
MECHANICAL SCREEN	
NUMBER OF SCREENS INSTALLED	1.0
PEAK CAPACITY PER SCREEN (MGD)	6.3
TYPE OF SCREENS	CONTINUOUS ROTATING CHAIN
CHANNEL WIDTH (FT)	3
CHANNEL DEPTH (FT)	5
INCLINATION ANGLE (DEGREE)	65
PERFORATED OPENING SIZE (MM)	6
WASHWATER FLOW (GPM)	42
WASHWATER PRESSURE (PSI)	50-60
MANUAL BYPASS SCREEN	
NUMBER OF SCREEN	1
CHANNEL WIDTH (FT)	3
BAR SPACING (MM)	25
SCREENING WASHER/COMPACTOR	
NUMBER OF SCREENING WASHER/COMPACTOR	1
MAXIMUM SOLIDS CAPACITY (CONTINUOUS, FT^3/HR)	206
MAXIMUM SOLIDS CAPACITY (BATCH, FT^3/HR)	120
WASHWATER PRESSURE (PSI)	60
MAXIMUM WATER (LAUNDER) CAPACITY (GPM)	160

HEADWORKS - FLOW MEASUREMENT

PARAMETER	VALUE
NUMBER OF DEVICE	1
TYPE	PARSHALL FLUME
THROAT SIZE (IN)	12
MEASUREMENT RANGE (MGD)	0.08 ~ 10.43

PRE-EQUALIZATION BASIN

PARAMETER	VALUE
BASINS	
BASIN DIMENSION	
LENGTH (FT)	200
WIDTH (FT)	126
DEPTH (FT)	15.0
SIDE WATER DEPTH (FT)	12.0
VOLUME (MG)	0.93
SURFACE AERATOR	
NUMBER OF DEVICE	2
TYPE	SURFACE MECHANICAL AERATOR
MOTOR (HP)	15

INFLUENT PUMP STATION

PARAMETER	VALUE
[1]FIRM CAPACITY (MGD)	3.0
NUMBER OF PUMPS	2 INSTALLED, 1 FUTURE
WETWELL	
INSIDE DIAMETER (FT)	12
LWL (FT)	498.50
HWL (FT)	509.00
WORKING VOLUME (GAL)	8,037
INFLUENT PUMP NO. 1/NO. 2	
NUMBER OF PUMPS	2
TYPE OF PUMPS	SUBMERSIBLE
CAPACITY (GPM)	2100
DESIGN HEAD (FT)	50
DISCHARGE PORT SIZE (IN)	8
MOTOR (HP)	40.0

[1]FIRM CAPACITY = ONE (1) LARGER PUMP OUT OF SERVICE, FOR CURRENT PHASE

BIOLOGICAL REACTORS (PACKAGE PLANT)

PARAMETER	VALUE
ANAEROBIC BASINS	
NUMBER OF ANAEROBIC BASINS	2
ANAEROBIC VOLUME PER BASIN (GAL)	31,250
TOTAL ANAEROBIC VOLUME (GAL)	62,500
SIDE WATER DEPTH (FT)	15
TOTAL ANAEROBIC HRT (HR)	1.5
TOTAL NUMBER OF SUBMERSIBLE MIXERS	2
MOTOR (HP)	2.5
PRE-ANOXIC BASIN	
NUMBER OF PRE-ANOXIC BASIN	1
PRE-ANOXIC VOLUME (GAL)	299,872
SIDE WATER DEPTH (FT)	15
PRE-ANOXIC HRT (HR)	7.2
TOTAL NUMBER OF SUBMERSIBLE MIXERS	1
MOTOR (HP)	8.3
ANOXIC BASIN DO (MG/L)	0.1
AERATION BASIN	
NUMBER OF AERATION BASIN	1
AEROBIC VOLUME (GAL)	644,601
SIDE WATER DEPTH (FT)	15
AEROBIC HRT (HR)	15.5
AEROBIC SRT (DAY)	10.2
DESIGN MLSS (MG/L)	3,500
AERATION BASIN DO (MG/L)	2.0
BLOWERS FOR BIOLOGICAL REACTORS	
NUMBER OF BLOWERS	2 (ONE IN OPERATION, ONE STANDBY)
AIR FLOW RATE PER BLOWER (SCFM)	1,699
DISCHARGE PRESSURE (PSI)	8.0
BLOWER POWER RATING (HP)	100

SECONDARY CLARIFIERS

PARAMETER	VALUE
VLR CLARIFIER #3 (PROPOSED)	
BASIN DIMENSION (FOR EACH)	
LENGTH (FT)	50
WIDTH (FT)	25
HEIGHT (FT)	23
SIDE WATER DEPTH (FT)	18
WEIR LENGTH	44.8
SLUDGE COLLECTOR DRIVE MOTOR (HP)	0.5
PACKAGE PLANT CLARIFIER #4 (PROPOSED)	
BASIN DIMENSION	
DIAMETER (FT)	56.5
HEIGHT (FT)	16.5
SIDE WATER DEPTH (FT)	14.93
WEIR LENGTH	171.22
SLUDGE COLLECTOR DRIVE MOTOR (HP)	0.5

TERTIARY FILTERS

PARAMETER	VALUE (EACH FILTER)
FILTERS #1 & #2 (EXISTING)	
TYPE OF FILTERS	CLOTH MEDIA DISC
TREATMENT CAPACITY AT AVERAGE FLOW (MGD)	1.0
TREATMENT CAPACITY AT PEAK FLOW (MGD)	2.5
NUMBER OF DISCS PER FILTER	8
NUMBER OF EXISTING DISCS PER FILTER	4
NUMBER OF NEW DISCS PER FILTER	4
MAX FILTER INFLUENT TSS (MG/L)	25
MAX FILTER EFFLUENT TSS (MG/L)	5
MAX EFFLUENT TURBIDITY (NTU)	3
FILTER #3 (PROPOSED)	
TYPE OF FILTERS	CLOTH MEDIA DISC
TREATMENT CAPACITY AT AVERAGE FLOW (MGD)	1.0
TREATMENT CAPACITY AT PEAK FLOW (MGD)	2.0
NUMBER OF DISCS PER FILTER	6
MAX FILTER INFLUENT TSS (MG/L)	30
MAX FILTER EFFLUENT TSS (MG/L)	5
MAX EFFLUENT TURBIDITY (NTU)	3
FILTER DRIVE UNIT MOTOR (HP)	1.5
BACKWASH PUMP (HP)	7.5

DISINFECTION (BY SODIUM HYPOCHLORITE)

PARAMETER	VALUE
CHEMICAL STORAGE TANKS	
NUMBER	
CURRENT PHASE INSTALLED	1
FUTURE ADD	1
CAPACITY (GAL)	2,000
CHEMICAL FEED PUMPS	
TYPE OF PUMP	PERISTALTIC
NUMBER OF PUMPS (WITH SKID)	2
FLOW RANGE (GPH)	0.05-15
CHLORINE CONTACT CHAMBER	
NUMBER OF BASINS	1
VOLUME (GAL)	43,896
DETENTION TIME AT PEAK HOURLY FLOW (MINUTES)	15

REJECT POND

PARAMETER	VALUE
NUMBER	2
EXISTING	1
NEW	1
BASIN DIMENSION (FOR NEW POND)	
LENGTH (FT)	222
WIDTH (FT)	144
DEPTH (FT)	18.0
SIDE WATER DEPTH (FT)	15.0
VOLUME (MG)	1.5

AEROBIC DIGESTER (WITHIN PACKAGE PLANT)

PARAMETER	VALUE
AEROBIC DIGESTERS	
NUMBER OF DIGESTERS	1
DIGESTER VOLUME (GAL)	603,000
SIDE WATER DEPTH (FT)	15
DIFFUSER TYPE	COARSE BUBBLE
BLOWERS FOR AEROBIC DIGESTER	
NUMBER OF BLOWERS	3 (TWO IN OPERATION, ONE STANDBY)
AIR FLOW RATE PER BLOWER (SCFM)	1,430
DISCHARGE PRESSURE (PSI)	7.0
BLOWER POWER RATING (HP)	60.0

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GOODWYN MILLS CAWOOD, LLC
NATHAN P. LEE
PE#027186
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

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WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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BASIS OF DESIGN

G-008

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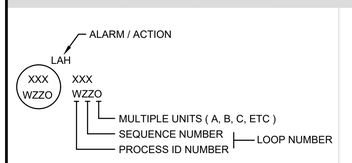
INSTRUMENT IDENTIFICATION LETTERS

	FIRST LETTER		SUCCEEDING LETTER		
	MEASURED OR INITIATED VARIABLE		READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER FLAME				
C	CONDUCTIVITY (ELECTRICAL)			CONTROL	CLOSE
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL	DELAY		
E	VOLTAGE (EMF)		PRIMARY ELEMENT		
F	FLOW RATE	RATIO (FRACTION)			
G	GAUGING		GLASS		
H	HAND (MANUALLY INITIATED)				HIGH
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME OR SCHEDULE			CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW
M	MOISTURE OR HUMIDITY	MOMENTARY			MIDDLE OR INTERMEDIATE
N	UNCLASSIFIED				
O	UNCLASSIFIED		ORIFICE (RESTRICTION)		OPEN
P	PRESSURE OR VACCUM		POINT (TEST CONNECTION)		
Q	QUANTITY	INTEGRATE OR TOTALIZE			
R	RADIOACTIVITY		RECORD OR PRINT		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT OR TRANSMITTER	
U	MULTIVARIABLE		MULTI FUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION MECHANICAL ANALYSIS			VALVE, DAMPER OR LOUVER	
W	WEIGHT OR FORCE		WELL		
X	EVENT			UNCLASSIFIED	
Y	UNCLASSIFIED			RELAY, COMPUTE, OR CONVERT	
Z	POSITION			DRIVE, ARTICULATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

P&ID ABBREVIATIONS

CONC	CONCENTRIC
CP	CONTROL PANEL
DO	DISSOLVED OXYGEN
ECC	ECCENTRIC
EL	ELEVATION
ES	EMERGENCY STOP
FC	FAIL CLOSE
FCP	FACTORY CONTROL PANEL (FURNISHED BY EQUIPMENT MANUFACTURER)
FI	FAIL INTERMEDIATE
FL	FAIL LOCKED
FLG	FLANGE
FO	FAIL OPEN
FOR	FORWARD/OFF/REVERSE (MAINTAINED)
FSR	FORWARD/STOP/REVERSE (MAINTAINED)
FWE	FURNISHED WITH EQUIPMENT
GPM	GALLONS PER MINUTE
HMI	HUMAN MACHINE INTERFACE
HOA	HAND/OFF/AUTO
HP	HIGH PRESSURE
LC	LOCKED CLOSE
LCP	LOCAL CONTROL PANEL (FURNISHED BY SYSTEMS INTEGRATOR)
LO	LOCKED OPEN
LOR	LOCAL/OFF/REMOTE
LP	LOW PRESSURE
LR	LOCAL/REMOTE
LT	LOW TEMPERATURE
MA	MANUAL/AUTO
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MCP	MAIN CONTROL PANEL
MIN	MINIMUM
MW	MANWAY
NC	NORMALLY CLOSED
NLL	NORMALLY LIQUID LEVEL
NO	NORMALLY OPEN
OC	OPEN/CLOSE
OCA	OPEN/CLOSE/AUTO
OCR	OPEN/CLOSE/REMOTE
OO	ON/OFF
ORIF	ORIFICE
ORP	OXIDATION REDUCTION POTENTIAL
OS	OPERATION SWITCH
PC	PARTICLE COUNT
pH	HYDROGEN ION CONCENTRATION
R	RESET
RED	REDUCER
RS	RUN/STOP (AUTO RESET/RUN @ POWER INTERRUPTION)
RSJ	RUN/STOP/JOG
S	SILENCE
SCN	SAMPLE CONNECTION
SC	STREAMING CURRENT
SCH	SCHEDULE
SD	SHUTDOWN
SLBL	SLUDGE BLANKET LEVEL
SP	SAMPLE POINT
SR	SAFE/RUN
SST	STAINLESS STEEL
SSR	START/STOP (MANUAL RESET @ POWER INTERRUPTION)
STD	STANDARD
T	TEST
TOR	TORQUE
TURB	TURBIDITY
TYP	TYPICAL
UD	UP/DOWN

INSTRUMENT IDENTIFICATION



	FIELD MOUNTED	PANEL MOUNTED	AUX LOCATION / MAIN CONTROL ROOM
DISCRETE INSTRUMENT	XXX 1000	XXX 1000	
SHARED DISPLAY / CONTROL	XXX 1000	XXX 1000	XXX 1000
UNDEFINED INTERLOCK LOGIC		◇	

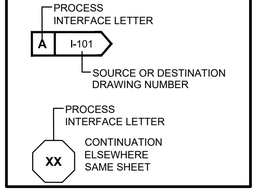
EXAMPLE ALARMS OR ACTIONS

HA	HIGH ALARM
LAH	LEVEL ALARM HIGH
LAHH	LEVEL ALARM HIGH HIGH
HOA	HAND/OFF/AUTO
LAL	LOW
LAU	LOW LOW
OO	ON / OFF

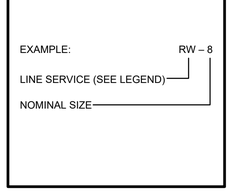
NOTES

1. THE PROCESS AND INSTRUMENTATION DIAGRAMS (P&ID) ARE BASED ON PROCESS EQUIPMENT SELECTED BY THE ENGINEER, AS SHOWN ON THE DRAWINGS.
2. THE ARRANGEMENT OF PROCESS AND INSTRUMENTATION DIAGRAMS REPRESENTS THE BASIS OF DESIGN FOR EACH TYPE OF EQUIPMENT, AS DESCRIBED IN THE SPECIFICATIONS. CHANGES TO THE LISTED BASIS OF DESIGN THAT DIFFER FROM THE SHOWN ARRANGEMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY. HOWEVER, NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR SUCH MODIFICATIONS.
3. IF APPROVED BY THE ENGINEER, THE MANUFACTURER MAY ELECT TO MODIFY PROCESS AND INSTRUMENTATION DIAGRAM TO IMPROVE SYSTEM FUNCTION.
4. THE CONFIGURATION SHOWN ON THE PROCESS AND INSTRUMENTATION DIAGRAM SHALL NOT BE USED FOR CONSTRUCTION AS THE LAYOUT OF THE PROCESS FLOW DIAGRAM IS NOT TO SCALE AND IS NOT REPRESENTATIVE OF THE ACTUAL FIELD LAYOUT.
5. FOR PIPE SERVICE ABBREVIATIONS, SEE GENERAL SHEETS.

SHEET CONTINUATION



LINE SYMBOLS



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GOODWYN MILLS CAWOOD, LLC
No. PEO07185
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1" 0" 5" 1"

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CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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ABBREVIATIONS & NOTES

I-001

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GENERAL EQUIPMENT

	CENTRIFUGAL PUMP		HEAT EXCHANGER
	POSITIVE DISPLACEMENT PUMP		PERISTALTIC PUMP
	VERTICAL TURBINE PUMP		STATIC MIXER
	HORIZONTAL SPLIT-CASE PUMP		MIXER
	ROTARY SCREW COMPRESSOR		SILENCER
	PROGRESSIVE CAVITY PUMP		DRAIN
	GRINDER		VENT
	DIAPHRAGM PUMP		FLEXIBLE HOSE OR JOINT
	EDUCTOR		DIAPHRAGM OR LOAD CELL
	CENTRIFUGAL FAN / BLOWER		UNION
	BLOWER (POSITIVE DISPLACEMENT)		ANNULAR SEAL RING
	SPRAY NOZZLE		SINGLE ARCH EXPANSION JOINT
	FILTER/STRAINER		SLIDE GATE
	HEATER		HIGH-SPEED TURBO BLOWER

VALVES

	GATE
	GLOBE
	CHECK
	DIAPHRAGM
	BALL
	FLOAT
	DUCKBILL CHECK
	NEEDLE
	BUTTERFLY
	SAFETY RELIEF
	PRESSURE REGULATING
	PLUG
	3-WAY
	AIR RELEASE
	MUD OR FOOT
	PINCH
	KNIFE GATE

INSTRUMENTS

M	FLOWMETER - MAG
	FLOWMETER - PROPELLER
	FLOWMETER - VENTURI
	FLOWMETER - THERMAL MASS
	ROTAMETER
	PARSHALL FLUME
	LEVEL ELEMENT (ULTRASONIC)
	FLOAT SWITCH
	VIBRATING FORK LEVEL SWITCH

GENERAL FITTINGS

	REDUCER
	FLANGE/BOLTED
	END CAP
	RESTRICTING ORIFICE
	COUPLER CONNECTION

ACTUATORS

M	MOTOR OPERATOR
S	SOLENOID
	PNEUMATIC ACTUATOR

LINE LEGEND

	PRIMARY PROCESS LINE
	SECONDARY PROCESS LINE
	EXISTING
	ELECTRICAL SIGNAL
ES 120/1	ELECTRIC SUPPLY VOLTAGE/PHASE
	INSULATED
	HEAT TRACED
E E	ETHERNET
PA A	PLANT AIR SUPPLY
IA A	INSTRUMENT AIR SUPPLY
NPW	NON-POTABLE WATER SUPPLY
PRW	REUSE WATER SUPPLY
	BY VENDOR

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No. PEO007186
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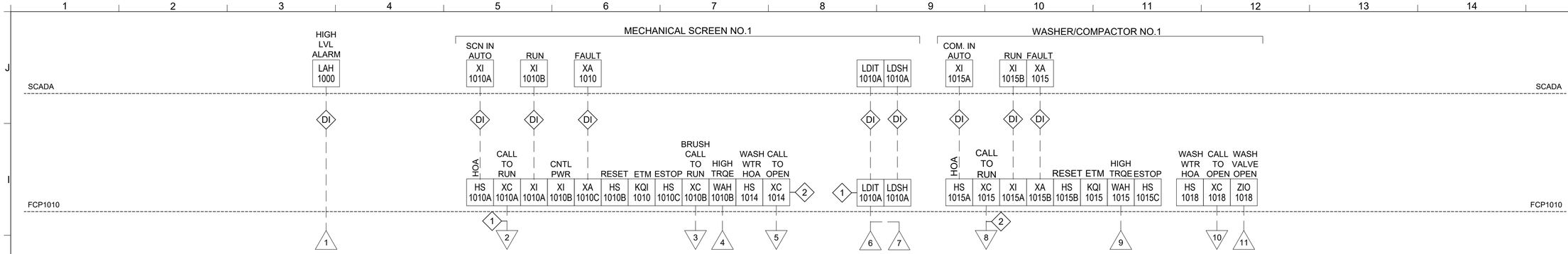
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LEGENDS

I-002

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1 WHEN SCR1010 IN AUTO, CALL TO RUN INITIATED BY LEVEL DIFFERENTIAL.

2 WHEN EV1014 IN AUTO, CALL TO OPEN INITIALED BY SCREEN RUNNING.
WHEN BRUSH IN AUTO, CALL TO RUN INITIATED BY SCREEN RUNNING.
WHEN SWC1015 IN AUTO, CALL TO RUN INITIATED BY SCREEN RUNNING.
WHEN SCR1010 TURNED OFF, SWC1015 SHALL CONTINUE RUNNING FOR PRE-SET PERIOD THEN STOP.

FROM OUTSIDE PUMP STATIONS 12" RWW FM

V1001 — 12" BYPASS

1 I-601 — **TO** EXISTING REJECT POND NO. 1

CAP THE PIPE AFTER 12" FM DIVERTED TO PROPOSED HEADWORKS (RESTRAINED BOTH SIDES)

V1002

2 I-301 — **TO** EXISTING HEADWORKS

V1019

12" RWW FM

12"X16"

12" RWW FM FROM FUTURE CONNECTION — V1020

12" RWW FM FROM FUTURE CONNECTION — V1021

12" RWW FM FROM FUTURE CONNECTION — V1022

16" RWW FM

INFLUENT CHANNEL

LSH 1000

1.5" PSW 42 GPM @ 50 PSIG — V1011

V1013

PI 1011

CV1012

EV1014

S

M

WAH 1010

LE 1010A

LE 1010B

SCR1010

VENDOR PACKAGE

SG1012

RWW — SG1011

RWW — SG1031

RWW — SG1021

MANUAL BAR SCREEN — SCR1030

SG1032

SG1022

FUTURE SCREEN

FUTURE SCREENINGS WASHER/COMPACTOR

VENDOR PACKAGE

PI 1012

V1017

EV1018

CV1016

V1015

1" PSW - WASH 30 GPM @ 40 PSIG

SWC1015

WAH 1015

DUMPSTER

3 I-102 — **TO GRIT REMOVAL SYSTEM**

6" D — 4 I-211 — TO EQ BASIN

SCR1010
PERFORATED PLATE SCREEN
SPEC: 46 21 15
CAPACITY: 6.3 MGD
HP (SCREEN): 2
HP (BRUSH): 1

SCR1030
MANUAL BAR SCREEN
SPEC: 46 21 01
CAPACITY: 8.4 MGD

SWC1015
SCREENINGS WASHER/COMPACTOR
SPEC: 46 21 15
CAPACITY: 206 CU. FT./HR
HP: 5

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1" 0" .5" 1"

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Conformed Set		
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Drawn By:		LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

SCREENING

I-101

DRAWING FILE: C:\Users\tsmith\DOACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
PLOTTED: Apr 17, 2026 - 8:32am

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SCADA

FCP1120

FLOW TO EQ

FI 1220	FQIR 1220	FC 1220	pH AIR 1209

AI AI AI

4 5 6

FUTURE GRIT SYSTEM

5

INFLUENT SAMPLER

AS1100

6

AIT 1209

pH

AE 1209

4

LE 1210 FIT 1210

SG1111

PE

PE

PE

20" PE

PARSHALL FLUME

FE 1210

5 I-211

TO EQ BASIN

3 I-101

FROM SCREENING

FUTURE GRIT SYSTEM

SG1121

PE

AS1100

AUTOMATIC SAMPLER
SPEC: 40 75 00

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
M. MYERS 1886
Exp.06.30.2026
NOT VALID UNLESS CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

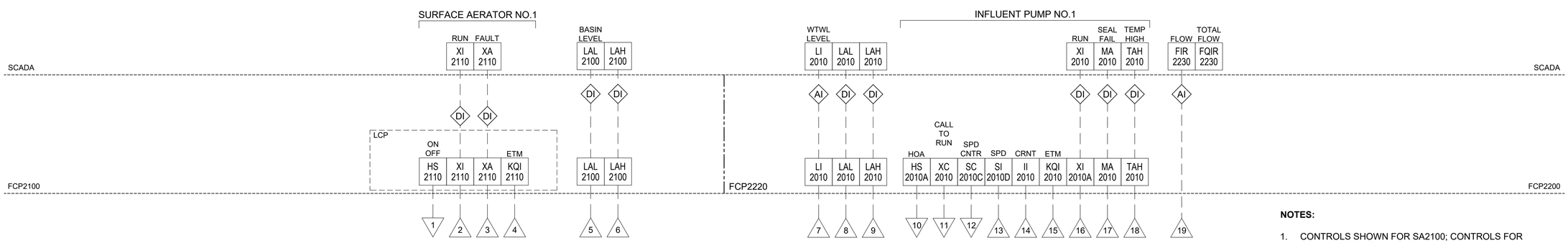
NOT RELEASED FOR CONSTRUCTION

PARSHALL FLUME
AND AUTOMATIC
SAMPLER

I-102

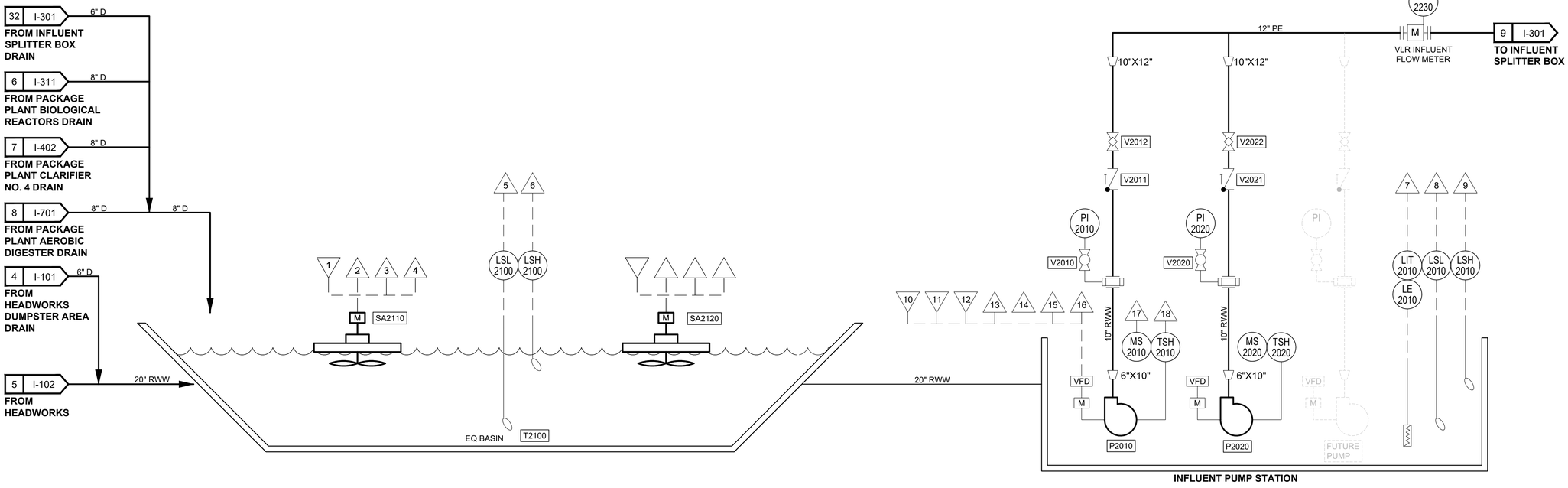
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PLOTTED: Apr 17, 2026 - 8:32am

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NOTES:

1. CONTROLS SHOWN FOR SA2100; CONTROLS FOR SA2200 ARE THE SAME.
2. CONTROLS SHOWN FOR P2210; CONTROLS FOR P2220 ARE THE SAME.



T2100

EQUALIZATION BASIN
VOLUME: 0.92 MG

SA2110

EQ SURFACE AERATOR NO.1
SPEC: 43 26 80
HP: 15

SA2120

EQ SURFACE AERATOR NO.2
SPEC: 43 26 80
HP: 15

P2010

INFLUENT PUMP NO.1
TYPE: SUBMERSIBLE CENTRIFUGAL
SPEC: 43 25 13
CAPACITY: 2,100 GPM
TDH: 50 FT
DRIVE: 40 HP

P2020

INFLUENT PUMP NO.2
TYPE: SUBMERSIBLE CENTRIFUGAL
SPEC: 43 25 13
CAPACITY: 2,100 GPM
TDH: 50 FT
DRIVE: 40 HP

GMC
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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NA.PE000738
Exp.06.30.2026
NOT VALID UNLESS CHECKED AND CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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EQUALIZATION BASIN & INFLUENT PUMP STATION

I-211

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SCADA

FCP3100

11 I-701
FROM EXISTING RAS/WAS PS

8" RAS

12" PE

12 I-311
TO PACKAGE PLANT

V3016

6" D

8" D

32 I-211
TO EQ BASIN

V3102

8" RAS

12" PE

WG3110

WG3120

12" PE

WG3130

TO FUTURE PROCESS TRAIN

SB3100
INFLUENT SPLITTER BOX

V3101

EXISTING HEADWORKS ALL EQUIPMENT DEMOLISHED

EXISTING VERTICAL LOOP REACTOR TANK NO. 1

T3100

THROUGH CHANNEL

13 I-401
TO VLR CLARIFIER SPLITTER BOX

V3202

8" RAS

12" FM

16" PE

V3014

V3011

12" PE

9 I-211
FROM INFLUENT PUMP STATION

12" PE

V3015

V3012

6" DRAIN FM

V3201

10 I-601
FROM EXISTING DRAIN PUMP STATION

6" DRAIN FM

V3013

EXISTING VERTICAL LOOP REACTOR TANK NO. 2

T3200

2 I-101
FROM OUTSIDE PUMP STATIONS

12" RWW FM

T3100
EXISTING VERTICAL LOOP REACTOR TANK NO. 1 VOLUME: 0.22 MG

T3200
EXISTING VERTICAL LOOP REACTOR TANK NO. 2 VOLUME: 0.22 MG

DRAWING FILE: C:\Users\lsmith\DCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
PLOTTED: Apr 17, 2026 - 8:32am

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE007186
Exp.06.30.2026
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1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

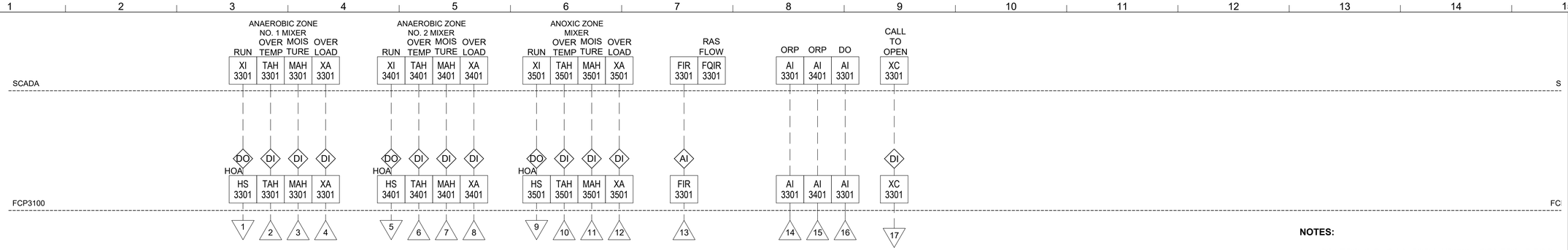
CAUG250007

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VLR TANKS

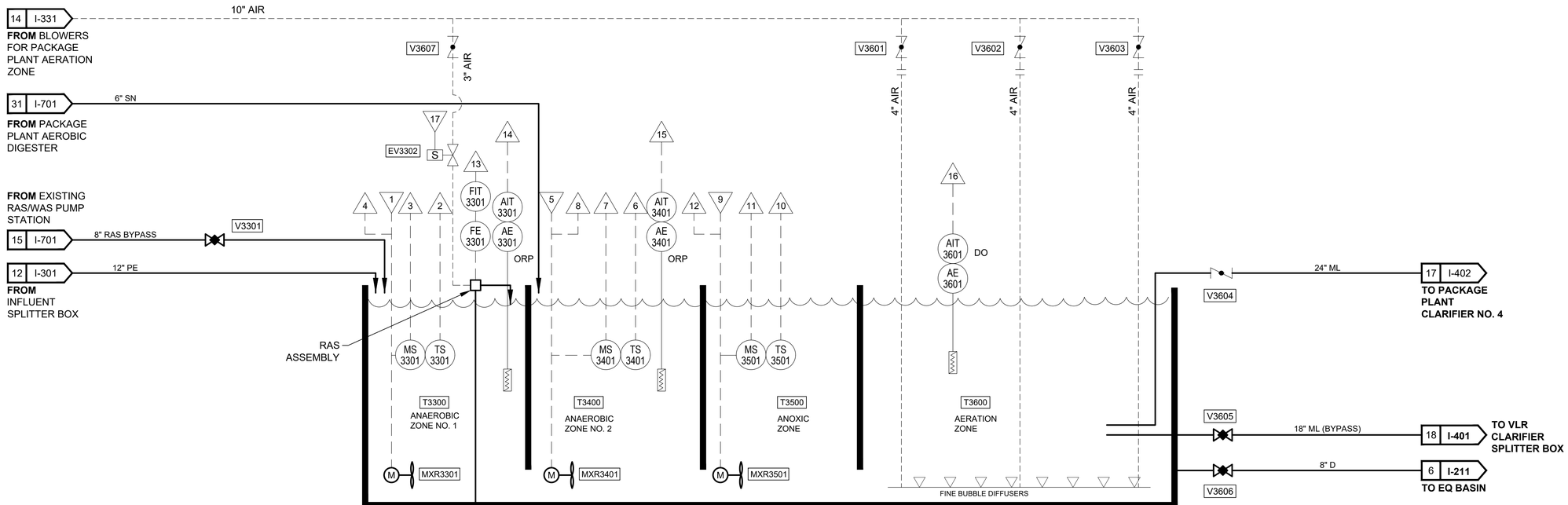
I-301

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NOTES:

1. CONTROLS SHOWN FOR MXR3301; CONTROLS FOR MXR3302 & MXR3303 ARE THE SAME.



T3300
PACKAGE PLANT
ANAEROBIC ZONE NO. 1
VOLUME: 0.031 MG

T3400
PACKAGE PLANT
ANAEROBIC ZONE NO. 4
VOLUME: 0.031 MG

T3500
PACKAGE PLANT
ANOXIC ZONE
VOLUME: 0.30 MG

T3600
PACKAGE PLANT
AERATION ZONE
VOLUME: 0.645 MG

MXR3301
ANAEROBIC ZONE
NO. 1 MIXER
SPEC: 46 53 54
HP: 2.5

MXR3401
ANAEROBIC ZONE
NO. 2 MIXER
SPEC: 46 53 54
HP: 2.5

MXR3501
ANOXIC ZONE MIXER
SPEC: 46 53 54
HP: 8.3

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000178 — Exp.06.30.2026 — NOT VALID UNLESS CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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PACKAGE PLANT
BIOLOGICAL
REACTORS

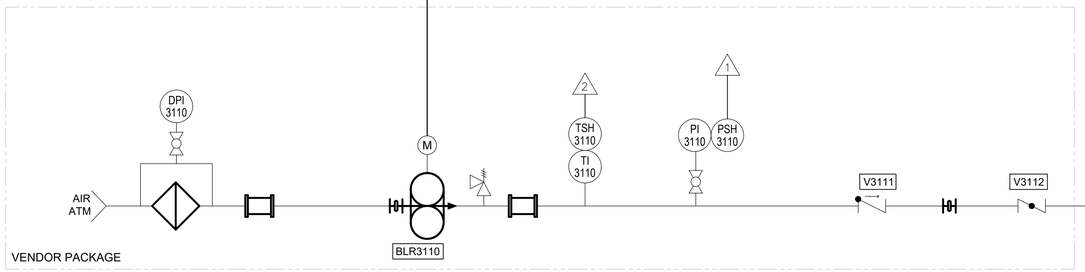
I-311

DRAWING FILE: C:\Users\lwang\DCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
PLOTTED: Apr 17, 2026 - 2:31pm

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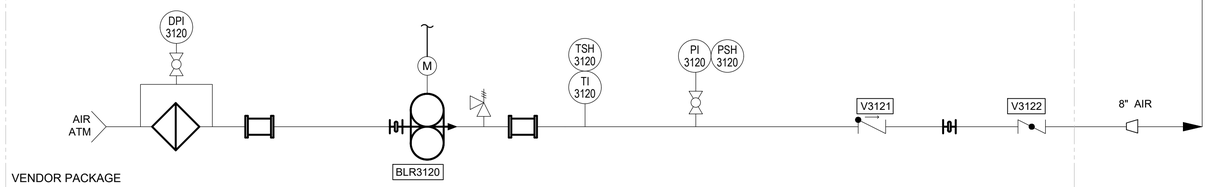
BLOWER NO. 1 FOR PACKAGE PLANT AERATION ZONE





10" AIR

14 | I-311
TO PACKAGE PLANT AERATION ZONE



NOTES:

1. CONTROLS SHOWN FOR BLR3110; CONTROLS FOR BLR3120 ARE THE SAME.

◇1 INTERLOCK BLOWERS WITH PACKAGE PLANT AERATION ZONE DO PROBE FOR SPEED CONTROL IN AUTO. BLOWER SPEED CONTROLLED BY OPERATOR SPEED SELECTION IN MANUAL MODE

BLR3110

BLOWER NO. 1 FOR PACKAGE PLANT AERATION ZONE
SPEC: 43 53 54
CAPACITY: 1,699 SCFM
DISCHARGE PRESSURE: 8.0 PSIG
HP: 100

BLR3120

BLOWER NO. 2 FOR PACKAGE PLANT AERATION ZONE
SPEC: 43 53 54
CAPACITY: 1,699 SCFM
DISCHARGE PRESSURE: 8.0 PSIG
HP: 100

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

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GOODWYN MILLS CAWOOD, LLC
GA.PEOO7.1886
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

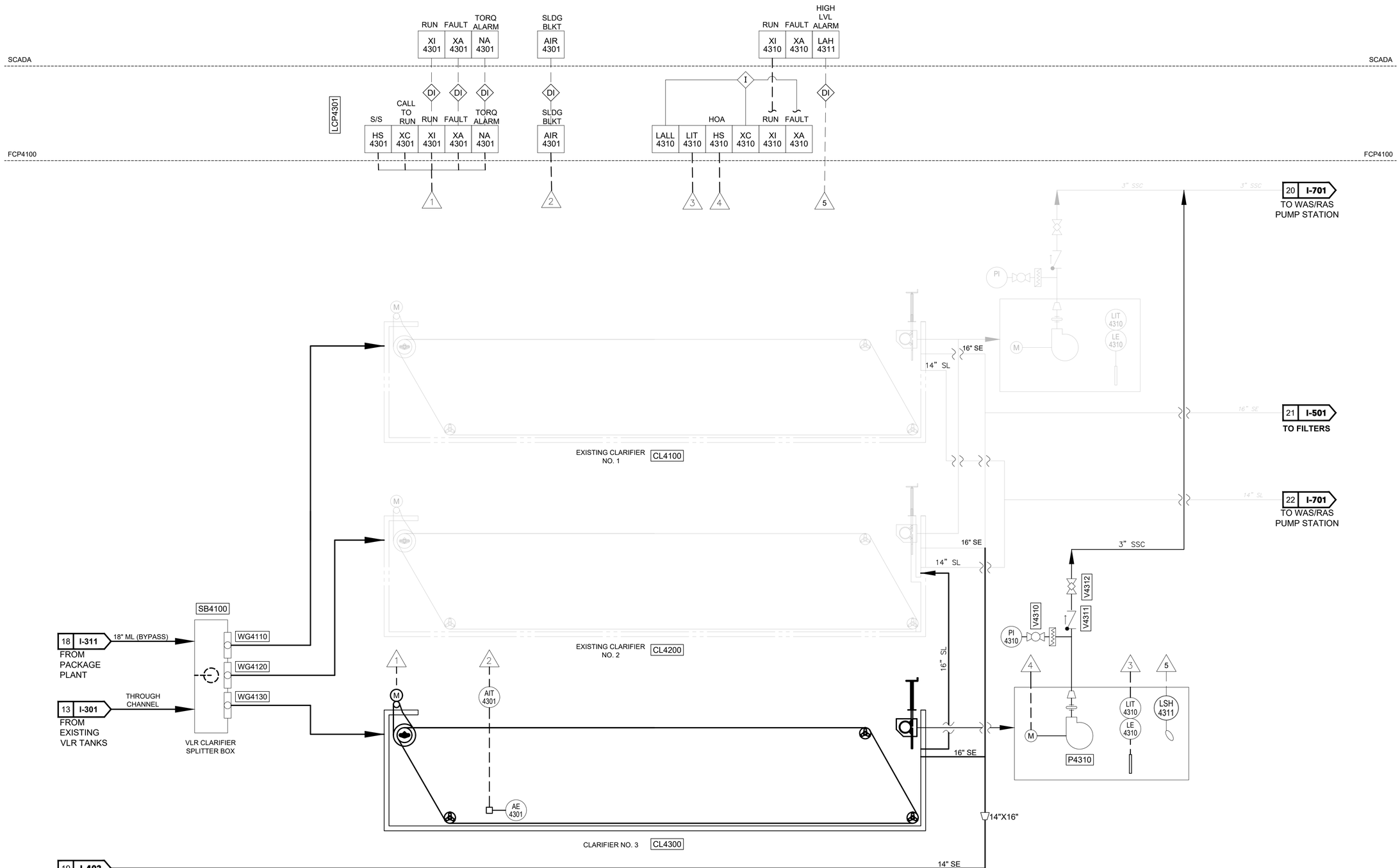
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BLOWERS FOR PACKAGE PLANT AERATION ZONE

I-331

DRAWING FILE: C:\Users\lsmith\DOACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
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CL4100
EXISTING SECONDARY CLARIFIER NO.1
LENGTH X WIDTH: 50 FT X 25 FT

CL4200
EXISTING SECONDARY CLARIFIER NO.2
LENGTH X WIDTH: 50 FT X 25 FT

CL4300
SECONDARY CLARIFIER NO.3
SPEC: 46 43 21
LENGTH X WIDTH: 50 FT X 25 FT
HP: 0.5

P4310
SCUM PUMP
SPEC: 43 25 13
CAPACITY: 130 GPM
TDH: 18 FT
HP: 1.0

GMC
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Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — NA.PE000718 — Exp.06.30.2026 — NOT VALID WITHOUT AN ORIGINAL SEAL — CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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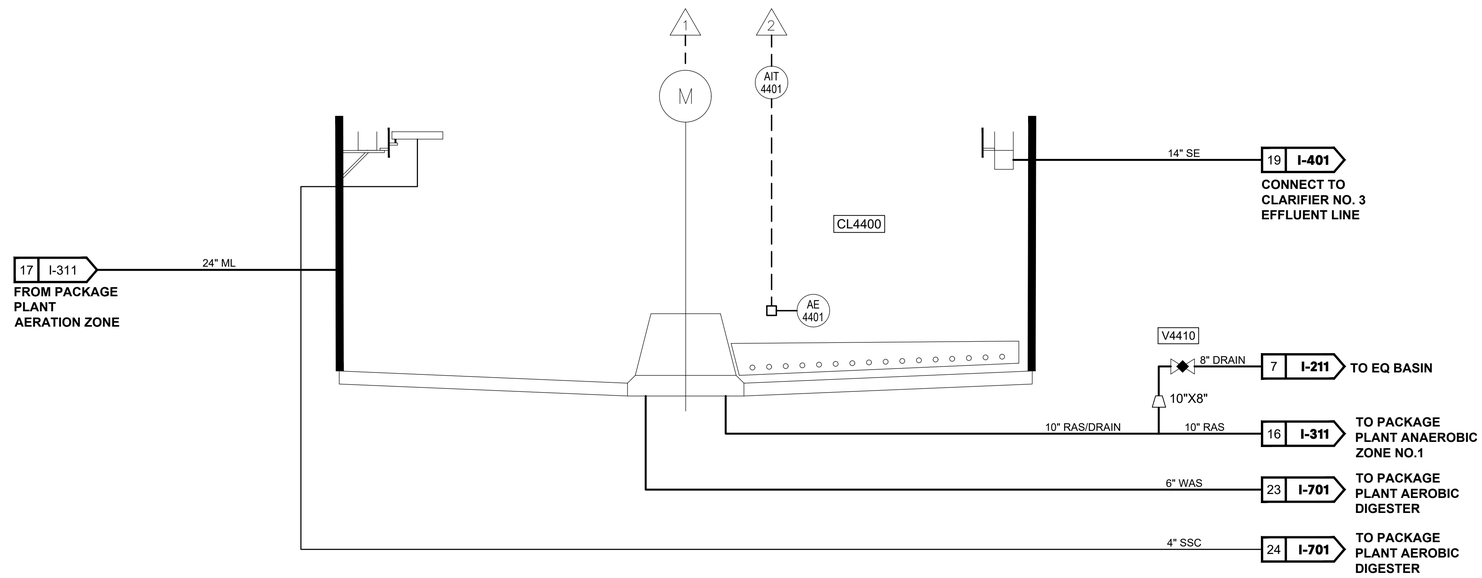
CLARIFIERS

I-401

DRAWING FILE: C:\Users\tsmith\DCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
PLOTTED: Apr 17, 2026 - 8:33am

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CL4400

PACKAGE PLANT CLARIFIER NO. 4
SPEC: 46 43 21
DIA: 56.5 FT.
H.P.: 0.5

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE000178
Exp.06.30.2026
NOT VALID WITHOUT ORIGINAL SIGNATURE
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE	
60% Submittal	02.16.2026	MP
90% Submittal	04.17.2026	LW
Bid Set		LW
Conformed Set		LS

Project Manager:
Engineer:
Designer:
Drawn By:

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

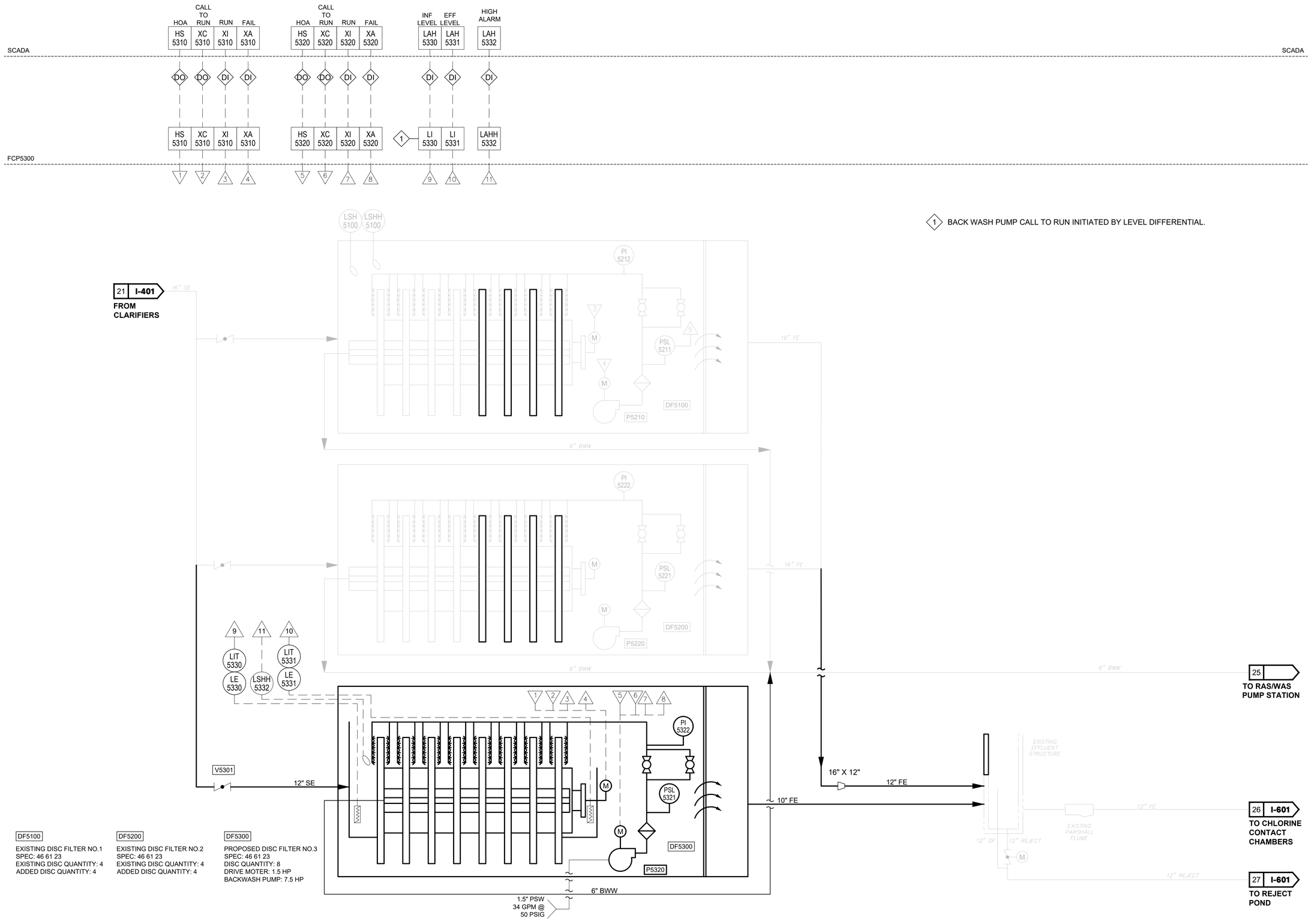
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PACKAGE PLANT
CLARIFIER NO. 4

I-402

DRAWING FILE: C:\Users\lsmith\DOACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
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DF5100
EXISTING DISC FILTER NO.1
SPEC: 46 61 23
EXISTING DISC QUANTITY: 4
ADDED DISC QUANTITY: 4

DF5200
EXISTING DISC FILTER NO.2
SPEC: 46 61 23
EXISTING DISC QUANTITY: 4
ADDED DISC QUANTITY: 4

DF5300
PROPOSED DISC FILTER NO.3
SPEC: 46 61 23
DISC QUANTITY: 8
DRIVE MOTER: 1.5 HP
BACKWASH PUMP: 7.5 HP

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NA.PE007186
Exp.06.30.2026
NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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FILTERS & EFFLUENT STRUCTURE

I-501

DRAWING FILE: C:\Users\lwang\DOCACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
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SCADA

SCADA

pH
AIR 6001

RESIDUAL CHLORINE
AIR 6002

AI

AI

1

2

1

2

AIT 6001

AIT 6002

AE 6001

AE 6002

28 I-801
HOCL FROM CHEM FEED

V8250

V8251

1/2" HOCL

26 I-501
FROM EXISTING EFFLUENT STRUCTURE

12" FE

12" FNE

V6001

6" DRAIN

CHLORINE CONTACT CHAMBER CCC6100

EXISTING REUSE POND

V6002

10" FNE

FOR FUTURE DIRECT DISCHARGE

10" RUW

29
REUSE WATER PUMP TO REYNOLDS GOLF COURSE PONDS

EXISTING REUSE PUMP STATION

27 I-501
FROM EXISTING EFFLUENT STRUCTURE

12" REJECT

EXISTING REJECT POND NO. 1

12" CONNECTION PIPE

PROPOSED REJECT POND NO. 2

T6200

6" DRAIN FM

10 I-301
TO INFLUENT SPLITTER BOX

EXISTING PLANT DRAIN PUMP STATION

CCC6100
CHLORINE CONTACT CHAMBER
VOLUME: 21,900 GALLON

T6200
REJECT POND NO. 2
VOLUME: 1,500,000 GALLON

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801 Broad Street, Suite 900
Augusta, GA 30901
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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE000178SG
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

CHLORINE CONTACT CHAMBER, PONDS & REUSE, & REJECT PS

I-601

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DIGESTER LEVEL
LI 7101 | LAH 7101

DO TEMP FAULT
AIR 7101 | TIR 7101 | XA 7101

WAS FLOW
FIR 7010 | FQIR 7010

CALL TO OPEN
XC 7010

CALL TO OPEN
XC 7011

CALL TO OPEN
XC 7012

SCADA (LCP1000) — SCADA (LCP1000)

PLC — MCC-B

AI AI DI AI DI DI DI

LI 7101 | LAH 7101 — XC 7010 — XC 7011 — XC 7012

1 2 3 4 5 6 7 8 9

24 I-402 4" SSC
FROM PACKAGE PLANT CLARIFIER NO. 4

30 I-711 12" AIR
FROM BLOWERS FOR PACKAGE PLANT AEROBIC DIGESTER

12" AIR

2" AIR | 6" AIR | 6" AIR | 6" AIR | 6" AIR | 6" AIR | 6" AIR | 6" AIR | 5 4 3 | 2" AIR | 2" AIR

V7101 | V7102 | V7103 | V7104 | V7105 | V7106 | V7107 | V7108 | V7109 | V7110

7 — EV7010 — S

6 — FIT 7010 — ES 120/1

FE 7010

WAS ASSEMBLY

8" WAS BYPASS

V7007

1 2 — DO TEMP — EV7011 — S — 8

AIT 7101 — AE 7101

LIT 7101 — LSH 7101 — LE 7101

9 — S — EV7012

4" SSC

SCUM REMOVAL UNIT

SUPERNATANT DECANT AIRLIFT ASSEMBLY

PACKAGE PLANT AEROBIC DIGESTER
T7200

COARSE BUBBLE DIFFUSERS

6" SN — 31 I-311 — TO PACKAGE PLANT ANAEROBIC ZONE NO.2

8" DRAIN — V7008 — 8 I-211 — TO EQ BASIN

4" DS — V7009 — TO SLUDGE TRUCK

23 I-402 — FROM PACKAGE PLANT CLARIFIER NO. 4

6" WAS

8" WAS BYPASS

8" RAS/WAS — 8" RAS — V7004 — 1" D — V7003 — 8" RAS — 11 I-301 — TO VLR BASINS

8" WAS — V7005 — 8" WAS — TO VLR PROCESS TRAIN AEROBIC DIGESTER

8" RAS/WAS BYPASS — V7006 — 8" RAS BYPASS — 15 I-311 — TO PACKAGE PLANT ANAEROBIC ZONE NO. 1

20 I-401 3" SSC — FROM VLR CLARIFIERS

22 I-401 14" SL — FROM VLR CLARIFIERS

EXISTING RAS/WAS PUMP STATION

T7200
PACKAGE PLANT AEROBIC DIGESTER
VOLUME: 0.60 MG
SWD: 15'

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

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GOODWYN MILLS CAWOOD, LLC
GA PE000718RA
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

PACKAGE PLANT
AEROBIC DIGESTER

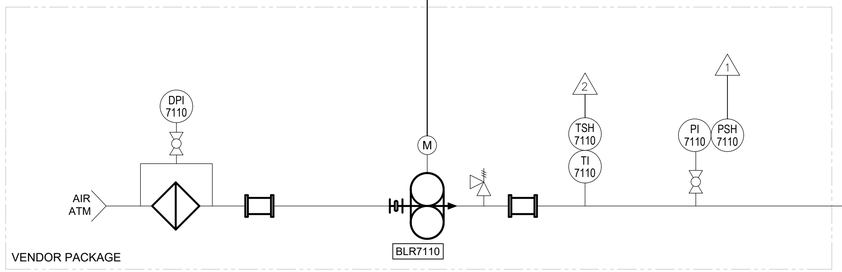
I-701

DRAWING FILE: C:\Users\lwang\DOCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
PLOTTED: Apr 17, 2026 - 2:34pm

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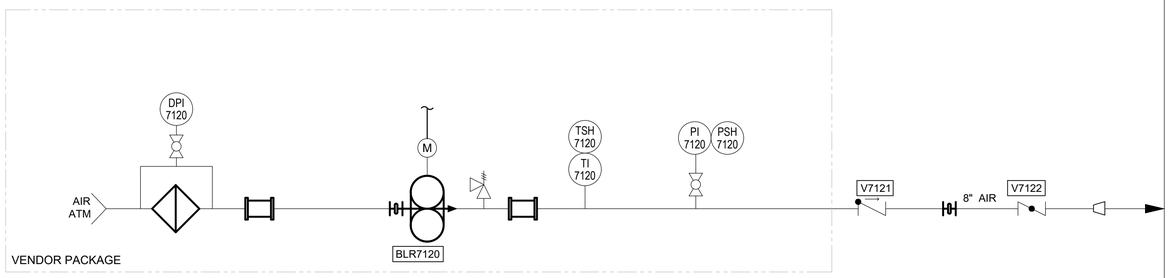
BLOWER NO. 1 FOR PACKAGE PLANT AEROBIC DIGESTER



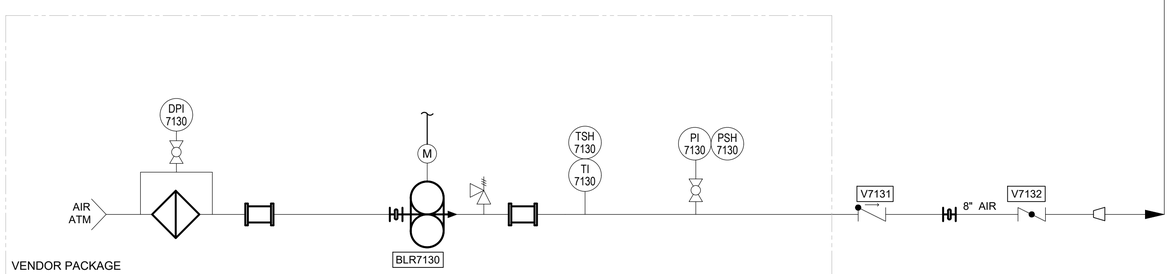


V7111 — 8" AIR — V7112 — 12" AIR

30 **I-701**
TO PACKAGE PLANT AEROBIC DIGESTER



V7121 — 8" AIR — V7122



V7131 — 8" AIR — V7132

NOTES:

1. CONTROLS SHOWN FOR BLR7110; CONTROLS FOR BLR7120 & BLR7130 ARE THE SAME.

(1) INTERLOCK BLOWERS WITH PACKAGE PLANT DIGESTER DO PROBES FOR SPEED CONTROL IN AUTO. BLOWER SPEED CONTROLLED BY OPERATOR SPEED SELECTION IN MANUAL MODE

BLR7110

BLOWER NO.1 FOR PACKAGE PLANT
AEROBIC DIGESTER
SPEC: 43 53 54
CAPACITY: 1,289 SCFM
DISCHARGE PRESSURE: 7.0 PSIG
HP: 60

BLR7120

BLOWER NO.2 FOR PACKAGE PLANT
AEROBIC DIGESTER
SPEC: 43 53 54
CAPACITY: 1,289 SCFM
DISCHARGE PRESSURE: 7.0 PSIG
HP: 60

BLR7130

BLOWER NO.3 FOR PACKAGE PLANT
AEROBIC DIGESTER
SPEC: 43 53 54
CAPACITY: 1,289 SCFM
DISCHARGE PRESSURE: 7.0 PSIG
HP: 60

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Augusta, GA 30901
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GOODWYN MILLS CAWOOD, LLC
No. PEO007486
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

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BLOWERS FOR
PACKAGE PLANT
AEROBIC DIGESTER

I-711

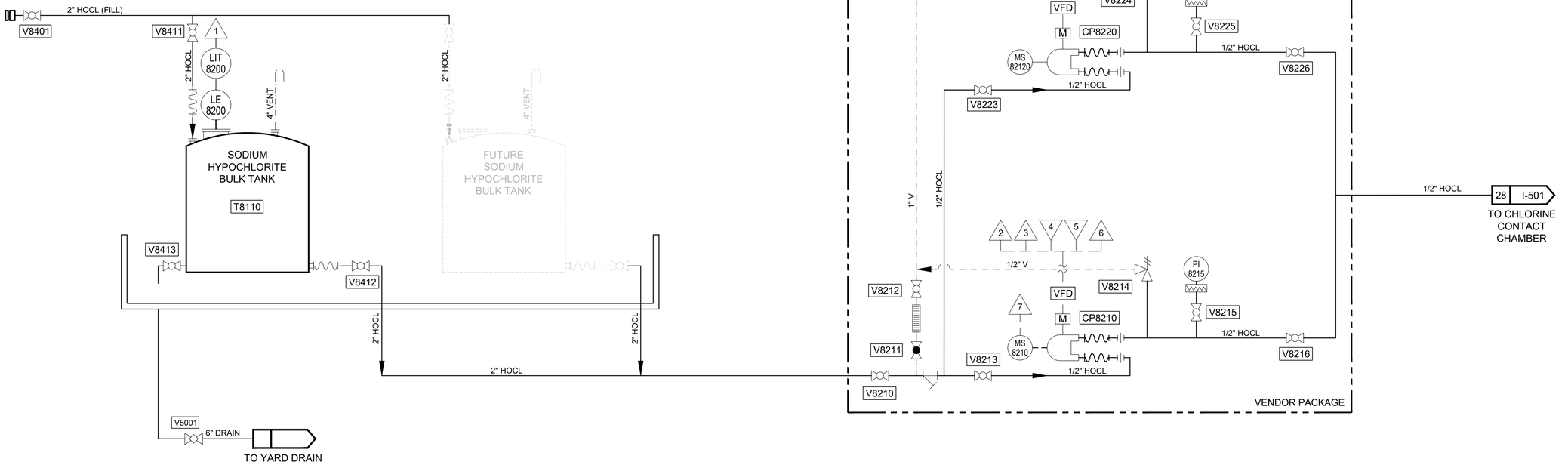
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NOTES:

1. CONTROLS SHOWN FOR CP8210; CONTROLS FOR CP8220 ARE THE SAME.



T8110
SODIUM HYPOCHLORITE TANK NO. 1
SPEC: 43 41 46
VOLUME: 2000 GAL

CP8210
HYPOCHLORITE FEED PUMP NO. 1
SPEC: 46 33 41
CAPACITY: 0.05 - 15.00 GPH
MAX BACK PRESSURE: 22 PSI

CP8220
HYPOCHLORITE FEED PUMP NO. 2
SPEC: 46 33 41
CAPACITY: 0.05 - 15.00 GPH
MAX BACK PRESSURE: 80 PSI

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NA.PE000718.RBS
Exp.06.30.2026
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CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

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Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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CHEMICAL FEED
SODIUM
HYPOCHLORITE

I-801

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TAG	SERVICE DESCRIPTION	DEVICE TYPE	DEVICE OUTPUT TYPE	RANGE / SETPOINT	SUPPLIED BY	P&ID	POWER TYPE	SERVICE	SPEC. SECTION	NOTES
LSH1000	INFLUENT CHANNEL LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	CONTRACTOR	I-101	120 VAC	RWW	40 72 76	
LE1010A	MECHANICAL SCREEN UPSTREAM LEVEL	ULTRASONIC LEVEL TRANSDUCER	ANALOG	0-6 FT	EQUIPMENT VENDOR	I-101	120 VAC	RWW	46 21 15	
LE1010B	MECHANICAL SCREEN DOWNSTREAM LEVEL	ULTRASONIC LEVEL TRANSDUCER	ANALOG	0-6 FT	EQUIPMENT VENDOR	I-101	120 VAC	RWW	46 21 15	
PI1011	MECHANICAL SCREEN WASH WATER PRESSURE INDICATOR	PRESSURE GAUGE	N/A	0-100 PSIG	CONTRACTOR	I-101	N/A	NPW	40 73 13	
PI1012	SCREENINGS WASHER/COMPACTOR WASH WATER PRESSURE INDICATOR	PRESSURE GAUGE	N/A	0-100 PSIG	CONTRACTOR	I-101	N/A	NPW	40 73 13	
AE/AIT1209	INFLUENT pH MEASUREMENT	pH	ANALOG	0-14	CONTRACTOR	I-102	120 VAC	RWW	40 75 13	
FE1210	FLOW MEASUREMENT	PARSHALL FLUME	N/A	0-10.4 MGD	CONTRACTOR	I-102	N/A	RWW	40 71 69	THROAT SIZE: 12 INCH
LE/FIT1210	PARSHALL FLUME LEVEL/FLOW INDICATOR	ULTRASONIC LEVEL TRANSMITTER	ANALOG	0-8.32 MGD	CONTRACTOR	I-102	120 VAC	RWW	40 72 13	
LSL2100	EQ BASIN LOW LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	CONTRACTOR	I-211	120 VAC	PE	40 72 76	
LSH2100	EQ BASIN HIGH LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	CONTRACTOR	I-211	120 VAC	PE	40 72 76	
LE/LIT2010	INFLUENT PUMP STATION WETWELL LEVEL TRANSMITTER	SUBMERSIBLE LEVEL TRANSMITTER	ANALOG	0-10 FT	EQUIPMENT VENDOR	I-211	120 VAC	PE	40 72 43	
LSL2010	INFLUENT PUMP STATION LOW LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	EQUIPMENT VENDOR	I-211	120 VAC	PE	40 72 76	
LSH2010	INFLUENT PUMP STATION HIGH LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	EQUIPMENT VENDOR	I-211	120 VAC	PE	40 72 76	
PI2010	INFLUENT PUMP NO. 1 DISCHARGE PRESSURE	PRESSURE GAUGE	-	0-100 PSIG	CONTRACTOR	I-211	-	PE	40 73 13	ANNULAR SEAL
MS2010	INFLUENT PUMP NO. 1 MOISTURE SWITCH	MOISTURE SWITCH	-	-	EQUIPMENT VENDOR	I-211	--	PE	43 25 13	
TSH2010	INFLUENT PUMP NO. 1 TEMPERATURE SWITCH	TEMPERATURE SWITCH	-	-	EQUIPMENT VENDOR	I-211	-	PE	43 25 13	
PI2020	INFLUENT PUMP NO. 2 DISCHARGE PRESSURE	PRESSURE GAUGE	-	0-100 PSIG	CONTRACTOR	I-211	-	PE	40 73 13	ANNULAR SEAL
MS2020	INFLUENT PUMP NO. 2 MOISTURE SWITCH	MOISTURE SWITCH	-	-	EQUIPMENT VENDOR	I-211	-	PE	43 25 13	
TSH2020	INFLUENT PUMP NO. 2 TEMPERATURE SWITCH	TEMPERATURE SWITCH	-	-	EQUIPMENT VENDOR	I-211	-	PE	43 25 13	
FE/FIT2230	INFLUENT PUMP STATION DISCHARGE FLOW METER	MAGNETIC FLOW METER	ANALOG	0-8.32 MGD	CONTRACTOR	I-211	-	PE	40 71 13	
MS3301	ANAEROBIC ZONE NO. 1 MIXER MOISTURE SWITCH	MOISTURE SWITCH	-	-	EQUIPMENT VENDOR	I-311	-	ML	46 51 16	
TS3301	ANAEROBIC ZONE NO. 1 MIXER TEMPERATURE SWITCH	TEMPERATURE SWITCH	-	-	EQUIPMENT VENDOR	I-311	-	ML	46 51 16	
FE/FIT3301	RETURN ACTIVATED SLUDGE DISCHARGE FLOW METER	MAGNETIC FLOW METER	ANALOG	0-4 MGD	CONTRACTOR	I-311	-	RAS	40 71 13	
AE/AIT3301	ANAEROBIC ZONE NO. 1 ORP MEASUREMENT	TRANSMITTER AND ORP PROBE	ANALOG	0-10 PPM/-1500-1500 MV	CONTRACTOR	I-311	-	ML	40 75 13	
MS3401	ANAEROBIC ZONE NO. 2 MIXER MOISTURE SWITCH	MOISTURE SWITCH	-	-	EQUIPMENT VENDOR	I-311	-	ML	46 51 16	
TS3401	ANAEROBIC ZONE NO. 2 MIXER TEMPERATURE SWITCH	TEMPERATURE SWITCH	-	-	EQUIPMENT VENDOR	I-311	-	ML	46 51 16	
AE/AIT3401	ANAEROBIC ZONE NO. 2 ORP MEASUREMENT	TRANSMITTER AND ORP PROBE	ANALOG	0-10 PPM/-1500-1500 MV	CONTRACTOR	I-311	-	ML	40 75 13	
MS3501	ANOXIC ZONE MIXER MOISTURE SWITCH	MOISTURE SWITCH	-	-	EQUIPMENT VENDOR	I-311	-	ML	46 51 16	
TS3501	ANOXIC ZONE MIXER TEMPERATURE SWITCH	TEMPERATURE SWITCH	-	-	EQUIPMENT VENDOR	I-311	-	ML	46 51 16	
AE/AIT3601	AERATION ZONE DISSOLVED OXYGEN	TRANSMITTER AND DO PROBE	ANALOG	0-20 MG/L	CONTRACTOR	I-311	120 VAC	ML	40 75 43	
PSH3110	PACKAGE PLANT AERATION ZONE BLOWER NO. 1 HIGH PRESSURE CUTOUT	PRESSURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-331	-	A	46 53 54	
TI/TSH3110	PACKAGE PLANT AERATION ZONE BLOWER NO. 1 DISCHARGE TEMPERATURE SENSOR	HIGH TEMPERATURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-331	-	A	46 53 54	
PI3110	PACKAGE PLANT AERATION ZONE BLOWER NO. 1 DISCHARGE PRESSURE	PRESSURE GAUGE	-	-	CONTRACTOR	I-331	-	A	46 53 54	
PSH3120	PACKAGE PLANT AERATION ZONE BLOWER NO. 2 HIGH PRESSURE CUTOUT	PRESSURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-331	-	A	46 53 54	
TI/TSH3120	PACKAGE PLANT AERATION ZONE BLOWER NO. 2 DISCHARGE TEMPERATURE SENSOR	HIGH TEMPERATURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-331	-	A	46 53 54	
PI3120	PACKAGE PLANT AERATION ZONE BLOWER NO. 2 DISCHARGE PRESSURE	PRESSURE GAUGE	-	-	CONTRACTOR	I-331	-	A	46 53 54	
AE/AIT4301	CLARIFIER NO. 3 SLUDGE BLANKET DEPTH	DOB METER	ANALOG	VENDOR RECOMMENDED	CONTRACTOR	I-401	120 VAC	ML	46 43 21	
PI4310	SCUM PUMP DISCHARGE PRESSURE	PRESSURE GAUGE	-	0-100 PSIG	CONTRACTOR	I-401	-	SSC	43 25 13	ANNULAR SEAL
LE/LIT4310	SCUM PIT LEVEL TRANSMITTER	SUBMERSIBLE LEVEL TRANSMITTER	ANALOG	0-10 FT	CONTRACTOR	1-401	120 VAC	SSC	40 72 43	
LSH4311	SCUM PIT HIGH LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	CONTRACTOR	I-401	120 VAC	SSC	40 72 76	
AE/AIT4401	PACKAGE PLANT CLARIFIER NO. 4 SLUDGE BLANKET DEPTH	DOB METER	ANALOG	VENDOR RECOMMENDED	CONTRACTOR	I-402	120 VAC	ML	46 43 21	
LE/LIT5330	FILTER INFLUENT CHAMBER SUBMERSIBLE LEVEL TRANSDUCER	SUBMERSIBLE LEVEL TRANSMITTER	ANALOG	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-501	120 VAC	ML	46 61 23	
LE/LIT5331	FILTER EFFLUENT CHAMBER SUBMERSIBLE LEVEL TRANSDUCER	SUBMERSIBLE LEVEL TRANSMITTER	ANALOG	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-501	120 VAC	FE	46 61 23	
LSHH5332	FILTER INFLUENT CHAMBER HIGH LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	EQUIPMENT VENDOR	I-501	N/A	ML	40 73 13	
AE/AIT6001	EFFLUENT PH MEASUREMENT	PH	ANALOG	0-14	CONTRACTOR	I-601	120 VAC	FNE	40 75 13	
AE/AIT6002	EFFLUENT RESIDUAL CHLORINE MEASUREMENT	CHLORINE MEASUREMENT	ANALOG	0-10 PPM	CONTRACTOR	I-601	120 VAC	FNE	40 75 33	
FE/FIT7010	WASTE ACTIVATED SLUDGE DISCHARGE FLOW METER	MAGNETIC FLOW METER	ANALOG	0-4 MGD	CONTRACTOR	I-701	-	WAS	40 71 13	
LE/LIT7101	PACKAGE PLANT AEROBIC DIGESTER LEVEL TRANSMITTER	SUBMERSIBLE LEVEL TRANSMITTER	ANALOG	0-25 FT	CONTRACTOR	I-701	120 VAC	WAS	40 72 43	
LSH7101	PACKAGE PLANT AEROBIC DIGESTER HIGH LEVEL SWITCH	LEVEL SWITCH	DIGITAL	-	CONTRACTOR	I-701	120 VAC	WAS	40 72 76	
AE/AIT7101	PACKAGE PLANT AEROBIC DIGESTER DISSOLVED OXYGEN	DISSOLVED OXYGEN PROBE	ANALOG	0-20 MG/L	CONTRACTOR	I-701	120 VAC	WAS	40 75 43	
TI/TSH7110	PACKAGE PLANT DIGESTER BLOWER NO. 1 DISCHARGE TEMPERATURE SENSOR	HIGH TEMPERATURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
PI7110	PACKAGE PLANT DIGESTER BLOWER NO. 1 DISCHARGE PRESSURE	PRESSURE GAUGE	-	-	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
PSH7110	PACKAGE PLANT DIGESTER BLOWER NO. 1 HIGH PRESSURE CUTOUT	PRESSURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
TI/TSH7120	PACKAGE PLANT DIGESTER BLOWER NO. 2 DISCHARGE TEMPERATURE SENSOR	HIGH TEMPERATURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
PI7120	PACKAGE PLANT DIGESTER BLOWER NO. 2 DISCHARGE PRESSURE	PRESSURE GAUGE	-	-	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
PSH7120	PACKAGE PLANT DIGESTER BLOWER NO. 2 HIGH PRESSURE CUTOUT	PRESSURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
TI/TSH7130	PACKAGE PLANT DIGESTER BLOWER NO. 3 DISCHARGE TEMPERATURE SENSOR	HIGH TEMPERATURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
PI7130	PACKAGE PLANT DIGESTER BLOWER NO. 3 DISCHARGE PRESSURE	PRESSURE GAUGE	-	-	EQUIPMENT VENDOR	I-711	-	A	46 53 54	

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1" 0" 5" 1"

ISSUE	DATE	
60% Submittal	02.16.2026	
90% Submittal	04.17.2026	
Bid Set		
Conformed Set		
Project Manager:		MP
Engineer:		LW
Designer:		LW
Drawn By:		LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

INSTRUMENTATION SCHEDULE

I-911

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PSH7130	PACKAGE PLANT DIGESTER BLOWER NO. 3 HIGH PRESSURE CUTOUT	PRESSURE SWITCH	DIGITAL	VENDOR RECOMMENDED	EQUIPMENT VENDOR	I-711	-	A	46 53 54	
LE/LIT8200	CHEMICAL TANK LEVEL/FLOW INDICATOR	ULTRASONIC LEVEL TRANSMITTER	ANALOG	0-10 FT	CONTRACTOR	I-801	120 VAC	HOCL	40 72 13	
PI8215	HYPOCHLORINE FEED PUMP NO. 1 DISCHARGE PRESSURE	PRESSURE GAUGE	N/A	0-100 PSIG	EQUIPMENT VENDOR	I-801	N/A	HOCL	40 73 13	
PI8225	HYPOCHLORINE FEED PUMP NO. 2 DISCHARGE PRESSURE	PRESSURE GAUGE	N/A	0-100 PSIG	EQUIPMENT VENDOR	I-801	N/A	HOCL	40 73 13	
MS8210	HYPOCHLORINE FEED PUMP NO. 1 TUBING RUPTURE DETECTOR	TUBING RUPTURE DETECTOR SENSOR	ANALOG		EQUIPMENT VENDOR	I-801	120 VAC	HOCL	46 33 41	
MS8220	HYPOCHLORINE FEED PUMP NO. 2 TUBING RUPTURE DETECTOR	TUBING RUPTURE DETECTOR SENSOR	ANALOG		EQUIPMENT VENDOR	I-801	121 VAC	HOCL	46 33 41	

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE000178386
Exp.06.30.2026
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1" 0" 5" 1"

ISSUE	DATE	
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90% Submittal	04.17.2026	LW
Bid Set		LW
Conformed Set		LS

Project Manager: MP
Engineer: LW
Designer: LW
Drawn By: LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

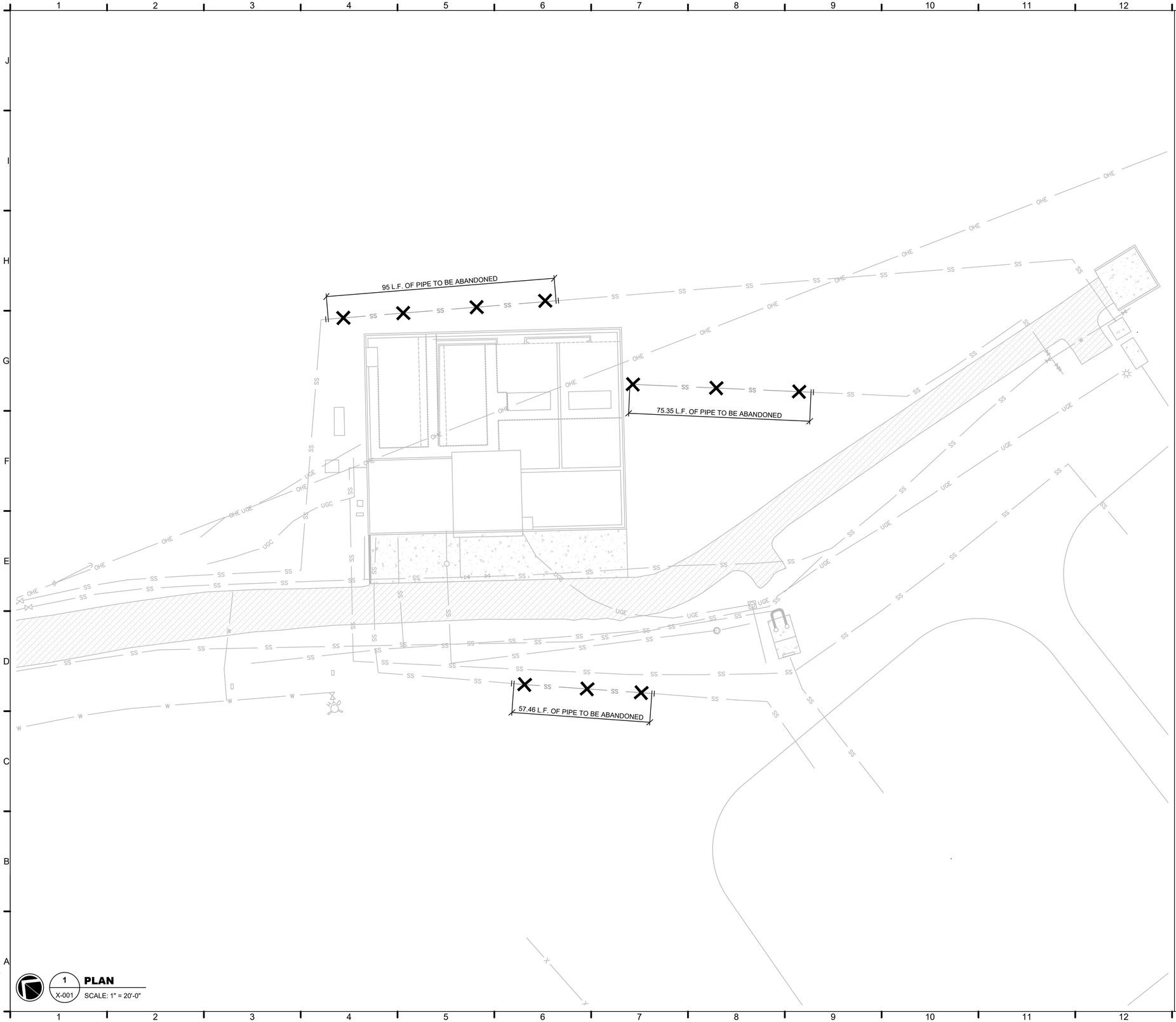
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INSTRUMENTATION
SCHEDULE

I-912

DRAWING FILE: C:\Users\lsmith\DCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\02 Instrumentation\Instrumentation Treatment.dwg
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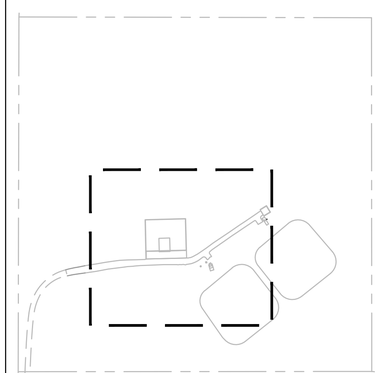
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1 X-001 **PLAN**
SCALE: 1" = 20'-0"

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL SUBMIT A DEMOLITION/DECONSTRUCTION PLAN TO BE APPROVED BY THE ENGINEER.
2. BEFORE STARTING DEMOLITION, THE CONTRACTOR MUST CHECK TO DETERMINE THAT ALL UTILITY SERVICES, SUCH AS WATER, GAS, ELECTRICITY, TELEPHONE, ETC. ARE DISCONNECTED AT THE SERVICE MAIN, IN ACCORDANCE WITH THE RULES AND REGULATIONS GOVERNING THE UTILITY INVOLVED.
3. CONTRACTOR SHALL PROVIDE SAFEGUARDS, INCLUDING WARNING SIGNS, BARRICADES, TEMPORARY FENCES, WARNING LIGHTS AND OTHER ITEMS THAT ARE REQUIRED FOR PROTECTION OF ALL PERSONNEL DURING DEMOLITION AND REMOVAL OPERATIONS.
4. ACCEPTABLE METHODS FOR DEMOLITION SHALL BE APPROVED BY THE ENGINEER. HAND DISMANTLING, PNEUMATIC AND HYDRAULIC BREAKERS, SAW CUTTING, MECHANICAL BREAKING, WATER JETTING, AND THERMAL LANCING ARE ACCEPTABLE. THE USE OF CHEMICALS AND EXPLOSIVES ARE NOT ACCEPTABLE.
5. ANY DAMAGE TO SURROUNDING EQUIPMENT, STRUCTURES, UTILITIES OR ADJACENT ITEMS SHALL BE RESTORED TO THE ENTITIES ORIGINAL CONDITION AT NO COST TO THE OWNER.
6. BEFORE CUTTING, EXAMINE THE SURFACES TO BE CUT AND PATCHED AND THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. IF UNSAFE OR OTHERWISE UNSATISFACTORY CONDITIONS ARE ENCOUNTERED, TAKE CORRECTIVE ACTION BEFORE PROCEEDING WITH THE WORK.
7. USE METHODS THAT ARE LEAST LIKELY TO DAMAGE WORK TO BE RETAINED OR ADJOINING WORK. IN GENERAL, WHERE CUTTING IS REQUIRED USE HAND OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING, NOT HAMMERING AND CHOPPING. CUT THROUGH CONCRETE AND MASONRY USING A CUTTING MACHINE SUCH AS A CARBORUNDUM SAW OR CORE DRILL TO INSURE A NEAT HOLE. CUT HOLES AND SLOTS NEATLY TO SIZE REQUIRED WITH MINIMUM DISTURBANCE OF ADJACENT WORK. TO AVOID MARRING EXISTING FINISHED SURFACES, CUT OR DRILL FROM THE EXPOSED OR FINISHED SIDE INTO CONCEALED SURFACES. TEMPORARILY COVER OPENINGS WHEN NOT IN USE.
8. RESTORE EXPOSED FINISHES OF PATCHED AREAS AND WHERE NECESSARY EXTEND FINISH RESTORATION INTO RETAINED ADJOINING WORK IN A MANNER WHICH WILL ELIMINATE EVIDENCE OF PATCHING AND REFINISHING.
9. SECURELY SEAL AND OR PLUG ALL STORM AND SANITARY SEWERS LEADING FROM THE STRUCTURE TO BE DEMOLISHED.
10. DEMOLISH STRUCTURES IN SUCH A MANNER AS TO AVOID HAZARDS TO PERSONS AND PROPERTY INTERFERENCE WITH THE USE OF ADJACENT BUILDINGS, AND INTERRUPTION OF FREE PASSAGE TO AND FROM SUCH BUILDINGS.
11. PROMPTLY DISPOSE OF DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM BUILDING SITE DEMOLITION OPERATIONS. NO BURNING IS ALLOWED. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE PROJECT SITE AND LEGALLY DISPOSED OF IN AN EPA AND OWNER-APPROVED LANDFILL OR RECYCLING FACILITY. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.



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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NA.PE000718.RBS
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE	
60% Submittal	02.16.2026	
90% Submittal	04.17.2026	
Bid Set		
Conformed Set		
Project Manager:		MP
Engineer:		LW
Designer:		LW
Drawn By:		LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

DEMOLITION - SITE PLAN

X-001

DRAWING FILE: C:\Users\lsmith\DOCACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\03 Demolition\X-001.dwg
PLOTTED: Apr 17, 2026 - 8:34am

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BORE LOCATIONS		
#	NORTHING	EASTING
B-001	106299.9523	27440.6847
B-002	106306.3325	27428.0386
B-003	106296.5123	27423.0189
B-004	106300.4410	27435.9960
B-005	106290.9964	27441.8239
B-006	106283.0423	27475.3450
B-007	106276.7562	27467.5678
B-008	106277.5982	27479.7452
B-009	106271.3121	27471.9680
B-010	106287.6403	27431.0218
B-011	106303.0763	27448.1044

150.00'± SETBACK FROM PROPERTY LINE

PROJECT LIMITS 8.6 AC. (TYP.)

1.5 MG REJECT POND

B-006

B-008

PACKAGE PLANT

AERATION

DIGESTER

B-011

ANOXIC

ANAEROBIC 2

ANAEROBIC 1

150.00'± SETBACK FROM PROPERTY LINE

EQ BASIN

CLARIFIER SPLITTER BOX & CLARIFIER

B-001

B-004

PACKAGE PLANT BLOWERS

DEWATERING PAD

EX. DRAIN PUMP STA. & VAULT

B-007

B-009

PROJECT LIMITS 8.6 AC. (TYP.)

VERTICAL LOOP REACTOR FACILITY

B-005

B-002

DISC FILTERS

GEN.

CONC.

WALL

ELEC. MH RM 503.51

CONTROL PANEL

REUSE PUMP STATION

1.5 MG REJECT POND

150.00'± SETBACK FROM PROPERTY LINE

B-003

INFLUENT PUMP STATION

B-010

CHEM STORAGE TANK & PUMP RM

CHLORINE CONTACT CHAMBER

HEADWORKS

1.5 MG REUSE POND

PROJECT LIMITS 8.6 AC. (TYP.)

150.00'± SETBACK FROM PROPERTY LINE

1 B-001 **PLAN**

SCALE: 1" = 40'-0"

GMC

801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE
GOODWYN MILLS CAWOOD, LLC
NA.PE000746
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

GEOTECHNICAL EXPLORATION - SITE PLAN

B-001

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DRAWING FILE: C:\Users\tsmith\DOCS\Docs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\04 Geotechnical\B-001.dwg
PLOTTED: Apr 17, 2026 - 8:34am

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

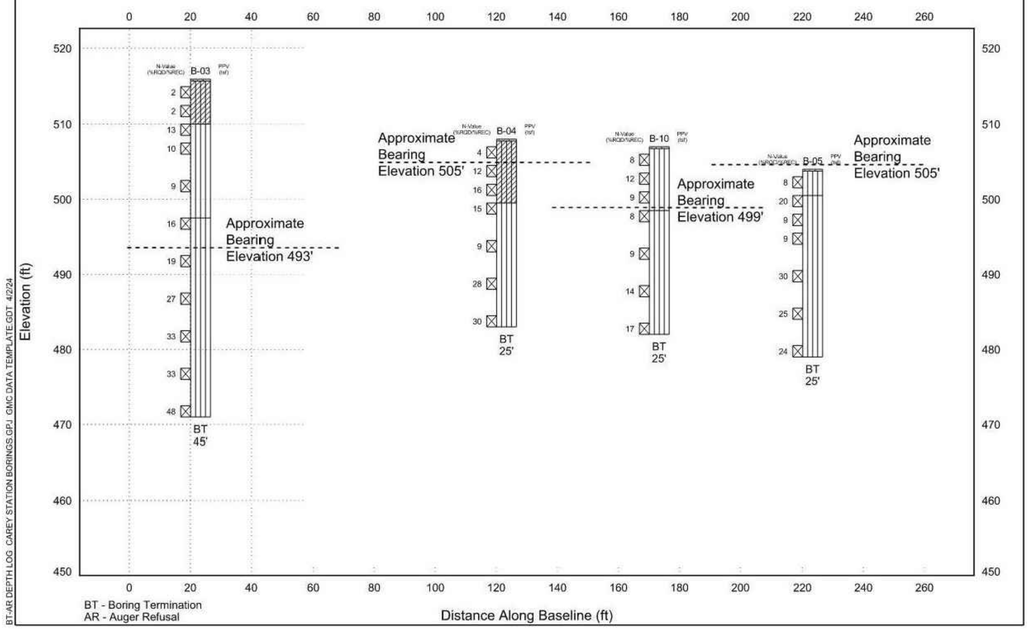
NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

GMC

TOPSOIL ML-CL ML

CLIENT Piedmont Water Company **PROJECT NAME** Carey Station Water Reuse Facility

PROJECT NUMBER GAUG230004 **PROJECT LOCATION** Greensboro, Georgia



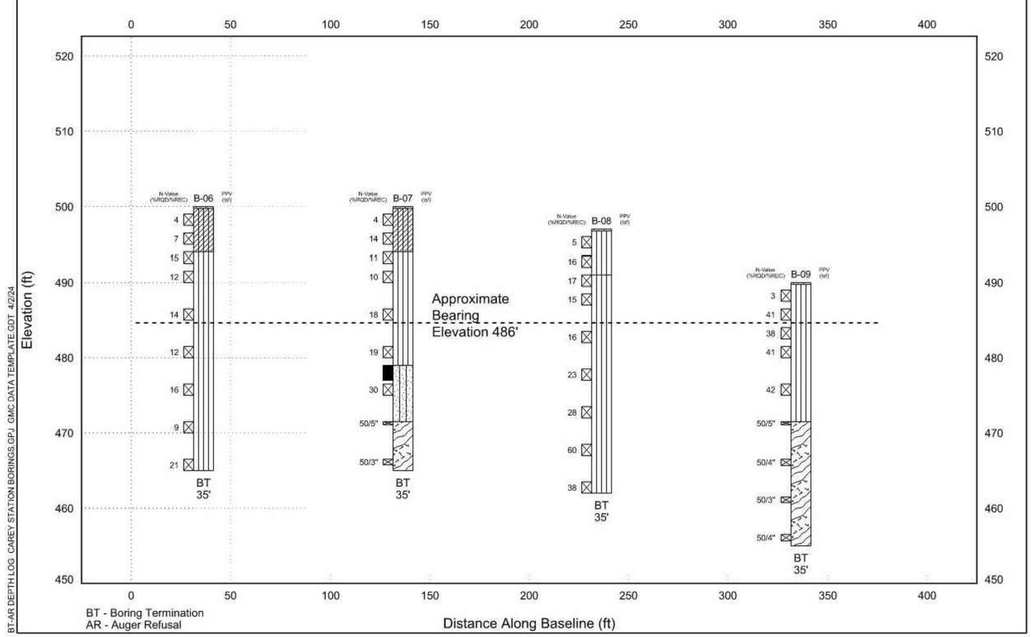
BT-AR DEPTH LOG_CAREY STATION BORINGS.GPJ_GMC DATA TEMPLATE.GDT 4/2/24

GMC

TOPSOIL ML-CL ML SM GNEISS

CLIENT Piedmont Water Company **PROJECT NAME** Carey Station Water Reuse Facility

PROJECT NUMBER GAUG230004 **PROJECT LOCATION** Greensboro, Georgia



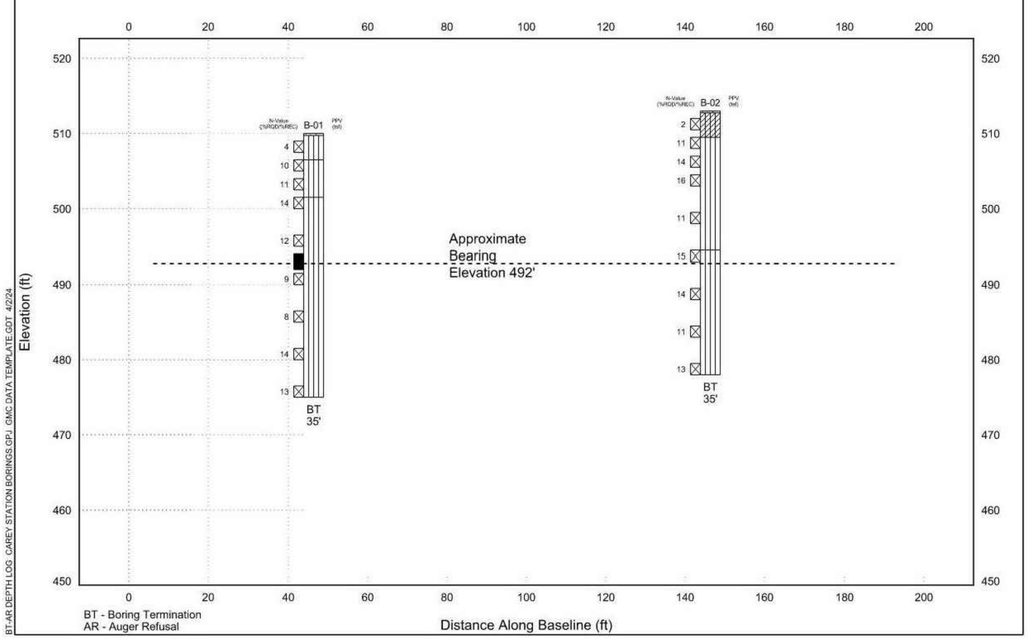
BT-AR DEPTH LOG_CAREY STATION BORINGS.GPJ_GMC DATA TEMPLATE.GDT 4/2/24

GMC

TOPSOIL ML ML-CL

CLIENT Piedmont Water Company **PROJECT NAME** Carey Station Water Reuse Facility

PROJECT NUMBER GAUG230004 **PROJECT LOCATION** Greensboro, Georgia



BT-AR DEPTH LOG_CAREY STATION BORINGS.GPJ_GMC DATA TEMPLATE.GDT 4/2/24

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID WITHOUT — GOODWYN MILLS CAWOOD LLC — No. PEO007886 — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" 5" 0" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager: MP
Engineer: LW
Designer: LW
Drawn By: LS

CAREY STATION URBAN WATER REUSE FACILITY

0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

GEOTECHNICAL EXPLORATION

B-101

DRAWING FILE: C:\Users\smith\DC\ACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG230002-GEOTEC.dwg
PLOTTED: Apr 17, 2026 - 8:35am

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BORING NUMBER B-01

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 510 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
510	0		Organic Laden Material (OLM) - 3 inches										
			SILT (ML), brown, medium to very stiff	SS		1-2-2 (4)							
			, light brown and gray	SS		3-5-5 (10)							
				SS		6-5-6 (11)							
500	10		, brown and light brown	SS		6-7-7 (14)							
				SS		5-6-6 (12)							
				ST						38	27	11	62
490	20			SS		4-5-4 (9)							
				SS		3-4-4 (8)							
480	30			SS		6-7-7 (14)							
				SS		7-6-7 (13)							
470	40		Boring was terminated at 35.0 feet.										
460	50												

BORING NUMBER B-02

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 513 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0		Organic Laden Material (OLM)- 3 inches										
510			SILTY CLAY (ML-CL), red, very soft	SS		1-1-1 (2)							
			SANDY SILT (ML), light brown, medium to stiff	SS		6-5-6 (11)							
				SS		6-7-7 (14)							
	10			SS		7-9-7 (16)							
500				SS		6-5-6 (11)							
			, light brown and gray	SS		6-7-8 (15)							
490	20			SS		8-7-7 (14)							
				SS		6-5-6 (11)							
480	30			SS		7-6-7 (13)							
			Boring was terminated at 35.0 feet.										
470	40												
	50												

BORING NUMBER B-03

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 516 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN.	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0		Organic Laden Material (OLM)- 3 inches										
510			SILTY CLAY (ML-CL), red, very soft	SS		1-1-1 (2)							
				SS		1-1-1 (2)							
	10		SANDY SILT (ML), brown, medium to hard	SS		4-6-7 (13)							
500				SS		4-5-5 (10)							
				SS		4-4-5 (9)							
490	20		, light brown and gray	SS		5-7-9 (16)							
				SS		7-9-10 (19)							
480	30			SS		8-12-15 (27)							
				SS		5-14-19 (33)							
470	40			SS		13-18-15 (33)							
			Boring was terminated at 45.0 feet.	SS		13-20-28 (48)							
	50												

BORING NUMBER B-04

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 508 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0		Organic Laden Material (OLM)- 2 inches										
			SILTY CLAY (ML-CL), red, medium to stiff	SS		3-2-2 (4)							
				SS		3-5-7 (12)							
500				SS		5-7-9 (16)							
	10		SANDY SILT (ML), brown, medium to hard	SS		7-7-8 (15)							
				SS		5-4-5 (9)							
490													
	20			SS		12-14-14 (28)							
				SS		10-15-15 (30)							
480			Boring was terminated at 25.0 feet.										
	30												
470													
	40												
460													
	50												

BORING NUMBER B-05

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 504 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN.	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0		Organic Laden Material (OLM)- 1 inch										
			SANDY SILT (ML), red, medium to hard	SS		6-4-4 (8)							
500				SS		6-9-11 (20)							
	10		, brown and light brown	SS		4-4-5 (9)							
				SS		4-5-4 (9)							
490													
	20			SS		11-15-15 (30)							
				SS		8-10-15 (25)							
480													
				SS		9-11-13 (24)							
	30		Boring was terminated at 25.0 feet.										
470													
	40												
460													
	50												

BORING NUMBER B-06

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 500 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN.	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
500	0		Organic Laden Material (OLM)- 3 inches										
			SILTY CLAY (ML-CL), red, medium to stiff	SS		2-2-2 (4)							
				SS		3-3-4 (7)							
			SANDY SILT (ML), light brown, stiff to very stiff	SS		7-7-8 (15)							
490	10			SS		6-6-6 (12)							
				SS		5-6-8 (14)							
480	20			SS		5-6-6 (12)							
				SS		7-7-9 (16)							
470	30			SS		5-4-5 (9)							
			Boring was terminated at 35.0 feet.	SS		8-9-12 (21)							
460	40												
450	50												

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD LLC
No. PEF007888
Exp.06.30.2026

1" 0" 1"
5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

GEOTECHNICAL
EXPLORATION

B-102

DRAWING FILE: C:\Users\lsmith\DOCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG230002-GEOTEC.dwg
PLOTTED: Apr 17, 2026 - 8:33am

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BORING NUMBER B-07

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 500 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
500	0	Organic Laden Material (OLM)- 4 inches										
		SILTY CLAY (ML-CL), red, medium to stiff	SS		2-2-2 (4)							
			SS		6-7-7 (14)							
		SANDY SILT (ML), light brown, stiff to very stiff	SS		5-6-5 (11)							
490	10		SS		5-5-5 (10)							
			SS		7-8-10 (18)							
480	20		SS		7-9-10 (19)							
		SILTY SAND (SM), gray, medium	ST						32	27	5	45
			SS		10-13-17 (30)							
470	30	PARTIALLY WEATHERED ROCK - Sampled as POORLY GRADED SAND with SILT (SP-SM), gray, very dense	SS		50/5"							
			SS		10-50/3"							
460	40	Boring was terminated at 35.0 feet.										
450	50											

BORING NUMBER B-08

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 497 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0	Organic Laden Material (OLM)- 3 inches										
		SANDY SILT (ML), brown, medium to very stiff	SS		3-3-2 (5)							
			SS		10-9-7 (16)							
490	10	, light brown, stiff to hard	SS		8-10-7 (17)							
			SS		7-7-8 (15)							
480			SS		6-7-9 (16)							
	20		SS		8-10-13 (23)							
470			SS		10-13-15 (28)							
	30		SS		14-28-32 (60)							
460			SS		14-17-21 (38)							
450	40	Boring was terminated at 35.0 feet.										
	50											

BORING NUMBER B-09

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 490 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
490	0	Organic Laden Material (OLM)- 4 inches										
		SANDY SILT (ML), light brown, soft to hard	SS		1-1-2 (3)							
			SS		12-23-18 (41)							
			SS		14-19-19 (38)							
480	10		SS		13-19-22 (41)							
			SS		10-19-23 (42)							
470	20	PARTIALLY WEATHERED ROCK - Sampled as POORLY GRADED SAND with SILT (SP-SM), light brown, very dense	SS		50/5"							
			SS		27-50/4"							
460	30		SS		25-50/3"							
			SS		30-50/4"							
450	40	Boring was terminated at 35.0 feet.										
440	50											

BORING NUMBER B-10

PAGE 1 OF 1

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility
PROJECT NUMBER GAUG230004
PROJECT LOCATION Greensboro, Georgia
DATE STARTED 2/20/24 **COMPLETED** 2/20/24
GROUND ELEVATION 507 ft **HOLE SIZE** 3.25"
DRILLING CONTRACTOR Premier Drilling
GROUND WATER LEVELS:
DRILLING METHOD CME 550 ATV, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING Not Encountered
LOGGED BY S. Nickerson **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0	Organic Laden Material (OLM)- 2 inches										
		SANDY SILT (ML), brown, medium to very stiff	SS		3-4-4 (8)							
			SS		6-6-6 (12)							
500			SS		3-4-5 (9)							
	10	, light brown	SS		4-4-4 (8)							
			SS		4-5-4 (9)							
490												
	20		SS		6-7-7 (14)							
480		Boring was terminated at 25.0 feet.	SS		9-8-9 (17)							
	30											
470												
	40											
460												
	50											

BORING NUMBER B-11

PAGE 1 OF 2

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility 1.0 MGD Expansion
PROJECT NUMBER GAUG250006
PROJECT LOCATION Greensboro, GA
DATE STARTED 6/12/25 **COMPLETED** 6/12/25
GROUND ELEVATION 507 ft **HOLE SIZE** 4
DRILLING CONTRACTOR Independence Drilling INC.
GROUND WATER LEVELS:
DRILLING METHOD CME 550, Auto-Hammer, HSA w/ SPT
AT TIME OF DRILLING None Encountered
LOGGED BY G. Owen **CHECKED BY** K. Wales
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	0	Organic Laden Material (OLM), 6"	SS		4-3-4 (7)			22	53	37	16	64
505		SANDY ELASTIC SILT (MH), orange, brown, loose to medium - residual	SS		4-6-7 (13)							
	5											
500		SILTY SAND (SM), orange, brown, pink, medium to dense	SS		9-11-15 (26)							
	10		SS		10-10-8 (18)			12	43	32	11	43
495												
	15		SS		11-15-20 (35)							
490												
	20		SS		10-12-11 (23)							
485		SILTY SAND (SM), orange, white, brown, very dense										
	25		SS		19-25-45 (70)							
480		SILTY SAND (SM), brown, white, medium										
	30		SS		3-4-7 (11)							
475		SILTY SAND (SM), brown, white, dense to very dense										
	35		SS		19-29-31 (60)							

(Continued Next Page)

BORING NUMBER B-11

PAGE 2 OF 2

CLIENT Piedmont Water Company
PROJECT NAME Carey Station Water Reuse Facility 1.0 MGD Expansion
PROJECT NUMBER GAUG250006
PROJECT LOCATION Greensboro, GA

ELEVATION (ft)	DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	35	SILTY SAND (SM), brown, white, dense to very dense *(continued)*										
470			SS		13-19-20 (39)							
	40											
465		SILTY SAND (SM), brown, very dense - partially weathered rock lens										
	45		SS		27-50/5"							
460		SILTY SAND (SM), brown, white, very dense- partially weathered rock										
	50		SS		20-49-50 (99)							
455		Boring was terminated at 50.0 feet.										
	55											
450												
	60											
445												
	65											
440												
	70											
435												
	75											

GMC
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Augusta, GA 30901
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STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
No. PEF007885
Exp.06.30.2026

1" 0" 1" 5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

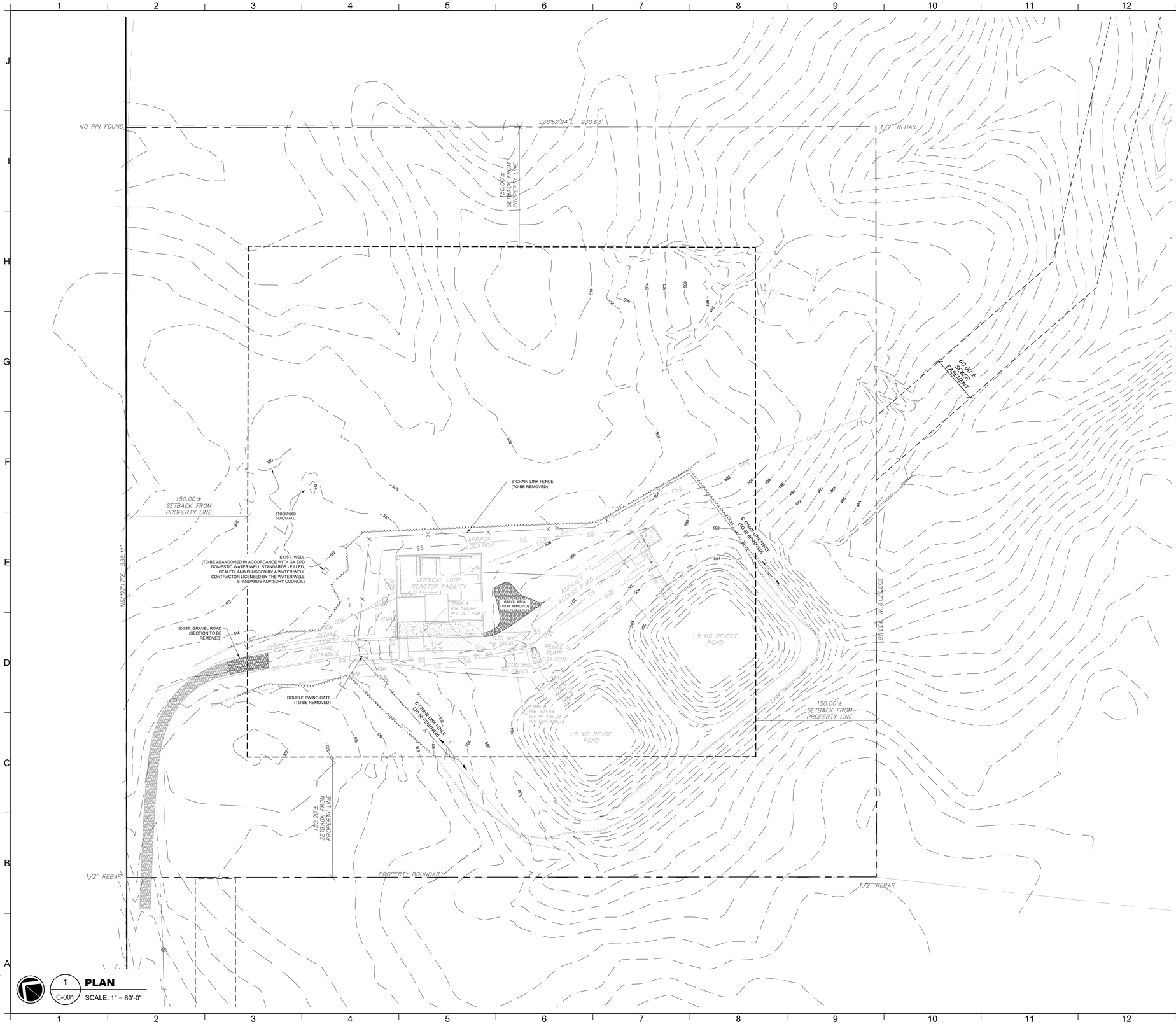
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GEOTECHNICAL EXPLORATION

B-103

DRAWING FILE: C:\Users\lsmith\DOCACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG230002-GEOTEC.dwg
PLOTTED: Apr 17, 2026 - 8:33am

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1 PLAN
C-001 SCALE: 1" = 60'-0"

SITE NOTES:

1. THE CONTRACTOR SHALL ADHERE TO THE LOCATIONS AND GEOMETRIC SHAPES FOR CONCRETE PADS OTHER THAN THE BUILDING AS SHOWN ON THE SITE PLAN UNLESS SPECIFIC DETAILS ARE PROVIDED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
2. ANY PROPERTY CORNERS OR PERMANENT SURVEY MARKERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LICENSED SURVEYOR AT CONTRACTORS EXPENSE.
3. ANY PAVEMENT OR CURBING DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED AND RESTORED TO LIKE OR BETTER CONDITION.
4. SITE SECURITY AND EQUIPMENT STORAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. PROPERTY OWNERSHIP INFORMATION IS SHOWN FOR GENERAL INFORMATION ONLY AND MAY NOT BE THE MOST RECENT OWNERSHIP ON RECORD.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND RESET FENCING TO ORIGINAL CONDITION WHERE REQUIRED AT NO ADDITIONAL COST.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR AND GRUB AS NECESSARY
8. CONTRACTOR SHALL MINIMIZE THE DISTURBANCE TO ANY EXISTING LANDSCAPING AND TREES, UNLESS APPROVED BY THE ENGINEER AND OWNER.
9. ANY LANDSCAPING (SHRUBS, FLOWERS, ORNAMENTAL GRASS, ETC.) DISTURBED DURING PROJECT CONSTRUCTION ACTIVITIES SHALL BE REPLACED AND OR TRANSPLANTED TO THE SATISFACTION OF THE OWNER TO PRE-CONSTRUCTION CONDITION. THIS MAY INCLUDE SOD REPLACEMENT AS DEEMED NECESSARY BY THE OWNER. ALL RELATED COSTS FOR SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.
10. THE CONTRACTOR MUST ADJUST ALL VALVE BOXES, COVERS, METERS, FIRE HYDRANTS, AND OTHER WATER SERVICE APPURTENANCES, TO FINAL GRADE. THE COST OF THESE ADJUSTMENTS SHALL BE INCLUDED IN THE PRICE BID.

DEMOLITION NOTES:

1. BEFORE STARTING DEMOLITION, THE CONTRACTOR MUST CHECK TO DETERMINE THAT ALL UTILITY SERVICES, SUCH AS WATER, GAS, ELECTRICITY, TELEPHONE, ETC. ARE DISCONNECTED AT THE SERVICE MAIN, IN ACCORDANCE WITH THE RULES AND REGULATIONS GOVERNING THE UTILITY INVOLVED.
2. CONTRACTOR SHALL PROVIDE SAFEGUARDS, INCLUDING WARNING SIGNS, BARRICADES, TEMPORARY FENCES, WARNING LIGHTS AND OTHER ITEMS THAT ARE REQUIRED FOR PROTECTION OF ALL PERSONNEL DURING DEMOLITION AND REMOVAL OPERATIONS.
3. ACCEPTABLE METHODS FOR DEMOLITION SHALL BE APPROVED BY THE ENGINEER. HAND DISMANTLING, PNEUMATIC AND HYDRAULIC BREAKERS, SAW CUTTING, MECHANICAL BREAKING, WATER JETTING, AND THERMAL LANCING ARE ACCEPTABLE. THE USE OF CHEMICALS AND EXPLOSIVES ARE NOT ACCEPTABLE.
4. ANY DAMAGE TO SURROUNDING EQUIPMENT, STRUCTURES, UTILITIES OR ADJACENT ITEMS SHALL BE RESTORED TO THE ENTITIES ORIGINAL CONDITION AT NO COST TO THE OWNER.
5. BEFORE CUTTING, EXAMINE THE SURFACES TO BE CUT AND PATCHED AND THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. IF UNSAFE OR OTHERWISE UNSATISFACTORY CONDITIONS ARE ENCOUNTERED, TAKE CORRECTIVE ACTION BEFORE PROCEEDING WITH THE WORK.
6. USE METHODS THAT ARE LEAST LIKELY TO DAMAGE WORK TO BE RETAINED OR ADJOINING WORK. IN GENERAL, WHERE CUTTING IS REQUIRED USE HAND OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING, NOT HAMMERING AND CHOPPING. CUT THROUGH CONCRETE AND MASONRY USING A CUTTING MACHINE SUCH AS A CARBORUNDUM SAW OR CORE DRILL TO INSURE A NEAT HOLE. CUT HOLES AND SLOTS NEATLY TO SIZE REQUIRED WITH MINIMUM DISTURBANCE OF ADJACENT WORK. TO AVOID MARRING EXISTING FINISHED SURFACES, CUT OR DRILL FROM THE EXPOSED OR FINISHED SIDE INTO CONCEALED SURFACES. TEMPORARILY COVER OPENINGS WHEN NOT IN USE.
7. RESTORE EXPOSED FINISHES OF PATCHED AREAS AND WHERE NECESSARY EXTEND FINISH RESTORATION INTO RETAINED ADJOINING WORK IN A MANNER WHICH WILL ELIMINATE EVIDENCE OF PATCHING AND REFINISHING.
8. SECURELY SEAL AND OR PLUG ALL STORM AND SANITARY SEWERS LEADING FROM THE STRUCTURE TO BE DEMOLISHED.
9. DEMOLISH STRUCTURES IN SUCH A MANNER AS TO AVOID HAZARDS TO PERSONS AND PROPERTY INTERFERENCE WITH THE USE OF ADJACENT BUILDINGS, AND INTERRUPTION OF FREE PASSAGE TO AND FROM SUCH BUILDINGS.
10. PROMPTLY DISPOSE OF DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM BUILDING SITE DEMOLITION OPERATIONS. NO BURNING IS ALLOWED. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE PROJECT SITE AND LEGALLY DISPOSED OF IN AN EPA AND OWNER-APPROVED LANDFILL OR RECYCLING FACILITY. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.

GMC
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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000178SS — Exp.06.30.2028 — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

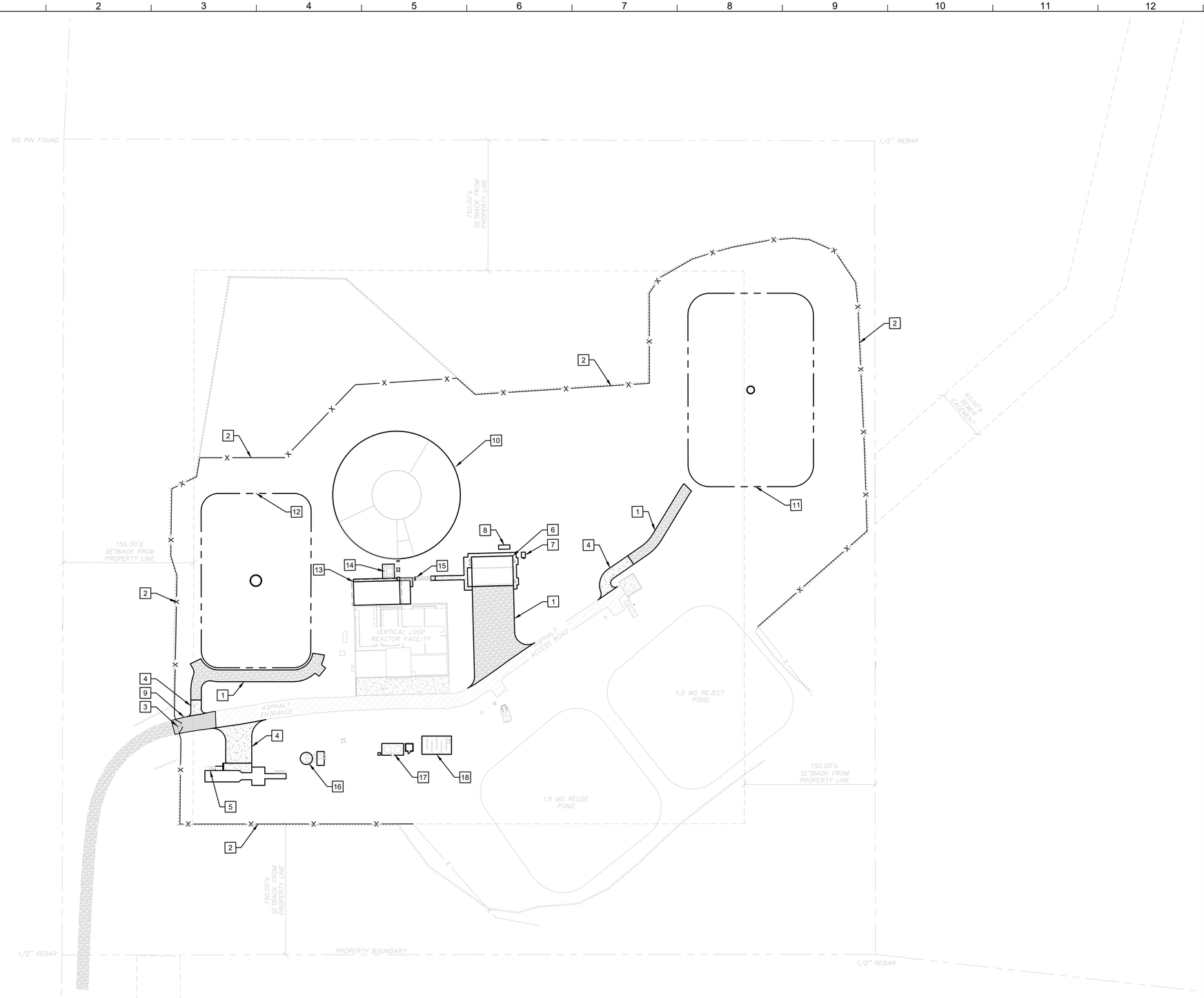
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CIVIL SITE PLAN -
EXISTING CONDITIONS
& DEMOLITION PLAN

C-001

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DRAWING FILE: C:\Users\tsmith\DC\ACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG250002-BASE - Package Plan.dwg
PLOTTED: Apr 17, 2026 - 8:33am



1 C-101 **PLAN**
SCALE: 1" = 60'-0"

KEY NOTES: #

1. GRAVEL ACCESS DRIVE
2. 6' CHAIN-LINK FENCE
3. 16' DOUBLE SWING GATE
4. CONCRETE APRON
5. ALUMINUM STAIRCASE
6. ELECTRICAL ROOM
7. TRANSFORMER
8. DIESEL GENERATOR
9. STANDARD DUTY ASPHALT PAVEMENT (WITHIN EXTENT OF EXISTING GRAVEL DRIVEWAY)
10. PACKAGE PLANT
11. 1.5 MG REJECT POND
12. EQ BASIN
13. CLARIFIER SPLITTER BOX AND CLARIFIER
14. INFLUENT SPLITTER BOX
15. STAIRCASE AND WALKWAY
16. INFLUENT PUMP STATION
17. CHEMICAL STORAGE TANK & CHEMICAL PUMP ROOM
18. CHLORINE CONTACT CHAMBER

GMC
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Augusta, GA 30901
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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NO. PE035760
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION
NO. LCH

1" 0" 1"
.5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

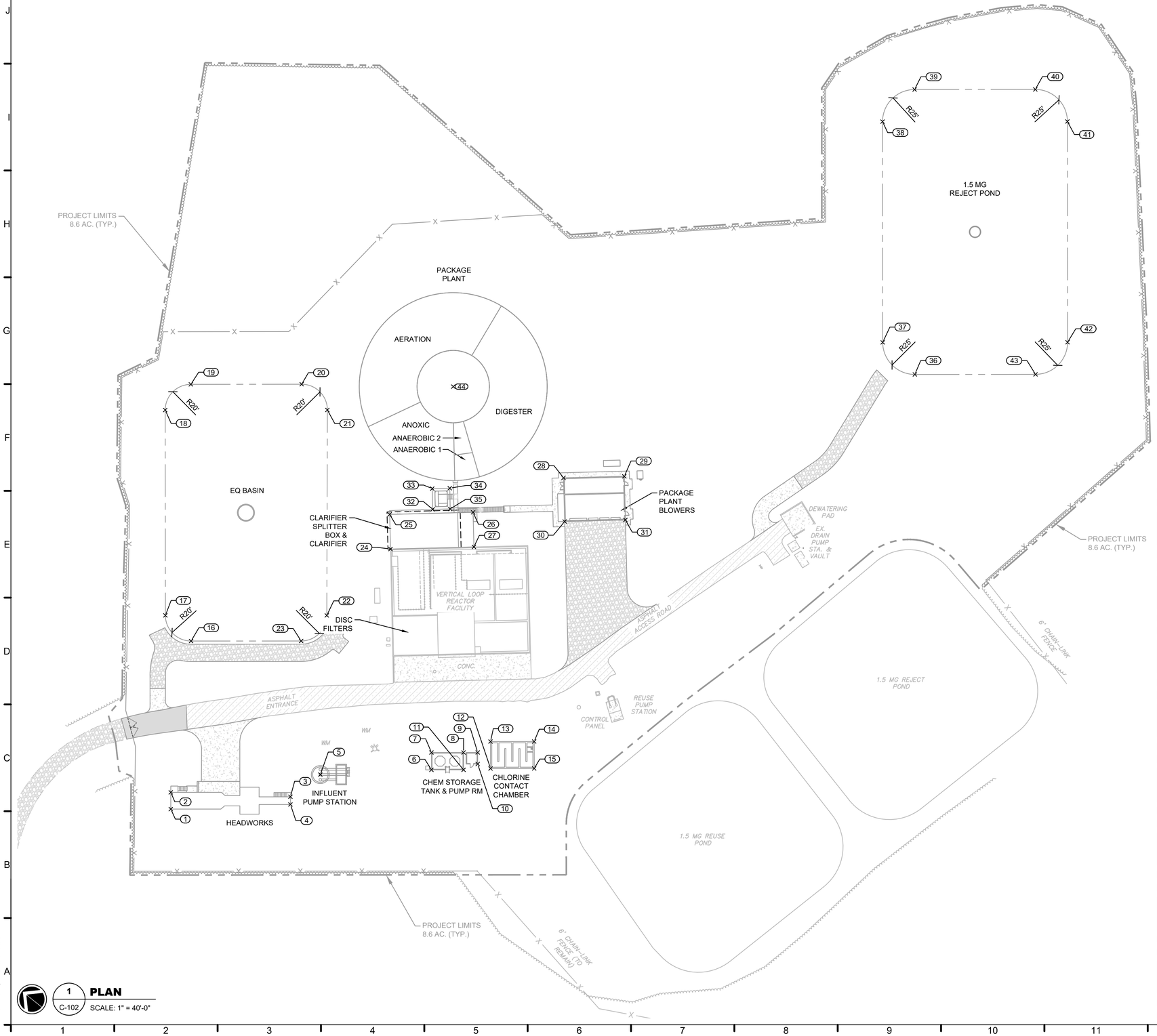
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**CIVIL SITE PLAN -
SITE PLAN**

C-101

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PLOTTED: Apr 17, 2026 - 8:33am

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1 C-102 **PLAN**
SCALE: 1" = 40'-0"

COORDINATES

#	NORTHING	EASTING
1	1275616.4085	328987.8999
2	1275624.6116	328998.0118
3	1275550.0277	329054.0097
4	1275546.2477	329049.3501
5	1275542.7900	329082.1100
6	1275477.8691	329139.4303
7	1275486.3741	329149.9144
8	1275466.9443	329165.6763
9	1275458.4017	329172.6062
10	1275452.7317	329165.6169
11	1275458.4496	329155.1840
12	1275442.7608	329169.1988
13	1275455.9907	329185.5073
14	1275429.5864	329206.9272
15	1275416.3565	329190.6187
16	1275686.5276	329099.5888
17	1275714.6511	329102.5275
18	1275815.4399	329226.7694
19	1275812.5125	329254.8976
20	1275745.5009	329309.2920
21	1275717.3134	329306.3005
22	1275616.9217	329181.6446
23	1275619.9131	329153.5691
24	1275610.8854	329253.0371
25	1275628.4087	329273.5781
26	1275578.9581	329315.7639
27	1275561.4348	329295.2229
28	1275541.0658	329380.9630
29	1275505.0556	329411.6828
30	1275518.9994	329355.0965
31	1275482.9892	329385.8164
32	1275604.8302	329297.7805
33	1275615.2743	329310.1193
34	1275604.8755	329318.9214
35	1275594.4314	329306.5826
36	1275379.1373	329615.7646
37	1275414.3018	329619.4328
38	1275522.6492	329753.0175
39	1275518.9810	329788.1820
40	1275445.9755	329847.3951
41	1275410.8109	329843.7269
42	1275302.4636	329710.1423
43	1275306.1318	329674.9777
44	1275652.5755	329382.1590

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NATHAN P. BAIS
No. PE037186
Exp.06.30.2028
NOT FOR CONSTRUCTION
CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

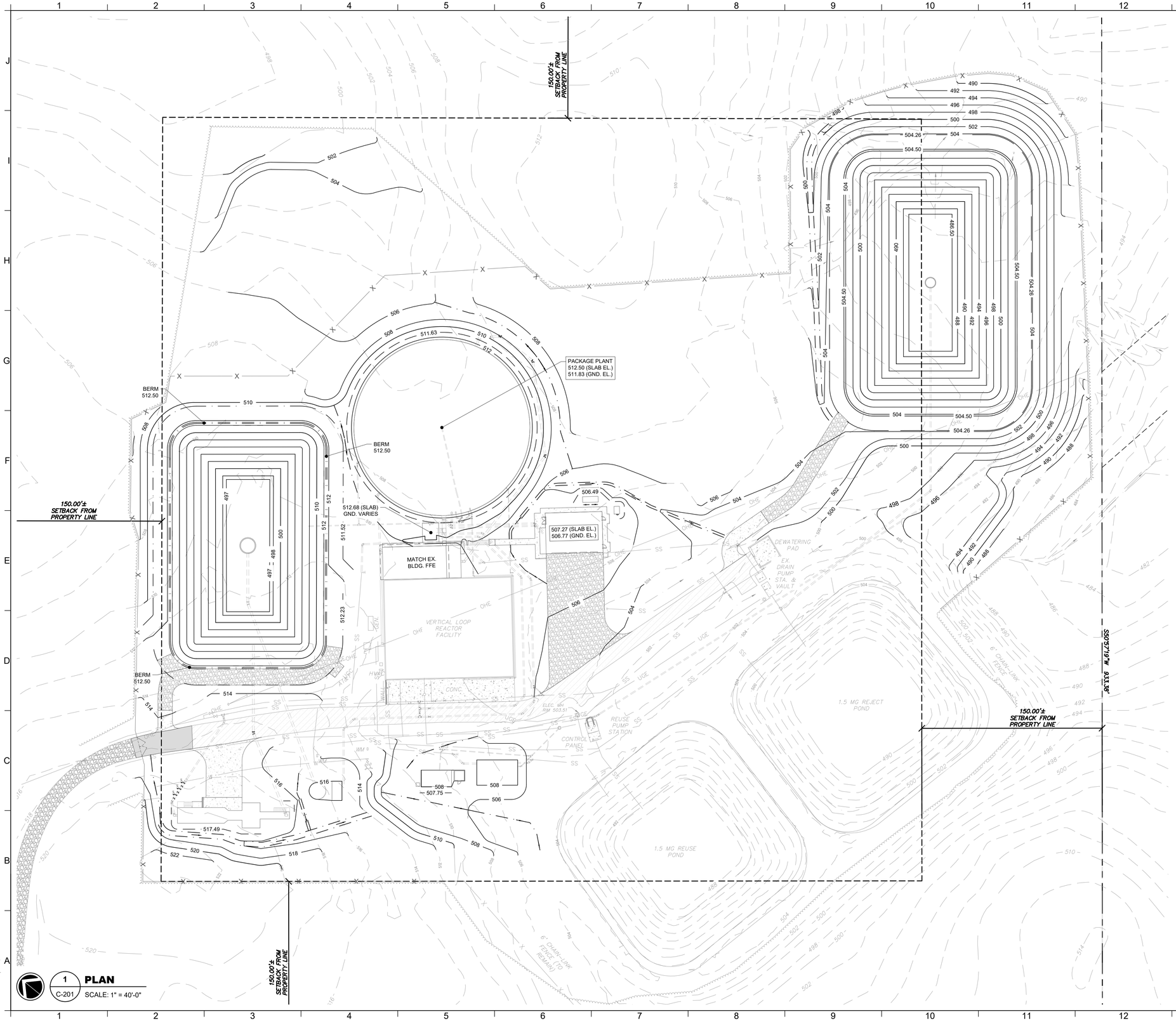
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CIVIL SITE PLAN - GEOMETRIC CONTROLS

C-102

DRAWING FILE: C:\Users\smith\DOCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\C-102.dwg
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1 C-201 **PLAN**
SCALE: 1" = 40'-0"

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE000178SG
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" 1" 5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

CIVIL SITE PLAN - GRADING AND DRAINAGE PLAN

C-201

DRAWING FILE: C:\Users\tsmith\DC\ACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\00 Civil\CAUG2230002-BASE - Package Plant.dwg
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PACKAGE PLANT
512.50 (SLAB EL.)
511.83 (GND. EL.)

HP 511.48

511.98 (SLAB)
GND. VARIES
[BOTTOM OF
SLAB 508.98]

507.27 (SLAB EL.)
506.77 (GND. EL.)

MATCH EX. BLDG. FFE

2 PLAN
C-202 SCALE: 1" = 20'-0"

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No. PE000178SG
Exp.06.30.2026
NOT VALID UNLESS SEALED
CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

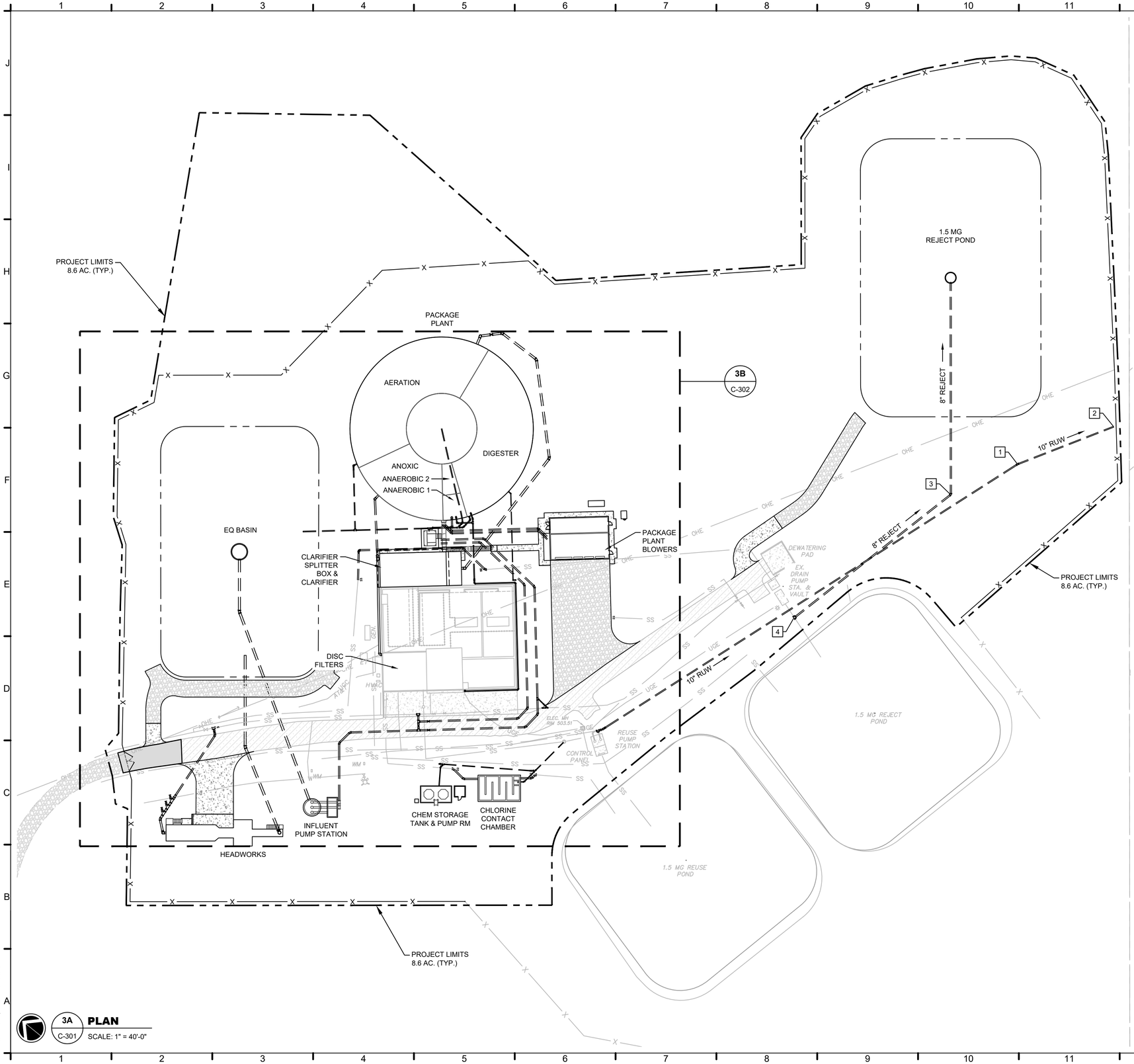
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CIVIL SITE PLAN -
GRADING AND
DRAINAGE PLAN

C-202

DRAWING FILE: C:\Users\tsmith\DC\ACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\00 Civil\CAUG230002-BASE - Package Plant.dwg
PLOTTED: Apr 17, 2026 - 8:37am

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3A / C-301 **PLAN**
SCALE: 1" = 40'-0"

PIPING NOTES:

1. CONTRACTOR SHALL INCLUDE ANY REQUIRED BENDS TO AVOID ANY PIPING CONFLICTS DUE TO LIMITED AREA OF CONSTRUCTION AND UNFAVORABLE GRADE.
2. ALL BURIED PIPE MUST HAVE MINIMUM COVER DEPTH OF 30" OR AS OTHERWISE INDICATED IN THE SPECIFICATIONS OR DETAILS.
3. ALL NECESSARY APPURTENANCES REQUIRED TO MAKE THE PROCESS PIPING FULLY FUNCTIONAL SHALL BE PROVIDED BY THE CONTRACTOR. THIS INCLUDES BUT NOT LIMITED TO MIXING RINGS, INJECTORS, SPARGERS, TAPS, FLANGE ADAPTERS, COUPLINGS, PIPE SUPPORTS, ETC.
4. CONTRACTOR SHALL VERIFY VALVE LOCATIONS AND INTENDED USE AS REQUIRED BY THE PROCESS MANUFACTURER. IF VALVE RELOCATION IS DESIRED, IT SHALL BE AT THE ENGINEER'S DISCRETION.
5. ELECTRICAL CONDUIT AND YARD PIPING CONFLICTS SHALL BE RESOLVED IN THE FIELD BY THE INSPECTOR/ENGINEER.
6. CONTRACTOR SHALL PROVIDE HEAT TRACING, INSULATION AND ELECTRICAL APPURTENANCES FOR ALL EXTERIOR ABOVE GROUND PIPING AND POLYETHYLENE TANKS PER SPECIFICATION GOVERNING WATER AND SEWER PIPING. AIR PIPING IS EXCLUDED FROM THIS REQUIREMENT.
7. CONTRACTOR SHALL REFER TO EROSION CONTROL AND GRADING PLANS FOR SEQUENCING REQUIRED BY DISTURBANCE.
8. VALVES, PIPES, MOTORS, ELECTRICAL PANELS, ETC. SHALL BE POSITIONED SO THAT THEY DO NOT INTERFERE WITH PEDESTRIAN TRAFFIC.
9. PIPE PENETRATIONS THROUGH ALUMINUM GRATING SHALL BE CLEAN PENETRATIONS AND MAINTAIN A MAXIMUM OF A 1" BETWEEN THE EDGE OF THE GRATING AND O.D. OF THE PIPE. GRATING SUPPORTS SHALL BE DESIGNED SUCH THAT PENETRATIONS DO NOT COMPROMISE THE INTEGRITY OF THE GRATING. BANDING & SUPPORT FOR SPECIFIED LOADS IS REQUIRED TO PROVIDE CLEAN PENETRATIONS.

KEY NOTES: [#]

1. 10" 11 1/4° RMJ BEND
2. 10" RMJ PLUG
3. 8" 45° MJ BEND
4. 8" MJ TEE, MEGALUG RESTRAINED

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No.PE000178SG — Exp.06.30.2026 — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager: MP
Engineer: LW
Designer: LW
Drawn By: LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

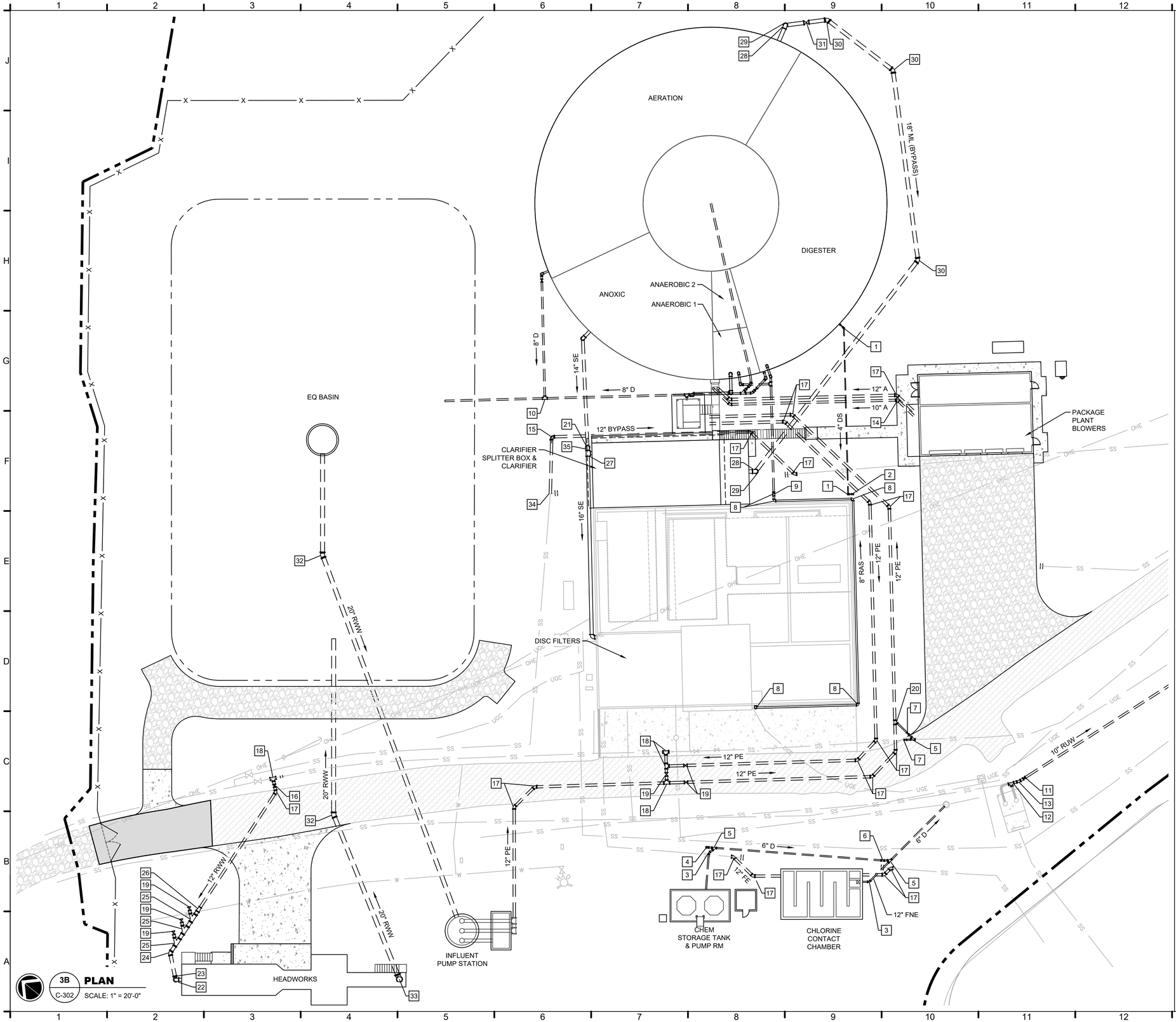
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CIVIL SITE PLAN - YARD PIPING

C-301

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PLOTTED: Apr 17, 2026 - 8:37am



3B C-302 **PLAN**
SCALE: 1" = 20'-0"

KEY NOTES: #

1. 4" 90° FL BEND
2. 4" PLUG VALVE
3. 6" 45° MJ BEND
4. 6" CLEANOUT
5. 6" MJ WYE
6. 6" 11 1/4° MJ BEND
7. 6" PLUG VALVE
8. 8" 90° FL BEND
9. 8" 90° RMJ BEND
10. 8" MJ TEE
11. 10" PLUG VALVE
12. 10" RMJ TEE
13. 10" 11 1/4° RMJ BEND
14. 10" 45° RMJ BEND
15. 12" 90° RMJ BEND
16. 12" PLUG VALVE
17. 12" 45° RMJ BEND
18. 12" RMJ TEE
19. 12" PLUG VALVE
20. 12" X 6" RMJ WYE
21. 14" 90° RMJ BEND
22. 16" 90° FL BEND
23. 16" 90° RMJ BEND
24. 16" 45° RMJ BEND
25. 16" X 16" X 12" RMJ WYE
26. 16" X 12" RMJ REDUCER
27. 16" FL TEE
28. 18" 90° FL BEND
29. 18" 90° RMJ BEND
30. 18" 45° RMJ BEND
31. 18" PLUG VALVE
32. 20" 22 1/2° MJ BEND
33. 20" 90° MJ VERTICAL BEND UP
34. CONNECT TO EXSTING 12"
35. 16" X 14" 90° FL BEND

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STATE OF GEORGIA — NOT FOR CONSTRUCTION — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
GA.PEOO7186
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

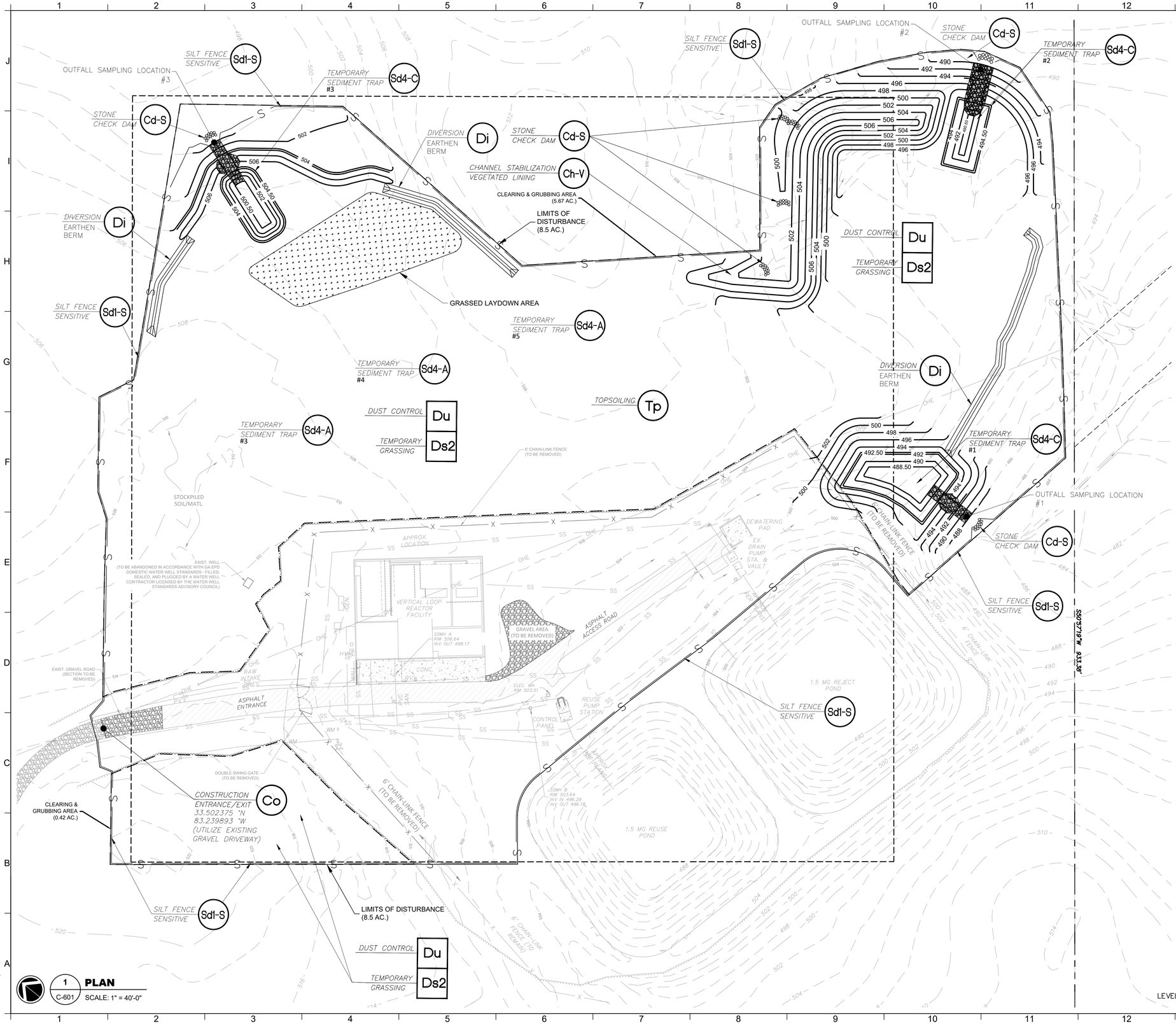
NOT RELEASED FOR CONSTRUCTION

CIVIL SITE PLAN - ENLARGED YARD PIPING

C-302

DRAWING FILE: C:\Users\tsmith\DOCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\C-301.dwg
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1 C-601 **PLAN**
SCALE: 1" = 40'-0"

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000178 — Exp. 06.30.2028 — NOT VALID UNLESS CERTIFICATE OF AUTHORIZATION

1" 0" 1" 5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

INTIAL PHASE - EROSION & SEDIMENT CONTROL PLAN

C-601

DRAWING FILE: C:\Users\lsmith\DOCS\CCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG230002-BASE - Package Plan1.dwg
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SILT FENCE SENSITIVE Sdl-S
OUTFALL SAMPLING LOCATION #3
TEMPORARY SEDIMENT TRAP #3 Sd4-C
STONE CHECK DAM Cd-S
DIVERSION EARTHEN BERM Di
LIMITS OF DISTURBANCE (8.5 AC.)
GRASSED LAYDOWN AREA
TEMPORARY GRASSING Ds2
TOPSOILING Tp
SLOPE STABILIZATION (RECP) Ss
CONCRETE WASHOUT Cw
APPROX. LOCATION
DEWATERING PAD
EX. DRAIN PUMP STA. & VAULT
VERTICAL LOOP REACTOR FACILITY
SSMH A RIM 506.64 INV OUT 498.17
ASPHALT ACCESS ROAD
RAW INTAKE PUMPS
ASPHALT ENTRANCE
REUSE PUMP STATION
CONTROL PANEL
SSMH B RIM 503.64 INV IN 496.29 INV OUT 496.18
1.5 MG REJECT POND
1.5 MG REUSE POND
6' CHAIN-LINK FENCE TO REMAIN
OUTFALL SAMPLING LOCATION #1
S80°57'19"W 933.38'

2 C-602 **PLAN**
SCALE: 1" = 40'-0"

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000178SS — Exp. 06.30.2028 — CERTIFICATE OF AUTHORIZATION

1" 0" 1" 5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

INTERMEDIATE PHASE - EROSION & SEDIMENT CONTROL PLAN

C-602

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PLOTTED: Apr 17, 2026 - 8:38am

SILT FENCE SENSITIVE Sdl-S

PERMANENT GRASSING Ds3

LIMITS OF DISTURBANCE (8.5 AC.)

SLOPE STABILIZATION (RECP) Ss

STONE CHECK DAM Cd-S

APPROX. LOCATION

DEWATERING PAD

EX. DRAIN PUMP STA. & VAULT

VERTICAL LOOP REACTOR FACILITY

ASPHALT ACCESS ROAD

SSMH A RIM 506.64 INV OUT 498.17

RAW INTAKE VALVES

ASPHALT ENTRANCE

REUSE PUMP STATION

CONTROL PANEL

ELEC. MH RIM 503.51

SSMH B RIM 503.64 INV IN 496.29 INV OUT 496.18

APPROX. BOAT RAMP

1.5 MG REUSE POND

1.5 MG RESET POND

6' CHAIN-LINK FENCE (TO REMAIN)

S50°57'19"W 933.38'

3 C-603 **PLAN**

SCALE: 1" = 40'-0"

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

GMC

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000718SS — Exp. 06.30.2028 — NOT VALID WITHOUT ORIGINAL SIGNATURE OR SEAL — CERTIFICATE OF AUTHORIZATION

1" 0" 1" 5"

ISSUE	DATE	
60% Submittal	02.16.2026	
90% Submittal	04.17.2026	
Bid Set		
Conformed Set		
Project Manager:		MP
Engineer:		DP
Designer:		LW
Drawn By:		LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

FINAL PHASE - EROSION & SEDIMENT CONTROL PLAN

C-603

DRAWING FILE: C:\Users\tsmith\DOCACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG250002-BASE - Package Plant.dwg
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EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS GAR100001

SWCD: Piedmont

Project Name: Carey Station Urban Water Reuse Facility Exp. **Address:** 4610 Carey Station Road, Greensboro, GA

Local Issuing Authority: Greene County **Date on Plans:** 07.10.2025

Name & Email of person filling out checklist: Daniel Phillips (daniel.phillips@gmcnetwork.com)

Plan Page #	Included Y/N		TO BE SHOWN ON ES&PC PLAN
C-604	Y	1	The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed. **Permit IV.D.1. pg 27**
C-601 - C-612	Y	2	Level II certification number issued by the Commission, signature and seal of the certified design professional. Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level II certification must be issued to the Design Professional, **after completion of a GSWCC approved course**, and whose signature and seal are on the Plan.
--	N/A	3	Limits of disturbance shall be **less than** 50 acres at any one time without prior written authorization from the GAEPD District Office. If GAEPD approves the request to disturb 50 acres or more at any one time, the Plan must include the GAEPD approval letter and completed Appendix 1 of this checklist with at least 4 of the chosen BMPs. * A copy of the written approval by GAEPD must be attached to the Plan for the Plan to be reviewed. **Permit IV.D.3. pg 28**
C-605	Y	4	The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
C-605	Y	5	Provide the name, address, email address, and phone number of Primary Permittee.
C-605	Y	6	Note total and disturbed acreages of the project or phase under construction.
C-601	Y	7	Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
G-001	Y	8	Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
C-605	Y	9	Descriptions of the nature of construction activity and existing site conditions.
C-606	Y	10	Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
C-605	Y	11	Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
C-605	Y	12	Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on **Part IV page 20** of the permit.
C-605	Y	13	Design professional's certification statement and signature that the Permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on **Part IV page 20** of the permit. *
C-605	Y	14	Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect **and certify** the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." *
C-605	Y	15	Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
C-605	Y	16	Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
C-605	Y	17	Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional." *
C-605	Y	18	Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
C-605	Y	19	Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
C-605	Y	20	Clearly note statement that "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."
C-605	Y	21	Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
C-605	N/A	22	Any construction activity which discharges storm water into a Biota Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as any portion of a Biota Impaired Stream Segment, must comply with **Part III.C.** of the permit. Include the completed Appendix 1 of this checklist with at least 4 of the chosen BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *
--	N/A	23	If a TMDL Implementation Plan for sediment has been finalized for the Biota Impaired Stream Segment (identified in Item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. *
C-608	Y	24	BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Include statement that washout of the drum at the construction site is prohibited. *
C-608	Y	25	Provide BMPs for the remediation of all petroleum spills and leaks.
C-605	Y	26	Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. *
C-605	Y	27	Description of practices to provide cover for building materials and building products on site. *
C-605	Y	28	Description of the practices that will be used to reduce the pollutants in storm water discharges. *
C-606	Y	29	Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, grading, infrastructure, temporary and final stabilization).
C-609	Y	30	Provide complete requirements of Inspections and record keeping by the Primary Permittee. *
C-609	Y	31	Provide complete requirements of Sampling Frequency and Reporting of sampling results. *
C-609	Y	32	Provide complete details for Retention of Records as per **Part IV.F.** of the permit. *
C-610	Y	33	Description of analytical methods to be used to collect and analyze the samples from each location. *
C-610	Y	34	Appendix B rationale for NTU values at all outfall sampling points where applicable. *
C-601, C-602	Y	35	Delineate all sampling locations on **all phases of** the Plan, and perennial and intermittent streams and other water bodies into which storm water is discharged. *
C-601 - C-605	Y	36	A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial sediment storage requirements and initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all BMPs into a single phase plan. *
C-601 - C-603	Y	37	Graphic scale and North arrow.
C-601 - C-603	Y	38	Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2% Rolling 2 - 8% Steep 8% +	0.5 or 1 1 or 2 2, 5 or 10

--	N	39	Use of Alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov.
--	N	40	Use of Alternative BMP for application to the Equivalent BMP List. Refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *
--	N/A	41	Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State Waters and any additional buffers as required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
--	N/A	42	Delineation of all State Waters and wetlands located on or within 200 feet of the project site.
HYDRO	Y	43	Delineation and acreage of contributing drainage basins on the project site.
HYDRO	Y	44	Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions. *
HYDRO	Y	45	Estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. **For solar farm projects, post-construction impervious area shall be calculated as 70% of total solar panel square footage.**
--	N/A	46	Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate at all storm water discharge points.
C-612	Y	47	Soil series for the project site and their delineation.
C-601 - C-603	Y	48	The limits of disturbance for each phase of construction.
C-601 - C-605	Y	49	Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, Permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.
C-601 - C-605	Y	50	Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual Chapter 6, with legend.
C-606 - C-608	Y	51	Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
C-606 - C-608	Y	52	Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

*** If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream, the * checklist items would be N/A.**

Effective January 1, 2025

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD LLC
NO. PEC007898
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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ES & PC CHECKLIST

C-604

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PLOTTED: Apr 11, 2026 - 8:38am

GENERAL NOTES

1. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT MAY NOT BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE BEEN INSTALLED AND CONSTRUCTED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING HIS WORK. IN ADDITION TO CONTACTING THE LOCAL UTILITY AGENCIES, THE CONTRACTOR SHALL GIVE THREE WORKING DAYS NOTICE TO THE UTILITIES PROTECTION CENTER AT 1-800-282-7411 PRIOR TO ANY EXCAVATION.
2. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
3. THE MAIN UTILITY RESPONSIBLE FOR THE PROJECT IS THE PIEDMONT WATER COMPANY, 24 HR. CONTACT: STEVEN MORELLI PH. (706) 816-0336 EMAIL: SMORELLI@PIEDMONTWATER.COM.
4. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL PROTECT, REPAIR, REMOVE AND/OR RELOCATE ANY UTILITIES DURING CONSTRUCTION WITH LIKE MATERIALS AND CONSTRUCTION METHODS AS APPROVED BY THE ENGINEER AND THE OWNER AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ANY UTILITY RELOCATION AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION AND SHALL USE WHATEVER MEANS NECESSARY TO MANAGE STORM WATER SUCH THAT IMPACT TO CONSTRUCTION IS MINIMIZED.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH EXISTING STATE, COUNTY, AND CITY DESIGN AND CONSTRUCTION STANDARDS UNLESS THOSE STANDARDS CONFLICT WITH THESE CONTRACT DOCUMENTS IN WHICH CASE THESE CONTRACT DOCUMENTS SHALL GOVERN. SUCH CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
8. DEWATERING SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH PROJECT SPECIFICATIONS AS NECESSARY TO INSTALL/CONSTRUCT THE WORK PROPERLY. DEWATERING DISCHARGE SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND REQUIREMENTS OF AGENCIES HAVING JURISDICTION.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) STANDARDS FOR EXCAVATIONS (29 CFR PART 1926-OCT 1989) AND TO ABIDE BY THEM. SAFETY IN, ON OR ABOUT THE SITE IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR ALONE.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE 1992 GEORGIA HIGH VOLTAGE SAFETY ACT AND TO NOTIFY THE UTILITIES PROTECTION CENTER AT 1-800-282-7411 BEFORE WORKING WITHIN 10 FEET OF OVERHEAD POWER LINES OF 750 VOLTS OR MORE.
11. THE OWNER RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS AND TO WAIVE ANY INFORMALITY IN BIDS RECEIVED WHENEVER SUCH REJECTION OR WAIVER IS IN ITS INTEREST.
12. A PRE-CONSTRUCTION CONFERENCE WITH THE ENGINEER IS REQUIRED PRIOR TO BEGINNING WORK.
13. ANY CHANGES IN THE APPROVED PLANS MUST BE COORDINATED WITH THE ENGINEER AND MUST BE APPROVED PRIOR TO PROCEEDING.
14. MATERIAL AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH REQUIREMENTS OF THE GDOT STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, (GDOTSS) LATEST EDITION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL SHRUBBERY, TREES, OR STRUCTURES WITHIN THE WORKING AREA THROUGHOUT THE COURSE OF CONSTRUCTION. ANY TREES, SHRUBS, OR STRUCTURES DAMAGED OR DISTURBED SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD STAKING.
17. VEHICLE FUELING AND MAINTENANCE SHALL TAKE PLACE ONLY IN AREAS DESIGNATED BY THE OWNER.
18. NO SANITARY SEWER OR SEPTIC TANKS ARE BEING INSTALLED DURING THIS PROJECT.
19. NOTIFY WATER & SEWER INSPECTOR PRIOR TO START OF CONSTRUCTION.
20. CUT AND FILL SLOPES NOT TO EXCEED 2H:1V.
21. THE CONTRACTOR SHALL FURNISH APPROPRIATE AUTHORITY OR DEPT. WITH A SCHEDULE OF ANTICIPATED STARTING AND COMPLETION DATES FOR EACH SEQUENCE OF LAND DISTURBING ACTIVITIES.
22. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH TEMPORARY HOLDING OF POWER/GUY POLES AND/OR GUY WIRES. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS OF INSTALLING NEW POWER/GUY POLES AND/OR GUY WIRES AT PROPOSED SITE. POWER COMPANY IS RESPONSIBLE FOR ALL COSTS TO BRING POWER TO THE SITE.

Sediment Storage (S.S.) Requirements

- Need to provide appropriate BMPs to provide 67 cubic yards of storage per acre drained for each common drainage location until final stabilization of the site. The appropriate initial BMPs must be installed on the site PRIOR to any land-disturbing activities.

Silt Fence (Sd1) - 0.25 ac. for every 100 LF of Sd1
- 0.1675 cu. yd. per LF of Sd1

V = 0.4 x A x D

Temporary Sediment Trap w/ Rock Outlet (Sd4-C)
- V = Sediment storage volume (below invert of emergency spillway)
- A = Surface Area (at level of emergency spillway)
- L = 2W (L:W 2:1)
- D = Maximum depth (from emergency spillway invert)

Sediment Storage (Initial Phase)

Drainage Basin	Area	S.S. Required	Sd4 Required?	Sd1 Provided	S.S. Provided	Sd4-##	S.S. Provided		Total S.S. Provided
1	1.4 ac.	93.8 cu. yd.	Yes	378 LF	63.3 cu. yd.	A - 3,4,5	--	--	222 cu. yd.
2	0.9 ac.	60.3 cu. yd.	No	469 LF	78.6 cu. yd.	--	--	--	78.6 cu. yd.
3	0.2 ac.	13.4 cu. yd.	No	384 LF	64.3 cu. yd.	--	--	--	64.3 cu. yd.
4	1.5 ac.	100.5 cu. yd.	Yes	593 LF	99.3 cu. yd.	C2	119.6	cu. yd.	218.9 cu. yd.
5	3.6 ac.	241.2 cu. yd.	Yes	794 LF	133.0 cu. yd.	C1	322.9	cu. yd.	455.9 cu. yd.
Total	7.6 ac.	509.2 cu. yd.		2618 LF	438.5 cu. yd.		601.2	cu. yd.	1039.7 cu. yd.

Sediment Storage (Intermediate Phase)

Drainage Basin	Area	S.S. Required	Sd4 Required?	Sd1 Provided	S.S. Provided	Sd4-##	S.S. Provided		Total S.S. Provided
1	0.7 ac.	46.9 cu. yd.	No	377 LF	63.1 cu. yd.	--	--	--	63.1 cu. yd.
2	0.4 ac.	26.8 cu. yd.	No	404 LF	67.7 cu. yd.	--	--	--	67.7 cu. yd.
3	0.7 ac.	46.9 cu. yd.	No	465 LF	77.9 cu. yd.	--	--	--	77.9 cu. yd.
4	0.9 ac.	60.3 cu. yd.	No	613 LF	102.7 cu. yd.	--	--	--	102.7 cu. yd.
5	3.0 ac.	201 cu. yd.	Yes	779 LF	130.5 cu. yd.	C1	322.9	cu. yd.	453.4 cu. yd.
Total	5.7 ac.	381.9 cu. yd.		2638 LF	441.9 cu. yd.		322.9	cu. yd.	764.8 cu. yd.

1.9 ac. in self-contained structures

SOIL EROSION & SEDIMENTATION CONTROL NOTES

1. PRIMARY PERMITTEE:
   OWNER: PIEDMONT WATER COMPANY
   5170 PEACHTREE RD, BLDG. 100 STE. 120
   ATLANTA, GA 30341
   706.484.0848
   24-HR CONTACT: BRANDON DOW
   (404) 456-2054
   bdow@lakeshoreengineering.com
2. SITE SIZE: 20.0 AC.
3. PROJECT AREA: 7.6 AC.
4. DISTURBED AREA: 7.6 AC.
5. GPS COORDINATES OF THE CONSTRUCTION EXIT (Co):
   33.502375 °N
   83.239893 °W
6. DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY AND EXISTING SITE CONDITIONS:
   6.1. THE PROJECT IS LOCATED AT 4610 CAREY STATION ROAD IN GREENSBORO - GREENE COUNTY, GEORGIA [PARCEL # 054000010B, ZONING DISTRICT HEAVY INDUSTRIAL (HI), AND 20 ACRES IN SIZE]. THE PROJECT SITE IS APPROXIMATELY 2.7 MILES SOUTH OF INTERSTATE 20 AND 0.3 MILES NORTH OF THE GREENE COUNTY FIRE RESCUE - STATION 9. THE SITE IS THE EXISTING CAREY STATION URBAN WATER REUSE FACILITY AND IS SURROUNDED BY WOODED AREAS. THE PROJECT INVOLVES MODIFICATIONS TO THE EXISTING FACILITY TO INCREASE THE CAPACITY FROM 0.5 MGD TO 1.5 MGD. THE PROJECT CONSISTS OF CONSTRUCTING A REJECT POND, A EQ. BASIN, A PACKAGE PLANT, NEW HEADWORKS, INFLUENT PUMP STATION, INFLUENT SPLITTER BOX, CHEMICAL STORAGE TANK & CHEMICAL PUMP ROOM, CHLORINE CONTACT CHAMBER, BLOWERS FOR THE PACKAGE PLANT, CLARIFIER SPLITTER BOX AND ADDITIONAL CLARIFIER, GRAVEL ACCESS DRIVES, ELECTRICAL ROOM, TRANSFORMER, AND GENERATOR. PROJECT RECEIVING WATERS IS RICHLAND CREEK.
7. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION. (IN ACCORDANCE WITH PART IV.A.5 PAGE 25 OF THE PERMIT)
8. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
9. THERE ARE NO JURISDICTIONAL WATERS PRESENT ON THE SITE.
10. THERE ARE NO STATE WATERS ON OR WITHIN 200 FEET OF THE PROJECT SITE. THEREFORE, THERE ARE NO BUFFERS WITHIN THE SITE.
11. THE PROJECT DOES NOT IMPACT/DISTURB WETLAND AREAS.
12. NO PORTIONS OF THE PROJECT LIE WITHIN ZONE A 100 YEAR FLOOD PLAIN PER FIRM 13133C0190B EFFECTVE 12-17-2010 AS SHOWN ON SHEET C-611 FEMA FLOODPLAIN MAPS.
13. AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
14. NO SECTION 404 PERMIT HAS BEEN AUTHORIZED FOR THIS PROJECT; THEREFORE, NO WASTE MATERIALS SHALL BE DISCHARGED INTO STATE WATERS.
15. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
16. 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.
17. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
18. THE SITE DRAINS TO RICHLAND CREEK. RICHLAND CREEK IS LISTED AS AN IMPAIRED STREAM SEGMENT AND IDENTIFIED AS GAR030701011106. THE SITE IS WITHIN ONE (1) LINEAR MILE UPSTREAM. DUE TO THE IMPAIRED STREAM SEGMENT CAUSED BY FECAL COLIFORM (FC) AND NOT BIO F AND/OR BIO M, THE REQUIREMENT OF SECTION 3 IS NOT APPLICABLE (NPDES PERMIT NO. GAR100001, PART III. SECTION C. DISCHARGES INTO, OR WITHIN ONE MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT).
19. CONTRACTOR SHALL VERIFY CLEARING LIMITS AND ENSURE THAT ADEQUATE CLEARANCE IS PROVIDED WITHIN THE CLEARING LIMITS FOR PROPER PLACEMENT OF SILT FENCE, WITHOUT INTERFERING WITH GRADING ACTIVITIES.
20. WASHOUT OF CONCRETE DRUMS AND EQUIPMENT AT THE CONSTRUCTION SITE IS PROHIBITED.
21. DESCRIPTION OF MEASURES/PRACTICES INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORMWATER DISCHARGES (FOR CONSTRUCTION & POST-CONSTRUCTION/COMPLETION): STORMWATER RUNOFF THRU DISTURBED AREAS TO BE MINIMIZED THROUGH THE INSTALLATION OF (Sd1) SILT FENCE, TEMPORARY SEDIMENT TRAPS WITH ROCK OUTLET (Sd4-C), TEMPORARY SEDIMENT TRAPS WITH OVERFLOW (Sd4-A), STONE CHECK DAMS WITHIN SWALES (Cd-S), DUST CONTROL (Du), (Ds1) MULCH, (Ds2) TEMPORARY SEEDING, (Ds3) PERMANENT VEGETATION, AND (Ss) SLOPE STABILIZATION.
22. CONTRACTOR SHALL STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS. STORE WITH SEALS AND LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHER TIGHT, CLIMATE CONTROLLED, ENCLOSURES IN AN ENVIRONMENT FAVORABLE TO PRODUCT. FOR EXTERIOR STORAGE OF FABRICATED PRODUCTS, PLACE ON SLOPED SUPPORTS ABOVE GROUND. COVER PRODUCTS SUBJECT TO DETERIORATION WITH IMPERVIOUS SHEET COVERING. PROVIDE VENTILATION TO PREVENT CONDENSATION AND DEGRADATION OF PRODUCTS. PROVIDE EQUIPMENT AND PERSONNEL TO STORE PRODUCTS BY METHODS TO PREVENT SOILING, DISFIGUREMENT, OR DAMAGE. ARRANGE STORAGE OF PRODUCTS TO PERMIT ACCESS FOR INSPECTION. PERIODICALLY INSPECT TO VERIFY PRODUCTS ARE UNDAMAGED AND ARE MAINTAINED IN ACCEPTABLE CONDITION. CONTRACTOR SHALL NOT LEAVE ANY WASTE PRODUCTS ON THE GROUND, BUT SHALL REMOVE AND DISPOSE OF THEM PROMPTLY AND IN APPROVED LOCATIONS.
23. ALL BMPs (STRUCTURAL AND VEGETATIVE) SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
24. SILT FENCE FABRIC SHALL BE COMPRISED OF GDOT QUALIFIED PRODUCTS LIST 36, FOR SILT FENCE FABRIC.
25. SILT FENCE SHALL BE CLEANED OR REPLACED AND MAINTAINED IN FUNCTIONAL CONDITION UNTIL PERMANENT EROSION CONTROL MEASURES ARE ESTABLISHED.
26. SILT FENCE AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE THE SITE IS FULLY STABILIZED.
27. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC STREETS.
28. ANY ADDITIONAL CONSTRUCTION ACTIVITIES, OTHER THAN SHOWN ON THIS PLAN, WILL REQUIRE SEPARATE AND ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND APPROVAL.
29. ALL DISTURBED AREAS SHALL BE PERMANENTLY LANDSCAPED AND GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT.
30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL MEASURES FOR THE ENTIRE LENGTH OF THE PROJECT AND SHALL ADD ADDITIONAL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION RUN-OFF FROM THE DISTURBED AREAS.
31. PHASED EROSION CONTROL (INITIAL, INTERMEDIATE & FINAL) PLANS ARE PRACTICAL FOR STAND ALONE PROJECTS. IN ORDER TO PROVIDE THE REQUIRED AMOUNT OF SEDIMENT STORAGE THROUGHOUT THE DURATION OF CONSTRUCTION, FIVE (5) TEMPORARY SEDIMENT TRAPS (2 Sd4-C AND 3 Sd4-A) AND SILT FENCE (Sd1) HAS BEEN PROPOSED.
   31.1. CLEARING & GRUBBING - DOWNSTREAM AREAS PROTECTED BY SILT FENCE, DUST CONTROL, AND TEMPORARY GRASSING;
   31.2. ASPHALT PAVING WITHIN THE EXISTING GRAVEL DRIVE;
   31.3. TRENCHING/EXCAVATION FOR THE YARD PIPING WITH PERMANENT STABILIZATION TO FOLLOW;
   31.4. CONSTRUCTION OF PERMANENT STRUCTURES WITH ASSOCIATED GRADING (ROUGH AND FINE) AND PERMANENT STABILIZATION TO FOLLOW;
   31.5. MAJORITY OF DISTURBANCE IS RELATED TO THE GRADING OF THE REJECT POND AND EQ. BASIN. THE PONDS ARE SELF-CONTAINED AND SILT FENCE, SLOPE STABILIZATION, AND PERMANENT GRASSING IS TO BE PROVIDED FOR THE EMBANKMENT.

CONSTRUCTION SEQUENCE

1. THE CONTRACTOR SHALL HAVE ALL UTILITIES MARKED AND COOPERATE WITH ANY NECESSARY RELOCATION OF ANY EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ON THE PROJECT SITE.
2. THE CONTRACTOR IS RESPONSIBLE FOR ATTENDING THE PRE-CONSTRUCTION AND BI-WEEKLY PROJECT MEETINGS. CONTRACTOR SHALL CONTACT PIEDMONT WATER TO SCHEDULE A PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING WORK.
3. DURING THIS TIME, THE CONTRACTOR SHALL BEGIN COORDINATION WITH THE PRIVATE UTILITY COMPANIES IN REFERENCE TO PERMANENTLY OR TEMPORARILY RELOCATING THE EXISTING UTILITY LINES AND STRUCTURES IN CONFLICT WITH PROPOSED CONSTRUCTION.
4. SUBMITTALS AND / OR SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO BEGINNING ANY WORK.
5. INSTALL EROSION CONTROL MEASURES AS LISTED WITHIN THESE PLANS AND / OR SPECIFICATIONS. CONTRACTOR SHALL ONLY CLEAR ENOUGH TO INSTALL SEDIMENT AND EROSION CONTROL DEVICES. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE STORM WATER CONTROL INSPECTOR. AFTER SITE APPROVAL FOR SEDIMENT AND EROSION CONTROL DEVICES IS GRANTED, SITE WORK CAN COMMENCE.
6. ONCE APPROVED BY THE OWNER, THE CONTRACTOR SHALL BEGIN CLEARING AND GRUBBING THE SITE.
7. AFTER CLEARING AND GRUBBING, DEMOLITION OF EXISTING STRUCTURES CAN COMMENCE WITH THE CONTRACTOR FOLLOWING ALL PROCEDURES INDICATED WITHIN THESE DRAWINGS AND / OR SPECIFICATIONS.
8. AFTER DEMOLITION DEBRIS HAS BEEN REMOVED FROM THE SITE AND DISPOSED OF, CONSTRUCTION OF NEW STRUCTURES AND ALIGNMENT CAN COMMENCE FOLLOWING ALL PROCEDURES INDICATED WITHIN THE DRAWINGS AND / OR SPECIFICATIONS.
9. ONCE ALL NEW CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION MEASURES, CONSTRUCTION MATERIALS AND OTHER RELATED MEASURES. THE CONTRACTOR SHALL INSTALL AND PERFORM ALL WORK TO RESTORE ALL DISTURBED AREAS BACK TO PRE-CONSTRUCTION/PLAN CONDITIONS. THIS WORK SHALL BE DONE UNDER THE DIRECTION OF THE OWNER.
10. THE CONTRACTOR TO PREPARE SITE FOR CLOSEOUT, INCLUDING FINAL CLEANING AND FINAL INSPECTION.
11. CONTRACTOR SHALL PROVIDE FINAL AS-BUILT DRAWINGS IN ACCORDANCE WITH GENERAL CONDITIONS.

Best Management Practices (BMPs)
Heavy Equipment & Earth-Moving Activities

Heavy Equipment Operation Problems

Soil excavation and grading operations often contribute to urban runoff pollution. By loosening large amounts of soil and sediment, earth-moving activities can cause sediment to flow into gutters, storm drains and streams. Sediment is the most common pollutant washed from worksites, creating multiple problems once it enters the stream. Sediment clogs the gills of fish, blocks light transmission and increases stream water temperature, all of which harm life, disturbing the food chain upon which both fish and people depend upon.

Sediment also carries with it other worksite pollutants such as pesticides, cleaning solvents, cement wash, asphalt and car fluids like motor oil, grease and fuel. Thus, poorly maintained vehicles and heavy equipment leaking fuel and oil at the construction site, also contribute to ocean pollution.

Solutions

Best Management Practices (BMPs) such as handling, storing, and disposing of materials properly can prevent pollutants from entering the storm drains.

General Business Practices

Schedule excavation and grading work for dry weather.
Use as little water as possible for dust control.

Clean Up Spills

Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled.
Use dry cleanup methods (sawdust, kitty litter, and/or rags) and dispose of properly.
Sweep up dry spilled materials immediately. Never attempt to bury them or "wash them away" with water.
Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
Report significant spills to the appropriate spill response agencies immediately.

Vehicle & Equipment Maintenance

Maintain all vehicle and heavy equipment in good working order and inspect frequently for leaks.
Conduct all vehicle/equipment maintenance and refueling at one location--away from storm drains.
Perform major maintenance, repair jobs and vehicle/equipment washing off-site.
Use gravel approaches where truck traffic is frequent, to reduce soil compaction and limit the tracking of sediment into streets.
Use drip pans or drop cloths to catch drips and spills if you drain and replace motor oil, radiator coolant
or other fluids on site. Collect all used fluids, store in separate containers and recycle whenever possible; otherwise make certain they are disposed of properly.
Do not use diesel oil to lubricate equipment or parts.
Washout of the drum at the construction site is prohibited.

Erosion Prevention

After clearing, grading or excavating, exposed soil poses a clear and immediate danger for stormwater pollution. Revegetation (permanent or temporary) is an excellent form of erosion control for any site.
Avoid excavation and grading activities during wet weather.
Construct diversion dikes to channel runoff around the site.
Line channels with grass or roughened pavement to reduce runoff velocity.
Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
Remove existing vegetation only when absolutely necessary. Large projects should be conducted in phases.
Consider planting temporary vegetation for erosion control on slopes or where construction is not immediately planned.
Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.

Vehicle Fueling

Description and Purpose

Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Suitable Applications

These procedures are suitable on all construction sites where vehicle and equipment fueling takes place.

Limitations

Onsite vehicle and equipment fueling should only be used where it is impractical to send vehicles and equipment offsite for fueling. Sending vehicles and equipment offsite should be done in conjunction with Co, Stabilized Construction Entrance/ Exit.

Implementation

Use offsite fueling stations as much as possible. These businesses are better equipped to handle fuel and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate fueling area at a site. Discourage "topping-off" of fuel tanks.

Spill Response Agencies
GA EPD - 912-264-7284
NRC - 800-424-8802

Concrete Waste Management

Description and Purpose

Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

Suitable Applications

These procedures are suitable on all construction sites where concrete work takes place.

Implementation

- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area.
- Train employees and subcontractors in proper concrete waste management.
- Washout of the drum at the construction site is prohibited.

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
DANIEL LEE PHILLIPS
GOODWYN MILLS CAWOOD LLC
No. PE0001886
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

ES & PC GENERAL NOTES

C-605

DRAWING FILE: C:\Users\smith\DOCACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\605 Civil\CAUG250002-EROS.dwg
PLOTTED: Apr 17, 2026 - 8:38am

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GEORGIA
UNIFORM CODING SYSTEM
FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Tp	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM. SEEDING)		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.

GaSWCC (Amended – 2013)

I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORMWATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR100001.

DANIEL L. PHILLIPS
LEVEL II CERTIFICATION #69394
EXPIRES 08/07/2026

Signed — Date: 07/10/2025

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT UNDER MY SUPERVISION.

Signed — Date: 07/10/2025

I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES, OR (B) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO. GAR100001, THAT THE INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER.

DANIEL L. PHILLIPS
LEVEL II CERTIFICATION #69394
EXPIRES 08/07/2026

Signed — Date: 07/10/2025

I CERTIFY UNDER PENALTY OF LAW THAT THIS REPORT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

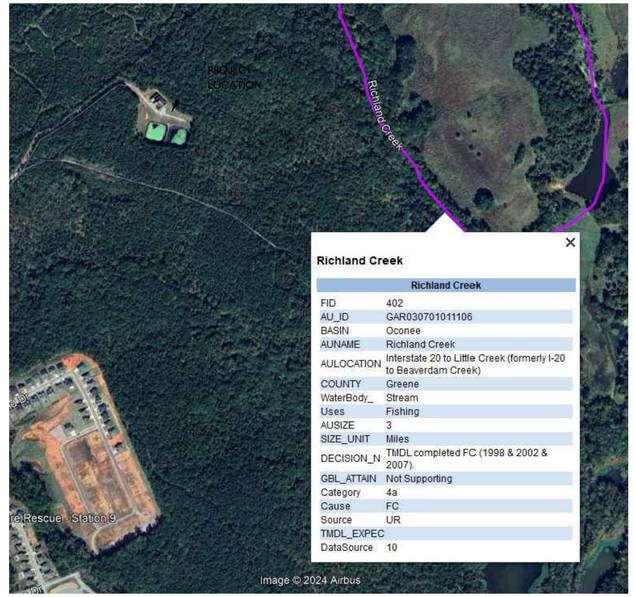
Owner — Date: 07/10/2025

GEORGIA811 www.Georgia811.com

ANTICIPATED ACTIVITY SCHEDULE

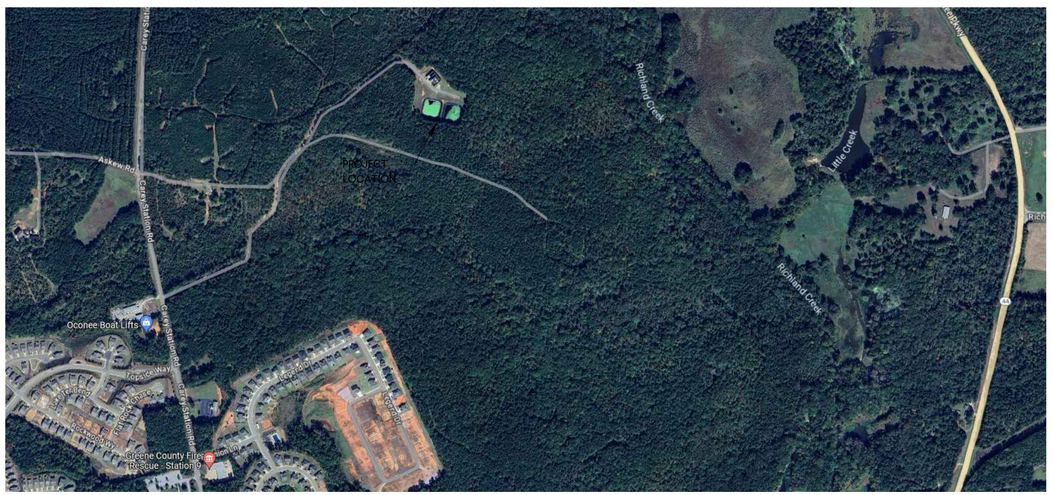
	MONTHS	START DATE 1	2	3	4	5	6	7	8	9
1	BEGIN PROJECT									
2	INSTALL INITIAL BMPs									
3	CLEARING & GRUBBING									
4	GRASS & MULCH (TEMP.) (PERM.)									
5	GRADING (ROUGH & FINE)									
6	UTILITY INSTALLATION									
7	BUILDING CONSTR. & PAVING									
8	MAINTAIN EROSION CONTROL									
9	CLEAN UP									
10	FINAL STABILIZATION									

NOTE: THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.



INFORMATION REGARDING IMPAIRED STREAM SEGMENTS WITHIN VICINITY OF THE PROJECT.

NOTE: RICHLAND CREEK IS LOACATED APPROXIMATELY 1700' EAST OF THE PROJECT AREA. IT IS A NON-SUPPORTING STREAM BUT NOT BIOTA IMPAIRED THEREFORE NO ADDITIONAL BMPs ARE REQUIRED.



VICINITY MAP
N.T.S.

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD LLC — NA PE007895 — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

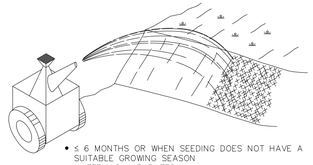
ES & PC GENERAL NOTES & LEGENDS

C-606

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DRAWING FILE C:\Users\lsmith\DOCADocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG230002-EROS.dwg
PLOTTED: Apr 17, 2026 - 8:38am

A TEMPORARY COVER OVER BASE AREAS TO PREVENT EROSION AND REDUCE RUNOFF; TO CONSERVE MOISTURE; TO PREVENT SURFACE COMPACTION OR CRUSTING; TO CONTROL UNDESIRABLE VEGETATION; TO MODIFY SOIL TEMPERATURE AND TO INCREASE BIOLOGICAL ACTIVITY IN THE SOIL.

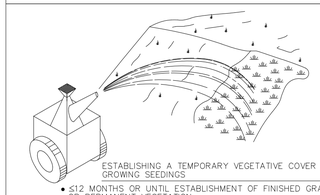


- ≤ 6 MONTHS OR WHEN SEEDING DOES NOT HAVE A SUITABLE GROWING SEASON
MATERIALS AND RATES:

MATERIAL	RATE
STRAW OR HAY	2" to 4" DEEP
WOOD WASTE, CHIPS, SAWDUST OR BARK	2"–3" DEEP (ABOUT 6 TO 9 TONS/ACRE)
POLYETHYLENE FILM	COMPLETELY COVER AREA

- MAY BE NECESSARY TO ANCHOR

Ds1 (Ds1) DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)



ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS

- ≤12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION
- SITE PREPARATION
  - GRADING AND SHAPING
  - SEED BED PREPARATION
  - APPLY LIME AND FERTILIZER
  - PLANT SEEDING, SELECT SPECIES BY SEASON AND REGION
  - APPLY MULCHING MATERIAL IF NEEDED
  - IRRIGATE IF NEEDED BUT NOT AT A RATE TO CAUSE EROSION
- PLANTING DATES DEPEND ON SPECIES AND REGION (MOUNTAIN, PIEDMONT OR COASTAL)

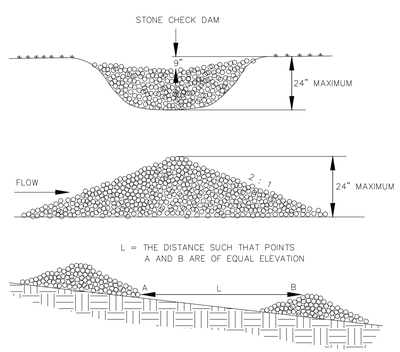
PLANTING RATES AND PLANTING DATES FOR TEMPORARY COVER

SPECIES	RATE PER 1,000 SQ. FT.	RATE PER ACRE	PLANTING DATES MOUNTAINS	PIEDMONT	COASTAL
RYE	3.9 LB.	3 BU. (168 LBS)	8/15–10/31	9/15–11/30	10/1–12/31
RYEGRASS ANNUAL	0.9 LB.	40 LBS.	8/15–11/15	9/1–12/15	9/15–12/31
ANNUAL LESPEDEZA	0.9 LB.	40 LBS.	3/1–3/31	3/1–3/31	2/1–2/28
WEEPING LOVEGRASS	0.1 LB.	4 LBS.	4/1–5/31	4/1–5/31	3/1–5/31
SUDANGRASS	1.4 LB.	60 LBS.	5/1–7/31	5/1–7/31	4/1–7/31
BROWNTOP MILLET	0.9 LB.	40 LBS.	4/15–6/15	4/15–6/30	4/15–6/30
WHEAT	4.1 LB.	3 BU. (180 LBS)	9/15–11/30	10/1–12/15	10/15–12/31

UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES. SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND LOCAL CONDITIONS.

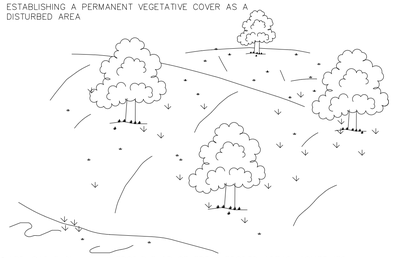
Ds2 (Ds2) DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDINGS)

TO PREVENT EROSION BY REDUCING THE VELOCITY OF STORM WATER IN AREAS OF CONCENTRATED FLOW



Cd-S (Cd–S) STONE CHECK DAM

ESTABLISHING A PERMANENT VEGETATIVE COVER AS A DISTURBED AREA



- APPLICABLE ON HIGHLY ERODIBLE OR SEVERELY ERODED AREAS, SOMETIMES CALLED "CRITICAL AREAS" INCLUDING:
  - CUT OR FILL SLOPES
  - EARTH SPILLWAYS
  - BORROW AREAS
  - CHANNEL BANKS
  - BERMS
  - ROADSIDES
  - SPOIL AREAS
  - GULLIED LANDS
- GRADING AND SHAPING REQUIRED WHERE FEASIBLE AND PRACTICAL
- SEED BED PREPARATION
  - NOT REQUIRED IF USING HYDRAULIC SEEDING AND FERTILIZING
  - WHEN REQUIRED

SLOPE	SEED BED
3:1 OR FLATTER	≥4" DEEP
2:1 TO 3:1	1" TO 4" DEEP
2:1 OR STEEPER	DEPRESSIONS EVERY 6" TO 8" APART WITH HAND TOOL

- HAVE SOIL ANALYZED FOR LIME AND FERTILIZER RATE
- MULCH SHALL BE APPLIED TO COVER 90% OF THE SOIL SURFACES.
- ANCHOR MULCH IMMEDIATELY

PERMANENT GRASSING

GRASS SEED ON LEVEL OR SLIGHTLY SLOPING GROUND SHALL CONSIST OF THE FOLLOWING FOR THE PLANTING DATES SPECIFIED:

(A)	MARCH 1 TO JUNE 30	
	COMMON BERMUDA (HULLED)	10 LBS/ACRE
	TALL FESCUE	50 LBS/ACRE
(B)	AUGUST 1 TO NOVEMBER 1	
	TALL FESCUE	50 LBS/ACRE
	COMMON BERMUDA (UNHULLED)	10 LBS/ACRE
(C)	NOVEMBER 1 TO MARCH 1	
	COMMON BERMUDA (UNHULLED)	10 LBS/ACRE

PERMANENT GRASSING

GRASS SEED ON LEVEL OR SLOPES 3:1 OR STEEPER AND INFREQUENTLY MOWED AREAS SHALL CONSIST OF THE FOLLOWING FOR THE PLANTING DATES SPECIFIED:

(A)	MARCH 1 TO JUNE 15	
	WEEPING LOVEGRASS	4 LBS/ACRE
	SERICEA LESPEDEZA (SCARIFIED)	60 LBS/ACRE
(B)	AUGUST 1 TO NOVEMBER 1	
	TALL FESCUE	50 LBS/ACRE
	SERICEA LESPEDEZA (UNSCARIFIED)	75 LBS/ACRE
(C)	NOVEMBER 1 TO MARCH 1	
	COMMON BERMUDA (UNHULLED)	10 LBS/ACRE
	SERICEA LESPEDEZA (UNSCARIFIED)	75 LBS/ACRE

WHEN AS DIRECTED BY THE ENGINEER, SEED OF AN APPROVED QUICK GROWING SPECIES OF GRASS, SUCH AS RYE, ITALIAN RYE, MILLET OR OTHER CEREAL GRASS, SHALL BE APPLIED AT A RATE OF 30 LBS/ACRE IN CONJUNCTION WITH AND IN ADDITION TO THE SEED MIXTURE SPECIFIED ABOVE ABOVE.

FERTILIZER

COMMERCIAL FERTILIZER SHALL COMPLY WITH THE STATE FERTILIZER LAWS AND SHALL BE OF AN ACCEPTED AND APPROVED COMMERCIAL BRAND. FERTILIZER SHALL BE A READY MIXED MATERIAL CONTAINING THE SOIL NUTRIENTS AS SPECIFIED AND IN A SUITABLE FORM COMPATIBLE WITH THE EQUIPMENT USED TO ACHIEVE UNIFORM DISTRIBUTION OF THE FERTILIZER. THE FERTILIZER MIXTURE SHALL CONTAIN THE FOLLOWING NUTRIENTS EXPRESSED IN PERCENT OF THE TOTAL WEIGHT: 6% NITROGEN 12% AVAILABLE PHOSPHORIC ACID, AND 12% WATER SOLUBLE POTASH (6–12–12) ANALYSIS. CONTAINER TAGS SHALL HAVE THE NAME AND ADDRESS OF THE MANUFACTURER, THE BRAND NAME, NET WEIGHT, AND CHEMICAL COMPOSITION OF ANALYSIS. FERTILIZER SHALL BE APPLIED AT THE RATE OF 1,500 LBS PER ACRE AT THE TIME OF SEEDING.

LIME

AGRICULTURAL DOLOMETIC LIME SHALL BE A PULVERIZED LIMESTONE HAVING A CALCIUM CARBONATE EQUIVALENT CONTENT OF NOT LESS THAN 90% OF THE TOTAL MATERIAL SHALL PASS A 10–MESH SIEVE AND AT LEAST 25% SHALL PASS A 100–MESH SIEVE. LIME SHALL BE APPLIED AS INDICATED BY THE SOIL TEST. OR THE RATE OF 1 TO 2 TONS PER ACRE.

WATER

THE WATER USED IN THE GRASSING OPERATIONS MAY BE OBTAINED FROM ANY APPROVED SPRING, POND, LAKE, STREAM, OR MUNICIPAL WATER SYSTEM. THE WATER SHALL BE FREE OF EXCESS AND HARMFUL CHEMICALS, ACIDS, ALKALIZES, OR ANY SUBSTANCE WHICH MIGHT BE HARMFUL TO PLANT GROWTH.

WATERING MAINTENANCE AND RESEEDING

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPER MOISTURE CONTENT OF THE SOIL TO INSURE ADEQUATE PLANT GROWTH UNTIL A SATISFACTORY STAND OF GRASS IS OBTAINED. WATERING SHALL BE PERFORMED TO MAINTAIN AN ADEQUATE WATER CONTENT IN THE SOIL.

THE CONTRACTOR SHALL MOW AND MAINTAIN ALL SEEDED AREAS WITHOUT ADDITIONAL PAYMENT UNTIL FINAL ACCEPTANCE OF THE WORK BY THE OWNER, AND ANY REGRADING, REFERTILIZING, RELIMING, RESEEDING OR REMULCHING SHALL BE DONE AT HIS OWN EXPENSE. SEEDING WORK SHALL BE REPEATED ON DEFECTIVE AREAS UNTIL A SATISFACTORY UNIFORM STAND OF GRASS IS ACCOMPLISHED. DAMAGE RESULTING FROM EROSION, GULLIES, WASHOUTS, OR OTHER CAUSES SHALL BE REPAIRED BY FILLING WITH TOPSOIL, COMPACTING, AND PREPARING THE SEEDING WORK AT HIS EXPENSE.

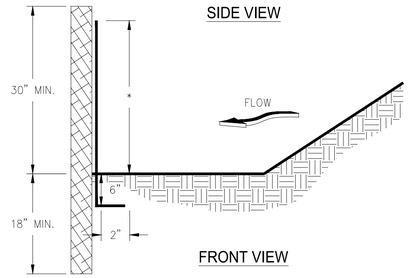
EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL WILL BE INSTALLED IF DEEMED NECESSARY BY ON–SITE INSPECTION.

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

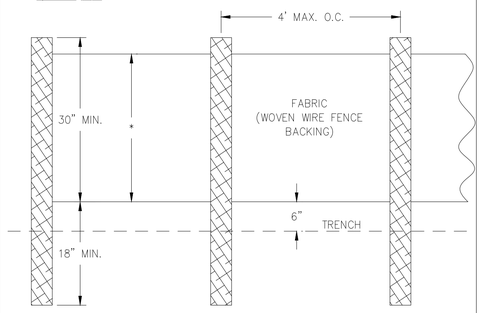
Ds3 (Ds3) DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

SILT FENCE - TYPE SENSITIVE

SIDE VIEW



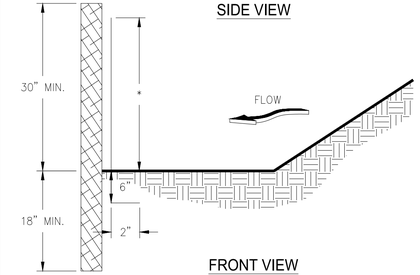
FRONT VIEW



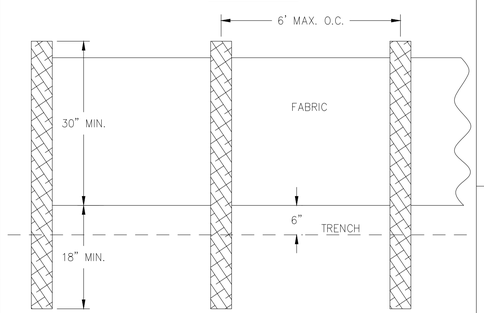
NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

SILT FENCE - TYPE NON-SENSITIVE

SIDE VIEW



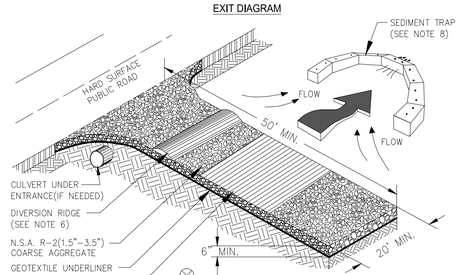
FRONT VIEW



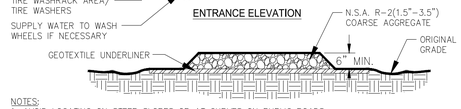
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2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1 SEDIMENT BARRIER (Sd1–S) TYPE SENSITIVE (Sd1–NS) TYPE NON–SENSITIVE

EXIT DIAGRAM



ENTRANCE ELEVATION



NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R–2 (1.5"–3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS–OF–WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Co TEMPORARY CONSTRUCTION EXIT

PURPOSE: 1. TO PREVENT THE MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES

2. PREVENT THE MOVEMENT OF AIRBORNE SUBSTANCES THAT MAY BE HARMFUL TO HEALTH.

INSTALLATION: 1. APPLY ACCORDINGLY TO APPROVED PLAN, IF SHOWN.

2. MULCH DISTURBED AREAS AND TACKIFY WITH RESINS SUCH AS ASPHALT, CURASOL OR TERRATACK ACCORDING TO MANUFACTURERS RECOMMENDATIONS

3. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION.

4. IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET.

5. COVER SURFACES WITH CRUSHED STONE OR GRAVEL.

6. APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACE MOIST.

7. APPLY SPRAY–ON ADHESIVES TO MINERAL SOILS (NOT MUCK SOILS) AS DESCRIBED IN TABLE 1

TABLE 1

ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN–IN–WATER EMULSION	4:1	FINE SPRAY	300

MAINTENANCE: 1. PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.

2. SUPPLEMENTAL SURFACE COVERING AS NEEDED.

REFERENCES: 1. Ds1
2. Ds2
2. Ds3
2. Ds4

Du DUST CONTROL ON DISTURBED AREAS

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA — CERTIFICATE OF AUTHORIZATION — GOODWYN MILLS CAWOOD LLC — NA.PE007188 — Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE	
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Bid Set		LW
Conformed Set		LS

Project Manager:
Engineer:
Designer:
Drawn By:

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
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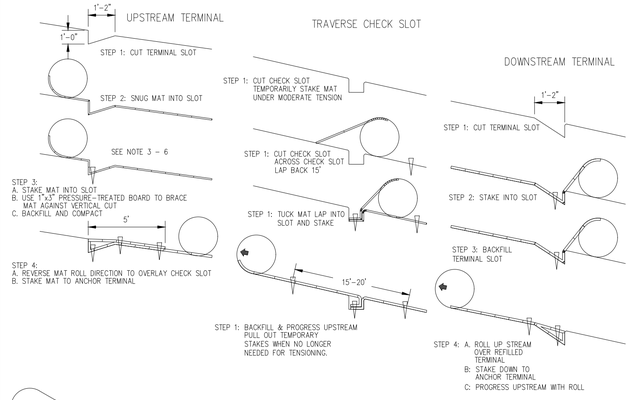
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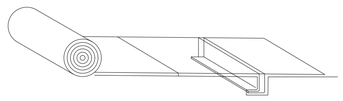
ES & PC CONTROL DETAILS

C-607

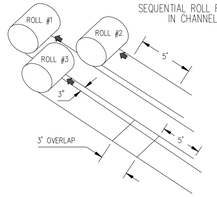
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PLOTTED: Apr 17, 2026 - 8:38am

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PICTORIAL VIEW OF TRANSVERSE SLOT



START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.

FIRST ROLL IS CENTERED LONGITUDINALLY IN MID CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.

SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND FIRST ROLL. USE CENTER ROLL FOR ALIGNMENT TO CHANNEL CENTER.

WORK OUTWARDS FROM CHANNEL CENTER TO EDGE.

USE 3" OVERLAP AND STAKE AT 5' INTERVAL ALONG SEAMS.

USE 3" OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT LINING AT ROLL ENDS.

Ss SLOPE STABILIZATION

Temporary Erosion Control Blankets

This includes temporary "combination" blankets (rolled erosion control blankets-RECB) consisting of a plastic netting which covers and is intertwined with a natural organic or manmade mulch; or, a jute mesh which is typically homogeneous in design and can act alone as a soil stabilization blanket.

Temporary blankets as a minimum shall be used to stabilize concentrated flow areas with a velocity less than 5 ft/sec and slopes 2:5:1 or steeper with a height of 10 feet or greater. Because temporary blankets will deteriorate in a short period of time, they provide no enduring reduction in erosion protection.

Benefits of using erosion control blankets include the following:

1. Protection of the seed and soil from raindrop impact and subsequent displacement.
2. Thermal consistency and moisture retention for seedbed area.
3. Stronger and faster germination of grasses and legumes.
4. Planing off excess stormwater runoff.
5. Prevention of sloughing of topsoil added to steeper slopes.

Permanent Erosion Control Matting

Consists of a permanent non-degradable, three-dimensional plastic structure which can be filled with soil prior to planting. These mats are also known as permanent soil reinforcing mats (turf reinforcement matting). Roots penetrate and become entangled in the matrix, forming a continuous anchorage for surface growth and promoting enhanced energy dissipation. Matting shall be used when a vegetative lining is desired in stormwater conveyance channels where the velocity is between five and ten per second.

Benefits of using erosion control matting include the following:

1. All benefits gained from using erosion control blankets.
2. Causes soil to drop out of stormwater and fill matrix with fine soils which become the growth medium for the development of roots.
3. Acts with the vegetative root system to form an erosion resistant cover which resists hydraulic lift and shear forces when embedded in the soil within stormwater channels.

Materials

All blanket and matting materials shall be on the Georgia Department of Transportation Qualified Products List (QPL #62 for blankets, QPL #49 for matting).

All blankets shall be nontoxic to vegetation and to the germination of seed and shall not be injurious to the unprotected skin of humans. At a minimum, the plastic netting shall be intertwined with the mulching material/fiber to maximize strength and provide for ease of handling.

Temporary Blankets

Machine produced temporary combination blankets shall have a consistent thickness with the organic material evenly distributed over the entire blanket area. All combination blankets shall have a minimum width of 48 inches. Machine produced combination blankets include the following:

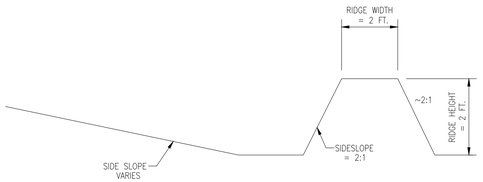
1. Straw blankets are combination blankets that consist of weed-free straw from agricultural crops formed into a blanket. Blankets with a top side of photodegradable plastic mesh with a maximum mesh size of 5/16 x 5/16 inch and sewn to the straw with biodegradable thread is appropriate for slopes. The blanket shall have a minimum thickness of 3/8 inch and minimum dry weight of 0.5 pounds per square yard.
2. Excelsior blankets are combination blankets that consist of curled wood excelsior (80% of fibers are six inches or longer) formed into a blanket. The blanket shall have clear markings indicating the top- side of the blanket and be smolder resistant. Blankets shall be photodegradable plastic mesh having a maximum mesh size of 1 1/2 x 3 inches. The blanket shall have a minimum thickness of 1/4 of an inch and a minimum dry weight of 0.8 pounds per square yard. Slopes require excelsior matting with the topside of the blanket covered in the plastic mesh, and for waterways, both sides of the blanket require plastic mesh.
3. Coconut fiber blankets are combination blankets that consist of 100% coconut fiber formed into a blanket. The minimum thickness of the blanket shall be 1/4 of an inch with a minimum dry weight of 0.5 pounds per square yard. Blankets shall have photodegradable plastic mesh, with a maximum mesh size of 5/8 x 5/8 inch and sewn to the fiber with a breakdown resistant synthetic yarn. Plastic mesh is required on both sides of the blanket is used in waterways. A maximum of two inches is allowable for the stitch pattern and row spacing.
4. Wood fiber blankets are combination blankets that consist of reprocessed wood fibers that do not possess or contain any growth or germination inhibiting factors. The blanket shall have a photodegradable plastic mesh, with a maximum mesh size of 5/8 x 3/4 inch, securely bonded to the top of the mat. The blanket shall have a minimum dry weight of 0.35 pounds per square yard. A maximum of two inches is allowable for the stitch pattern and row spacing. This practice shall be applied only to slopes.
5. Jute Mesh can be applied to slopes. Jute mesh with a 48 inch width shall show between 76 and 80 warpings and a one yard length shall show between 39 to 43 weftings. The woven mesh shall be at least 45 inches wide. Yarn shall have a unit weight of at least 0.9 pounds per square yard, but not more than 1.5 pounds per square yard.

Permanent Matting

Permanent matting shall consist of a lofty web of mechanically or melt bonded polymer nettings, monofilaments or fibers which are entangled to form a strong and dimensionally stable matrix. Polymer welding, thermal of polymer fusion, or the placement of fibers between two high strength, biaxially oriented nets bound securely together by parallel lock stitching with polyolefin, nylon or polyester threads are all appropriate bonding methods. Mats shall maintain their shape before, during, and after installation, under dry or water saturated conditions. Mats must be stabilized against ultraviolet degradation and shall be inert to chemicals normally encountered in a natural soil environment.

The mat shall conform to the following physical properties:

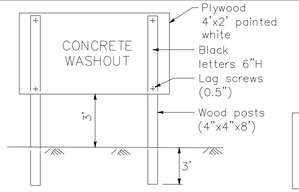
Property	Minimum Value
Thickness	0.5 inch
Weight	0.6 PSY
Roll Width	38 inches
Tensile Strength	
Length (50% elongation)	15 lbs./in.
Length (ultimate)	20 lbs./in.



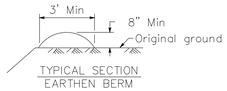
CONSTRUCTION SPECIFICATIONS

1. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the diversion.
2. The diversion shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and free of irregularities which will impede normal flow.
3. All fills shall be machine compacted as needed to prevent unequal settlement that would cause damage in the completed diversion.
4. All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the diversion.
5. Diversion channel shall be stabilized in accordance with specification Ch - Channel Stabilization.

Di DIVERSION



CONCRETE WASHOUT SIGN DETAIL

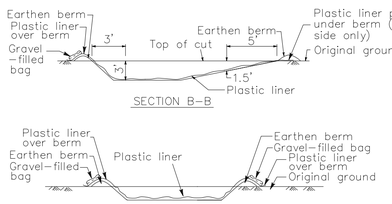


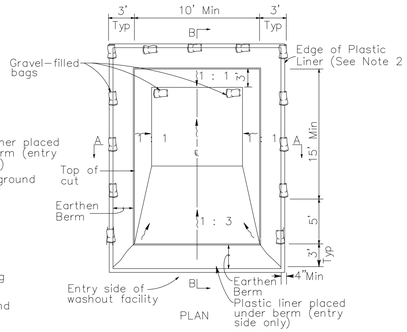
TYPICAL SECTION EARTHEN BERM

- CONCRETE TOOLS, MIXER CHUTES, HOPPERS & THE REAR OF VEHICLES ARE TO BE WASHED DOWN IN TEMPORARY WASH DOWN FACILITY ONLY.
- WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

NOTES

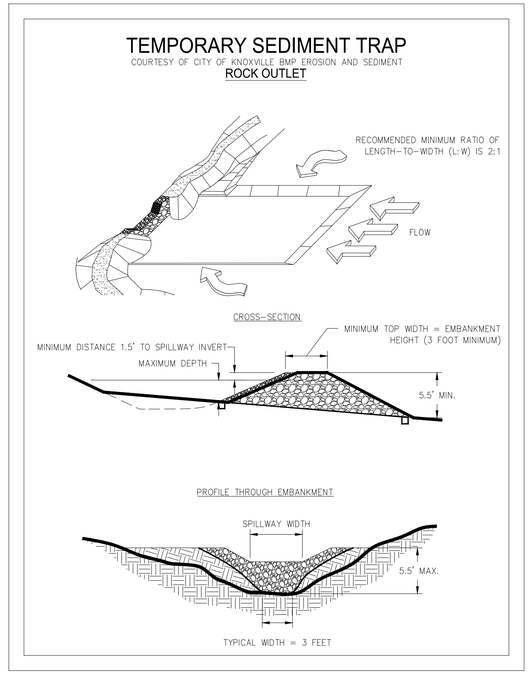
1. The concrete washout sign shall be installed within 30' of the temporary concrete washout facility.
2. 10 Mil Plastic liner shall be anchored w/ gravel-filled bags for below grade concrete washout facility.





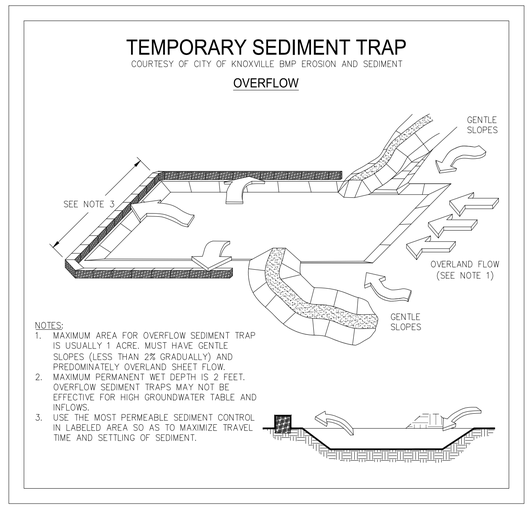
CONCRETE WASH OUT DETAIL

N.T.S



Sd4 (Sd4-C) TEMPORARY SEDIMENT TRAP WITH ROCK OUTLET

Sd4 - ##	C1	C2	A3	A4	A5
Drainage Basin	5	4	1	1	1
Bottom of Sd4	488.5 ft.	490.5 ft.	505.5 ft.	504 ft.	505.5 ft.
Spillway Invert	492.5 ft.	494.5 ft.	506.5 ft.	505 ft.	506.5 ft.
Depth	4.0 ft.	4.0 ft.	1.0 ft.	1.0 ft.	1.0 ft.
Volume	322.9 cu. yd.	119.6 cu. yd.	52.9 cu. yd.	52.9 cu. yd.	52.9 cu. yd.
Top of Berm	494.0 ft.	496.0 ft.	507.5 ft.	506.0 ft.	507.5 ft.
Spillway Depth	1.5 ft.	1.5 ft.	1.0 ft.	1.0 ft.	1.0 ft.
Cleanout Volume	107.6 cu. yd.	39.9 cu. yd.	17.7 cu. yd.	17.7 cu. yd.	17.7 cu. yd.
Cleanout Elevation	490.5 ft.	493.0 ft.	506.0 ft.	504.5 ft.	506.0 ft.



Sd4 (Sd4-A) TEMPORARY SEDIMENT TRAP WITH OVERFLOW

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA
CERTIFICATION
GOODWYN MILLS CAWOOD LLC
NA.PE007185
Exp.06.30.2026
CERTIFICATE OF AUTH

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

ES & PC CONTROL DETAILS

C-608

DRAWING FILE: C:\Users\smith\DOCACDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\GS Civil\CAUG250002-EROS.dwg
PLOTTED: Apr 17, 2026 - 8:38am

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CMP SAMPLING METHODS & PROCEDURES
GENERAL PERMIT No. GAR 100001 - EFFECTIVE AUGUST 1, 2023

REPRESENTATIVE SAMPLING ON STAND ALONE CONSTRUCTION PROJECT
Receiving water samples and storm water discharge samples will be collected by "grab samples", as specified in Part IV.D.6 of the GAR 100001 permit. All "grab samples" will be collected using the following methods and procedures.

SAMPLING REQUIREMENTS:

SAMPLING FREQUENCY:
(1). The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall location within forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit. after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the representative sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the representative sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the Permittee may choose to meet the requirements of (a) and above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

INSPECTIONS:
(1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.

(2). Measure and record rainfall within disturbed areas of the site that have not met final stabilization once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday. The data collected for the purpose of compliance with this permit shall be representative of the monitored activity. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every fourteen (14) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any nonworking Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site ; {b) areas used by the primary permittee for storage of materials that are exposed to precipitation ; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

INSPECTIONS CONTINUED:
(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5). of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a statement that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

REPORTING:
1. The applicable permittees are required to submit the sampling results to the EPD by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any stormwater discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. Sampling reports must be submitted to EPD using the electronic submittal service provided by EPD. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements;
b. The name(s) of the certified personnel who performed the sampling and measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The name(s) of the certified personnel who performed the analyses;
f. References and written procedures, when available, for the analytical techniques or methods used;
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and
i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI.

RETENTION OF RECORDS:
1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD;
b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
d. A copy of all sampling information, results, and reports required by this permit;
e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

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801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
No. PEO01886
Exp.06.30.2028

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

COMPREHENSIVE
MONITORING
PROGRAM GENERAL
NOTES

C-609

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

DRAWING FILE: C:\Users\tsmith\DOCS\Docs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG250002-NPDES.dwg
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DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES:

The method used to collect and analyze the water samples shall be in accordance with the following procedures:

- All samples shall be grab samples.
- Analysis of samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved), the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.
- Sample containers should be labeled prior to collecting the samples.
- Samples should be well mixed before transferring to a secondary container.
- Large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.
- Manual or automatic sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. Samples are not required to be cooled. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter.
- Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in the permit must be reported to EPD as specified in Part IV.E of the permit.
- The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity but downstream of any other storm water discharges not associated with the permitted activity.
- The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last storm water discharge from the permitted activity but upstream of any other storm water discharge not associated with the permitted activity.
- Samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).
- Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.
- The sampling container should be held so that the opening faces upstream.
- The samples should be kept free from floating debris.

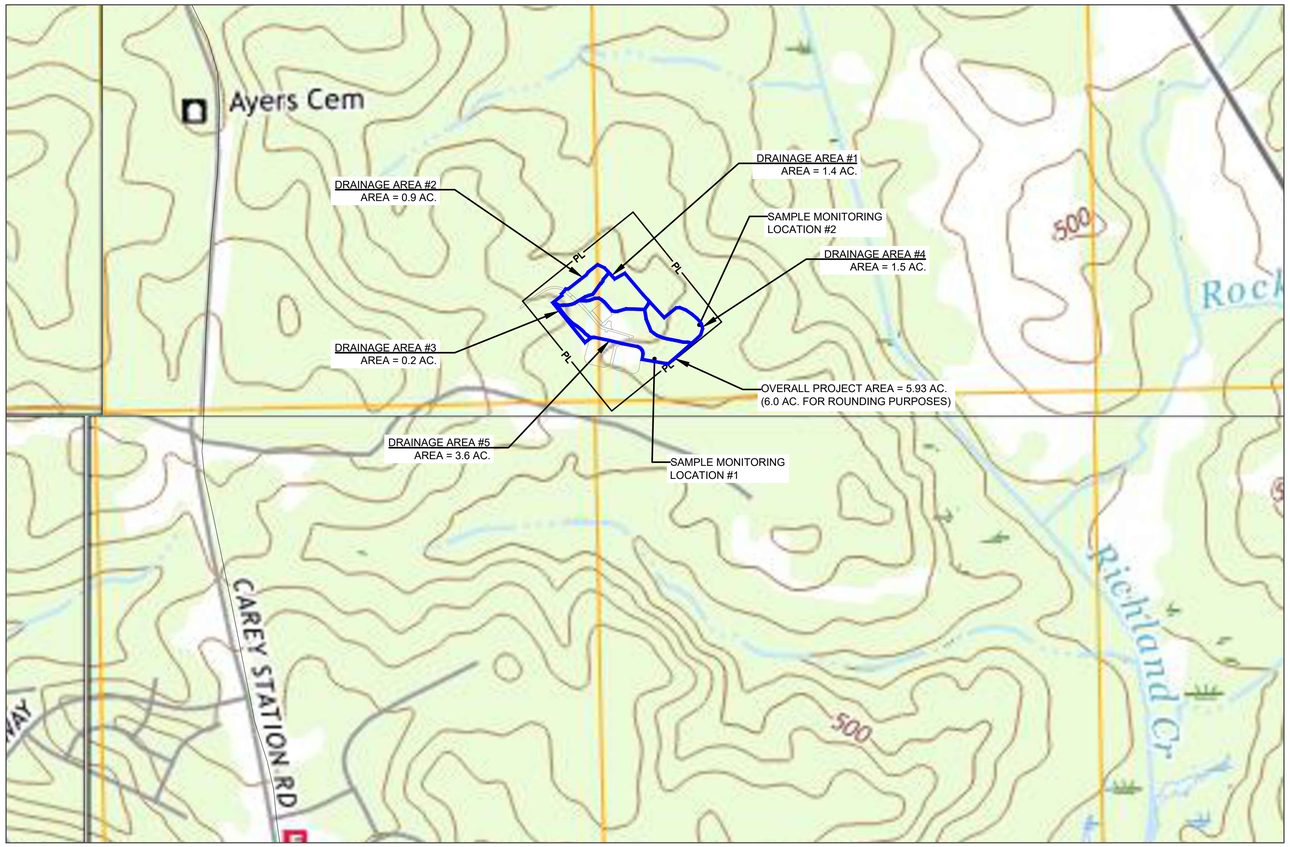
Deviations from these methods and procedures shall be documented by the primary permittee.

Sampling must be done in such a way as to accurately reflect whether storm water runoff from the site is in compliance with the standard set forth in the permit.

Measurement of rainfall must be recorded daily (once each twenty-four hour period) at the site.

The primary permittee must sample all perennial and intermittent streams and other water bodies or all outfalls into such streams and other water bodies as indicated on the map referenced in the permit.

For infrastructure construction projects, monitoring obligations shall cease for any phase of the project that has been stabilized in accordance with Part IV.D.6.c.(1).(g).



WATERSHED, SITE MONITORING LOCATIONS AND DRAINAGE AREA MAP

SCALE: 1" = 500'

SAMPLING POINTS:

For this project two (2) outfalls will be sampled for the Stand Alone construction in accordance with current NPDES General Permit No. GAR 100001.

The project is located in Greene County, GA as indicated on the vicinity map and plan sheets. Based on the existing terrain of the project (disturbed) area, the site drains to five (5) locations prior to going offsite. The total drainage area for the analyzed area is 38.09 acres with a project area of 7.6 acres. All runoff ultimately converges at Richland Creek. Stormwater Monitoring will be required at two (2) locations [Sd4-C #1 and #2]. Sampling is not proposed at either of the three (3) temporary sediment traps with straw bale / silt fence overflow (Sd4-A #3, #4, and #5) as the runoff will exit via sheet flow. Due to proposed grading and construction of the EQ Basin, Reject Pond, and Package Plant, Sd4-C #2, Sd4-A #3, #4, and #5 will be removed during the Intermediate Phase of the ES&PC Plan. The structures are self-contained and therefore been removed from the drainage area. Drainage Basin #1 will be reduced to 0.7 ac. and Drainage Basin #4 will be reduced to 0.9 ac. in the Intermediate Phase. Sd4-C #1 will remain in place until such time Drainage Basin #5 is fully stabilized.

Drainage Basin	Disturbed Area	Monitoring Station Location	Allowable NTU (per Appendix B)
#1	1.4 AC. (0.002 SQ. MI.)	N/A	N/A
#2	0.9 AC. (0.001 SQ. MI.)	N/A	N/A
#3	0.2 AC. (0.0003 SQ. MI.)	N/A	N/A
#4	1.5 AC. (0.002 SQ. MI.)	Sd4-C #2 OUTLET	75
#5	3.6 AC. (0.006 SQ. MI.)	Sd4-C #1 OUTLET	75

The aforementioned tributary is a continuously flowing stream.

The sampling location for the disturbed drainage basins above shall be monitored concurrent with land disturbance/clearing. Sampling is required during construction and until all disturbed areas are stabilized. Permanent/Final Stabilization is defined as 100% cover with 70% density of the disturbed soil surface uniformly covered in permanent vegetation or equivalent permanent stabilization measures have been employed.

APPENDIX B RATIONAL

Waters Supporting Warm Water Fisheries

Site Size, acres	Surface Water Drainage Area, square miles							
	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

ONLY USE IF SAMPLING FROM OUTFALLS

LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
NA.PE000.1886
Exp.06.30.2028

ISSUE	DATE
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90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

1" 0" 1" .5"

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

WATERSHED, DRAINAGE AREA AND SITE MONITORING LOCATIONS

C-610

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National Flood Hazard Layer FIRMette

FEMA

83°14'27"W 33°30'21"N



Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/29/2024 at 9:40 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

GMC
801 Broad Street, Suite 900
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STATE OF GEORGIA — GOODWYN MILLS CAWOOD LLC — NO. PEO017895 — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

FEMA FLOODPLAIN MAP

C-611

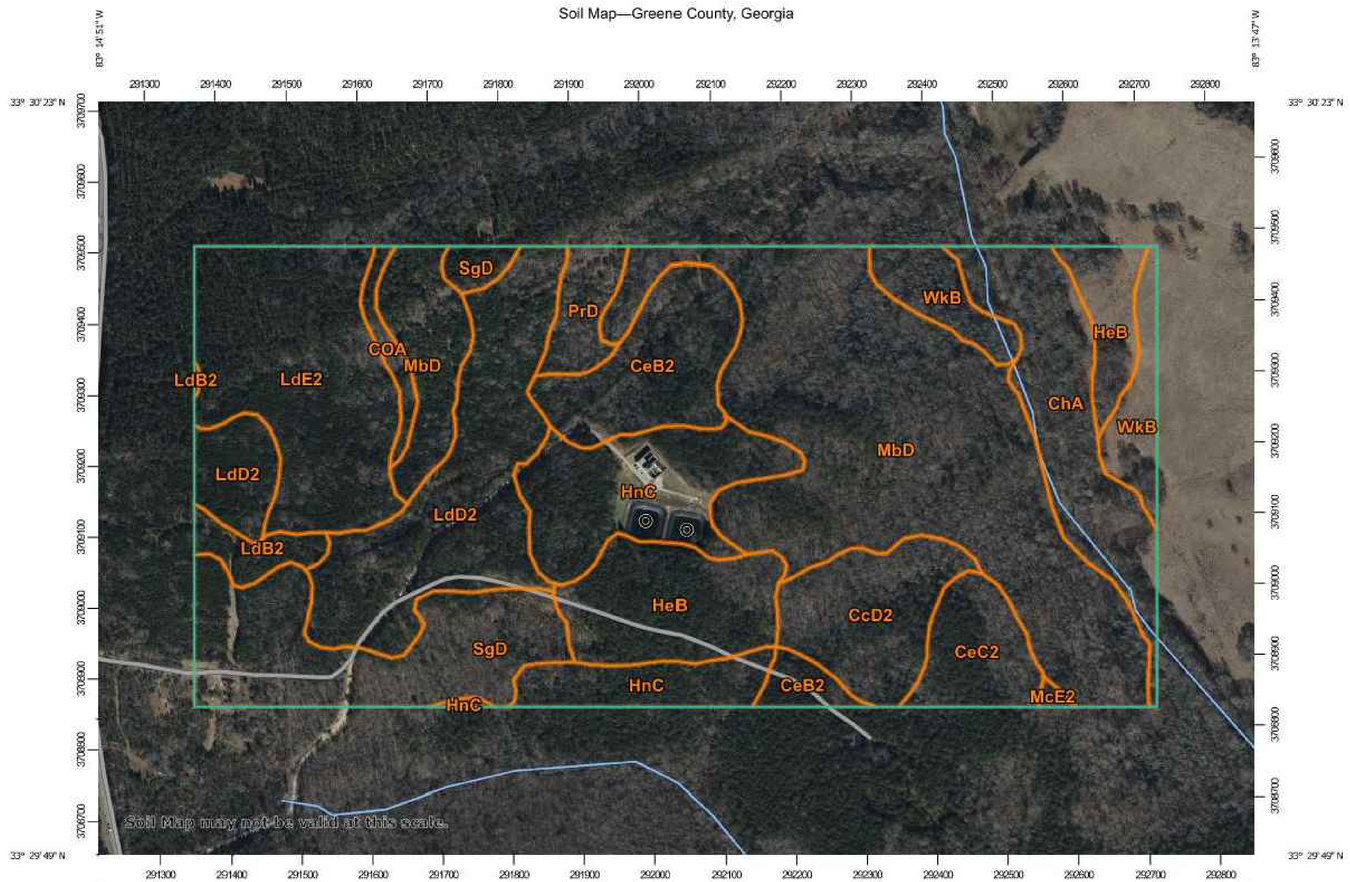
LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

DRAWING FILE: C:\Users\smith\DOCACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\CAUG250002-FIRM.dwg
PLOTTED: Apr 17, 2026 - 8:33am

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Greene County, Georgia

Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				L-R-H	L-R-H	L-R-H	L-R-H	L-R-H	L-R-H	L-R-H	L-R-H
CcD2—Cataula-Cecil complex, 6 to 15 percent slopes, moderately eroded														
Cataula, moderately eroded	60	D	0-3	Sandy loam, gravelly sandy loam, sandy clay loam, loam	SC, SM, CL	A-4, A-1-b, A-7-6	0- 0- 0	0- 0- 0	100-100-100	63-100-100	42-77- 96	19-41- 60	17-27 -45	########
			7-Mar	Loam, sandy clay loam, sandy loam	CL, SC-SM	A-6, A-2-4, A-7-6	0- 0- 0	0- 0- 0	85-100-100	84-100-100	60-87- 97	29-50- 60	20-34 -44	########
			17-Jul	Clay, clay loam	CH, SC	A-7-6, A-6	0- 0- 0	0- 0- 8	84-98-100	84-98-100	59-87-100	49-74- 91	36-52 -66	19-32-43
			17-47	Clay loam, clay, sandy clay, sandy clay loam, loam	CL, SC, CH	A-6, A-7-6	0- 0- 0	0- 0- 0	90-100-100	89-100-100	67-85-100	36-50- 80	29-38 -65	13-20-43
			47-72	Sandy clay loam, sandy loam	SC, SM, CL	A-2-4, A-4, A-7-6	0- 0- 0	0- 0- 0	90-100-100	89-100-100	60-77- 97	27-40- 60	16-25 -44	2/9/2024
Cecil, moderately eroded	40	B	0-3	Sandy clay loam, sandy loam, gravelly sandy loam	SC, SM, CL	A-7-6, A-4, A-2-4	0- 0- 0	0- 0- 0	100-100-100	76-100-100	52-77- 98	23-39- 60	17-26 -45	2/9/2024
			10-Mar	Gravelly sandy clay loam, sandy clay loam	SC, CL	A-6, A-7-6	0- 0- 0	0- 0- 0	100-100-100	77-100-100	58-80- 90	33-48- 58	29-34 -44	13-17-24
			Oct-40	Sandy clay, clay loam, clay	CH, SC	A-7-6	0- 0- 0	0- 0- 0	100-100-100	84-92-100	63-78-100	38-51- 71	42-52 -66	24-32-43
			40-55	Sandy clay loam	SC, SC	A-6, A-7-6	0- 0- 0	0- 0- 4	86-98-100	84-98-100	62-80- 88	36-49- 57	29-37 -44	13-19-24
			55-60	Loam, sandy loam, sandy clay loam	SC, SM, CL	A-6, A-2-4	0- 0- 0	0- 0- 0	92-100-100	85-100-100	54-77- 89	22-39- 51	16-28 -39	########
CeB2—Cecil gravelly sandy loam, 2 to 6 percent slopes, moderately eroded														
Cecil, moderately eroded	90	B	0-3	Gravelly sandy loam, gravelly sandy clay loam, sandy clay loam	SC	A-2-6, A-1	0- 0- 0	0- 0- 0	86-88-100	44-52-100	32-40- 96	16-20- 58	21-26 -44	########
			7-Mar	Sandy clay loam, gravelly sandy clay loam	SC	A-2-4, A-2-6	0- 0- 0	0- 0- 0	88-92-100	51-60-100	41-52- 92	23-30- 55	29-34 -40	########
			Jul-56	Clay, clay loam	CH	A-7-6, A-7	0- 0- 0	0- 1- 5	95-95-100	94-94-100	75-87-100	63-76- 92	42-54 -66	14-27-39
			56-72	Clay loam, sandy clay loam	CL	A-6	0- 0- 0	0- 0- 5	83-100-100	82-100-100	68-91- 95	52-71- 75	29-37 -42	########
HeB—Helena loamy coarse sand, 2 to 6 percent slopes														
Helena	70	D	0-3	Sandy loam, loamy sand, coarse sandy loam, loamy coarse sand	SC-SM	A-1-b	0- 0- 0	0- 0- 4	91-100-100	90-100-100	40-50- 58	########	17-22 -33	2/6/2012
			8-Mar	Sandy loam, loamy coarse sand, loamy sand, coarse sandy loam	SC-SM	A-1-b	0- 0- 0	0- 0- 4	91-100-100	90-100-100	40-50- 58	########	17-22 -33	2/6/2012
			19-Aug	Sandy clay loam, coarse sandy loam	SC	A-6, A-4	0- 0- 0	0- 0- 5	95-100-100	95-100-100	60-65- 83	38-42- 60	22-25 -42	6/8/2021
			19-42	Clay loam, sandy clay, clay, sandy clay loam	CH	A-7-6	0- 0- 0	0- 0- 5	95-100-100	95-100-100	63-84-100	36-55- 73	37-53 -69	18-30-44
			42-60	Sandy clay loam, clay loam, sandy loam	CL	A-7-6	0- 0- 0	0- 0- 0	83-96-100	82-96-100	60-88- 96	44-69- 76	26-43 -49	########
HnC—Helena loamy sand, 6 to 10 percent slopes														
Helena	80	D	0-5	Loamy coarse sand, coarse sandy loam, loamy sand, sandy loam	SC-SM	A-2-4, A-1-b	0- 0- 0	0- 0- 4	91-100-100	90-100-100	40-50- 58	########	17-23 -33	2/6/2012
			18-May	Loamy sand	SC-SM	A-2-6, A-4	0- 0- 0	0- 0- 12	86-100-100	86-100-100	62-78- 85	30-41- 48	16-23 -31	2/7/2012
			18-55	Clay loam, sandy clay loam, clay, sandy clay	SM, SC, ML, CH	A-7-6	0- 0- 0	0- 0- 5	95-100-100	95-100-100	63-84-100	36-55- 73	37-53 -69	18-30-44
			55-60	Sandy clay loam, coarse sandy loam	SC	A-6	0- 0- 0	0- 0- 5	95-100-100	95-100-100	72-86- 96	34-46- 56	22-32 -42	########
MbD—Mecklenburg-Crawfordville complex, 6 to 15 percent slopes														
Mecklenburg	35	C	0-5	Loam, sandy loam	CL, CL-ML, SM, SC-SM	A-4	0- 0- 0	0- 0- 0	100-100-100	92-97-100	68-75- 82	42-47- 54	19-23 -31	3/6/2010
			12-May	Loam, sandy loam	CL, CL-ML, SM, SC-SM	A-4	0- 0- 0	0- 0- 0	100-100-100	92-97-100	68-75- 82	42-47- 54	19-23 -31	3/6/2010
			Dec-43	Clay	CH	A-7-6	0- 0- 0	0- 0- 0	100-100-100	90-96-100	77-91-100	62-75- 93	43-53 -67	25-32-44
			43-60	Clay loam, loam	CL	A-6	0- 0- 0	0- 0- 0	100-100-100	97-98-100	82-89- 95	63-70- 75	29-35 -40	13-18-21
Crawfordville	30	D	0-3	Sandy loam, loamy sand	SC, SM, SC-SM	A-4, A-2-4	0- 0- 0	0- 0- 0	100-100-100	84-95-100	59-71- 80	23-31- 38	17-23 -31	2/6/2010
			7-Mar	Sandy loam, loamy sand	SC, SM, SC-SM	A-4, A-2-4	0- 0- 0	0- 0- 0	100-100-100	84-95-100	59-71- 80	23-31- 38	17-23 -31	2/6/2010
			13-Jul	Clay loam, clay	CH	A-7-6	0- 0- 0	0- 0- 0	100-100-100	100-100-100	83-93- 98	61-71- 76	45-55 -61	25-33-37
			13-35	Clay	CH	A-7, A-7-6	0- 0- 0	0- 7- 17	100-100-100	100-100-100	84-94- 99	69-79- 84	54-64 -69	32-40-44
			35-38	Clay loam, clay	CH	A-7-6	0- 0- 0	0- 0- 0	100-100-100	100-100-100	83-93- 98	61-71- 76	45-55 -61	25-33-37
			38-40	Bedrock	—	—	—	—	—	—	—	—	—	—



Map Scale: 1:7,480 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

USDA **Natural Resources Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

2/29/2024
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Greene County, Georgia
Survey Area Data: Version 18, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 4, 2023—Feb 18, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

GMC
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STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
No. PEO00178S
Exp.06.30.2026

1" 0" 1" 5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

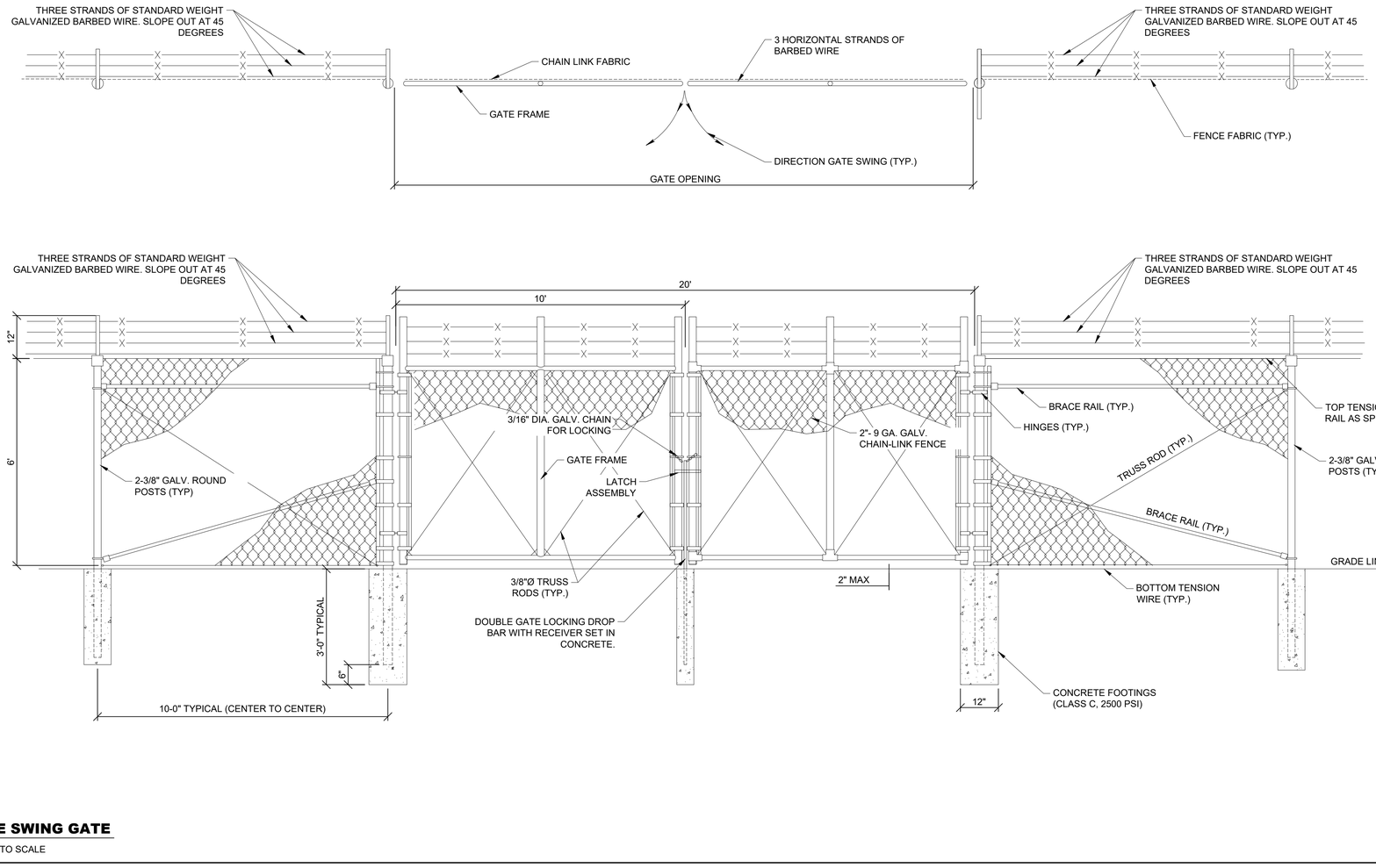
SOILS MAP

C-612

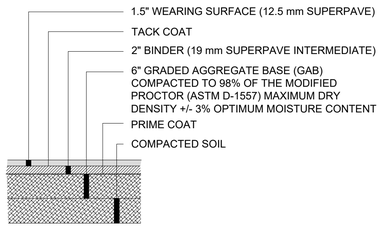
LEVEL II CERTIFICATION #69394 DANIEL L. PHILLIPS 08/07/2026

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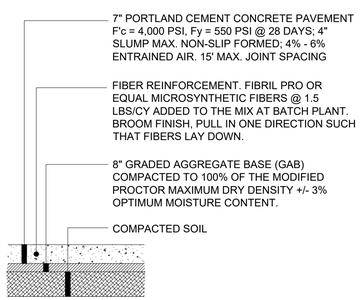
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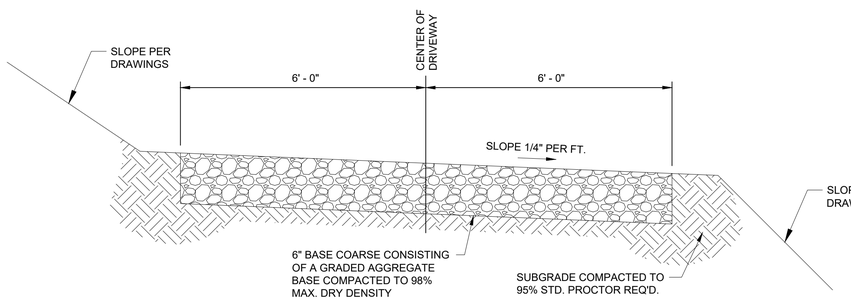
A C-101 **DOUBLE SWING GATE**
SCALE: NOT TO SCALE



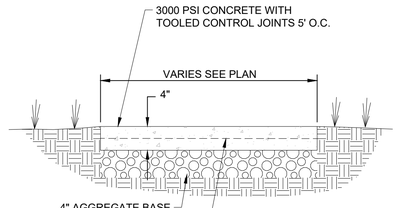
1 C-613 **STANDARD DUTY ASPH. PAV'T.**
SCALE: NOT TO SCALE



2 C-613 **HEAVY DUTY CONCRETE PAV'T.**
SCALE: NOT TO SCALE



3 C-613 **TYPICAL ACCESS ROAD**
SCALE: NOT TO SCALE



NOTES:
1. CONCRETE SIDEWALK TO HAVE 6" x 6" - 10/10 W.W.F. MAXIMUM 4" SLUMP FOR NON-SLIP FORMED AND 2" SLUMP WHEN SLIP FORMED.
2. 4% - 6% ENTRAINED AIR
3. SUBGRADE COMPACTED TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY.

4 C-613 **SIDEWALK WITHOUT CURB**
SCALE: NOT TO SCALE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID UNLESS CHECKED — GOODWYN MILLS CAWOOD, LLC — No. PE000178SG — Exp.06.30.2028 — CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	DP
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
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CAUG250007

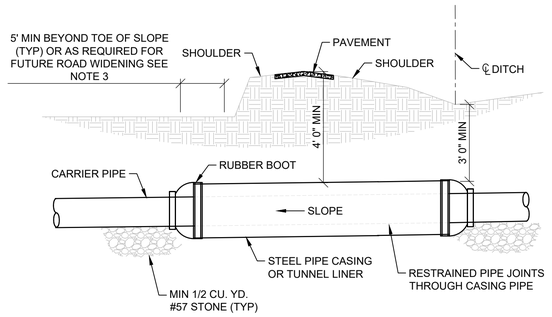
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CIVIL DETAILS

C-613

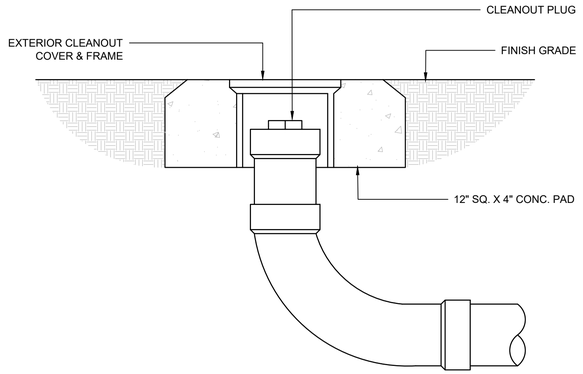
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PLOTTED: Apr 17, 2026 - 8:44am

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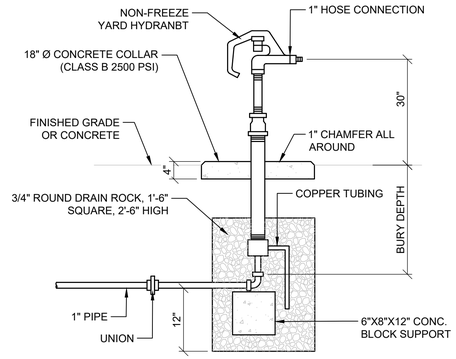
A C-911 **CASING & CARRIER PIPE UNDER PAVED ROADS**

SCALE: NOT TO SCALE



B C-911 **EXTERIOR CLEANOUT**

SCALE: NOT TO SCALE



C C-911 **FROST PROOF YARD HYDRANT**

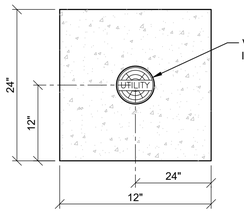
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CASING & CARRIER PIPE UNDER PAVED ROADS NOTES:

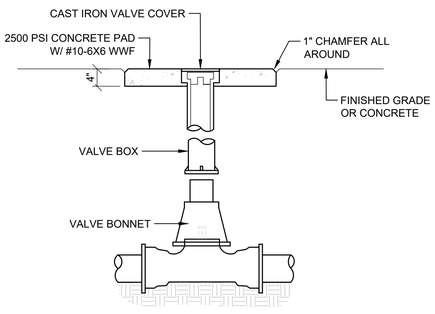
1. THIS DETAIL ILLUSTRATES A TYPICAL SEWER INSTALLATION UNDER A HIGHWAY. EACH HIGHWAY CROSSING WILL BE DIFFERENT AND SHALL BE SPECIFICALLY DESIGNED. ALL CROSSINGS SHALL BE APPROVED BY STATE DEPARTMENT OF TRANSPORTATION, THE COUNTY AND/OR THE CITY AND SHALL MEET ALL OF THEIR REQUIREMENTS.
2. REFER TO THE DRAWINGS FOR THE LOCATION, SIZE AND LENGTH OF STEEL PIPE CASINGS AND TUNNEL LINERS. REFER TO THE STANDARD SPECIFICATIONS FOR MATERIAL AND INSTALLATION REQUIREMENTS.
3. THE NEAR EDGE OF THE PIT FOR INSTALLING THE CASING/TUNNEL SHALL BE NO CLOSER TO THE EDGE OF THE TRAVELED WAY THAN ITS DEPTH BELOW THE SURFACE OF THE TRAVELED WAY UNLESS SPECIAL, APPROVED BULKHEADS ARE PROVIDED.

VALVE & VALVE BOX NOTES;

1. ALL BURIED VALVES W/ MANUAL NUT SHALL RECEIVE A BRASS I.D. PLATE.



PLAN

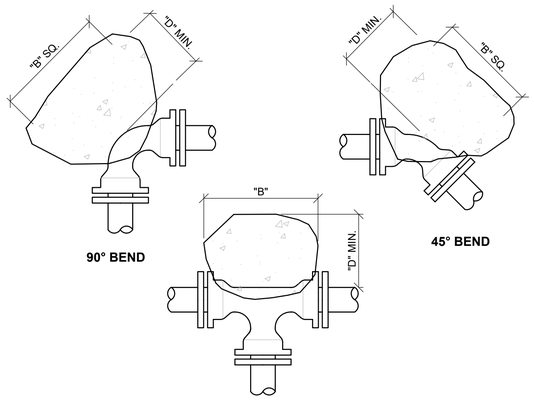


ELEVATION

D C-911 **VALVE AND VALVE BOX**

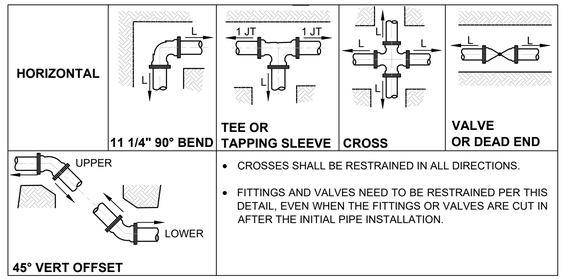
SCALE: NOT TO SCALE

PIPE SIZE (IN.)	THRUST BLOCKS (MINIMUM DIMENSIONS IN FEET)											
	90° BENDS			45° BENDS			22.5° BENDS			TEE		
	B	D	REINF. (EA WAY)	B	D	REINF. (EA WAY)	B	D	REINF. (EA WAY)	B	D	REINF. (EA WAY)
2	1.0	0.7	-	1.0	0.7	-	1.0	0.7	-	1.0	0.7	-
3	1.0	0.7	-	1.0	0.7	-	1.0	0.7	-	1.0	0.7	-
4	1.0	0.7	-	1.0	0.7	-	1.0	0.7	-	1.2	0.7	-
6	1.4	0.7	-	1.0	0.7	-	1.0	0.7	-	1.6	0.7	-
8	1.8	0.8	-	1.4	0.7	-	1.0	0.7	-	2.2	1.0	-
10	2.3	1.0	-	1.7	0.8	-	1.2	0.7	-	2.7	1.0	-
12	2.7	1.0	-	2.0	0.8	-	1.4	0.7	-	3.2	1.0	-
14	3.2	1.0	4-#5'S	2.4	1.0	3-#5'S	1.7	0.7	-	3.8	1.0	5-#5'S
16	3.6	1.0	5-#5'S	2.7	1.0	3-#5'S	1.9	0.8	2-#5'S	4.3	1.2	5-#5'S
18	4.1	1.2	5-#5'S	3.0	1.0	4-#5'S	2.2	1.0	3-#5'S	4.9	1.2	6-#5'S
20	4.5	1.2	5-#5'S	3.4	1.0	4-#5'S	2.4	1.0	3-#5'S	5.4	1.2	6-#5'S
24	5.5	1.2	6-#5'S	4.0	1.0	5-#5'S	2.9	1.0	3-#5'S	6.5	1.5	8-#5'S
30	6.8	1.5	8-#5'S	5.0	1.2	6-#5'S	3.6	1.0	5-#5'S	8.1	1.7	9-#5'S
36	8.2	1.7	9-#5'S	6.0	1.3	7-#5'S	4.3	1.2	5-#5'S	9.7	1.8	10-#5'S
42	9.6	1.8	10-#5'S	7.0	1.5	8-#5'S	5.0	1.2	6-#5'S	11.3	2.0	12-#5'S



E C-911 **THRUST BLOCK**

SCALE: NOT TO SCALE



- CROSSES SHALL BE RESTRAINED IN ALL DIRECTIONS.
- FITTINGS AND VALVES NEED TO BE RESTRAINED PER THIS DETAIL, EVEN WHEN THE FITTINGS OR VALVES ARE CUT IN AFTER THE INITIAL PIPE INSTALLATION.

HORIZONTAL DUCTILE IRON PIPE - LINEAR FEET						45° VERTICAL OFFSET (FEET)	
DIAMETER (INCHES)	45°	90°	TEES OR CROSS	VALVES & DEAD ENDS	REDUCERS LARGE SIDE	UPPER	LOWER
8	22	28	30	55	—	22	22
12	30	35	35	78	—	30	30
24	65	80	124	144	—	65	65
30	80	100	154	174	—	80	80
36	100	120	270	300	—	100	100
42	112	138	140	230	—	112	112
42 x 24	—	—	105	—	153	—	—
42 X 30	—	—	143	—	111	—	—
42 X 36	—	—	—	N/A	89	—	—

THE NOTED REQUIREMENTS WERE CALCULATED IN ACCORDANCE WITH THRUST RESTRAINT CALCULATOR v7.1.2 BY EBAA IRON WITH THE FOLLOWING ASSUMPTIONS:

- **SOIL CONDITIONS:** SANDS (SM, SP)
- **LAYING CONDITION:** 3, LOOSE SOIL BEDDING, BACKFILL LIGHTLY CONSOLIDATED TO TOP OF THE PIPE.
- **MINIMUM COVER:** 4.0 FT
- **SAFETY FACTOR:** 1.5, BARE PIPE.
- **TEST PRESSURE:** 150 PSI

IF FIELD CONDITIONS OR TEST PRESSURE DIFFER FROM THE ABOVE, CONTRACTOR SHALL NOTIFY ENGINEER.

F C-911 **THRUST RESTRAINT**

SCALE: NOT TO SCALE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — No. PE000718SG — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

YARD PIPING DETAILS

C-911

DRAWING FILE C:\Users\lsmith\DC\ACCDocs\GMC\Carey Station WRF I.5 MGD Expansion\CAD Files\Dwg\02 Sheets\05 Civil\C-911.dwg
PLOTTED: Apr 17, 2026 - 8:40am

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GENERAL

1. SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. COORDINATE THESE DRAWINGS WITH EXISTING CONDITIONS, AND COORDINATE ALL DIMENSIONS AND WALL LOCATIONS WITH THE *CIVIL DRAWINGS*. THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL AND THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES WITHIN THE CONSTRUCTION DOCUMENTS

2. THE STRUCTURAL DRAWINGS SHOULD NOT BE USED TO SIZE OR LOCATE DOORS, WINDOWS, TOILET PARTITIONS, OR NON-LOAD BEARING WALLS.

3. SEE *CIVIL* FOR ALL *EXPANSION JOINT COVERS* AND PROCESS DETAILS.

4. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE *2024 INTERNATIONAL BUILDING CODE*, WITH GEORGIA AMENDMENTS.

5. DESIGN LOADS:
   - *LIVE LOAD INFORMATION*
     - A. BLOWER = 5,022 LB EACH (2) AND 3,527 LB (3)
     - B. SODIUM HYPOCHLORITE STORAGE TANK = 20,000 LB EACH (INCLUDING CONTENTS)
     - C. SLAB ON GRADE = 100 PSF
   - *DEAD LOADING INFORMATION*
     - A. WEIGHT OF STRUCTURE
   - *WIND LOAD INFORMATION*
     - A. ULT. WIND SPEED = 115 MPH
     - B. ASD WIND SPEED = 89 MPH
     - C. WIND IMPORTANCE FACTOR (IW) = 1.0
     - D. RISK CATEGORY = III
     - E. WIND EXPOSURE = B
   - *SEISMIC DESIGN INFORMATION*
     - A. SEISMIC IMPORTANCE FACTOR (IE) = 1.25
     - B. SEISMIC DESIGN CATEGORY = C
     - C. 0.2 SECOND SPECTRAL RESPONSE ACCELERATION (SS) = 0.224
     - D. 1 SECOND SPECTRAL RESPONSE ACCELERATION (S1) = 0.085
     - E. 0.2 DESIGN SPECTRAL RESPONSE ACCELERATION (SDS) = 0.239
     - F. 1 DESIGN SECOND SPECTRAL RESPONSE ACCELERATION (SD1) = 0.136
     - G. SITE CLASS = D (PER GEOTECHNICAL REPORT)
     - H. RESPONSE MODIFICATION COEFFICIENT (R) = 4 (3.5 FOR ELECTRIC BLDG)
     - I. SYSTEM OVERSTRENGTH FACTOR = 2.5
     - J. DEFLECTION AMPLIFICATION FACTOR (CD) = 4 (2.25 FOR ELECTRIC BLDG)
     - K. SEISMIC RESPONSE COEFFICIENT (CS) = 0.0747 (0.075 FOR ELECTRIC BLDG)
     - L. DESIGN BASE SHEAR (VX) = VARIES
     - M. BASIC SEISMIC FORCE RESISTING SYSTEM - BEARING WALL SYSTEM - ORDINARY RC SHEAR WALLS (INTERMEDIATE REINFORCED MASONRY SHEAR WALLS FOR ELECTRIC BLDG)
     - N. ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE PROCEDURE

6. ALL THE SAFETY REGULATIONS, METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING, BRACING, AND FRAMEWORK, ETC. AS REQUIRED.

7. DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THESE DRAWINGS. IF THERE IS ANY QUESTION ABOUT DETAILS OR DIMENSIONS, CONTACT THE CIVIL AND STRUCTURAL ENGINEER FOR CLARIFICATION.

8. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL ALSO APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.

SUBMITTALS

1. THE CONTRACT DOCUMENTS ARE THE STRUCTURAL ENGINEER'S INSTRUMENTS OF SERVICE TO CONVEY DESIGN INTENT. THEY ARE NOT TO BE CONSIDERED FABRICATION OR LAYOUT DRAWINGS.

2. THE FOLLOW ARE REQUIRED SUBMITTALS:
   - A. *CONCRETE MIX DESIGN(S)*
   - B. *REINFORCING BAR DRAWINGS*
   - C. *CONCRETE ACCESSORIES INCLUDING WATER STOPS, CURING METHODS, CURING COMPOUNDS, JOINT SEALANTS AND JOINT MATERIALS*
   - D. *GRATING SHOP DRAWINGS*
   - E. *PRE-ENGINEERED COLD-FORMED STEEL TRUSSES*
   - F. OTHER SUBMITTALS AS NOTED ON THE DRAWINGS AND SPECIFICATIONS

   ALL GRATING SHALL BE ENGINEERED BY THE MANUFACTURER. GRATING SHOP DRAWINGS SHALL BE DEVELOPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. THE DRAWINGS SHALL BE SIGNED AND SEALED OR A COVER LETTER PROVIDED STATING THE ACCEPTANCE OF THE SHOP DRAWING BY THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

3. SUBMITTALS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER AND SHALL BEAR THE CONTRACTOR'S STAMP ATTESTING TO THE SAME. DRAWINGS NOT STAMPED WILL NOT BE REVIEWED. SUBCONTRACTOR'S UNCHECKED SUBMITTAL DRAWINGS WILL NOT BE REVIEWED.

4. SUBMITTALS TO BE REVIEWED BY THE STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE *CIVIL ENGINEER*. THE STRUCTURAL ENGINEER WILL NOT ACCEPT SUBMITTALS DIRECTLY FROM CONTRACTORS WITHOUT THE STRUCTURAL ENGINEER'S PRIOR APPROVAL.

5. UPON COMPLETION OF THE STRUCTURAL ENGINEER'S REVIEW, SUBMITTALS WILL BE RETURNED TO THE *CIVIL ENGINEER* FOR THEIR REVIEW.

6. ANY DEVIATION IN DESIGN, DETAILS, DIMENSIONS, ETC. FROM THE CONSTRUCTION DOCUMENTS SHALL BE CLOUDED ON THE SUBMITTAL AND VERIFICATION OF THE CHANGE SHALL BE REQUESTED.

CONSOLIDATING CONCRETE:

1. CONSOLIDATE CONCRETE BY MEANS OF INTERNAL VIBRATORS OPERATED BY COMPETENT WORKMEN.

2. USE VIBRATORS HAVING A MINIMUM HEAD DIAMETER OF AT LEAST 2-INCHES, A MINIMUM CENTRIFUGAL FORCE OF 700-POUNDS AND A MINIMUM FREQUENCY OF 8,000 VIBRATIONS PER SECOND.

3. VIBRATORS FOR CONFINED AREAS: IN CONFINED AREAS, USE ADDITIONAL VIBRATORS HAVING A MINIMUM HEAD DIAMETER OF 1 1/2-INCHES, A MINIMUM CENTRIFUGAL FORCE OF 300-POUNDS AND A MINIMUM FREQUENCY OF 9,000 VIBRATIONS PER SECOND.

4. KEEP ONE SPARE VIBRATOR FOR EACH THREE IN USE ON THE SITE DURING ALL CONCRETE PLACING OPERATIONS.

5. INSERT AND WITHDRAW VIBRATORS AT POINTS APPROXIMATELY 18-INCHES APART. AT EACH INSERTION OPERATE VIBRATOR FOR 5 TO 10 SECONDS. DO NOT TRANSPORT CONCRETE IN THE FORMS OR IN SLABS BY MEANS OF VIBRATORS.

REF. SHEET S-312 FOR MASONRY AND OTHER NOTES RELATIVE TO THE BLOWER/ELECTRICAL BUILDING

FOUNDATIONS

1. THE FOUNDATION IS DESIGNED USING A NET ALLOWABLE SOIL BEARING CAPACITY OF *2000 PSF* PER GEOTECHNICAL REPORT BY *GMC* DATED MAY 9, 2024 WITH PROJECT NUMBER: *GAUG230004* AND REPORT FOR WRF PACKAGE PLANT DATED JULY 14, 2025 WITH PROJECT NUMBER *GAUG250006*. IF THE BEARING CONDITIONS VARY FROM WHAT IS SHOWN, OR IF THE SOIL BEARING CAPACITY IS QUESTIONABLE, THE *CIVIL* AND STRUCTURAL ENGINEER ARE TO BE NOTIFIED IMMEDIATELY.

2. ALL BUILDING AREAS SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D698, CURRENT EDITION.

3. A REGISTERED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER SHALL BE PRESENT TO MONITOR COMPACTION AND SETTLEMENT AND VERIFY THE BEARING CAPACITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ON-SITE GEOTECHNICAL ENGINEER.

4. REMOVE ALL TOPSOIL, ROOT SYSTEM OR OTHER DELETERIOUS MATERIAL UNDER PROPOSED SLAB AND COLUMN FOOTINGS AND REPLACE WITH SUITABLE COMPACTED FILL OR CRUSHED STONE. STRUCTURAL ENGINEER'S DECISION ON QUESTIONABLE MATERIAL SHALL BE FINAL.

5. BACKFILLING SHALL BE PERFORMED IN EQUAL LIFTS NOT TO EXCEED 8" IN THICKNESS PER LIFT AROUND THE BUILDING PERIMETER TO BALANCE LATERAL EARTH PRESSURE ON THE BUILDING. WALK BEHIND COMPACTION EQUIPMENT IS REQUIRED WITHIN A DISTANCE OF TWO TIMES THE WALL HEIGHT.

6. BACKFILL AGAINST STRUCTURAL WALLS SHALL NOT BE PERFORMED UNTIL WALL AND SLAB ON GRADE HAS OBTAINED SPECIFIED STRENGTH.

7. IF REQUIRED BY THE GEOTECHNICAL REPORT OR THE ON-SITE GEOTECHNICAL ENGINEER, THE GROUND WATER TABLE SHALL BE LOWERED.

8. ALL FOOTINGS TO BE CENTERED UNDER THE COLUMNS OR WALLS THEY SUPPORT, UNLESS NOTED OTHERWISE ON THE DRAWING.

9. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL IN WRITING. THE CONTRACTOR SHALL LOCATE ANY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION.

10. INSPECTIONS BY GEOTECH FIRM ARE REQUIRED FOR EXISTING SOILS CONDITIONS, MONITORING A PROOF ROLL, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS:
    - A. SITE PREPARATION: PRIOR TO PLACEMENT OF PREPARED FILL, THE INSPECTOR SHALL DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT NOTED ABOVE FOR THE REQUIRED BEARING PRESSURE NOTED.
    - B. FILL PLACEMENT: DURING PLACEMENT AND COMPACTION OF FILL MATERIAL, THE INSPECTOR SHALL DETERMINE THAT THE PROPER FILL MATERIAL IS BEING USED AND THAT THE MAXIMUM LIFT THICKNESS IS FOLLOWED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT NOTED ABOVE.
    - C. EVALUATION OF IN-PLACE DENSITY: THE INSPECTOR SHALL DETERMINE, AT THE FREQUENCIES DETERMINED IN THE SOILS REPORT AND PROJECT SPECIFICATIONS, THAT THE IN-PLACE DRY DENSITY OF THE COMPACTED FILL COMPLIES WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT NOTED ABOVE.

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60, AND SHALL BE FREE FROM ANY FORM RELEASE AGENTS.

2. REINFORCING BENDS SHALL CONFORM TO CRSI.

3. WELDED WIRE FABRIC SHALL BE SHEETS OF NEW BILLET STEEL COLD DRAWN, CONFORMING TO ASTM SPECIFICATION A1064, GRADE 60.

4. REINFORCING IS TO BE SUPPORTED AND SPACED WITH WIRE BAR SUPPORTS ACCORDING TO CRSI "PLACING REINFORCING BARS" UNLESS NOTED OTHERWISE.

5. BAR SUPPORTS, DESIGN, DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318 AND "THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.

6. SPLICES FOR CONTINUOUS BARS SHALL BE CLASS B, UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.

7. PROVIDE BENT HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF ALL WALLS AND FOOTINGS. BENT BARS ARE TO MATCH THE SIZE AND SPACING OF HORIZONTAL BARS IN WALL OR FOOTING. USE CLASS B SPLICE EACH SIDE.

8. PROVIDE DIAGONAL BARS AT CORNERS OF OPENINGS IN SLABS AND CONCRETE WALLS. SEE DETAILS "RECTANGULAR OPENING WALL SLAB" AND "CIRCLE OPENING WALL SLAB". PROVIDE 2" CLEAR COVER BETWEEN THE OPENING AND THE CORNER REINFORCING BARS.

9. WALL FOOTING REINFORCEMENT SHALL BE CONTINUOUS THROUGH COLUMN FOOTING.

10. EXTEND ALL FOOTING REINFORCEMENT TO FAR SIDE OF FOOTING. SEE NOTE BELOW FOR CONCRETE COVERAGE.

    PROVIDE DOWELS IN WALL FOOTING TO MATCH WALL VERTICALS UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE CLASS B SPLICE. USE STANDARD ACI 90 DEGREE HOOK WITH 3" CLEAR TO BOTTOM OF FOOTING UNLESS NOTED OTHERWISE. SEE DETAIL "CORNER BAR & SPLICE LENGTH DETAIL (IN CONCRETE)"

CLASS B SPLICE OR CORNER BAR PER ACI 318 FOR: FOOTING BOTTOM MAT, SLAB ON GRADES AND VERTICAL WALL BARS WITH LESS THAN 12" OF CONCRETE BELOW BAR

BAR #	4000 PSI CONCRETE MIN. SPLICE (INCHES)	4500 PSI CONCRETE MIN. SPLICE (INCHES)	
4	25	24	
5	31	30	
6	37	35	
7	54	51	
8	62	59	
9	70	66	
10	78	73	
11	85	80	

CLASS B SPLICE OR CORNER BAR PER ACI 318 FOR: HORIZONTAL WALL BARS AND FOOTING TOP BARS WHERE MORE THAN 12" OF CONCRETE IS BELOW BAR

BAR #	4000 PSI CONCRETE MIN. SPLICE (INCHES)	4500 PSI CONCRETE MIN. SPLICE (INCHES)	
4	32	31	
5	40	38	
6	48	46	
7	70	67	
8	80	76	
9	90	86	
10	102	95	
11	114	106	

11. MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS. IF CONSTRUCTION DOCUMENTS INDICATE A LARGER COVERAGE, IT SHALL BE USED. IF STIRRUPS, TIES, OR SPIRALS ARE USED, COVERAGE SHALL BE TO THE OUTERMOST FACE OF THESE ELEMENTS:
    - A. FOOTINGS, CAISSONS, AND OTHER MEMBERS WHERE CONCRETE IS DEPOSITED AGAINST SOIL (EXCEPT SLABS ON GRADE) = 3"
    - B. CONCRETE EXPOSED TO WEATHER OR SOIL BUT IS NOT DEPOSITED AGAINST SOIL:
      - #6 BAR AND LARGER = 2"
      - #5 BAR AND SMALLER = 1 1/2"
    - C. CONCRETE NOT EXPOSED TO WEATHER OR SOIL:
      - SLABS, WALLS, JOISTS #14 BAR AND LARGER = 1 1/2"
      - SLABS, WALLS, JOISTS #11 BAR AND SMALLER = 3/4"
      - BEAMS AND COLUMNS = 1 1/2"

CONCRETE:

1. ALL CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE CODE REFERENCED EDITION OF ACI-318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"

2. PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES FOR WALLS AND BEAMS.

3. CONCRETE MIX DESIGN REQUIREMENTS AND COMPRESSIVE STRENGTH AT 28 DAYS.

DESCRIPTION	28 DAY STRENGTH (PSI)	WEIGHT PER CUBIC FOOT (PCF)	CONCRETE CLASSES FOR ACI 318 MIXTURE REQUIREMENTS	W/C RATIO, COMMENTS
FOUNDATION SLABS	*4500*	145	F2, S0, W1, C1 S1 FOR DIGESTER & CLARIFIER	*0.45 MAX.*
WALLS	*4500*	145	F2, S0, W1, C1 S1 FOR DIGESTER & CLARIFIER	*0.45 MAX. W/ 5 LB/CY OF XYPEX C-500NF*
CHLORINE CONTACT STRUCTURE	*5000*	145	F2, S1, W1, C2	*0.4 MAX.*

   FLY ASH SHALL NOT BE USED. WATER REDUCING ADMIXTURES MAY BE USED TO ACHIEVE SLUMP REQUIREMENTS.

4. LOCATION OF ALL CONSTRUCTION JOINTS, EXCLUDING SLABS ON GRADE, SHALL BE COORDINATED WITH STRUCTURAL ENGINEER.

5. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER SHOWING PROPOSED LOCATIONS OF ANY MATERIAL SUCH AS BUT NOT LIMITED TO CONDUITS, EMBEDMENTS, OR FIXTURES TO BE PLACED INSIDE ANY STRUCTURAL CONCRETE MEMBER SUCH AS BEAMS, WALLS, SLABS, COLUMNS OR FOOTINGS. THIS IS NOT REQUIRED FOR SLABS ON GRADE OF 4" OR LESS IN THICKNESS.

6. CONCRETE SLAB FLATNESS AND LEVELNESS TOLERANCES SHALL BE IN CONFORMANCE WITH ACI 117, AND SHALL BE SPECIFIED BY THE OWNER. UNLESS SUPERSEDED BY THE OWNER'S CRITERIA, CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:

   A. PROVIDE A FLOOR SURFACE WHISH IS TRUE AND LEVEL AND ACHIEVES "F NUMBERS" OF *FF = 30* AND *FL = 20* MINIMUM OVERALL COMPOSITE AND *FF = 20* AND *FL = 15* MINIMUM AT ANY INDIVIDUAL SECTION, WHEN TESTED IN ACCORDANCE WITH ASTM E1155, REMOVE SURFACE IRREGULARITIES TO PROVIDE A CONTINUOUS SMOOTH FINISH.

   B. ALL INTERIOR SLABS TO RECEIVE A SMOOTH TROWEL FINISH UNLESS NOTED.

8. UNLESS SPECIFIED OTHERWISE IN THE SPECIFICATION, TESTING OF CONCRETE SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ACI 318.

9. THE FOLLOWING PROCEDURES SHALL MEET THE REQUIREMENTS OF THE REFERENCED CODE SECTIONS:

PROCEDURE	*REFERENCE SECTION*
PREPARATION AND PLACING	ACI 304 - "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE"
CONSOLIDATION	ACI 309 - "GUIDE FOR CONSOLIDATION OF CONCRETE"
CURING	ACI 308 - "GUIDE TO EXTERNAL CURING OF CONCRETE"
HOT WEATHER CONCRETING	ACI 305 - "HOT WEATHER CONCRETING"
COLD WEATHER CONCRETING	ACI 306 "COLD WEATHER CONCRETING"

10. SLAB ON GRADE AND TURNDOWN REINFORCING SHALL BE PROPERLY SUPPORTED AT 48" O.C. MAX BY CHAIRS OR CONCRETE BRICKS WITH EQUAL COMPRESSIVE STRENGTH AS SLAB.

11. TOP MAT OF SLABS SHALL BE SUPPORTED WITH STANDEES AT A MAXIMUM OF 4'-0" O.C. EACH DIRECTION.

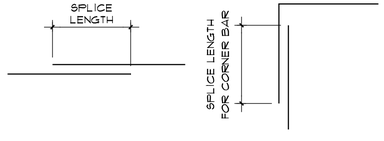
12. VERTICAL WALL REINFORCING SHALL BE TIED IN PLACE USING SPREADER BARS TO ENSURE CORRECT BAR SPACING FULL HEIGHT OF WALL. EXCESSIVE COVER IS NOT ACCEPTABLE.

CONTAINING CONCRETE STRUCTURES:

1. ALL WATERSTOP SHALL BE PVC WATERSTOP AS MANUFACTURED BY DURAJOINT OR APPROVED EQUAL UNO. IT SHALL BE AN EXTRUSION OF VIRGIN POLYVINYL CHLORIDE AND ADDITIONAL RESINS, PLASTICIZERS AND STABLEIZERS WHICH MEET OR EXCEED THE REQUIREMENTS OF THE CORPS OF ENGINEERS SPECIFICATIONS. TYPES AND DISMENSIONS OF WATERSTOP SHALL BE THOSE SHOWN IN THE PROJECT SPECIFICATIONS. THE WATERSTOP SHALL BE SECURED TO THE REINFORCING STEEL USING HOG RINGS SPACED AT 12" O.C. TO PREVENT THE WATERSTOP FROM COLLAPSING DURING THE PLACEMENT OF CONCRETE. SPLICES AND CONNECTIONS TO WATERSTOPS SHALL BE EITHER FACTORY MADE OR COMPLETED IN THE FIELD FOLLOWING CONTRACTOR TRAINING. THE CONTRACTOR SHOULD SUBMIT FIELD MADE SPLICES FOR THE STRUCTURAL ENGINEERS REVIEW PRIOR TO PLACEMENT.

2. PVC WATERSTOPS SHALL BE TYPE 11 UNLESS NOTED OTHERWISE. TYPE 10 IS USED IN EXPANSION JOINT LOCATIONS (WHERE NOTED).

3. TAPER TIE PLUGS SHALL BE MECHANICAL PLUG FOR TAPER TIE VOIDS, SUCH AS SIKA X-PLUG, OR APPROVED EQUAL.



SEE TABLE *"CLASS B SPLICE OR CORNER BAR PER ACI 318"* ON NOTES SHEET FOR SPLICE LENGTH IN CONCRETE

CORNER BAR AND SPLICE LENGTH DETAIL (IN CONCRETE)

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

GOODWYN MILLS CAWOOD, LLC
GA PE000178 LLC
Exp.06.30.2026

1" 0" 1" 5"

ISSUE	DATE	
60% Submittal	02.16.2026	DA
90% Submittal	04.17.2026	DA
Bid Set		NK
Conformed Set		MS

Project Manager:
Engineer:
Designer:
Drawn By:

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

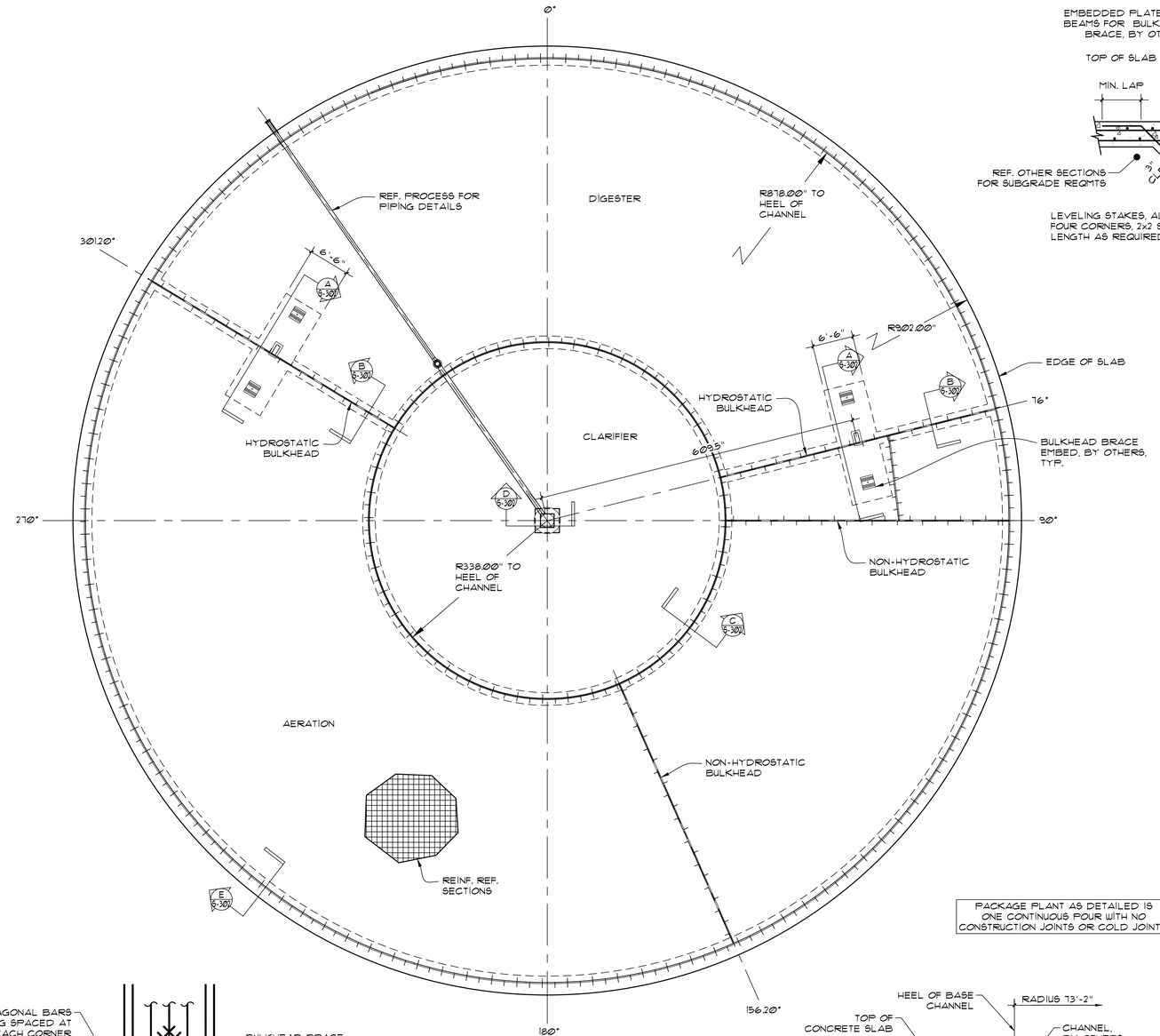
PRELIMINARY NOT FOR CONSTRUCTION

Kornegay Engineering Inc.
Structural Consultant
1450 Greene St.
Suite 520
Augusta, GA 30901
(706)955-4745 ph
Project No: 25-273

GENERAL NOTES AND DETAILS

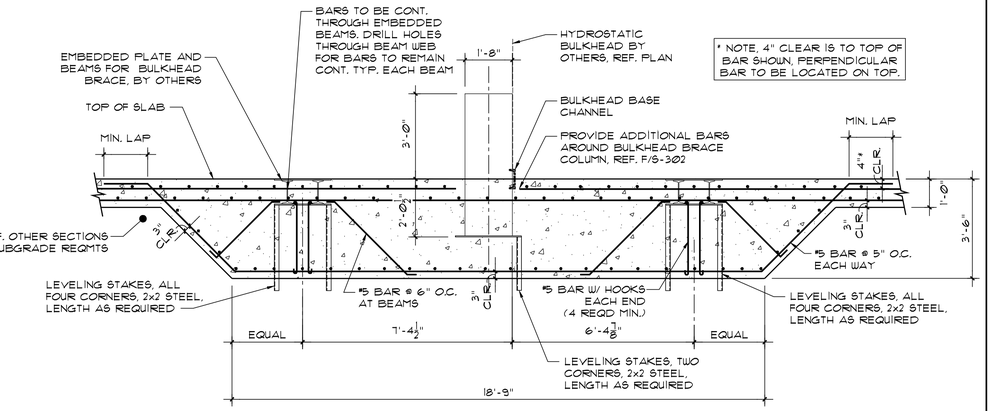
S-000

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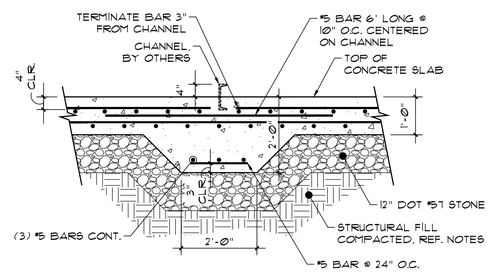
FOUNDATION PLAN

SCALE: 3/32"=1'-0"



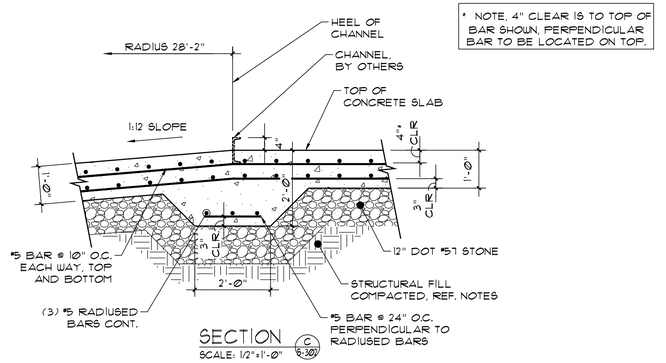
SECTION

SCALE: 3/8"=1'-0" (A S-301)



SECTION

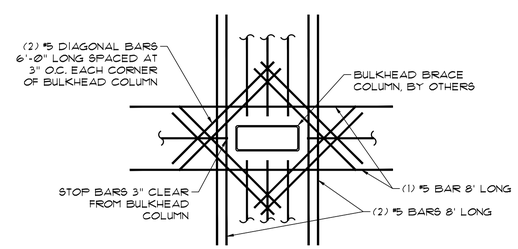
SCALE: 1/2"=1'-0" (B S-301)



SECTION

SCALE: 1/2"=1'-0" (C S-301)

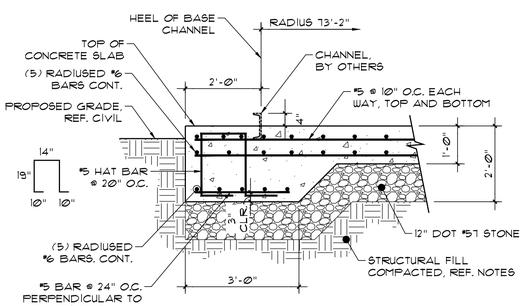
PACKAGE PLANT AS DETAILED IS ONE CONTINUOUS POUR WITH NO CONSTRUCTION JOINTS OR COLD JOINTS.



TOP MAT OF REINFORCING SHOWN, BOTTOM MAT SIMILAR.

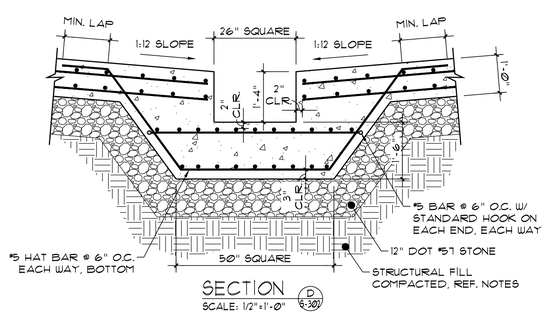
BULKHEAD BRACE COLUMN DETAIL

SCALE: NOT TO SCALE (F S-301)



SECTION

SCALE: 1/2"=1'-0" (E S-301)



SECTION

SCALE: 1/2"=1'-0" (D S-301)

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GOODWYN MILLS CAWOOD LLC
NA.PE000718SS
Exp.06.30.2026

1" 0" 1" 5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	DA
Engineer:	DA
Designer:	NK
Drawn By:	MS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

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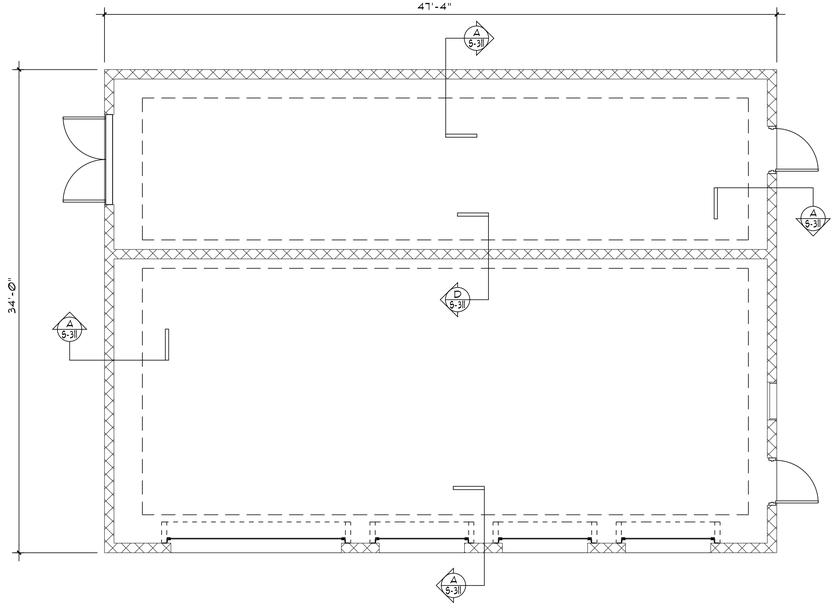
Kornegay Engineering Inc.
Structural Consultant
1450 Greene St.
Suite 520
Augusta, GA 30901
(706)955-4745 ph

Project No: 25-273

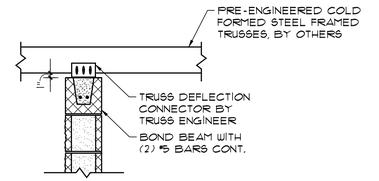
PACKAGE PLANT FOUNDATION PLAN

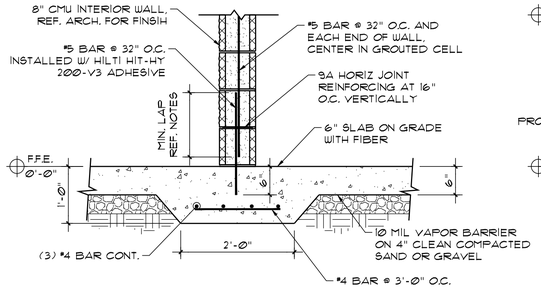
S-302

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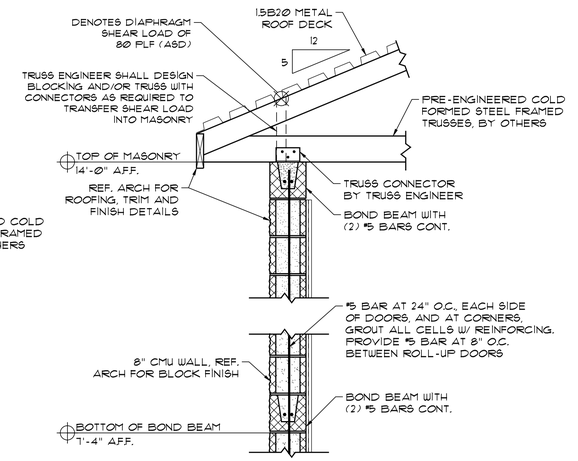


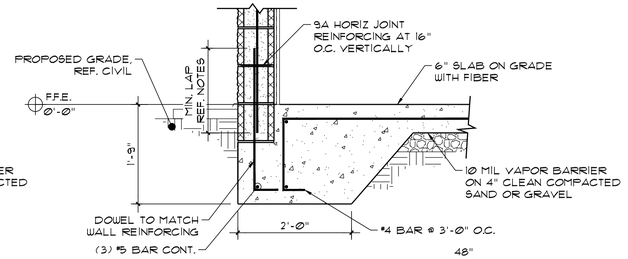
FOUNDATION PLAN
SCALE: 3/16"=1'-0"





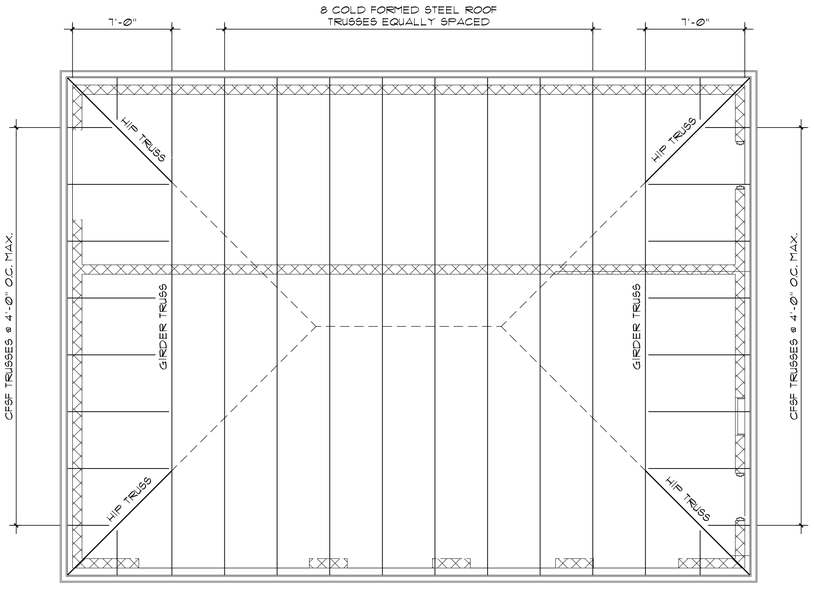
SECTION
SCALE: 3/4"=1'-0" (D 5-311)



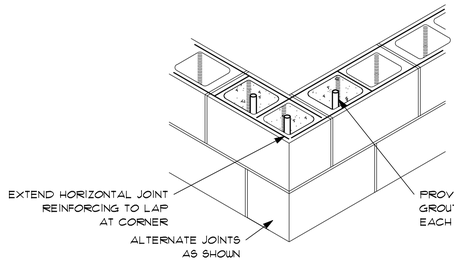


SECTION
SCALE: 3/4"=1'-0" (A 5-311)

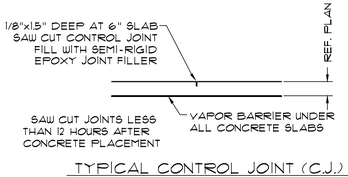




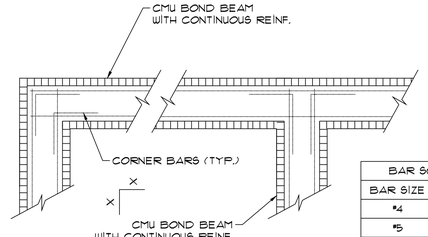
ROOF FRAMING PLAN
SCALE: 3/16"=1'-0"



TYPICAL CMU CORNER DETAIL
SCALE: 1"=1'-0" (B 5-311)



TYPICAL CONTROL JOINT (C.J.)
N.T.S.



BAR SCHEDULE	
BAR SIZE	X
#4	24"
#5	30"
#6	36"

REINF @ BOND BEAM INTERSECTION
SCALE: N.T.S. (C 5-311)

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GOODWYN MILLS CAWOOD LLC
NA.PE007486
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1" 0" .5" 1"

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BLOWERS AND ELECTRICAL BUILDING
PLANS AND DETAILS

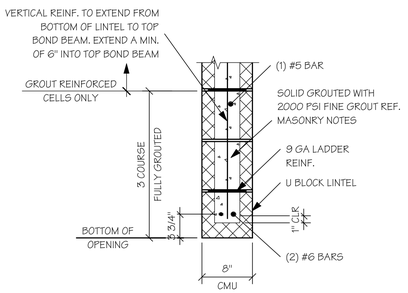
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Project No: 25-273

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BL2 DETAILS SHOWN ABOVE FOR REF. BL1 AND BL3 SIMILAR

CONCRETE BLOCK LINTEL BEAM SCHEDULE

NAME	SPAN	LINTEL	
BL1	0'-0" TO 3'-4"	(2) #5 B	1 COURSE DEEP (NON LOAD BEARING)
BL2	OVER 7'	(1) #5 T & (2) #6 B	3 COURSES DEEP
BL3	6'-0" TO 6'-4"	(2) #5 B	2 COURSES DEEP

NOTES:

1. LINTELS SCHEDULED ABOVE SHALL BE USED UNLESS SHOWN OR NOTED OTHERWISE.
2. LINTELS SHALL HAVE 1" BEARING, EACH END, FOR EACH 1'-0" OF SPAN, BUT NOT LESS THAN 8" BEARING EACH END.
3. CONCRETE BLOCK LINTELS SHALL BE MADE WITH FILLED "U" BLOCKS. SHORE POURED LINTELS (7) DAYS MINIMUM.

STRUCTURAL MASONRY

1. ALL MASONRY WORK TO BE DONE IN ACCORDANCE WITH THE CODE-REFERENCED EDITION OF ACI-530 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", AND ACI-530.1 "SPECIFICATION FOR MASONRY STRUCTURES."
2. MORTAR SHALL BE PORTLAND CEMENT-LIME AND CONFORM TO ASTM C270.
3. CLAY MASONRY UNITS SHALL HAVE TYPE N MORTAR. NET AREA COMPRESSIVE STRENGTH OF UNITS SHALL BE 6200 PSI. NET AREA COMPRESSIVE STRENGTH OF INSTALLED MASONRY (FM) SHALL BE 2000 PSI. REFER TO ARCHITECTURAL DOCUMENTS FOR ASTM DESIGNATIONS.
4. CONCRETE MASONRY UNITS ABOVE AND BELOW GRADE SHALL HAVE TYPE S MORTAR. NET AREA COMPRESSIVE STRENGTH OF UNITS SHALL BE 1900 PSI. NET AREA COMPRESSIVE STRENGTH OF INSTALLED MASONRY (FM) SHALL BE 1500 PSI. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 FOR LIGHTWEIGHT WITH A MAXIMUM UNIT WEIGHT OF 105 PCF.
5. BLOCK FILL FOR REINFORCED MASONRY SHALL BE FINE GROUT IN CONFORMANCE WITH ASTM C476 MINIMUM COMPRESSIVE STRENGTH METHOD. GROUT SHALL BE 2000 PSI AT 28 DAYS. GROUT SLUMP SHALL BE 8 TO 11 INCHES.
6. REINFORCING: ASTM A615 - GRADE 60. SEE TABLE BELOW FOR MINIMUM LAP SPLICE LENGTH AND EMBEDMENT OF REINFORCING BARS.

MASONRY REINFORCING LAP SPLICES AND EMBED LENGTH		
BAR SIZE	LAP SPLICE LENGTH (IN)	EMBEDMENT (IN)
#4	24	18
#5	30	24
#6	36	28
#7	42	32
#8	48	36
#9	54	42

7. MASONRY PREPARATION, CONSTRUCTION AND PROTECTION IN HOT OR COLD WEATHER (GREATER THAN 90 DEGREES FAHRENHEIT OR LESS THAN 40 DEGREES FAHRENHEIT) SHALL BE IN CONFORMANCE WITH ACI 530.1 SECTION 1.8.
8. EMBEDDED CONDUITS, PIPES AND SLEEVES SHALL BE COMPATIBLE WITH MASONRY AND SHALL NOT BE LOCATED IN GROUTED CELLS. PIPES CONTAINING WATER SUBJECT TO FREEZING, MATERIALS IN EXCESS OF 150 DEGREE FAHRENHEIT OR PIPES UNDER PRESSURE IN EXCESS OF 55 PSI SHALL NOT BE EMBEDDED IN MASONRY. GENERAL CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL EMBEDDED ITEMS WITH THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
9. ALL MASONRY WALLS SHALL BE REINFORCED WITH HORIZONTAL JOINT REINFORCEMENT @ 16" O.C. VERTICALLY AS FOLLOWS. THE SPACE BETWEEN THESE WIRES SHALL BE THE WIDEST THAT THE MORTAR JOINT WILL ACCOMMODATE.

CMU SIZE	HORIZONTAL JOINT REINFORCING	
	RUNNING BOND	
4"	(1) W1.7 @ 16" O.C.	
6" OR 8"	(2) W1.7 @ 16" O.C.	
12"	(2) W1.7 @ 16" O.C.	

10. VERTICAL REBAR SHALL BE CENTERED IN BLOCK WALLS LAID IN RUNNING BOND U.N.O.
11. MASONRY CELLS ON WHICH STEEL OR MASONRY LINTELS BEAR MUST BE REINFORCED WITH SAME REINFORCING AS WALL AND MUST BE FILLED WITH GROUT. IF NO WALL REINFORCING IS SHOWN A #4 BAR SHALL BE ASSUMED.
12. PROVIDE HORIZONTAL BOND BEAMS IN ALL MASONARY WALLS AT 10'-0" O.C. MAX VERTICALLY AND WITHIN 8" OF THE TOP OF THE WALL. REINFORCING IN BOND BEAM SHALL BE 1 #4 X CONT CENTERED IN 6" CMU, 2 #5 X CONT SPACED 3 1/2" O.C. HORIZONTALLY FOR 8" CMU, AND 2 #5 X CONT SPACED 7" O.C. HORIZONTALLY FOR 12" CMU. BOND BEAMS SHALL CONSIST OF "KNOCKOUT" STYLE BLOCKS.
13. THE MINIMUM LEVEL OF QUALITY ASSURANCE BASED ON ACI 530-11 SHALL BE LEVEL C. REFER TO TABLE 1.15.3 IN ACI 530-11.
14. WHERE CONCRETE BLOCK IS ABOVE AND BELOW EQUIPMENT PLATFORM, FIT BLOCK TIGHT TO UNDERSIDE OF BEAM PRIOR TO CONSTRUCTING BLOCK ABOVE.
15. MASONRY CELLS SHALL BE GROUTED ROUTINELY TO MINIMIZE GROUT FALL HEIGHT TO A MAXIMUM OF 4'-0".

CONCRETE

1. REF. SHEET S-000 FOR ADDITIONAL NOTES.
2. CONCRETE MIX DESIGN REQUIREMENTS AND COMPRESSIVE STRENGTH AT 28 DAYS.

DESCRIPTION	28 DAY STRENGTH (PSI)	WEIGHT PER CUBIC FOOT (PCF)	CONCRETE CLASSES FOR ACI 318 MIXTURE REQUIREMENTS	W/C RATIO, COMMENTS
SLAB ON GRADE ELECT. BLDG	4000	145	F0, S0, W1, C1	FIBERMESH AT 1.5 LB/CY

FIBERMESH SHALL BE A SYNTHETIC MICRO-FIBER: ASTM D7508/D7508M, FIBRILLATED POLYPROPYLENE MICRO-FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE, COMPLYING WITH ASTM C1116/C1116M, TYPE III AND SECTION 4.1.3 NOTE 2, (0.75" OR MULTI-LENGTH).

COLD-FORMED STEEL FRAMING AND TRUSSES

1. ALL COLD-FORMED STRUCTURAL STEEL MEMBERS, UNLESS FULLY DETAILED HERE IN, ACCESSORIES, AND CONNECTIONS SHALL BE DESIGNED BY PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PROJECT LOCATION IN ACCORDANCE WITH THE REFERENCED CODE. DESIGN SHALL BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STRUCTURAL STEEL MEMBERS". ALL COLD-FORMED STEEL STUD FRAMING SHALL BE MANUFACTURED BY CURRENT MEMBERS OF THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA). THE INSTALLATION SHALL COMPLY WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM 1003 (OR ASTM-A653). WELDS SHALL BE TOUCHED UP WITH A ZINC RICH PROTECTIVE PAINT FOR CORROSION RESISTANCE. STRUCTURAL STEEL STUDS SHALL HAVE A MINIMUM THICKNESS OF 33 MILS AND SHALL HAVE A MINIMUM YIELD STRENGTH 33 KSI. ANY FREAMING WITH GAUGE 16 (54 MILS) OR THICKER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.

COLD-FORMED STEEL STRUCTURAL MEMBERS				
THICKNESS (MILS)	GAUGE		THICKNESS (MILS)	GAUGE
			68	14
43	18		97	12
54	16		118	10

3. DESIGNER SHALL PROVIDE SEALED SHOP DRAWINGS SHOWING DESIGN CRITERIA, MEMBER SIZE AND SPACING, HEADER AND JAMB CONDITIONS, CONNECTIONS BETWEEN MEMBERS AND TO THE BUILDING STRUCTURE. ALL MEMBERS SHALL HAVE A MINIMUM THICKNESS OF 18 GAUGE.
4. SCREWS SHALL BE SELF DRILLING WITH A LENGTH THAT ENSURES THREE EXPOSED THREADS BEYOND PENETRATION OF THE JOINED MATERIAL. MINIMUM SCREW SPACING SHALL BE 3/4", MINIMUM EDGE DISTANCE SHALL BE 3/8". SCREW CAPACITIES SHALL BE EQUAL TO OR GREATER THAN THOSE GIVEN BY THE STEEL STUD MANUFACTURER'S ASSOCIATION WITH A 3.0 FACTOR OF SAFETY.
5. ALL COLD FORMED STEEL FRAMING ACCESSORIES OR BASIC CLIPS SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M) G-60 GALVANIZED COATING.
6. ROOF TRUSS DESIGN LOADS SHALL BE AS FOLLOWS:

ROOF

TOP CHORD LIVE LOAD. . . . . 20 PSF
TOP CHORD DEAD LOAD. . . . . 12 PSF
BOTTOM CHORD LIVE LOAD. . . . . 0 PSF
BOTTOM CHORD DEAD LOAD. . . . . 14 PSF
TOP CHORD WIND UPLIFT LOAD. . . . . IN ACCORDANCE W/ ASCE7-16
SEE GENERAL NOTES FOR OTHER DESIGN LOADS. SEE PLANS FOR ADDITIONAL POINT LOADS.

7. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR THE TRUSSES DURING ERECTION.
8. TRUSS DESIGN SHALL ACCOUNT FOR LOAD IMPOSED UPON TRUSSES BY WEIGHT OF MECHANICAL UNITS. SEE PLANS FOR UNIT LOCATION. VERIFY WEIGHT OF UNIT W/ EQUIP. SELECTED.

STEEL DECK

1. MATERIAL, DESIGN, FABRICATION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE STEEL DECK INSTITUTE. (SDI)
2. STEEL DECK SHALL BE CUT TO LENGTHS TO PROVIDE A MINIMUM OF THREE SPAN CONDITION, STEEL DECK SUBMITTAL DRAWINGS SHALL CLEARLY INDICATE BY CLOUDING ONE OR TWO SPAN CONDITIONS.
3. STEEL DECK SHALL BE FASTENED THROUGH THE DECK ONTO THE SUPPORTING MEMBERS AND AT SIDELAPS PER THE DRAWINGS. USE WELDING WASHERS AS REQUIRED TO PREVENT BURN-THROUGH OF STEEL DECK.
4. ALL STEEL ROOF DECK SHALL BE G90 GALVANIZED IN CONFORMANCE WITH ASTM A653.
5. STEEL DECK MANUFACTURER SHALL PROVIDE ALL REQUIRED ACCESSORIES.
6. FASTEN ROOF DECK TO STEEL SUPPORTING MEMBERS AT EDGE AND INTERIOR RIBS WITH A SUFFICIENT NUMBER OF #12 TEK SCREWS FOR A 36/4 PATTERN. AT EDGES PROVIDE #12 TEK SCREWS @ 12" O.C. MAX. USE 2 #10 TEK SCREWS PER SIDELAP IN THE FIELD AND AT PLACES WHERE DECK IS CANTILEVERED.

REF. SHEET S-000 FOR ADDITIONAL NOTES

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GOODWYN MILLS CAWOOD LLC
NA #000078
Exp.06.30.2026

1" 0" 1"
.5"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
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Drawn By:	MS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

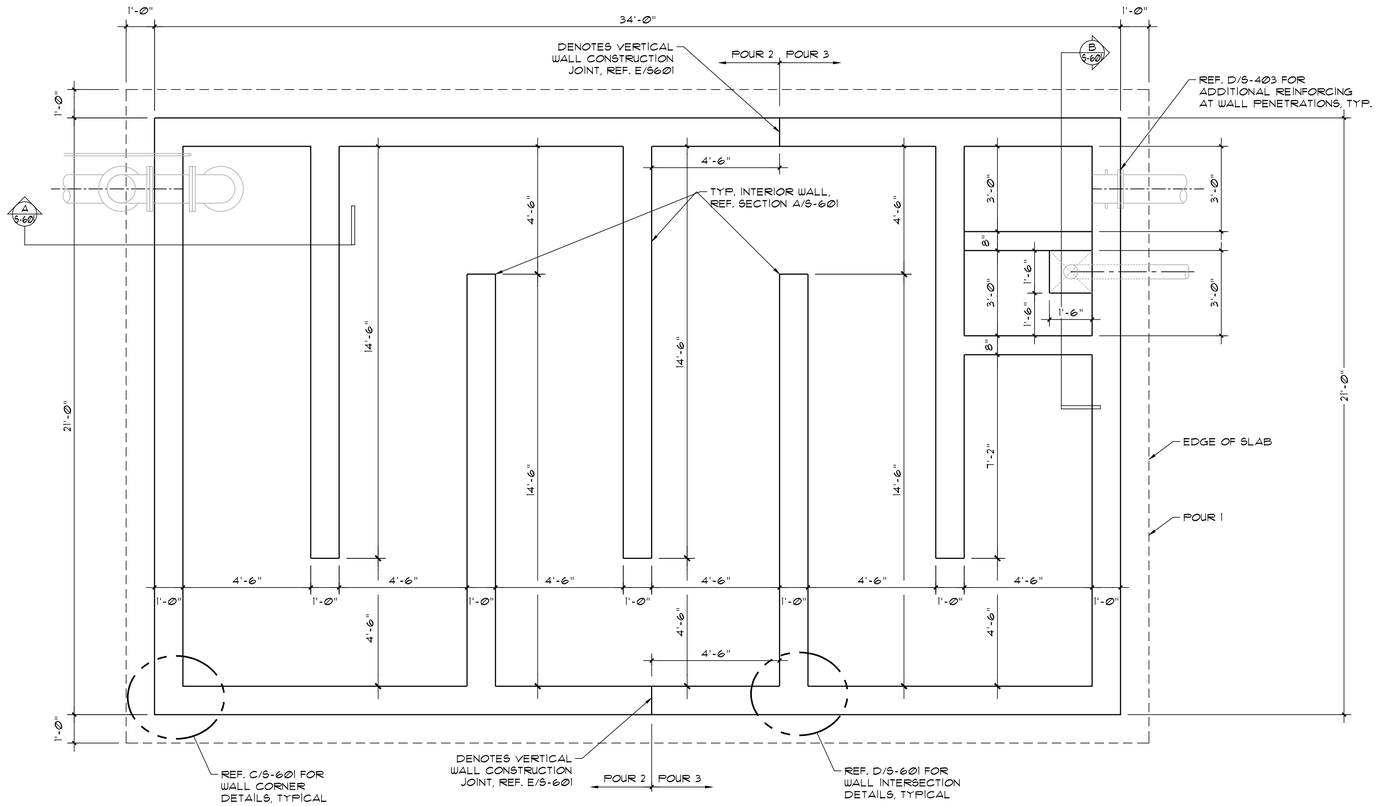
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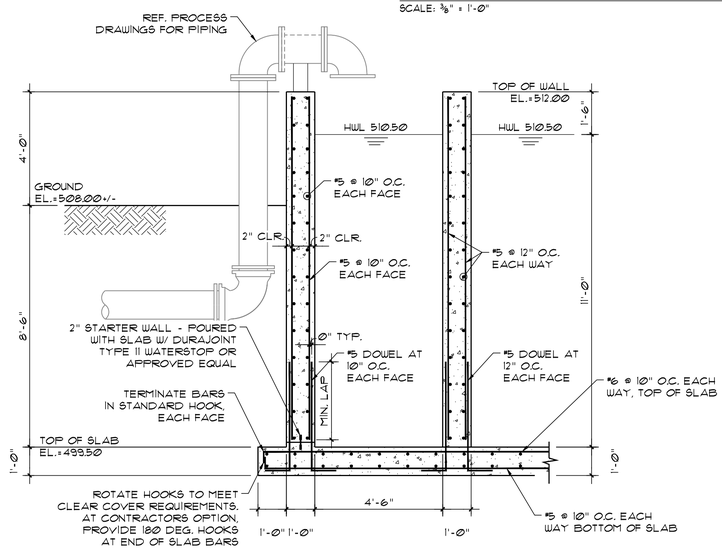
S-312

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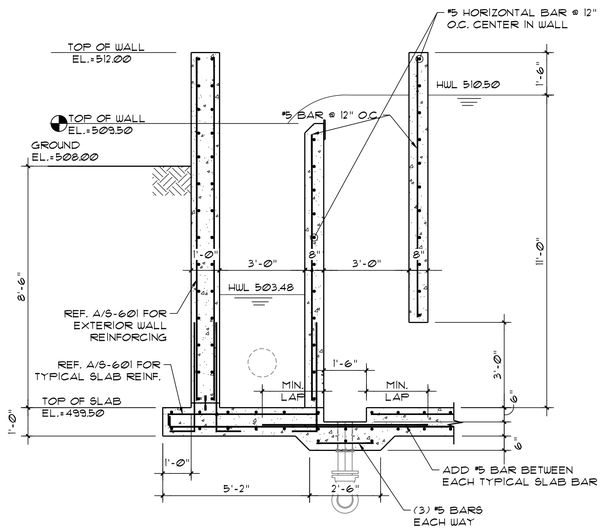
CHLORINE CONTACT CHAMBER FOUNDATION PLAN

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



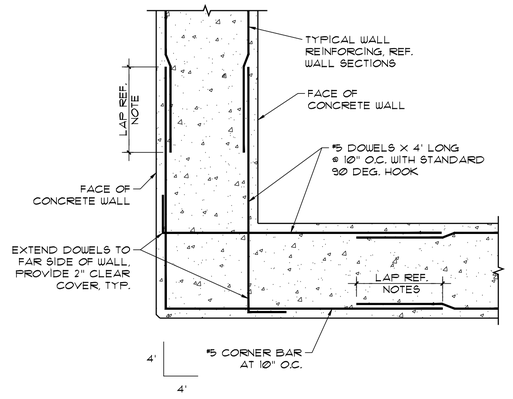
CHLORINE CONTACT CHAMBER SECTION

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



CHLORINE CONTACT CHAMBER SECTION

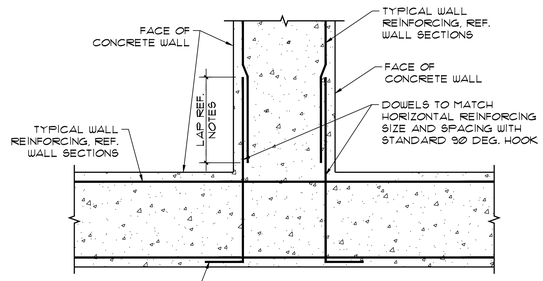
SCALE: 3/8" = 1'-0"



NOTE: VERTICAL REINFORCING NOT SHOWN FOR CLARITY. REF. WALL SECTIONS FOR SIZE AND ORIENTATION

REINFORCING AT TANK CORNERS

SCALE: NONE

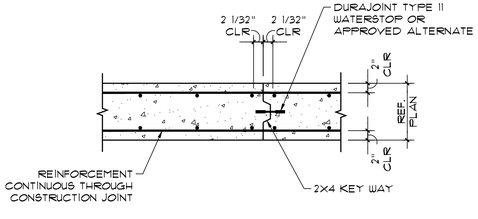


NOTE: LAP LENGTH SHALL MATCH SPLICE LENGTH FOR LARGER BAR SIZE, TYPICAL

NOTE: VERTICAL REINFORCING NOT SHOWN FOR CLARITY. REF. WALL SECTIONS FOR SIZE AND ORIENTATION

REINFORCING AT INTERIOR WALL INTERSECTION

SCALE: NONE



TYPICAL CONSTRUCTION JOINT

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

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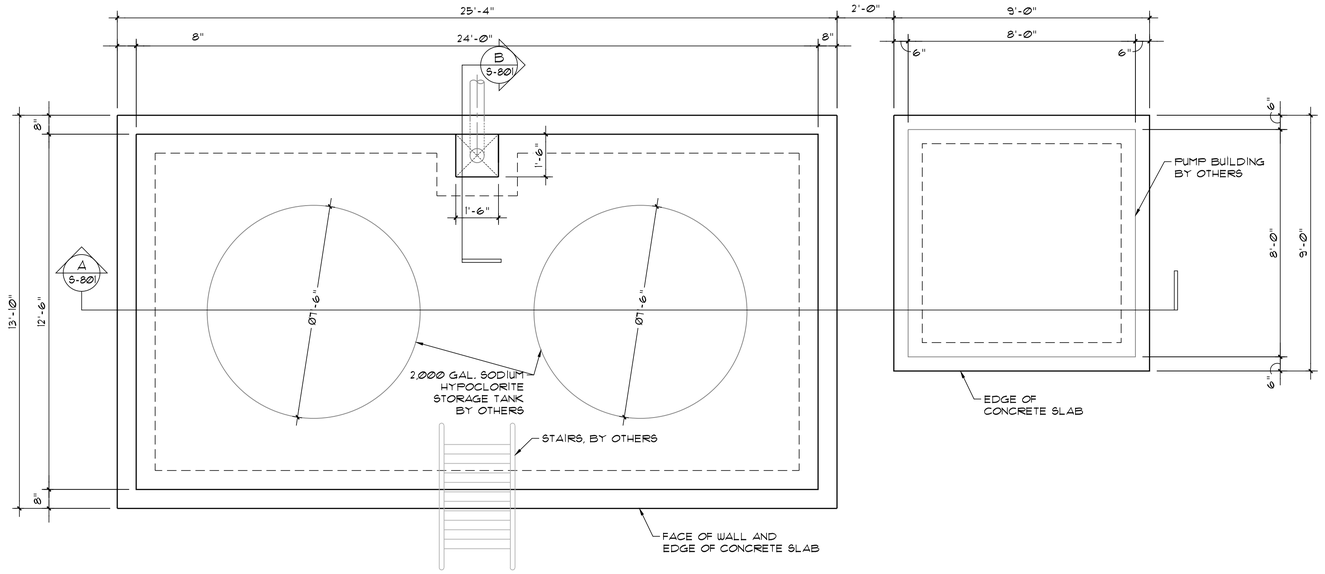
CHLORINE CONTACT CHAMBER FOUNDATION PLAN, SECTIONS & DETAILS

S-601

Kornegay Engineering Inc.
Structural Consultant
1450 Greene St.
Suite 520
Augusta, GA 30901
(706)955-4745 ph

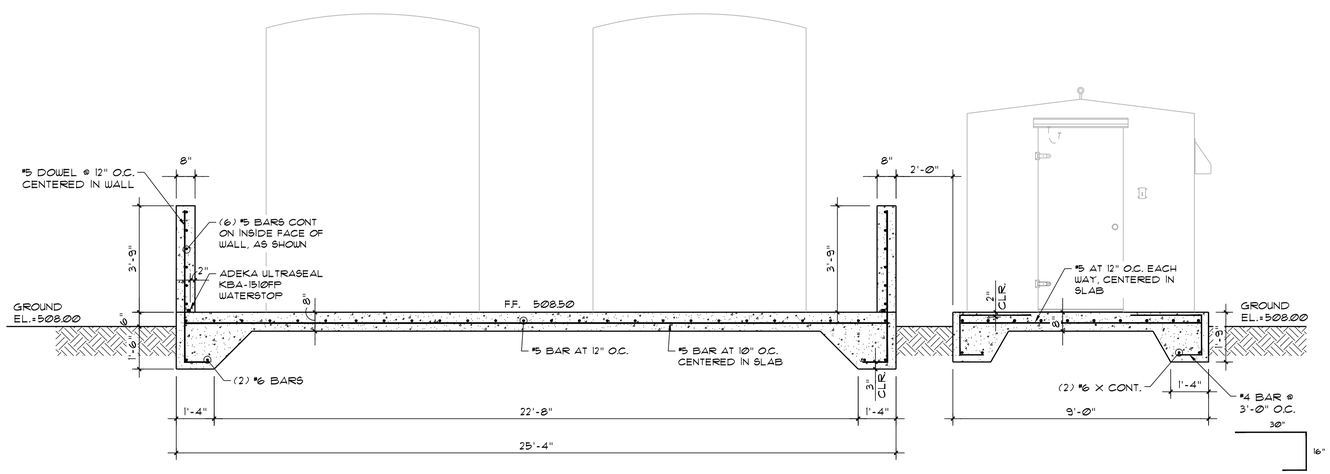
Project No: 25-273

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CHEMICAL TANK FARM & PUMP BUILDING FOUNDATION PLAN

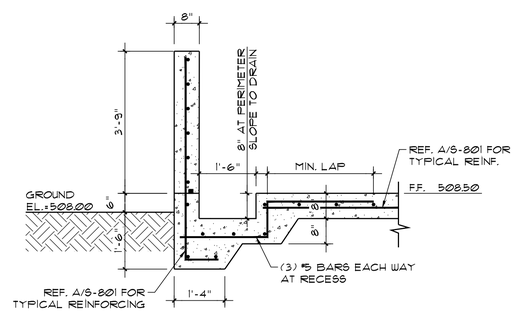
SCALE: ⅜" = 1'-0"



CHEMICAL TANK FARM & PUMP BUILDING SECTION

A S-801

SCALE: ⅜" = 1'-0"



FOUNDATION SECTION

B S-801

SCALE: ½" = 1'-0"

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Project No: 25-273

GMC
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Augusta, GA 30901
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GOODWYN MILLS CAWOOD LLC
NAPEDO7486
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	DA
Engineer:	DA
Designer:	NK
Drawn By:	MS

CAREY STATION URBAN WATER REUSE FACILITY

0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

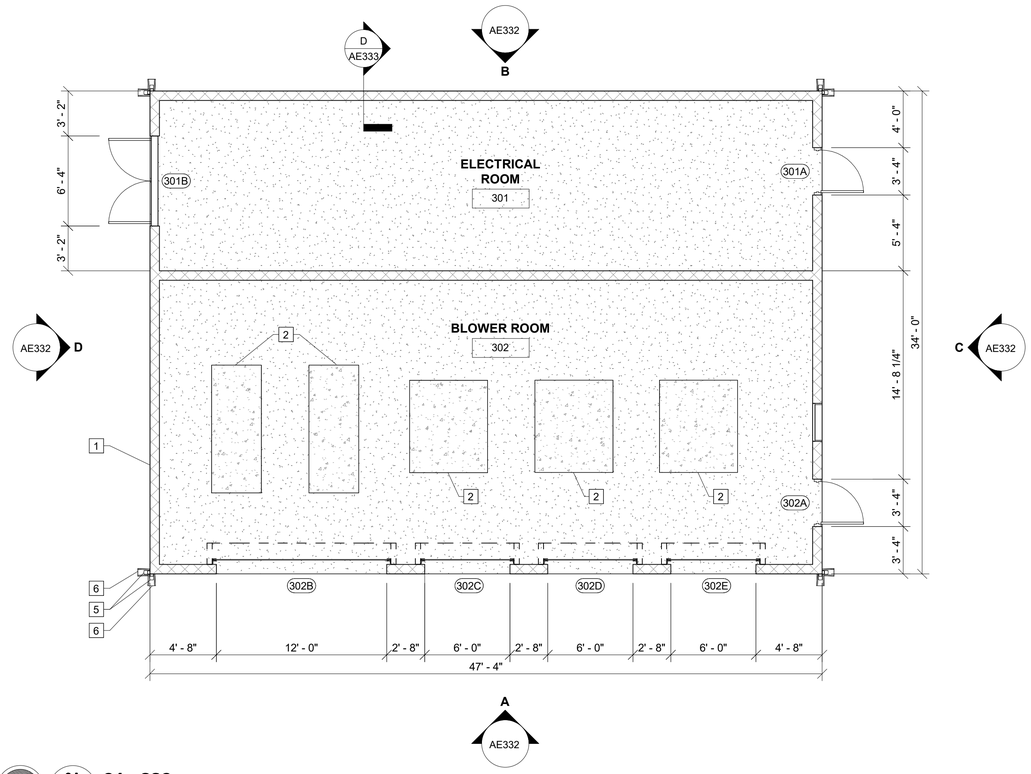
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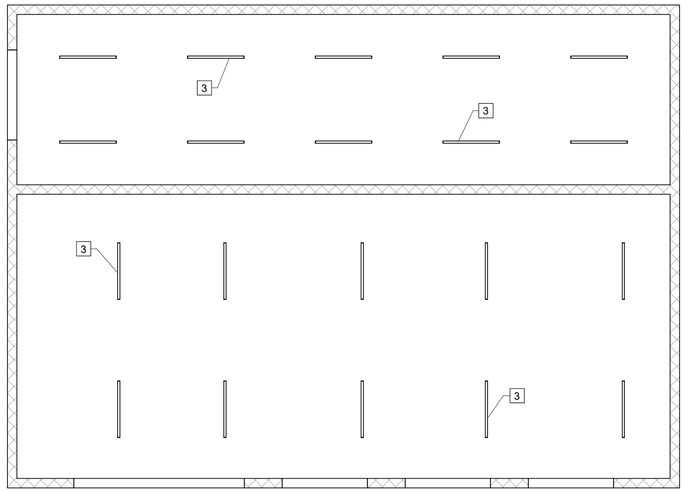
CHEMICAL TANK FARM & PUMP BLDG. FOUNDATION PLAN, SECTIONS & DETAILS

S-801

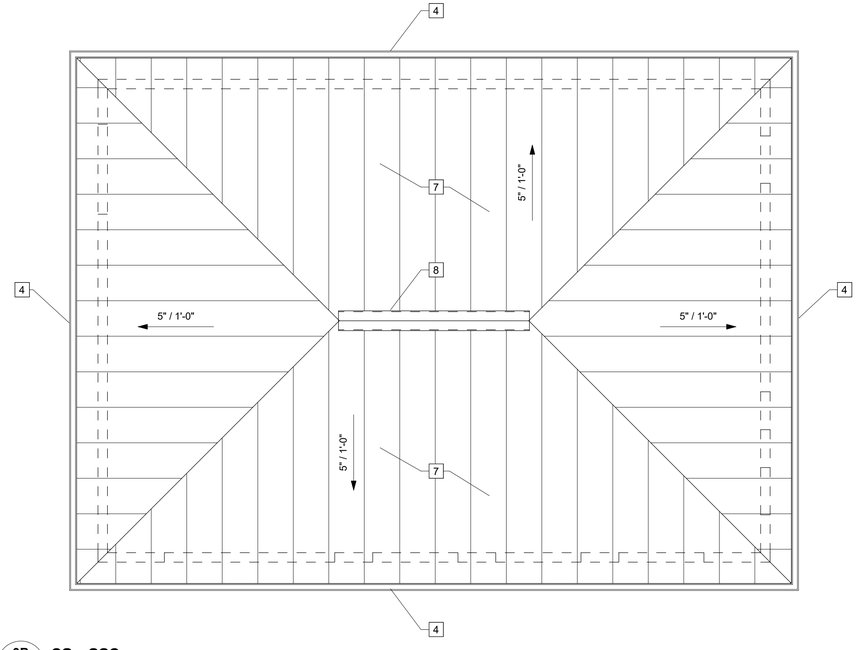
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3A AE331 **01 - 330**
SCALE: 3/16" = 1'-0"



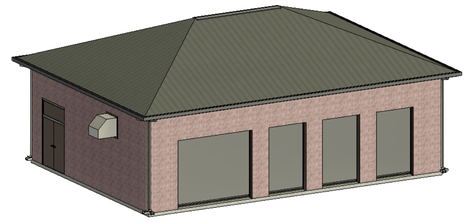
3C AE331 **REFLECTED CEILING PLAN**
SCALE: 3/16" = 1'-0"



3B AE331 **02 - 330**
SCALE: 3/16" = 1'-0"

KEY NOTES: #

1. SPLIT FACE 8" CMU
2. 4" TALL EQUIPMENT PAD
3. SEE ELECTRICAL FOR ALL LIGHT FIXTURE TYPE AND SIZES
4. ALUMINUM GUTTERS
5. 6" DOWNSPOUT
6. PRECAST CONCRETE SPLASH BLOCK
7. METAL PANEL ROOF
8. RIDGE VENT



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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NATHAN C. LEE
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION NO.

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

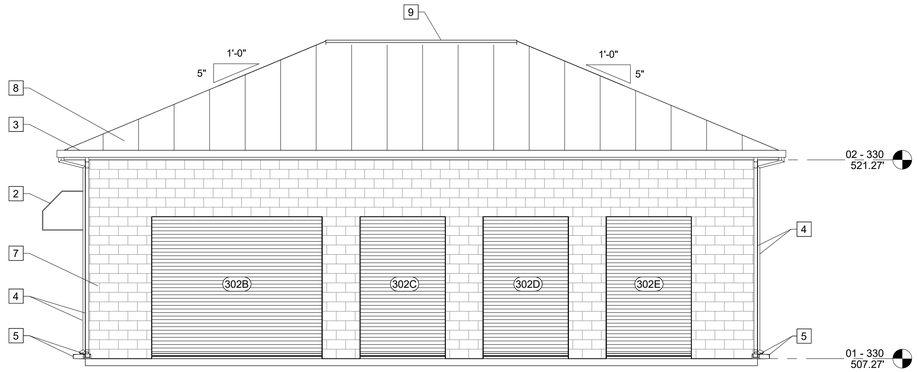
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BLOWERS AND ELECTRICAL BUILDING - PLANS

AE331

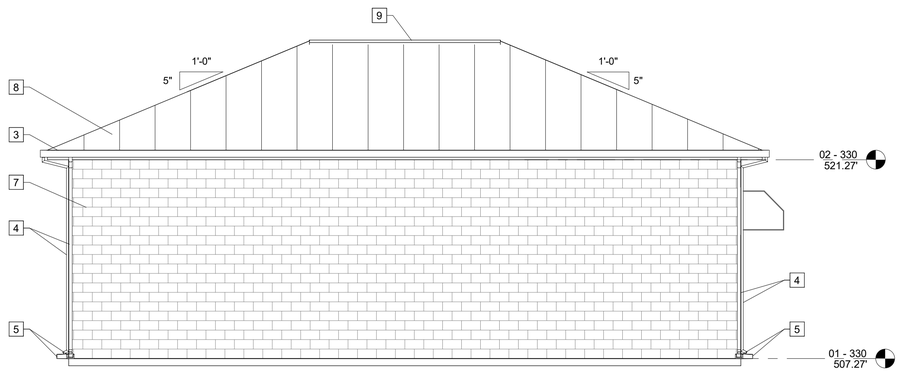
Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 8:49:50 AM

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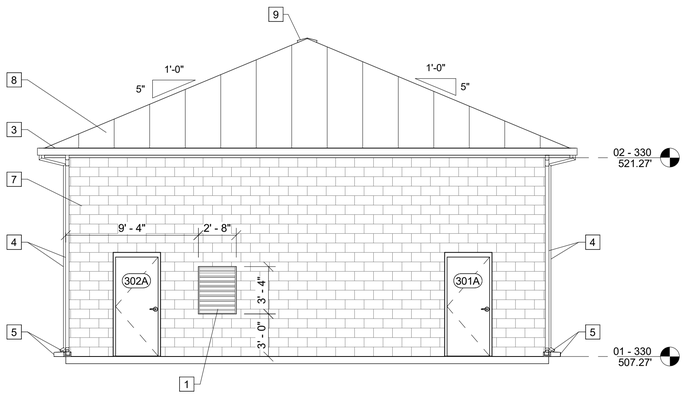
A AE331 **ELEVATION**

SCALE: 3/16" = 1'-0"



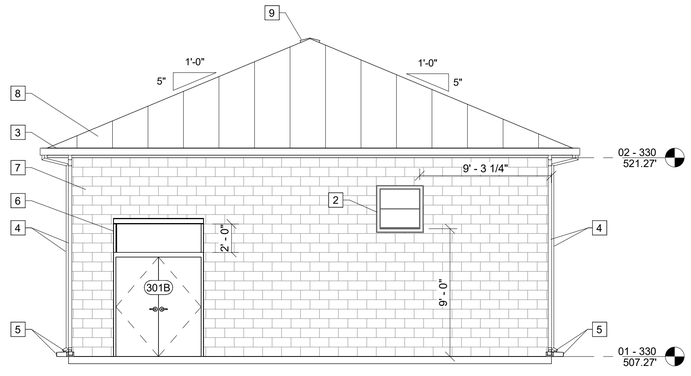
B AE331 **ELEVATION**

SCALE: 3/16" = 1'-0"



C AE331 **ELEVATION**

SCALE: 3/16" = 1'-0"



D AE331 **ELEVATION**

SCALE: 3/16" = 1'-0"

KEY NOTES: #

1. WALL LOUVER - SEE MECHANICAL
2. EXHAUST FAN - SEE MECHANICAL
3. GUTTERS
4. 6" DOWNSPOUT
5. PRECAST CONCRETE SPLASH BLOCK
6. 2' REMOVABLE TRANSOM
7. SPLIT FACE 8" CMU
8. METAL PANEL ROOF
9. RIDGE VENT

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
MATTHEW PHILLIP BAIS
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
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Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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BLOWERS AND ELECTRICAL BUILDING - EXTERIOR ELEVATIONS

AE332

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4/17/2026 8:49:53 AM

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FINISH SCHEDULE

ROOM #	ROOM NAME	WALL FINISH				FLOOR	CEILING
		NORTH	EAST	SOUTH	WEST	MATERIAL	MATERIAL
301	ELECTRICAL ROOM	CMU/PNT	CMU/PNT	CMU/PNT	CMU/PNT	RBF-1	OPEN
302	BLOWER ROOM	CMU/PNT	CMU/PNT	CMU/PNT	CMU/PNT	RBF-1	OPEN

FLOOR LEGEND

NUMBER	TYPE
RBF-1	ROUGH BROOM FINISH

MISCELLANEOUS LEGEND

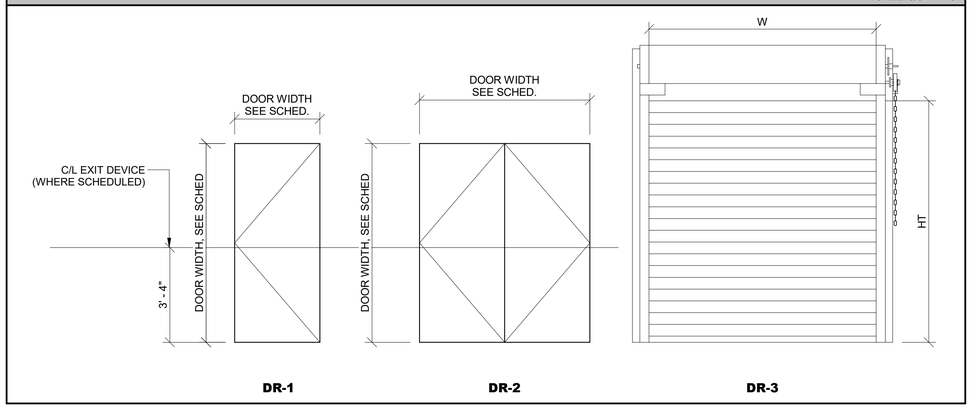
NUMBER	TYPE	DESCRIPTION
CMU-1	CONCRETE MASONRY UNITS	COLOR BY OWNER
SSMR	METAL ROOF	COLOR BY OWNER
PNT	PAINT	COLOR BY OWNER

DOOR SCHEDULE

DOOR #	DOOR			FRAMES					COMMENTS
	SIZE		TYPE	TYPE	MATERIAL	DETAILS			
	WIDTH	HEIGHT				HEAD	JAMB	SILL	
301A	3' - 0"	7' - 0"	DR-1	FR-1	HM	A	B	C	
301B	6' - 0"	7' - 0"	DR-2	FR-1	HM	A	B	C	
302A	3' - 0"	7' - 0"	DR-1	FR-1	HM	A	B	C	
302B	12' - 0"	10' - 0"	DR-3	-	-	-	-	-	ROLL-UP DOOR
302C	6' - 0"	10' - 0"	DR-3	-	-	-	-	-	ROLL-UP DOOR
302D	6' - 0"	10' - 0"	DR-3	-	-	-	-	-	ROLL-UP DOOR
302E	6' - 0"	10' - 0"	DR-3	-	-	-	-	-	ROLL-UP DOOR

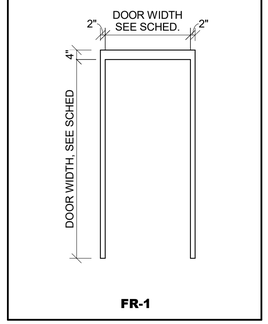
DOOR TYPES

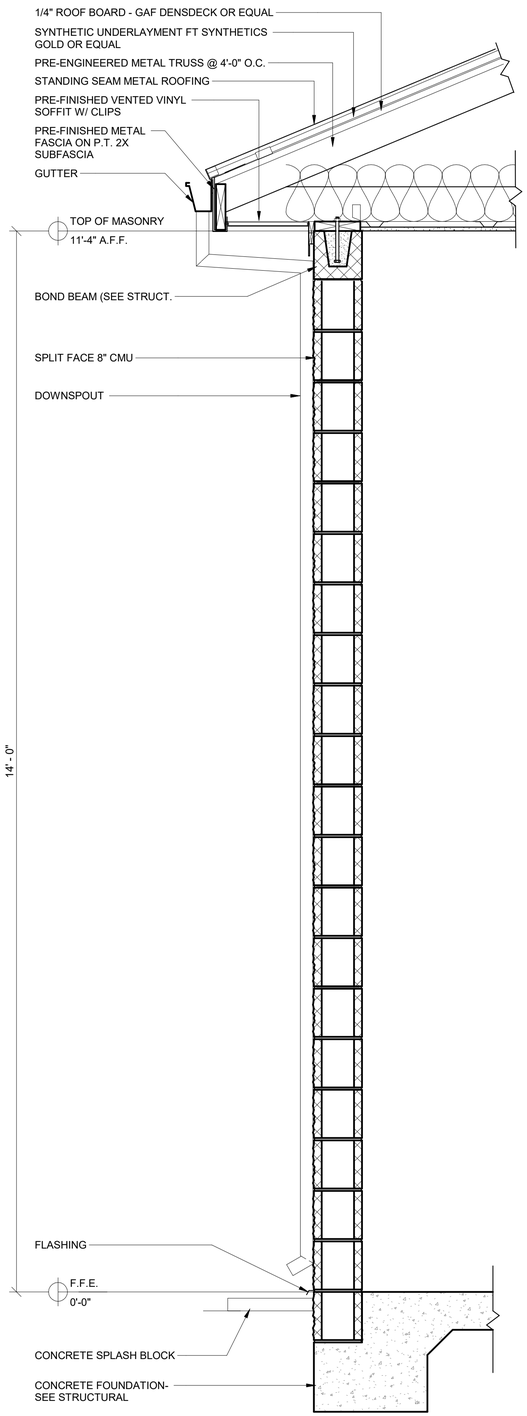
SCALE: 3/8" = 1'-0"

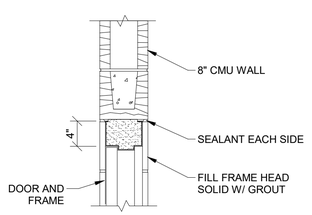


FRAME TYPES

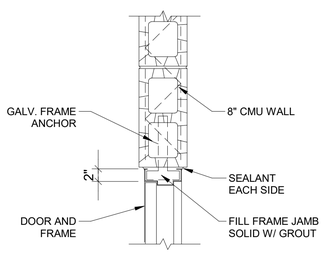
SCALE: 3/8" = 1'-0"



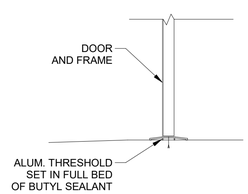




A AE333 **HEAD** SCALE: 1" = 1'-0"



B AE333 **DOOR JAMB** SCALE: 1" = 1'-0"



C AE333 **DOOR SILL** SCALE: 1" = 1'-0"

D AE331 **SECTION** SCALE: 1" = 1'-0"

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — ARCHITECTURE — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" .5" 0" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greenboro, Georgia

CAUG250007

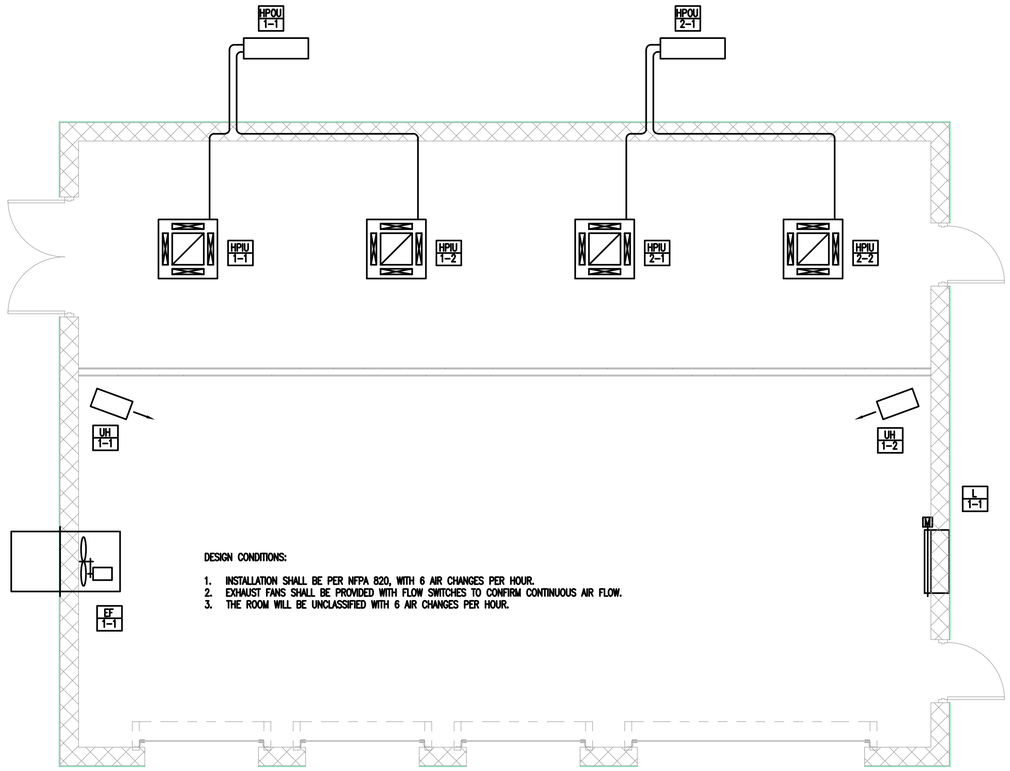
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BLOWERS AND ELECTRICAL BUILDING - SCHEDULES & WALL SECTION

AE333

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1 M-201 BLOWER BUILDING FLOOR PLAN – HVAC
SCALE: 1/4"=1'-0"

4' 2' 0 4' 8'
1/4" = 1'- 0"

HVAC SYMBOLS AND ABBREVIATIONS

	SUPPLY AIR DUCT UP/DOWN	CHWR	CHILLED WATER RETURN
	RETURN/EXHAUST AIR DUCT UP/DOWN	CHWS	CHILLED WATER SUPPLY
	NEW DUCTWORK	CU-*	CONDENSING UNIT
	FLEXIBLE DUCT	DIA.	DIAMETER
	VOLUME DAMPER	EF-*	EXHAUST FAN
	SUPPLY DIFFUSER	ES	EQUAL SPLIT
	RETURN OR EXHAUST GRILLE	FIL-*	FILTER
T	THERMOSTAT	F-*	FURNACE
P	PRESSURE SENSOR	GA	GAUGE
	SMOKE DETECTER	OA	OUTSIDE AIR
	FIRE DAMPER	OE	OPEN ENDED DUCT
	FIRE/SMOKE DAMPER	SD	SPLITTER DAMPER
S	PIPE TURNED DOWN	U/G	UNDERGROUND
S	PIPE TURNED UP	UH-*	UNIT HEATER
S	BRANCH PIPE OFF MAIN	VD	VOLUME DAMPER
CFM	CUBIC FEET PER MINUTE	A/C-*	AIR CONDITIONING SYSTEM
M	MOTOR OPERATOR	AFF	ABOVE FINISHED FLOOR
		AHU-*	AIR HANDLING UNIT

GENERAL NOTES

1. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY CONFLICTS OF WORK PRIOR TO PURCHASE OF EQUIPMENT OR COMMENCEMENT OF WORK. CONTRACTOR SHALL NOT FABRICATE WORK WITHOUT COORDINATING WITH OTHER DISCIPLINES AND VERIFYING CLEARANCE FOR THE WORK.
2. CONTRACTOR SHALL VISIT THE JOB SITE AND HAVE A GOOD WORKING KNOWLEDGE AND ACQUAINTANCE OF THE EXISTING JOB SITE AS WELL AS THE CONDITIONS OF THE JOB SITE.
3. DEVIATIONS FROM MATERIAL, METHODS, AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING WITH EQUIPMENT AND INSTALLATION SUBMITTALS.
4. CONTRACTOR SHALL REVIEW STRUCTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS BEFORE FABRICATING OR INSTALLING DUCTWORK OR EQUIPMENT TO AVOID ANY CONFLICTS.
5. REQUEST FOR PAYMENT FOR ADDITIONAL COST DUE TO SITE CONDITIONS WILL NOT BE ALLOWED.
6. ALL DUCT DIMENSIONS ARE INSIDE CLEAR.
7. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY EVERY APPLICABLE JURISDICTION FOR THE PERFORMANCE OF THE WORK.
8. ALL WORK SHALL MEET THE LOCAL AND STATE, HEATING AND AIR-CONDITIONING, AND ENERGY CODES.
9. CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING.
10. SYSTEM SHALL BE AIR BALANCED.
11. PROVIDE OPERATIONS AND MAINTENANCE MANUALS FOR ALL EQUIPMENT.
12. ALL REQUIRED LOW VOLTAGE (24 VOLTS AND BELOW) CONTROL AND INTERLOCK WIRING SHALL BE INCLUDED FOR A FULLY OPERATIONAL SYSTEM.
13. RUN COPPER CONDENSATE DRAIN FROM UNIT TO A LOCATION OUTSIDE THE BUILDING THAT IS NOT IN A VEHICLE OR FOOT TRAFFIC AREA.
14. AIR-CONDITIONING UNITS SHALL HAVE FACTORY INSTALLED VIBRATION (INTERNAL) ISOLATORS.
15. CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES AND CHECK CLEARANCES TO PREVENT ANY CONFLICTS.
16. MOUNT ALL THERMOSTATS AT 4'-6" AFF.(TOP)
17. PROVIDE SEVEN-DAY (5-1-1) DAY PROGRAMMABLE THERMOSTATS SINGLE STAGE HEAT-OFF-COOL-AUTO OR AS APPROVED BY ENGINEER. CONTRACTOR SHALL MAKE SURE THAT THESE THERMOSTAT ARE COMPATIBLE WITH THE HEAT PUMP PROVIDED.
18. ALL CONDENSING UNITS SHALL BE MOUNTED ON 4" HIGH CONCRETE PAD AND PROVIDE CLEARANCE AROUND AND THE UNITS AS RECOMMENDED BY THE MANUFACTURER.
19. MINIMUM SEER(@ SEASONAL RATING) \ EER (@ STANDARD RATING) FOR AIR-CONDITIONING UNITS SHALL BE 10.0 \ 9.5
20. MINIMUM COP @ 17 F DB AND 15 F WB FOR ELECTRIC HEAT PUMP SHALL BE 2.0 AND 6.8 HSPH(@ SEASONAL RATING AND SINGLE PHASE SPLIT SYSTEM). 6.6 HSPF(@ SEASONAL RATING AND SINGLE PHASE SINGLE PACKAGE SYSTEM).
21. AIR SHALL BE BALANCED BY A CERTIFIED INDEPENDENT BALANCING CONTRACTOR. CONTRACTOR SHALL PROVIDE SIX COPIES OF CERTIFIED BALANCING REPORT TO THE OWNER.
22. FRESH AIR INTAKES SHALL NOT BE TAKEN FROM A LOCATION CLOSER THAN 10'-0" FROM ANY SANITARY SEWER VENT OUTLET OR FLUE OR ANY EXHAUST AIR OUTLET, UNLESS SUCH OUTLET IS NOT LESS THAN 24 INCH ABOVE THE FRESH AIR INLET AND SHALL COMPLY LOCAL AND STANDARD MECHANICAL CODE.
23. DRAWINGS INDICATE LOCATIONS OF FIXTURES, APPARATUS, DUCTWORK AND PIPING; AND WHILE THESE ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE, IF IT IS NECESSARY TO CHANGE THE LOCATION OF SAME TO ACCOMMODATE BUILDING CONDITIONS, MAKE CHANGES WITHOUT ADDITIONAL COST TO THE OWNER AND AS APPROVED BY THE ARCHITECT.
24. PROVIDE ACCESS TO EQUIPMENT AND APPARATUS REQUIRING OPERATION SERVICE OR MAINTENANCE WITHIN THE LIFE OF THE SYSTEM.
25. DO NOT RUN PIPING OR LOCATE EQUIPMENT (WITH RESPECT TO SWITCHBOARDS, PANEL BOARDS, POWER PANELS, MOTOR CONTROL CENTERS OR DRY TYPE TRANSFORMERS WITHIN 42" IN FRONT OF EQUIPMENT, OVER EQUIPMENT, OR WITHIN 36" HORIZONTALLY OF SAME SPACE.
26. ALL MATERIALS AND EQUIPMENT SHALL FIT THE SPACE AVAILABLE, WITH MANUFACTURER'S RECOMMENDED CLEARANCE FOR ACCESS.
27. SCHEDULED FAN STATIC PRESSURES ARE ESTIMATED. PROVIDE AND ADJUST DRIVES TO DELIVER SCHEDULED AIR QUANTITIES AGAINST ACTUAL SYSTEM RESISTANCE. CONTRACTOR SHALL MAKE CHANGES TO SHEAVES, BELTS, VALVES, AND DAMPERS OR PROVIDE ADDITIONAL DAMPERS REQUIRED TO PROVIDE AIR QUANTITIES SHOWN ON THE DRAWINGS.
28. PROVIDE LABELS FOR EACH EQUIPMENT. LABELS TO BE ENGRAVED LAMINATED BAKELITE NAMEPLATES WITH 1/4" HIGH WHITE CUT LETTERS; SECURE TO EQUIPMENT.
29. DIMENSIONS, CONNECTIONS, AND INSTALLATION DETAILS OF EQUIPMENT SUPPLIED BY SEVERAL ACCEPTABLE MANUFACTURERS MAY VARY. CONTRACTOR SHALL BE FULLY RESPONSIBLE OF COMPLIANCE WITH REQUIREMENTS OF PLANS AND SPECIFICATION FOR ANY SUBSTITUTE EQUIPMENT.
30. CONTRACTOR SHALL SUBMIT EQUIPMENT DATA FOR APPROVAL.
31. CONTRACTOR SHALL PROVIDE A ONE-YEAR WARRANTY ON EQUIPMENT AND INSTALLATION. WARRANTY SHALL BEGIN FROM THE DATE OF THE ENTIRE PROJECT'S COMPLETION.
32. THE USE OF BRAND NAME IS FOR THE SOLE PURPOSE OF DESCRIBING THE STANDARD OF QUALITY, PERFORMANCE AND CHARACTERISTICS DESIRED AND IS NOT INTENDED TO LIMIT OR RESTRICT COMPETITION. WHENEVER MATERIAL IS DESCRIBED BY USE OF A PRODUCT OR BRAND NAME, OR BY USING THE NAME OF A MANUFACTURER OR VENDOR, THE USE OF SAME IS FOR INFORMATION PURPOSES ONLY, AND THE TERM "OR EQUAL" IF NOT INSERTED, IS IMPLIED.

EXHAUST FAN SCHEDULE

EF TAG	SERVICE	BASIS OF DESIGN	CFM	HP	S.P.	VOLTS / PH	REMARKS
1-1	DEWATERING	GREENHECK BEAR-24-02-0615	4,000	1.0	0.62	460/3	1, 2, 3, 4, 5 MOTORIZED DAMPER

1. EXHAUST FANS TO BE INTERNALLY AND EXTERNALLY COATED (INCLUDING WHEEL AND ALL SURFACES IN AIRSTREAM) SUITABLE FOR SEVERELY CORROSIVE ATMOSPHERES (CHLORINE, HYDROFLUOROSILICIC ACID, CAUSTIC, SODIUM HYPOCHLORITE AS WELL AS PHOSPHATE WHICH SHOULD NOT BE CORROSIVE). COATING TO BE FACTORY APPLIED POLYESTER COATING, GREENHECK HI-PRO POLYESTER OR APPROVED EQUAL.
2. PROVIDE WITH 45° WEATHER HOOD, MOTORIZED BACKDRAFT DAMPER, MOTOR GUARDS, ALL COATED AS INDICATED ABOVE.
3. FANS SHALL BE PROVIDED WITH CORROSION RESISTANT, NEMA 4X, WALL MOUNTED THERMOSTAT TO CONTROL FANS. THERMOSTAT SHALL BE 120V, SPDT IN NEMA 4X HOUSING, CHROMOLOX MODEL WCRT-100 OR EQUAL. THERMOSTAT SHALL ENERGIZE FANS UPON RISE IN TEMPERATURE ABOVE ADJUSTABLE SET POINT (80°F SET INITIALLY).
4. FANS SHALL BE PROVIDED WITH A NEMA 4X WALL SWITCH LOCATED INSIDE OF THE ROOM, BESIDE THE DOOR OF THE RESPECTIVE SPACE. WALL SWITCH SHALL ENERGIZE THE FAN, BYPASSING THE THERMOSTAT OPERATION TO ENERGIZE FAN PRIOR TO ENTERING ROOM AND / OR PROVIDE CONTINUOUS OPERATION. SEE ELECTRICAL DRAWING FOR SWITCH AND CONTROLS.
5. PROVIDE INTEGRAL SAFETY SWITCH.

WALL LOUVERS

L #	TYPE	SIZE WIDTH	SIZE HEIGHT	FRAME	BLADES	DAMPER	BASIS OF DESIGN	REMARKS
1-1	STATIONARY	32	48	MATCH WALL TYPE	DRAINABLE	YES, MOTORIZED	GREENHECK ESD 635	1, 2

1. LOUVERS SHALL BE GREENHECK OR EQUAL WITH BIRDSCREEN AND MIN. .06" THICK FRAME AND BLADES. COLOR TO BE SELECTED BY OWNER / ARCHITECT.
2. LOUVER TO BE PROVIDED WITH 120V ELECTRIC MOTOR OPERATED DAMPER. DAMPER SHALL BE INTERLOCKED WITH RESPECTIVE FAN TO OPEN WHEN FAN IS ENERGIZED. DAMPERS SHALL BE FIBER-REINFORCED PLASTIC RESIN TYPE. DAMPER MOTOR/ACTUATOR SHALL BE INSTALLED IN A NEMA 4X ENCLOSURE SUITABLE FOR CORROSIVE ENVIRONMENTS. CASING SHALL BE EPOXY PAINTED.

ELECTRIC UNIT HEATER SCHEDULE

UH TAG	BASIS OF DESIGN (OR EQUAL BY CHROMOLOX, REZNOR, TRANE	MODEL	CFM	FAN HP	HEATER INPUT	ELECTRICAL	AREA SERVICE	REMARKS/ ACCESSORIES
1-1	MODINE	MEW-480360-050	750	1/2	5 KW	480/3/60	BLOWER ROOM	1,2,3
1-2	MODINE	MEW-480360-050	750	1/2	5 KW	480/3/60	BLOWER ROOM	1,2,3

1. PROVIDE WITH WALL MOUNTED THERMOSTAT, CONTACTOR, AND INTEGRAL FAN CONTROL POWER TRANSFORMER. ALL COMPONENTS SHALL BE HOUSED IN NEMA 4X ENCLOSURE SUITABLE FOR CORROSIVE ENVIRONMENTS. CASING SHALL BE EPOXY PAINTED.
2. PROVIDE WITH WALL OR CEILING MOUNTING BRACKETS. MOUNT 8' MIN. A.F.F.
3. PROVIDE WITH INTEGRAL NEMA 4X NON-FUSED DISCONNECT SWITCH.
4. PROVIDE DISCHARGE POLYTUBE OR OUTLET ADAPTER PLENUM.

HEAT PUMP OUTDOOR UNIT SCHEDULE

HPOU TAG	BASIS OF DESIGN	COOLING CAPACITY	SEER2	HEATING CAPACITY	COP	VOLTS / PH	REMARKS
1-1	MITSUBISHI MXZ-SM60NAM2	60 MBH	20.0	66 MBH	2.3	208-230 / 1	
1-2	MITSUBISHI MXZ-SM60NAM2	60 MBH	20.0	66 MBH	2.3	208-230 / 1	

HEAT PUMP INDOOR COIL UNIT SCHEDULE

HPIU TAG	BASIS OF DESIGN	COOLING CAPACITY	CFM	HEATING CAPACITY	VOLTS / PH	REMARKS
1-1	MITSUBISHI PLA-A30EA7	30 MBH	670	32 MBH	208-230 / 1	
1-2	MITSUBISHI PLA-A30EA7	30 MBH	670	32 MBH	208-230 / 1	
2-1	MITSUBISHI PLA-A30EA7	30 MBH	670	32 MBH	208-230 / 1	
2-2	MITSUBISHI PLA-A30EA7	30 MBH	670	32 MBH	208-230 / 1	

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

BLOWER BUILDING HVAC FLOOR PLAN

M-001

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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Model: BAER-24-02-0615

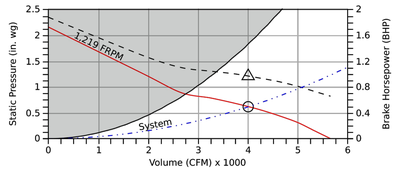
Sidewall Belt Driven Exhaust Fan

Standard Construction Features: Galvanized steel panel with fabricated galvanized steel drive frame (optional wall housing or wall collar). Propeller, cast aluminum. Belt driven motor in the airstream.

Fan Configuration	
Drive type	Belt

Performance	
Requested Volume (CFM)	4,000
Actual Volume (CFM)	4,000
Total External SP (in. wg)	0.62
Fan RPM	1,219
Drive Loss (%)	6
Operating Power (bhp)	0.97
Startup Power (bhp)	0.97
FEI	1.24
FEP Input Power (kw)	0.88
Air Stream Temp (F)	70
Start-up Temp (F)	70
Air Density (lbs/ft^3)	0.072
Elevation (ft)	1000
Static Efficiency (%)	43
Outlet Velocity (ft/min)	1,235

Motor	
Size (hp)	1
V/C/P	460/60/3
NEC FLA (Amps)	2.1
Min Circuit Ampacity (MCA)	2.6
Max Overload Production (MOP)	15
Motor Efficiency (%)	85.5



Fan curve
Brake horsepower curve
Operating Point SP
Operating Bhp point
Max system curve
System curve

Static Pressure Calculations	
External SP	0.5 in. wg
Backdraft Damper	0.02 in. wg
Wall Housing	0.04 in. wg
Weatherhood	0.05 in. wg
Total External SP	0.62 in. wg

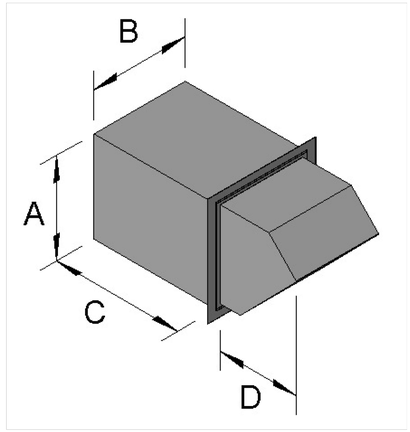
Sound

	Octave Bands (hz)								LwA	dBA	Sones
	62.5	125	250	500	1000	2000	4000	8000			
Inlet	85	83	85	84	83	78	76	73	87	76	25

Greenheck Fan Corporation certifies that the model shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA certified ratings seal applies to sound and air performance ratings only. Performance certified is for installation type A: Free inlet, free outlet. Power rating includes transmission losses. Performance ratings do not include the effects of appurtenances. The AMCA licensed air and/or sound performance data has been modified for installation, appurtenances, etc. not included in the certified data. The modified performance is not AMCA licensed but is provided to aid in selection and applications of the product.

FLA - based on tables 150 or 148 of National Electric Code 2002. Actual motor FLA may vary, for sizing thermal overload, consult factory. MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc.).

Dimensions and Weights		
Label	Value	Description
-	24.125	Impeller Diameter (in)
-	237	Weight w/o accessories (lbs)
A	38	Overall Height (in)
B	38	Overall Width (in)
C	38	Overall Length (in)
D	31	WTHD Length (in)
-	33.5	Wall Opening Width (in)
-	33.5	Wall Opening Height (in)



*All dimensions are in inches.

Model: ESD-635-32x40

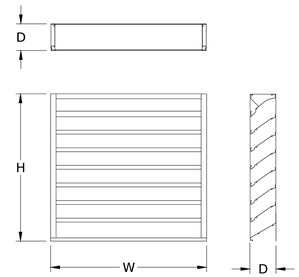
6 in. Drainable Blade Louver

Certifications/special requirements: AMCA-500-L (Air), AMCA-500-L (Water)

Construction	
Material	Aluminum
Blade Type	All
Blade Orientation	Horizontal
Weight (lbs)	35

Dimensional	
Nominal Width (in)	32
Nominal Height (in)	40
Actual Width (in)	31.75
Actual Height (in)	39.75
Blade Depth (in)	6
Sections Wide	1
Sections High	1

Performance	
Application	Intake
Volume (CFM)	4,000
Pressure Drop (in. wg)	0.1
Free Area Velocity (ft/min)	800
Free Area (ft^2)	5
Air Density (lbs/ft^3)	0.075



*Louvers are tested to figure 5.5-6.5
*Sections wide x high are as configured with a base mill finish channel frame product and may vary depending on options selected.

Greenheck Fan Corporation certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance and water penetration ratings.

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GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION

ISSUE	DATE

PROJECT MANAGER: DV
ENGINEER: DV
DESIGNER: DV
DRAWN BY: DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

BLOWER BUILDING
HVAC EQUIPMENT
PART 1

M-002

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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MODINE
Engineering a Cleaner, Healthier World

Corrosion-Resistant Washdown Unit Heaters – MEW



Modine® MEW

Bringing comfort to washdown and corrosive environments

A new generation of NEMA 4X corrosion-resistant washdown heaters. UL listed Type 4X heater with models ranging from 3 kW to 39 kW.

US Coast Guard Marine Rating available only with the following options selected: Built in manual reset, high temp limit (M), and built in disconnect switch (D).

IMPORTANT: Modine® MEW heaters are suitable for non-hazardous locations only. For washdown applications use water pressure less than 70 psi.



Shown with optional disconnect and built-in thermostat.

Features & Benefits

- NEMA type 4x protection against water penetration for longer life in corrosive or washdown environments
- 16-gauge stainless-steel cabinet offers industrial-grade durability
- Stainless steel elements add corrosion protection and improved heat distribution
- Epoxy-coated fan blade contributes to longer operational life
- Optional built-in features allow for greater installation flexibility and US Coast Guard Marine Duty listing
- Highly flexible mounting options from the included stainless steel wall/ceiling mounting kit
- 120 V controls allow for better contractor pull-in reliability
- Increased safety with stainless steel temperature high-limit

Core Industries

- Farming and Agriculture
- Food and Beverage Production
- Car Washes
- Oil and Gas
- Dairy
- Petrochemical

modinehvac.com

Dimensions

Dimensions	A		B		C		D		E		F	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
3 to 10 kW	12.5	318	12.8	325	8.5	216	24.4	620	6.4	162.5	0.9	23
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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General Specifications

		1.5, 5, 10	15, 20	25, 30, 35, 39
Air Delivery	CFM	700	1450	2100
	m3/hr	20	41	60
Approximate Air Velocity	ft/min	785	950	288
	m/s	240	288	276
Fan Diameter	in	12	16	20
	mm	305	406	508
Horizontal Air Throw	ft	22	35	44
	m	6.7	10.7	13.4
Maximum Mounting Height* (horizontal to underside)	ft	8.5	11.5	13.3
	m	2.6	3.5	4.1
Maximum Mounting Height* (45° decline to underside)	ft	12.8	18.0	18.8
	m	3.9	5.5	5.7
Minimum Mounting Height	ft		6.0	
	m		1.8	
Net Weight	lbs	75.0	90.0	130
	kg	34.1	40.9	59.1
Shipping Weight	lbs	125.0	140.0	180
	kg	56.8	40.9	81.8

* Maximum mounting height to ensure warm air reaches the floor. Contact factory for suitable applications.

Approvals	UL listed to U.S. & Canadian safety standards. Type 4X. Complies with U.S. Coast Guard electrical engineering regulations subchapter J (46 CFR Parts 110-113) when manual reset temperature high-limit is ordered
Enclosure	NEMA Type 4X non-metallic enclosure
Motor Type	Thermally protected, ½ HP, 1725 RPM, permanently lubricated ball bearings
Fan	Epoxy coated, aluminium blade, steel spider
Mounting Bracket	Type 304 stainless steel universal mounting bracket. Minimum 16-gauge (0.06" / 1.52 mm)
Heating Elements	Type 321 stainless steel sheath with Type 304 stainless steel spiral fins
Temperature High-Limit	Automatic reset, stainless steel bulb and capillary. Optional manual reset, stainless steel bulb and capillary. Replaces automatic reset.
Temperature Limitations	Storage: -4°F to 140°F (-20°C to 40°C) Operating: -4°F to 104°F (-20°C to 60°C)
Control Circuit	120 Vac
Optional Built-in Thermostat	NEMA Type 4X thermostat
Control Transformer	Multi-tap primary, 120V secondary, 50 VA
Contactor	40 or 75 amp. Rated for 500,000 mechanical operations. 120V, 15 VA coil
Cabinet Material	Type 304 stainless-steel, 16-gauge (0.06" / 1.52 mm). All external fasteners are stainless steel
Inlet Grille	Type 304 stainless steel, ¼" (6.3 mm) maximum openings. Minimum 18-gauge (0.05" / 1.21 mm)
Discharge Grille	Type 304 stainless steel. Rotatable in 45° increments. Minimum 18-gauge (0.05" / 1.21 mm)

MODINE
Engineering a Cleaner, Healthier World

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Modine Manufacturing Company
1500 DeKoven Avenue
Racine, Wisconsin 53403-2552

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9-129

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T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

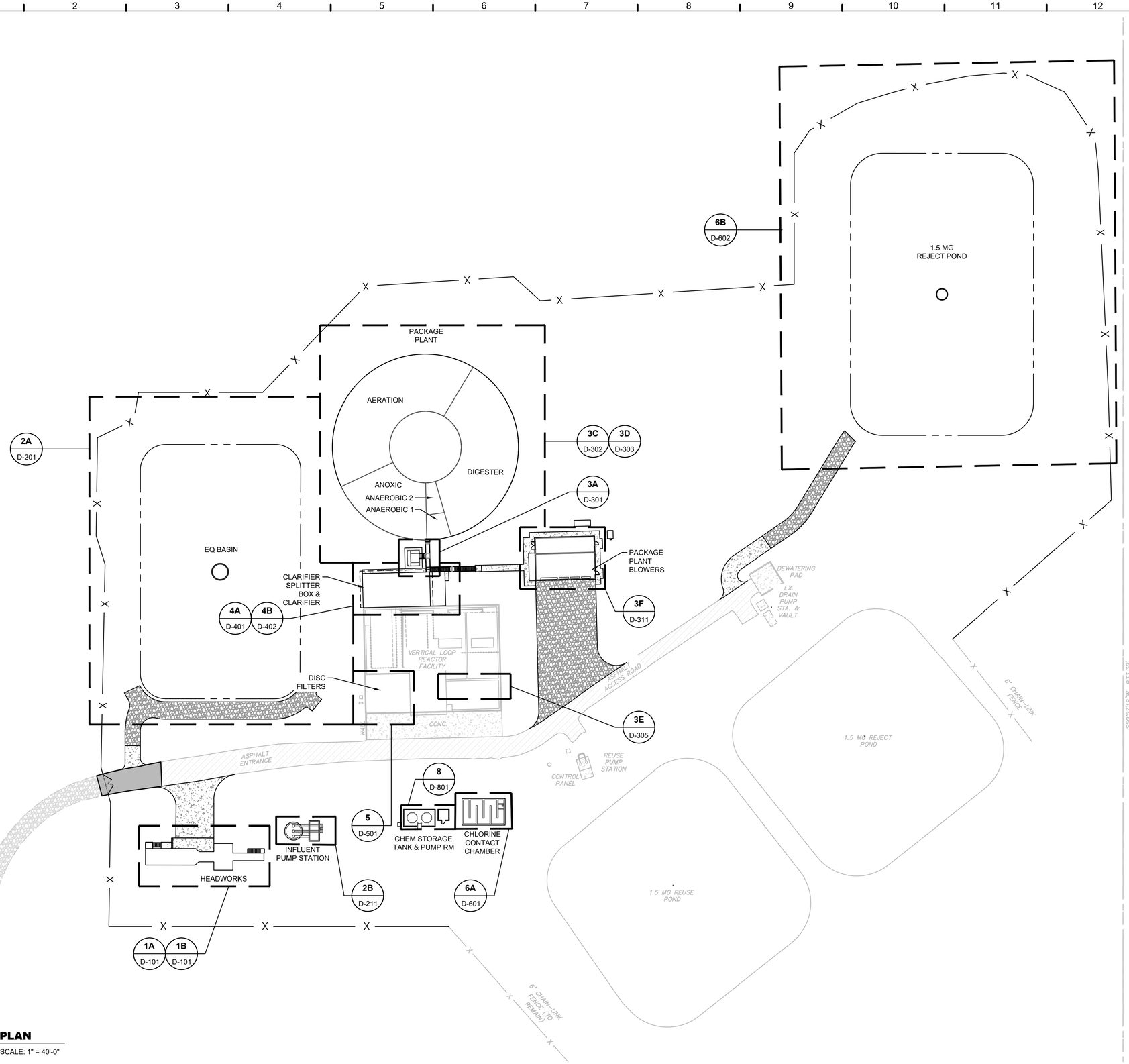
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BLOWER BUILDING HVAC EQUIPMENT PART 2

M-003

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 D-001 **PLAN**
SCALE: 1" = 40'-0"

PROCESS NOTES:

1. PROCESS EQUIPMENT DIMENSIONS, LOCATIONS, AND PIPING SYSTEM LAYOUTS SHOWN ON THE DRAWINGS ARE BASED ON EQUIPMENT SELECTED BY ENGINEER AND INFORMATION AVAILABLE TO ENGINEER. CONTRACTOR SHALL VERIFY FIELD CONDITIONS, ACTUAL EQUIPMENT DIMENSIONS AND INSTALLATION REQUIREMENTS BASED ON SHOP DRAWINGS, AND ALL NECESSARY DETAILS FOR COMPLETE INSTALLATION.
2. EQUIPMENT ARRANGEMENTS ARE BASED ON THE EQUIPMENT BASIS OF DESIGN IN THE SPECIFICATIONS. CHANGES TO THE LISTED BASIS OF DESIGN RESULTING IN DIFFERENCES OF THE SHOWN ARRANGEMENT SHALL BE THE CONTRACTORS RESPONSIBILITY. NO PAYMENT WILL BE ISSUED TO THE CONTRACTOR FOR MODIFICATIONS TO THE LAYING LENGTH, CONCRETE LAYOUT, ELECTRICAL OR MECHANICAL REQUIREMENTS, ETC.
3. VALVES, PIPES, MOTORS, ELECTRICAL PANELS, ETC. SHALL BE POSITIONED SO THAT THEY DO NOT INTERFERE WITH PEDESTRIAN TRAFFIC.
4. ALL ELECTRICAL APPURTENANCES AND EQUIPMENT SHOWN ON THIS SHEET AND EXCLUDED FOR CLARITY SHALL BE COORDINATED WITH THE ELECTRICAL PLANS AND SPECIFICATIONS.
5. ALL STRUCTURAL ENTITIES SHOWN ON THIS SHEET AND EXCLUDED FOR CLARITY SHALL BE COORDINATED WITH THE STRUCTURAL PLANS AND SPECIFICATIONS.
6. DRAWINGS MAY NOT SHOW ALL VALVES, GAUGES, SWITCHES, OPERATORS, DRAINS, VENTS, ETC., REQUIRED FOR THE COMPLETE SYSTEM. CERTAIN SMALL DIAMETER PROCESS PIPING RUNS MAY NOT BE SHOWN IN THEIR ENTIRETY. GENERALLY, NOT EVERY FITTING AND OFFSET IS SHOWN. SOME VALVES AND APPURTENANCES MAY BE OMITTED FOR THE SAKE OF CLARITY. THE CONTRACTOR SHALL FURNISH, INSTALL, AND TEST ALL PIPING SYSTEMS AS INDICATED ON THE PROCESS SYSTEM FLOW SCHEMATICS AND/OR AS DEFINED IN THE SPECIFICATIONS AND/OR AS REQUIRED TO PROVIDE THE COMPLETE SYSTEM.
7. FOR PIPING INDICATED REQUIRING INSULATION AND/OR HEAT TRACING, REFER TO SECTIONS 40 42 13 - PROCESS PIPING INSULATION AND/OR 40 41 13 - PROCESS PIPING ELECTRICAL RESISTANCE HEAT TRACING

NOTE:

1. ALL UNDER-SLAB PIPING TO BE ENCASED IN CONCRETE.

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE
GOODWYN MILLS CAWOOD, LLC
No. PE000178RG
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

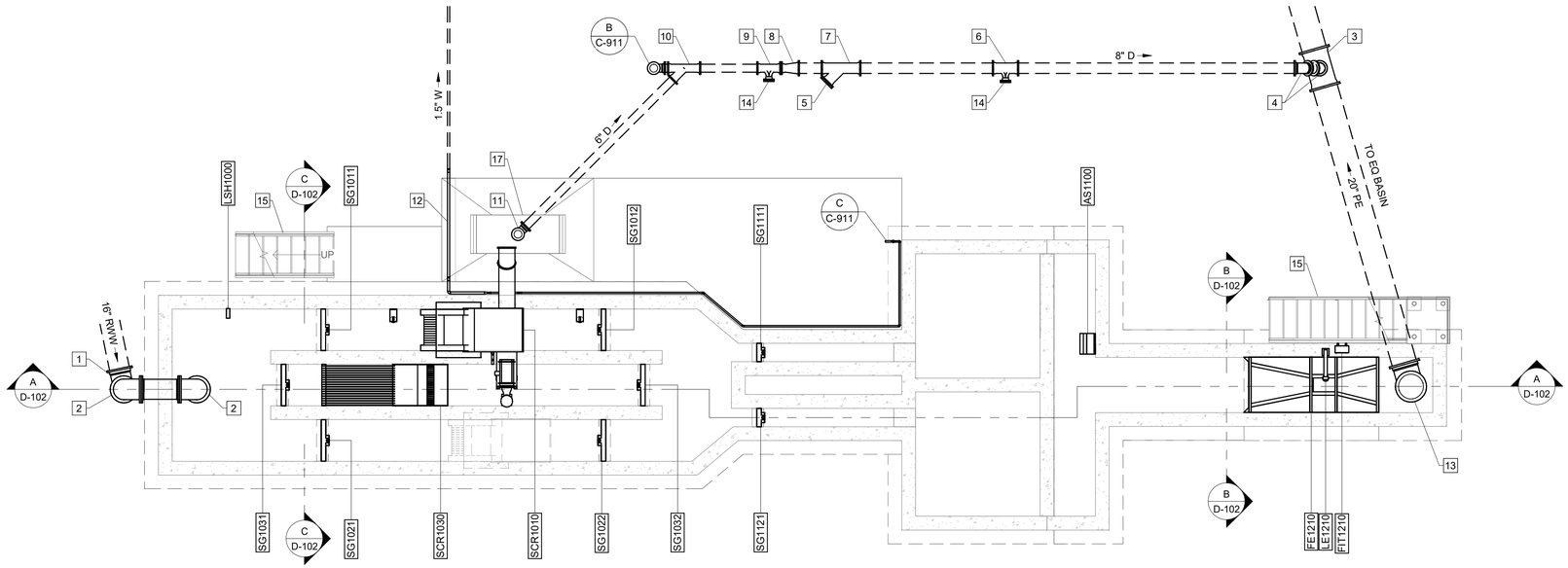
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PROCESS KEY PLAN

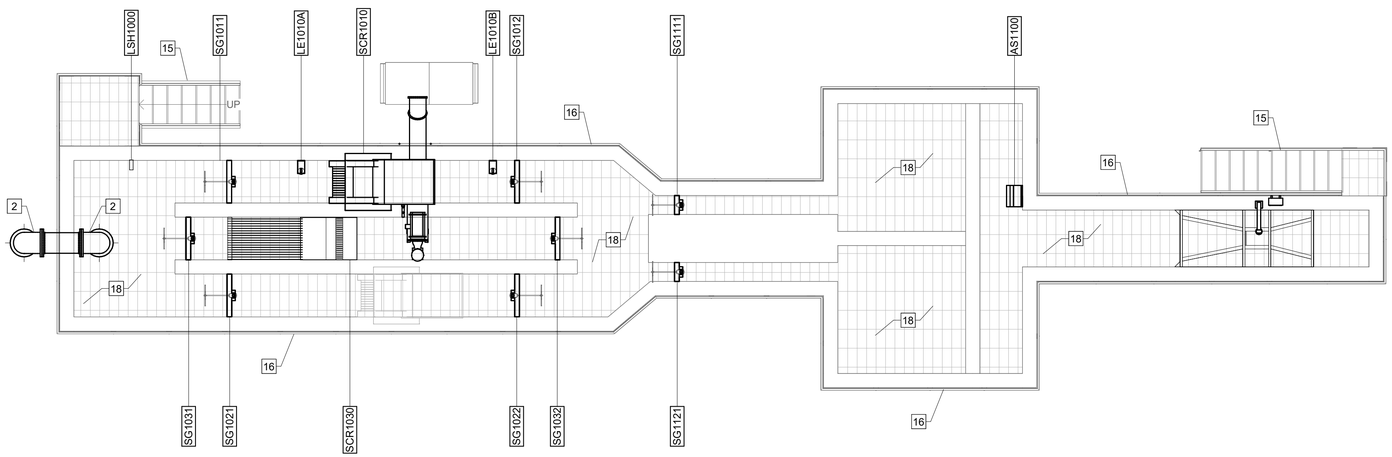
D-001

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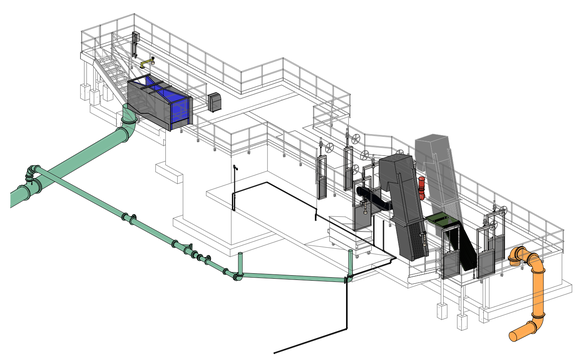
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PLOTTED: Apr 17, 2026 - 8:41am



1A D-101 **04 - 100**
SCALE: 3/16" = 1'-0"



1B D-101 **05 - 100**
SCALE: 3/16" = 1'-0"



KEY NOTES: [#]

1. 16" 90° RMJ BEND
2. 16" 90° FL BEND
3. 20" X 20" X 8" MJ TEE
4. 8" 45° MJ BEND
5. 8" MJ PLUG
6. 8" X 8" X 4" MJ TEE
7. 8" X 8" X 8" MJ TEE WYE
8. 8" X 6" MJ REDUCER
9. 6" X 6" X 4" MJ TEE
10. 6" X 6" X 6" MJ TEE WYE
11. 6" 90° MJ BEND
12. INSULATE AND HEAT TRACE ABOVE GROUND PIPING
13. 20" 90° MJ BEND
14. 4" MJ PLUG
15. PREFABRICATED METAL STAIRS, ELEVATED METAL LANDING, & RAILING
16. 42" SIDE MOUNTED ALUMINUM HANDRAIL W/ TOE BOARD
17. 2 CU. YD. DUMPSTER PROVIDED BY OWNER
18. REMOVABLE ALUMINUM I-BAR GRATING

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
MD 21 PROFESSIONAL ENGINEER
GOODWYN MILLS CAWOOD, LLC
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY

0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

HEADWORKS - PLANS

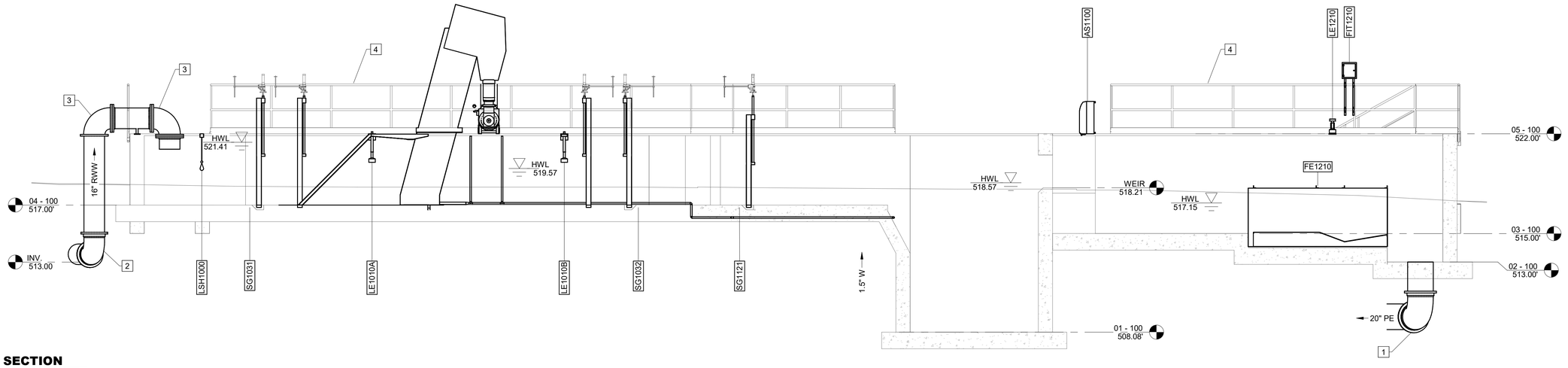
D-101

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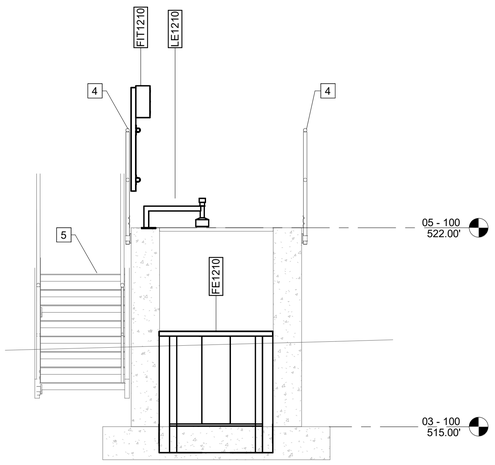
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KEY NOTES: [#]

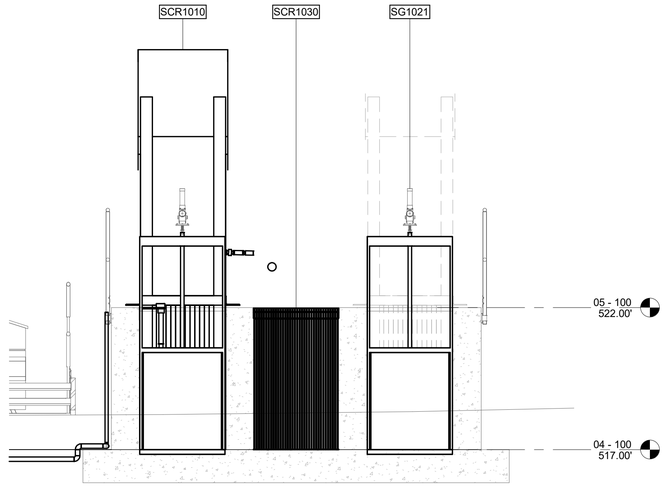
1. 20" 90° MJ BEND
2. 16" 90° RMJ BEND
3. 12" 90° MJ BEND, RESTRAINED
4. 42" SIDE MOUNTED ALUMINUM HANDRAIL W/ TOE BOARD
5. PREFABRICATED METAL STAIRS, ELEVATED METAL LANDING, & RAILING



A **SECTION**
D-101 SCALE: 1/4" = 1'-0"



B **SECTION**
D-101 SCALE: 3/8" = 1'-0"



C **SECTION**
D-101 SCALE: 3/8" = 1'-0"

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T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
CERTIFICATE OF AUTHORIZATION
Exp.06.30.2026

ISSUE	DATE	
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90% Submittal	04.17.2026	LW
Bid Set		LW
Conformed Set		LS

Project Manager:
Engineer:
Designer:
Drawn By:

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

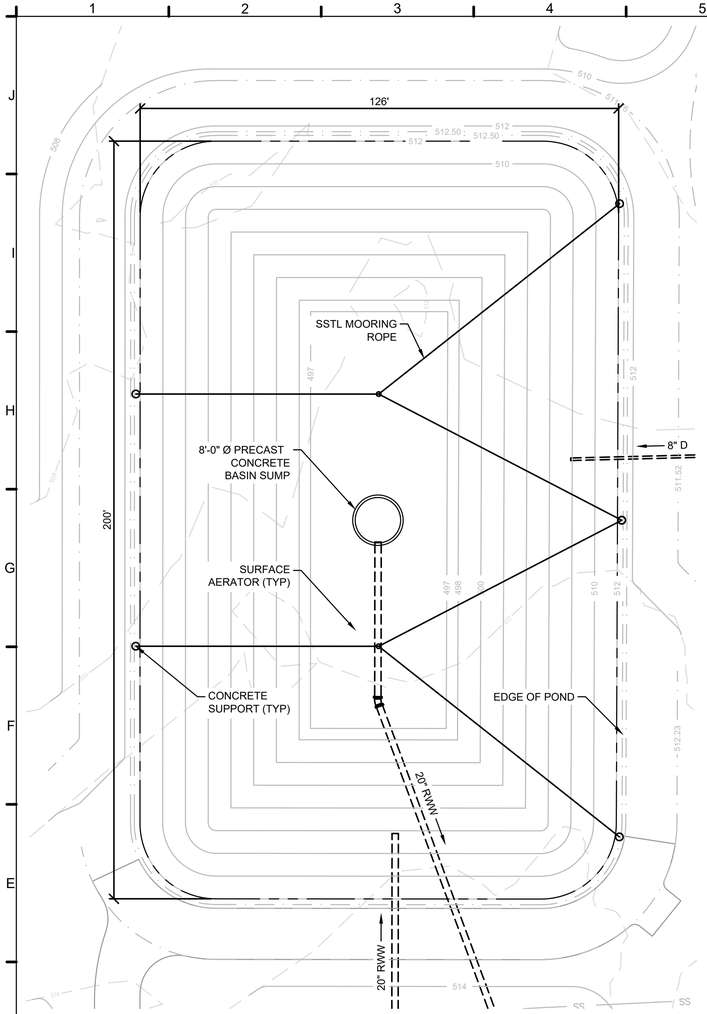
NOT RELEASED FOR CONSTRUCTION

HEADWORKS -
SECTIONS

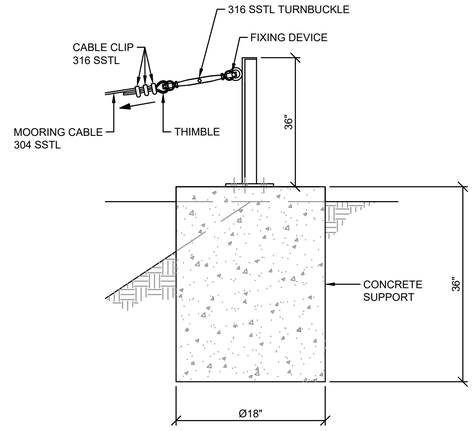
D-102

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Headworks.rvt
4/17/2026 2:31:50 PM

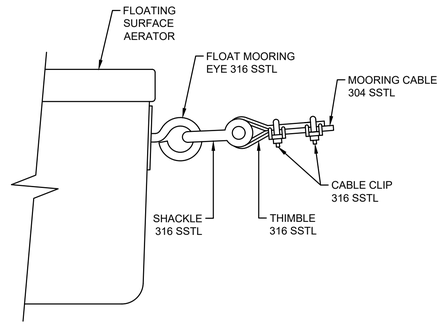
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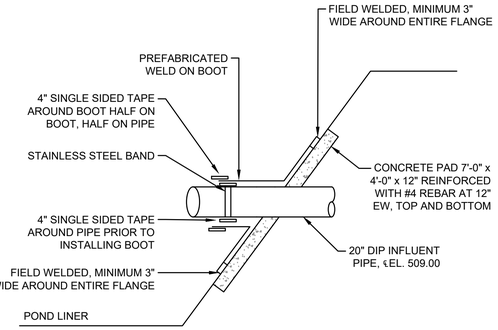
2A PLAN (D-001)
SCALE: 1" = 20'-0"



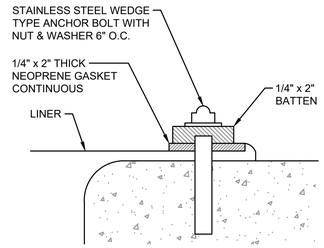
A MOORING CABLE & CONC. SUPPORT (D-201)
SCALE: NOT TO SCALE



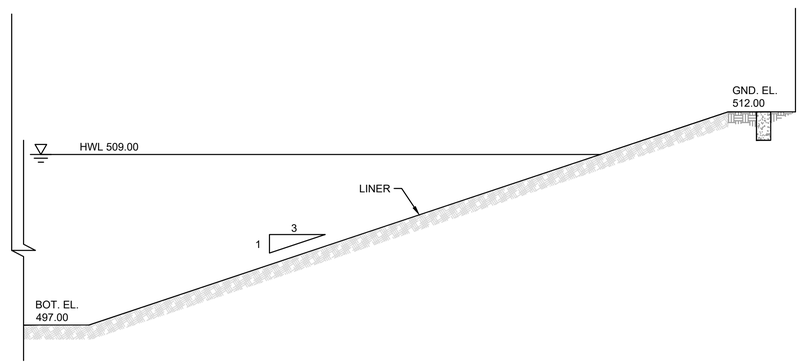
B FLOAT MOORING (D-201)
SCALE: NOT TO SCALE



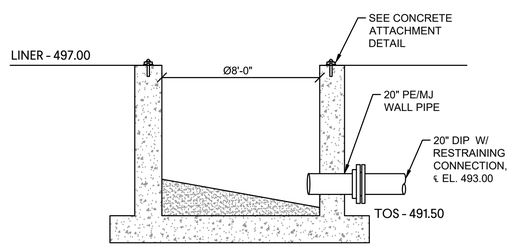
C WELD ON BOOT (D-201)
SCALE: NOT TO SCALE



D TYPICAL CONCRETE ATTACHMENT (D-201)
SCALE: NOT TO SCALE



E TYPICAL POND SECTION (D-201)
SCALE: NOT TO SCALE



F EQ BASIN CONCRETE STUMP (D-201)
SCALE: NOT TO SCALE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — GOODWYN, MILLS AND CAWOOD, LLC — No.PE007898 Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007
NOT RELEASED FOR CONSTRUCTION

EQUALIZATION BASIN - PLAN AND DETAILS

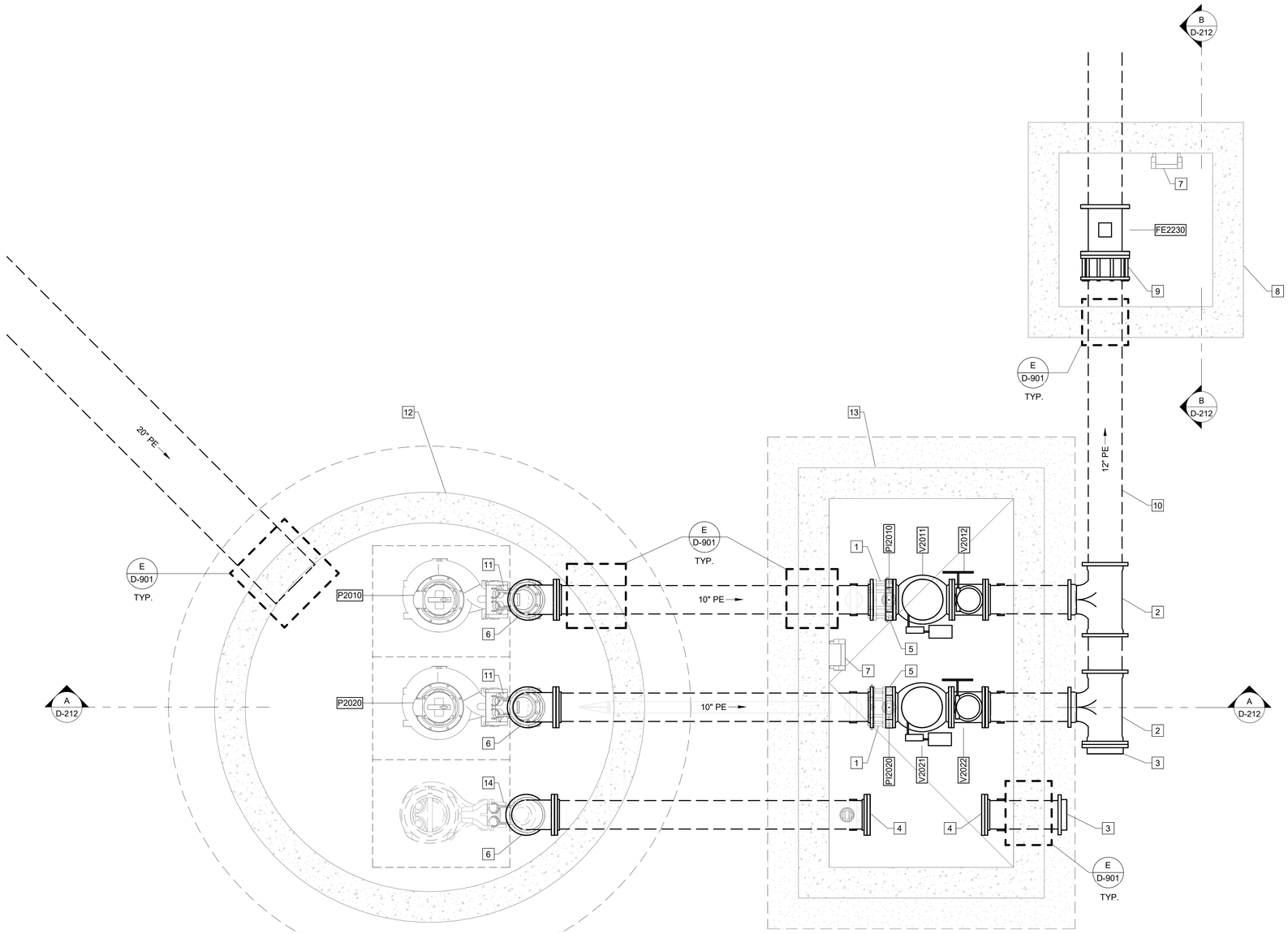
D-201

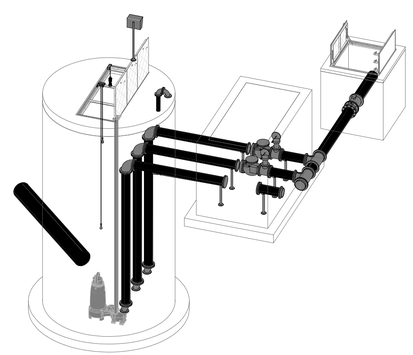
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PLOTTED: Apr 17, 2026 - 8:41am

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KEY NOTES: #

1. 10" FL COUPLING ADAPTER (RESTRAINED)
2. 12" X 10" MJ TEE (RESTRAINED)
3. 12" PLUG (RESTRAINED)
4. 10" FL BLIND
5. 10" ANNULAR SEAL
6. 10" 90° FL BEND
7. ACCESS STEPS
8. 5' X 5' PRECAST CONCRETE VAULT
9. 12" FL COUPLING ADAPTER
10. 12" PE X PE PIPE, LENGTH = 10 FEET
11. TWO (2) - 2" SCH 40 304 SSTL GUIDE RAIL
12. 12' ⌀ PRECAST CONCRETE WETWELL
13. 6' X 12" PRECAST VALVE VAULT
14. INSTALL TWO (2) - 2" SCH 40 304 SSTL GUIDE RAIL, BASE ELBOW, RISER, AND 10" X 6" ECCENTRIC REDUCER FOR FUTURE PUMP





2B / D-211 **02 - 210**
SCALE: 1/2" = 1'-0"

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/IPS.rvt
4/17/2026 8:38:26 AM

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NATHAN E. LOWE
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

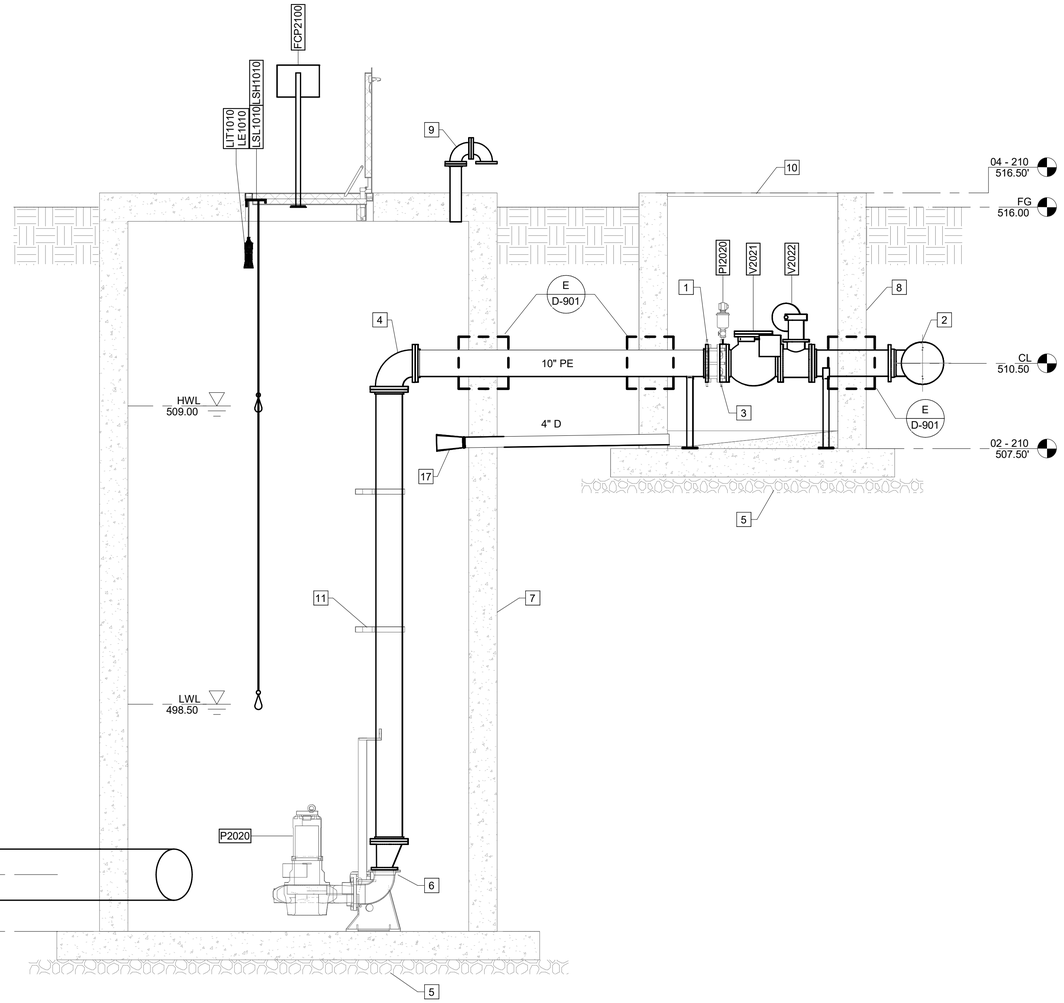
CAUG250007

NOT RELEASE FOR CONSTRUCTION

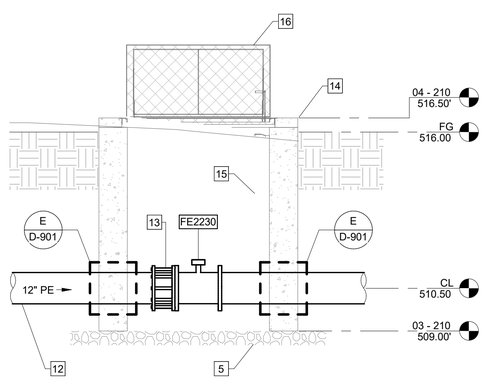
INFLUENT PUMP
STATION AND FLOW
METER VAULT - PLAN

D-211

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A **SECTION**
D-211 SCALE: 3/8" = 1'-0"



B **SECTION**
D-211 SCALE: 3/8" = 1'-0"

KEY NOTES: #

1. 10" FL COUPLING ADAPTER (RESTRAINED)
2. 12" X 10" MJ TEE (RESTRAINED)
3. 10" ANNULAR SEAL
4. 10" 90° FL BEND
5. MINIMUM 6" NO. 57 STONE BASE
6. 10" X 6" ECCENTRIC REDUCER
7. 12' ⌀ PRECAST CONCRETE WETWELL
8. 6' X 12" PRECAST VALVE VAULT
9. 4" 304 SSTL VENT SCREEN W/ RETAINING FL
10. GRATING
11. TWO (2) - 2" SCH 40 304 SSTL GUIDE RAIL
12. 12" PE X PE PIPE, LENGTH = 10 FEET
13. 12" FL COUPLING ADAPTER
14. 5' X 5' PRECAST CONCRETE VAULT
15. ACCESS STEPS
16. DOUBLE LEAF HATCH
17. TIDE FLEX DUCKBILL CHECK VALVE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
COODWYN MILLS CAWOOD, LLC
CERTIFICATE OF AUTHORIZATION NO. PEZ/1706
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

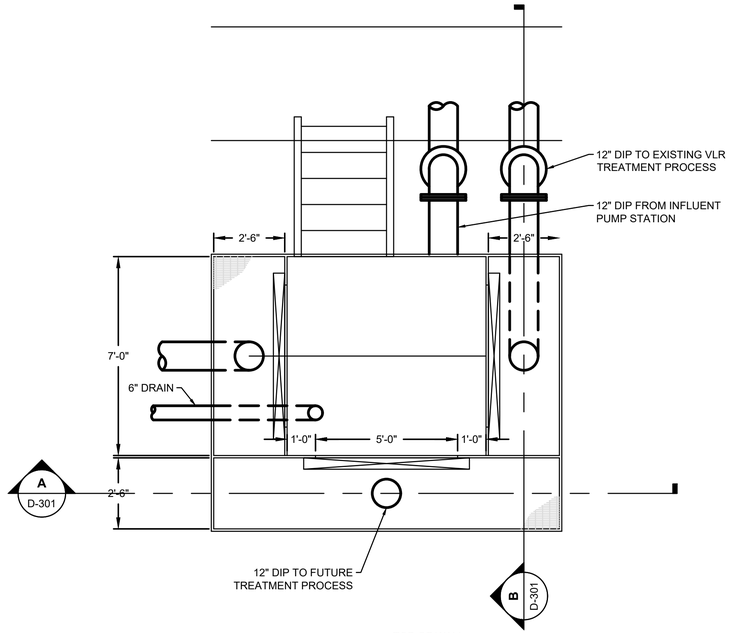
Approver

INFLUENT PUMP
STATION AND FLOW
METER VAULT -
SECTIONS

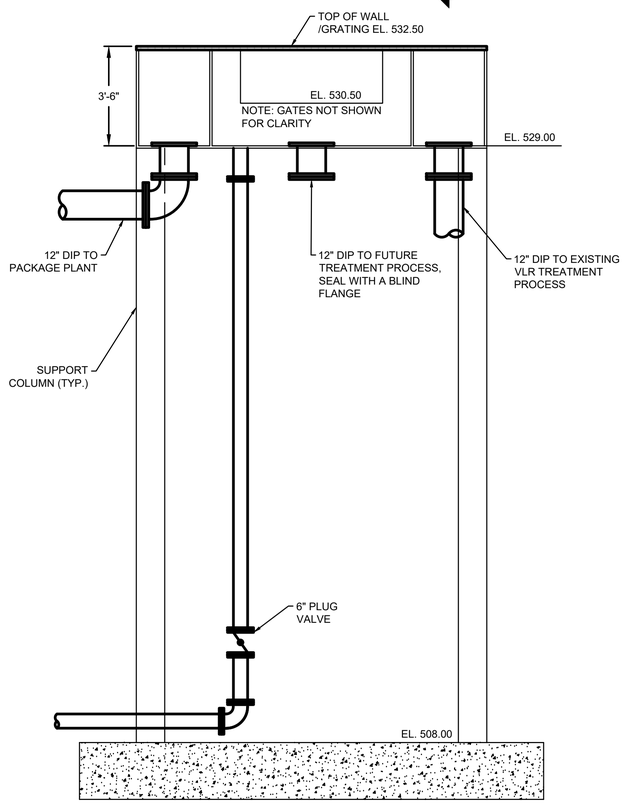
D-212

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/IPS.rvt
4/17/2026 8:38:27 AM

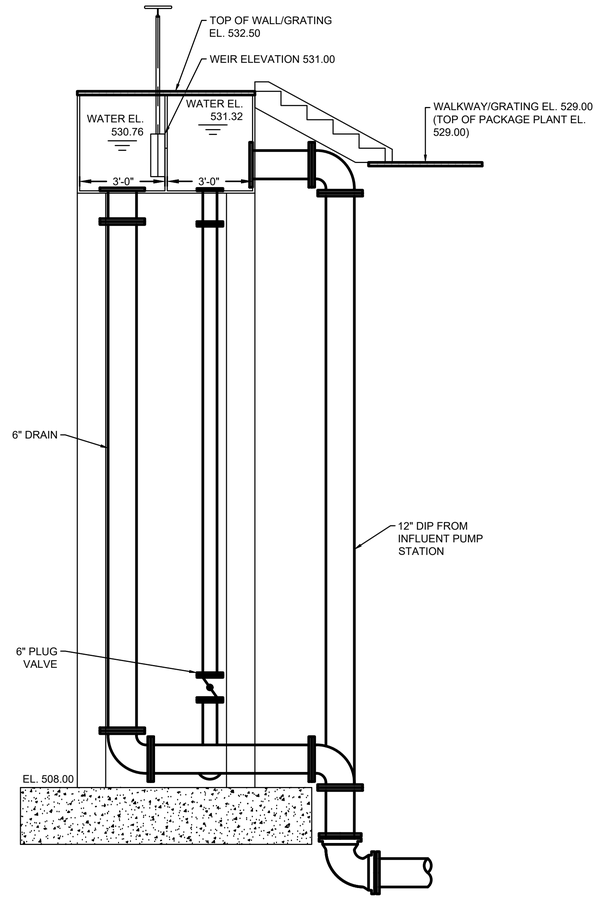
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3A D-301 **PLAN**
SCALE: 3/8" = 1'-0"



A D-301 **SECTION**
SCALE: 3/8" = 1'-0"



B D-301 **SECTION**
SCALE: 3/8" = 1'-0"

KEY NOTES: #

1. XXXXXXXX
2. XXXXXXXX
3. XXXXXXXX

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Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT FOR CONSTRUCTION — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
GA.PEOA.001886
Exp.06.30.2026

1" 0" 5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

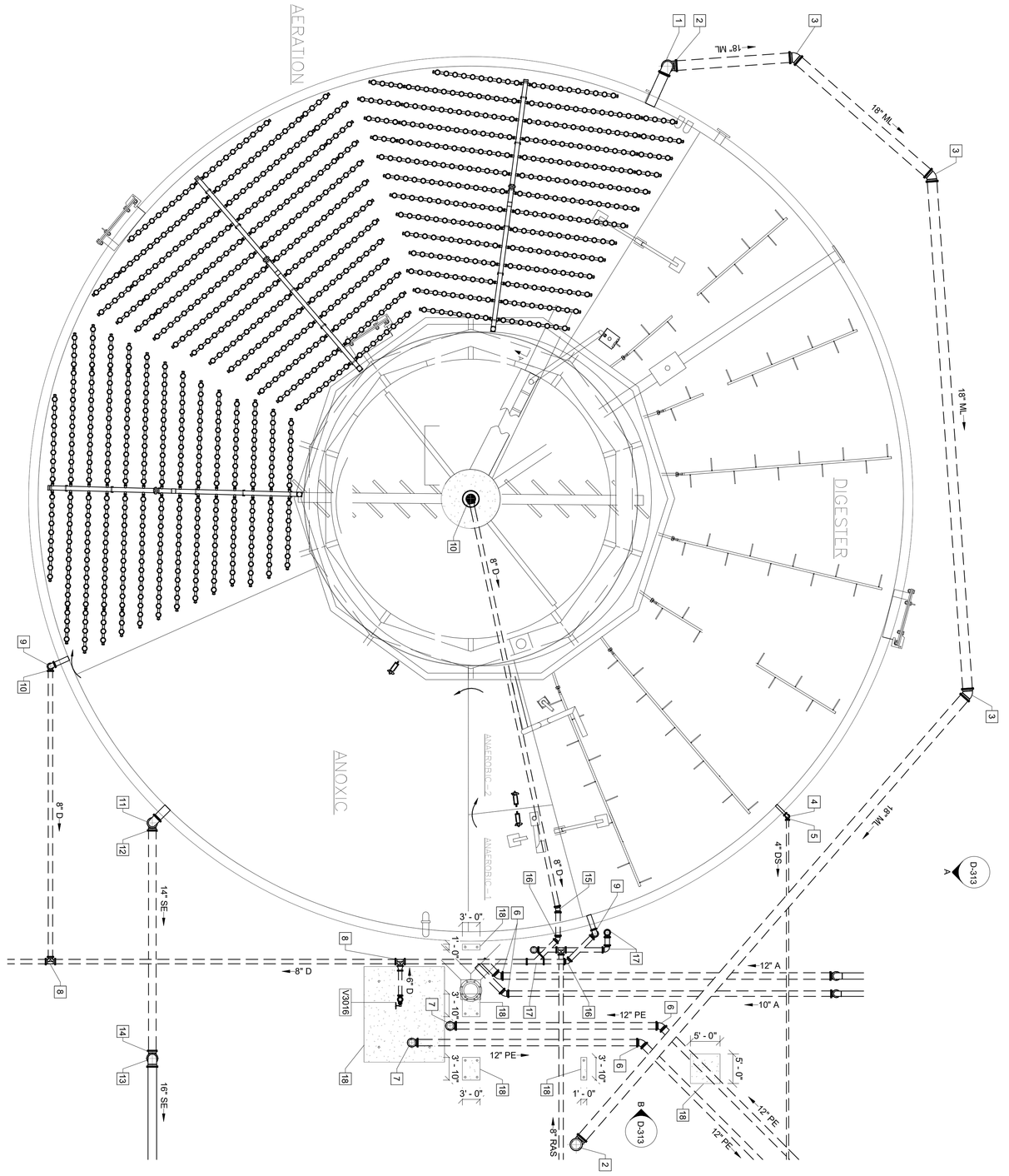
INFLUENT SPLITTER BOX - PLAN & SECTIONS

D-301

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DRAWING FILE: C:\Users\tsmith\DocACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\11 Process\D-301.dwg
PLOTTED: Apr 17, 2026 - 8:41am

3C
D-311
01 - 310
SCALE: 3/32" = 1'-0"



KEY NOTES: [#]

1. 18" 90° FL BEND
2. 18" 90° RMJ BEND
3. 18" 45° RMJ BEND
4. 4" 90° FL BEND
5. 4" 90° MJ BEND
6. 12" 45° RMJ BEND
7. 12" 90° RMJ BEND
8. 8" X 6" X 8" MJ TEE
9. 8" 90° FL BEND
10. 8" 90° MJ BEND
11. 14" 90° FL BEND
12. 14" 90° MJ BEND
13. 16" 90° FL BEND
14. 16" 90° MJ BEND
15. 8" 11.25° MJ BEND
16. 8" 45° MJ BEND
17. 8" X 6" MJ WYE
18. CONCRETE PAD

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PACKAGE PLANT - LOWER PLAN

D-311

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

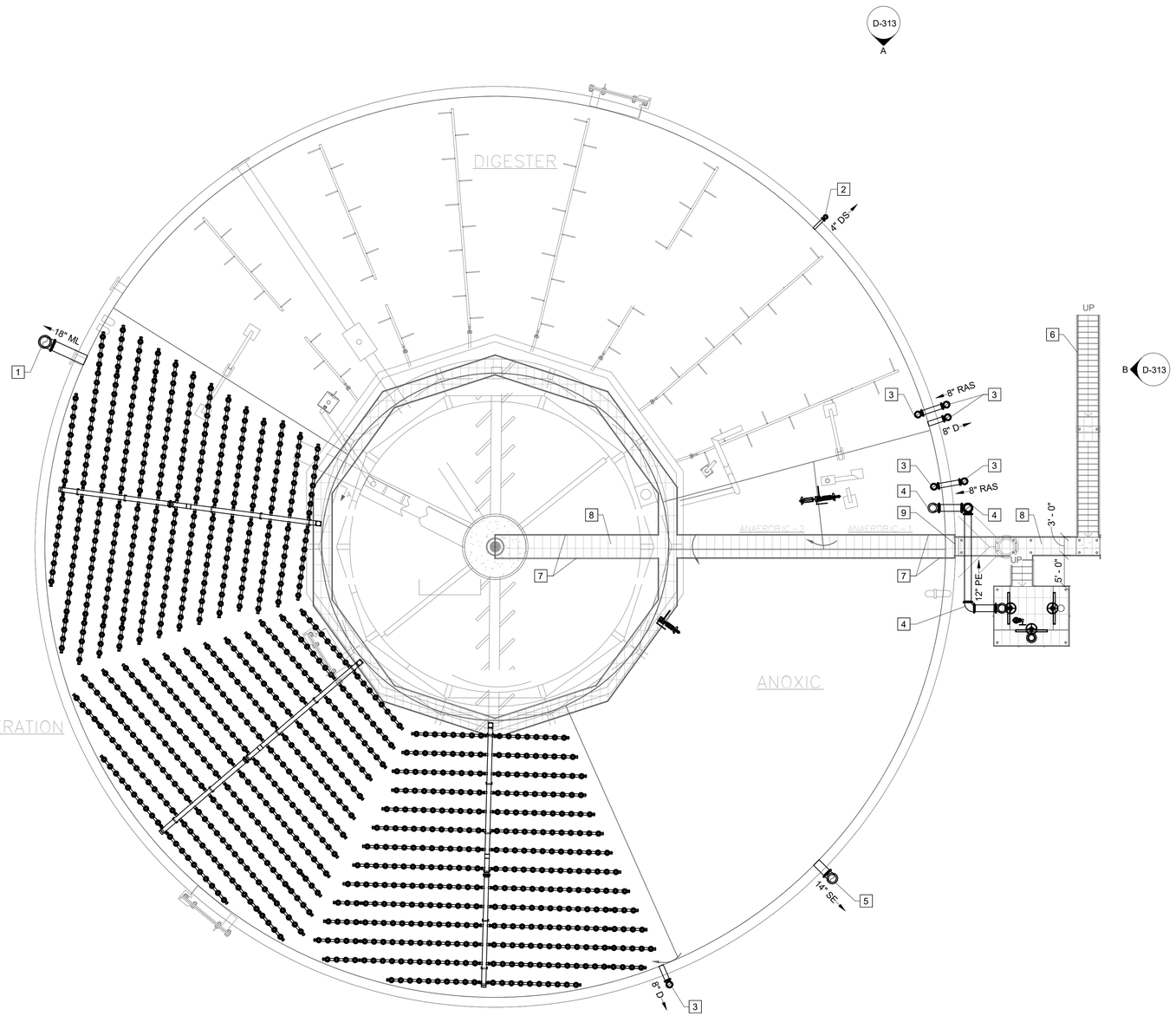
ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" .5" 0" 1"

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272



KEY NOTES: [#]

1. 18" 90° FL BEND
2. 4" 90° FL BEND
3. 8" 90° FL BEND
4. 12" 90° FL BEND
5. 14" 90° FL BEND
6. PREFABRICATED METAL STAIRS, ELEVATED METAL LANDING, & RAILING
7. 42" SIDE MOUNTED ALUMINUM HANDRAIL W/ TOE BOARD
8. ELEVATED WALKWAY W/ ALUMINUM I-BAR GRATING
9. 1" GAP BETWEEN EDGE OF PACKAGE PLANT WALKWAY AND ELEVATED WALKWAY

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
CERTIFICATE OF AUTHORIZATION NO. PEF001048
Exp.06.30.2026

1" 1" .5" 0"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

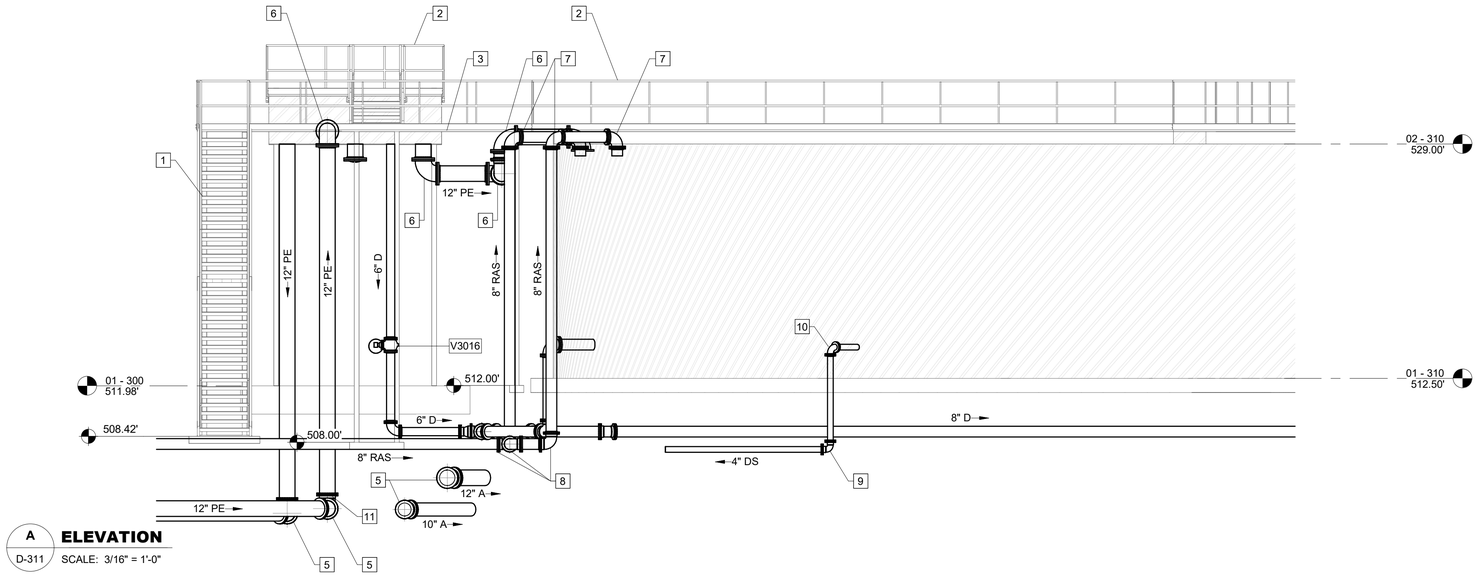
PACKAGE PLANT - UPPER PLAN

D-312

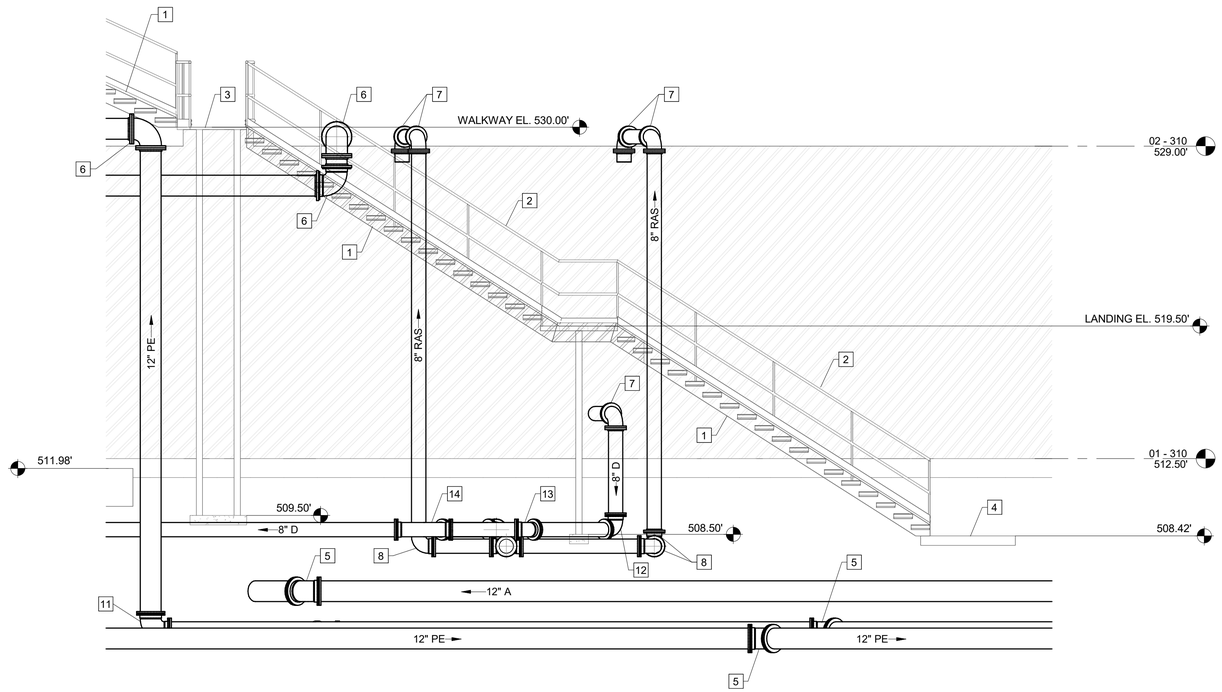
3D D-312 **02 - 310** SCALE: 3/32" = 1'-0"

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 2:13:07 PM

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A **ELEVATION**
D-311 SCALE: 3/16" = 1'-0"



B **ELEVATION**
D-311 SCALE: 1/4" = 1'-0"

KEY NOTES: #

1. PREFABRICATED METAL STAIRS, ELEVATED METAL LANDING, & RAILING
2. 42" SIDE MOUNTED ALUMINUM HANDRAIL W/ TOE BOARD
3. ELEVATED WALKWAY W/ ALUMINUM I-BAR GRATING
4. CONCRETE PAD
5. 12" 45° RMJ BEND
6. 12" 90° FL BEND
7. 8" 90° FL BEND
8. 8" 90° RMJ BEND
9. 4" 90° MJ BEND
10. 4" 90° FL BEND
11. 12" 90° RMJ BEND
12. 8" 90° MJ BEND
13. 8" 45° MJ BEND
14. 8" X 8" MJ WYE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
CERTIFICATE OF AUTHORIZATION
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE	
60% Submittal	02.16.2026	
90% Submittal	04.17.2026	
Bid Set		
Conformed Set		
Project Manager:		MP
Engineer:		LW
Designer:		LW
Drawn By:		LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

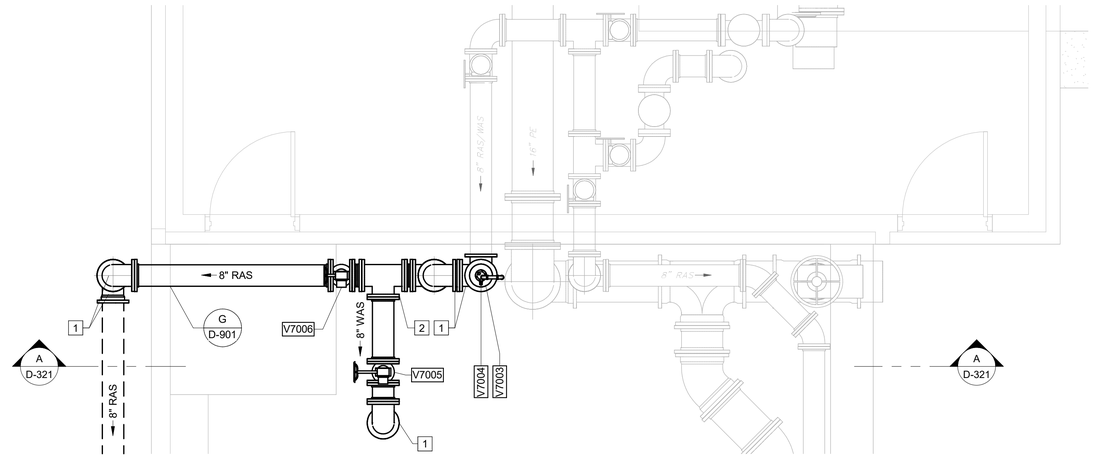
NOT RELEASED FOR CONSTRUCTION

PACKAGE PLANT -
EXTERIOR
ELEVATIONS

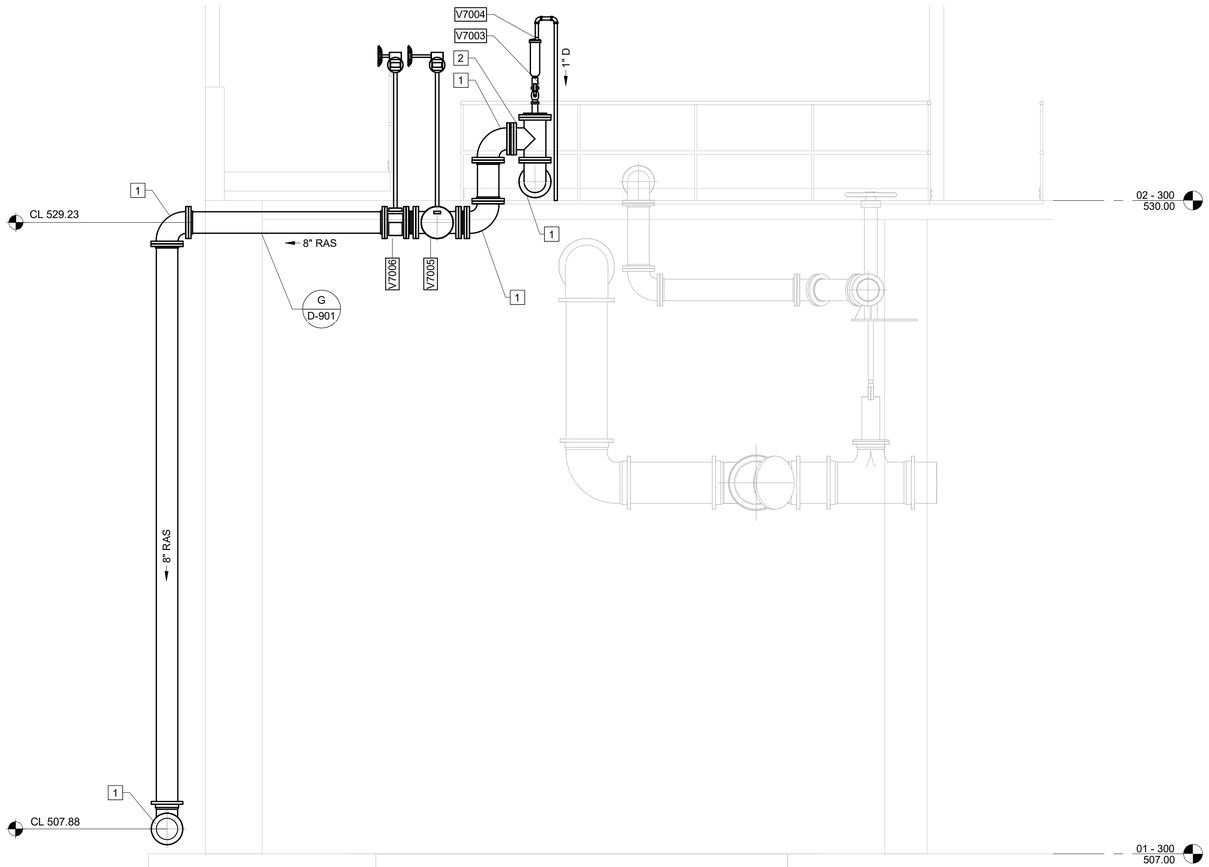
D-313

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 2:13:09 PM

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3E D-321 **PLAN**
SCALE: 3/8" = 1'-0"



A D-321 **SECTION**
SCALE: 3/8" = 1'-0"

KEY NOTES: #

1. 8" 90° FL BEND
2. 8" X 8" X 8" FL TEE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NATHAN E. LEE
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION NO. LLC000815

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MDG TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

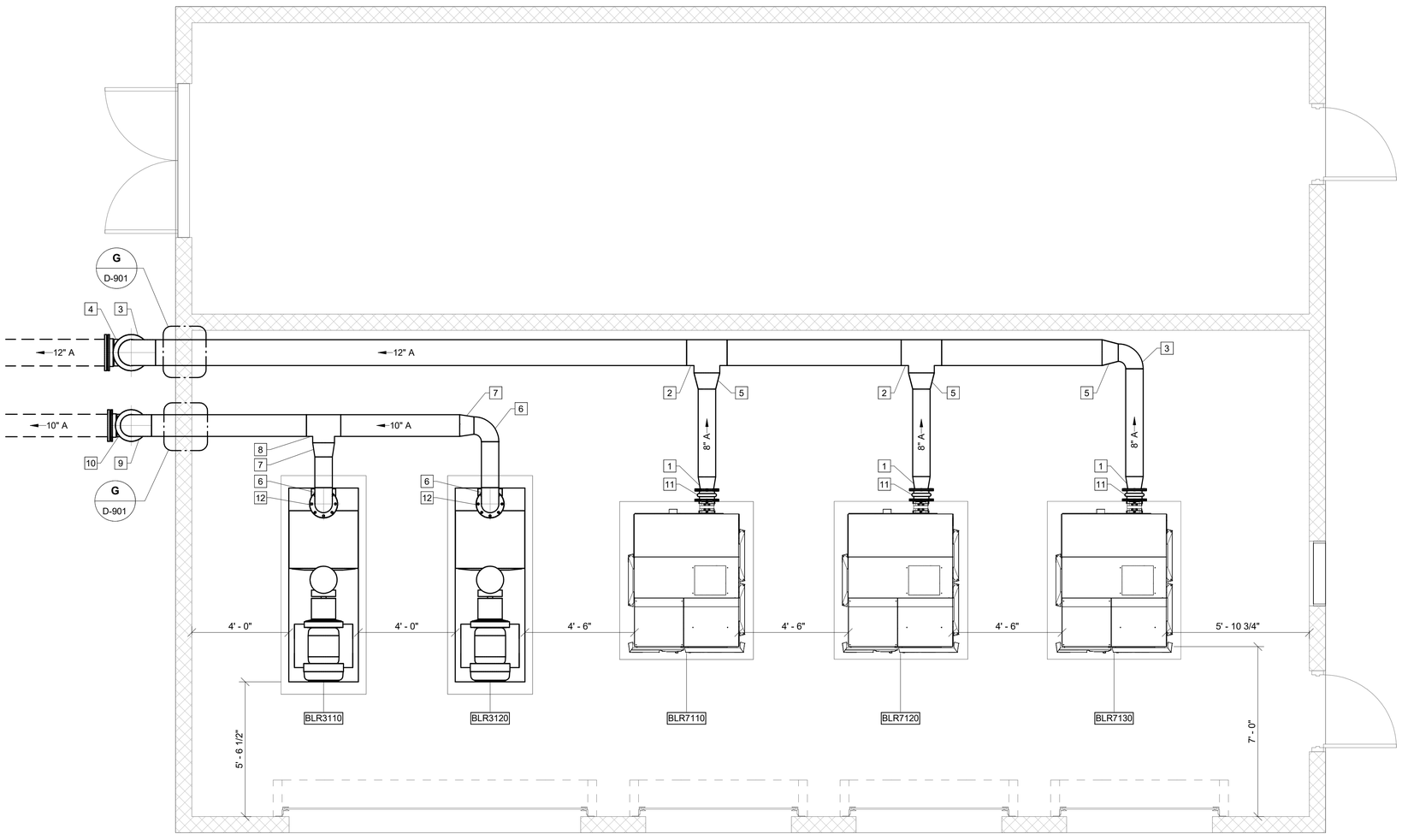
NOT RELEASED FOR CONSTRUCTION

RAS/WAS PIPE GALLERY - PLAN AND SECTION

D-321

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/VLR Building.rvt
4/17/2026 8:39:37 AM

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KEY NOTES: [#]

1. 8" X 6" REDUCER (WELDED)
2. 12" X 12" X 8" TEE (WELDED)
3. 12" 90° BEND (WELDED)
4. 12" 90° MJ BEND
5. 12" X 8" REDUCER (WELDED)
6. 8" 90° BEND (WELDED)
7. 10" X 8" REDUCER (WELDED)
8. 10" X 10" X 8" TEE (WELDED)
9. 10" 90° BEND (WELDED)
10. 10" 90° MJ BEND
11. 6" SINGLE ARCH EXPANSION JOINT
12. 8" SINGLE ARCH EXPANSION JOINT

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NO. PE034008
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

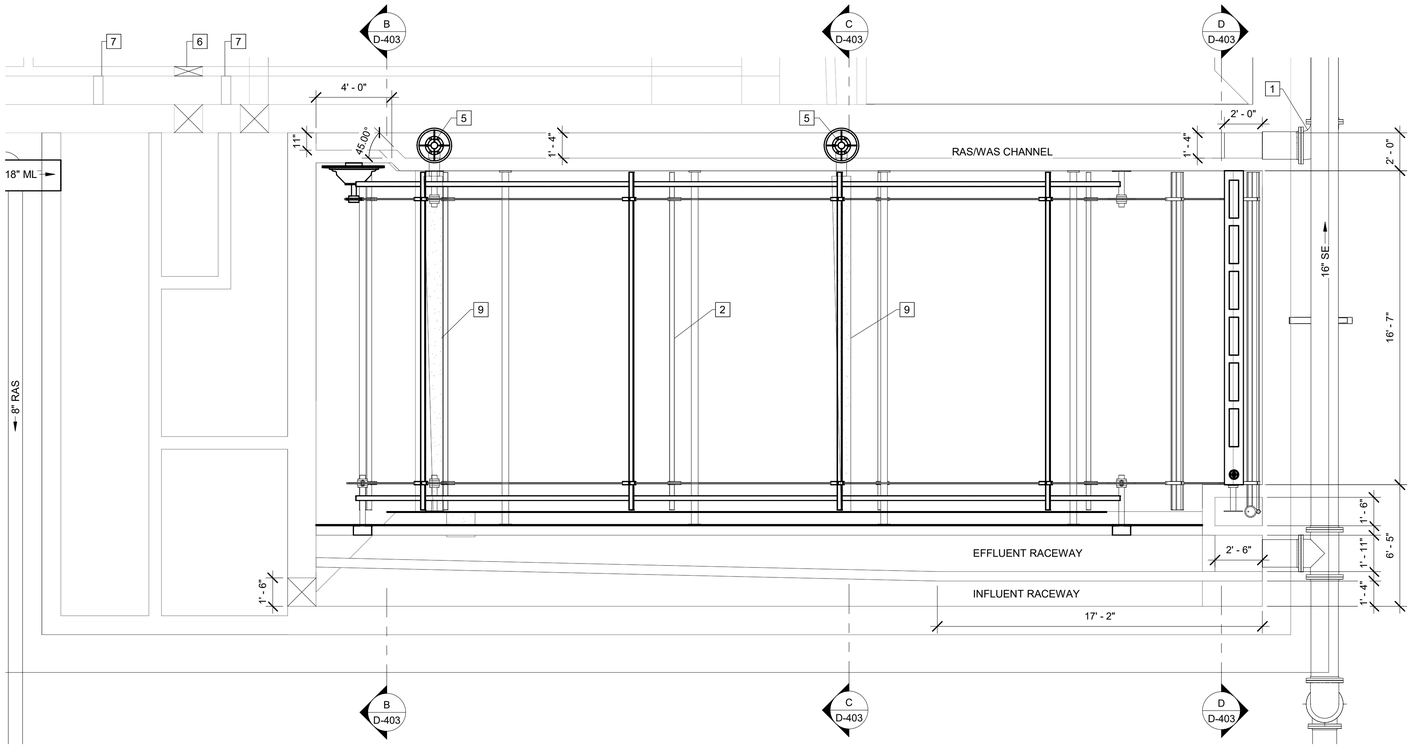
BLOWERS AND ELECTRICAL BUILDING - PLAN

D-331

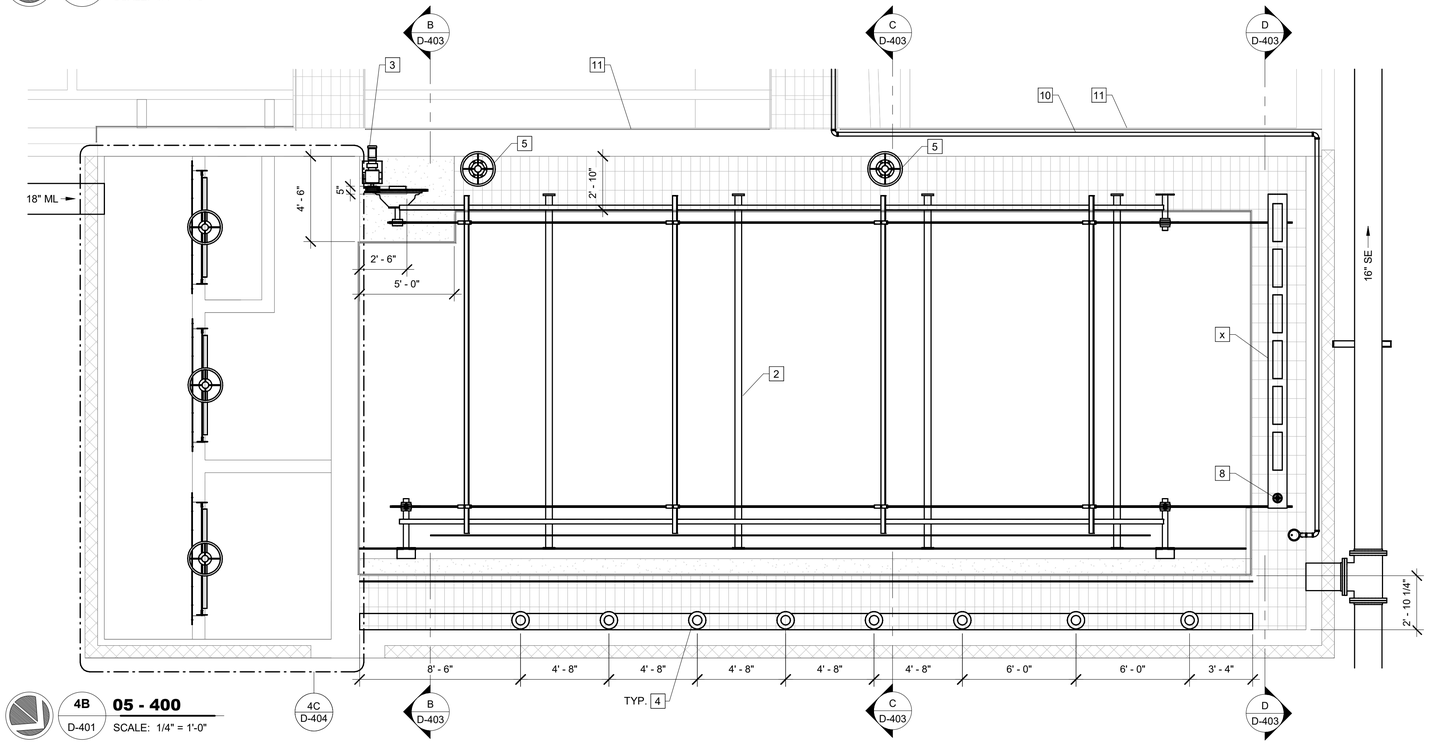
3F / D-331 **01 - 330**
SCALE: 3/8" = 1'-0"

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 8:49:56 AM

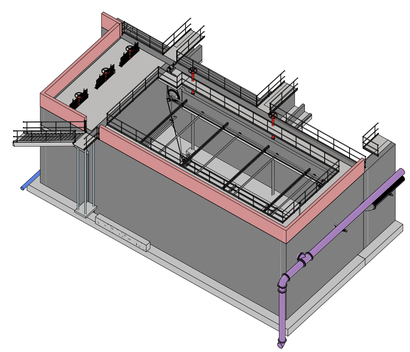
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4A D-401 **02 - 400**
SCALE: 1/4" = 1'-0"



4B D-401 **05 - 400**
SCALE: 1/4" = 1'-0"



KEY NOTES: #

1. 16" 90° BEND
2. CHAIN AND SCRAPER COLLECTION SYSTEM
3. DRIVE UNIT
4. ORIFICE TUBE
5. SLUDGE CONTROL VALVE
6. ADD 18" X 18" OPENING AT EXISTING WALL BOTTOM ELEVATION 524.58
7. BRICK BLOCK, FROM BOTTOM OF CHANNEL TO TOP OF CHANNEL
8. SCUM CONTROL VALVE
9. SLUDGE HEADER, WIDTH VARIES
10. 3" PVC SCUM PIPE. RUN CONTINUOUSLY TO CONNECT TO EXISTING 3" SCUM PIPE.
11. ADD NEW ALUMINUM HAND RAIL.

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
NICHOLAS ZACHARIAH
GOODWYN MILLS CAWOOD, LLC
CERTIFICATE OF AUTHORIZATION
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE	
60% Submittal	02.16.2026	MP
90% Submittal	04.17.2026	LW
Bid Set		LW
Conformed Set		LS

Project Manager:
Engineer:
Designer:
Drawn By:

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MDG TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007
Approver

CLARIFIER AND SPLITTER BOX - PLANS

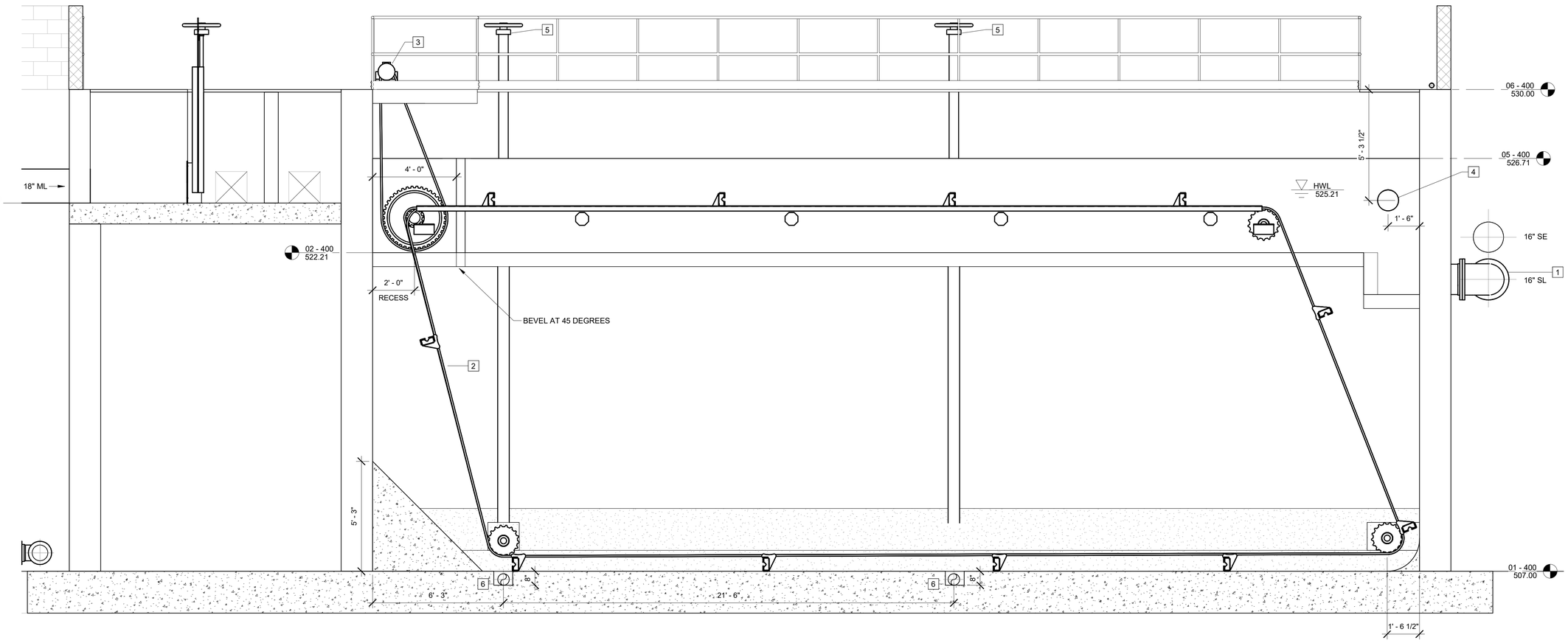
D-401

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/VLR Building.rvt
4/17/2026 8:39:39 AM

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KEY NOTES: #

1. 16" 90° BEND
2. CHAIN AND SCRAPER COLLECTION SYSTEM
3. DRIVE UNIT
4. SCUM PIPE
5. SLUDGE CONTROL VALVE
6. SLUDGE HEADER, WIDTH VARIES



A
D-404
SECTION
SCALE: 3/8" = 1'-0"

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
NATIONAL CERTIFICATE
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MDG TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

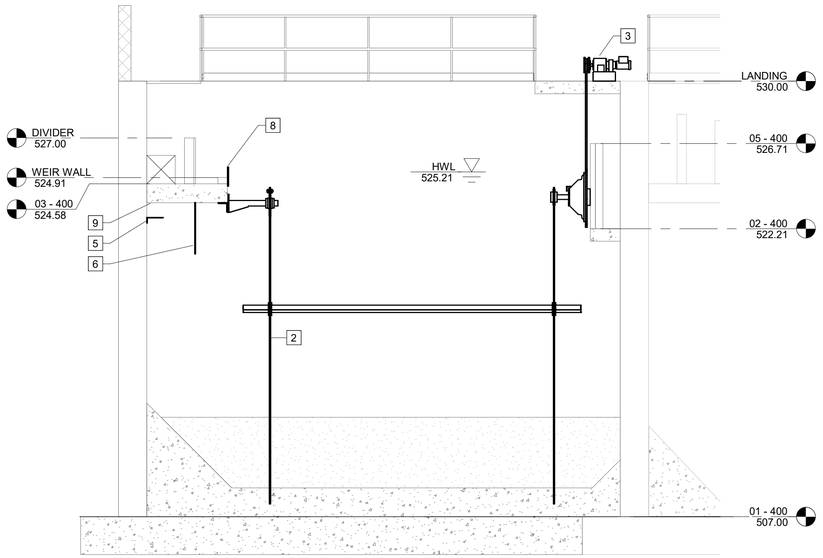
Approver

CLARIFIER AND SPLITTER BOX - SECTIONS

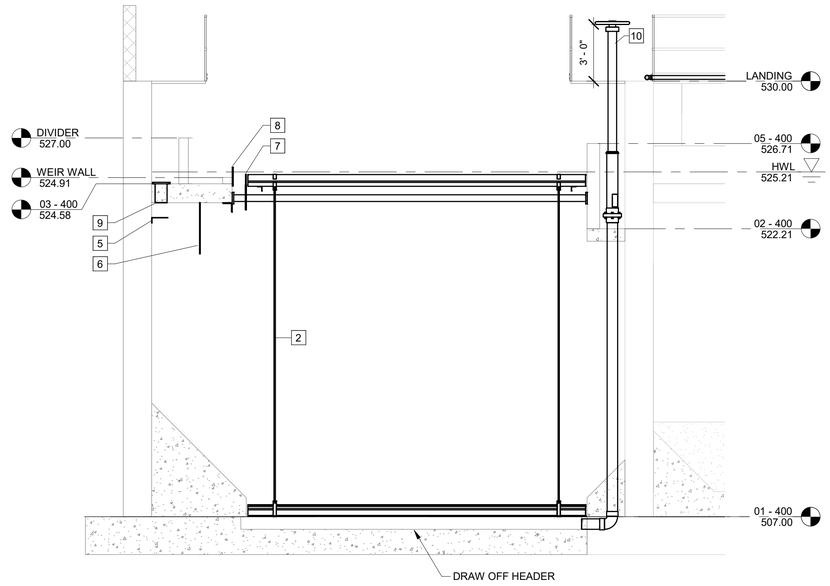
D-402

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4/17/2026 8:39:40 AM

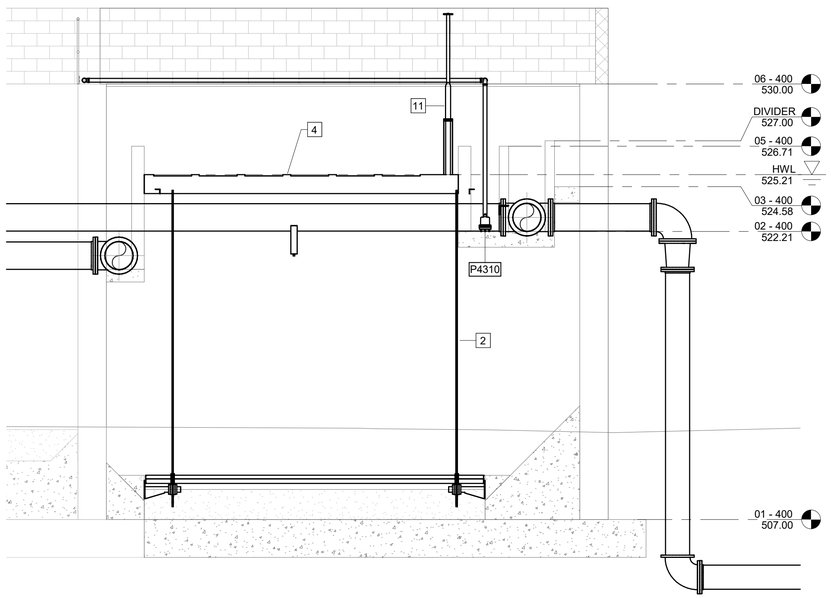
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B D-403 **SECTION**
SCALE: 1/4" = 1'-0"



C D-403 **SECTION**
SCALE: 1/4" = 1'-0"



D D-403 **SECTION**
SCALE: 1/4" = 1'-0"

KEY NOTES: #

1. 16" 90° BEND
2. CHAIN AND SCRAPER COLLECTION SYSTEM
3. DRIVE UNIT
4. SCUM PIPE
5. TARGET BAFFLE
6. SKIRT BAFFLE
7. SCUM BAFFLE
8. EFFLUENT WEIR
9. INLET ORIFICE TUBE
10. SLUDGE CONTROL VALVE
11. SCUM CONTROL VALVE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
LAWRENCE E. ROSE
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MDG TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

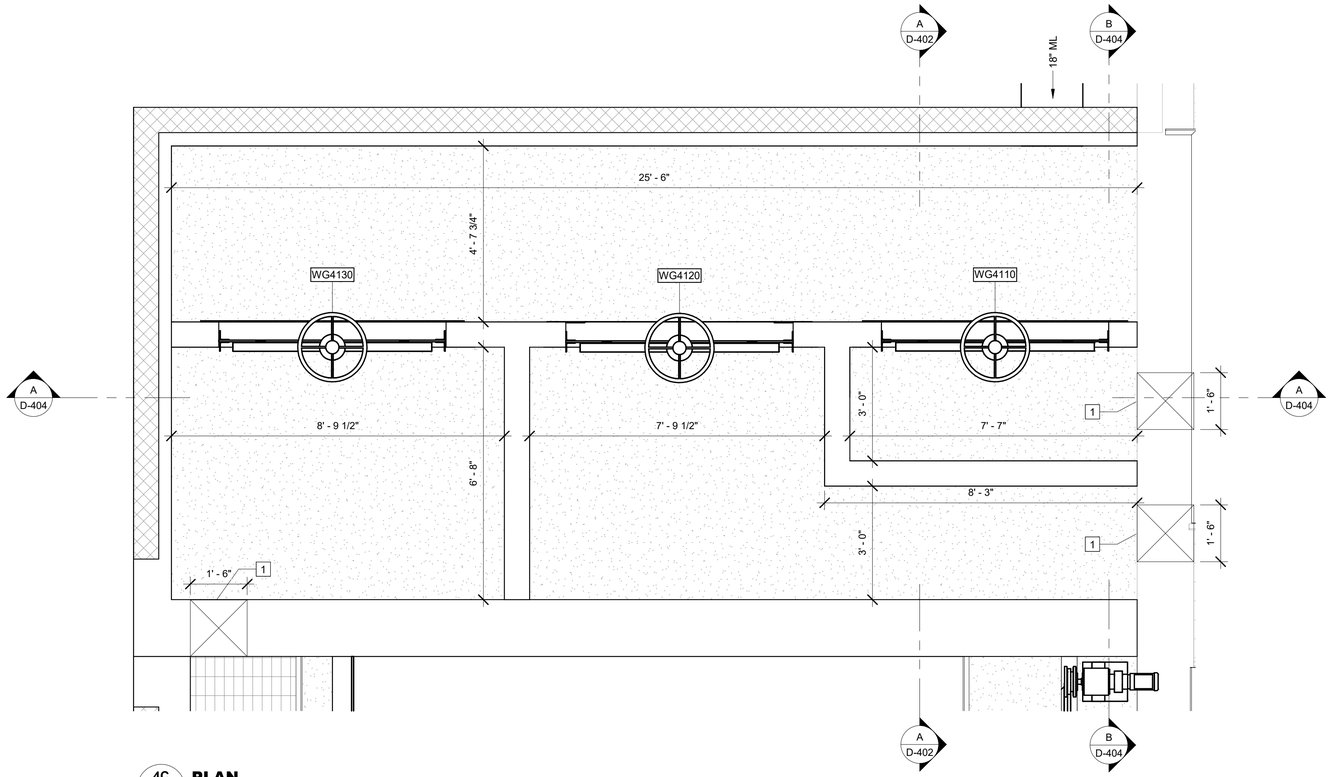
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CLARIFIER AND
SPLITTER BOX -
SECTIONS

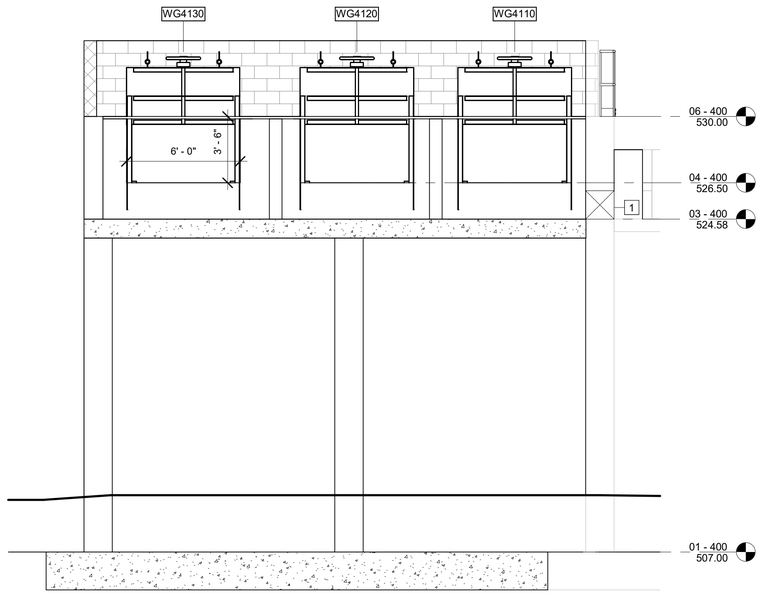
D-403

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/VLR Building.rvt
4/17/2026 8:39:33 AM

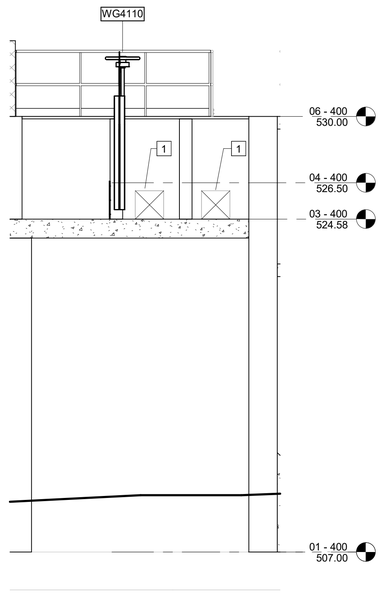
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4C / D-401 PLAN
SCALE: 1/2" = 1'-0"



A / D-404 SECTION
SCALE: 1/4" = 1'-0"



B / 102 SECTION
SCALE: 1/4" = 1'-0"

KEY NOTES: #

1. 1.5' X 1.5' OPENING

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — REGISTERED ARCHITECT — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION NO. LLC000485

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MDG TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

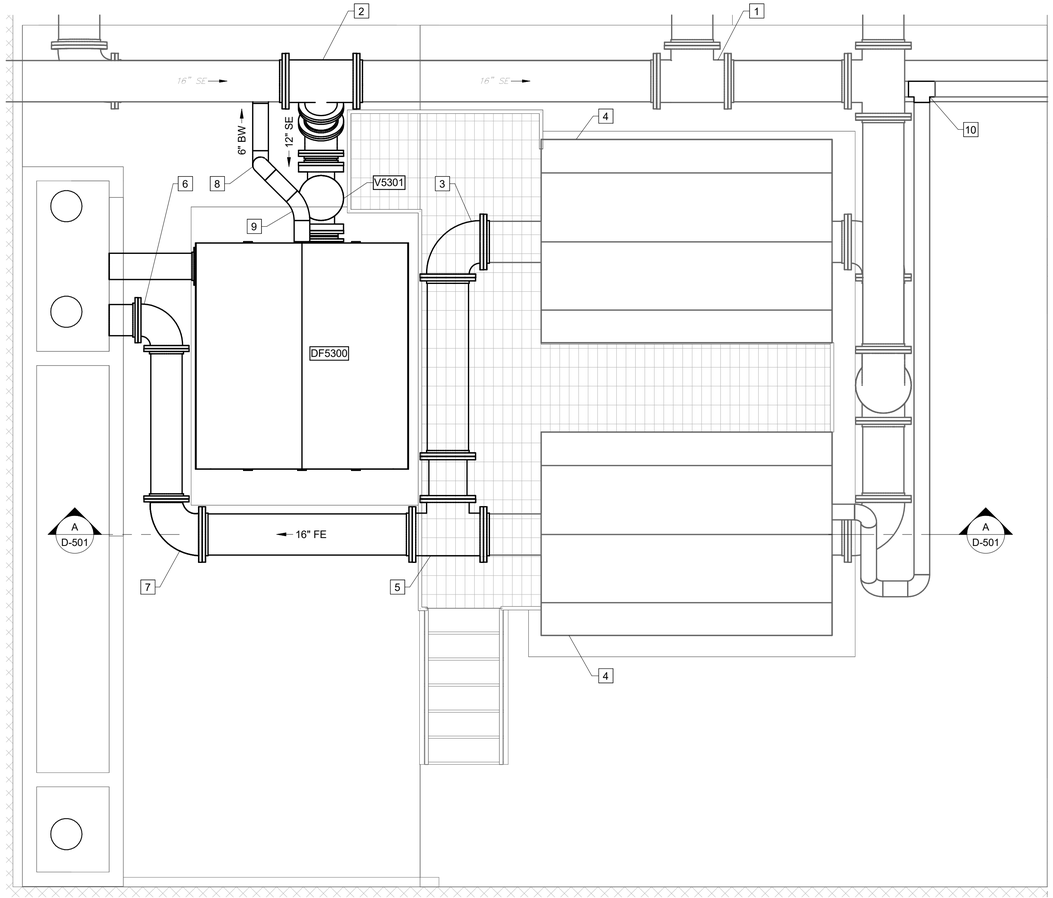
CAUG250007
Approver

CLARIFIER AND
SPLITTER BOX - PLAN
& SECTIONS

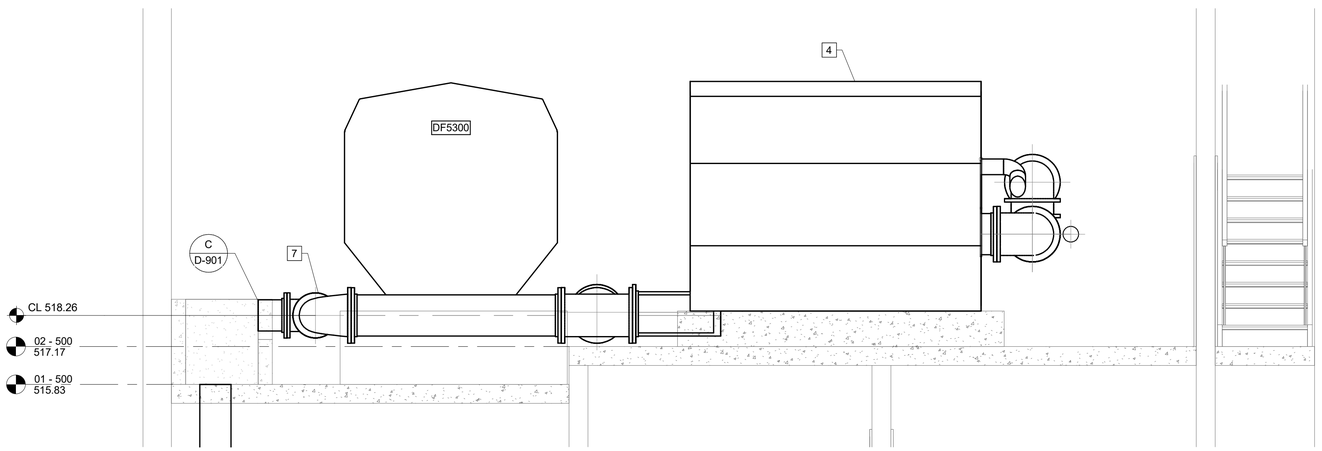
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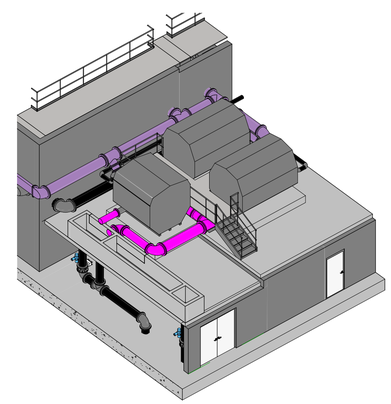
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5 D-501 **02 - 500**
SCALE: 3/8" = 1'-0"



A D-501 **SECTION**
SCALE: 3/8" = 1'-0"



KEY NOTES: #

1. REMOVE EXISTING 16" 90° BEND AND REPLACE WITH 16" FL TEE
2. 16" X 16" X 12" TEE
3. 16" 90° FL BEND
4. ADD FOUR (4) DISC FOR EACH FILTER
5. 16" X 16" X 16" TEE
6. 12" 90° FL BEND
7. 16" X 12" REDUCING 90° FL BEND
8. 6" 90° BEND (304 SSTL)
9. 6" 45° BEND (304 SSTL)
10. REMOVE EXISTING 90° BEND AND REPLACE WITH 6" X 6" TEE (304 SSTL)

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
MICHAEL P. PATTILLO
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MDG TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

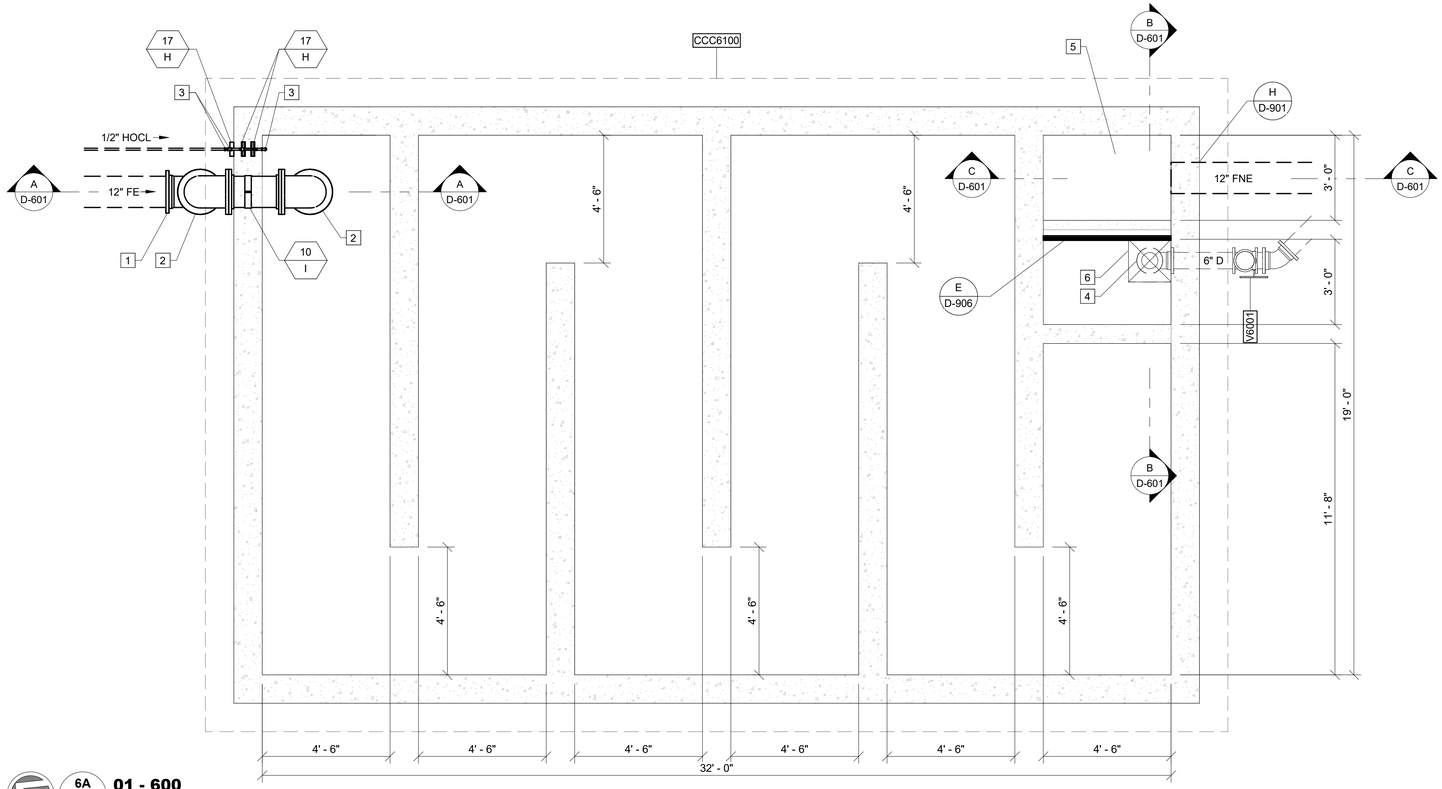
Approver

FILTERS - PLAN & SECTION

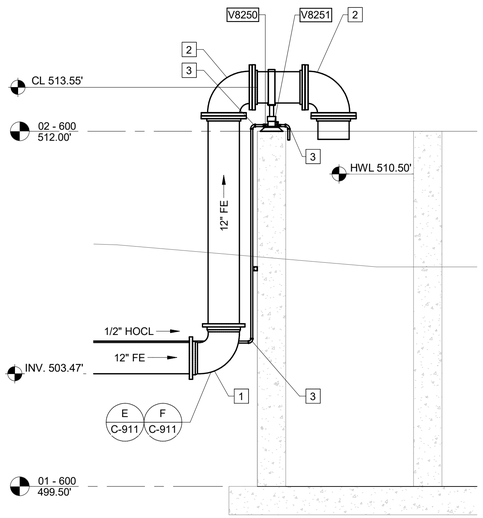
D-501

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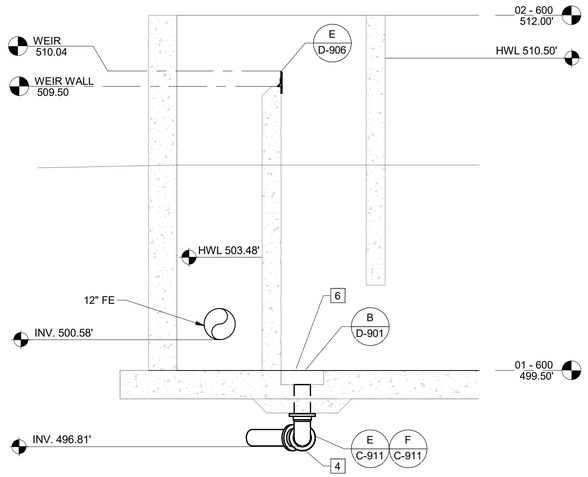
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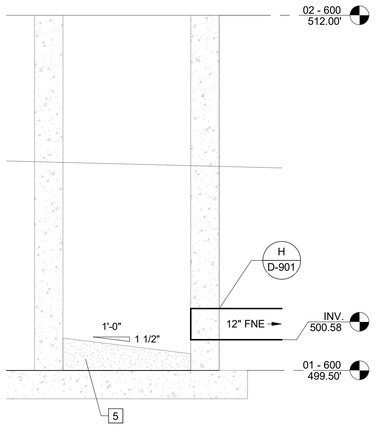
6A D-601 **01 - 600**
SCALE: 3/8" = 1'-0"



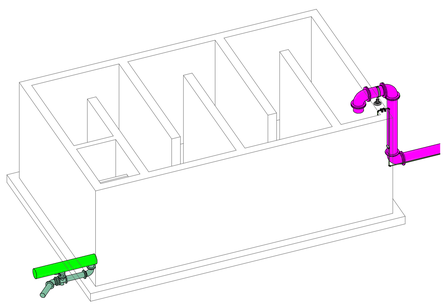
A D-601 **SECTION**
SCALE: 3/8" = 1'-0"



B D-601 **SECTION**
SCALE: 3/8" = 1'-0"



C D-601 **SECTION**
SCALE: 3/8" = 1'-0"



KEY NOTES: #

1. 12" 90° MJ BEND, RESTRAINED
2. 12" 90° FL BEND
3. 1/2" 90° FL BEND
4. 6" 90° MJ BEND, RESTRAINED
5. SLOPED GROUT
6. 18" X 18" X 6" SUMP

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — CERTIFICATE OF AUTHORIZATION — Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY

0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

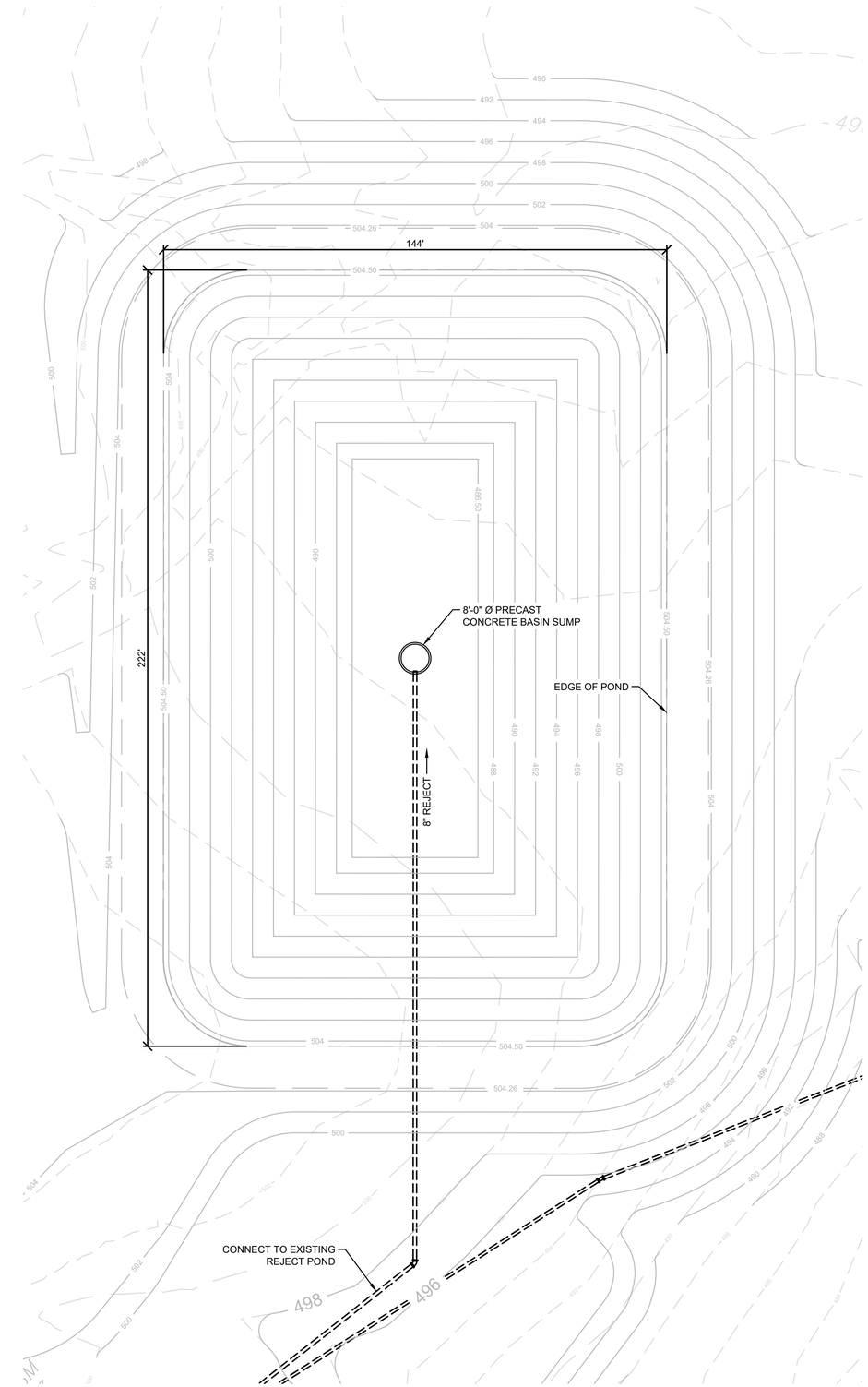
NOT RELEASED FOR CONSTRUCTION

CHLORINE CONTACT CHAMBER - PLAN AND SECTIONS

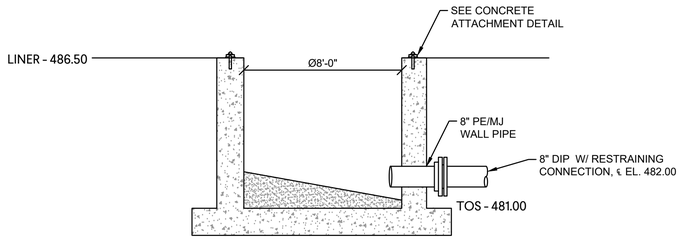
D-601

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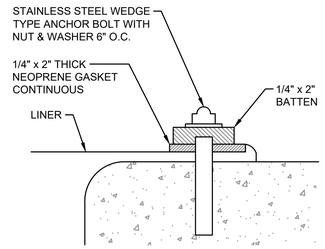
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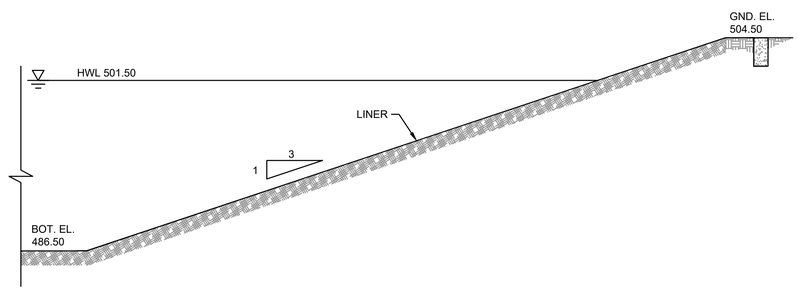
6B PLAN
D-001 SCALE: 1" = 20'-0"



A REJECT POND CONCRETE SUMP
D-602 SCALE: NOT TO SCALE



B TYPICAL CONCRETE ATTACHMENT
D-602 SCALE: NOT TO SCALE



C TYPICAL POND SECTION
D-602 SCALE: NOT TO SCALE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

GOODWYN MILLS CAWOOD, LLC
No.PE007898
Exp.06.30.2026
STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION NO.

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007
NOT RELEASED FOR CONSTRUCTION

REJECT POND NO. 2 -
PLAN AND DETAILS

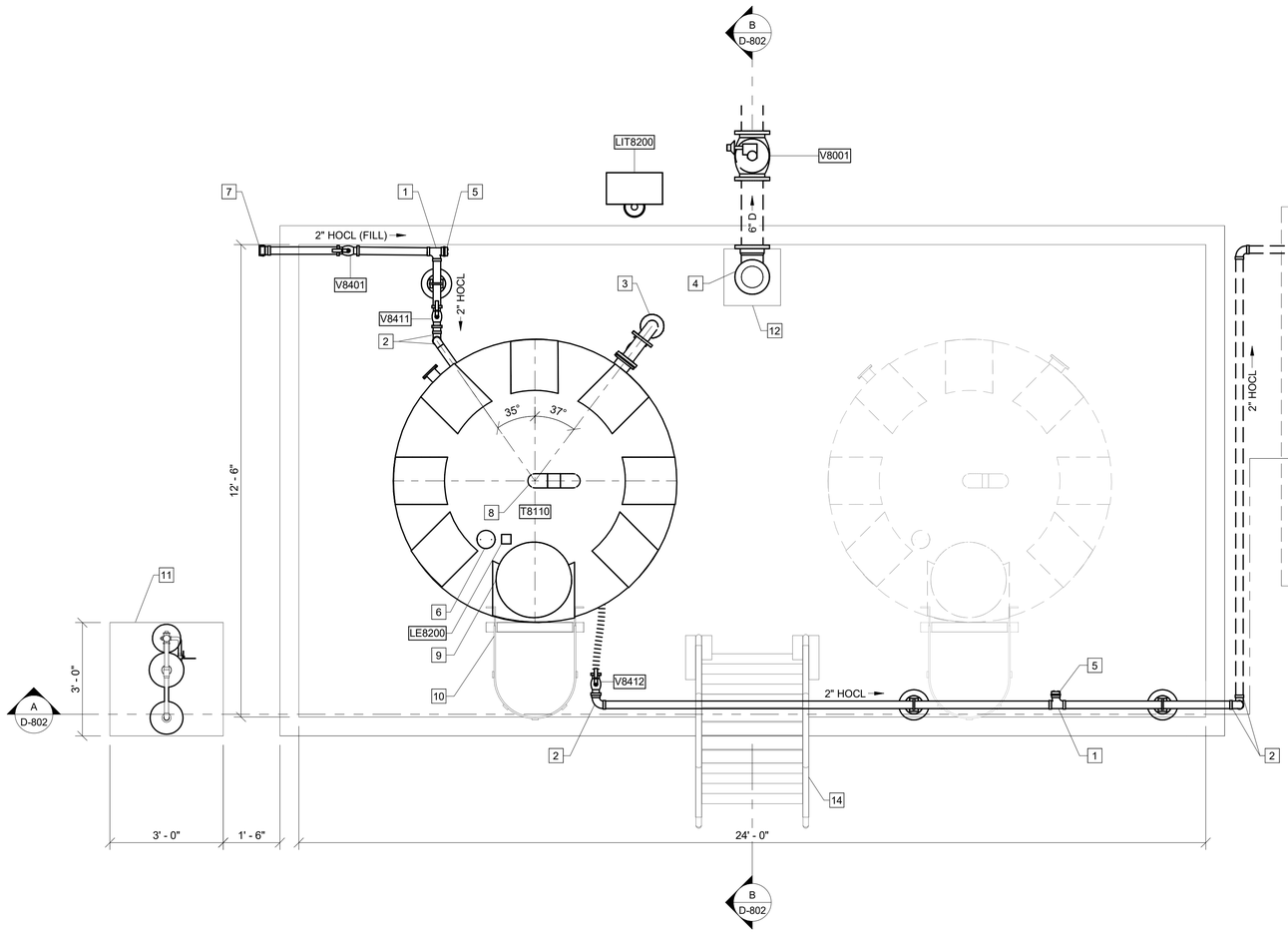
D-602

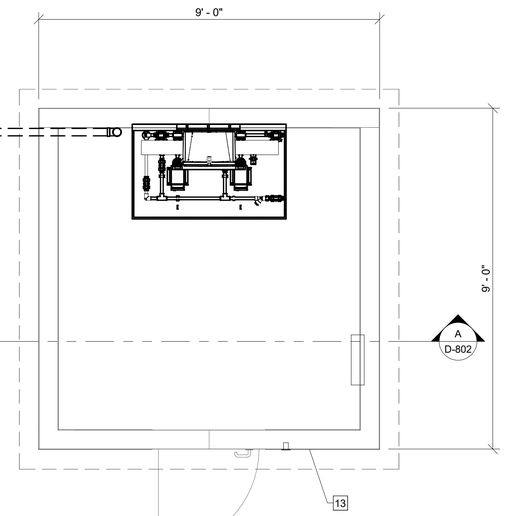
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PLOTTED: Apr 17, 2026 - 8:42am

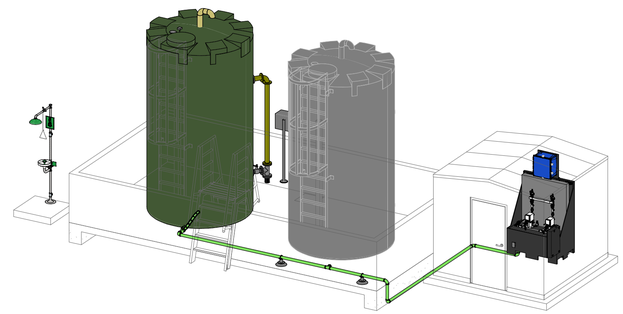
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KEY NOTES: #

1. 2" TEE
2. 2" 90° BEND
3. 3" 90° FL BEND
4. 6" 90° MJ BEND
5. BLIND FLANGE
6. 3" FLANGE NOZZEL FOR LEVEL INSTRUMENT
7. 2" MALE CAMLOCK FITTING
8. 4" GOOSENECK FITTING
9. 24" ⌀ HINGED MANWAY
10. ACCESS LADDER W/ SAFETY CAGE
11. CONCRETE PAD 3'-0" X 3'-0" X 8" REINFORCED WITH #4 REBAR AT 12" E.W.
12. 18" X 18" X 6" SUMP
13. PRE-MANUFACTURED FIBERGLASS BUILDING
14. ALUMINUM LADDER







8 / D-801 **01 - 800** SCALE: 1/2" = 1'-0"

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — CERTIFICATE OF AUTHORIZATION — Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

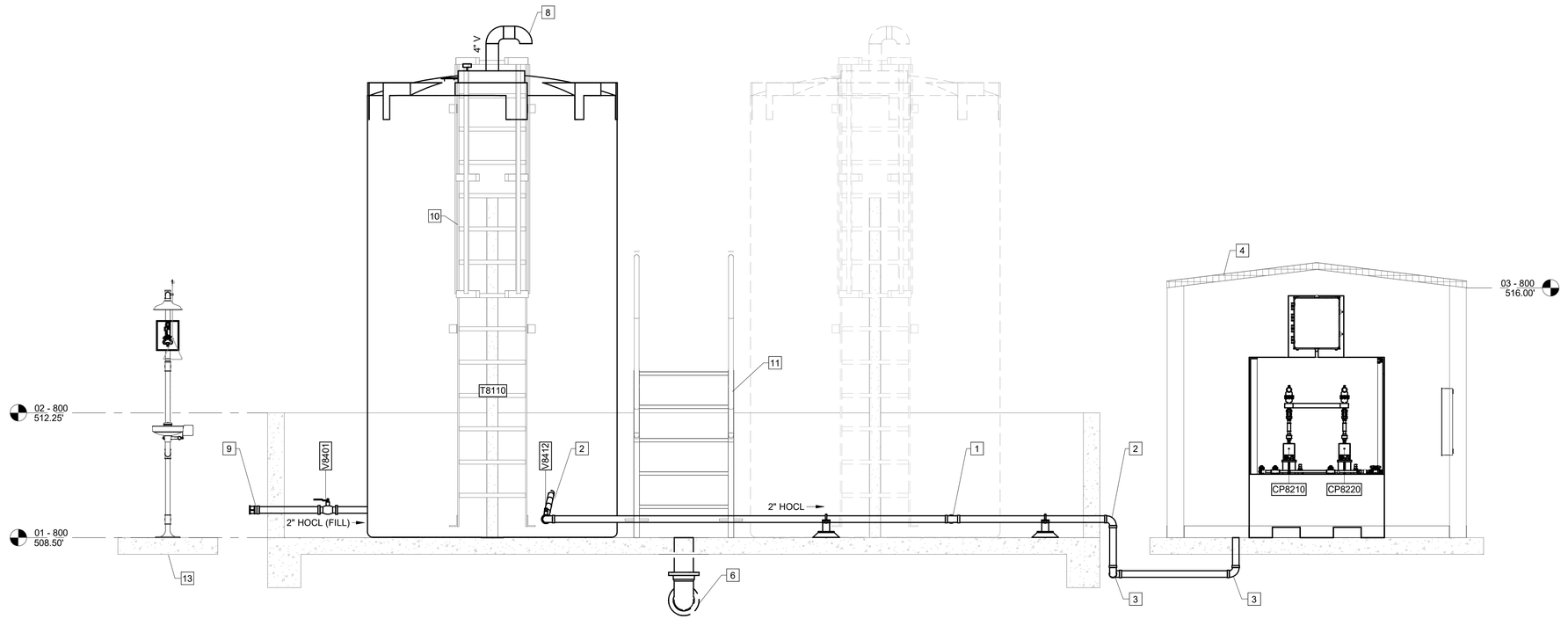
NOT RELEASED FOR CONSTRUCTION

CHEMICAL TANK FARM
AND BUILDING - PLAN

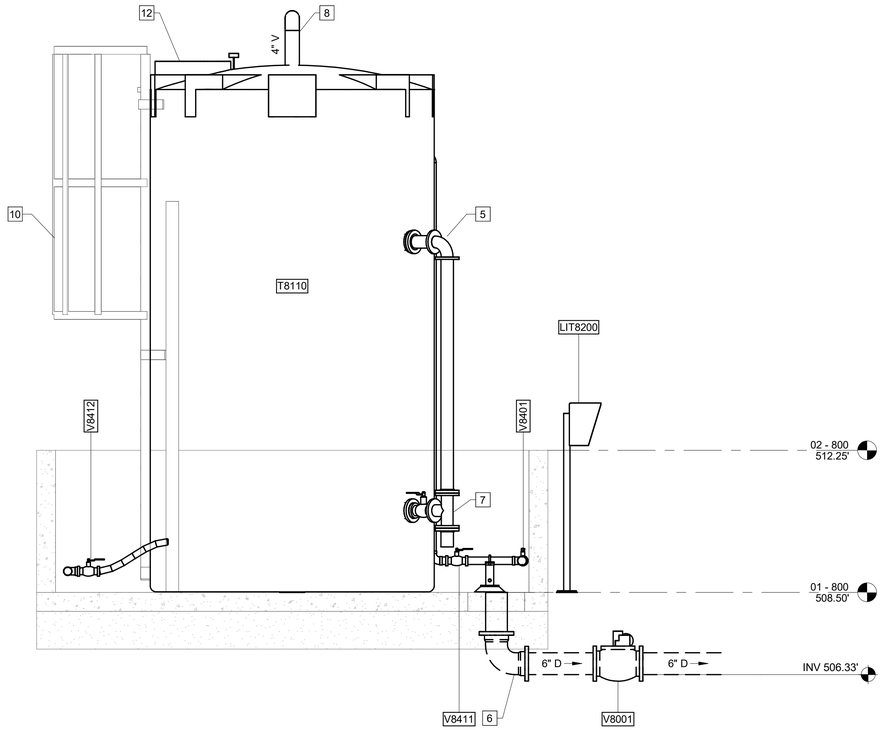
D-801

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Chemical Tank and Building.rvt
4/17/2026 8:35:40 AM

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A **SECTION**
D-801 SCALE: 1/2" = 1'-0"



B **SECTION**
D-801 SCALE: 1/2" = 1'-0"

KEY NOTES: #

1. 2" TEE
2. 2" 90° FL BEND
3. 2" 90° MJ BEND
4. PRE-MANUFACTURED FIBERGLASS BUILDING
5. 3" 90° BEND
6. 6" 90° MJ BEND
7. 3" TEE
8. 4" GOOSENECK FITTING
9. 2" MALE CAMLOCK FITTING
10. ACCESS LADDER W/ SAFETY CAGE
11. ALUMINUM LADDER
12. 24" ⌀ HINGED MANWAY
13. CONCRETE PAD 3'-0" X 3'-0" X 8" REINFORCED WITH #4 REBAR AT 12" E.W.

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
LANCE WOOD
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION NO.

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

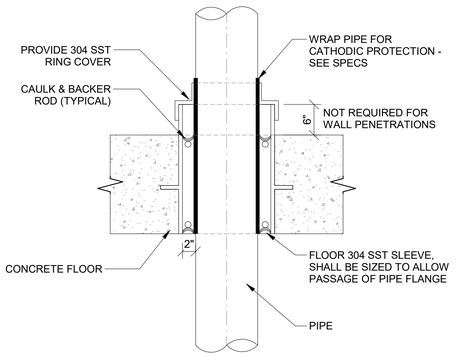
CHEMICAL TANK FARM AND BUILDING - SECTIONS

D-802

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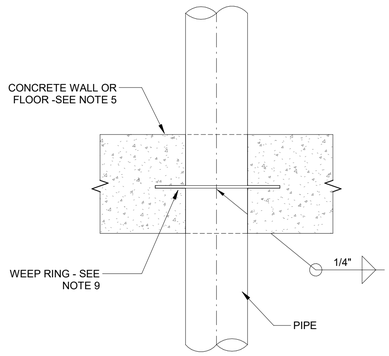
FOR FLOORS



A D-901 **FLOOR SLEEVE W/ RING COVER**

SCALE: 1" = 1'-0"

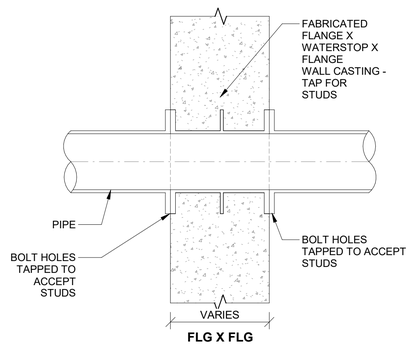
FOR WALLS, FLOORS AND CEILINGS



B D-901 **FLOOR/WALL PIPE (WEEP RING)**

SCALE: 1" = 1'-0"

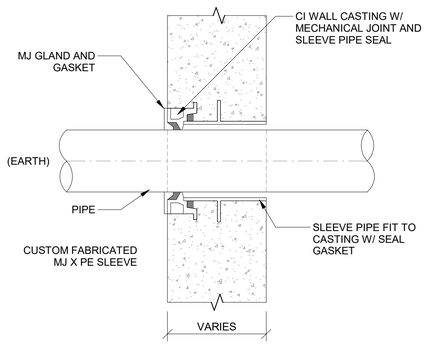
FOR WALLS



C D-901 **WALL PIPE (FLG X FLG)**

SCALE: 1" = 1'-0"

FOR WALLS



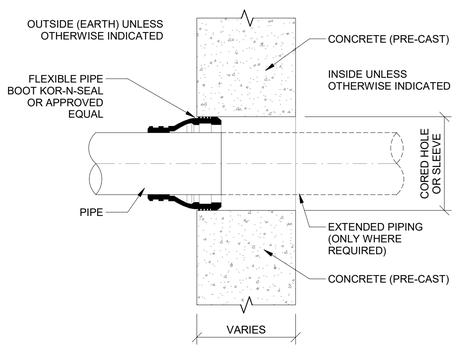
D D-901 **WALL PIPE (MJ GLAND)**

SCALE: 1" = 1'-0"

PIPE PENETRATION NOTES:

1. ALL SLEEVES SHALL BE 304 STAINLESS STEEL, SCH 20 UNLESS NOTED OTHER WISE.
2. SEAL FLANGES SHALL BE DRILLED TO 150 POUND STANDARD. EACH JOINT SHALL BE GASKETED.
3. WHERE NOTED, DUCTILE IRON FLANGES MAY BE INSTALLED FLUSH W/ WALL & TAPPED FOR STUDS.
4. PROVIDE CURB WHERE PENETRATING FLOOR EXCEPT FOR PENETRATION TYPE A. CURB SHALL BE 4" HIGH & 3" WIDE.
5. PROVIDE A MINIMUM OF 3" CLEARANCE BETWEEN REINFORCING STEEL & PIPE PENETRATIONS.
6. FLEXIBLE JOINTS SHALL BE PROVIDED FOR UNDERGROUND PIPING AS SPECIFIED.
7. RESTRAINED FLEXIBLE COUPLINGS FOR STEEL PIPE SHALL BE DESIGNED FOR 100 PSI LINE PRESSURE IN ACCORDANCE W/ AWWA MANUAL M11. FIGURES 19.15 & 19.16 & TABLE 19.17 SHALL BE UTILIZED.
8. INSULATION SHALL NOT EXTEND THROUGH SLEEVES UNLESS OTHERWISE NOTED.
9. WEEP RINGS SHALL HAVE A MINIMUM DIAMETER EQUAL TO THE PIPE DIAMETER PLUS 3 INCHES.
10. SLEEVED DIAMETER SHALL BE AS RECOMMENDED BY THE MECHANICAL SEAL MANUFACTURER.
11. ALL WALL PIPE SHALL BE CAST UNLESS OTHERWISE NOTED.
12. PROVIDE PIPE JOINT WITHIN TWO (2) FEET OF EXTERIOR WALL FACE OF WALL AT CONNECTION TO ALL NEW & EXISTING STRUCTURES OR MANHOLES.
13. DETAIL NUMBERS G, H, I, & J REPRESENT MODIFICATIONS TO EXISTING STRUCTURES & NEW CONSTRUCTION.

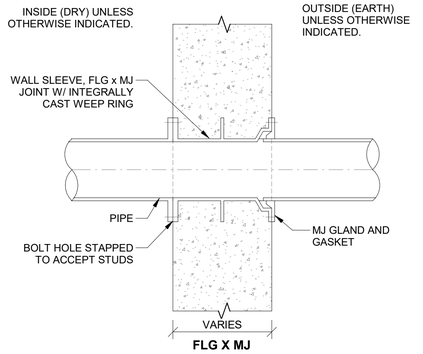
FOR PRECAST WALLS



E D-901 **CORED/PRECAST OPENING W/ PIPE BOOT**

SCALE: 1" = 1'-0"

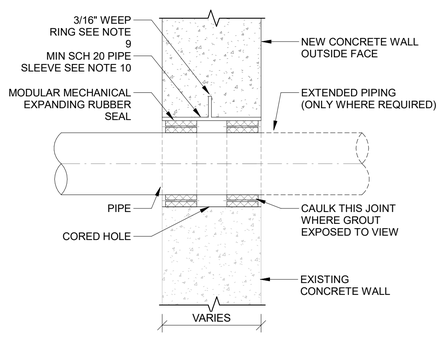
FOR WALLS



F D-901 **WALL PIPE (FLG X MJ/RJ)**

SCALE: 1" = 1'-0"

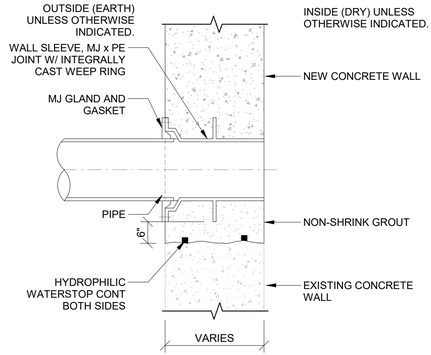
FOR WALLS AND FLOORS



G D-901 **WALL SLEEVE W/ MODULAR LINK TYPE SEAL**

SCALE: 1" = 1'-0"

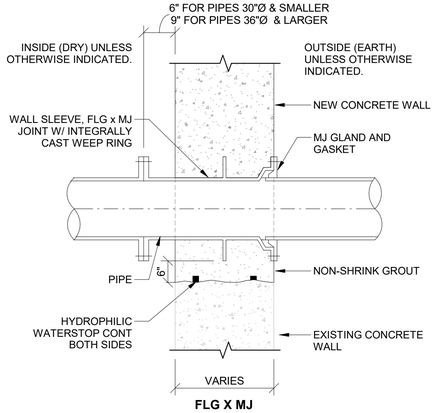
FOR WALLS



H D-901 **WALL PIPE (MJ X PE)**

SCALE: 1" = 1'-0"

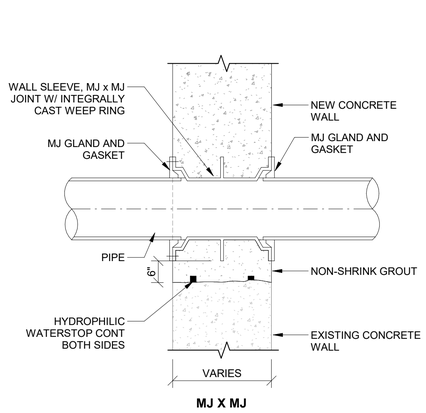
FOR WALLS



J D-901 **WALL PIPE (FLG X MJ/RJ)**

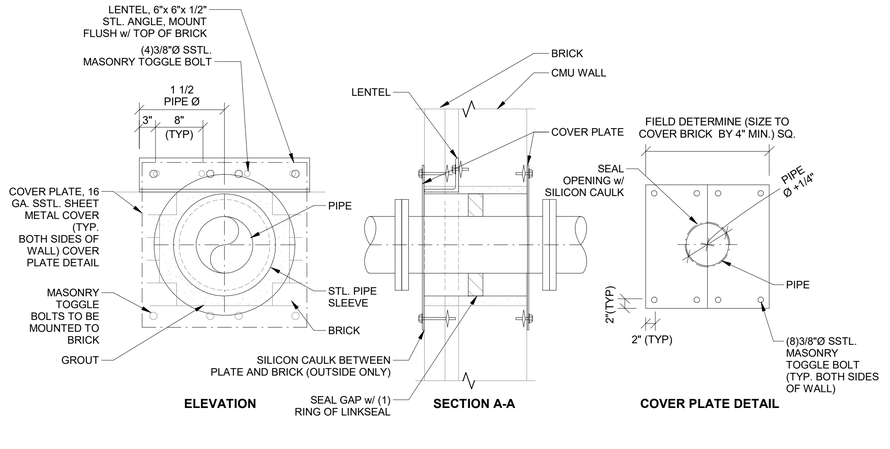
SCALE: 1" = 1'-0"

FOR WALLS



K D-901 **WALL PIPE (MJ/RJ X MJ/RJ)**

SCALE: 1" = 1'-0"



L D-901 **EXISTING CMU WALL PENETRATION**

SCALE: 1" = 1'-0"

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STATE OF GEORGIA — NICHOLAS J. LAY — 040174 — CERTIFICATE OF AUTHORIZATION — GOODWYN MILLS CAWOOD, LLC — NO. PEF001488 — Exp.06.30.2026

1" 0" .5" 1"

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CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

Approver

PROCESS PIPING PIPE PENETRATION DETAILS

D-901

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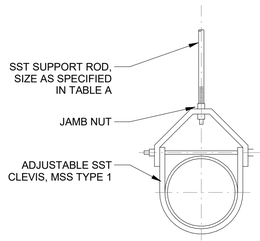
TABLE A

NOMINAL PIPE SIZE (INCHES)	SUPPORT ROD SIZE AND MAXIMUM LOAD PER ROD SEE NOTES 2 AND 3				MAXIMUM PIPE SPAN (FEET) SEE NOTE 4			
	ONE ROD SUPPORT SYSTEM		TWO ROD SUPPORT SYSTEM					
	ROD SIZE (INCHES)	MAX LOAD (POUNDS)	ROD SIZE (INCHES)	MAX LOAD (POUNDS)	STEEL SEE NOTE 3	COPPER	PLASTIC SEE NOTE 5	CAST IRON SEE NOTE 6
3/8 TO 3/4	3/8	610	3/8	610	5	5	CONTINUOUS	- - -
1	3/8	610	3/8	610	5	5	5	- - -
1 1/4	3/8	610	3/8	610	5	5	5	- - -
1 1/2	3/8	610	3/8	610	5	5	5	- - -
2	3/8	610	3/8	610	10	5	5	12 FEET FOR DUCTILE IRON 10 FEET FOR CAST IRON
2 1/2	3/8	610	3/8	610	10	10	5	
3	3/8	610	3/8	610	10	20	5	
4	1/2	1130	3/8	610	10	20	10	
6	3/4	1810	1/2	1130	15	20	20	
8	3/4	2710	1/2 (5/8)	1130 (1810)	15	20	20	
10	3/4 (1)	2710 (4960)	5/8 (3/4)	1810 (2710)	20	- - -	20	
12	7/8 (1 1/4)	3770 (8000)	3/4 (7/8)	2710 (3370)	20	- - -	20	
14	1	4960	- - -	- - -	20	- - -	- - -	
16	1	4960	- - -	- - -	20	- - -	- - -	
18	1	4960	- - -	- - -	20	- - -	- - -	
20	1 1/4	8000	- - -	- - -	20	- - -	- - -	
24	1 1/4	8000	- - -	- - -	20	- - -	- - -	
30	1 1/2	12,000	1 1/2	24,000	20	- - -	- - -	

TABLE B

X INDICATES PIPE HANGERS SUITABLE FOR CONDITIONS LISTED BELOW:		PIPE HANGER TYPE						
		1	2	3	4	5	6	7
SERVICE TEMPERATURE								
33° F - 59° F	INSULATED	-	-	X	X	X	-	-
120° F - 450° F	UNINSULATED	X	X	X	X	X	X	X
60° F - 119° F		X	X	X	-	-	X	X
PIPING MATERIALS								
STEEL		X	X	X	X	X	X	X
COPPER		-	X	-	X	-	X	X
PLASTIC		X	X	-	X	X	X	X
CAST IRON		X	X	-	X	X	X	X

1/2" THROUGH 12" PIPE



1 D-902 **TYPE 1 PIPE HANGER**

SCALE: 1" = 1'-0"

GENERAL NOTES:

1. WHERE NO REFERENCE TO PIPE SUPPORT SYSTEMS ARE GIVEN ON THE DRAWINGS. THE CONTRACTOR SHALL USE AN APPROPRIATE SYSTEM. SEE TABLE "B". PIPE AND CONDUIT SUPPORT SYSTEMS SHALL BE UNISTRUT, ELCEN, OR EQUAL, AND SHALL BE DESIGNED BY THE CONTRACTOR TO MEET THE MINIMUM LOAD AND SPAN REQUIREMENTS AS SPECIFIED.
2. MATERIALS FOR HANGERS, SUPPORTS AND ASSOCIATED HARDWARE SHALL BE 304 OR 316 SST.
3. UNLESS OTHERWISE SPECIFIED, EXPANSION ANCHORS SHALL NOT BE USED.
4. MSS REFERS TO THE MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY, STANDARD PRACTICE SP58 AND SP69.
5. HANGER BRACKETS AND SUPPORT COMPONENTS MAY BE INTERCHANGED.
6. CONCRETE INSERTS IN AREA BELOW WATER SURFACE OR NORMALLY SUBJECT TO SUBMERGING SHALL BE EMBEDDED ANCHOR BOLTS OR EQUAL.
7. PROVIDE PLASTIC OR RUBBER CHANNEL END CAPS AT EXPOSED ENDS OF CHANNELS 7'-0" ABOVE FLOOR AND BELOW.
8. MAXIMUM DESIGN WEIGHTS AND LOADS SHALL BE AS SHOWN IN TABLE "A" OR AS SHOWN IN THE DETAILS ON THIS DRAWING.
9. WHEN SUPPORT PIPING REQUIRES HORIZONTAL FLEXIBILITY NORMAL TO A STEEL BEAM AXIS, USE STRUCTURAL ATTACHMENTS C AND D AS SHOWN ON DRAWING D-903.
10. ALL PIPING SUPPORTED BY HANGERS AND/OR STRUCTURAL ATTACHMENTS SHALL BE BRACED AGAINST HORIZONTAL, VERTICAL, AXIAL, AND LONGITUDINAL SWAY. BRACING SHALL BE CALCULATED TO RESIST SEISMIC LOADINGS AS SPECIFIED BY SMACNA AND AS INDICATED IN THE SPECIFICATIONS.
11. FITTINGS SHALL NOT BE LESS THAN MSS CL B.
12. UNLESS OTHERWISE SPECIFIED, TRAPEZE AND PIPE RACK COMPONENTS SHALL HAVE A MINIMUM THICKNESS OF 12 GAGE WITH A MAXIMUM DEFLECTION 1/240 OF THE SPAN. MINIMUM CHANNEL COMPONENT SIZE SHALL BE 1-5/8" SQUARE 316 SST AS MANUFACTURED BY SUPER STRUT, UNISTRUT, ELCEN, OR EQUAL.

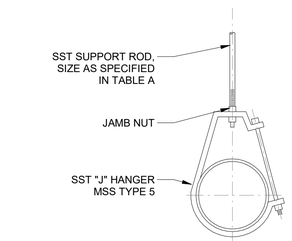
TABLE A NOTES:

1. DESIGN WEIGHT SHALL BE TWICE THE WEIGHT OF THE PIPE FULL OF WATER PLUS THE WEIGHT OF VALVES,FITTINGS, INSULATING MATERIALS, AND SUSPENDED HANGER COMPONENTS ON THE RUN OF PIPE BEING SUPPORTED.
2. ROD SIZES SHOWN ARE FOR THE SUPPORT OF A SINGLE PIPE. WHEN SUPPORTING MORE THAN ONE PIPE, ROD SHALL BE SIZED USING THE DESIGN WEIGHTS (SEE NOTE 1) TO DETERMINE THE TOTAL DESIGN LOAD. THE TOTAL DESIGN LOAD SHALL NOT EXCEED THE MAXIMUM LOADS IN THE TABLE ABOVE.
3. ROD SIZES AND MAXIMUM LOADS IN PARENTHESIS ARE FOR 8", 10" OR 12" STEEL PIPE ONLY, AT SPANS SHOWN.
4. PIPE SHALL NOT HAVE POCKETS FORMED IN THE SPAN DUE TO SAGGING OF THE PIPE BETWEEN SUPPORTS CAUSED BY THE WEIGHT OF THE PIPE, MEDIUM IN THE PIPE, INSULATION, VALVES AND FITTINGS.
5. SPAN SHOWN IS FOR SCHEDULE 80 PVC PIPE AT 100 DEGREES F. SPANS FOR OTHER PLASTICS, OTHER PVC PIPE SCHEDULES, AND PIPES AT HIGHER TEMPERATURES, SHALL BE SHORTENED IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS. CONTINUOUS MEANS PIPE SHALL BE IN UNISTRUT OR SIMILAR CHANNEL.
6. PROVIDE A MINIMUM OF ONE PIPE HANGER PER PIPE LENGTH, WITHIN 4 INCHES OF THE BELL.
7. PIPE HANGER AND SUPPORT SELECTION SHALL BE IN ACCORDANCE WITH TABLE B.

TABLE B NOTES:

1. FOR SERVICES OTHER THAN THOSE SHOWN IN TABLE "B", PIPE ATTACHMENTS SHALL BE THOSE SPECIFIED IN THE PIPE SPECS.

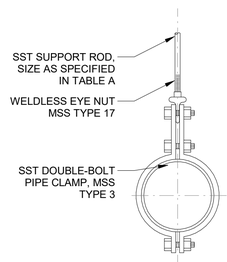
1/2" THROUGH 8" PIPE



2 D-902 **TYPE 2 PIPE HANGER**

SCALE: 1" = 1'-0"

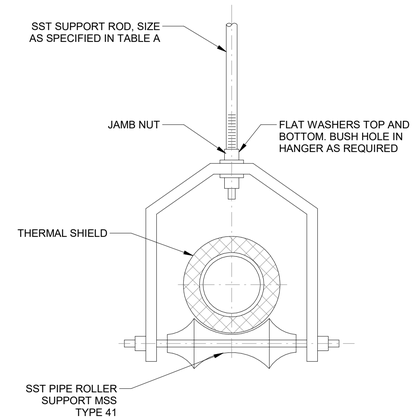
3/4" THROUGH 12" PIPE



3 D-902 **TYPE 3 PIPE HANGER**

SCALE: 1" = 1'-0"

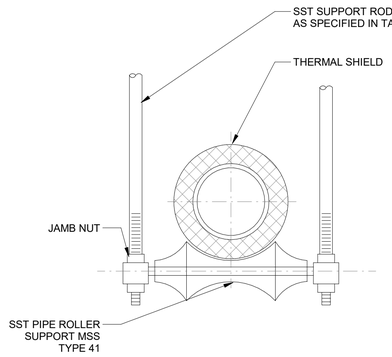
3/8" THROUGH 12" PIPE



4 D-902 **TYPE 4 PIPE HANGER**

SCALE: 1" = 1'-0"

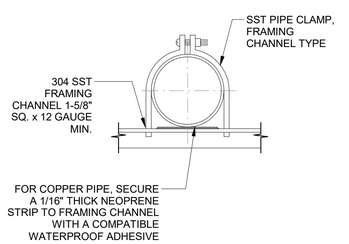
3/8" THROUGH 12" PIPE



5 D-902 **TYPE 5 PIPE HANGER**

SCALE: 1" = 1'-0"

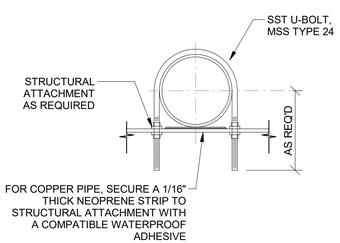
3/8" THROUGH 8" PIPE



6 D-902 **TYPE 6 PIPE HANGER**

SCALE: 1" = 1'-0"

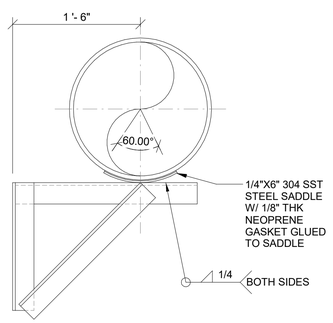
1/2" THROUGH 12" PIPE



7 D-902 **TYPE 7 PIPE HANGER**

SCALE: 1" = 1'-0"

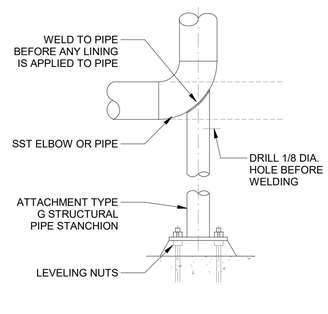
6" THROUGH 20" PIPE



8 D-902 **TYPE 8 PIPE HANGER**

SCALE: 1" = 1'-0"

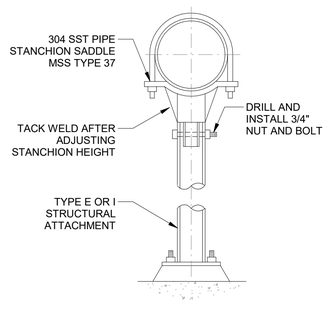
2-1/2" THROUGH 14" PIPE



9 D-902 **TYPE 9 PIPE HANGER**

SCALE: 1" = 1'-0"

4" THROUGH 12" PIPE



10 D-902 **TYPE 10 PIPE SUPPORT**

SCALE: 1" = 1'-0"

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STATE OF GEORGIA — GOODWYN MILLS CAWOOD, LLC — CERTIFICATE OF AUTHORIZATION — Exp.06.30.2026

1" .5" 0" 1"

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Project Manager: MP
Engineer: LW
Designer: LW
Drawn By: LS

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For Piedmont Water Company
Greensboro, Georgia

CAUG250007

Approver

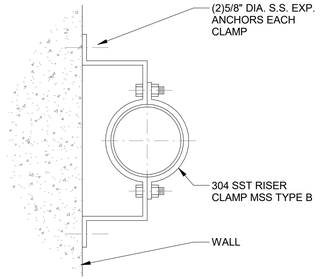
PROCESS PIPING SUPPORT DETAILS

D-902

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 8:50:06 AM

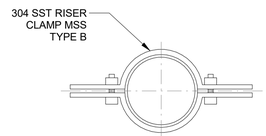
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FOR VERTICAL PIPE ONLY
3/4" THROUGH 8" PIPE



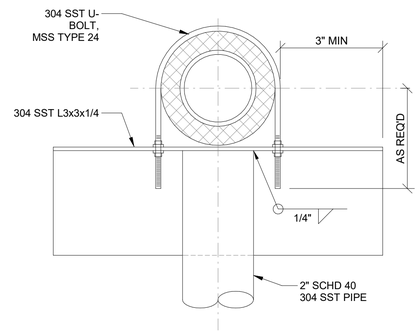
11 D-903 **TYPE 11 PIPE HANGER**
SCALE: 1" = 1'-0"

FOR VERTICAL PIPE ONLY
1/2" THROUGH 12" PIPE



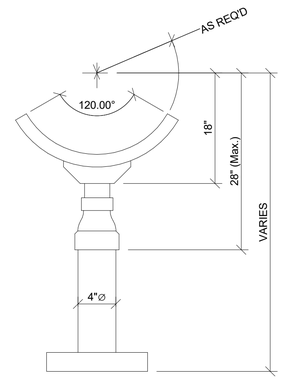
12 D-903 **TYPE 12 PIPE HANGER**
SCALE: 1" = 1'-0"

1/2" THROUGH 3" PIPE



13 D-903 **TYPE 13 PIPE HANGER**
SCALE: 1" = 1'-0"

1/4" THROUGH 30" PIPE



14 D-903 **TYPE 14 PIPE SUPPORT**
SCALE: 1" = 1'-0"

GENERAL NOTES:

1. WHERE NO REFERENCE TO PIPE SUPPORT SYSTEMS ARE GIVEN ON THE DRAWINGS THE CONTRACTOR SHALL USE AN APPROPRIATE SYSTEM. SEE TABLE "B". PIPE AND CONDUIT SUPPORT SYSTEMS SHALL BE UNISTRUT, ELCEN, OR EQUAL, AND SHALL BE DESIGNED BY THE CONTRACTOR TO MEET THE MINIMUM LOAD AND SPAN REQUIREMENTS AS SPECIFIED.
2. MATERIALS FOR HANGERS, SUPPORTS AND ASSOCIATED HARDWARE SHALL BE 316 SST.
3. UNLESS OTHERWISE SPECIFIED, EXPANSION ANCHORS SHALL NOT BE USED.
4. MSS REFERS TO THE MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY, STANDARD PRACTICE SP58 AND SP69.
5. HANGER BRACKETS AND SUPPORT COMPONENTS MAY BE INTERCHANGED.
6. CONCRETE INSERTS IN AREA BELOW WATER SURFACE OR NORMALLY SUBJECT TO SUBMERGING SHALL BE EMBEDDED ANCHOR BOLTS OR EQUAL.
7. PROVIDE PLASTIC OR RUBBER CHANNEL END CAPS AT EXPOSED ENDS OF CHANNELS 7'-0" ABOVE FLOOR AND BELOW.
8. MAXIMUM DESIGN WEIGHTS AND LOADS SHALL BE AS SHOWN IN TABLE "A" D-902 OR AS SHOWN IN THE DETAILS ON THIS DRAWING.
9. WHEN SUPPORT PIPING REQUIRES HORIZONTAL FLEXIBILITY NORMAL TO A STEEL BEAM AXIS, USE STRUCTURAL ATTACHMENTS C AND D AS SHOWN ON D-904.
10. ALL PIPING SUPPORTED BY HANGERS AND/OR STRUCTURAL ATTACHMENTS SHALL BE BRACED AGAINST HORIZONTAL, VERTICAL, AXIAL, AND LONGITUDINAL SWAY. BRACING SHALL BE CALCULATED TO RESIST SEISMIC LOADINGS AS SPECIFIED BY SMACNA AND AS INDICATED IN THE SPECIFICATIONS.
11. FITTINGS SHALL NOT BE LESS THAN MSS CL B.
12. UNLESS OTHERWISE SPECIFIED, TRAPEZE AND PIPE RACK COMPONENTS SHALL HAVE A MINIMUM THICKNESS OF 12 GAGE WITH A MAXIMUM DEFLECTION 1/240 OF THE SPAN. MINIMUM CHANNEL COMPONENT SIZE SHALL BE 1 5/8" SQUARE 316 SST AS MANUFACTURED BY SUPER STRUT, UNISTRUT, ELCEN, OR EQUAL.
13. SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A ON SHEET D-902. SUPER STRUT, UNISTRUT, ELCEN, OR EQUAL.

TYPE 15 PIPE HANGER NOTES:

1. SPACING SHALL BE AS SPECIFIED IN TABLE A / D-902 ON PRIOR SHEET.
2. TOTAL LOADS ON END CONNECTIONS SHALL NOT EXCEED 1/2 THE MAXIMUM ALLOWABLE LOAD AT MID-POINT.

STRAP SCHEDULE	
PIPE SIZE	**STRAP SIZE**
14" TO 16"	1/2"X6"
18" TO 20"	5/8"X6"
24" TO 30"	3/4"X6"

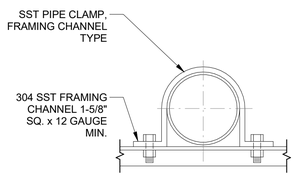
15 D-903 **TYPE 15 PIPE HANGER**
SCALE: 1" = 1'-0"

14" THROUGH 30" PIPE

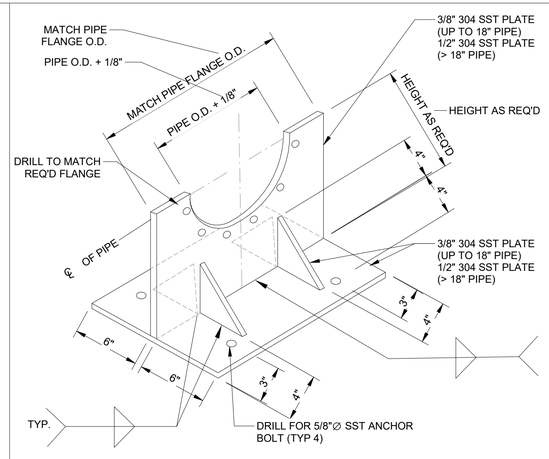
14" THROUGH 48" PIPE

16 D-903 **FIXED PIPE SUPPORT**
SCALE: 1" = 1'-0"

1/2" THROUGH 6" PIPE

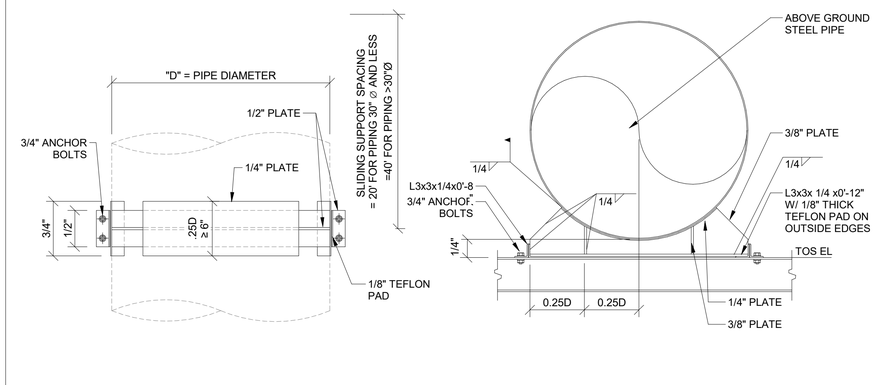


17 D-903 **TYPE 17 PIPE HANGER**
SCALE: 1" = 1'-0"



18 D-903 **TYPE 18 PIPE HANGER**
SCALE: 1" = 1'-0"

42" THROUGH 60" DIAMETER STEEL PIPING



19 D-903 **FIXED PIPE SUPPORT**
SCALE: 1" = 1'-0"

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STATE OF GEORGIA — NO. 001127 — CERTIFICATE OF AUTHORIZATION — GOODWYN MILLS CAWOOD, LLC — Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

Approver

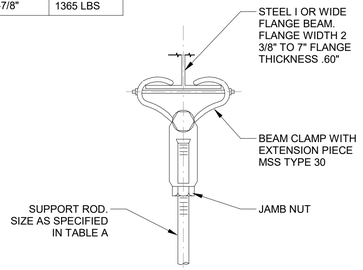
PROCESS PIPING SUPPORT DETAILS

D-903

Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 8:50:07 AM

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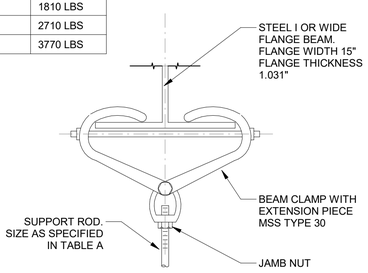
MAXIMUM ALLOWABLE LOAD	
ROD SIZE	LOAD
3/8"	610 LBS
1/2"	1130 LBS
5/8"-7/8"	1365 LBS



A D-904 **ATTACHMENT TYPE A**

SCALE: 1" = 1'-0"

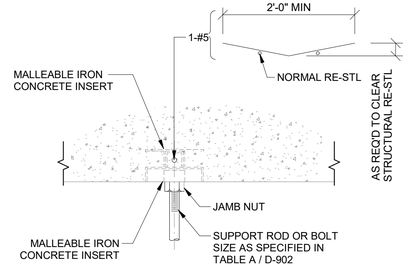
MAXIMUM ALLOWABLE LOAD	
ROD SIZE	LOAD
3/8"	610 LBS
1/2"	1130 LBS
5/8"	1810 LBS
3/4"	2710 LBS
7/8"	3770 LBS



B D-904 **ATTACHMENT TYPE B**

SCALE: 1" = 1'-0"

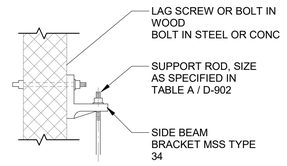
MAXIMUM ALLOWABLE LOAD	
ROD SIZE	LOAD
3/8"	610 LBS
1/2"	1130 LBS
5/8"-7/8"	1140 LBS



C D-904 **ATTACHMENT TYPE C**

SCALE: 1" = 1'-0"

MAXIMUM ALLOWABLE LOAD		
ROD SIZE	LOAD	LOAD CONC/STEEL
3/8"	390 LBS	610 LBS
1/2"	640 LBS	1130 LBS
5/8"	760 LBS	1810 LBS
3/4"	830 LBS	2710 LBS
7/8"	830 LBS	3770 LBS



D D-904 **ATTACHMENT TYPE D**

SCALE: 1" = 1'-0"

GENERAL NOTES:

1. FOR EXISTING CONCRETE, NEW PRECAST CONCRETE OR NEW CONCRETE MASONRY UNITS USE SURFACE MOUNT CHANNEL UNISTRUT P-1000 OR EQUAL. FOR ALL POURED-IN-PLACE CONCRETE, USED EMBEDDED CONCRETE INSERT CHANNELS, UNISTRUT P3200 OR EQUAL AND DELETE THE SURFACE MOUNT ANCHOR BOLTS.
2. SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A ON SHEETD-902.

TYPE G ATTACHMENT NOTES

1. BRACKET MAY BE USED WITH VARIOUS HANGER, ROLLER, GUIDE AND CLAMP ASSEMBLIES

TYPE H ATTACHMENT NOTES

1. BRACKET MAY BE WALL OR CEILING MOUNTED, AND MAY BE USED WITH VARIOUS HANGER, GUIDE, RACK, OR ANCHOR, AND SWAY BRACE ASSEMBLIES
2. MAXIMUM LOAD CAPACITY SHALL BE AS RECOMMENDED BY THE CHANNEL MANUFACTURER.

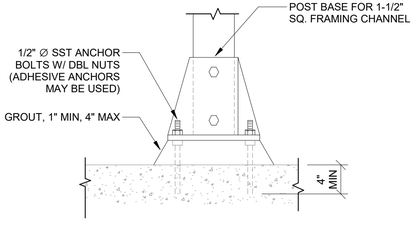
TYPE J ATTACHMENT NOTES

1. PROVIDE FLAT HEADED BOLTS 3/8"∅x1-1/2"L SCREWED IN PLACE TO CREATE FLUSH SURFACE WITH PLATE, PRIOR TO POURING CONCRETE. THESE BOLTS ARE TO BE REMOVED AND REPLACED WITH 2" L BOLTS AFTER CURING FOR SUPPORT ATTACHMENT.

TYPE K ATTACHMENT NOTES

1. STRUCTURAL ATTACHMENTS MAY BE USED WITH VARIOUS HANGER, GUIDE AND ANCHOR ASSEMBLIES.

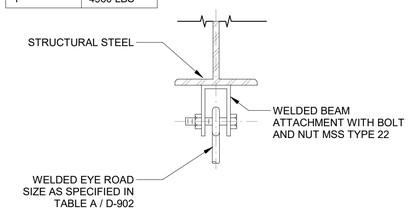
4" OR LESS



E D-904 **ATTACHMENT TYPE E**

SCALE: 1" = 1'-0"

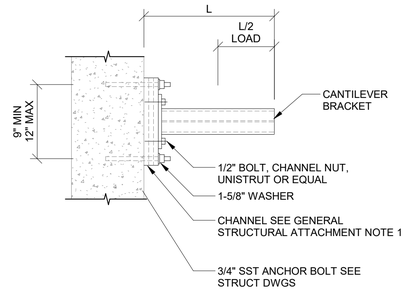
MAXIMUM ALLOWABLE LOAD	
ROD SIZE	LOAD
3/8"	610 LBS
1/2"	1130 LBS
5/8"	1810 LBS
3/4"	2710 LBS
7/8"	3770 LBS
1"	4960 LBS



F D-904 **ATTACHMENT TYPE F**

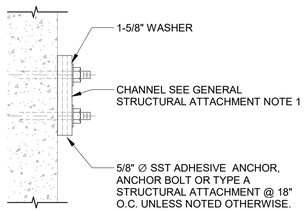
SCALE: 1" = 1'-0"

CAPACITY AT MID-POINT	
L	LOAD
12"	2000 LBS
18"	1300 LBS
24"	1000 LBS
30"	800 LBS



G D-904 **ATTACHMENT TYPE G**

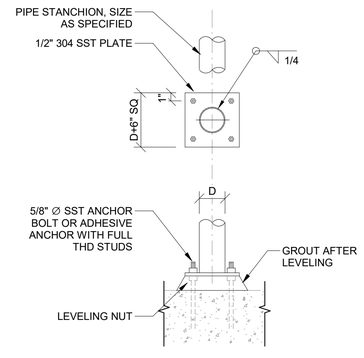
SCALE: 1" = 1'-0"



H D-904 **ATTACHMENT TYPE H**

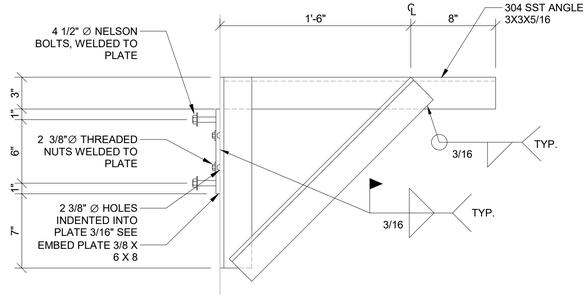
SCALE: 1" = 1'-0"

6" THROUGH 30" PIPE



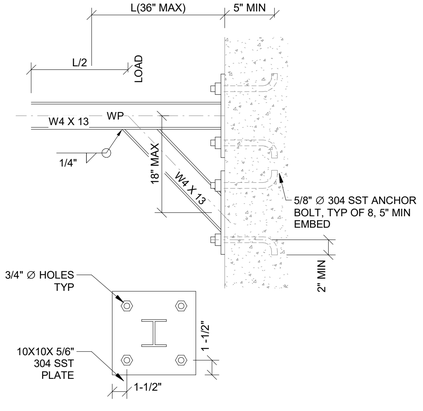
I D-904 **ATTACHMENT TYPE I**

SCALE: 1" = 1'-0"



J D-904 **ATTACHMENT TYPE J**

SCALE: 1" = 1'-0"



WALL PLATE ELEVATION

K D-904 **ATTACHMENT TYPE K**

SCALE: 1" = 1'-0"

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STATE OF GEORGIA — NO. 001421 — CERT IF ICATE OF AUTHORIZATION — GOODWYN MILLS CAWOOD, LLC — Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE	
60% Submittal	02.16.2026	MP
90% Submittal	04.17.2026	LW
Bid Set		LW
Conformed Set		LS

Project Manager:
Engineer:
Designer:
Drawn By:

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007
Approver

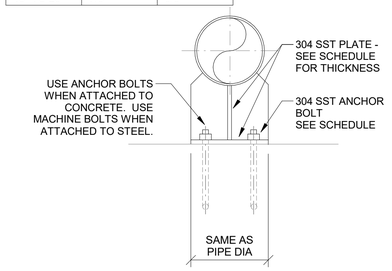
PROCESS PIPING
STRUCTURAL
ATTACHMENT DETAILS

D-904

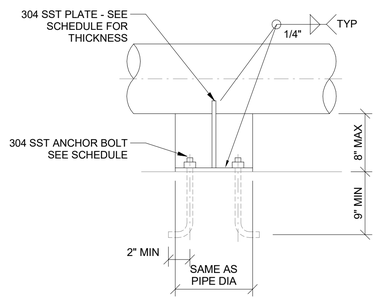
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COMPONENT SCHEDULE		
PIPE SIZE	BOLT SIZE	PL THK
2" & 2-1/2"	3/8"	1/4"
3" TO 6"	1/2"	3/8"
8" TO 12"	5/8"	3/8"
14" TO 16"	3/4"	1/2"
18" TO 20"	7/8"	5/8"



FRONT

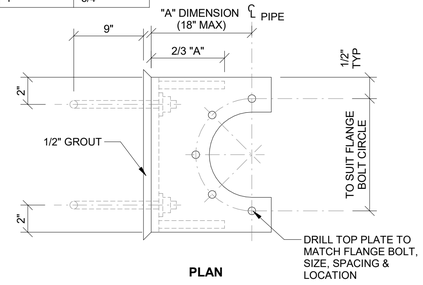


SIDE

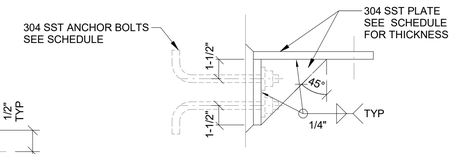
L ATTACHMENT TYPE L

D-905 SCALE: 1" = 1'-0"

COMPONENT SCHEDULE		
PIPE SIZE	BOLT SIZE	PL THK
2" & 2-1/2"	3/8"	1/4"
3" TO 6"	1/2"	3/8"
8" TO 12"	5/8"	3/8"
14" TO 16"	3/4"	1/2"
18" TO 20"	7/8"	5/8"
24" TO 30"	1"	3/4"



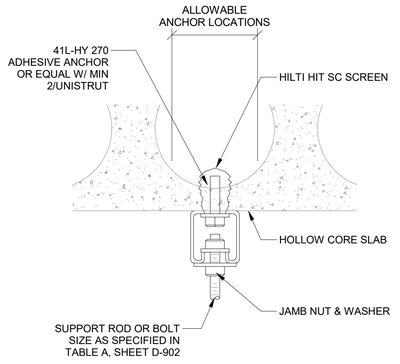
PLAN



SIDE

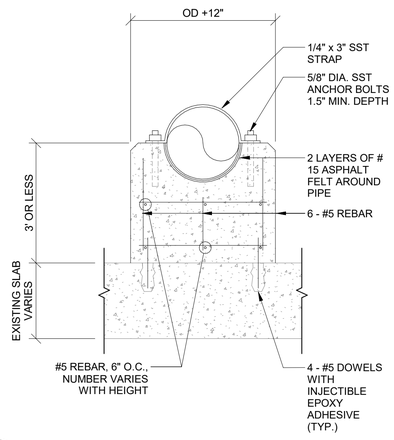
M ATTACHMENT TYPE M

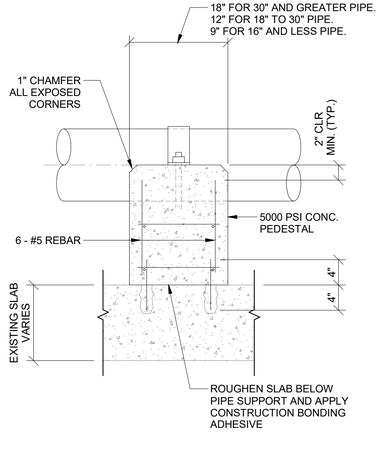
D-905 SCALE: 1" = 1'-0"



N ATTACHMENT TYPE N

D-905 SCALE: 1" = 1'-0"





O TYPE 18 PIPE SUPPORT

D-905 SCALE: 1" = 1'-0"

GENERAL NOTES:

1. FOR EXISTING CONCRETE, NEW PRECAST CONCRETE OR NEW CONCRETE MASONRY UNITS USE SURFACE MOUNT CHANNEL UNISTRUT P-1000 OR EQUAL. FOR ALL POURED-IN-PLACE CONCRETE, USED EMBEDDED CONCRETE INSERT CHANNELS, UNISTRUT P3200 OR EQUAL AND DELETE THE SURFACE MOUNT ANCHOR BOLTS.
2. SPACING SHALL BE AS REQUIRED BUT SHALL NOT EXCEED THOSE SPANS SHOWN IN TABLE A ON SHEET D-902.

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STATE OF GEORGIA
COODWYN MILLS CAWOOD, LLC
NO. PEZ2171
CERTIFICATE OF AUTHORIZATION
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

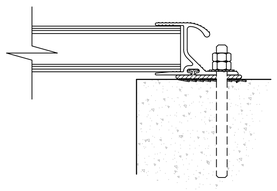
Approver

PROCESS PIPING
STRUCTURAL
ATTACHMENT DETAILS

D-905

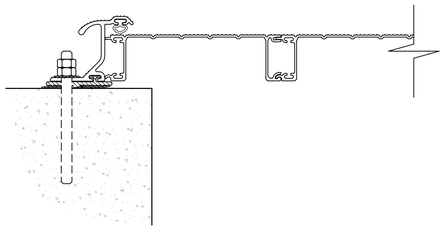
Autodesk Docs://Carey Station WRF 1.5 MGD Expansion/Package Plant.rvt
4/17/2026 8:50:08 AM

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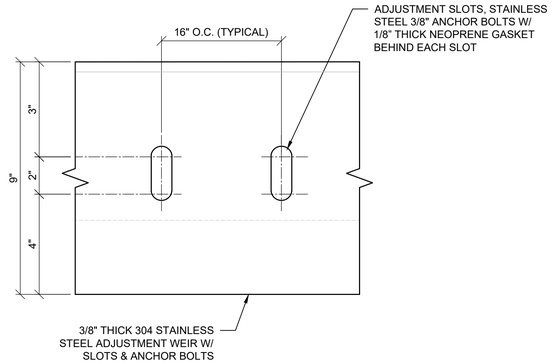
A D-906 **ODOR CONTROL COVER EDGE**

SCALE: 3" = 1'-0"

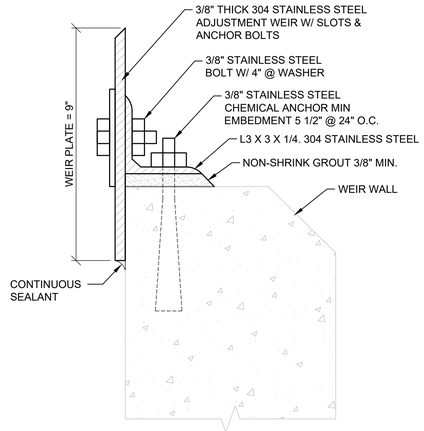


B D-906 **ODOR CONTROL COVER END**

SCALE: 3" = 1'-0"



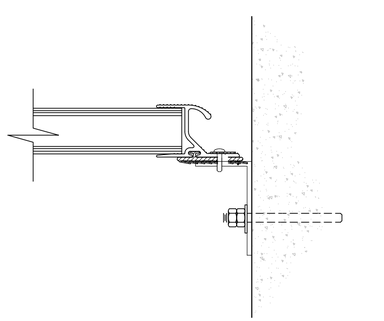
ELEVATION



SECTION

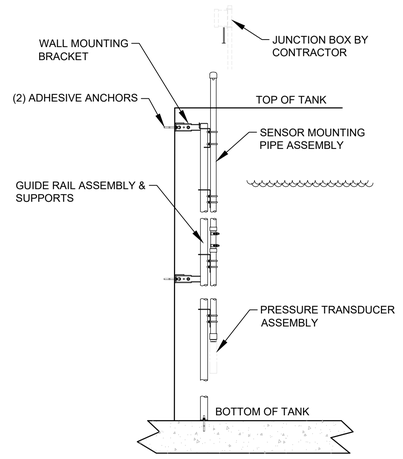
E D-906 **ADJUSTABLE WEIR**

SCALE: NOT TO SCALE



C D-906 **COVER EDGE @ PUMP HATCH**

SCALE: 3" = 1'-0"

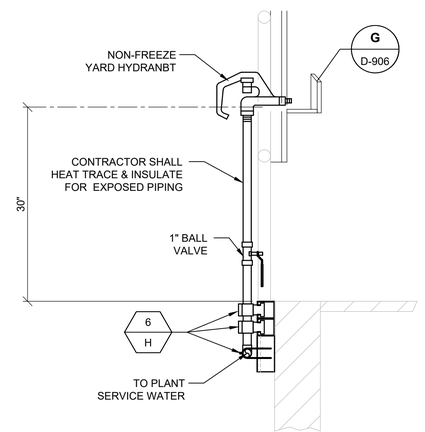


D D-906 **LEVEL TRANSDUCER MOUNT**

SCALE: NOT TO SCALE

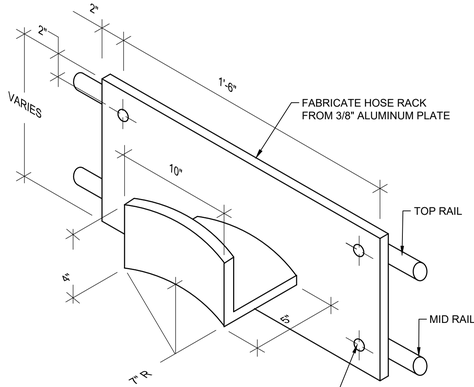
F D-906 **COVER EDGE @ VERT WALL**

SCALE: 3" = 1'-0"



G D-906 **YARD HYDRANT (RAILING MOUNTED)**

SCALE: NOT TO SCALE



PROVIDE 50 FEET OF HOSE AT EACH HOSE RACK (HOSE EQUIVALENT TO HOSE BIBB DIAMETER).

H D-906 **RAIL MOUNTED HOSE RACK**

SCALE: NOT TO SCALE

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA — NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL — CERTIFICATE OF AUTHORIZATION
GOODWYN MILLS CAWOOD, LLC
No. PEO007886
Exp.06.30.2026

1" 0" .5" 1"

ISSUE	DATE
60% Submittal	02.16.2026
90% Submittal	04.17.2026
Bid Set	
Conformed Set	

Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

PROCESS DETAILS

D-906

DRAWING FILE: C:\Users\lsmith\DC\ACCDocs\GMC\Carey Station WRF 1.5 MGD Expansion\CAD Files\Dwg\02 Sheets\11 Process\D-906.dwg
PLOTTED: Apr 17, 2026 - 8:42am

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	TAG	SERVICE	TYPE	SIZE (INCHES)	CONNECTIONS	OPERATOR	NOTES
1000	V1011	W	BALL	1 1/2	THD	LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	CV1012	W	PRESSURE REGULATING	1 1/2	THD	N/A	FURNISHED BY EQUIPMENT MANUFACTURER
	V1013	W	BALL	1/4	THD	LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	EV1014	W	SOLENOID	1 1/2	THD	ELECTRIC ACTUATED	FURNISHED BY EQUIPMENT MANUFACTURER
	V1015	W	BALL	1	THD	LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	CV016	W	PRESSURE REGULATING	1	THD	N/A	FURNISHED BY EQUIPMENT MANUFACTURER
	V1017	W	BALL	1/4	THD	LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	EV1018	W	SOLENOID	1	THD	ELECTRIC ACTUATED	FURNISHED BY EQUIPMENT MANUFACTURER
	V1019	RWW	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
	V1020	RWW	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
	V1021	RWW	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
	V1022	RWW	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
2000	V2010	RWW	BALL	1/4	THD	LEVER	
	V2011	RWW	SWING CHECK	10	FLG	N/A	
	V2012	RWW	PLUG	10	FLG	HANDWHEEL	
	V2020	RWW	BALL	1/4	THD	LEVER	
	V2021	RWW	SWING CHECK	10	FLG	N/A	
	V2022	RWW	PLUG	10	FLG	HANDWHEEL	
3000	V3011	PE	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
	V3012	DRAIN FM	PLUG	6	MJ	2" NUT	PROVIDE VALVE BOX
	V3013	DRAIN FM	PLUG	6	MJ	2" NUT	PROVIDE VALVE BOX
	V3014	PE	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
	V3015	PE	PLUG	12	MJ	2" NUT	PROVIDE VALVE BOX
	V3016	D	PLUG	6	FLG	HANDWHEEL	INSTALL ON VERTICAL PIPING
	V3301	RAS BYPASS	PLUG	8	FLG	HANDWHEEL	INSTALL ON VERTICAL PIPING
	EV3302	AIR	SOLENOID	3	THD	ELECTRIC ACTUATED	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V3601	AIR	BUTTERFLY	4	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V3602	AIR	BUTTERFLY	4	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V3603	AIR	BUTTERFLY	4	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V3604	ML	KNIFE GATE	24	FLG	HANDWHEEL	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V3605	ML	PLUG	18	MJ	2" NUT	PROVIDE VALVE BOX
	V3606	D	PLUG	8	MJ	2" NUT	PROVIDE VALVE BOX
	V3607	AIR	BUTTERFLY	3	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V3111	AIR	CHECK	8	FLG	N/A	FURNISHED BY BLOWER MANUFACTURER
	V3112	AIR	BUTTERFLY	8	WFR	MANUAL LEVER	FURNISHED BY BLOWER MANUFACTURER
	V3121	AIR	CHECK	8	FLG	N/A	FURNISHED BY BLOWER MANUFACTURER
	V3122	AIR	BUTTERFLY	8	WFR	MANUAL LEVER	FURNISHED BY BLOWER MANUFACTURER
4000-6000	V4310	SSC	BALL	1/4	THD	LEVER	
	V4311	SSC	SWING CHECK	3	FLG	N/A	
	V4312	SSC	PLUG	3	FLG	HANDWHEEL	
	V4410	D	PLUG	8	MJ	2" NUT	PROVIDE VALVE BOX
	V5301	SE	PLUG	12	FLG	HANDWHEEL	
	V6001	D	PLUG	6	MJ	2" NUT	PROVIDE VALVE BOX
	V6002	FNE	PLUG	10	MJ	2" NUT	PROVIDE VALVE BOX

	TAG	SERVICE	TYPE	SIZE (INCHES)	CONNECTIONS	OPERATOR	NOTES
7000	V7003	WAS	BALL	1/4	THD	LEVER	
	V7004	WAS	AIR RELEASE	2	THD	N/A	
	V7005	WAS	PLUG	8	FLG	HANDWHEEL	
	V7006	RAS/WAS	PLUG	8	FLG	HANDWHEEL	
	V7007	WAS BYPASS	PLUG	8	FLG	HANDWHEEL	INSTALL ON VERTICAL PIPING
	V7008	D	PLUG	8	MJ	2" NUT	PROVIDE VALVE BOX
	V7009	DS	PLUG	4	FLG	HANDWHEEL	PROVIDE 4" HOSE QUICK CONNECT
	EV7010	AIR	SOLENOID	2	THD	ELECTRIC ACTUATED	FURNISHED BY PACKAGE PLANT MANUFACTURER
	EV7011	AIR	SOLENOID	2	THD	ELECTRIC ACTUATED	FURNISHED BY PACKAGE PLANT MANUFACTURER
	EV7012	AIR	SOLENOID	2	THD	ELECTRIC ACTUATED	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7101	AIR	BUTTERFLY	2	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7102	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7103	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7104	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7105	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7106	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7107	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7108	AIR	BUTTERFLY	6	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7109	AIR	BUTTERFLY	2	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7110	AIR	BUTTERFLY	2	WFR	MANUAL LEVER	FURNISHED BY PACKAGE PLANT MANUFACTURER
	V7111	AIR	CHECK	8	FLG	N/A	
	V7112	AIR	BUTTERFLY	8	WFR	MANUAL LEVER	
	V7121	AIR	CHECK	8	FLG	N/A	
	V7122	AIR	BUTTERFLY	8	WFR	MANUAL LEVER	
	V7131	AIR	CHECK	8	FLG	N/A	
	V7132	AIR	BUTTERFLY	8	WFR	MANUAL LEVER	
8000	V8001	D	PLUG	6	MJ	2" NUT	PROVIDE VALVE BOX
	V8210	NaHOCl	BALL	1/2	FLG	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8211	V	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8212	V	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8213	NaHOCl	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8214	NaHOCl	SAFETY RELIEF	1/2	THD	N/A	FURNISHED BY EQUIPMENT MANUFACTURER
	V8215	NaHOCl	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8216	NaHOCl	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8223	NaHOCl	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURERFURNISHED BY EQUIPMENT MANUFACTURER
	V8224	NaHOCl	SAFETY RELIEF	1/2	THD	N/A	FURNISHED BY EQUIPMENT MANUFACTURER
	V8225	NaHOCl	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8226	NaHOCl	BALL	1/2	THD	MANUAL LEVER	FURNISHED BY EQUIPMENT MANUFACTURER
	V8250	NaHOCl	CHECK	1/2	TRUE UNION	N/A	
	V8251	NaHOCl	BALL	1/2	TRUE UNION	MANUAL LEVER	
	V8401	NaHOCl	BALL	2	FLG	MANUAL LEVER	
	V8411	NaHOCl	BALL	2	FLG	MANUAL LEVER	
	V8412	NaHOCl	BALL	2	FLG	MANUAL LEVER	
	V8413	D	BALL	3	FLG	MANUAL LEVER	

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MILLS
NA PE007 - BAS
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Project Manager:	MP
Engineer:	LW
Designer:	LW
Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

VALVE
SCHEDULE

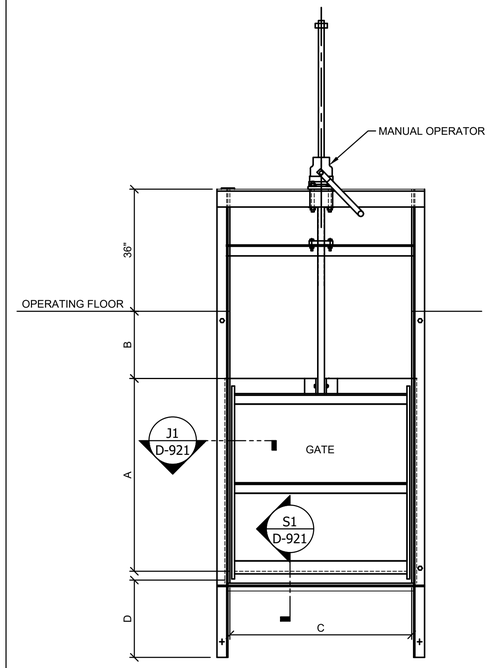
D-911

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PLOTTED: Apr 17, 2026 - 8:42am

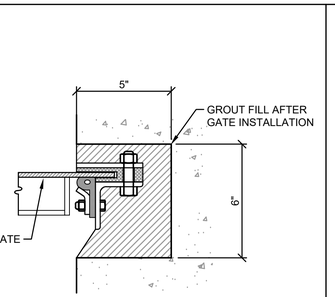
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SLIDE GATE SCHEDULE

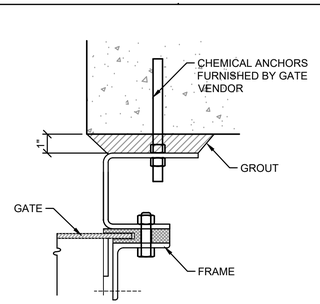
TAG	TYPE	LOCATION	MOUNTING	OPERATOR	GATE HEIGHT -A (INCHES)	HEIGHT TO OPERATING DECK - B (INCHES)	GATE WIDTH - C (INCHES)	DOWNWARD OPENING FRAME EXTENSION - D (INCHES)	JAMB TYPE	SILL TYPE	P&ID SHEET NUMBER	PROCESS SHEET NUMBER	SEATED HEAD	OPERATOR SUPPORT	REMARKS
SG1011	SLIDE GATE	MECHANICAL SCREEN	EMBEDDED	HANDWHEEL	54	6	36	-	-	-	I-101	D-103	53	-	
SG1012	SLIDE GATE	MECHANICAL SCREEN	EMBEDDED	HANDWHEEL	36	24	36	-	-	-	I-101	D-103	31	-	
SG1021	SLIDE GATE	MANUAL BAR SCREEN	EMBEDDED	HANDWHEEL	54	6	36	-	-	-	I-101	D-103	53	-	
SG1022	SLIDE GATE	MANUAL BAR SCREEN	EMBEDDED	HANDWHEEL	36	24	36	-	-	-	I-101	D-103	31	-	
SG1031	SLIDE GATE	MECHANICAL SCREEN	EMBEDDED	HANDWHEEL	54	6	36	-	-	-	I-101	D-103	53	-	
SG1032	SLIDE GATE	MECHANICAL SCREEN	EMBEDDED	HANDWHEEL	36	24	36	-	-	-	I-101	D-103	31	-	
SG1111	SLIDE GATE	HEADCELL GRIT SYSTEM	EMBEDDED	HANDWHEEL	36	24	16	-	-	-	I-102	D-104	31	-	
SG1121	SLIDE GATE	HEADCELL GRIT SYSTEM	EMBEDDED	HANDWHEEL	36	24	16	-	-	-	I-102	D-104	31	-	
WG3110	WEIR GATE	INFLUENT SPLITTER BOX	WALL MOUNTED	HANDWHEEL	18	18	60	6	-	-	I-301	D-301	21.1	-	PROVIDED BY PACKAGE PLANT MANUFACTURER
WG3120	WEIR GATE	INFLUENT SPLITTER BOX	WALL MOUNTED	HANDWHEEL	18	18	60	6	-	-	I-301	D-301	21.1	-	PROVIDED BY PACKAGE PLANT MANUFACTURER
WG3130	WEIR GATE	INFLUENT SPLITTER BOX	WALL MOUNTED	HANDWHEEL	18	18	60	6	-	-	I-301	D-301	21.1	-	PROVIDED BY PACKAGE PLANT MANUFACTURER
WG4110	WEIR GATE	CLARIFIER SPLITTER BOX	WALL MOUNTED	HANDWHEEL	24	33	72	8	-	-	I-401	D-405	13	-	
WG4120	WEIR GATE	CLARIFIER SPLITTER BOX	WALL MOUNTED	HANDWHEEL	24	33	72	8	-	-	I-401	D-405	13	-	
WG4130	WEIR GATE	CLARIFIER SPLITTER BOX	WALL MOUNTED	HANDWHEEL	24	33	72	8	-	-	I-401	D-405	13	-	



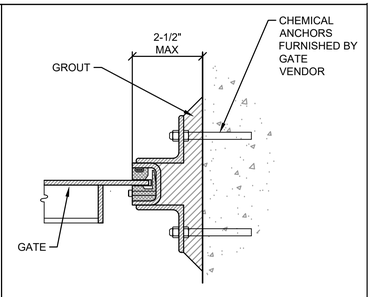
1 D-921 **SECTION - UPWARD OPENING SLIDE GATE**
SCALE: NOT TO SCALE



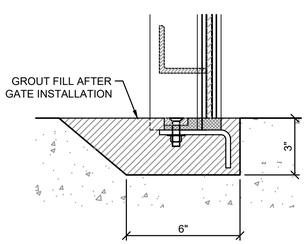
J1 D-921 **JAMB DETAIL**
SCALE: NOT TO SCALE



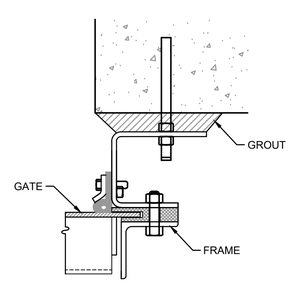
J2 D-921 **JAMB DETAIL**
SCALE: NOT TO SCALE



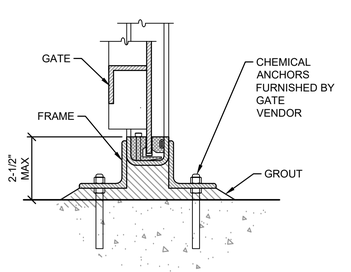
J3 D-921 **JAMB DETAIL**
SCALE: NOT TO SCALE



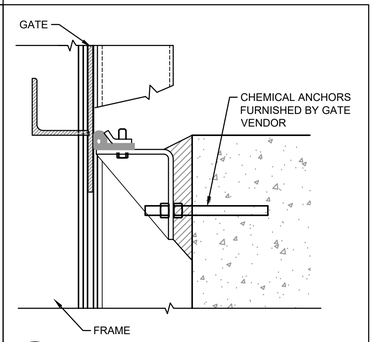
S1 D-921 **SILL DETAIL**
SCALE: NOT TO SCALE



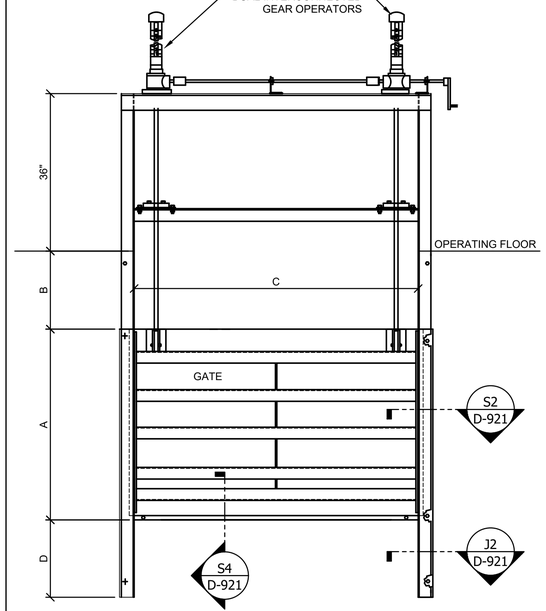
S2 D-921 **SILL DETAIL**
SCALE: NOT TO SCALE



S3 D-921 **SILL DETAIL**
SCALE: NOT TO SCALE



S4 D-921 **SILL DETAIL**
SCALE: NOT TO SCALE



2 D-921 **SECTION - DOWNWARD OPENING SLIDE GATE**
SCALE: NOT TO SCALE

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STATE OF GEORGIA — NOT VALID WITHOUT — GOODWYN MILLS CAWOOD, LLC — No. PE000178SS — Exp.06.30.2026 — CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

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Drawn By:	LS

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

GATE SCHEDULE
& DETAILS

D-921

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PLOTTED: Apr 17, 2026 - 8:42am

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SCHEMATIC DIAGRAM SYMBOLS:

- CONDUCTORS CONNECTED
- CONDUCTORS NOT CONNECTED
- CONNECTION POINT
- XX — TERMINAL POINT FOR OUTGOING CONDUCTORS, WITH IDENTIFICATION. "XX" DENOTES CONTRACTOR ASSIGNED.
- MCPXXX–XX / XXA — MAGNETIC–ONLY CIRCUIT BREAKER (MCP), WITH CURRENT RATING
- CBXXX–XX / XXA — CIRCUIT BREAKER, THERMAL–MAGNETIC UNLESS OTHERWISE NOTED, WITH FRAME SIZE AND TRIP RATING
- FUXXX–XX / XXA — FUSE WITH SIZE AND OPTIONAL IDENTIFICATION.
- DSXXX–XX / XXXA — DISCONNECT SWITCH. RATING OPTIONAL. 30 AMP, 600V RATED MINIMUM UNLESS OTHERWISE NOTED.
- FUXXX–XX / XXA — FUSE DISCONNECT SWITCH. RATING OPTIONAL. 30 AMP, 600V MINIMUM UNLESS OTHERWISE NOTED.
- XX M–XXX — MOTOR (HP AS SHOWN, PHASES AS REQUIRED)
- MSR–XXX / XX XX — MOTOR STARTER COIL
- OL–XXX — THERMAL MOTOR OVERLOAD
- M–XXX — MOTOR CONTACT
- LSXXX–XX / LSXXX–XX — LIMIT SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- PSXXX–XX / PSXXX–XX — PRESSURE SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- TSXXX–XX / TSXXX–XX — TEMPERATURE SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- FSXXX–XX / FSXXX–XX — FLOW SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- FLTXXX–XX / FLTXXX–XX — LEVEL SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- PRSXXX–XX / PRSXXX–XX — PROXIMITY SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- PCSXXX–XX / PCSXXX–XX — PULLCORD SWITCH NORMALLY CLOSED AND NORMALLY OPEN
- SVXXX–XX — SOLENOID VALVE
- PBXXX–XX / PBXXX–XX — MOMENTARY PUSHBUTTON NORMALLY CLOSED AND NORMALLY OPEN
- SSXXX–XX / OX SSXXX–XX OX — SELECTOR SWITCH NORMALLY NORMALLY CLOSED AND NORMALLY OPEN
- LTXXX–XX / X — PILOT LIGHT X = LENS COLOR
  - A = AMBER
  - B = BLUE
  - G = GREEN
  - R = RED
  - W = WHITE
- CRXXX–XX — CONTROL RELAY
- CRXXX–XX / CRXXX–XX — CONTROL RELAY CONTACT NORMALLY CLOSED AND NORMALLY OPEN
- ALXXX–XX — ALARM LIGHT
- AHXXX–XX — ALARM HORN
- H1 H2 / X1 X2 TFRXXX–XX — CONTROL POWER TRANSFORMER, PRIMARY AND SECONDARY VOLTAGE SHOWN. SIZE AS SHOWN OR SPECIFIED.
- C.T. CTXXX–XX — CURRENT TRANSFORMER. PRIMARY/SECONDARY TURNS RATIO AS SHOWN.

FIRE ALARM SYMBOLS:

- S — SMOKE DETECTOR, 120VAC RATED

ONE LINE DIAGRAM SYMBOLS:

- CB–XXX — LOW VOLTAGE POWER CIRCUIT AND BREAKER DRAWOUT TYPE, FRAME TRIP SHOWN
- CB–XXX — MOLDED CASE CIRCUIT BREAKER, FRAME AND TRIP ID SHOWN
- LIGHTNING ARRESTOR AND GROUND
- DS–XXX — DISCONNECT OR ISOLATING SWITCH: CONTINUOUS RATING SHOWN
- MCP–XXX — MAGNETIC–ONLY CIRCUIT BREAKER (MCP), DRAWOUT TYPE, WITH CURRENT RATING
- FS–XXX — FUSED SWITCH: FUSE AND SWITCH CONTINUOUS RATINGS SHOWN
- TFR–XXX — POWER TRANSFORMER: PRIMARY & SECONDARY VOLTAGES, %Z, SIZE SHOWN
- XS — CURRENT TRANSFORMER: RATIO SHOWN (3 INDICATES NO. OF CT'S)
  METER SWITCH, xS:
  AS – AMMETER SWITCH
  VS – VOLTMETER SWITCH
  FS – FREQUENCY SWITCH
- PT — POTENTIAL TRANSFORMER PRIMARY & SECONDARY VOLTAGES & WINDINGS SHOWN. (x) UNITS
- METER
  METER:
  A – AMMETER
  W – WATTMETER
  KWH – WATT–HOUR METER
  F – FREQUENCY METER
  VAR – VAR METER
  V – VOLTMETER
- FVNR / SIZE X — FULL VOLTAGE, NON–REVERSING MAGNETIC MOTOR STARTER. NEMA SIZE INDICATED
- FVR / SIZE X — FULL VOLTAGE, REVERSING MAGNETIC MOTOR STARTER. NEMA SIZE INDICATED
- XXHP VFD–XXX — VARIABLE FREQUENCY DRIVE. NEMA SIZE INDICATED
- XXHP RVSS–XXX — REDUCED VOLTAGE SOLID STATE DRIVE (SOFT START). NEMA SIZE INDICATED
- XX / M–XXX — MOTOR (HP AS SHOWN, PHASES AS REQUIRED)
- GENERATOR RECEPTACLE
- N E MTS–XXX — MANUAL TRANSFER SWITCH
- P–XXX–X
  CABLE TAG:
  P – POWER CABLE
  C – CONTROL CABLE
  S – SHIELDED SIGNAL CABLE
- Gx
  GENERATOR TAG:
  G – EQUIPMENT TO RUN OFF GENERATOR
  X – STEP NUMBER FOR EQUIPMENT STARTING OFF THE GENERATOR

CIRCUIT AND RACEWAY SYMBOLS:

- RACEWAY OR WIRING SYSTEM ABOVE FLOOR LEVEL BELOW CEILING, EXPOSED. (UNLESS OTHERWISE NOTED)
- RACEWAY OR WIRING SYSTEM BELOW FLOOR LEVEL, ABOVE CEILING, HIDDEN, OR EXISTING CABLE/CONDUIT. (UNLESS OTHERWISE NOTED)
- SCHEMATIC DIAGRAM FIELD WIRING. (UNLESS OTHERWISE NOTED)
- ONE LINE DIAGRAM EQUIPMENT ENCLOSURE. (UNLESS OTHERWISE NOTED)
- PBD A–1,3,5 — HOME RUN – SEE PANELBOARD SCHEDULE FOR CIRCUIT INFORMATION
  EXAMPLE: HOME TO PANELBOARD PBD A, CIRCUITS 1, 3, AND 5

GENERAL ABBREVIATIONS:

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

GROUNDING SYMBOLS:

- GROUND ROD, 3/4" x 10'–0", COPPERCLAD (UNLESS OTHERWISE NOTED)
- GROUND ROD AND TEST WELL
- COMPRESSION TYPE GROUNDING BOND TO MOTOR CASING OR EQUIPMENT
- EXOTHERMIC TYPE GROUNDING BOND TO CABLE OR CONCRETE REBAR OR RISER
- G G — GROUNDING CONDUCTOR (CONCEALED), #4/0 AWG BARE COPPER (UNLESS OTHERWISE NOTED)
- GG GG GG — GROUNDING CONDUCTOR (EXPOSED), #4/0 AWG INSULATED COPPER (UNLESS OTHERWISE NOTED)

GENERAL NOTES:

1. SCOPE:
   A. FURNISH ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS REQUIRED TO COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEM INCLUDING BUT NOT LIMITED TO WIRING, BOXES, LIGHT FIXTURES, PANELS, SWITCHES, RECEPTACLES, DISCONNECTS, STARTERS, AND ALL OTHER WORK INDICATED ON THE DRAWINGS OR AS SPECIFIED HEREIN.
   B. OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED BY THE LOCAL AUTHORITIES HAVING JURISDICTION AND DELIVER CERTIFICATE OF APPROVAL TO THE GENERAL CONTRACTOR. ALL ASSOCIATED FEES SHALL BE PAID BY THE CONTRACTOR.
   C. ALL MATERIALS AND EQUIPMENT OF THE ELECTRICAL SYSTEM NECESSARY FOR ITS PROPER AND SAFE OPERATION OR OTHERWISE REQUIRED BY CODE, BUT NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, SHALL BE FURNISHED AND INSTALLED WITHOUT ADDITIONAL CHARGE.
   D. WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE, THE LATEST STANDARD BUILDING CODE, NFPA 820, ANY OTHER LOCALLY ADOPTED CODES AND LOCAL AUTHORITIES HAVING JURISDICTION.
2. ALL SUBSTITUTIONS FOR EQUIPMENT AND MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO PURCHASING.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER TRADES. IT IS THE RESPONSIBILITY OF CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF EQUIPMENT, DUCTWORK, PIPING, ETC. AND COORDINATED THE INSTALLATION ACCORDINGLY. THE EQUIPMENT WIRING SHALL INCLUDE ALL NECESSARY CABLES AND CONDUIT REQUIRED FOR THE PROPER AND SAFE EQUIPMENT OPERATION.
4. CONTRACTOR SHALL CONFIRM ALL DIMENSIONS AND DISTANCES IN THE FIELD. IN CASE OF DISCREPANCY, CONTRACTOR SHALL INCLUDE A MORE EXPENSIVE OPTION.
5. ALL METERIALS SELECTION SHALL BE AS PER THE SCHEDULE SHOWN ON DWG. E–002, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
6. ALL ITEMS DESIGNED TO BE REMOVED SHALL BECOME THE PROPERTY OF CONTRACTOR, WITH THE EXCEPTION OF THE ITEMS IDENTIFIED BY THE PIEDMONT WATER COMPANY DURING THE CONSTRUCTION.

PLAN DRAWING SYMBOLS:

- M — MOTOR CONNECTION
- MOTOR STARTER, INDIVIDUAL –– NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY
- COMBINATION MOTOR STARTER/DISCONNECT INDIVIDUAL –– NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY
- DISCONNECT SWITCH. DISCONNECT SWITCHES ARE HEAVY DUTY, SINGLE THROW, WITH NEMA 4X ENCLOSURE UNLESS OTHERWISE NOTED. MOUNT AT 4'–8" TO CENTER OF DISCONNECT.
- FUSED DISCONNECT, NON–FUSED. PROVISION FOR CLASS R FUSES.
- FIELD INSTRUMENT CONNECTION
- START/STOP HAND STATION MOUNTED TO HANDRAIL (NEMA 4X UNLESS OTHERWISE NOTED)
- $X — 120V, 20A, 1P TOGGLE SWITCH
  [BLANK] = 1P TOGGLE SWITCH
  2 = 2P TOGGLE SWITCH
  3 = 3P TOGGLE SWITCH
  D = SLIDE DIMMER
  M = MOTOR RATED
  S = TOGGLE WITH OCCUPANCY SENSOR
- DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET.
- GFCI DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET.
- QUADRAPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET.
- TELEPHONE BOX. MOUNT 18" A.F.F., INSTALL A 1/2" CONDUIT FROM BOX TO 6" ABOVE CEILING. PROVIDE PULL CORD FOR FUTURE CONNECTIONS AS REQUIRED.
- ETHERNET CAT–6 BOX. MOUNT 18" A.F.F., INSTALL A 1/2" CONDUIT FROM BOX TO 6" ABOVE CEILING. PROVIDE PULL CORD FOR FUTURE CONNECTIONS AS REQUIRED.
- JB — JUNCTION BOX
- RECESSED FLOOR JUNCTION BOX
- 60A, 480V, 3PH WELDING RECEPTACLE WITH INTERLOCKED 60A (NEMA 4X FUSED DISCONNECT SWITCH UNLESS OTHERWISE NOTED)
- EXHAUST FAN
- CCTV CAMERA

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

ELECTRICAL LEGEND & NOTES

E-001

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		ELECTRICAL EQUIPMENT MATERIALS RATING								
		INSTALLATION AREA AND DESIGN CRITERIA								
NO.	EQUIPMENT	INDOOR NON-PROCESS: EXPOSED INSTALLATION (ELECTRICAL & CONTROL ROOMS, OFFICES, LAB, UNDER RAISED FLOORS, ETC.) ENVIRONMENT: NON-CORROSIVE; DRY	INDOOR PROCESS (PIPING GALLERY, PUMPS ROOM, ETC.) ENVIRONMENT: CORROSIVE; DAMP	INDOOR CHEMICAL ROOM ENVIRONMENT: CORROSIVE; DAMP	OUTDOOR CHEMICALS STORAGE AREA ENVIRONMENT: CORROSIVE; WET	OUTDOOR GENERAL AREAS ENVIRONMENT: CORROSIVE; WET	BELOW GRADE VAULTS (METERING VAULT, VALVE VAULT, ETC.) ENVIRONMENT: CORROSIVE; WET	CLASS 1, DIVISION 1, GROUP D HAZARDOUS AREA ENVIRONMENT: CORROSIVE; WET	CLASS 1, DIVISION 2, GROUP D HAZARDOUS AREA ENVIRONMENT: CORROSIVE; WET	UNDERGROUND AND DIRECT BURIED ENVIRONMENT: CORROSIVE; WET
1	RIGID CONDUITS	RMC – ALUMINUM	RMC – ALUMINUM	RC – PVC SCH. 80	PVC COATED ALUMINUM	RMC – ALUMINUM	RMC – ALUMINUM	RMC – ALUMINUM	RMC – ALUMINUM	DIRECT BURIED – PVC 40; CONCRETE ENCASED – PVC 40.
2	FLEXIBLE CONDUITS	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC)	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC)	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (LFNC)	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC)	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC)	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC)	EXPLOSIONPROOF FLEXIBLE COUPLING	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC), RATED FOR CLASSIFIED AREA	N/A
3	CABLE TRAYS	LADDER TYPE – ALUMINUM	LADDER TYPE – ALUMINUM	FIBERGLASS REINFORCED PLASTIC	FIBERGLASS REINFORCED PLASTIC	LADDER TYPE – ALUMINUM	LADDER TYPE – ALUMINUM	LADDER TYPE – ALUMINUM – ONLY WHEN USED WITH CABLE TYPES PERMITTED PER NEC ARTICLE 500	LADDER TYPE – ALUMINUM – ONLY WHEN USED WITH CABLE TYPES PERMITTED PER NEC ARTICLE 500	N/A
4	JUNCTION BOXES	STEEL – NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, PLASTIC	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 304 SS	NEMA 7	NEMA 4X, TYPE 304 SS (WHEN NO SWITCHING CONTACTS OR ARCING DEVICES ARE IN THE JUNCTION BOX), OTHERWISE, USE NEMA 7	POLYMER CONCRETE
5	PULL BOXES	STEEL – NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, PLASTIC	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 304 SS	NEMA 7	NEMA 4X, TYPE 304 SS (WHEN NO SWITCHING CONTACTS OR ARCING DEVICES ARE IN THE JUNCTION BOX), OTHERWISE, USE NEMA 7	POLYMER CONCRETE
6	EQUIPMENT RACKS/SUPPORTS/HARDWARE	ALUMINUM	ALUMINUM	STAINLESS STEEL 316	STAINLESS STEEL 316	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	STAINLESS STEEL 304
7	FASTENERS	ALUMINUM	ALUMINUM	STAINLESS STEEL 316	STAINLESS STEEL 316	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	STAINLESS STEEL 304
8	SWITCHGEAR	NEMA 1	N/A	N/A	N/A	NEMA 3R	N/A	N/A	N/A	N/A
9	SWITCHBOARD	NEMA 1	N/A	N/A	N/A	NEMA 3R	N/A	N/A	N/A	N/A
10	MOTOR CONTROL CENTER	NEMA 1	N/A	N/A	N/A	NEMA 3R	N/A	N/A	N/A	N/A
11	PANELBOARDS	NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	N/A	N/A	N/A	N/A
12	DRY TYPE TRANSFORMERS	NEMA 2	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	N/A	N/A	N/A	N/A
13	DISCONNECT SWITCHES	NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 304 SS	NEMA 7	NEMA 7	N/A
14	MOTOR STARTERS	NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 304 SS	NEMA 7	NEMA 7	N/A
15	CONTACTORS	NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 304 SS	NEMA 7	NEMA 7	N/A
16	CONTROL PANELS	NEMA 1	NEMA 4X, TYPE 304 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 316 SS	NEMA 4X, TYPE 304 SS	N/A	NEMA 7	NEMA 7	N/A
17	MOTOR HOUSING MINIMUM PROTECTION RATING	ODP	TEFC	TEFC	TEFC	TEFC	TEFC	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	TEFC, RATED FOR CLASSIFIED AREA	N/A
18	INSTRUMENTATION MINIMUM PROTECTION RATING	NEMA 1	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 4X	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA OR USED WITH INTRINSICALLY SAFE BARRIERS	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA OR USED WITH INTRINSICALLY SAFE BARRIERS	NEMA 6P
19	VALVE ACTUATORS	N/A	NEMA 4	NEMA 4	NEMA 4	NEMA 4	NEMA 6P	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	N/A
20	WIRING DEVICE BOXES	DIE-CAST ALUMINUM; WEATHERPROOF	DIE-CAST ALUMINUM; WEATHERPROOF	PLASTIC; WEATHERPROOF	ALUMINUM, PVC COATED; WEATHERPROOF	DIE-CAST ALUMINUM; WEATHERPROOF	DIE-CAST ALUMINUM; WEATHERPROOF	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	N/A
21	DEVICES COVER PLATES	STAINLESS STEEL; NON-WEATHERPROOF (WITH GASKET)	DIE-CAST ALUMINUM; WEATHERPROOF (WITH GASKET)	PLASTIC; WEATHERPROOF (WITH GASKET)	ALUMINUM, PVC COATED; WEATHERPROOF (WITH GASKET)	DIE-CAST ALUMINUM; WEATHERPROOF (WITH GASKET)	DIE-CAST ALUMINUM; WEATHERPROOF (WITH GASKET)	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	N/A
22	OUTLET BOX HOODS	N/A	ALUMINUM; WEATHERPROOF (WHILE-IN-USE COVER) (WITH GASKET)	PLASTIC; WEATHERPROOF (WHILE-IN-USE COVER) (WITH GASKET)	PLASTIC; WEATHERPROOF (WHILE-IN-USE COVER) (WITH GASKET)	ALUMINUM; WEATHERPROOF (WHILE-IN-USE COVER) (WITH GASKET)	ALUMINUM; WEATHERPROOF (WHILE-IN-USE COVER) (WITH GASKET)	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	EXPLOSION PROOF, RATED FOR CLASSIFIED AREA	N/A

CABLE TYPES REQUIREMENTS						
	MATERIAL	SERVICE ENTRANCE	VFD MOTOR FEEDERS	POWER	CONTROL	SIGNAL
CABLE TYPES	COPPER, UNLESS NOTED OTHERWISE	XHHW, 600V	SHIELDED VFD CABLES, 1000V	THWN-2, 600V	THWN-2, 600V	SHIELDED TWISTED TYPE, 600V

NOTES:

1. POWER CABLES REQUIREMENTS:
   - 1.1. MINIMUM ALLOWED WIRE GAUGE: #12 AWG.
   - 1.2. MAXIMUM ALLOWED WIRE GAUGE: 600KCMIL.
   - 1.3. MAXIMUM MULTICONDUCTOR CABLES SIZE: #1 AWG.
   - 1.4. MAXIMUM SOLID CORE CABLES SIZE: #10 AWG.
2. CONTROL CABLES REQUIREMENTS:
   - 2.1. CABLES CONSTRUCTION TYPE: SINGLE CONDUCTOR.
   - 2.2. MINIMUM ALLOWED WIRE GAUGE: #14 AWG.
3. SIGNAL CABLES REQUIREMENTS:
   - 3.1. CABLES CONSTRUCTION TYPE: MULTICONDUCTOR CONDUCTOR WITH OVERALL SHIELD AND DRAIN WIRE.
   - 3.2. MINIMUM ALLOWED WIRE GAUGE: #16 AWG.
   - 3.3. MAXIMUM NUMBER OF PAIRS/TRIADS IN MULTI-PAIR/TRID CABLE: 2.

INSTALLATION REQUIREMENTS:

GENERAL:

1. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE UL LISTED.
2. ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED OUTDOORS SHALL BE UV RESISTANT.
3. ALL ELECTRICAL EQUIPMENT AND MATERIALS OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER AND MODEL LINE.
4. ALL FREESTANDING EQUIPMENT SHALL BE INSTALLED ON 4" HOUSEKEEPING PAD, ELEVATED ABOVE THE SURROUNDING SURFACE.
5. ALL ELECTRICAL, INSTRUMENTATION AND CONTROL SYSTEM COMPONENTS LOCATIONS SHALL BE ADJUSTED TO PROVIDE NEC REQUIRED WORKING CLEARANCES.
6. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL HAVE CONCRETE PADS EXTENDING 3 FT IN FRONT OF THE EQUIPMENT.
7. CONTRACTOR SHALL ADJUST CIRCUIT BREAKER SIZES, CABLES AND CONDUITS FOR ELECTRICAL EQUIPMENT AT NO ADDITIONAL COST BASED ON THE ACTUAL ACCEPTED SHOP DRAWINGS.
8. CONTRACTOR SHALL CONFIRM ELECTRICAL EQUIPMENT DIMENSIONS PRIOR TO RELEASING FOR FABRICATION LOCATED IN THE AREAS WITH LIMITED AVAILABLE SPACE TO ENSURE PROPER EQUIPMENT INSTALLATION PROVIDING NEC REQUIRED WORKING CLEARANCES.
9. FOR NEW CONSTRUCTION, INSTALLATION AND/OR DEMOLITION THAT INTERRUPTS ANY POWER, CONTROL OR SIGNAL WIRING TO EXISTING EQUIPMENT OR DEVICES THAT SHALL REMAIN IN OPERATION. CONTRACTOR SHALL INCLUDE ALL REQUIRED BREAKERS, CABLES/CONDUITS AND/OR ANY OTHER EQUIPMENT AS REQUIRED TO KEEP THE EXISTING SYSTEM FUNCTIONAL.
10. ALL MOTORS USED WITH VARIABLE FREQUENCY DRIVES SHALL BE INVERTER DUTY RATED TYPE.
12. ALL OUTDOOR ENCLOSURES CABLES ENTRY POINTS SHALL BE IN THE BOTTOM OF THE ENCLOSURE. IN CASE OF INABILITY TO MAKE BOTTOM PENETRATION, SIDE CONNECTION WOULD BE ACCEPTABLE. ENCLOSURES TOP ENTRY ARE NOT ALLOWED.

POWER DISTRIBUTION AND CONDUITS INSTALLATION REQUIREMENTS:

1. ALL CONDUITS ENDS SHALL BE FREE OF METAL SHAVINGS AND BE PROVIDED WITH FITTINGS WITH INSULATED BUSHING.
2. ALL EXPOSED CONDUITS SHALL BE MINIMUM OF 3/4". ALL BURIED CONDUIT SHALL BE MINIMUM OF 1".
3. ALL UNDERGROUND CONDUITS SHALL HAVE RIGID STEEL ELBOWS.
4. ALL METAL CONDUITS SHALL BE PROTECTED WITH A BITUMINOUS COATING WHEN INSTALLED UNDERGROUND OR WHEN IN CONTACT WITH CONCRETE.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CABLES AND EQUIPMENT LUG SIZES. IN CASE THE CABLE IS OF A LARGER SIZE THAN THE EQUIPMENT LUG, CONTRACTOR SHALL PROVIDE THE REQUIRED CONNECTOR AT NO ADDITIONAL CHARGE TO OWNER.
6. CONTRACTOR SHALL PROVIDE PULL STRING AND PERMANENTLY ATTACHED IDENTIFICATION LABELS AT EACH CONDUIT END FOR ALL SPARE CONDUITS. EACH TAG SHALL INCLUDE CONDUIT NUMBER, SIZE AND DESTINATION POINT.
7. CONTRACTOR SHALL PROVIDE ALL REQUIRED PULL BOXES AND/OR CONDULETS TO MEET NEC ARTICLE 314 FOR CABLE PULLS.
8. ALL CABLES INSTALLED IN CABLE TRAYS SHALL BE TC RATED.
9. CONDUIT FITTING CONNECTION TYPES SHALL BE AS FOLLOWS:
   - 9.1. FOR RMC AND IMC CONDUITS – THREADED TYPE;
   - 9.2. FOR EMT CONDUITS – COMPRESSION TYPE.
10. RIGID CONDUIT CONNECTIONS TO ENCLOSURES SHALL BE MADE WITH MYERS HUBS.
11. ALL OPEN CONDUIT ENDS SHALL BE PROTECTED FROM ELEMENTS PENETRATION TO THE INSIDE THE CONDUIT WITH DUCT SEAL.
12. TO EQUIPMENT ENCLOSURES THAT ARE NOT SUITABLE FOR RIGID OR FLEXIBLE CONDUIT CONNECTION, THE CONTRACTOR SHALL PROVIDE A CORD GRIP AT THE CONDUIT END TO PROTECT THE FROM ELEMENTS PENETRATION TO THE INSIDE THE CONDUIT.
13. THE CONTRACTOR SHALL INSTALL EXPANSION COUPLINGS AS REQUIRED TO PREVENT CONDUIT DAMAGE DUE TO LONGITUDAL MOVEMENT AND/OR THERMAL EXPANSION.
14. THE CONTRACTOR SHALL INSTALL DEFLECTION COUPLINGS FOR CONDUITS RUNS THAT ARE SUBJECT TO ANGULAR AND PARALLEL MISALIGNMENT.
15. THE CONTRACTOR SHALL INSTALL DRAIN FITTING IN VERTICAL CONDUIT RUNS AT LOW POINTS IN CONDUIT SYSTEM TO PREVENT ACCUMULATION OF CONDENSATE ABOVE SEAL-OFF FITTINGS.
16. THE CONTRACTOR SHALL INSTALL DRAIN FITTINGS AT LOW POINTS OF CONDUIT RUN TO DRAIN ACCUMULATED CONDENSATE AND TO PROVIDE VENTILATION TO MINIMIZE CONDENSATION.
17. FOR OVERHEAD SERVICES THE CONTRACTOR SHALL INSTALL WEATHERED FITTINGS AS REQUIRED, FOR SERVICE CABLE INSTALLATION THROUGH THE ROOF, USE SERVICE ENTRANCE MAST KITS.
18. THE CONTRACTOR SHALL INSTALL GROUNDING BUSHING AS REQUIRED BY NEC, AS WELL AS FOR THE FOLLOWING CONDITIONS:
    - 18.1. FOR METALLIC RACEWAYS CONTAINING SERVICE CONDUCTORS
    - 18.2. FOR METALLIC RACEWAYS TERMINATED AT NON-METALLIC ENCLOSURES
    - 18.3. FOR METALLIC RACEWAYS TERMINATED ON RING KNOKOUTS REMAINING AND THE CIRCUIT EXCEEDING 250V TO GROUND NOMINAL
    - 18.4. FOR METALLIC RACEWAYS NOT TERMINATED AT ENCLOSURE

INSTRUMENTATION AND CONTROLS:

1. ALL FIELD MOUNTED INDICATING TRANSMITTERS SHALL BE PROVIDED WITH SUN/RAIN HOOD.
2. ALL CONTROL CABINETS INSTALLED OUTDOORS SHALL BE PROVIDED WITH SUN PROTECTING COVER OVER DISPLAYS TO AVOID DETERIORATION FROM UV EXPOSURE.

GROUNDING:

1. MAXIMUM DISTANCE BETWEEN DRIVEN GROUND RODS IS NOT TO EXCEED 50' UNLESS OTHERWISE NOTED.
2. ALL GROUNDING CONDUCTORS TO BE BARE, STRANDED, SOFT DRAWN, COPPER, SIZED AS INDICATED ON THE DESIGN DRAWINGS.
3. MAIN RING GROUND WIRE TO BE MAXIMUM 3' OUTSIDE FOUNDATIONS AND 2'-6" BELOW FINISH GRADE.
4. CONTRACTOR TO DETERMINE ACTUAL LOCATION OF ANY EQUIPMENT UTILIZING BONDS TO GROUNDING TAILS. CONTRACTOR TO LOCATE 1" PVC GROUNDING STUB-UPS IN ACCORDANCE WITH EQUIPMENT VENDOR INFORMATION OR DRAWING REQUIREMENTS.
5. FOR COMPRESSION APPLICATIONS, APPLY A COAT OF "NO-OXIDE" COMPOUND ONTO COPPER CABLE AND COMPRESSION CONNECTORS PRIOR TO CRIMPING CONNECTION OR USE PRE-FILLED CONNECTORS.
6. ALL GROUND CABLES STUBBING UP THROUGH CONCRETE SHALL STUB UP THRU PVC CONDUIT, SIZED PER PLAN DRAWINGS. PVC CONDUIT SHALL EXTEND A MINIMUM OF 6" ABOVE AND 6" BELOW THE CONCRETE.
7. PIGTAILS SHOULD BE INSTALLED THRU 1" PVC CONDUIT, 10' LONG U.N.O.
8. ALL UNDERGROUND CONNECTIONS SHALL BE EITHER MADE WITH EXOTHERMIC WELDS OR CRIMP CONNECTORS. ALL SUCH CONNECTIONS SHALL BE INSPECTED BY THE SITE ENGINEER REPRESENTATIVE PRIOR TO COVER.
9. ALL ABOVE GROUND GROUNDING CONNECTIONS SHALL EMPLOY PROPERLY RATED COMPRESSION CONNECTORS.
10. THE MAIN GROUNDING RING CONDUCTOR SHALL BE RUN AS MECHANICALLY CONTINUOUS AS POSSIBLE WITH A MINIMUM OF CUTS AND SPLICES.

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

ELECTRICAL MATERIALS SCHEDULE

E-002

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LIGHTING/POLE SCHEDULE

SYMBOL/TYPE	DESCRIPTION	INSTALLATION ENVIRONMENT	HAZARDOUS AREA	LAMP/VOLTAGE	MOUNTING
B1	EMERGENCY LIGHT/EXIT COMBO FIXTURE COLOR: WHITE ACCESSORIES: INTERNAL BATTERY BASIS OR DESIGN: BRAND: LITHONIA MODEL #: LHQM-LED-R-R0	INDOOR & OUTDOOR; CORROSIVE & NON-CORROSIVE; DRY AND DAMP	N/A	LED 120/277V, 1PH 6WATTS	CEILING/ WALL/ SURFACE
D1	INDUSTRIAL STRIP LIGHT, 4FT ENCLOSURE COLOR: WHITE COLOR TEMPERATURE: 4000K ACCESSORIES: NONE BASIS OR DESIGN: BRAND: LITHONIA MODEL #: ZL1N-L48-SMR-5000LM-FST-MVOLT-40K-80CRI-WH	INDOOR; NON-CORROSIVE; DRY	N/A	LED 120/277V, 1PH 34WATTS	CEILING/ SURFACE
F1	INDUSTRIAL WALLPACK FIXTURE (ADJUSTABLE LIGHT OUTPUT) ENCLOSURE COLOR: DARK BRONZE COLOR TEMPERATURE: 4000K ACCESSORIES: NONE BASIS OR DESIGN: BRAND: LITHONIA MODEL #: #TWPLED-ALO-40K-T3M-MVOLT-DDBXD	INDOOR AND OUTDOOR; CORROSIVE & NON-CORROSIVE; DRY, DAMP AND WET	N/A	LED 120/277V, 1PH 11-48WATTS	WALL/ SURFACE
H2	20FT, 4" DIA. SQUARE STRAIGHT ALUMINUM POLE WITH A SINGLE AREA LIGHT FIXTURE POLE COLOR: DARK BRONZE FIXTURE COLOR: DARK BRONZE COLOR TEMPERATURE: 4000K FIXTURE ACCESSORIES: NONE BASIS OR DESIGN: BRAND: LITHONIA FIXTURE MODEL #: DSX1LED-P4-40K-70CRI-T2M-MVOLT-SPA5-DDBXD POLE MODEL #: SSA-20-5G-DM19AS-DDBXD	OUTDOOR; CORROSIVE & NON-CORROSIVE; WET	N/A	LED 120/277V, 1PH 125WATTS	POLE
I1	STANCHION MOUNTED (25 DEG. ANGLED) LIGHT FIXTURE FIXTURE COLOR: GRAY COLOR TEMPERATURE: 4000K FIXTURE ACCESSORIES: NONE BASIS OR DESIGN: BRAND: CROUSE-HINDS FIXTURE MODEL #: PVML 5 N J R3 UNV1 STANCHION MODEL #: JM5	INDOOR AND OUTDOOR; CORROSIVE & NON-CORROSIVE; DRY, DAMP AND WET	N/A	LED 120-277V, 1PH 67WATTS	STANCHION
I2	FIXTURE TYPE: STANCHION MOUNTED (@ 25 DEG. ANGLED) LIGHT ENCLOSURE COLOR: GRAY COLOR TEMPERATURE: 4000K ACCESSORIES: NONE BASIS OR DESIGN: BRAND: CROUSE-HINDS FIXTURE MODEL #: VMVL-5-N-J-R3-UNV1 STANCHION MODEL #: JM5	INDOOR AND OUTDOOR; CORROSIVE & NON-CORROSIVE; DRY, DAMP AND WET	CL.1, DIV.2, GR. D CL.2, DIV.2, GR. F, G	LED 120-277V, 1PH 43WATTS	STANCHION
H21	20FT, 4" DIA. SQUARE STRAIGHT ALUMINUM POLE WITH A TWO (@180 DEG.) AREA LIGHT FIXTURES POLE COLOR: DARK BRONZE FIXTURE COLOR: DARK BRONZE COLOR TEMPERATURE: 4000K FIXTURE ACCESSORIES: NONE BASIS OR DESIGN: BRAND: LITHONIA FIXTURE MODEL #: DSX1LED-P4-40K-70CRI-T2M-MVOLT-SPA5-DDBXD POLE MODEL #: SSA-20-5G-DM28AS-DDBXD	OUTDOOR; CORROSIVE & NON-CORROSIVE; WET	N/A	LED 120/277V, 1PH 125WATTS (EACH)	POLE
V1	INDUSTRIAL STRIP LIGHT, 4FT ENCLOSURE COLOR: WHITE COLOR TEMPERATURE: 4000K ACCESSORIES: NONE BASIS OR DESIGN: BRAND: LITHONIA MODEL #: FEM-L48-4000LM-IMACD-WD-MVOLT-40K-80CRI-WLFEND2 (PREWIRED BY BUILDING MANUFACTURER)	INDOOR; CORROSIVE & NON-CORROSIVE; DRY, DAMP AND WET	N/A	LED 120/277V, 1PH 34WATTS	CEILING/ SURFACE
V2	INDUSTRIAL WALLPACK FIXTURE (ADJUSTABLE LIGHT OUTPUT) ENCLOSURE COLOR: DARK BRONZE COLOR TEMPERATURE: 4000K ACCESSORIES: NONE BASIS OR DESIGN: BRAND: LITHONIA MODEL #: #TWPLED-ALO-40K-T3M-MVOLT-DDBXD (PREWIRED BY BUILDING MANUFACTURER)	INDOOR AND OUTDOOR; CORROSIVE & NON-CORROSIVE; DRY, DAMP AND WET	N/A	LED 120/277V, 1PH 11-48WATTS	WALL/ SURFACE
V3	EMERGENCY LIGHT/EXIT COMBO FIXTURE COLOR: WHITE ACCESSORIES: INTERNAL BATTERY BASIS OR DESIGN: BRAND: LITHONIA MODEL #: LHQM-LED-R-R0 (PREWIRED BY BUILDING MANUFACTURER)	INDOOR & OUTDOOR; CORROSIVE & NON-CORROSIVE; DRY AND DAMP	N/A	LED 120/277V, 1PH 6WATTS	CEILING/ WALL/ SURFACE

NOTE:
DESIGN IS BASED ON THE EQUIPMENT SHOWN IN THE ABOVE SCHEDULE. LIGHTS AND POLE SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR PER SCHEDULE. ANY SUBSTITUTIONS SHALL BE APPROVED BY ENGINEER PRIOR TO PURCHASE/INSTALLATION.

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STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

LIGHTING FIXTURES SCHEDULE

E-003

EDEC
A SALAS O'BRIEN COMPANY
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CONDUCTOR/CONDUIT SCHEDULE	
1	EXISTING CABLES/CONDUIT
2	EXISTING CABLES/CONDUIT (TO BE REMOVED)
3	3 #3 & 1 #8 GND IN 1.5" C.
4	3 #3 & 1 #8 GND IN 2" C. (VFD SHIELDED)
5	3 #12 & 1 #12 GND IN 1" C.
6	3 #10 & 1 #10 GND IN 1" C.

EXISTING
HV UNDERGROUND POWER LINES
(BY RAYLE EMC)

EXISTING PAD MOUNTED
TRANSFORMER
480/277V, 3PH, 4W (SECONDARY)

EXISTING
SPD

MAIN
BONDING
JUMPER

EXISTING
480V, 600A, 3P, 3W, 22kAIC
NEMA 1
THERMAL MAGNETIC
MAIN BREAKER
MB-1
(SERVICE ENTRANCE RATED)

TO EXISTING
GROUND GRID

350kW/437.5kVA, 480/277V, 3PH, 3W
STANDBY, EXISTING DIESEL
GENERATOR SET
GEN-1

600A, LSI

EXISTING
480V, 600A, 3P, 3W, 22kAIC
NEMA 1
AUTOMATIC TRANSFER SWITCH
ATS-1

CONNECTED LOAD: 653A
RUNNING LOAD: 653A

EXISTING
METER

3CT's
600/5

600A BUS, 480V, 3PH, 3W, 42kAIC

LOCATED IN ELECTRICAL ROOM
EXISTING MOTOR CONTROL CENTER MCC-1
NEMA 1

CONTINUED
TOP LEFT
DWG. E-102

20AT 3P, MCCB	MCP 50A SIZE 2 FVNR OL	MCP 50A SIZE 2 FVNR OL	MCP 3A SIZE 1 FVNR OL	MCP 3A SIZE 1 FVNR OL	20AT 3P, MCCB (NOTE 1)	20AT 3P, MCCB (NOTE 1)	20AT 3P, MCCB (NOTE 1)	20AT 3P, MCCB (NOTE 1)	MCP 3A SIZE 1 FVNR OL	30AT 3P, MCCB	30AT 3P, MCCB	125AT 2P, MCCB	15AT 3P, MCCB	20AT 3P, MCCB			
EXISTING CONTROL PANEL HELISIEVE INFLUENT SCREEN	20HP	20HP	1/2HP	1/2HP	EXISTING 10kW ULTRAVIOLET SYSTEM #1 CONTROL MODULE INLINE 1000 (TO BE REMOVED)	EXISTING 10kW ULTRAVIOLET SYSTEM #2 CONTROL MODULE INLINE 1000 (TO BE REMOVED)	EXISTING 10kW ULTRAVIOLET SYSTEM #3 CONTROL MODULE INLINE 1000 (TO BE REMOVED)	EXISTING 10kW ULTRAVIOLET SYSTEM #4 CONTROL MODULE INLINE 1000 (TO BE REMOVED)	SPARE	EXISTING DISC FILTER #1	EXISTING DISC FILTER #2	EXISTING 50kVA, 480-240/120V 1PH, 3W, NEMA 1 104A (PRIM.), 208A (SEC.) DRY-TYPE TRANSFORMER TA	EXISTING 480V, 30A, 3P NFDS NEMA 1	EXISTING 480V, 30A, 3P NFDS NEMA 1			
	EXISTING VLR DRIVE MOTOR #1 460V, 3PH FLC=27A	EXISTING VLR DRIVE MOTOR #2 460V, 3PH FLC=27A	EXISTING CLARIFIER DRIVE MOTOR #1 460V, 3PH FLC=1.1A	EXISTING CLARIFIER DRIVE MOTOR #2 460V, 3PH FLC=1.1A								EXISTING 240/120V 200A MB 1PH, 3W NEMA 1 PANELBOARD LA	EXISTING 4.5kW ELECTRIC WATER HEATER	EXISTING 10kW UNIT HEATER #1			
												SEE PANELBOARD SCHEDULE ON DWG. E-202					

LEGEND:

- EQUIPMENT TO BE DEMOLISHED

G X – DENOTES EQUIPMENT WILL BE BACKED UP BY GENERATOR
- GENERATOR STEP NUMBER
- GENERATOR LOAD

1 EXISTING PLANT ONE LINE DIAGRAM

NOTES:

1. THE CONTRACTOR SHALL LABEL THE EXISTING MCC BUCKETS WITH ENGRAVED PHENOLIC NAMEPLATES READING: "SPARE".
2. THE CONTRACTOR SHALL DEMOLISH ALL EXISTING ELECTRICAL EQUIPMENT AS NOTED AND ALL ASSOCIATED INSTALLATION HARDWARE, CABLES AND CONDUITS. ALL DEMOLISHED ELECTRICAL MOTORS/INSTRUMENTS/EQUIPMENT/ETC. SHALL BE COORDINATED WITH THE OWNER FOR RE-USED OR DISPOSAL.

EDEC
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GOODWYN MILLS CAWOOD, LLC
No.PEF007898
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STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

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DESIGNER:		DV
DRAWN BY:		DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

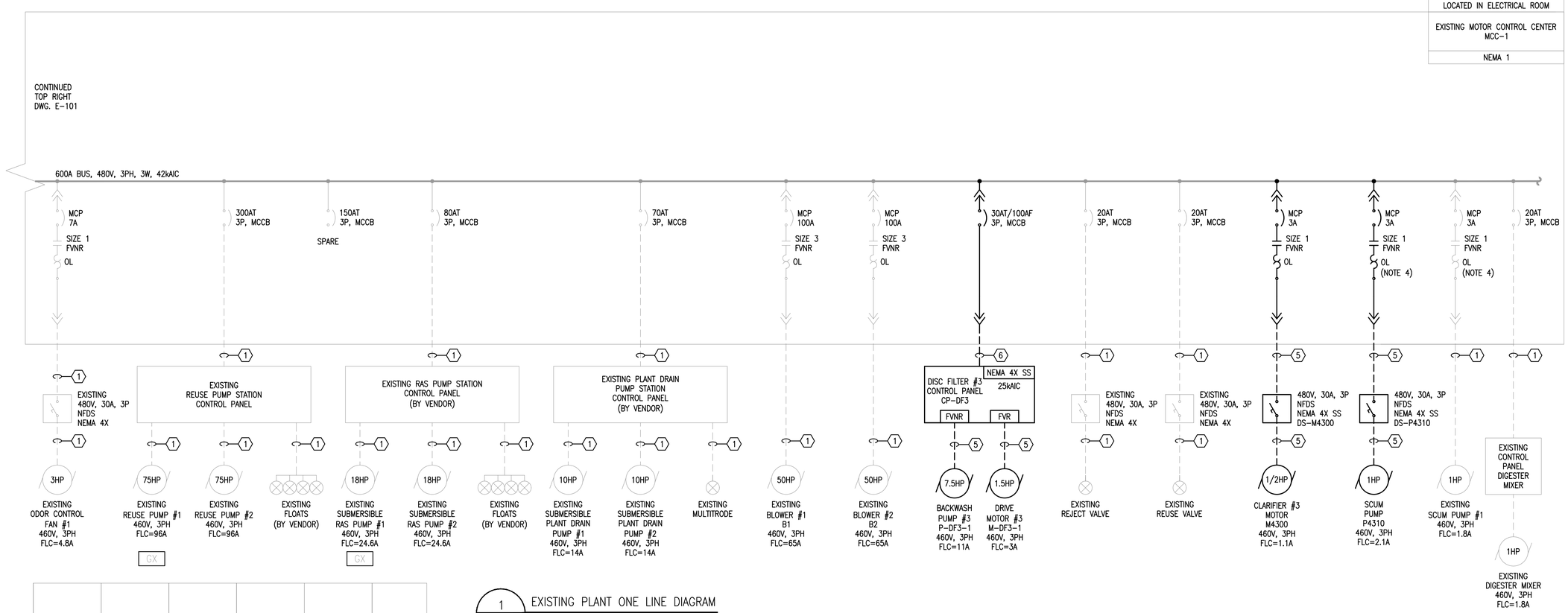
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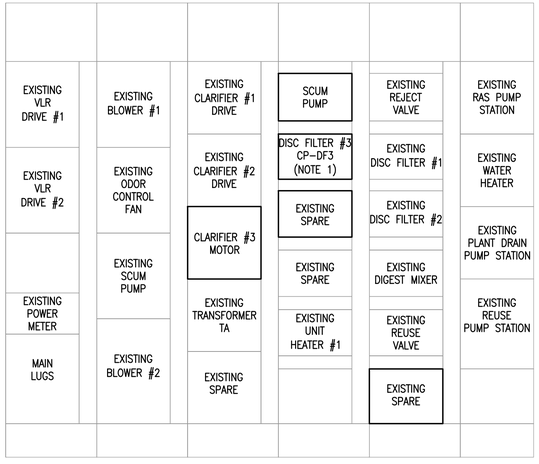
EXISTING PLANT ONE LINE DIAGRAM

E-101

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1 EXISTING PLANT ONE LINE DIAGRAM



2 EXISTING MOTOR CONTROL CENTER MCC-1 – FRONT

LEGEND:

C.T. – VFD – CONSTANT TORQUE VFD

V.T. – VFD – VARIABLE TORQUE VFD

– EQUIPMENT TO BE DEMOLISHED

NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL 480V, 30AT/100AF, 3P CIRCUIT BREAKER. THE CIRCUIT BREAKER SHALL BE OF THE SAME MANUFACTURER AND SHALL HAVE THE SAME AIC RATING AS THE EXISTING MOTOR CONTROL CENTER (MCC-1). INCLUDE MCC BUCKET FRONT DOOR AND DISCONNECT HANDLE AS REQUIRED.
2. THE CONTRACTOR SHALL DEMOLISH ALL EXISTING ELECTRICAL EQUIPMENT AS NOTED AND ALL ASSOCIATED INSTALLATION HARDWARE, CABLES AND CONDUITS. ALL DEMOLISHED ELECTRICAL MOTORS/INSTRUMENTS/EQUIPMENT/ETC. SHALL BE COORDINATED WITH THE OWNER FOR RE-USED OR DISPOSAL.
3. THE CONTRACTOR SHALL PROVIDE AND INSTALL MOTOR STARTER AS SHOWN. THE STARTER SHALL BE OF THE SAME MANUFACTURER AND SHALL HAVE THE SAME AIC RATING AS THE EXISTING MOTOR CONTROL CENTER (MCC-1). INCLUDE MCC BUCKET FRONT DOOR AND DISCONNECT HAND AS REQUIRED.

CONDUCTOR/CONDUIT SCHEDULE
1 EXISTING CABLES/CONDUIT
2 EXISTING CABLES/CONDUIT (TO BE REMOVED)
3 3 #3 & 1 #8 GND IN 1.5" C.
4 3 #3 & 1 #8 GND IN 2" C. (VFD SHIELDED)
5 3 #12 & 1 #12 GND IN 1" C.
6 3 #10 & 1 #10 GND IN 1" C.

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GOODWYN MILLS CAWOOD, LLC No.PEF007898 Exp.06.30.2026 STATE OF GEORGIA CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

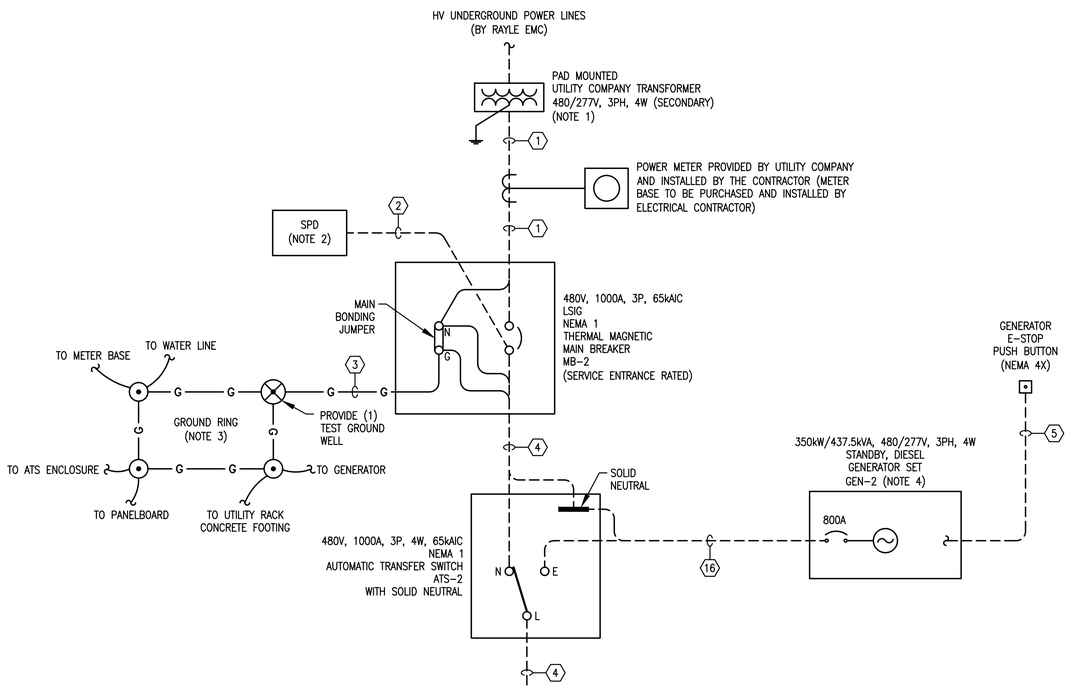
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EXISTING PLANT ONE LINE DIAGRAM

E-102

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CONDUCTOR/CONDUIT SCHEDULE
(1) 3 RUNS OF 4 #500KCMIL IN 4" C.
(2) 5 #6 IN 1" C. (3 FT MAX)
(3) 1 #3/0 GND IN 1" C.
(4) 3 RUNS OF 4 #500KCMIL & 1 #2/0 GND IN 4" C.
(5) 2 #14 IN 1" C.
(6) 3 #2/0 & 1 #3 GND IN 3.5" C. (VFD SHIELDED)
(7) 3 #12 & 1 #12 GND IN 1" C.
(8) 3 #10 & 1 #10 GND IN 1" C.
(9) 3 #8 & 1 #10 GND IN 1" C.
(10) 3 #1/0 & 1 #6 GND IN 1.5" C.
(11) CABLE BY VENDOR IN 2.5" C.
(12) 3 #1 & 1 #6 GND IN 2.5" C. (VFD SHIELDED)
(13) 3 #6 & 1 #10 GND IN 1" C.
(14) 1 #6 GND IN 1" C.
(15) 4 #1 & 1 #8 GND IN 1.5" C.
(16) 2 RUNS OF 4 #600KCMIL & 1 #1/0 GND IN 4" C.
(17) SPARE 2.5" C.
(18) 3 #1 & 1 #8 GND IN 2.5" C. (VFD SHIELDED)
(19) 3 #1 & 1 #8 GND IN 1.25" C.
(20) 3 #3/0 & 1 #6 GND IN 2" C.
(21) SPARE 1" C.
(22) 1 #8 GND IN 1" C.
(23) 2 #12 & 1 #12 GND IN 1" C.
(24) 3 #4 & 1 #8 GND IN 1" C.
(25) 3 #1/0 & 1 #6 GND IN 1.5" C.

NOTES:

1. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE PAD MOUNTED UTILITY TRANSFORMER WITH RAYLE EMC, JIM BENNETT (TEL: 706-678-2116). THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL COSTS ASSOCIATED WITH BRINGING POWER SERVICE TO THE SITE AND PROVIDING METER INSTALLATION AND ASSOCIATED HARDWARE AS REQUIRED BY UTILITY COMPANY.

2. THE CONTRACTOR SHALL PROVIDE SURGE PROTECTION DEVICE (SPD) IN NEMA 1 ENCLOSURE. SPD SHALL BE EATON CAT#: SPD-160-480Y-3-M WITH INTEGRAL DISCONNECT SWITCH OR APPROVED EQUAL.

3. THE CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE GROUND GRID AROUND THE UTILITY RACK, WETWELL AND MAKE CONNECTIONS TO THE SERVICE ENTRANCE RATED BREAKER ENCLOSURE. GRID SHALL CONSIST OF #2/0 BARE COPPER GROUND CONDUCTOR, 5-3/4" DIAMETER 10' GROUND RODS AND CADWELD CONNECTIONS TO GROUND RODS.

4. THE CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE 350kW/437.5kVA, 480/277V, 3PH STANDBY DIESEL GENERATOR SET. THE GENERATOR SET SHALL INCLUDE: GENERATOR; GENERATOR CONTROL PANEL; MAIN CIRCUIT BREAKER; GENERATOR PAD; 24HR RATED FUEL TANK AND AUTOMATIC TRANSFER SWITCH IN NEMA 1 ENCLOSURE.
   THE GENERATOR HOUSING SHALL BE WEATHERPROOF (73 DBA AT 23 FT). SEE GENERATOR SPEC 26 32 13 FOR ADDITIONAL INFORMATION. VOLTAGE DIP AND FREQUENCY DIP SHOULD NOT EXCEED 25% AND 10% ACCORDINGLY. THE GENERATOR SUPPLIER SHALL CONFIRM THE GENERATOR CALCULATIONS PRIOR TO BID, BASED ON SPECIFIED LOADS. IF A LARGER GENERATOR IS REQUIRED TO RUN THE LOADS, THEN CONTRACTOR SHALL INCLUDE A LARGER GENERATOR AND UPSIZE CABLES/CONDUITS AS REQUIRED. A LETTER OF GUARANTEE SHALL BE PROVIDED INCLUDING LOAD CALCULATIONS TO VERIFY THE GENERATOR SELECTION. THE CONTRACTOR SHALL VERIFY GENERATOR BREAKER SIZE AND ADJUST CABLE SIZE PER NEC 310.16 AS REQUIRED.
   THE GENERATOR SHALL INCLUDE 120VAC, 2A RATED CONTACTS:
   - GENERATOR RUNNING;
   - GENERATOR LOW FUEL LEVEL ALARM;
   - GENERATOR COMMON FAULT.

   AUTOMATIC TRANSFER SWITCH SHALL INCLUDE 120VAC, 2A RATED CONTACTS:
   - ATS IN NORMAL POSITION;
   - ATS IN EMERGENCY POSITION;
   - ATS NORMAL POWER LOSS.

   GENERATOR STEPS:
   STEP 1:
   - 30kVA MISCELLANEOUS LOADS;
   - 30kVA MPZ CHEMICAL AREA;
   - 15kVA MPZ HEADWORKS AREA
   - 19kVA WALL MOUNTED HEAT PUMP;
   - 5kW UNIT HEATER #1;
   - 5kW UNIT HEATER #2.

   STEP 2:
   - ONE (1) 2HP SCREEN MOTOR #1 (FVR);
   - ONE (1) 1HP BRUSH MOTOR #1 (FVNR);
   - ONE (1) 5HP SCREEN WASHER/COMPACTOR MOTOR #1 (FVR);
   - * ONE (1) FUTURE 2HP SCREEN MOTOR #2 (FVR);
   - * ONE (1) FUTURE 1HP BRUSH MOTOR #2 (FVNR);
   - * ONE (1) FUTURE 5HP SCREEN WASHER/COMPACTOR MOTOR #2 (FVR);
   - * TWO (2) FUTURE 0.5HP GRIT CHAMBER PADDLE MOTOR #1 (FVNR);
   - * TWO (2) FUTURE 1HP DEWATERING SCREW MOTOR #1 (FVNR);
   - * TWO (2) FUTURE 5HP GRIT PUMP #1 (FVNR);
   - ONE (1) 2.5HP ANAEROBIC MOTOR #1 (FVNR);
   - ONE (1) 2.5HP ANAEROBIC MOTOR #2 (FVNR);
   - ONE (1) 8.3HP ANOXIC MOTOR #1 (FVNR);
   - ONE (1) 0.5HP CLARIFIER DRIVE #1 (FVNR);
   - ONE (1) 1HP EXHAUST FAN #1(FVNR).

   STEP 3:
   - ONE (1) 40HP SUBMERSIBLE INFLUENT PUMP #1 (VFD).

   STEP 4:
   - ONE (1) 40HP SUBMERSIBLE INFLUENT PUMP #2 (VFD).

   STEP 5:
   - ONE (1) 100HP AEROBIC BLOWER #1 (VFD).

   STEP 6:
   - * ONE (1) 15HP FUTURE INTERNAL RECYCLE PUMP #1 (VFD).

   THE CONTRACTOR SHALL COORDINATE THE EQUIPMENT STARTING SEQUENCE AND DELAYS WITH THE SYSTEM INTEGRATOR AND EQUIPMENT SUPPLIERS (SUPPLYING PLC CONTROL PANELS) TO ENSURE PROPER LOAD STAGGERING DURING POWER OUTAGE AND GENERATOR OPERATION.

5. THE CONTRACTOR SHALL PROVIDE AND INSTALL MINI POWER CENTER IN NEMA 3R SS ENCLOSURE WHICH SHALL BE A COMBINATION OF 30kVA, 480-208/120V, 3PH, 4W TRANSFORMER AND 24 CKT. PANELBOARD. SEE PANELBOARD SCHEDULE ON DWG. E-201.

6. THE CONTRACTOR SHALL CONFIRM VFD TYPES WITH THE EQUIPMENT VENDORS (CONSTANT TORQUE VS VARIABLE TORQUE) PRIOR TO BID AND PROVIDE CONFIRMATION TO THE ENGINEER FOR REVIEW.

CONNECTED LOAD: 796.46A
RUNNING LOAD: 595.46A
FUTURE CONNECTED LOAD: 912.06A
FUTURE RUNNING LOAD: 638.06A

1000A, 3P
LSIG

1000A BUS, 480/277V, 3PH, 4W, 65kAIC

LOCATED IN ELECTRICAL ROOM
SWITCHBOARD SWBD-1
NEMA 1

CONTINUED
TOP LEFT
DWG. E-112

CB, 3P	FED FROM	DESCRIPTION	NEMA	SCCR	CONTROL PANEL	MOTOR	LOAD
30A	(8)	FINE SCREEN CONTROL PANEL FCP1010	4X SS	25kAIC	FVR, FVNR, FVR	2HP, 1HP, 5HP	SCREEN MOTOR #1 M1010 460V, 3PH FLC=3.4A (DUTY); BRUSH MOTOR #1 M1015 460V, 3PH FLC=2.1A (DUTY); SCREEN WASHER/ COMPACTOR MOTOR #1 M1020 460V, 3PH FLC=7.6A (DUTY)
30A	(8)	FUTURE FINE SCREEN CONTROL PANEL FCP-1110	4X SS	25kAIC	FVR, FVNR, FVR	2HP, 1HP, 5HP	FUTURE SCREEN MOTOR #2 M1110 460V, 3PH FLC=3.4A (DUTY); FUTURE BRUSH MOTOR #2 M1115 460V, 3PH FLC=2.1A (DUTY); FUTURE SCREEN WASHER/ COMPACTOR MOTOR #2 M1120 460V, 3PH FLC=7.6A (DUTY)
30A	(8)	FUTURE GRIT SYSTEM CONTROL PANEL FCP-1210	4X SS	25kAIC	FVNR, FVNR, FVNR	0.5HP, 1HP, 5HP	FUTURE GRIT CHAMBER PADDLE DRIVE MOTOR #1 M1210 460V, 3PH FLC=1.1A (DUTY); FUTURE DEWATERING SCREW MOTOR #1 M1220 460V, 3PH FLC=2.1A (DUTY); FUTURE GRIT PUMP #1 P1210 460V, 3PH FLC=7.6A (DUTY)
30A	(8)	FUTURE GRIT SYSTEM CONTROL PANEL FCP-1310	4X SS	25kAIC	FVNR, FVNR, FVNR	0.5HP, 1HP, 5HP	FUTURE GRIT CHAMBER PADDLE DRIVE MOTOR #2 M1310 460V, 3PH FLC=1.1A (DUTY); FUTURE DEWATERING SCREW MOTOR #2 M1320 460V, 3PH FLC=2.1A (DUTY); FUTURE GRIT PUMP #2 P1310 460V, 3PH FLC=7.6A (DUTY)
40A	(9)	EQ BASIN AERATOR #1 RVSS CABINET RVSS-M2110 (NEMA 1, 42kAIC)			RVSS	15HP	EQ BASIN SURFACE AERATOR #1 M2110 460V, 3PH FLC=21A (DUTY)
40A	(9)	EQ BASIN AERATOR #2 RVSS CABINET RVSS-M2120 (NEMA 1, 42kAIC)			RVSS	15HP	EQ BASIN SURFACE AERATOR #2 M2120 460V, 3PH FLC=21A (DUTY)
100A	(19)	MCP 100A, 5% LINE REACTOR, VFD 6-PULSE, DV/DT FILTER				40HP	SUBMERSIBLE INFLUENT PUMP #1 P2210 460V, 3PH FLC=52A (DUTY)
100A	(19)	MCP 100A, 5% LINE REACTOR, VFD 6-PULSE, DV/DT FILTER				40HP	SUBMERSIBLE INFLUENT PUMP #2 P2220 460V, 3PH FLC=52A (DUTY)
100A	(19)	MCP 100A, 5% LINE REACTOR, VFD 6-PULSE, DV/DT FILTER				40HP	FUTURE SUBMERSIBLE INFLUENT PUMP #3 P-IPS-3 460V, 3PH FLC=52A (STAND-BY)
150A	(10)	MCP 150A, VFD AFE, DV/DT FILTER				60HP	DIGESTER BLOWER #1 B7110 460V, 3PH FLC=77A (DUTY)
150A	(10)	MCP 150A, VFD AFE, DV/DT FILTER				60HP	DIGESTER BLOWER #2 B7120 460V, 3PH FLC=77A (DUTY)

CB, 3P	FED FROM	DESCRIPTION	LOAD
40A	(9)	480V, 30A, 3P NFDS NEMA 4X SS DS-M2110	(11)
40A	(9)	480V, 30A, 3P NFDS NEMA 4X SS DS-M2120	(11)
100A	(18)	480V, 100A, 3P NFDS NEMA 4X SS DS-IPS-1	(11)
100A	(18)	480V, 100A, 3P NFDS NEMA 4X SS DS-IPS-2	(11)
100A	(17)	FUTURE 480V, 100A, 3P NFDS NEMA 4X SS DS-IPS-3	(17)
150A	(12)	480V, 150A, 3P NFDS NEMA 4X SS DS-B7110	(12)
150A	(12)	480V, 150A, 3P NFDS NEMA 4X SS DS-B7120	(12)

LEGEND:
G X - DENOTES EQUIPMENT WILL BE BACKED UP BY GENERATOR
GENERATOR STEP NUMBER
GENERATOR LOAD

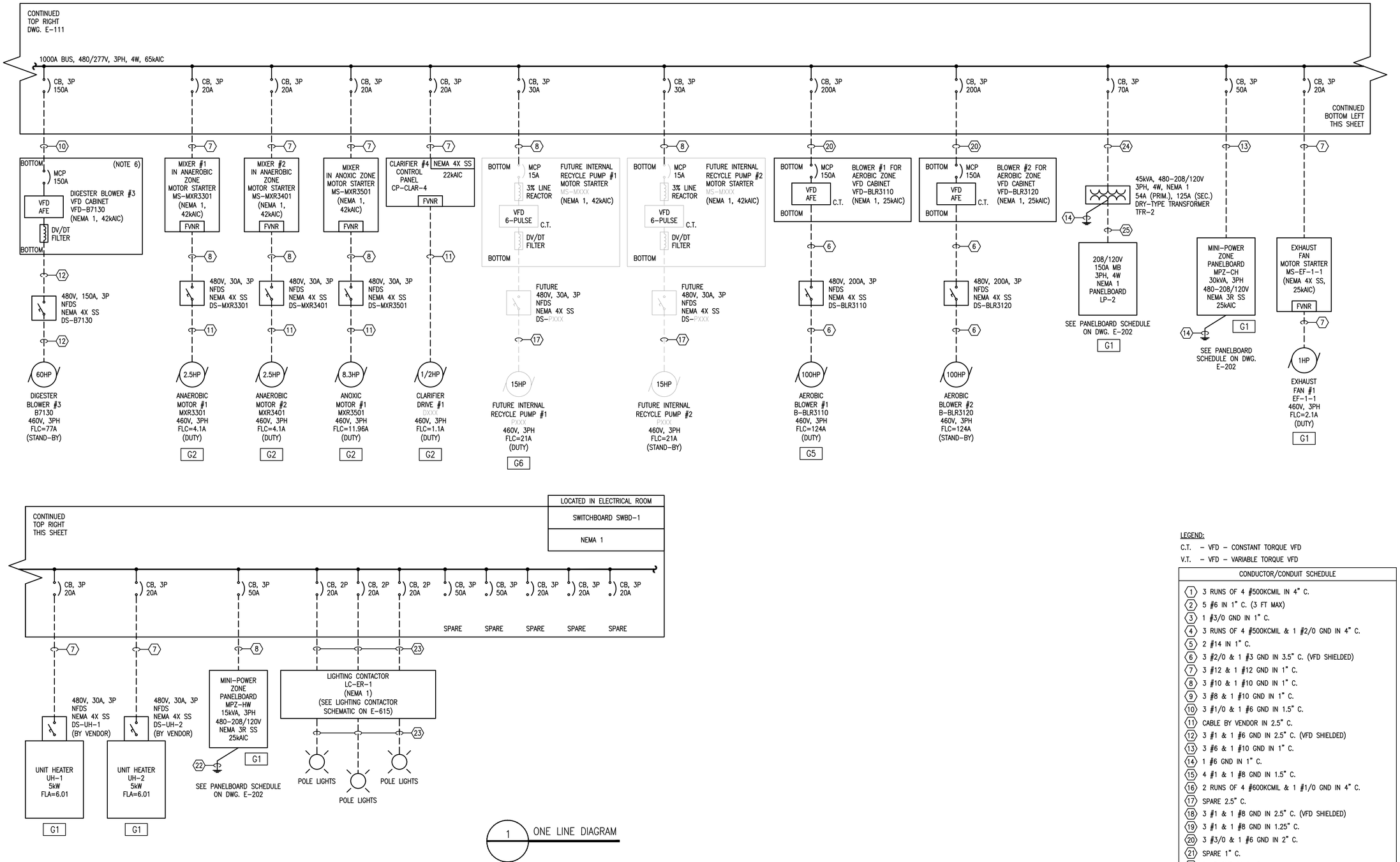
1 ONE LINE DIAGRAM

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
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TEL. (770) 493-8685

GMC
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GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION

ISSUE	DATE



LEGEND:

C.T. – VFD – CONSTANT TORQUE VFD

V.T. – VFD – VARIABLE TORQUE VFD

CONDUCTOR/CONDUIT SCHEDULE
1 — 3 RUNS OF 4 #500KCMIL IN 4" C.
2 — 5 #6 IN 1" C. (3 FT MAX)
3 — 1 #3/0 GND IN 1" C.
4 — 3 RUNS OF 4 #500KCMIL & 1 #2/0 GND IN 4" C.
5 — 2 #14 IN 1" C.
6 — 3 #2/0 & 1 #3 GND IN 3.5" C. (VFD SHIELDED)
7 — 3 #12 & 1 #12 GND IN 1" C.
8 — 3 #10 & 1 #10 GND IN 1" C.
9 — 3 #8 & 1 #10 GND IN 1" C.
10 — 3 #1/0 & 1 #6 GND IN 1.5" C.
11 — CABLE BY VENDOR IN 2.5" C.
12 — 3 #1 & 1 #6 GND IN 2.5" C. (VFD SHIELDED)
13 — 3 #6 & 1 #10 GND IN 1" C.
14 — 1 #6 GND IN 1" C.
15 — 4 #1 & 1 #8 GND IN 1.5" C.
16 — 2 RUNS OF 4 #600KCMIL & 1 #1/0 GND IN 4" C.
17 — SPARE 2.5" C.
18 — 3 #1 & 1 #8 GND IN 2.5" C. (VFD SHIELDED)
19 — 3 #1 & 1 #8 GND IN 1.25" C.
20 — 3 #3/0 & 1 #6 GND IN 2" C.
21 — SPARE 1" C.
22 — 1 #8 GND IN 1" C.
23 — 2 #12 & 1 #12 GND IN 1" C.
24 — 3 #4 & 1 #8 GND IN 1" C.
25 — 3 #1/0 & 1 #6 GND IN 1.5" C.

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1" 0" .5" 1"

ISSUE	DATE	

MINI-POWER ZONE				MPZ-CH				(LOCATED AT THE CHEMICAL SHED)			
VOLTAGE (L-N):	120V			ENCLOSURE TYPE:				NEMA 3R SS			
VOLTAGE (L-L):	208V			MOUNTING:				SURFACE			
PHASE, WIRES:	3 ϕ, 4 W			AIC RATING (A):				25,000 AIC AT 480V			
MINIMUM BUS CAPACITY (A):	125A			NOTES:				THE MPZ SHALL BE EQUIPPED WITH 30kVA, 480-208/120V, 3PH, 4W TRANSFORMER			
MAIN O.C. DEVICE (A):	50A, 3P MB PRIM.; 100A, 3P MB SEC.										

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (AMP) A		PHASE LOADS (AMP) B		PHASE LOADS (AMP) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	LEVEL INDICATING TRANSMITTER (LIT8110)	20	1	1.0	0.0					1	20	(pH) TRANSMITTER (AIT/AE6001)	2
3	FUTURE LEVEL INDICATING TRANSMITTER (LIT8120)	20	1			1.0	0.0			1	20	RESIDUAL CHLORINE TRANSMITTER (AIT/AE6002)	4
5	CONVENIENCE RECEPTACLE	20	1					1.5	20.0	1	30 (*)	CHEMICAL TANK HEAT TRACING CONTROLLER (CP-TB8110A)	6
7	FUTURE CHEMICAL TANK HEAT TRACING CONTROLLER (CP-TB8120A)	30 (*)	1	20.0	15.0					1	20 (*)	CHEMICAL TANKS PIPING HEAT TRACE	8
9	CHEMICAL TANKS FILING PIPING HEAT TRACE	20 (*)	1			15.0	1.0			1	20	FILLING STATION PANEL #1 (LCP-TB8110)	10
11	PANELBOARD (LP-CH)	50	3					0.9	1.0	1	20	FUTURE FILLING STATION PANEL #2 (LCP-TB8120)	12
13	↓	↓	↓	13.7	0.5					1	20	LEAK DETECTION SYSTEM TANK (TB8110) (CP-TB8110B)	14
15	↓	↓	↓			10.9	0.0			1	20	FUTURE LEAK DET. SYSTEM (CP-TB8120B)	16
17	SPACE							0.0	0.0			SPACE	18
19	SPACE			0.0	0.0							SPACE	20
21	SPACE					0.0	0.0					SPACE	22
23	SPACE							0.0	0.0			SPACE	24

USE THE FOLLOWING CONDUCTORS FOR PANELBOARD CIRCUITS:	CONNECTED LOAD PHASE TOTALS (AMP)			(*) - 30mA, EGFP CIRCUIT BREAKER
20A - #12AWG; 30A - #10AWG; 50A - #6AWG;	50.2	27.9	23.4	

1 MPZ-CH - PANELBOARD SCHEDULE

PANELBOARD				LP-CH				(LOCATED IN CHEMICAL BUILDING)			
VOLTAGE (L-N):	120V			ENCLOSURE TYPE:				NEMA 4X SS			
VOLTAGE (L-L):	208V			MOUNTING:				SURFACE			
PHASE, WIRES:	3 ϕ, 4 W			AIC RATING (A):				10,000 AIC			
MINIMUM BUS CAPACITY (A):	125A			NOTES:				(PROVIDED BY CHEM BLD. VENDOR)			
MAIN O.C. DEVICE (A):	50A, 3P MAIN BREAKER										

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (AMP) A		PHASE LOADS (AMP) B		PHASE LOADS (AMP) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	CHEMICAL PUMP #1 (P8210)	20	1	5.0	1.5					1	20	CONVENIENCE RECEPTACLE (PREWIRED BY BUILDING VENDOR)	2
3	CONVENIENCE RECEPTACLE (PREWIRED BY BUILDING VENDOR)	20	1			1.5	2.2			1	20	CHEMICAL BUILDING EXHAUST FAN (EF-CB) (PREWIRED BY BUILDING VENDOR)	4
5	CHEMICAL BUILDING INTERIOR LIGHTING (PREWIRED BY BUILDING VENDOR)	20	1					0.5	0.4	1	20	CHEMICAL BUILDING OUTDOOR LIGHTING (PREWIRED BY BUILDING VENDOR)	6
7	CHEMICAL PUMP #2 (P8220)	20	1	5.0	7.2					2	20	CHEMICAL BUILDING UNIT HEATER (CB-UH) (PREWIRED BY BUILDING VENDOR)	8
9	SPACE					0.0	7.2			↓	↓	↓	10
11	SPACE							0.0	0.0	1	20	SPARE	12
13	SPACE			0.0	0.0					1	20	SPARE	14
15	SPACE					0.0	0.0			1	20	SPARE	16
17	SPACE							0.0	0.0	1	20	SPARE	18
19	SPACE			0.0	0.0							SPACE	20
21	SPACE					0.0	0.0					SPACE	22
23	SPACE							0.0	0.0			SPACE	24
25	SPACE			0.0	0.0							SPACE	26
27	SPACE					0.0	0.0					SPACE	28
29	SPACE							0.0	0.0			SPACE	30

USE THE FOLLOWING CONDUCTORS FOR PANELBOARD CIRCUITS:	CONNECTED LOAD PHASE TOTALS (AMP)			(*) - 30mA, EGFP CIRCUIT BREAKER
20A - #12AWG	18.7	10.9	0.9	

2 LP-CH - PANELBOARD SCHEDULE

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1" 0" .5" 1"

ISSUE	DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

PANELBOARD SCHEDULES

E-201

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
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DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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EXISTING PANELBOARD	LA	(LOCATED IN ELECTRICAL ROOM)
VOLTAGE (L–N):	120V	ENCLOSURE TYPE: NEMA 1
VOLTAGE (L–L):	240V	MOUNTING: SURFACE
PHASE, WIRES:	1 ϕ, 3 W	AIC RATING (A): 14,000 AIC
MINIMUM BUS CAPACITY (A):	200A	NOTES:
MAIN O.C. DEVICE (A):	200A, 2P MAIN BREAKER	

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (AMP) A	PHASE LOADS (AMP) B	POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	BLOWER ROOM RECEPTACLES	20	1	0.4	1.0	1	20	EXISTING LOAD	2
3	CTRL. RM/ REST RM. RECEPTACLES	20	1	1.2	1.6	1	20	EXISTING LOAD	4
5	LAB REFRIGERATOR	20	1	1.0	1.6	1	20	EXISTING LOAD	6
7	ELEC. RM & MAINT. RM LIGHTING	20	1	0.7	0.8	1	20	EXISTING LOAD	8
9	LAB/ CTRL RM/ REST RM LIGHTING	20	1	0.8	0.7	1	20	EXISTING LOAD	10
11	TURB. METER/EFFL. SAMPLER/FLOW METER	20	1	0.3	1.1	1	20	EXISTING LOAD	12
13	MAINTENANCE RECEPTACLE	20	2	0.5	0.8	1	20	EXISTING LOAD	14
15	″	″	″	0.5	0.9	2	20	″	16
17	HOT WATER RECIRCULATION PUMP	20	1	0.4	0.9	″	″	″	18
19	AHU–1 (1)	50	2	3.0	1.2	2	20	EXISTING LOAD	20
21	″	″	″	3.0	1.2	″	″	″	22
23	EF–2	20	2	0.6	0.6	2	20	EXISTING LOAD	24
25	″	″	″	0.6	0.6	″	″	″	26
27	WALKWAY/VLR LIGHTING	20	1	1.2	0.6	2	20	EXISTING LOAD	28
29	INFLUENT SCREEN ROOM RECEPTACLES	20	1	0.6	0.6	″	″	″	30
31	VLR CATWALK LIGHTING	20	1	0.2	0.5	2	20	EXISTING LOAD	32
33	INFLUENT SAMPLER	20	1	0.1	0.5	″	″	″	34
35	UV SOLENOID PANEL	20	1	0.2	0.8	1	20	EXISTING LOAD	36
37	REJECT/REUSE VALVES PANEL	20	1	0.2	1.8	1	20	EXISTING LOAD	38
39	PANEL "LB"	100	2	6.0	0.5	1	20	EXISTING LOAD	40
41	″	″	″	6.0	0.4	1	20	EXISTING LOAD	42
				CONNECTED LOAD PHASE TOTALS (AMP)					
				23.6	22.4				

1 EXISTING LA – PANELBOARD SCHEDULE

EXISTING PANELBOARD	LB	(LOCATED IN ELECTRICAL ROOM)
VOLTAGE (L–N):	120V	ENCLOSURE TYPE: NEMA 1
VOLTAGE (L–L):	240V	MOUNTING: SURFACE
PHASE, WIRES:	1 ϕ, 3 W	AIC RATING (A): 14,000 AIC
MINIMUM BUS CAPACITY (A):	200A	NOTES:
MAIN O.C. DEVICE (A):	200A, 2P MAIN BREAKER	

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (AMP) A	PHASE LOADS (AMP) B	POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	RECEPTICALS @ HP–1 & HP–2	20	1	0.0	0.0	1	20	INFLUENT SCREEN RM. RECEPTACLE	2
3	POLYMER FEED PUMP	20	1	0.0	0.0	1	20	EF–6	4
5	GENERATOR JACKET HEATER	30	2	0.0	0.0	1	20	HP–1	6
7	″	″	″	0.0	0.0	″	″	″	8
9	SPACE			0.0	0.0	1	20	EF–4	10
11	SLUDGE BLANKET MONITOR (AIT4201)	20	1	1.0	0.0	1	20	PLANT DRAIN P.S. REC & LIGHT	12
13	SPACE			0.5	0.0	1	20	WELL PUMP CONTROL	14
15	SCADA PANEL (LCP–1)	30	1	24.0	0.0			SPACE	16
17	SPACE			0.0	0.0			SPACE	18
19	SPACE			0.0	0.0			SPACE	20
				CONNECTED LOAD PHASE TOTALS (AMP)					
				0.5	25.0				

2 EXISTING LB – PANELBOARD SCHEDULE

PANELBOARD	LP–2	(LOCATED IN ELECTRICAL ROOM)
VOLTAGE (L–N):	120V	ENCLOSURE TYPE: NEMA 1
VOLTAGE (L–L):	208V	MOUNTING: SURFACE
PHASE, WIRES:	3 ϕ, 4 W	AIC RATING (A): 10,000 AIC
MINIMUM BUS CAPACITY (A):	100A	NOTES:
MAIN O.C. DEVICE (A):	100A, 3P MAIN BREAKER	

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (AMP) A	PHASE LOADS (AMP) B	PHASE LOADS (AMP) C	POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	POLE LIGHTING	20	1	1.0	20.0		1	30	PLANT SCADA (LCP–2)	2
3	DO INDICATING TRANSMITTER (AIT3601)	20	1		1.0	1.0	1	20	ORT INDICATING TRANSMITTER (AIT3401)	4
5	FLOW INDICATING TRANSMITTER (FIT3301)	20	1			1.0	1.0	1	20	ORT INDICATING TRANSMITTER (AIT3301)	6
7	SPARE	20	1	0.0	0.0			1	20	SPARE	8
9	SPARE	20	1		0.0	0.0		1	20	SPARE	10
11	SPARE	20	1			0.0	1.0	1	20	ELECTRICAL ROOM INTERIOR LIGHTING	12
13	SPARE	20	1	1.5	1.6			1	20	ELECTRICAL ROOM EXTERIOR LIGHTING	14
15	ELECTRICAL ROOM INTERIOR RECEPTACLES	20	1		6.0	0.5		1	20	LIGHTING CONTACTOR (LC–ER–1)	16
17	CLARIFIER LIGHTS	20	1			4.5	1.5	1	20	SPARE	18
19	ELECTRICAL ROOM EXTERIOR RECEPTACLES	20	1	1.5	1.0			1	20	CHEMICAL STORAGE POLE LIGHTS	20
21	GENERATOR BLOCK HEATER	20	2		10.0	1.0		1	20	SPARE	22
23	″	″	″			10.0	1.0	1	20	INFLUENT SAMPLER (S1100)	24
25	GENERATOR BATTERY CHARGER	20	1	5.0	1.0			1	20	BLOWERS AIR FLOW TRANSMITTER (FIT7100)	26
27	SPLITTER BOX LIGHTS	20	1		0.5	0.0				SPACE	28
29	SPACE					0.0	0.0			SPACE	30
31	SPACE			0.0	0.0					SPACE	32
33	SPACE				0.0	0.0				SPACE	34
35	SPACE					0.0	0.0			SPACE	36
37	SPACE			0.0	0.0					SPACE	38
39	SPACE				0.0	0.0				SPACE	40
41	SPACE					0.0	0.0			SPACE	42
USE THE FOLLOWING CONDUCTORS FOR PANELBOARD CIRCUITS: 20A – #12AWG; 30A – #10AWG; 40A – #8AWG; 50A – #6AWG; 60A – #4AWG				CONNECTED LOAD PHASE TOTALS (AMP)						
				32.6	20.0	20.0				

3 LP–2 – PANELBOARD SCHEDULE

MINI–POWER ZONE	MPZ–HW	(LOCATED IN HEADWORKS)
VOLTAGE (L–N):	120V	ENCLOSURE TYPE: NEMA 3R STAINLESS STEEL
VOLTAGE (L–L):	208V	MOUNTING: SURFACE
PHASE, WIRES:	3 ϕ, 4 W	AIC RATING (A): 25,000 AIC AT 480V
MINIMUM BUS CAPACITY (A):	100A CU	NOTES: THE MPZ SHALL BE EQUIPPED WITH 15kVA, 480–208/120V, 3PH, 4W TRANSFORMER
MAIN O.C. DEVICE (A):	30A, 3P MB PRIM.; 50A, 3P MB SEC.	

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (AMP) A	PHASE LOADS (AMP) B	PHASE LOADS (AMP) C	POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	HEADWORKS pH SENSOR (AIT/AE–1209)	20	1	1.0	1.0		1	20	INFLUENT FLOW METER (LE/FIT1210)	2
3	INFLUENT PS RECEPTACLE	20	1		1.5	5.0	1	20 (*)	FINE SCREEN HEAT TRACE	4
5	HEADWORKS RECEPTACLE #1	20	1			1.5	1.5	1	20	HEADWORKS RECEPTACLE #2	6
7	HEADWORKS LIGHTS	20	1	1.4	1.0			1	20	FLOW INDICATING TRANSMITTER (FE/FIT2200)	8
9	SPARE	20	1		0.0	0.0		20	1	SPARE	10
11	SPARE	20	1			0.0	0.0			SPACE	12
13	SPACE			0.0	0.0					SPACE	14
15	SPACE				0.0	0.0				SPACE	16
17	SPACE					0.0	0.0			SPACE	18
USE THE FOLLOWING CONDUCTORS FOR PANELBOARD CIRCUITS: 20A – #12AWG; 30A – #10AWG; 40A – #8AWG; 50A – #6AWG; 60A – #4AWG				CONNECTED LOAD PHASE TOTALS (AMP)			(*) – 30mA, EGFP CIRCUIT BREAKER			
				4.4	6.5	3.0				

4 MPZ–HW – PANELBOARD SCHEDULE

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GOODWYN MILLS CAWOOD, LLC
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CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

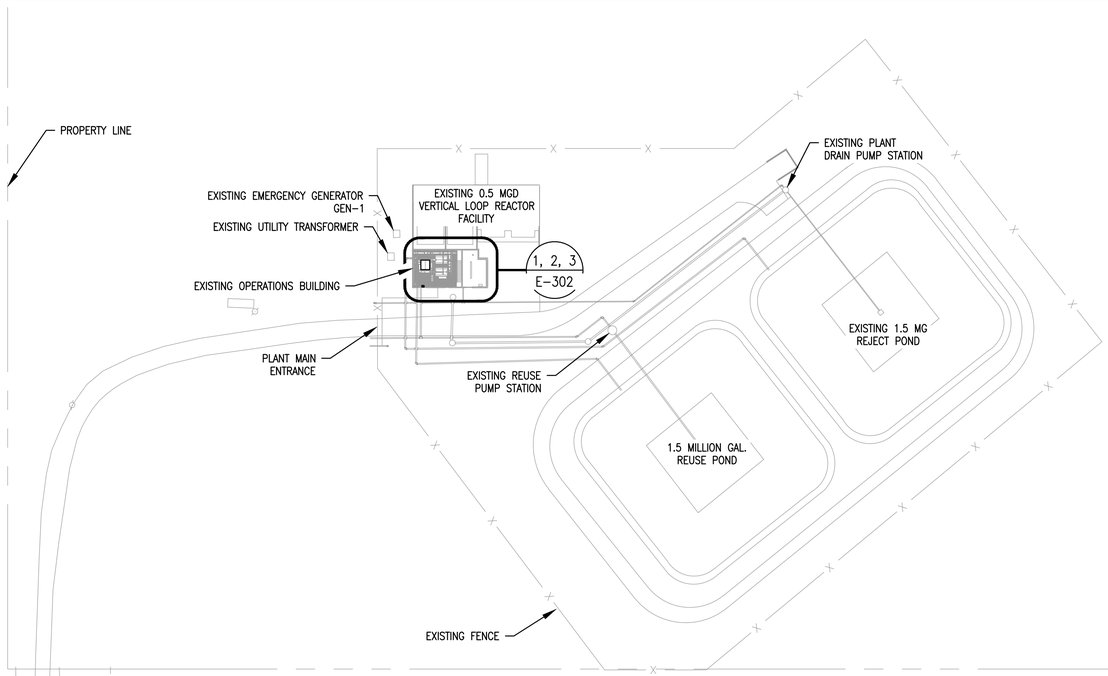
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PANELBOARD SCHEDULES

E-202

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 EXISTING OVERALL PLANT ELECTRICAL PLAN – DEMOLITION

SCALE: 1/64" = 1'-0"

GRAPHIC SCALE

64 0 32 64 128 256

(IN FEET)

1/64 inch = 1 ft.

GMC

801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY

0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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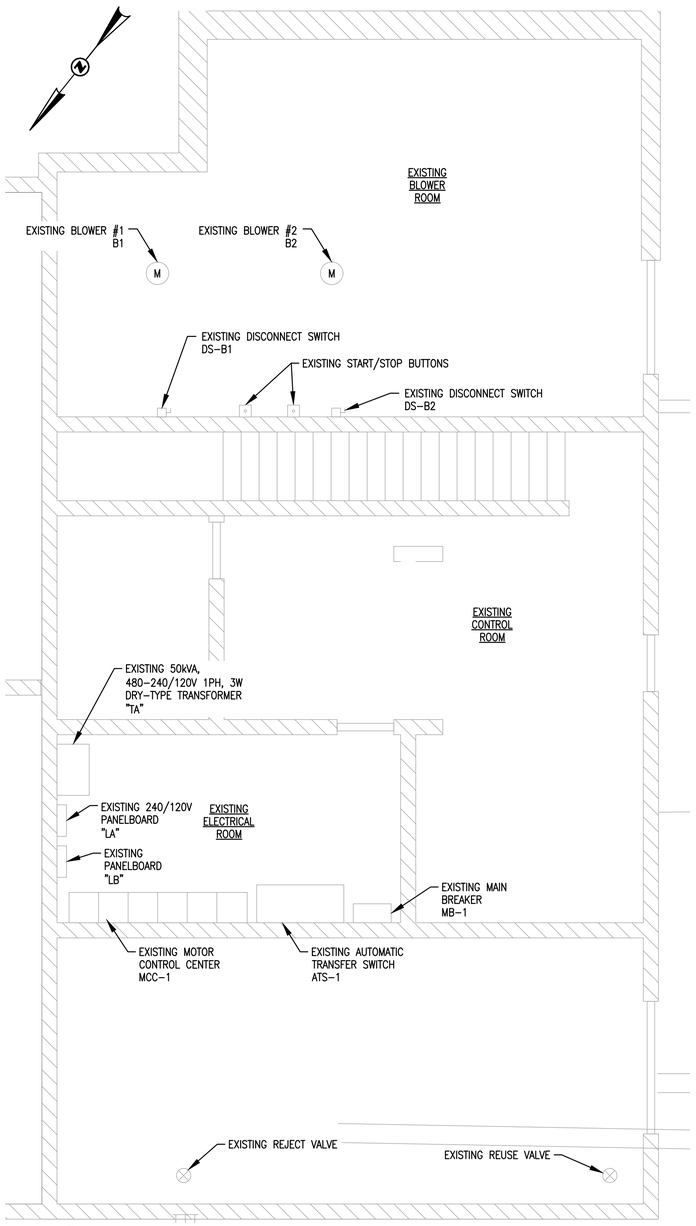
EXISTING OVERALL PLANT ELECTRICAL PLAN DEMOLITION

E-301

EDEC
A SALAS O'BRIEN COMPANY

EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 EXISTING OPERATIONS BUILDING ELECTRICAL PLAN (1-ST FLOOR) – EL. 0.00

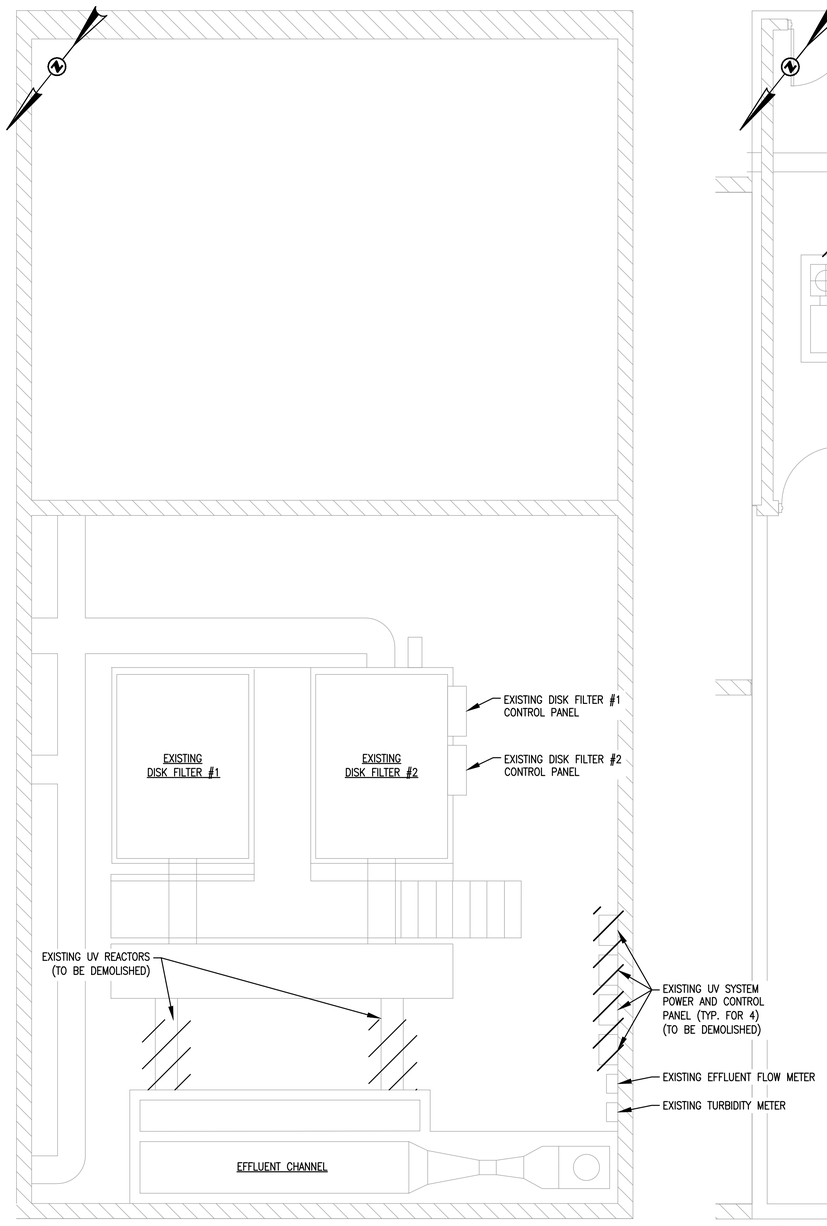
DEMOLITION

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.



2 EXISTING OPERATIONS BUILDING ELECTRICAL PLAN (2-ND FLOOR) – EL. 10.17

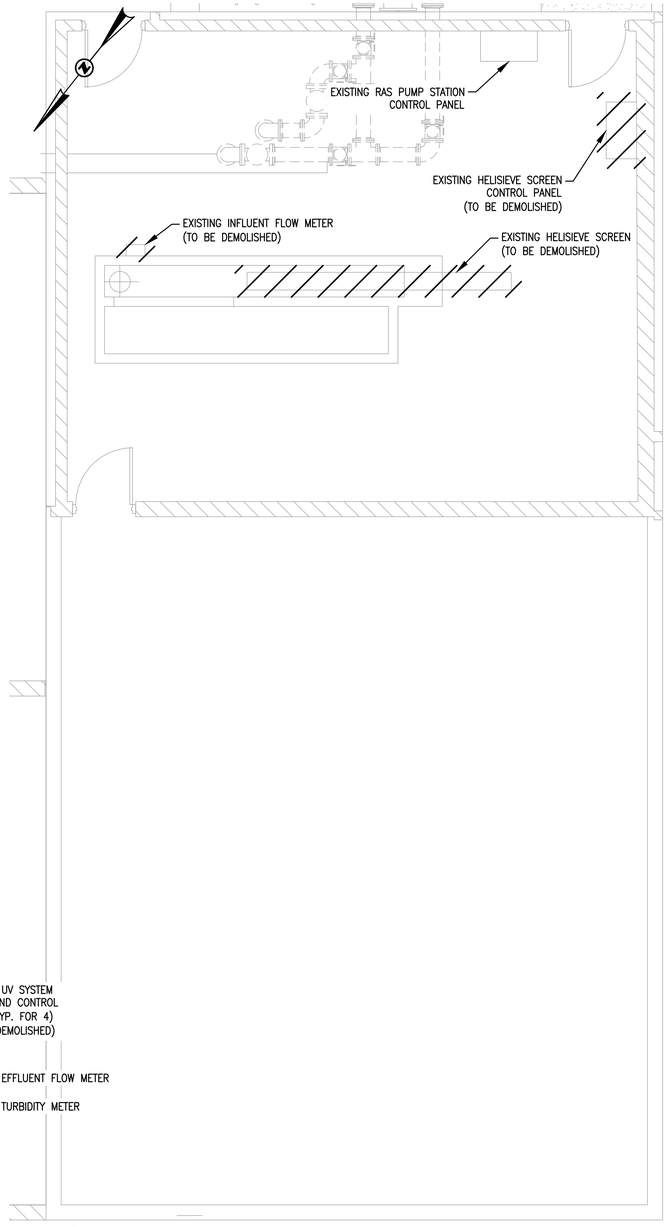
DEMOLITION

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.



3 EXISTING OPERATIONS BUILDING ELECTRICAL PLAN (3-RD FLOOR) – EL. 23.00

DEMOLITION

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.

NOTES:

1. THE CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING EQUIPMENT AS SHOWN. COORDINATE DISPOSAL OR STORAGE OF THE DEMOLISHED EQUIPMENT WITH THE OWNER. REFER TO MECHANICAL AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING THE REQUIRED DEMOLITION SCOPE.

LEGEND:

– EQUIPMENT TO BE DEMOLISHED

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

EXISTING OPERATIONS BLDG ELECTRICAL PLAN DEMOLITION

E-302

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A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
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TEL. (770) 493-8685

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NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL UNDERGROUND PULL BOXES SIZED IN ACCORDANCE WITH NEC ARTICLE 314.28 (SEE DETAIL C, DWG. E-902 FOR UNDERGROUND PULLBOX DETAILS).
2. THE CONTRACTOR SHALL PROVIDE AND INSTALL UNDERGROUND PULL BOXES SIZED IN ACCORDANCE WITH NEC ARTICLE 314.28 (SEE DETAIL "C" ON DWG. E-902 FOR UNDERGROUND PULLBOX DETAILS).
3. THE CONTRACTOR SHALL ADJUST ROUTING AND STUB-UP LOCATIONS OF THE UNDERGROUND DUCTBANK CONDUITS BASED ON THE ACTUAL EQUIPMENT LOCATION.
4. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER DISCIPLINES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF EQUIPMENT, PIPING, ETC. AND COORDINATE INSTALLATION ACCORDINGLY, THE EQUIPMENT WIRING SHALL INCLUDE ALL NECESSARY CABLES AND CONDUIT REQUIRED FOR THE PROPER AND SAFE EQUIPMENT OPERATION.
5. ONLY MAJOR UNDERGROUND CONDUITS ARE SHOWN FOR CLARITY. THE CONTRACTOR SHALL COORDINATE ALL UNDERGROUND CONDUIT RUNS WITH OTHER UNDERGROUND UTILITIES. DUCTBANKS UNDER THE ROAD SHALL BE CONCRETE ENCASED. SEE DETAIL "D" AND "E" ON DWG. E-901.

LEGEND:

– DIRECT BURIED UNDERGROUND DUCTBANK

RC RC – REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

1 OVERALL ELECTRICAL SITE PLAN
SCALE: 1/32" = 1' – 0"

GRAPHIC SCALE
32 0 16 32 64 128
(IN FEET)
1/32 inch = 1 ft.

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE	
PROJECT MANAGER:		DV
ENGINEER:		DV
DESIGNER:		DV
DRAWN BY:		DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

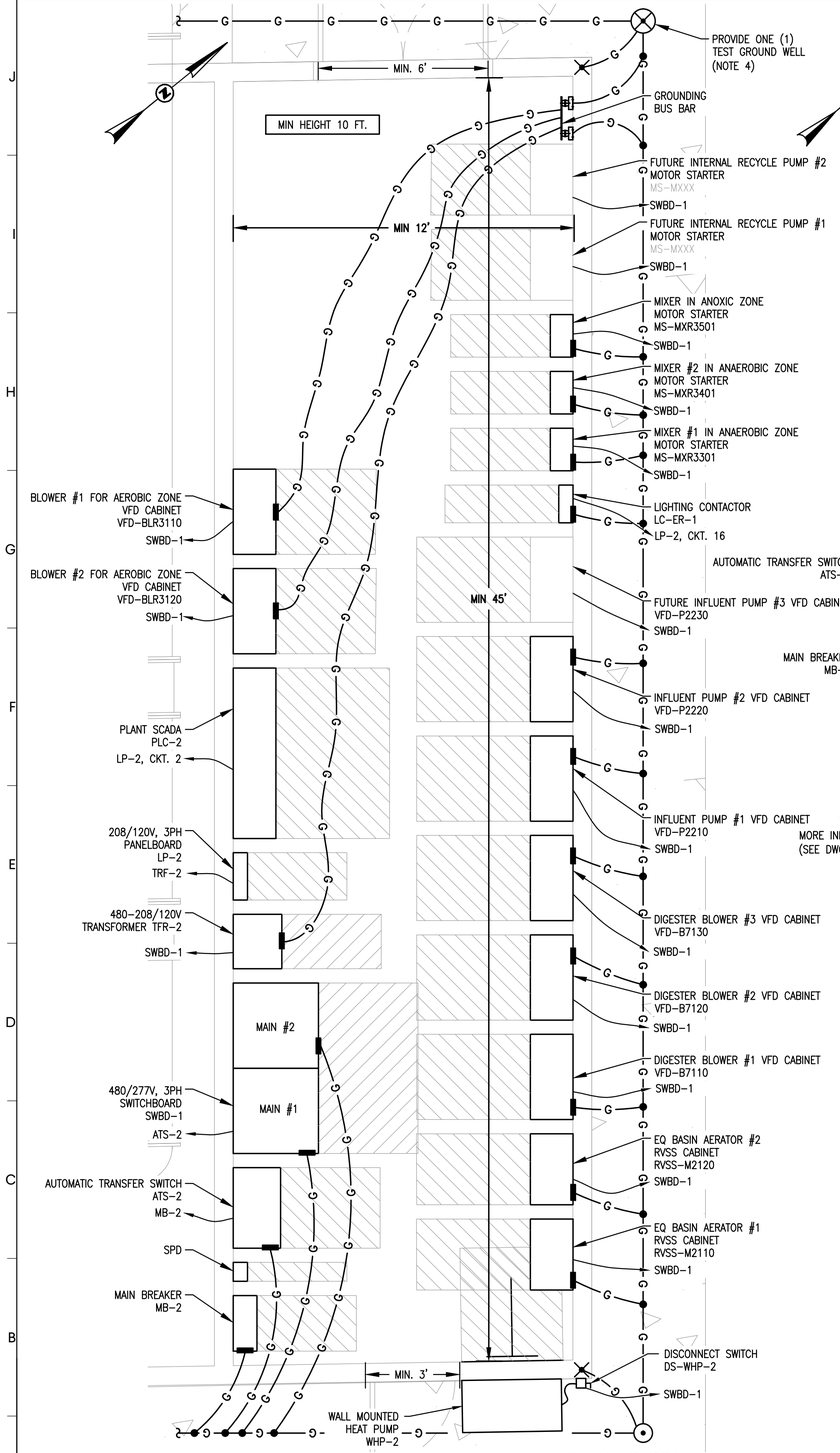
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OVERALL ELECTRICAL SITE PLAN

E-311

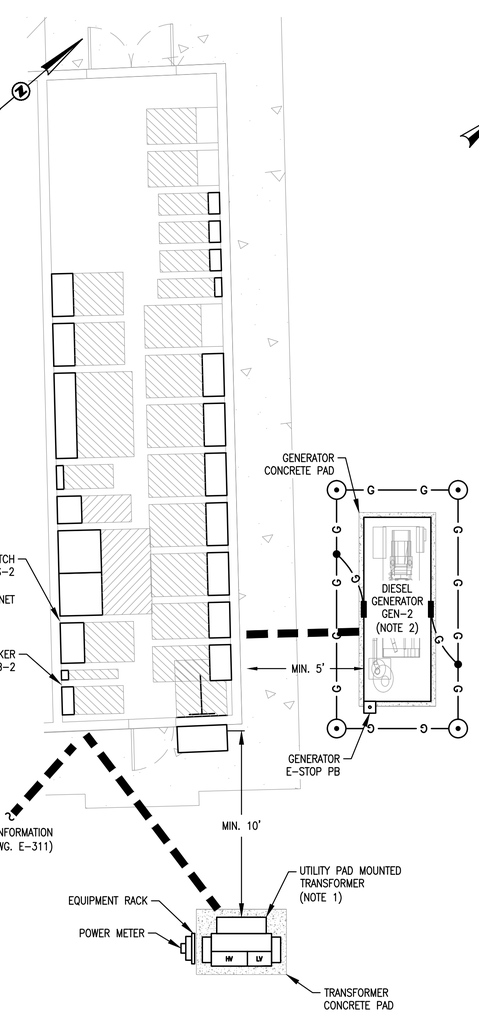
EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
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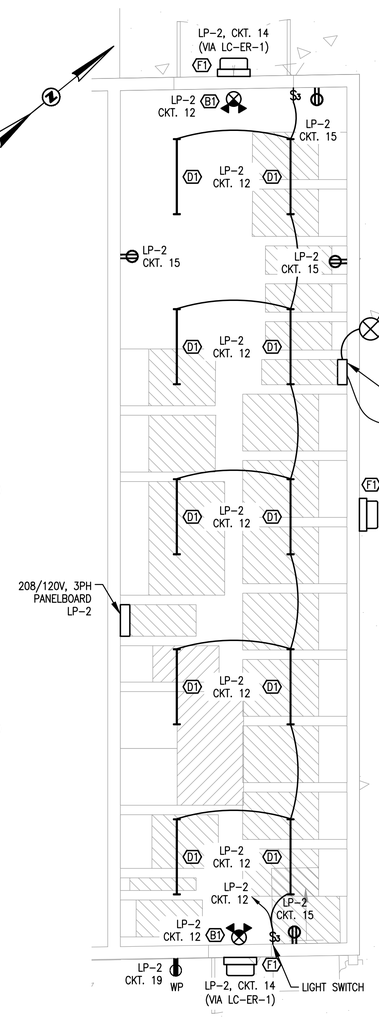
1 ELECTRICAL ROOM – POWER PLAN
SCALE: 3/8" = 1' – 0"

LEGEND:
– DIRECT BURIED UNDERGROUND DUCTBANK



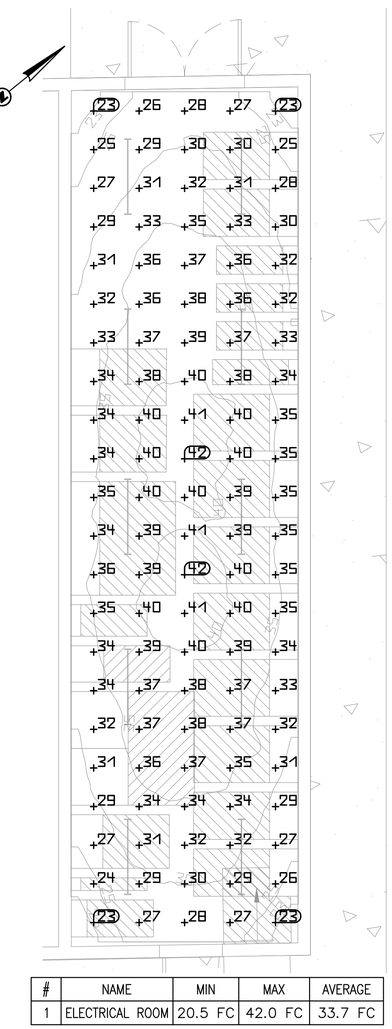
2 TRANSFORMATOR & GENERATOR – POWER PLAN
SCALE: 3/16" = 1' – 0"

GRAPHIC SCALE
5.33 0 2.67 5.33 10.67 21.33
(IN FEET)
3/16 inch = 1 ft.



3 ELECTRICAL ROOM – LIGHTING & RECEPTACLES PLAN
SCALE: 1/4" = 1' – 0"

GRAPHIC SCALE
4 0 2 4 8 16
(IN FEET)
1/4 inch = 1 ft.



#	NAME	MIN	MAX	AVERAGE
1	ELECTRICAL ROOM	20.5 FC	42.0 FC	33.7 FC

4 ELECTRICAL ROOM – PHOTOMETRIC PLAN
SCALE: 1/4" = 1' – 0"

GRAPHIC SCALE
4 0 2 4 8 16
(IN FEET)
1/4 inch = 1 ft.

NOTES:

1. THE CONTRACTOR SHALL COORDINATE ACTUAL UTILITY TRANSFORMER LOCATION IN THE FIELD AND ADJUST SECONDARY CABLES/CONDUITS ROUTING ACCORDINGLY. UTILITY COMPANY SHALL PROVIDE AND INSTALL HIGH VOLTAGE PRIMARIES FROM POINT OF SERVICE TO NEW TRANSFORMER.
2. THE CONTRACTOR SHALL PROVIDE AND INSTALL STAND-BY GENERATOR IN LOCATION AS SHOWN AND WITH THE REQUIRED WORKING CLEARANCES. REFER TO ONE LINE DIAGRAM ON DWG. E-111 FOR FURTHER REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE GENERATOR PAD AS PER DETAIL "C" ON DWG. E-901.
3. COORDINATE THE EXACT ELECTRICAL EQUIPMENT LOCATION IN THE FIELD TO PROVIDE NEC REQUIRED WORKING CLEARANCES.
4. THE CONTRACTOR SHALL PROVIDE A GROUND GRID CONSISTING OF 3/4" DIAMETER x 10' LONG COPPER CLAD GROUND RODS. THE RODS SHALL BE DRIVEN IN GROUND CONNECTED TOGETHER WITH #3/0 AWG BARE STRANDED COPPER CONDUCTORS. PROVIDE A GROUND WELL FOR ONE ROD. SEE DETAIL "A" AND "B" ON DWG. E-901 FOR GROUND WELL INSTALLATION DETAILS.
5. ONLY MAJOR UNDERGROUND CONDUITS ARE SHOWN FOR CLARITY. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND CONDUIT RUNS WITH OTHER UNDERGROUND UTILITIES. DUCTBANKS UNDER THE ROADS SHALL BE CONCRETE ENCASED. SEE DETAIL "D", "E" ON DRAWING E-901.
6. ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT IN ELECTRICAL ROOM SHALL BE PROVIDED WITH 4" HOUSE KEEPING PADS.

GMC
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T 706.303.3272

GOODWYN MILLS CAWOOD, LLC No.PEF007898 Exp.06.30.2026
STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

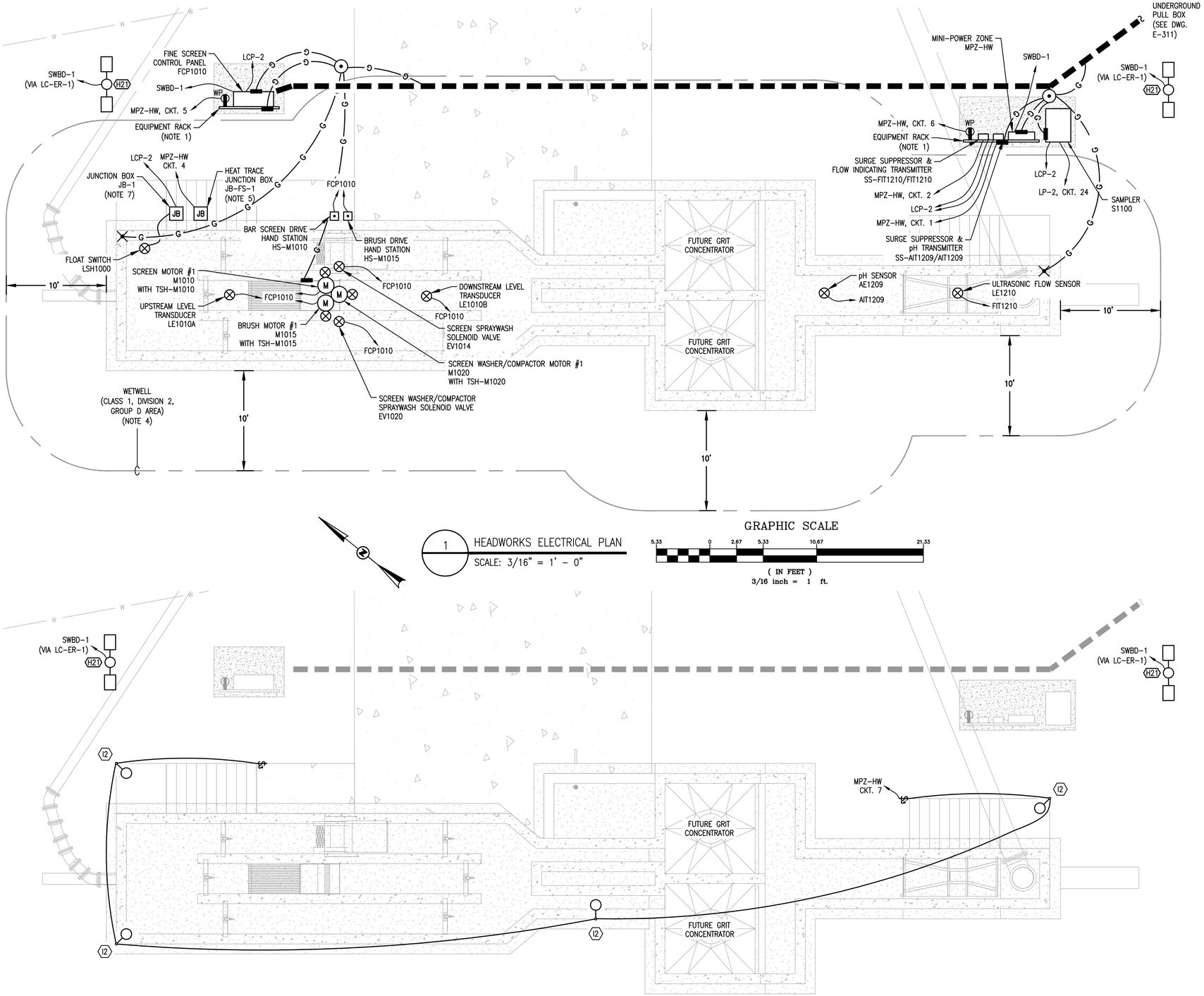
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ELECTRICAL ROOM - POWER AND LIGHTING PLAN

E-312

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 HEADWORKS ELECTRICAL PLAN
SCALE: 3/16" = 1' - 0"

GRAPHIC SCALE
5.33 0 2.67 5.33 10.67 21.33
(IN FEET)
3/16 inch = 1 ft.

NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT RACK SUPPORT AS SHOWN. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXACT LOCATION OF EQUIPMENT RACK TO PROVIDE ADEQUATE CLEARANCES FOR ALL EQUIPMENT. SEE DETAIL "A" ON DWG. E-902 FOR INSTALLATION DETAILS. 6" CONCRETE PAD SHALL BE UNDER ELECTRICAL EQUIPMENT AND SHALL EXTEND 3 FEET IN FRONT OF THE EQUIPMENT.
2. THE CONTRACTOR SHALL GROUND ALL METAL STRUCTURES/SURFACES TO THE GROUNDING SYSTEM USING BARE COPPER CONDUCTOR #1/0 AWG.
3. THE EXACT DEVICE LOCATIONS SHALL BE CONFIRMED WITH APPROVED VENDOR DRAWINGS.
4. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 5.2.2 ROW 2C:

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN 10 FT ENVELOPE AROUND EQUIPMENT AND OPEN CHANNEL.
5. THE CONTRACTOR SHALL PROVIDE AND INSTALL A LOCAL NEMA 4X SS JUNCTION BOX FOR TERMINATION OF 120V HEAT TRACING POWER WIRING. THE CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE HEAT TRACING SYSTEM FOR EXPOSED WASH WATER PIPING, INCLUDING ASSOCIATED CABLES/CONDUITS, THERMOSTATS, SELF REGULATING HEATING CABLE (5W/FT U.O.N.), PIPING INSULATION, ON/OFF INDICATING LIGHTS, ETC. ALL COMPONENTS SHALL BE CORROSION RESISTANT – NEMA 4X, RATED FOR OUTDOOR INSTALLATION AND RATED FOR HAZARDOUS AREA WHERE APPLICABLE.
6. THE CONTRACTOR SHALL PROVIDE AND INSTALL RAIN/SUN HOOD OVER THE CONTROL PANELS TO AVOID DIRECT SUN EXPOSURE.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL NEMA 4X SS JUNCTION BOXES ADEQUATELY SIZED FOR ASSOCIATED CABLES AND CONDUITS.

1 HEADWORKS LIGHTING PLAN
SCALE: 3/16" = 1' - 0"

GRAPHIC SCALE
5.33 0 2.67 5.33 10.67 21.33
(IN FEET)
3/16 inch = 1 ft.

LEGEND:
- DIRECT BURIED UNDERGROUND DUCTBANK
RC RC – REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV	
ENGINEER:	DV	
DESIGNER:	DV	
DRAWN BY:	DV	

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

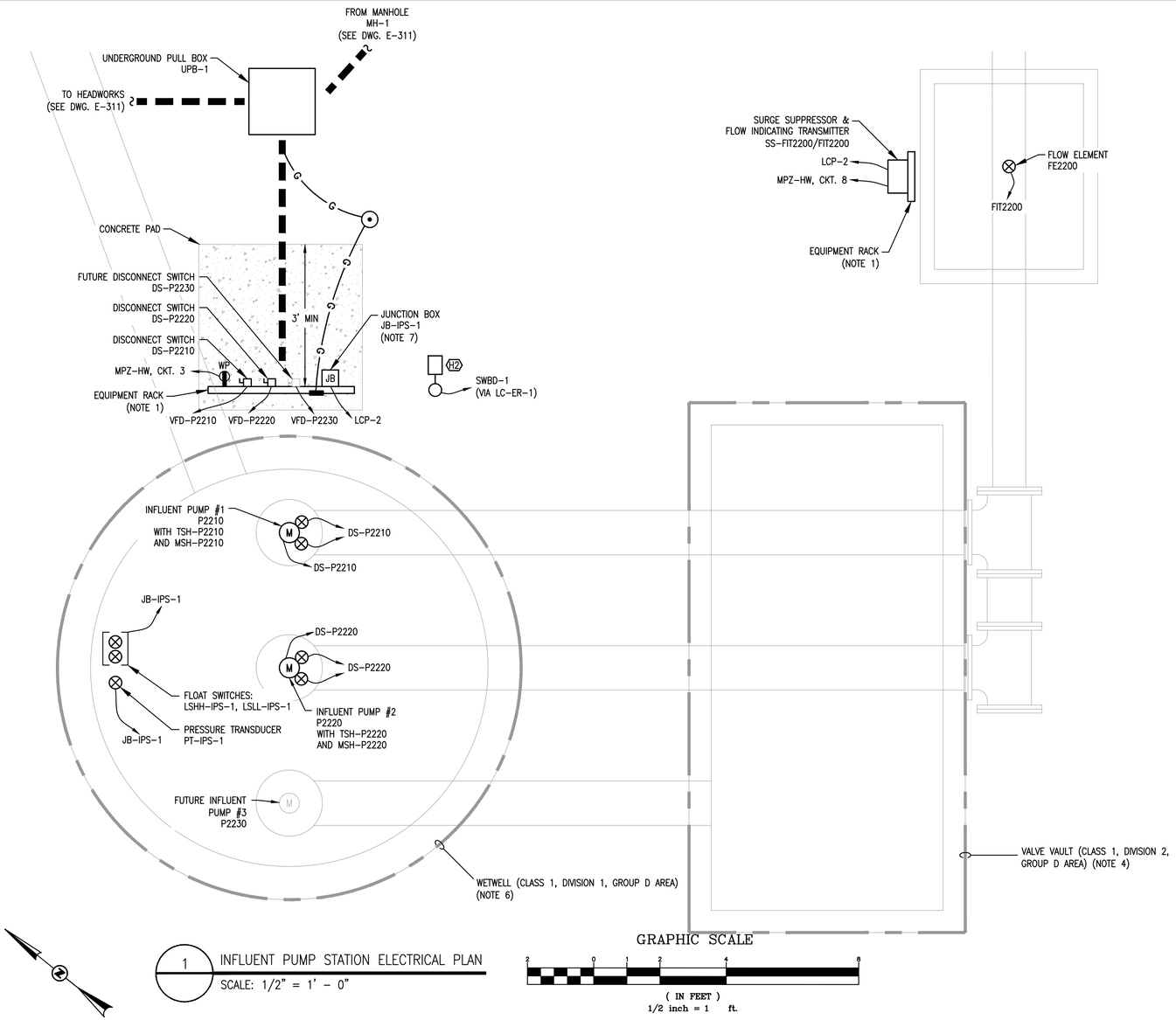
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HEADWORKS ELECTRICAL PLAN

E-313

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 INFLUENT PUMP STATION ELECTRICAL PLAN

SCALE: 1/2" = 1' - 0"

GRAPHIC SCALE

(IN FEET)
1/2 inch = 1 ft.

NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT RACK SUPPORT AS SHOWN. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXACT LOCATION OF EQUIPMENT RACK TO PROVIDE ADEQUATE CLEARANCES FOR ALL EQUIPMENT. SEE DETAIL "A" ON DWG. E-902 FOR INSTALLATION DETAILS. 6" CONCRETE PAD SHALL BE UNDER ELECTRICAL EQUIPMENT AND SHALL EXTEND 3 FEET IN FRONT OF THE EQUIPMENT.
2. THE CONTRACTOR SHALL GROUND ALL METAL STRUCTURES/SURFACES TO THE GROUNDING SYSTEM.
3. THE EXACT DEVICE LOCATIONS SHALL BE CONFIRMED WITH APPROVED VENDOR DRAWINGS.
4. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 4.2.2 ROW 31A.

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN ENTIRE VALVE VAULT SPACE.
5. THE CONTRACTOR SHALL USE BARE COPPER CONDUCTOR 1/0 AWG TO MAKE CONNECTIONS TO THE PLANT GROUNDING SYSTEM.
6. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 4.2.2 ROW 16B.

   CLASS 1, DIVISION 1, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN ENTIRE WETWELL SPACE.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL NEMA 4X SS JUNCTION BOXES ADEQUATELY SIZED FOR ASSOCIATED CABLES AND CONDUITS.

LEGEND:

– DIRECT BURIED UNDERGROUND DUCTBANK

RC RC – REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

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INFLUENT PUMP STATION ELECTRICAL PLAN

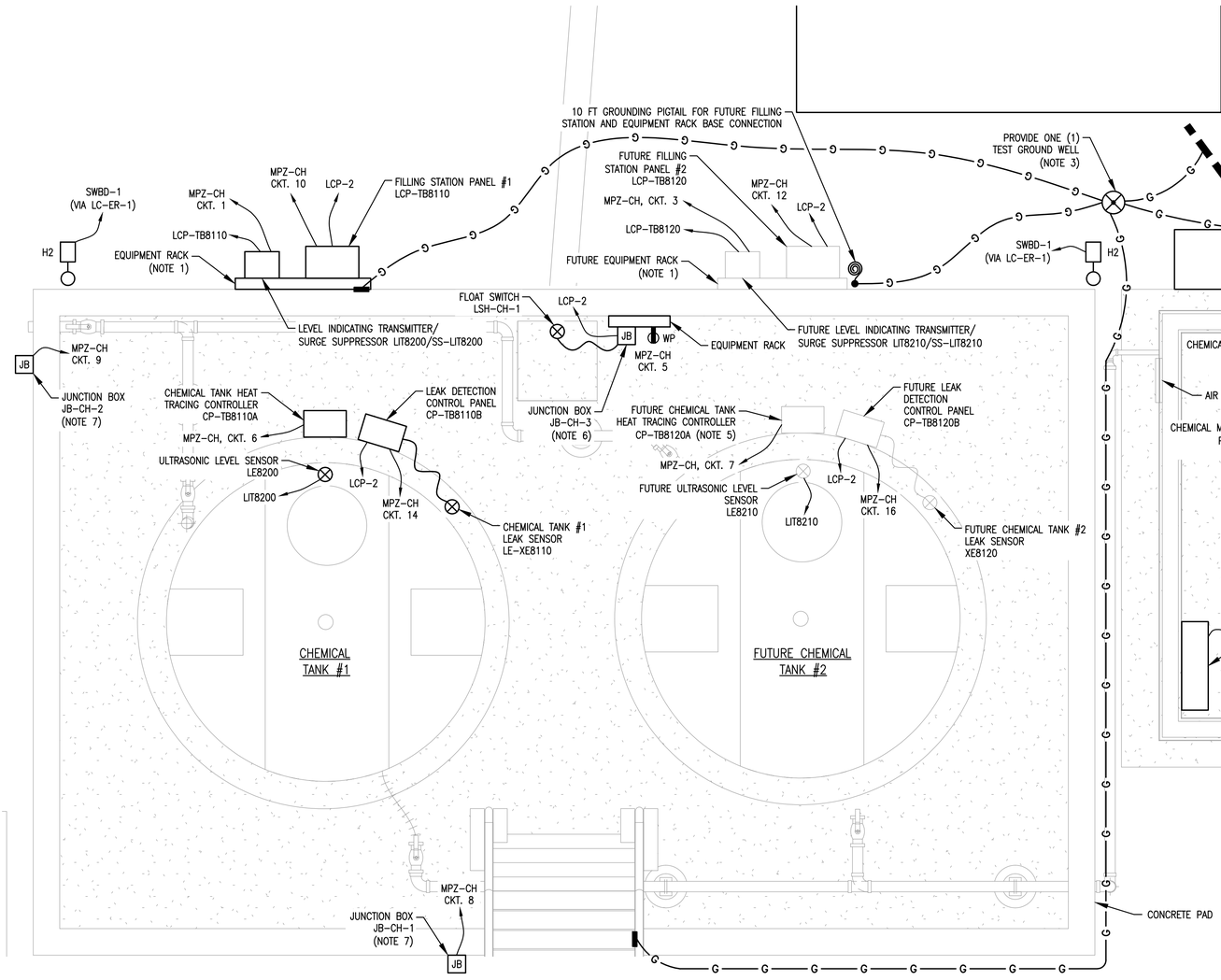
E-314

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
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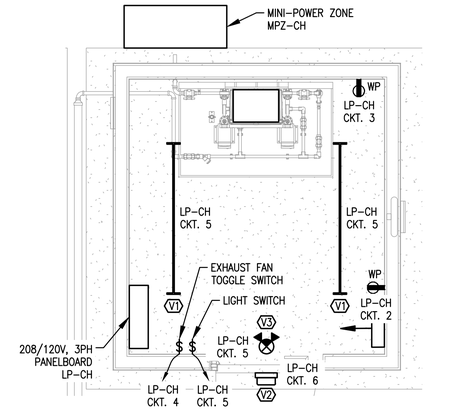
NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT RACK SUPPORT AS SHOWN. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXACT LOCATION OF EQUIPMENT RACK TO PROVIDE ADEQUATE CLEARANCES FOR ALL EQUIPMENT. SEE DETAIL "A" ON DWG. E-902 FOR INSTALLATION DETAILS. 6" CONCRETE PAD SHALL BE UNDER ELECTRICAL EQUIPMENT AND SHALL EXTEND 3 FEET IN FRONT OF THE EQUIPMENT.
2. THE CONTRACTOR SHALL PROVIDE THE REQUIRED STUB-UPS FOR FUTURE EQUIPMENT CONNECTIONS.
3. THE CONTRACTOR SHALL PROVIDE AND INSTALL #1/0 BARE COPPER GROUND WIRE TO CONNECT EQUIPMENT TO THE CLOSEST POINT OF PLANT EXISTING GROUND GRID. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING GROUND GRID IN THE FIELD.
4. THE CONTRACTOR SHALL CONFIRM ALL DIMENSIONS AND DISTANCES IN THE FIELD BASED ON THE ACTUAL PURCHASED EQUIPMENT. ADJUST INSTALLATION ACCORDINGLY TO MEET NEC WORKING SPACE REQUIREMENTS.
5. INCLUDE SPARE CONDUITS FOR FUTURE INSTALLATION.
6. THE CONTRACTOR SHALL PROVIDE AND INSTALL NEMA 4X SS JUNCTION BOXES ADEQUATELY SIZED FOR ASSOCIATED CABLES AND CONDUITS.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL A LOCAL NEMA 4X SS JUNCTION BOX FOR TERMINATION OF 120V HEAT TRACING POWER WIRING. THE CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE HEAT TRACING SYSTEM FOR EXPOSED CHEMICAL PIPING, INCLUDING ASSOCIATED CABLES/CONDUITS, THERMOSTATS, SELF REGULATING HEATING CABLE (5W/FT U.O.N.), PIPING INSULATION, ON/OFF INDICATING LIGHTS, ETC. ALL COMPONENTS SHALL BE CORROSION RESISTANT – NEMA 4X, RATED FOR OUTDOOR INSTALLATION AND RATED FOR HAZARDOUS AREA WHERE APPLICABLE.
8. ALL ELECTRICAL EQUIPMENT SUPPLIED WITH THE PRE-FAB CHEMICAL BUILDING SHALL BE PROVIDED PRE-WIRED TO A LOCAL LOW VOLTAGE PANELBOARD.



1 CHEMICAL STORAGE AREA ELECTRICAL PLAN
SCALE: 3/4" = 1' – 0"

GRAPHIC SCALE
1.33 0 0.67 1.33 2.67 5.33
(IN FEET)
3/4 inch = 1 ft.



2 CHEMICAL BUILDING – LIGHTS & RECEPTACLES PLAN
SCALE: 1/2" = 1' – 0"

GRAPHIC SCALE
2 0 1 2 4 8
(IN FEET)
1/2 inch = 1 ft.

LEGEND:
– DIRECT BURIED UNDERGROUND DUCTBANK
RC – REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
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1" 0" .5" 1"

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DESIGNER:		DV
DRAWN BY:		DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

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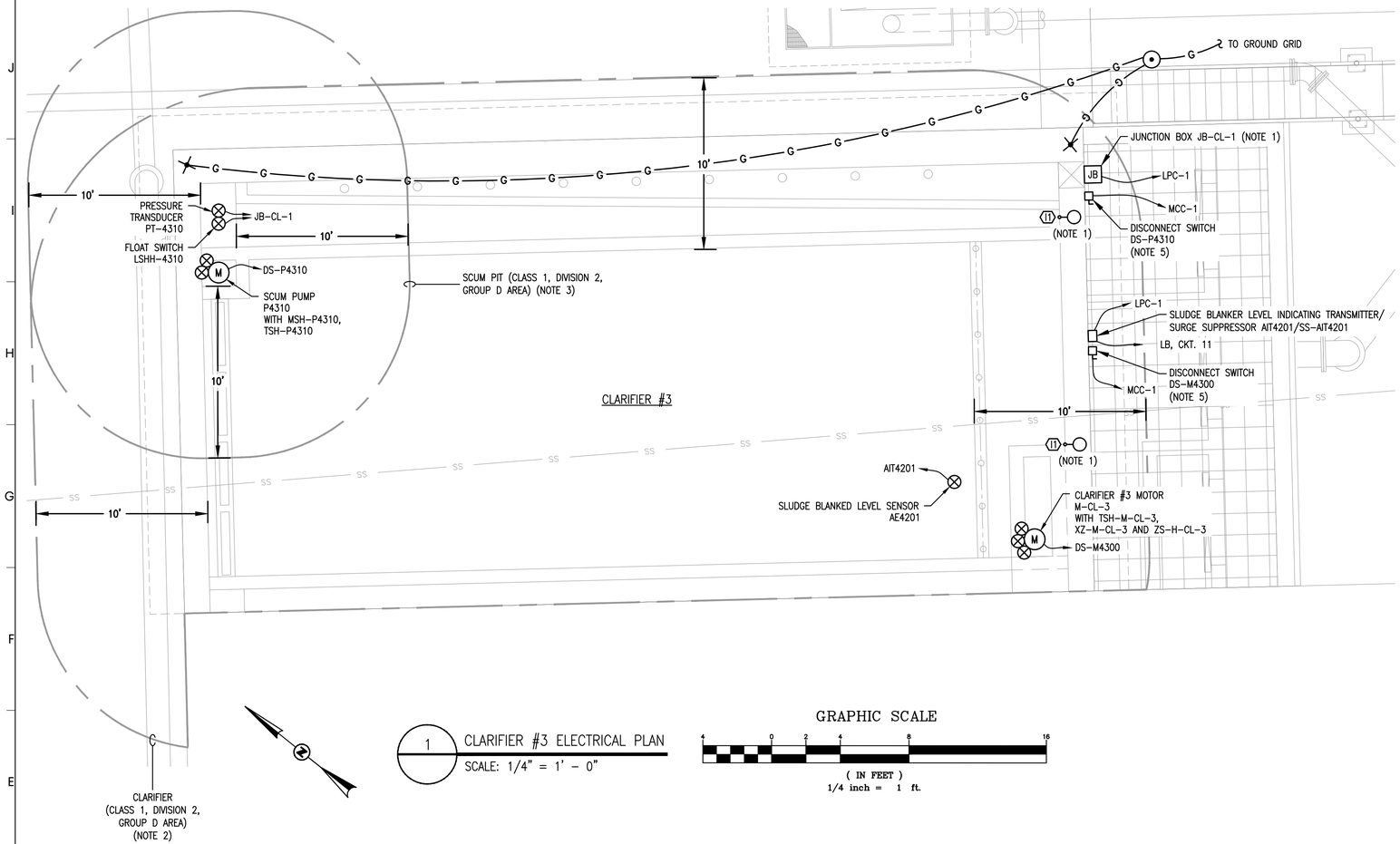
NOT RELEASED FOR CONSTRUCTION

CHEMICAL STORAGE AREA ELECTRICAL PLAN

E-315

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
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DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 CLARIFIER #3 ELECTRICAL PLAN

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)

1/4 inch = 1 ft.

NOTES:

1. THE CONTRACTOR SHALL EXTEND POWER CIRCUIT FROM EXISTING STANCHION MOUNTED LIGHTS AT THE CLARIFIER #1 AND #2 TO FEED THE NEW LIGHTS. USE 2 #12 & 1 #12 GND IN 0.75" C.

2. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 4.2.2 ROW 7C.

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN ENTIRE CLARIFIER SPACE.

3. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 4.2.2 ROW 4C.

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN ENTIRE SCUM PIT SPACE.

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GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE | DATE

PROJECT MANAGER:	DV
ENGINEER:	DV
DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

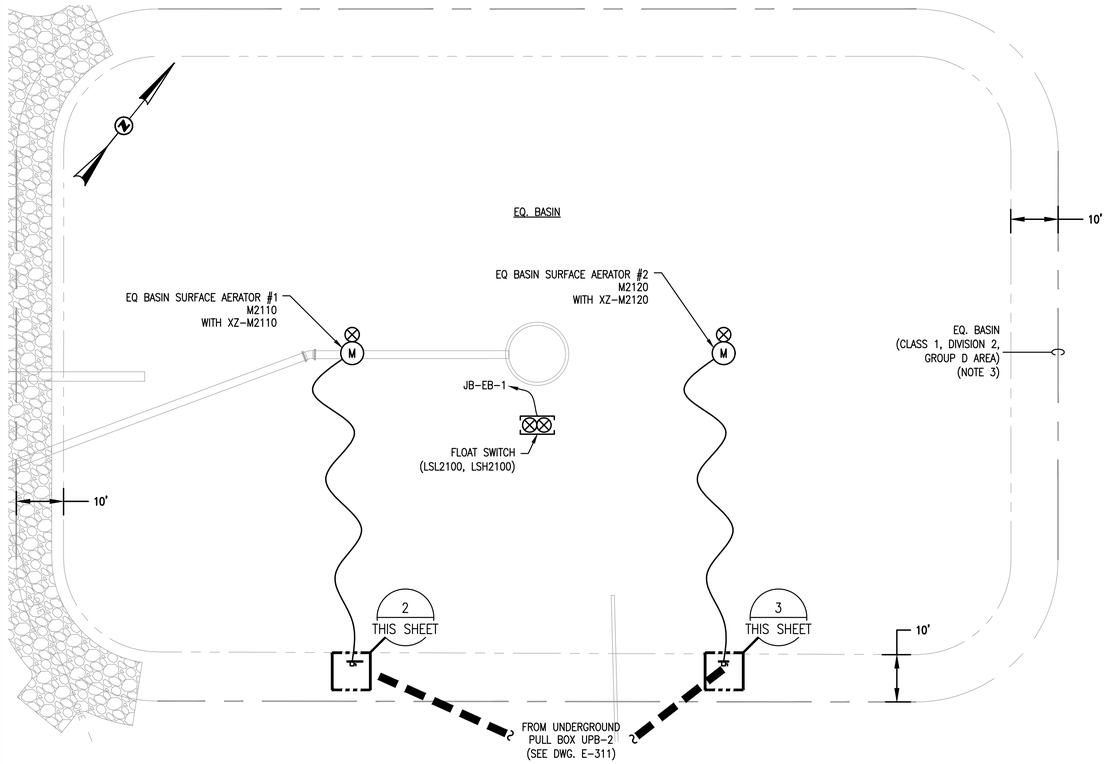
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CLARIFIER
ELECTRICAL PLAN

E-316

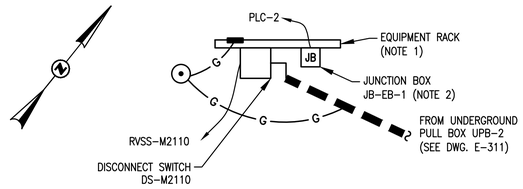
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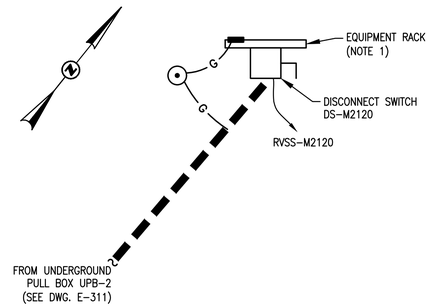
1 EQ. BASIN ELECTRICAL PLAN
SCALE: 1/16" = 1' – 0"

GRAPHIC SCALE
16 0 8 16 32 64
(IN FEET)
1/16 inch = 1 ft.



2 AERATOR #1 RACK DETAIL
SCALE: 1/2" = 1' – 0"

GRAPHIC SCALE
2 0 1 2 4 8
(IN FEET)
1/2 inch = 1 ft.



3 AERATOR #2 RACK DETAIL
SCALE: 1/2" = 1' – 0"

GRAPHIC SCALE
2 0 1 2 4 8
(IN FEET)
1/2 inch = 1 ft.

NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL EQUIPMENT RACK SUPPORT AS SHOWN. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXACT LOCATION OF EQUIPMENT RACK TO PROVIDE ADEQUATE CLEARANCES FOR ALL EQUIPMENT. SEE DETAIL "A" ON DWG. E-902 FOR INSTALLATION DETAILS. 6" CONCRETE PAD SHALL BE UNDER ELECTRICAL EQUIPMENT AND SHALL EXTEND 3 FEET IN FRONT OF THE EQUIPMENT.
2. THE CONTRACTOR SHALL PROVIDE AND INSTALL NEMA 4X SS JUNCTION BOXES ADEQUATELY SIZED FOR ASSOCIATED CABLES AND CONDUITS.
3. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 5.2.2 ROW 4C.

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN A 10FT ENVELOPE AROUND EQUIPMENT AND OPEN CHANNED.

LEGEND:

– DIRECT BURIED UNDERGROUND DUCTBANK

RC RC – REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

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GOODWYN MILLS CAWOOD, LLC
No.PEF007898
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CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE	
		DV
		DV
		DV
		DV

PROJECT MANAGER:
ENGINEER:
DESIGNER:
DRAWN BY:

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

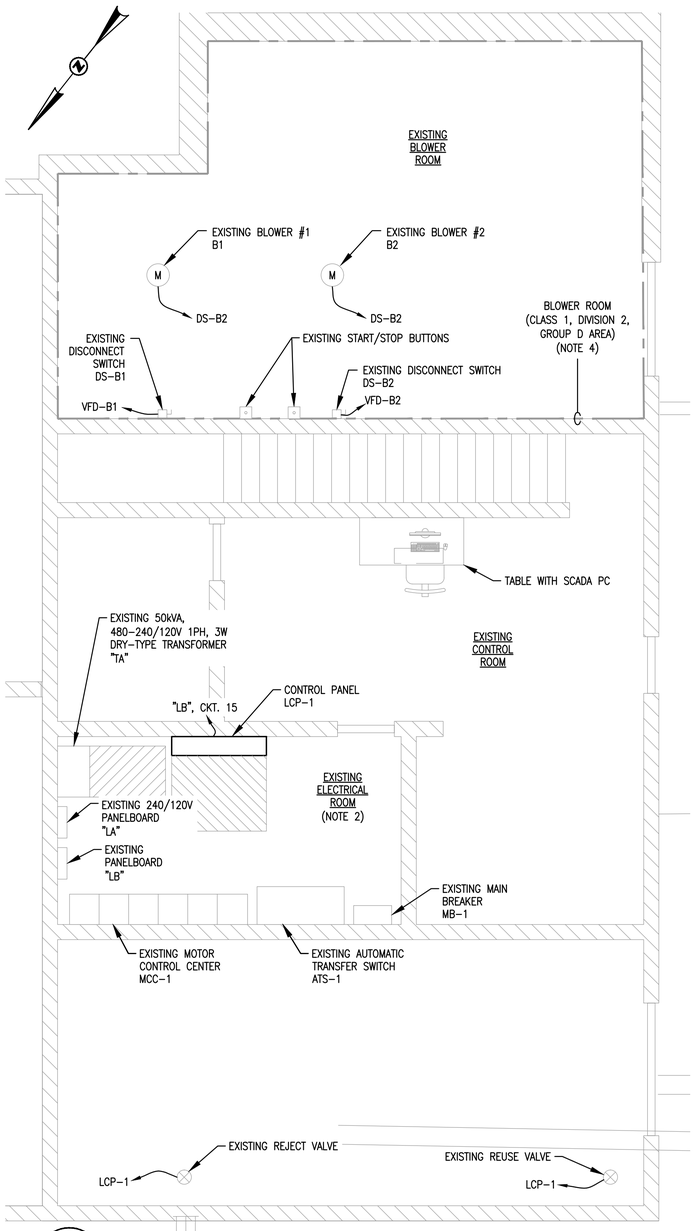
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EQ. BASIN ELECTRICAL PLAN

E-317

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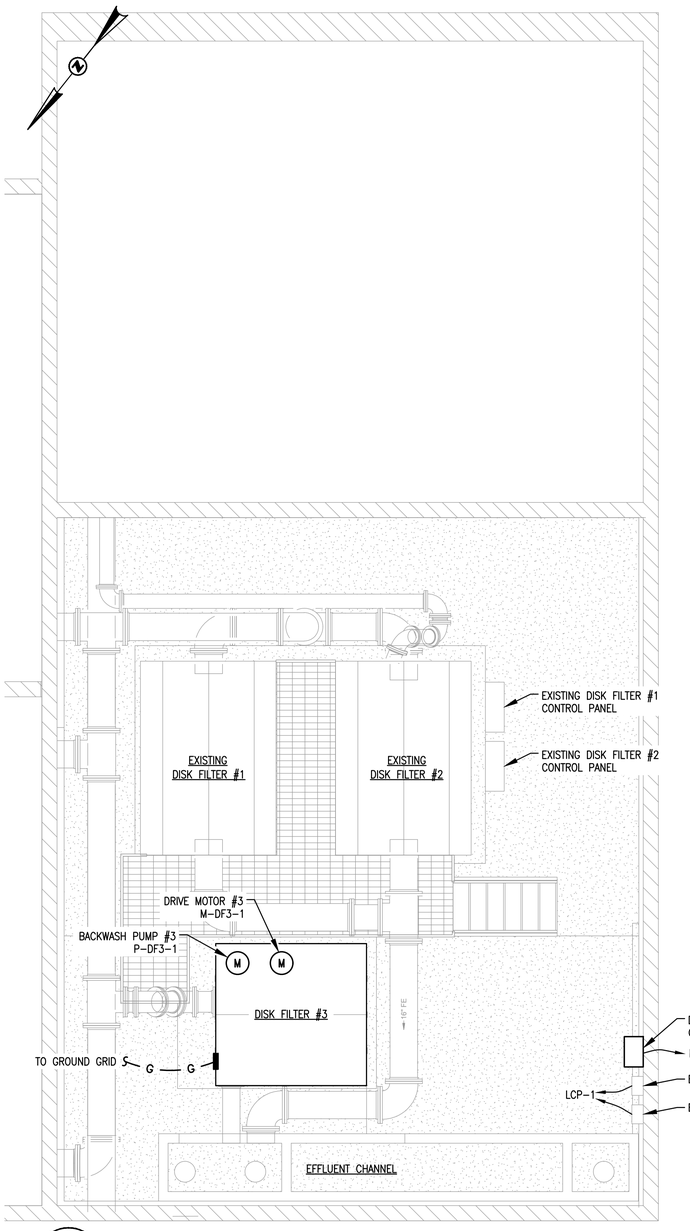
1 EXISTING OPERATIONS BUILDING ELECTRICAL PLAN (1-ST FLOOR) – EL. 0.00

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.



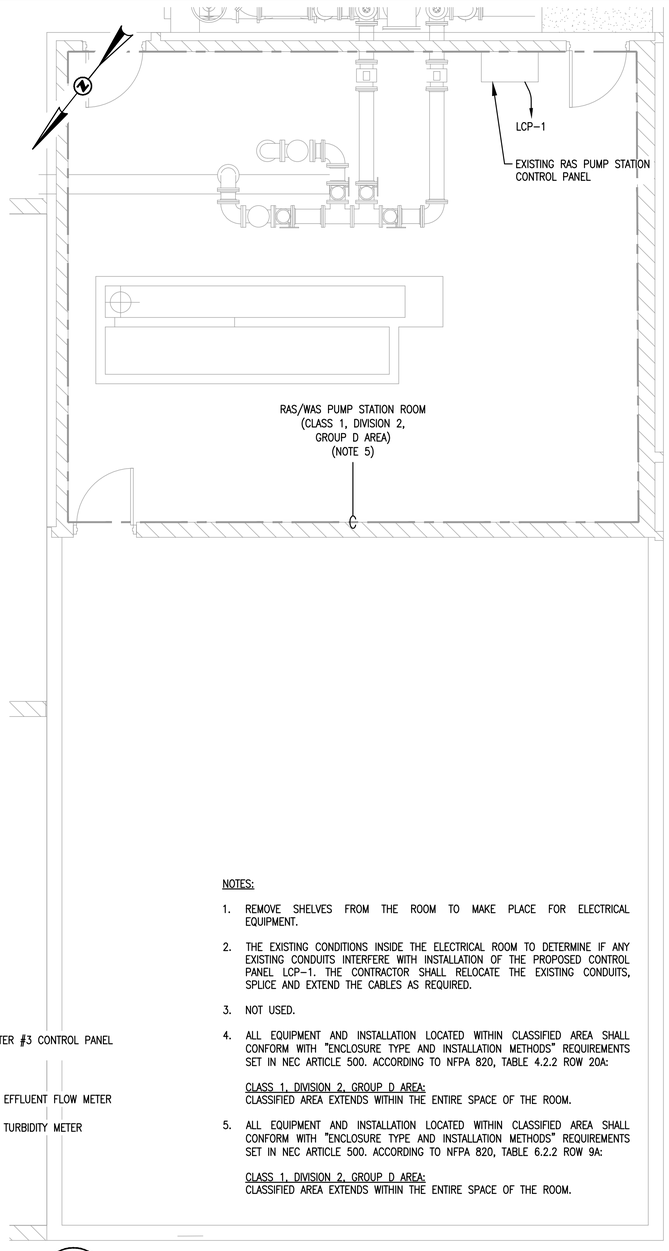
2 EXISTING OPERATIONS BUILDING ELECTRICAL PLAN (2-ND FLOOR) – EL. 10.17

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.



NOTES:

1. REMOVE SHELVES FROM THE ROOM TO MAKE PLACE FOR ELECTRICAL EQUIPMENT.
2. THE EXISTING CONDITIONS INSIDE THE ELECTRICAL ROOM TO DETERMINE IF ANY EXISTING CONDUITS INTERFERE WITH INSTALLATION OF THE PROPOSED CONTROL PANEL LCP-1. THE CONTRACTOR SHALL RELOCATE THE EXISTING CONDUITS, SPLICE AND EXTEND THE CABLES AS REQUIRED.
3. NOT USED.
4. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 4.2.2 ROW 20A:

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN THE ENTIRE SPACE OF THE ROOM.
5. ALL EQUIPMENT AND INSTALLATION LOCATED WITHIN CLASSIFIED AREA SHALL CONFORM WITH "ENCLOSURE TYPE AND INSTALLATION METHODS" REQUIREMENTS SET IN NEC ARTICLE 500. ACCORDING TO NFPA 820, TABLE 6.2.2 ROW 9A:

   CLASS 1, DIVISION 2, GROUP D AREA:
   CLASSIFIED AREA EXTENDS WITHIN THE ENTIRE SPACE OF THE ROOM.

3 EXISTING OPERATIONS BUILDING ELECTRICAL PLAN (3-RD FLOOR) – EL. 23.00

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.

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GOODWYN MILLS CAWOOD, LLC
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CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

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CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

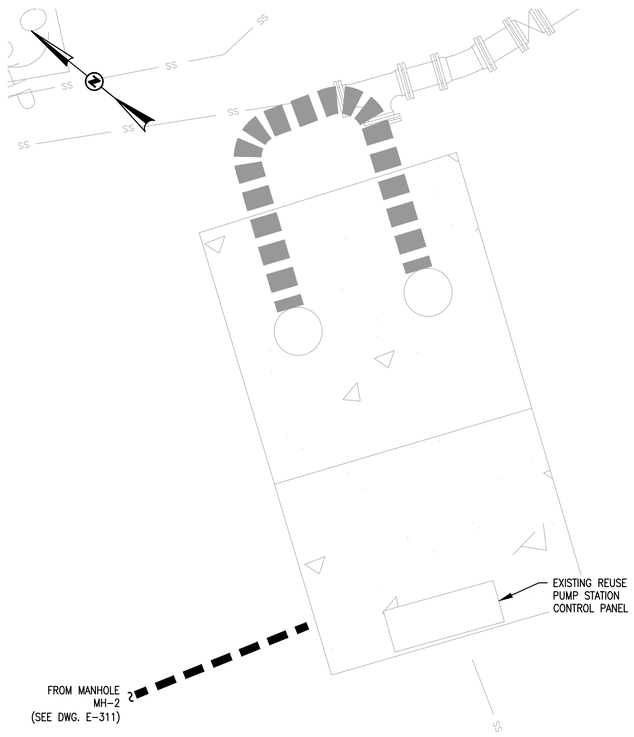
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EXISTING OPERATINONS BUILDING ELECTRICAL PLAN

E-318

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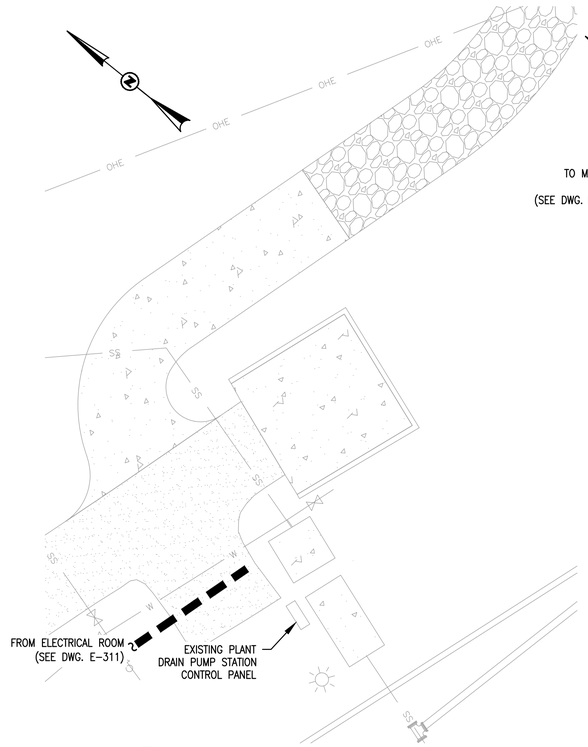
1 EXISTING REUSE PS ELECTRICAL PLAN

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

GRAPHIC SCALE

2.67 0 1.33 2.67 5.33 10.67

(IN FEET)
3/8 inch = 1 ft.



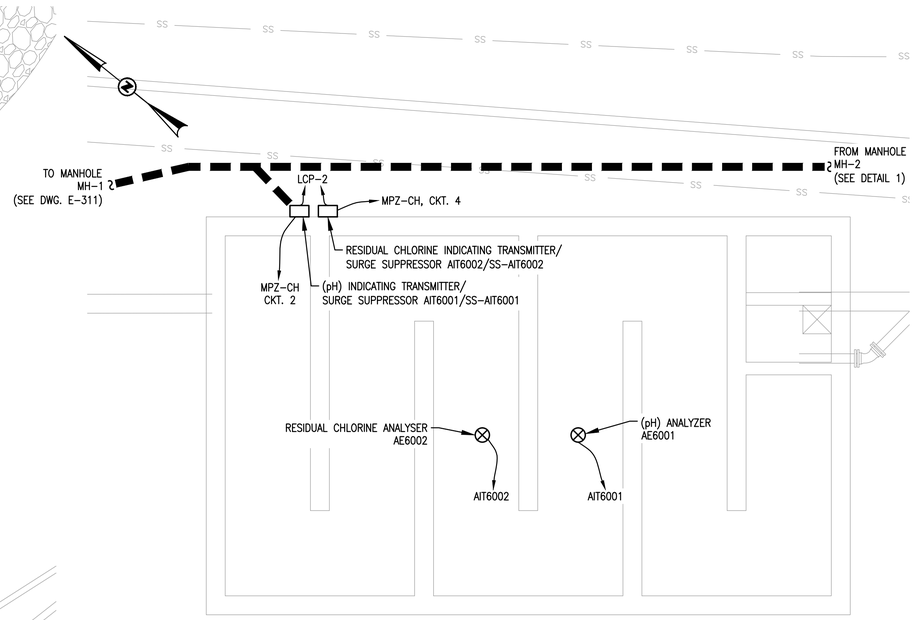
2 EXISTING PLANT DRAIN PS ELECTRICAL PLAN

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

GRAPHIC SCALE

2.67 0 1.33 2.67 5.33 10.67

(IN FEET)
3/8 inch = 1 ft.



3 CHLORINE CONTACT CHAMBER ELECTRICAL PLAN

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

GRAPHIC SCALE

4 0 2 4 8 16

(IN FEET)
1/4 inch = 1 ft.

LEGEND:

- DIRECT BURIED UNDERGROUND DUCTBANK
- RC RC - REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

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1" .5" 0" 1"

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		DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

CAUG250007

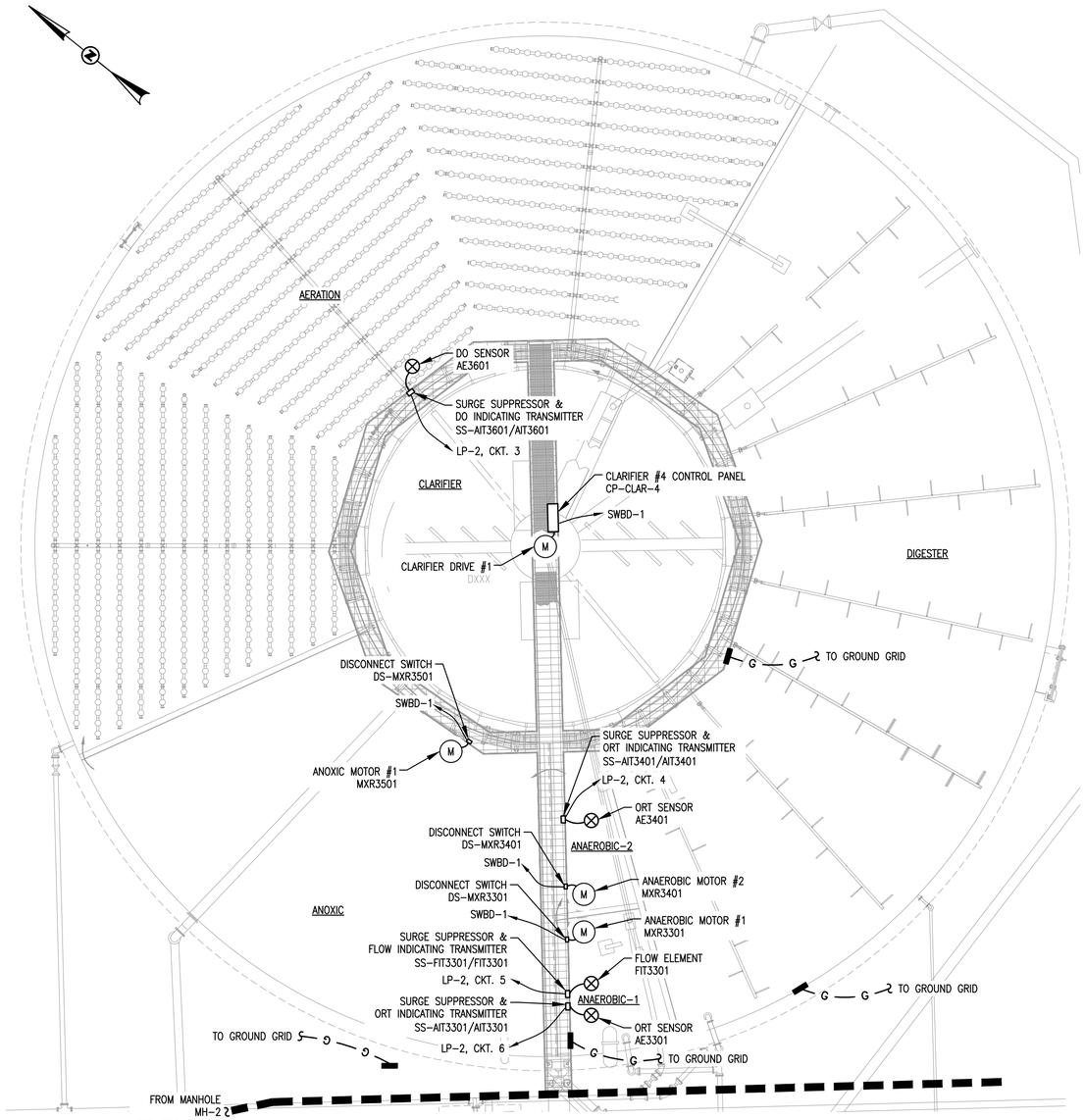
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REUSE PS & PLANT DRAIN PS & CHLORINE CONTACT CHAMBER ELECTRICAL PLAN

E-319

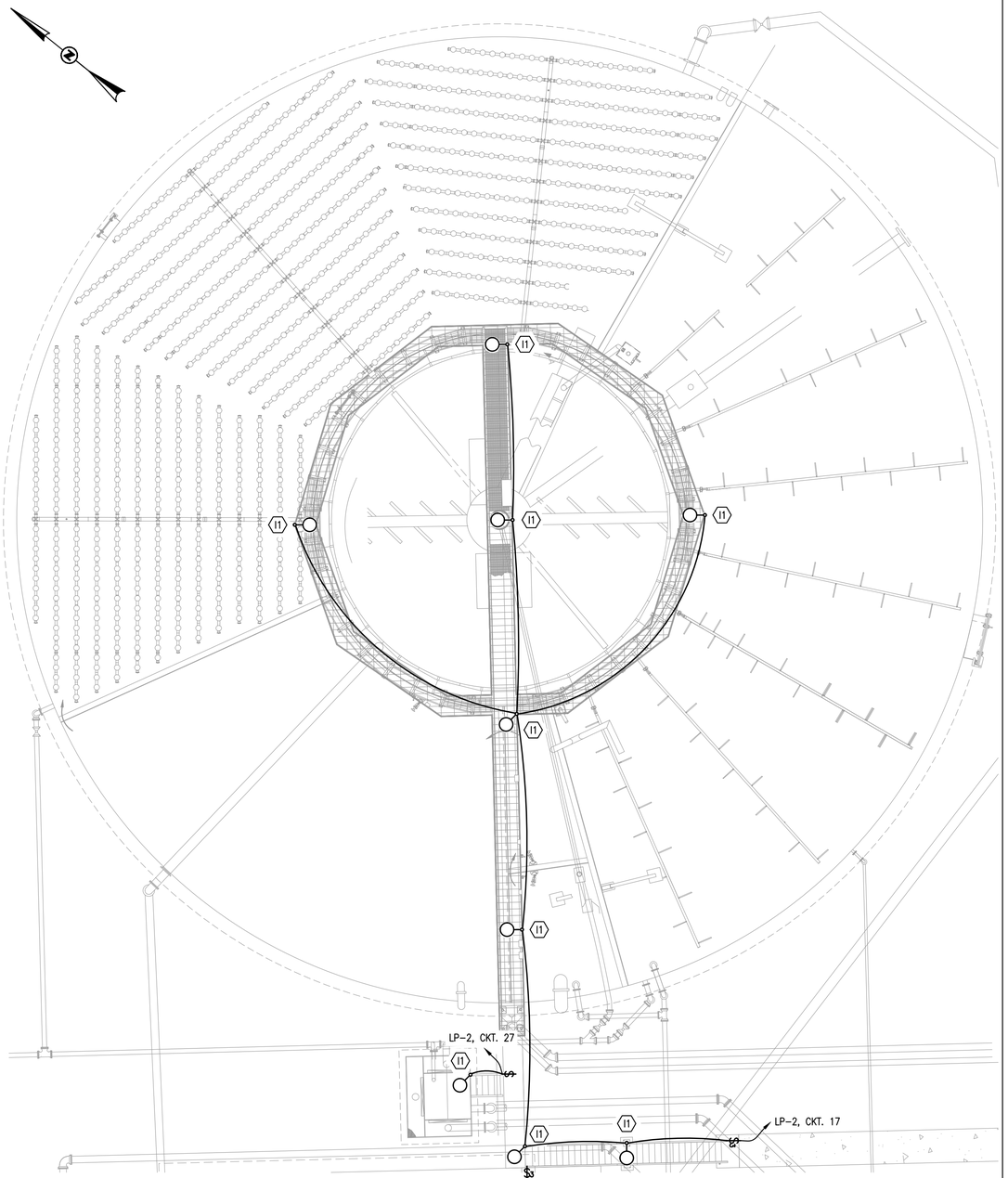
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1 CLARIFIER ELECTRICAL PLAN
SCALE: 3/32" = 1' – 0"

GRAPHIC SCALE
10,67 0 5,33 10,67 21,33 42,67
(IN FEET)
3/32 inch = 1 ft.



2 CLARIFIER LIGHTING PLAN
SCALE: 3/32" = 1' – 0"

GRAPHIC SCALE
10,67 0 5,33 10,67 21,33 42,67
(IN FEET)
3/32 inch = 1 ft.

LEGEND:
– DIRECT BURIED UNDERGROUND DUCTBANK
RC RC – REINFORCED CONCRETE ENCASED UNDERGROUND DUCTBANK

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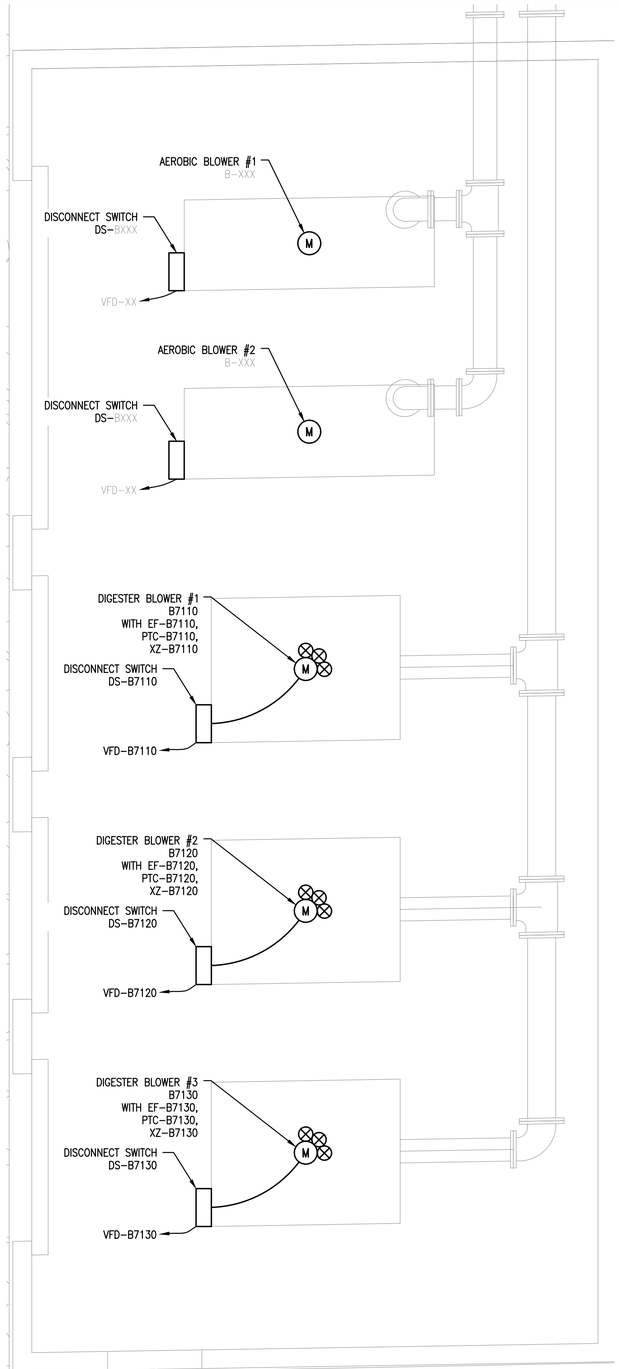
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CLARIFIER AND LIGHTING PLAN

E-320

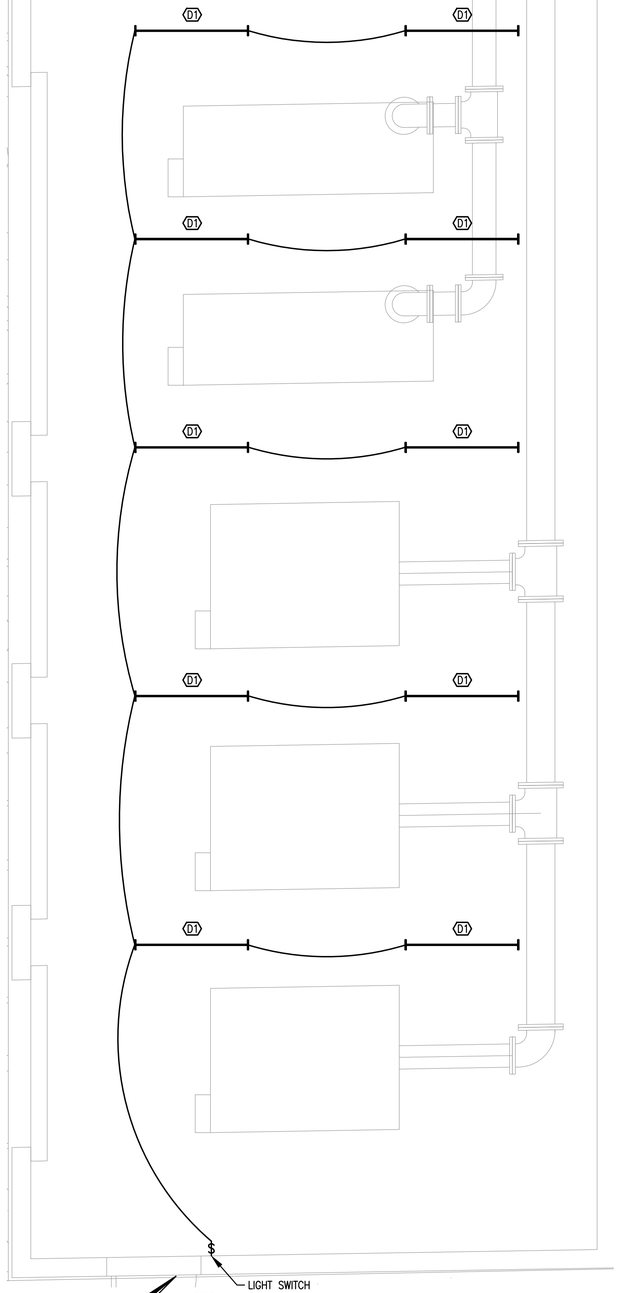
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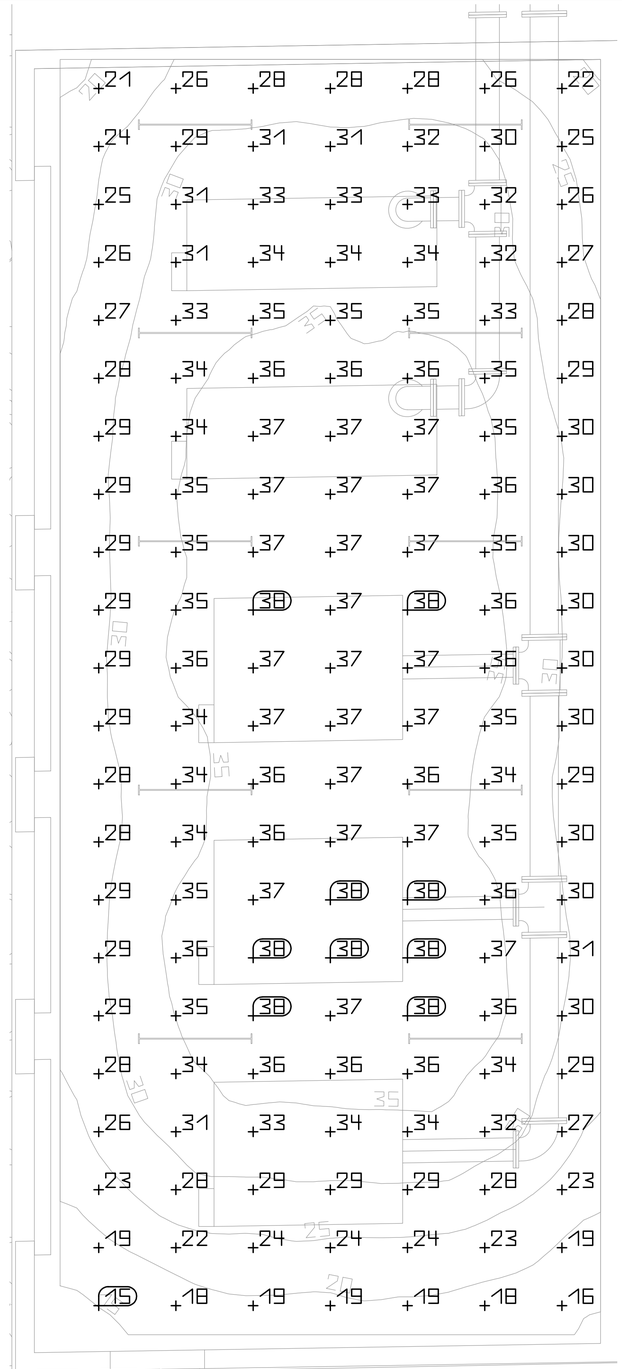
1 BLOWER ROOM – POWER PLAN

SCALE: 3/8" = 1' – 0"



2 BLOWER LIGHTING – POWER PLAN

SCALE: 3/8" = 1' – 0"



3 BLOWER – PHOTOMETRIC PLAN

SCALE: 3/8" = 1' – 0"

#	NAME	MIN	MAX	AVERAGE
1	BLOWER ROOM	13.4 FC	38.2 FC	31.4 FC

GRAPHIC SCALE

2.67 0 1.33 2.67 5.33 10.67

(IN FEET)
3/8 inch = 1 ft.

GRAPHIC SCALE

2.67 0 1.33 2.67 5.33 10.67

(IN FEET)
3/8 inch = 1 ft.

GRAPHIC SCALE

2.67 0 1.33 2.67 5.33 10.67

(IN FEET)
3/8 inch = 1 ft.

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PROJECT MANAGER: DV
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DESIGNER: DV
DRAWN BY: DV

CAREY STATION URBAN
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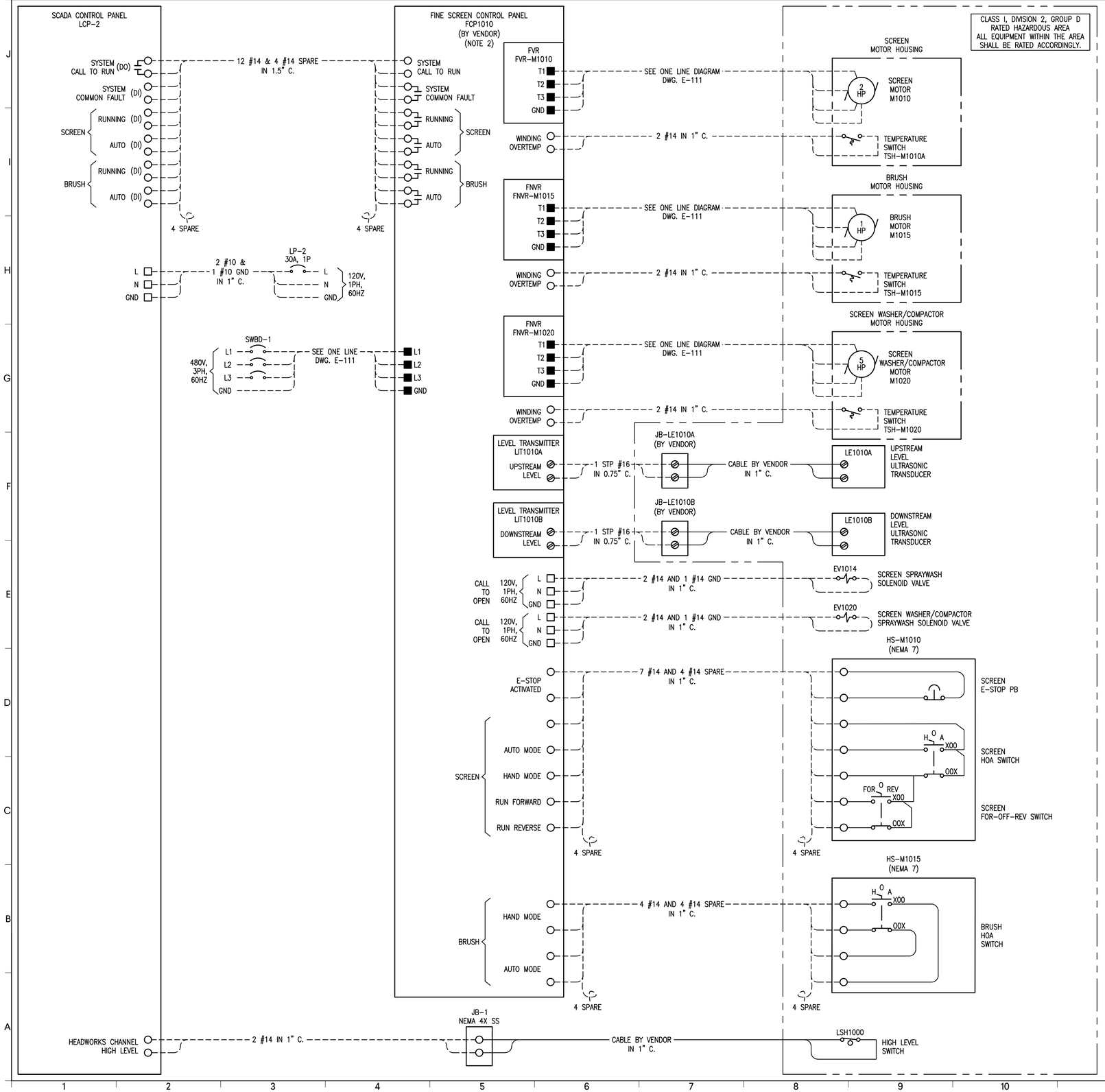
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BLOWER ROOM ELECTRICAL PLAN

E-321

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NOTES:

1. THE SCHEMATIC WIRING DIAGRAM IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL ADJUST THE FIELD WIRING BASED ON APPROVED VENDOR DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

2. THE EQUIPMENT VENDOR SHALL FURNISH AND CONTRACTOR SHALL INSTALL FINE SCREEN SYSTEM CONTROL PANEL WHICH INCLUDES ALL NECESSARY POWER AND CONTROLS COMPONENTS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
   - A. CONTROL PANEL SCCR SHALL BE 42kAIC MINIMUM.
   - B. ENCLOSURE: 3-POINT LATCHING WALL MOUNTED NEMA 4X 304 SS WITH INNER DOORS, FOLDING SHELF, INTERIOR LIGHT FIXTURE WITH DOOR SWITCH.
   - C. MAIN DEVICE: THERMAL MAGNETIC CIRCUIT BREAKER 20A, 480V, 3P WITH LOCKABLE DISCONNECT HANDLE.
   - D. ONE (1) 480V, 3PH FULL VOLTAGE REVERSING MOTOR STARTER (FVR) WITH MOTOR CIRCUIT PROTECTORS, RATED FOR SCREEN MOTOR.
   - E. ONE (1) 480V, 3PH FULL VOLTAGE NON-REVERSING MOTOR STARTER (FVNR) WITH MOTOR CIRCUIT PROTECTORS, RATED FOR BRUSH MOTORS.
   - F. 1kVA, 480-240/120V CONTROL POWER TRANSFORMER WITH PRIMARY AND SECONDARY CIRCUIT BREAKERS.
   - G. SURGE PROTECTION DEVICE.
   - H. LIGHTNING ARRESTOR.
   - I. PHASE MONITOR TO SENSE LOW VOLTAGE AND LOSS OF PHASE AND POWER.
   - J. ONE(1) GFCI/WP 120V, 20A DUPLEX RECEPTACLE.
   - K. THREE (3) 120V, 20A, 1P CIRCUIT BREAKERS: INTERNAL DUPLEX RECEPTACLE, AND TWO (2) SPARE BREAKERS.
   - L. STRIP HEATER, FAN & THERMOSTAT.
   - M. CONTROLLER: ALLEN-BRADLEY MICROLOGIX 1400 PLC.
   - N. CONTROLLER OIT: 12" HMI TOUCH SCREEN BY ALLEN-BRADLEY.
   - O. SELECTOR SWITCHES, PUSH BUTTONS, PILOT LIGHTS, ETC. AS REQUIRED FOR PROPER EQUIPMENT OPERATION.
   - R. SELECTOR SWITCHES:
     - R.A. MASTER LOCAL/REMOTE SWITCH.
     - R.B. HOA SWITCHES:
       - R.B.A. SCREEN MOTOR;
       - R.B.B. BRUSH MOTOR.
     - R.C. OPEN-AUTO-CLOSE SWITCHES:
       - R.C.A. SCREEN SPRAYWASH SOLENOID VALVE.
   - S. PUSH BUTTONS:
     - S.A. SCREEN MOTOR START.
     - S.B. BRUSH MOTOR STOP.
     - S.C. E-STOP.
     - S.D. ALARM SILENCE.
     - S.E. ALARM RESET.
   - T. 24 VDC POWER SUPPLY.
   - U. 120V, 5A RATED DRY CONTACTS, AND SIGNAL WIRING PREWIRED TO FIELD TERMINALS:
     - U.A. SCREEN MOTOR RUNNING;
     - U.B. SCREEN MOTOR AUTO;
     - U.C. BRUSH MOTOR RUNNING;
     - U.D. BRUSH MOTOR AUTO.
   - V. INTRINSICALLY SAFE RELAYS FOR ALL DEVICES LOCATED IN THE HAZARDOUS AREA.
   - W. INDICATING LIGHTS FOR:
     - W.A. CONTROL POWER ON (WHITE);
     - W.B. SCREEN MOTOR RUNNING (GREEN);
     - W.C. SCREEN MOTOR FAULT (RED);
     - U.C. BRUSH MOTOR RUNNING (GREEN);
     - U.D. BRUSH MOTOR FAULT (RED).
   - V. PANEL SHALL INCLUDE ALL NECESSARY COMPONENTS FOR EQUIPMENT SAFE AND RELIABLE OPERATION.

ALL OPERATOR INTERFACE DEVICES SHALL BE MOUNTED ON THE INNER SWING DOOR. CONTROL PANEL SHALL BE UL508A LISTED AND LABELED. CONTRACTOR SHALL SUBMIT DETAILED WIRING DIAGRAM AND BOM FOR THE CONTROL PANEL TO ENGINEER FOR APPROVAL, PRIOR TO FABRICATION.

LEGEND:
- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

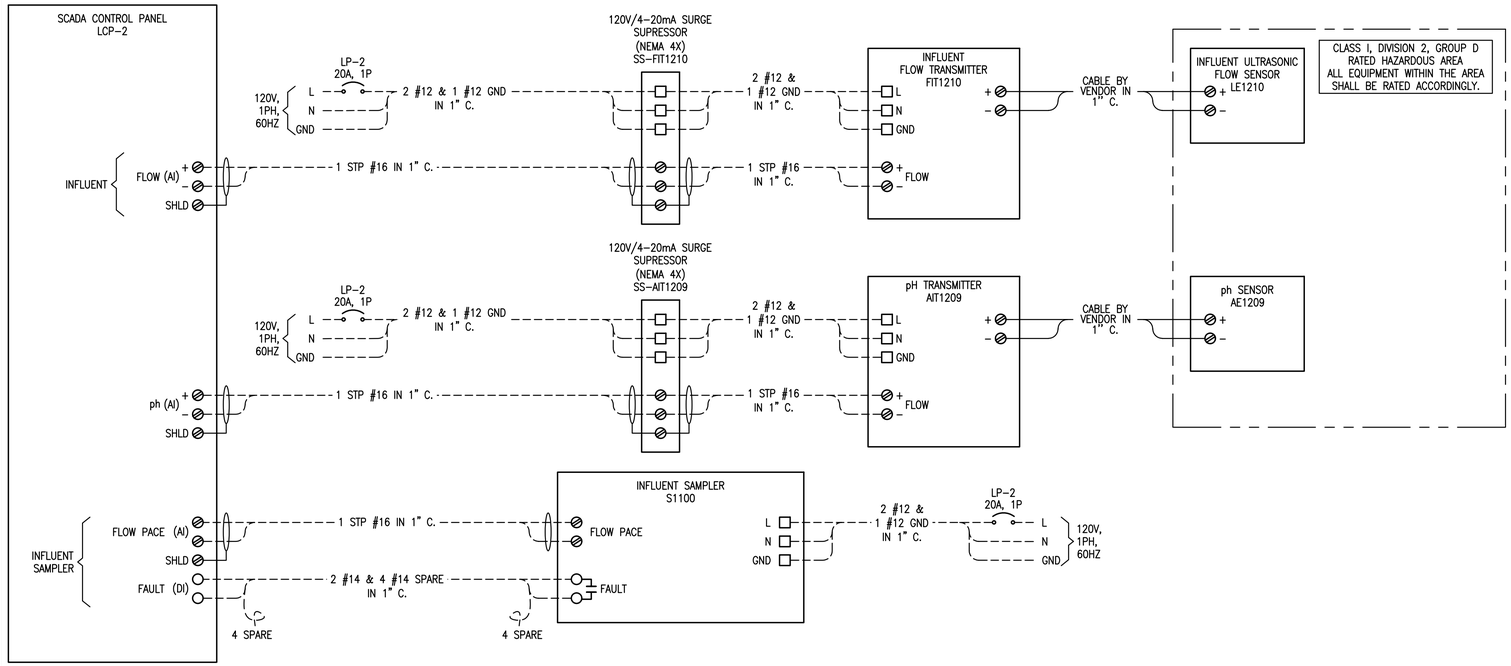
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"GOODWYN MILLS CAWOOD, LLC No.PEF007898 Exp.06.30.2026" STATE OF GEORGIA CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE	



LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

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GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
STATE OF GEORGIA
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE	
PROJECT MANAGER:		DV
ENGINEER:		DV
DESIGNER:		DV
DRAWN BY:		DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

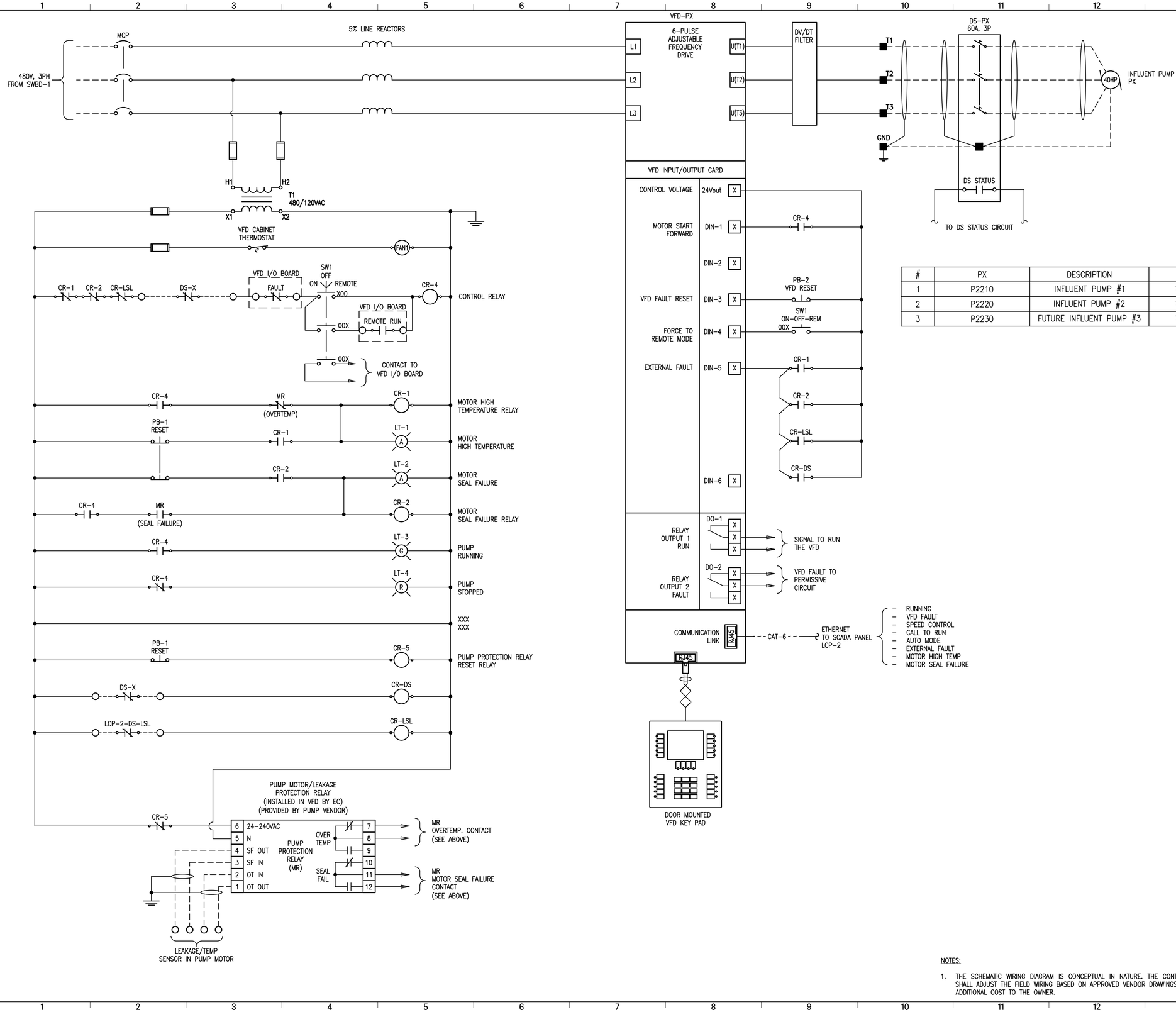
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GRIT SYSTEM
SCHEMATIC WIRING DIAGRAM

E-602

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#	PX	DESCRIPTION	VFD-PX	DS-PX
1	P2210	INFLUENT PUMP #1	VFD-P2210	DS-P2210
2	P2220	INFLUENT PUMP #2	VFD-P2220	DS-P2220
3	P2230	FUTURE INFLUENT PUMP #3	VFD-P2230	DS-P2230

LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

NOTES:

1. THE SCHEMATIC WIRING DIAGRAM IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL ADJUST THE FIELD WIRING BASED ON APPROVED VENDOR DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

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T 706.303.3272

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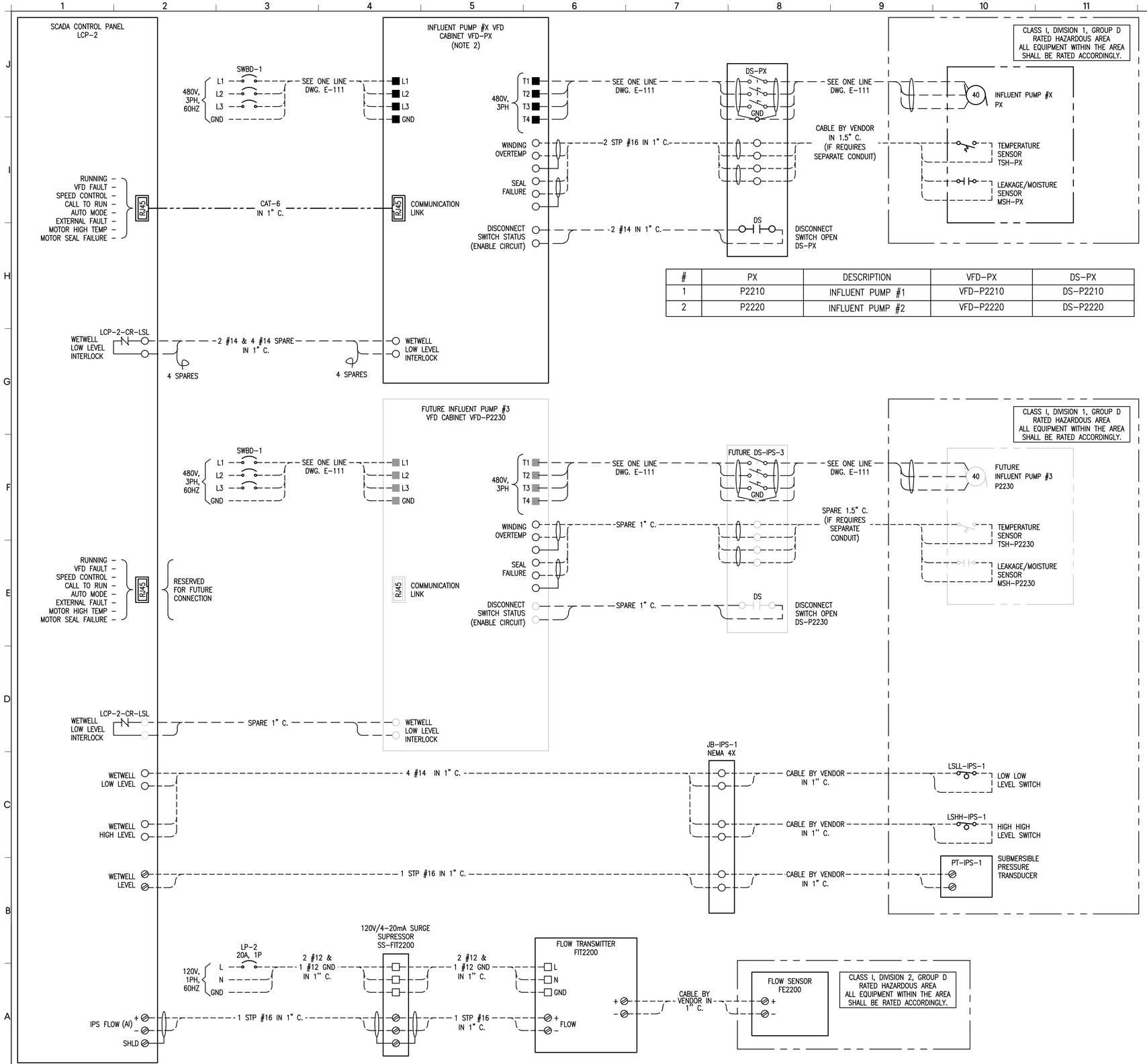
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INFLUENT PUMP STATION SCHEMATIC WIRING DIAGRAM

E-603

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#	PX	DESCRIPTION	VFD-PX	DS-PX
1	P2210	INFLUENT PUMP #1	VFD-P2210	DS-P2210
2	P2220	INFLUENT PUMP #2	VFD-P2220	DS-P2220

NOTES:

1. THE SCHEMATIC WIRING DIAGRAM IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL ADJUST THE FIELD WIRING BASED ON APPROVED VENDOR DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.
2. THE EQUIPMENT VENDOR SHALL FURNISH AND CONTRACTOR SHALL INSTALL INFLUENT PUMP VFD CABINET WHICH INCLUDES ALL NECESSARY POWER AND CONTROLS COMPONENTS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
   - A. CABINET SCCR SHALL BE 42kAIC MINIMUM.
   - B. ENCLOSURE: WALL MOUNTED NEMA 4X 304 SS WITH INNER DOORS, FOLDING SHELF, INTERIOR LIGHT FIXTURE WITH DOOR SWITCH.
   - C. MAIN DEVICE: THERMAL MAGNETIC CIRCUIT BREAKER 70A, 480V, 3P WITH LOCKABLE DISCONNECT HANDLE.
   - D. VARIABLE FREQUENCY DRIVE (VFD):
     - D.A. THE VFD CABINET MANUFACTURER SHALL COORDINATE WITH THE EQUIPMENT MANUFACTURER WHETHER VARIABLE OR CONSTANT TORQUE DRIVE SHALL BE PROVIDED AND PROVIDE A CONFIRMATION LETTER.
     - D.B. 6 PULSE DRIVE WITH MOTOR CIRCUIT PROTECTORS, RATED FOR 40 HP MOTOR.
     - D.C. 5% LINE REACTOR, DV/DT FILTER, THE CABINET MANUFACTURER SHALL PERFORM A HARMONIC ANALYSIS BASED ON THE SELECTED VFD MODEL TO ENSURE THAT THE HARMONIC DISTORTIONS ARE WITHIN IEEE519 LIMITS AND PROVIDE REPORT FOR ENGINEERS REVIEW.
   - E. 1kVA, 480-240/120V CONTROL POWER TRANSFORMER WITH PRIMARY AND SECONDARY CIRCUIT BREAKERS.
   - F. EXTERNALLY MOUNTED 480V, 1PH AIR CONDITIONER IN NEMA 4X SS ENCLOSURE SIZED TO KEEP CABINET INTERNAL TEMPERATURE BELOW 90° F.
   - G. STRIP HEATER, FAN & THERMOSTAT.
   - H. SELECTOR SWITCHES, PUSH BUTTONS, PILOT LIGHTS, ETC. AS REQUIRED FOR PROPER EQUIPMENT OPERATION.
   - R. OPERATOR INTERFACE DEVICES:
     - R.A. VFD KEY PAD MOUNTED ON THE FRONT DOOR;
     - R.A. HOA SWITCH;
     - R.B. FORWARD-REVERSE SWITCH;
     - R.C. SPEED POTENTIOMETER FOR HAND MODE.
   - S. PUSH BUTTONS:
     - S.A. START;
     - S.B. STOP;
     - S.C. E-STOP.
   - T. ANALOG INDICATORS:
     - T.A. SPEED;
     - T.B. CURRENT.
   - U. INDICATING LIGHTS FOR:
     - U.A. CONTROL POWER ON (WHITE);
     - U.B. PUMP RUNNING (GREEN);
     - U.C. PUMP FAULT (AMBER).
   - V. MEANS OF I/O'S COMMUNICATION:
     - V.A. 120V, 5A RATED DRY CONTACTS, PREWIRED TO FIELD TERMINALS:
       - V.A.A. PHASE LOSS ALARM;
       - V.A.B. SCREEN COMMON FAULT;
       - V.A.C. SCREW CONVEYOR COMMON FAULT.
     - U.B. HARDWIRED SIGNALS PREWIRED TO FIELD TERMINALS:
       - U.B.A. SPEED CONTROL INPUT 4-20mA;
       - U.B.B. SPEED FEEDBACK OUTPUT 4-20mA;
       - U.B.C. CURRENT OUTPUT 4-20mA.
     - U.C. COMMUNICATION LINKS:
       - U.C.A. ETHERNET/IP (RJ-45).
   - V. HARDWIRED SAFETY INTERLOCKS SHALL INCLUDE:
     - V.A. DISCONNECT SWITCH STATUS;
     - V.B. LOW LEVEL CUTOFF;
     - V.C. VFD FAULT.
   - X. CABINET SHALL INCLUDE ALL NECESSARY COMPONENTS FOR EQUIPMENT SAFE AND RELIABLE OPERATION.

THE CABINET SHALL BE MANUFACTURED BY EATON, SCHNEIDER ELECTRIC, ALLEN-BRADLEY, ABB, SIEMENS OR APPROVED EQUAL MANUFACTURER, THE CABINET SHALL BE UL LISTED AND LABELED. CONTRACTOR SHALL SUBMIT DETAILED WIRING DIAGRAM AND BOM FOR THE CONTROL PANEL TO ENGINEER FOR APPROVAL, PRIOR TO FABRICATION.

LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

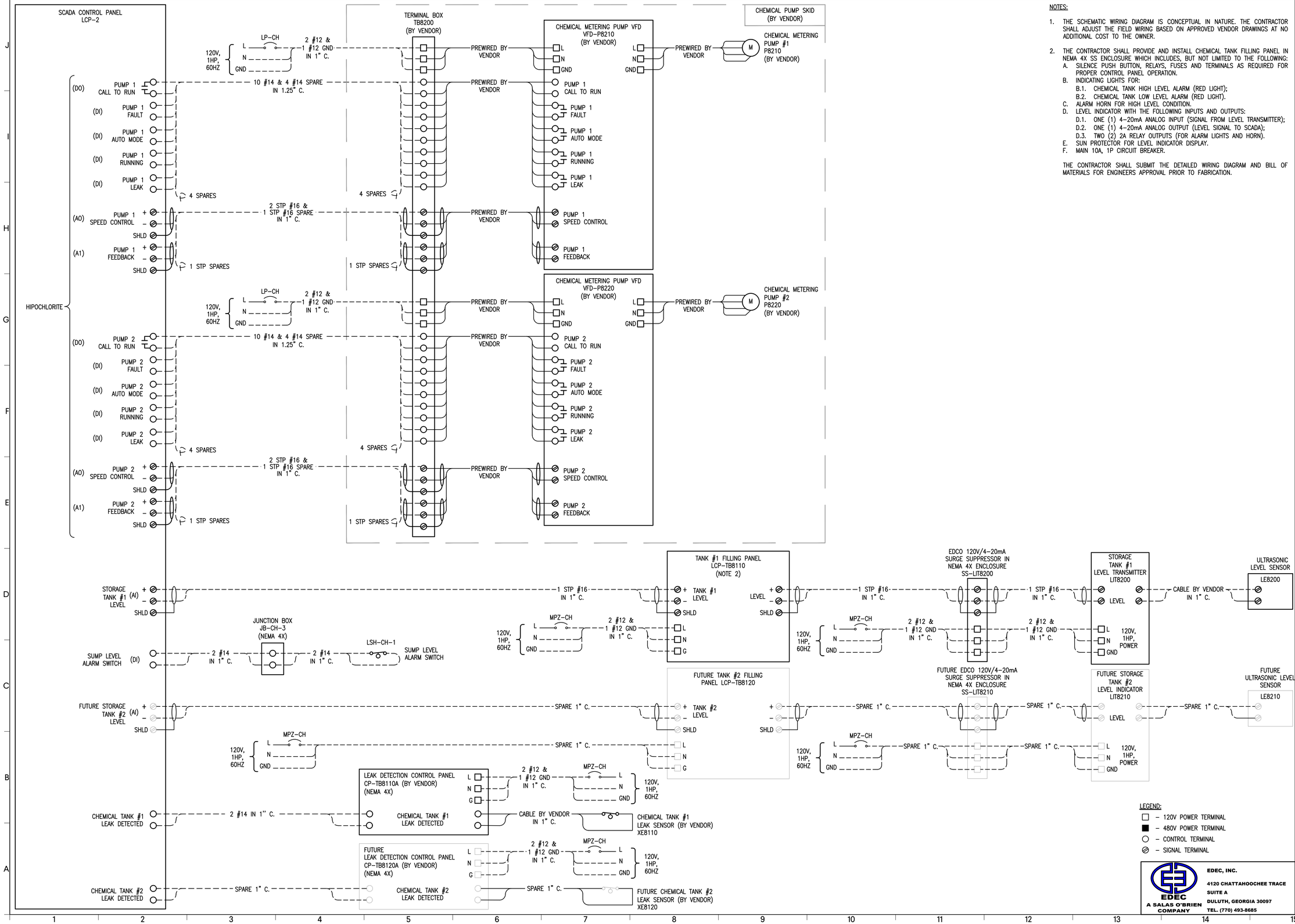
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"GOODWYN MILLS CAWOOD, LLC No.PEF007898 Exp.06.30.2026" STATE OF GEORGIA CERTIFICATE OF AUTHORIZATION

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NOTES:

1. THE SCHEMATIC WIRING DIAGRAM IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL ADJUST THE FIELD WIRING BASED ON APPROVED VENDOR DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

2. THE CONTRACTOR SHALL PROVIDE AND INSTALL CHEMICAL TANK FILLING PANEL IN NEMA 4X SS ENCLOSURE WHICH INCLUDES, BUT NOT LIMITED TO THE FOLLOWING:
   A. SILENCE PUSH BUTTON, RELAYS, FUSES AND TERMINALS AS REQUIRED FOR PROPER CONTROL PANEL OPERATION.
   B. INDICATING LIGHTS FOR:
      B.1. CHEMICAL TANK HIGH LEVEL ALARM (RED LIGHT);
      B.2. CHEMICAL TANK LOW LEVEL ALARM (RED LIGHT).
   C. ALARM HORN FOR HIGH LEVEL CONDITION.
   D. LEVEL INDICATOR WITH THE FOLLOWING INPUTS AND OUTPUTS:
      D.1. ONE (1) 4-20mA ANALOG INPUT (SIGNAL FROM LEVEL TRANSMITTER);
      D.2. ONE (1) 4-20mA ANALOG OUTPUT (LEVEL SIGNAL TO SCADA);
      D.3. TWO (2) 2A RELAY OUTPUTS (FOR ALARM LIGHTS AND HORN).
   E. SUN PROTECTOR FOR LEVEL INDICATOR DISPLAY.
   F. MAIN 10A, 1P CIRCUIT BREAKER.

THE CONTRACTOR SHALL SUBMIT THE DETAILED WIRING DIAGRAM AND BILL OF MATERIALS FOR ENGINEERS APPROVAL PRIOR TO FABRICATION.

LEGEND:
- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
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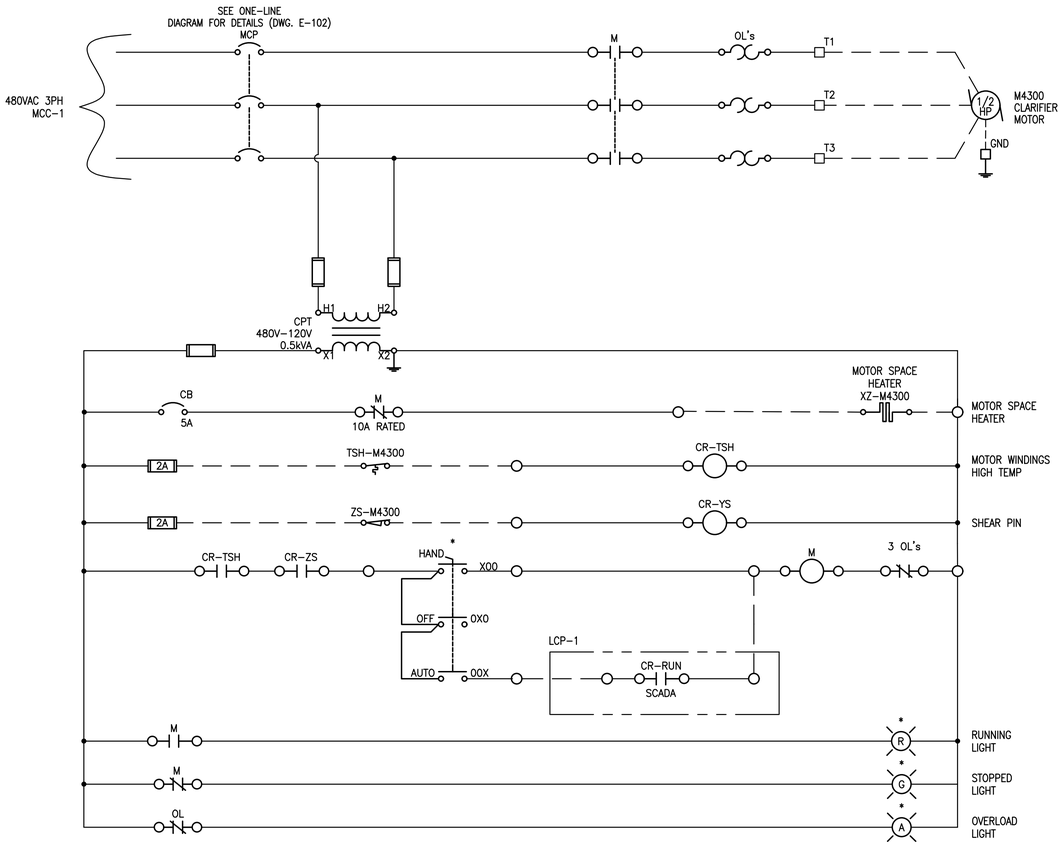
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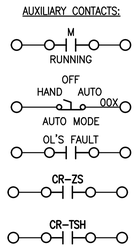
CHEMICAL STORAGE AREA SCHEMATIC WIRING DIAGRAM

E-605

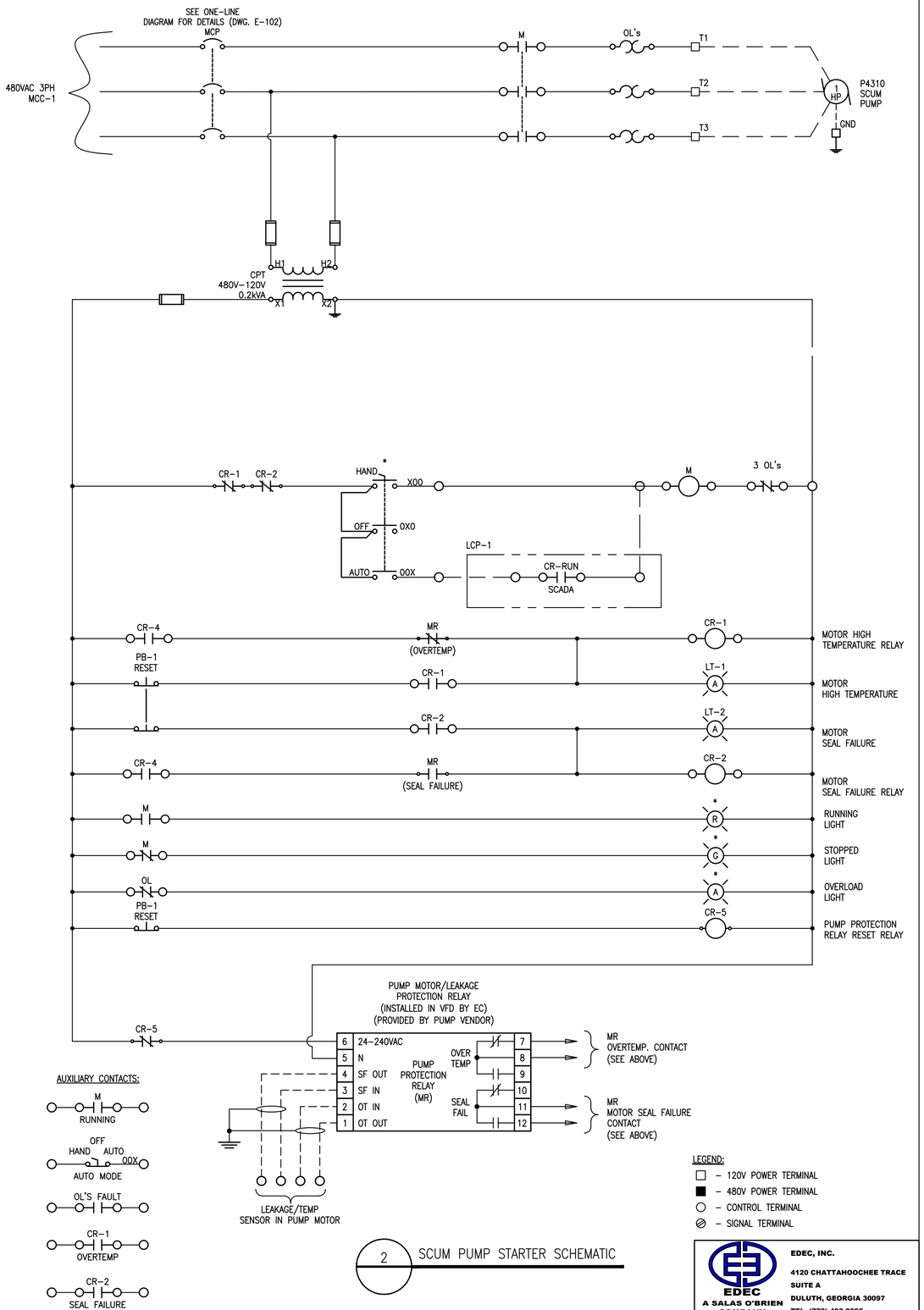
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AUXILIARY CONTACTS:



1 CLARIFIER MOTOR STARTER SCHEMATIC



AUXILIARY CONTACTS:

LEGEND:
- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

2 SCUM PUMP STARTER SCHEMATIC

NOTES:

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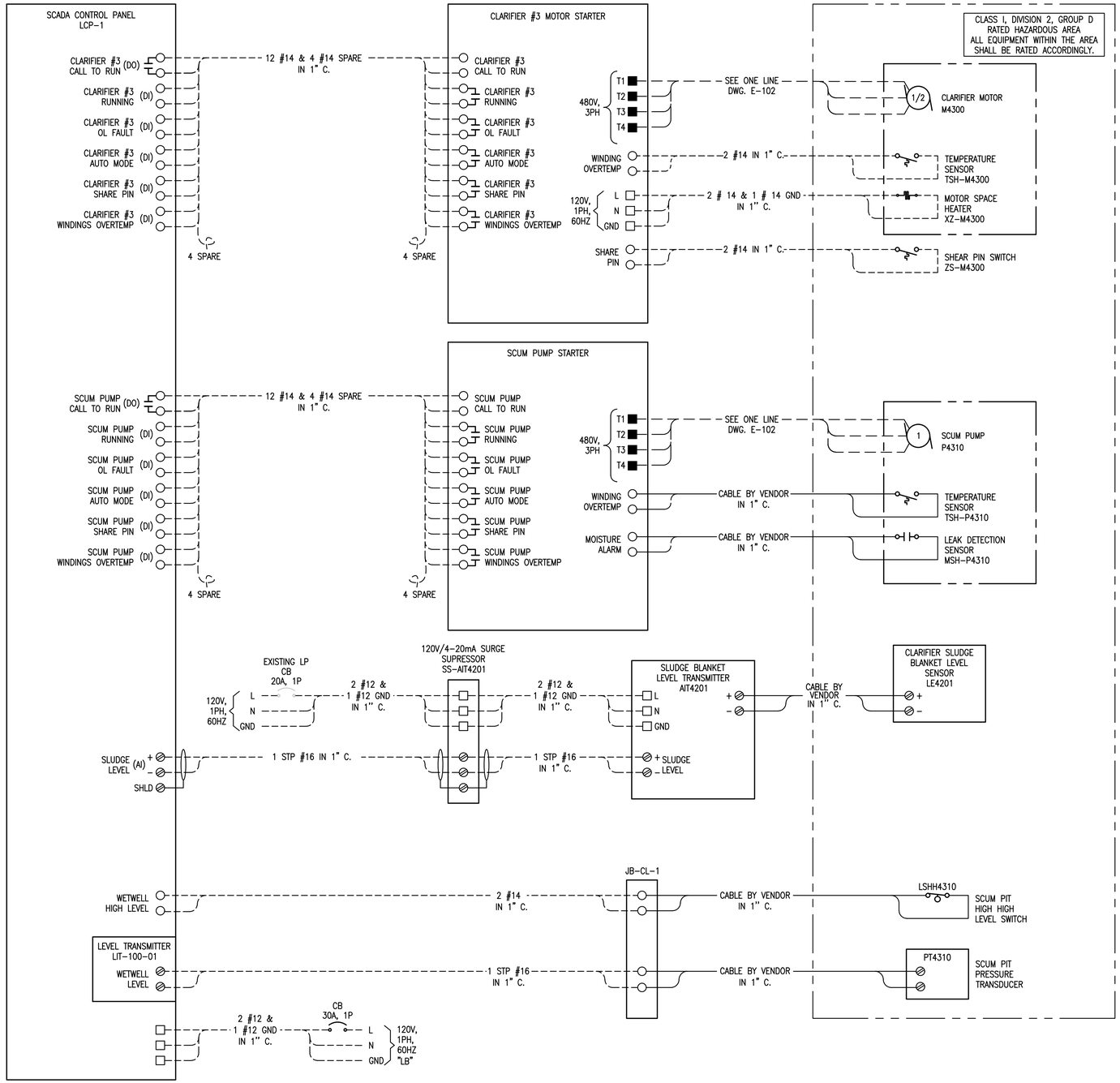
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CLARIFIER SCHEMATIC WIRING DIAGRAM

E-606

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NOTES:

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LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

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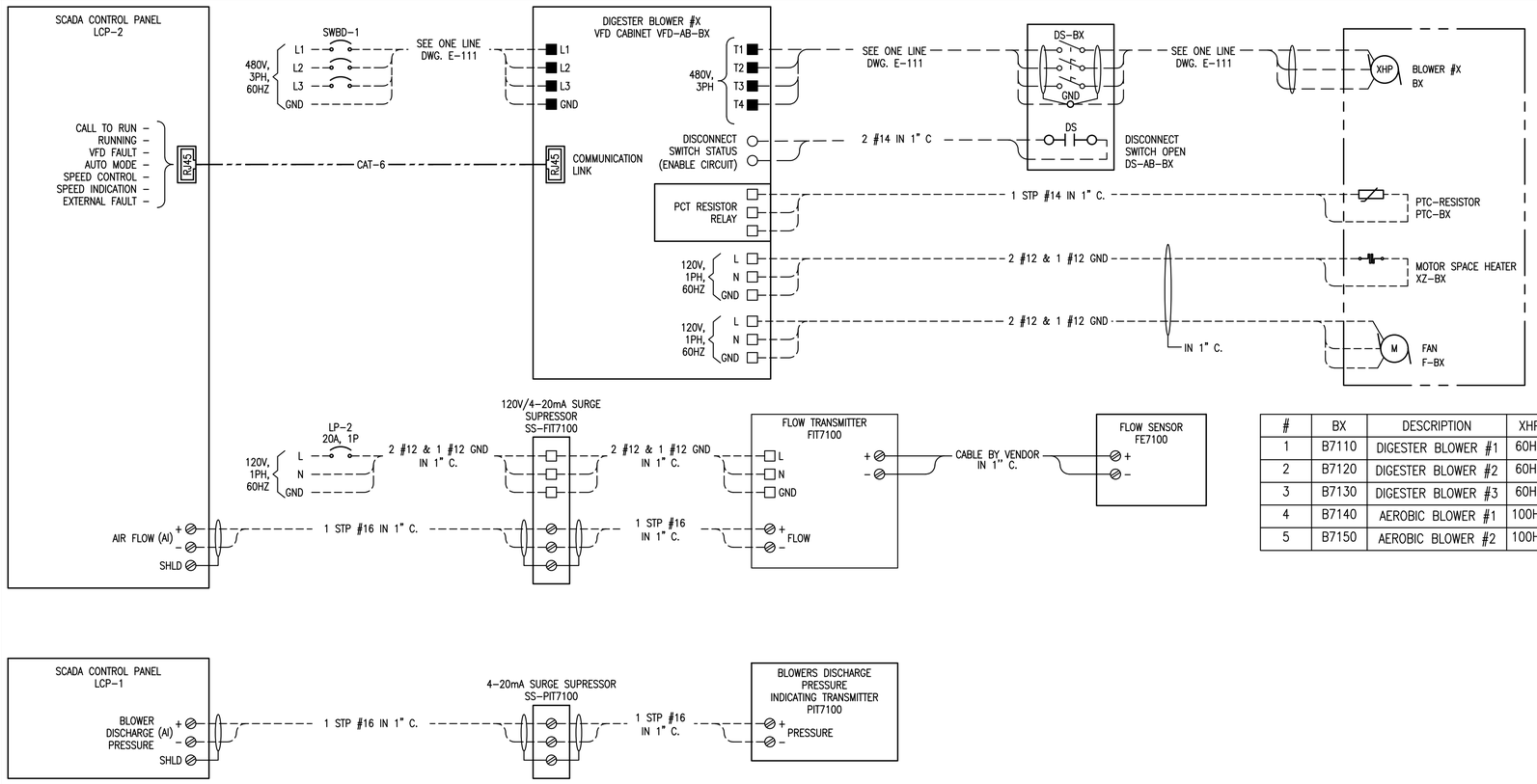
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CLARIFIER SCHEMATIC WIRING DIAGRAM

E-607

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NOTES:

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#	BX	DESCRIPTION	XHP	VFD-AB-BX	DS-AB-BX	XZ-BX	PTC-BX	F-BX
1	B7110	DIGESTER BLOWER #1	60HP	VFD-B7110	DS-B7110	XZ-B7110	PTC-B7110	F-B7110
2	B7120	DIGESTER BLOWER #2	60HP	VFD-B7120	DS-B7120	XZ-B7120	PTC-B7120	F-B7120
3	B7130	DIGESTER BLOWER #3	60HP	VFD-B7130	DS-B7130	XZ-B7130	PTC-B7130	F-B7130
4	B7140	AEROBIC BLOWER #1	100HP	VFD-B7140	DS-B7140	XZ-B7140	PTC-B7140	F-B7140
5	B7150	AEROBIC BLOWER #2	100HP	VFD-B7150	DS-B7150	XZ-B7150	PTC-B7150	F-B7150

LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

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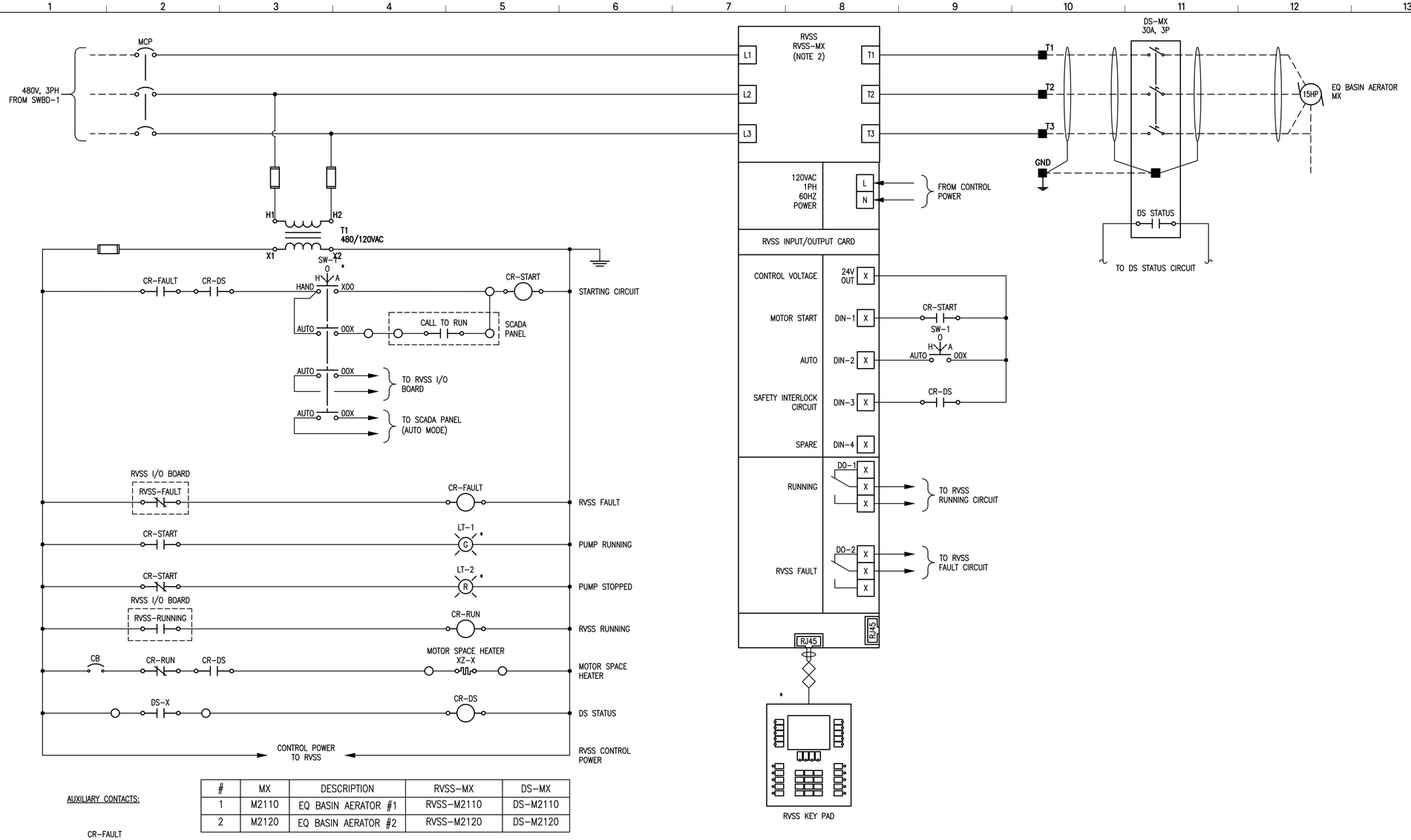
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DIGESTER SCHEMATIC WIRING DIAGRAM

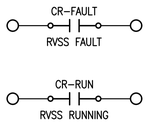
E-608

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#	MX	DESCRIPTION	RVSS-MX	DS-MX
1	M2110	EQ BASIN AERATOR #1	RVSS-M2110	DS-M2110
2	M2120	EQ BASIN AERATOR #2	RVSS-M2120	DS-M2120

AUXILIARY CONTACTS:



NOTES:

1. THE SCHEMATIC WIRING DIAGRAM IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL ADJUST THE FIELD WIRING BASED ON APPROVED VENDOR DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
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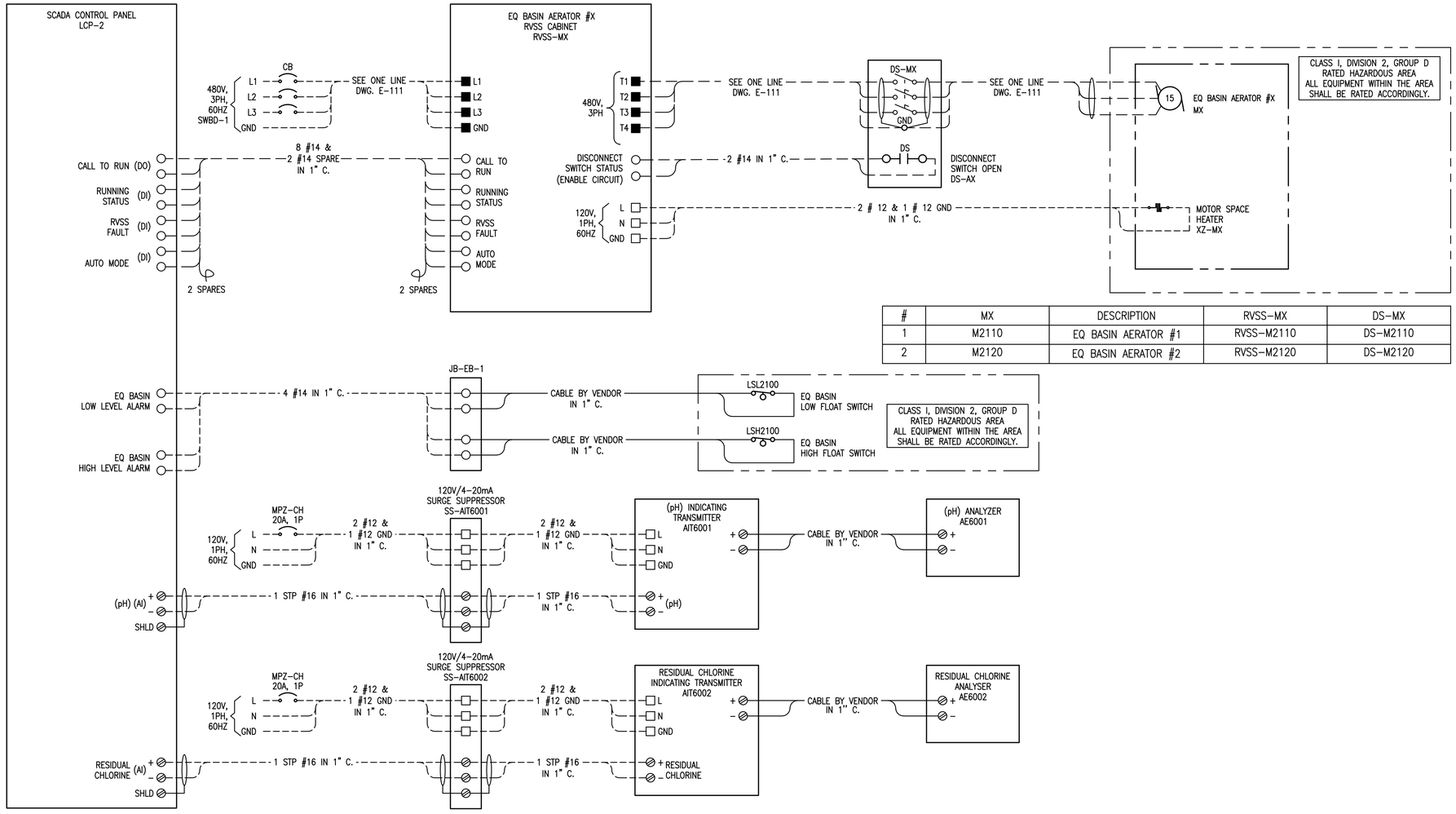
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EQ BASIN SCHEMATIC WIRING DIAGRAM

E-609

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#	MX	DESCRIPTION	RVSS-MX	DS-MX
1	M2110	EQ BASIN AERATOR #1	RVSS-M2110	DS-M2110
2	M2120	EQ BASIN AERATOR #2	RVSS-M2120	DS-M2120

NOTES:

1. THE SCHEMATIC WIRING DIAGRAM IS CONCEPTUAL IN NATURE. THE CONTRACTOR SHALL ADJUST THE FIELD WIRING BASED ON APPROVED VENDOR DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

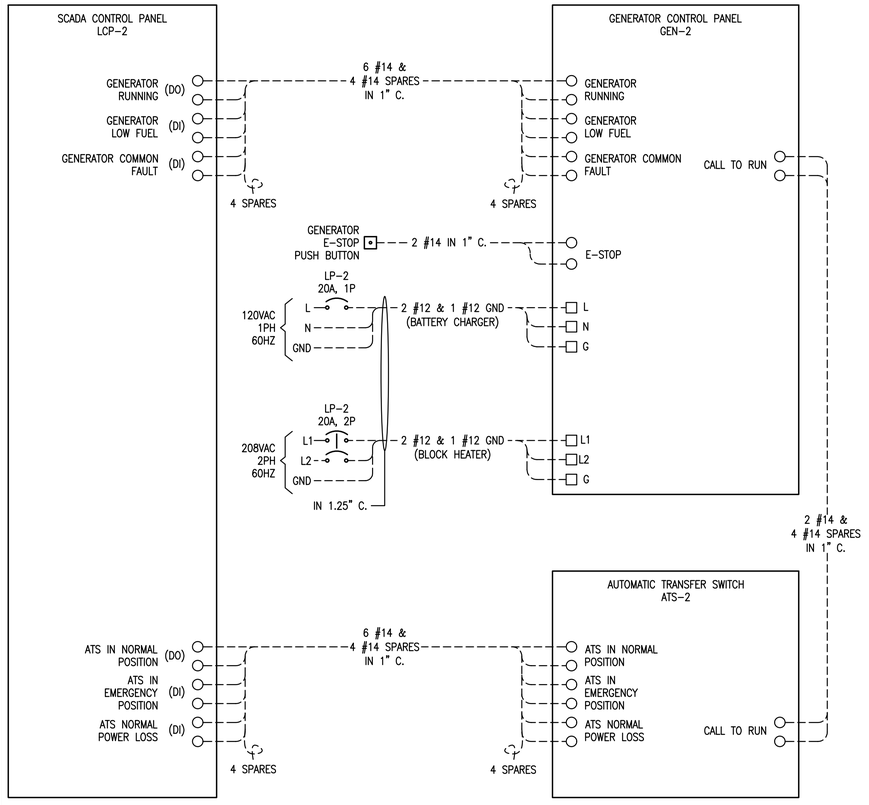
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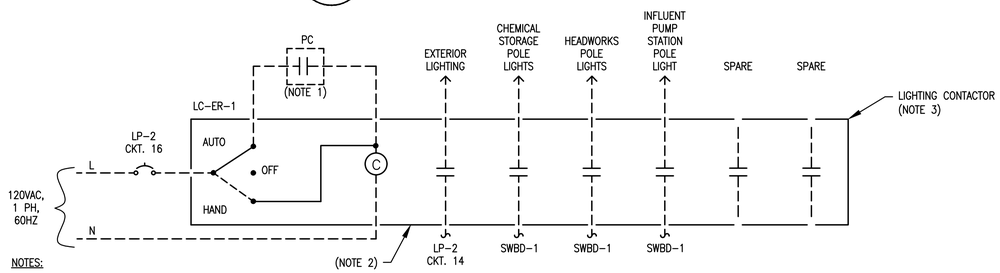
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1 GENERATOR SCHEMATIC



NOTES:

1. "PC" – PHOTOCELL, 120V. LOCATE ON THE EQUIPMENT RACK FACING NORTH.
2. ELECTRICALLY-HELD HEAVY-DUTY LIGHTING CONTACTOR. 5 POLES, 20A RATED CONTACTS. TAG THE CONDUCTORS ON THE LINE SIDE OF THE LIGHTING CONTACTOR WITH THEIR RESPECTIVE CIRCUIT NUMBER.
3. INSTALL LIGHTING CONTROL IN NEMA 1, 12 GAUGE GALVANIZED STEEL CABINET, FINISHED IN GRAY ENAMEL WITH HINGED DOOR AND LOCKING HANDLE. THE CONTACTOR SHALL BE 3 POLES, 120V COIL VOLTAGE EATON CLASS ECCO3 OR ACCEPTED EQUAL.

2 LIGHTING CONTACTOR LC-ER-1 SCHEMATIC

NOTES:

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LEGEND:

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- ○ – CONTROL TERMINAL
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DESIGNER:	DV
DRAWN BY:	DV

CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
Greensboro, Georgia

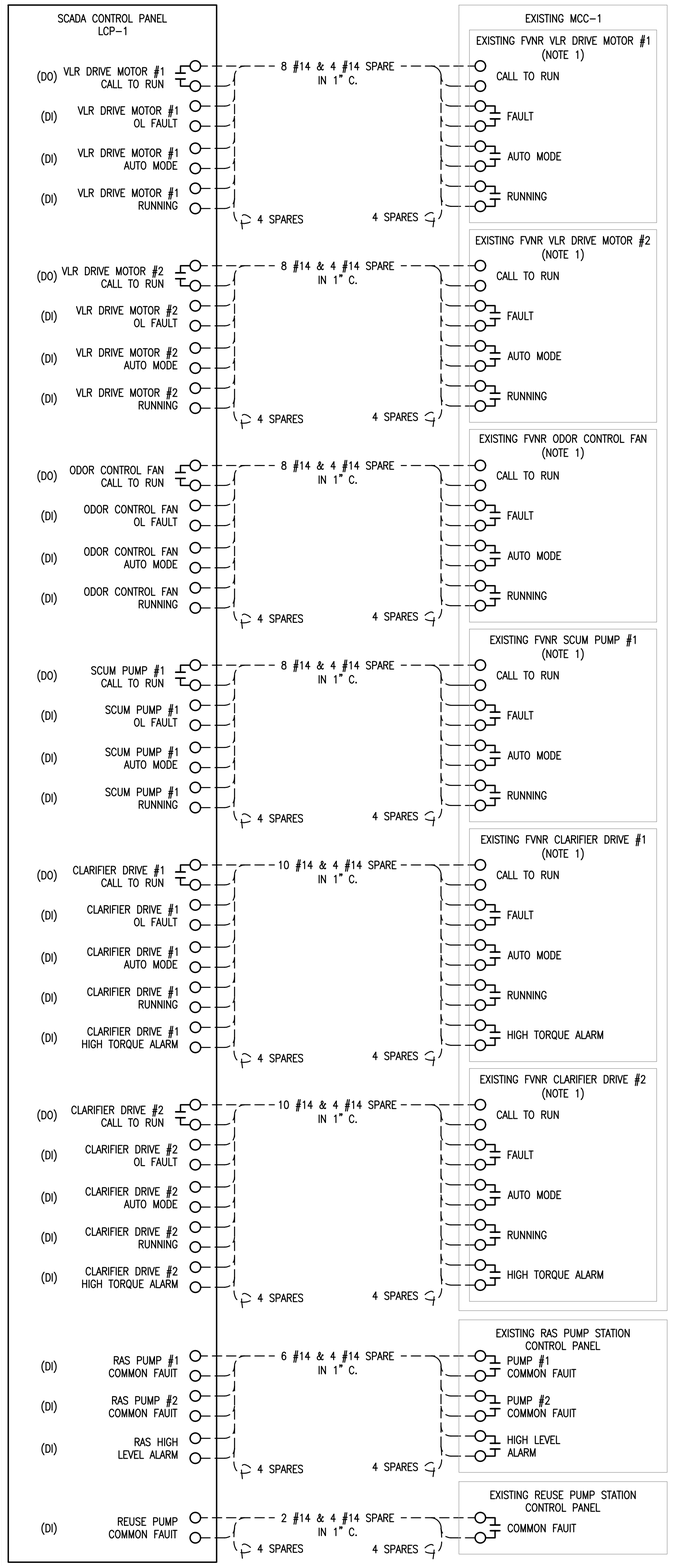
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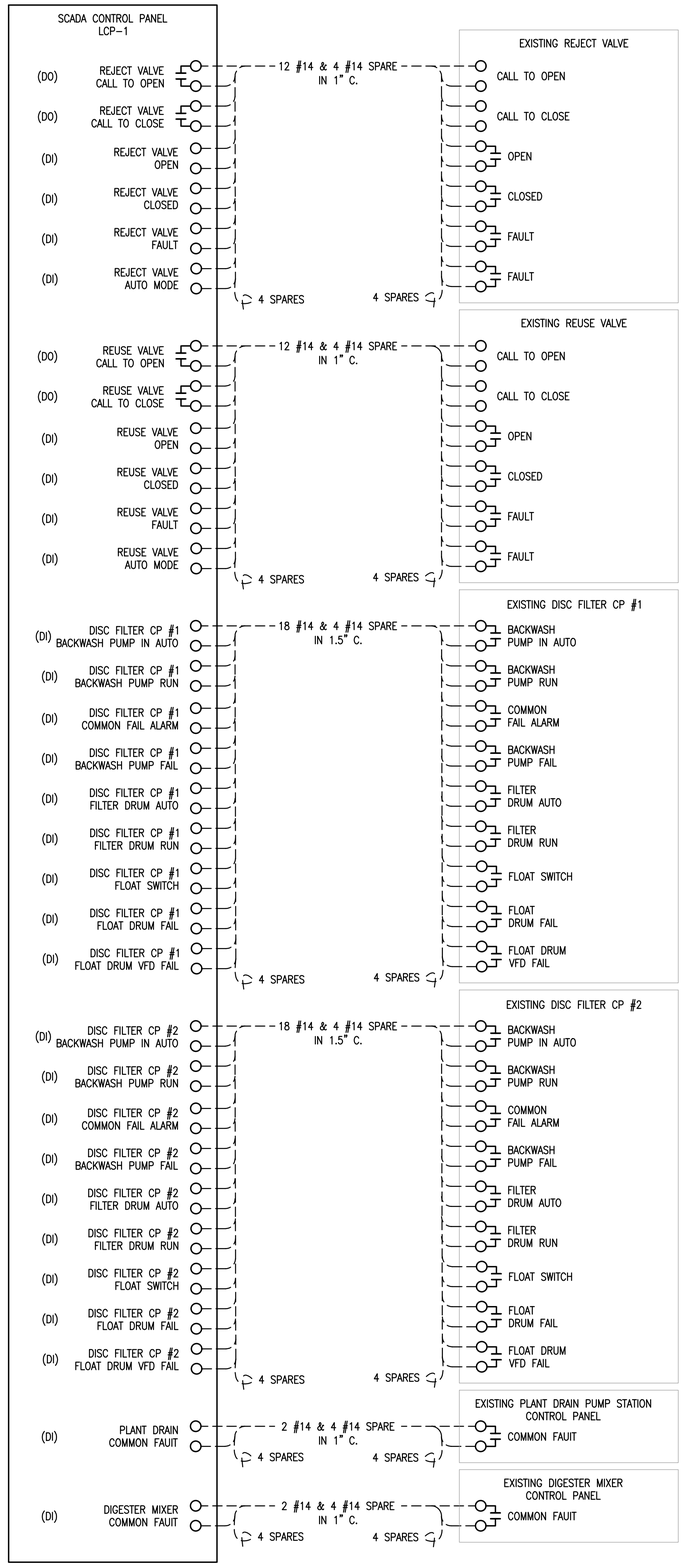
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ATS AND GENERATOR SCHEMATIC WIRING DIAGRAM

E-611

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NOTES:

1. THE CONTRACTOR SHALL PERFORM ALL THE REQUIRED MODIFICATIONS TO THE EXISTING MOTOR STARTERS TO PROVIDE ADDITIONAL AUXILIARY CONTACTS FOR MONITORING AL THE PLANT SCADA.

1 EXISTING EQUIPMENT CONNECT TO LCP-1 SCHEMATIC

LEGEND:

- □ – 120V POWER TERMINAL
- ■ – 480V POWER TERMINAL
- ○ – CONTROL TERMINAL
- ⊘ – SIGNAL TERMINAL

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

STATE OF GEORGIA
GOODWYN MILLS CAWOOD, LLC
No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE

PROJECT MANAGER: DV
ENGINEER: DV
DESIGNER: DV
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CAREY STATION URBAN
WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
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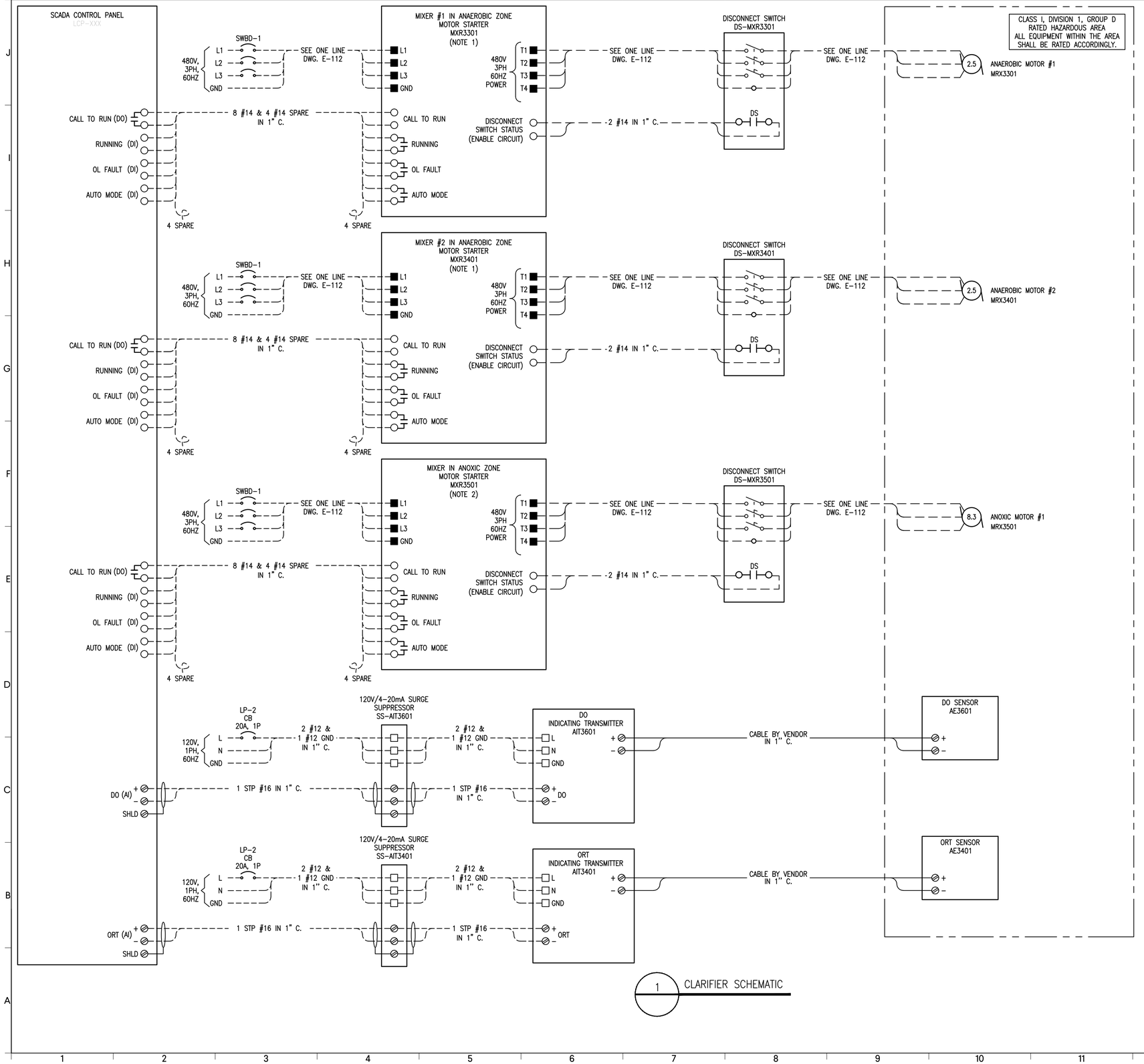
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SCHEMATIC WIRING DIAGRAM

E-612

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1 CLARIFIER SCHEMATIC

NOTES:

1. THE EQUIPMENT VENDOR SHALL PROVIDE AND CONTRACTOR SHALL INSTALL ENCLOSED MOTOR STARTER CABINET WHICH INCLUDES ALL NECESSARY POWER AND CONTROLS COMPONENTS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
   - A. CABINET SCCR SHALL BE 42kAIC MINIMUM.
   - B. ENCLOSURE: 3-POINT LATCHING WALL MOUNTED NEMA 1 WITH INNER DOORS, FOLDING SHELF, INTERIOR LIGHT FIXTURE WITH DOOR SWITCH.
   - C. MAIN DEVICE: THERMAL MAGNETIC CIRCUIT BREAKER 20A, 480V, 3P WITH LOCKABLE DISCONNECT HANDLE.
   - D. FULL VOLTAGE NON-REVERSIBLE (FVNR) NEMA TYPE COMBINATION 480V, 3PH MOTOR STARTER RATED FOR 2.5HP MOTOR WITH MOTOR CIRCUIT PROTECTORS WITH EXTERNAL OPERATOR.
   - E. 1kVA, 480-240/120V CONTROL POWER TRANSFORMER WITH PRIMARY AND SECONDARY CIRCUIT BREAKERS.
   - F. FAN & THERMOSTAT.
   - G. SELECTOR SWITCHES:
     - G.1. H-O-A SWITCH.
   - H. PUSH BUTTONS:
     - H.1. START;
     - H.2. STOP.
   - I. INDICATING LIGHTS:
     - I.1. CONTROL POWER ON (WHITE);
     - I.2. RUNNING (RED);
     - I.3. STOPPED (GREEN);
     - I.4. OVERLOAD ALARM (AMBER).
   - J. MEANS OF I/O's COMMUNICATION:
     - J.1. 120V, 5A RATED DRY CONTACTS, PREWIRED TO FIELD TERMINALS:
       - J.1.1. RUNNING;
       - J.1.2. STOPPED;
       - J.1.3. AUTO MODE;
       - J.1.4. OVERLOAD FAULT.
   - K. PUMPS HARDWIRED SAFETY INTERLOCKS SHALL INCLUDE AT LEAST:
     - K.1. PHASE LOSS ALARM;
     - K.2. OVERLOAD FAULT.
   - L. CABINET SHALL INCLUDE ALL NECESSARY COMPONENTS FOR EQUIPMENT SAFE AND RELIABLE OPERATION.

   THE CABINET SHALL BE MANUFACTURED BY EATON, SCHNEIDER ELECTRIC, ALLEN-BRADLEY, ABB, SIEMENS OR APPROVED EQUAL MANUFACTURER, THE CABINET SHALL BE UL LISTED AND LABELED. THE CONTRACTOR SHALL SUBMIT DETAILED WIRING DIAGRAM AND BOM FOR THE CONTROL PANEL TO ENGINEER FOR APPROVAL, PRIOR TO FABRICATION.

2. THE EQUIPMENT VENDOR SHALL PROVIDE AND CONTRACTOR SHALL INSTALL ENCLOSED MOTOR STARTER CABINET WHICH INCLUDES ALL NECESSARY POWER AND CONTROLS COMPONENTS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
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   - B. ENCLOSURE: 3-POINT LATCHING WALL MOUNTED NEMA 1 WITH INNER DOORS, FOLDING SHELF, INTERIOR LIGHT FIXTURE WITH DOOR SWITCH.
   - C. MAIN DEVICE: THERMAL MAGNETIC CIRCUIT BREAKER 20A, 480V, 3P WITH LOCKABLE DISCONNECT HANDLE.
   - D. FULL VOLTAGE NON-REVERSIBLE (FVNR) NEMA TYPE COMBINATION 480V, 3PH MOTOR STARTER RATED FOR 8.3HP MOTOR WITH MOTOR CIRCUIT PROTECTORS WITH EXTERNAL OPERATOR.
   - E. 1kVA, 480-240/120V CONTROL POWER TRANSFORMER WITH PRIMARY AND SECONDARY CIRCUIT BREAKERS.
   - F. FAN & THERMOSTAT.
   - G. SELECTOR SWITCHES:
     - G.1. H-O-A SWITCH.
   - H. PUSH BUTTONS:
     - H.1. START;
     - H.2. STOP.
   - I. INDICATING LIGHTS:
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GMC
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No.PEF007898
Exp.06.30.2026
CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

ISSUE	DATE
ISSUED FOR REVIEW	02-23-24

PROJECT MANAGER:	DV
ENGINEER:	MM
DESIGNER:	MM
DRAWN BY:	MM

CAREY STATION URBAN WATER REUSE FACILITY
0.5 MGD TO 1.5 MGD EXPANSION
For Piedmont Water Company
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CAUG250007

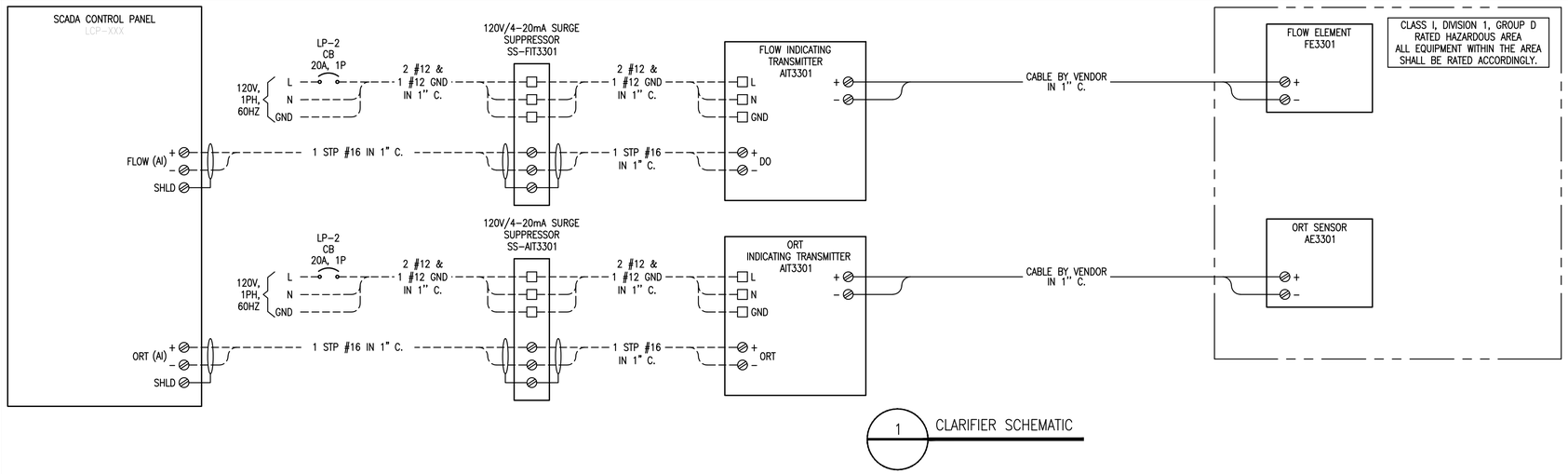
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SCHEMATIC WIRING DIAGRAM

E-613

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685

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1 CLARIFIER SCHEMATIC

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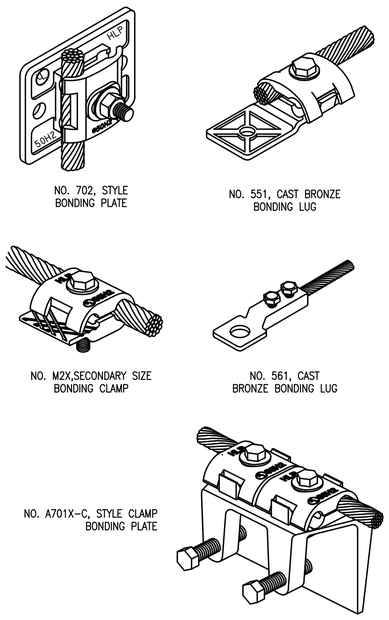
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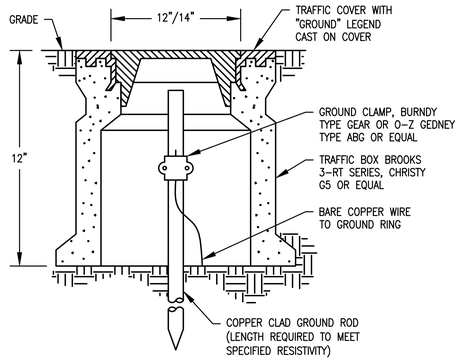
E-614

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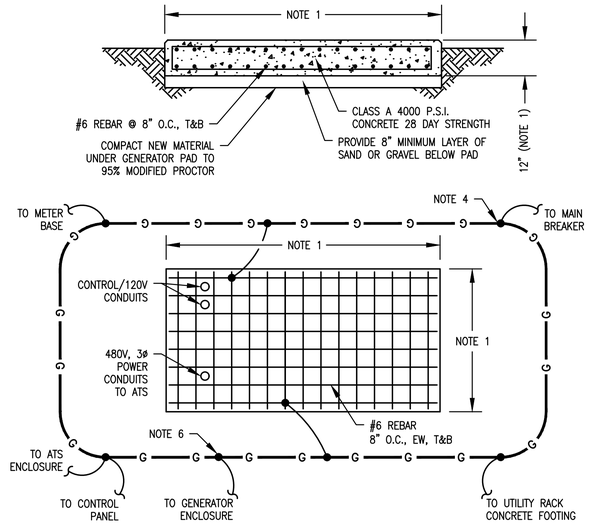
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A BONDING LUGS AND PLATES



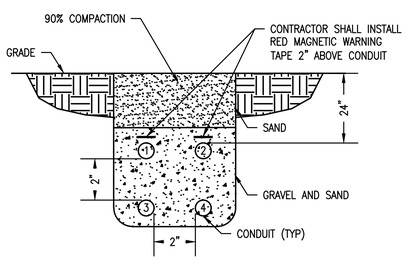
B GROUND TEST WELL



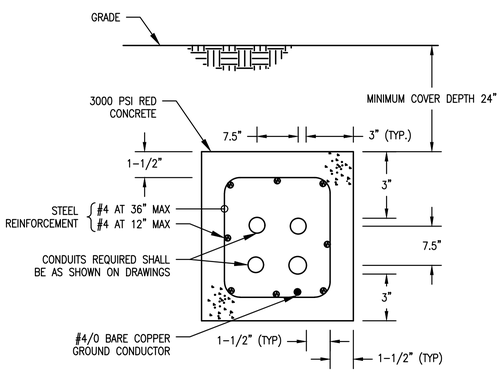
C GENERATOR PAD

NOTES:

1. REVIEW DIMENSIONS OF GEN. SET, INCLUDING W.P. HOUSING, TO DETERMINE ACTUAL DIMENSIONS OF GEN. PAD. PAD SHALL BE INSTALLED AS RECOMMENDED BY THE GENERATOR MANUFACTURER.
2. PAD SHALL BE 12" LARGER ON ALL SIDES THAN THE GENERATOR BASE AND ENCLOSURE.
3. VERIFY CONDUIT PENETRATIONS WITH GENERATOR MANUFACTURER.
4. PROVIDE FOUR (4) 10' x 3/8" COPPER CLAD STEEL GROUND RODS AS SHOWN WITH #1/0 BARE COPPER GROUND WIRE AROUND THE GENERATOR PAD. CONNECT GROUND WIRE TO THE GENERATOR ENCLOSURE.
5. EXACT GENERATOR PAD SIZE SHALL BE DETERMINED BY THE GENERATOR MANUFACTURER'S SHOP DRAWING PRIOR TO INSTALLATION.
6. GENERATOR HOUSING SHALL BE GROUNDED, NOT THE NEUTRAL.



D CONDUIT SECTION IN TRENCH



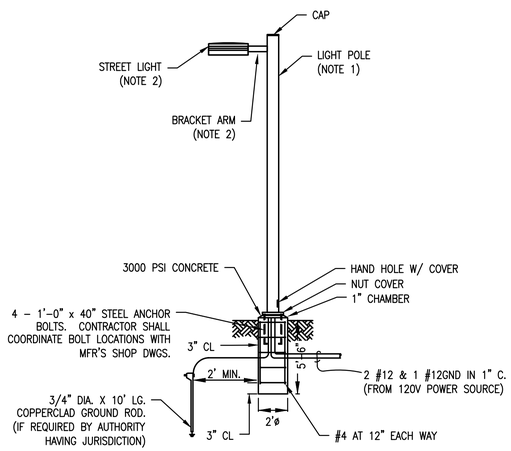
(DIMENSIONS ARE MINIMUM)

REINFORCED DUCTBANK

DUCT BANK NOTES:

1. ALL DUCTBANKS CROSSING ROADS OR HEAVY TRAFFIC AREAS SHALL BE REINFORCED WITHIN 5 (FIVE) FEET OF TRAFFIC AREAS.
2. CONTRACTOR SHALL FIELD COORDINATE EXACT DUCTBANK ROUTING WITH EXISTING UTILITIES.

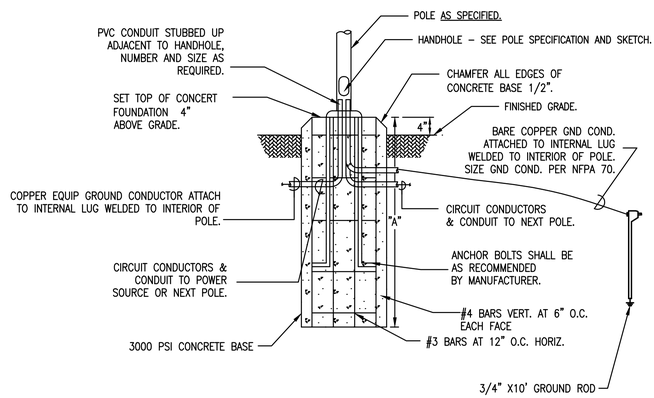
E REINFORCED DUCTBANK INSTALLATION DETAIL



LIGHT POLE NOTES:

1. WIRING TO BE CONTINUOUS TO FIXTURE. NO SPLICING IN CONDUIT IS PERMITTED.
2. STREET LIGHT MUST BE MOUNTED ON A SQUARE STRAIGHT ALUMINUM POLE FEET IN HEIGHT. LIGHT POLE SHALL BE LITHONIA #SSA-"20"-DDB WITH ALL THE REQUIRED ANCHORING AND MOUNTING ACCESSORIES.
3. STREET LIGHT ATTACHED TO THE TOP OF THE POLE SHALL BE A 102W LED LIGHTING FIXTURE LITHONIA #DSX1LED-P3-40K-T3M-MVOLT-SPUMBA-KMA-SF-DDBXD WITH "PER" PHOTOCELL OR APPROVED EQUAL OR ALTERNATE ACCEPTABLE TO THE COUNTY.

F LIGHT POLE INSTALLATION DETAIL



POLE HEIGHT	A	B
8' -12'	3'-0"	1'-0"
13' - 20'	4'-6"	1'-6"
21' - 25'	6'-0"	2'-0"

G LIGHTING POLE BASE DETAIL

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
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GMC
801 Broad Street, Suite 900
Augusta, GA 30901
T 706.303.3272

"GOODWYN MILLS CAWOOD, LLC No.PEF007898 Exp.06.30.2026" STATE OF GEORGIA CERTIFICATE OF AUTHORIZATION

1" 0" .5" 1"

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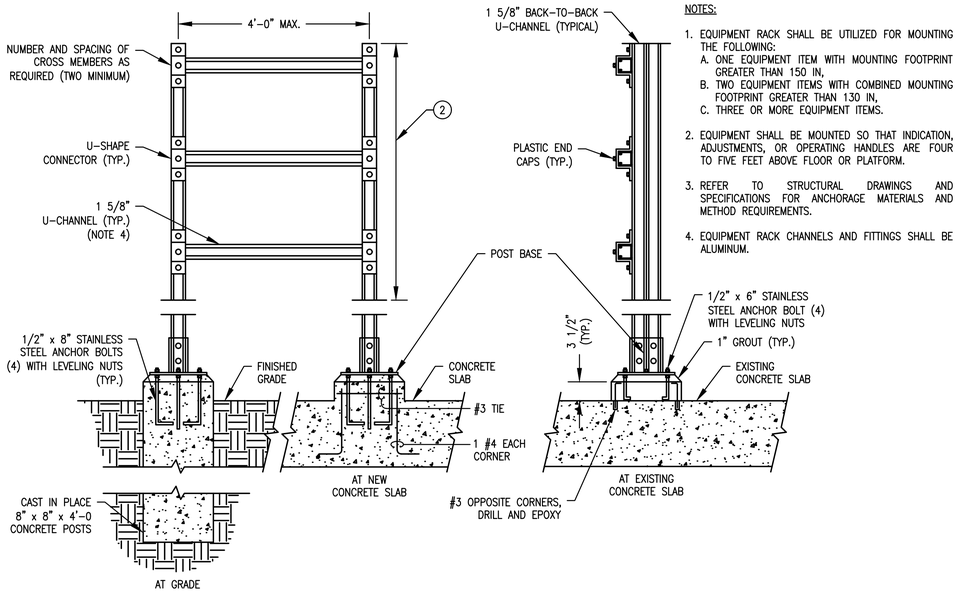
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ELECTRICAL INSTALLATION DETAILS

E-901

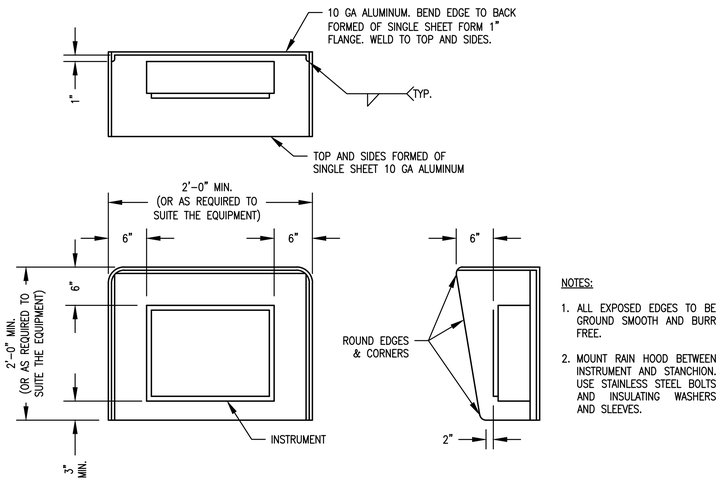
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NOTES:

1. EQUIPMENT RACK SHALL BE UTILIZED FOR MOUNTING THE FOLLOWING:
   A. ONE EQUIPMENT ITEM WITH MOUNTING FOOTPRINT GREATER THAN 150 IN,
   B. TWO EQUIPMENT ITEMS WITH COMBINED MOUNTING FOOTPRINT GREATER THAN 130 IN,
   C. THREE OR MORE EQUIPMENT ITEMS.
2. EQUIPMENT SHALL BE MOUNTED SO THAT INDICATION, ADJUSTMENTS, OR OPERATING HANDLES ARE FOUR TO FIVE FEET ABOVE FLOOR OR PLATFORM.
3. REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ANCHORAGE MATERIALS AND METHOD REQUIREMENTS.
4. EQUIPMENT RACK CHANNELS AND FITTINGS SHALL BE ALUMINUM.

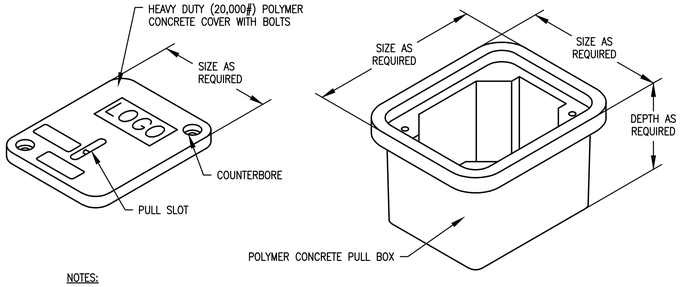
A EQUIPMENT RACK



NOTES:

1. ALL EXPOSED EDGES TO BE GROUND SMOOTH AND BURR FREE.
2. MOUNT RAIN HOOD BETWEEN INSTRUMENT AND STANCHION. USE STAINLESS STEEL BOLTS AND INSULATING WASHERS AND SLEEVES.

B SUN/RAIN HOOD FOR INSTRIMENTS AND CONTROL PANELS

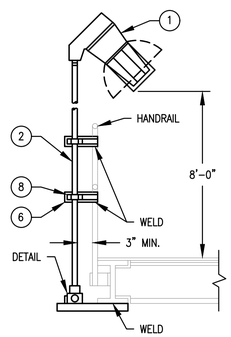


NOTES:

1. PULL BOX TO BE MADE WITH PRECAST POLYMER CONCRETE FIBERGLASS REINFORCED, STACKABLE WITH SELF-ALIGNING, REPLACEABLE EZ-NUT.
2. THE CONTRACTOR SHALL SIZE THE PULLBOXES BASED ON THE NUMBER OF CONDUITS. USE MANHOLES WHERE PULLBOX WIDTH/HEIGHT IS NOT SUFFICIENT TO ACCEPT ALL ENTERING/EXITING CONDUITS.
3. "LOGO" ENGRAVING SHALL READ "ELECTRICAL" FOR ALL ELECTRICAL/FIBER UNDERGROUND DUCTBANKS.

TIER TYPE	APPLICATION DESCRIPTION	NOTES
8	SIDEWALK APPLICATIONS, NOT EXPOSED TO ANY VEHICLE TRAFFIC	
15	OFF-ROADWAY APPLICATIONS SUBJECT TO OCCASIONAL NON-DELIBERATE VEHICLE TRAFFIC	
22	DRIVEWAY AND PARKING LOT APPLICATIONS SUBJECT TO OCCASIONAL NON-DELIBERATE HEAVY VEHICULAR TRAFFIC	
AASHTO H-20	DRIVEWAY, PARKING LOT, AND OFF-ROADWAY APPLICATIONS SUBJECT TO HEAVY VEHICLE TRAFFIC	UTILIZE PRECAST HANDHOLES FOR AASHTO H-20 APPLICATIONS

C UNDERGROUND PULL BOX



BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	SEE LIGHTING FIXTURE SCHEDULE
2	A/R	1.5" PVC COATED STEEL CONDUIT
3	1	T-CONDULET 1.5" W/COVER & GASKET
4	2	REDUCER 1.5" - 0.75"
5	2	UNISTRUT CLAMP (0.75")
6	A/R	UNISTRUT P1000 (LENGTH TO SUIT) OR EQUAL
7	A/R	0.75" PVC COATED STEEL CONDUIT
8	2	UNISTRUT CLAMP (1.5")

A/R = AS REQUIRED

D STANCHION FIXTURE

GMC
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Greensboro, Georgia

CAUG250007

NOT RELEASED FOR CONSTRUCTION

ELECTRICAL INSTALLATION DETAILS

E-902

EDEC
A SALAS O'BRIEN COMPANY
EDEC, INC.
4120 CHATTAHOOCHEE TRACE
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