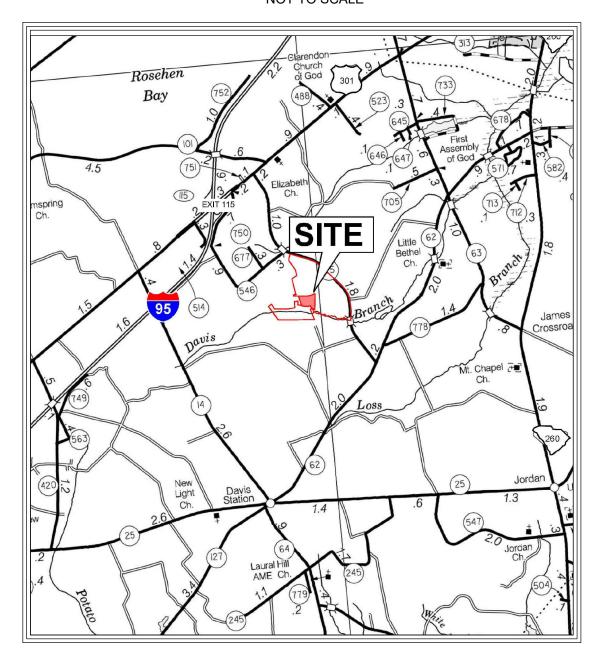


ROADWAY, WATER, AND WASTEWATER IMPROVEMENTS JO ROGERS JR BOULEVARD CLARENDON COUNTY INDUSTRIAL PARK UNINCORPORATED CLARENDON COUNTY, SOUTH CAROLINA

VICINITY MAP



LOCATION MAP SCALE 1" = 1 MILE



CLARENDON OUNTY Economic Development

SHEET INDEX

SHEET NO	SHEET
C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS AND GENERAL NOTES
C2.0	OVERALL IMPROVEMENT PLAN
C3.0	ROADWAY PLAN AND PROFILE - STA 0+00 - STA 12+00
C3.1	ROADWAY PLAN AND PROFILE - STA 12+00 - STA 14+00
C3.2	STORM DRAINAGE PROFILES
C3.3	ROADWAY CROSS SECTIONS - STA: 0+00 - STA 3+50
C3.4	ROADWAY CROSS SECTIONS - STA: 4+00 - STA 7+50
C3.5	ROADWAY CROSS SECTIONS - STA: 8+00 - STA 11+50
C3.6	ROADWAY CROSS SECTIONS - STA: 12+00 - STA 13+50
C4.0	WATER MAIN PLAN AND PROFILE - STA 0+00 - STA 12+90
C5.0	WASTEWATER GRAVITY MAIN PLAN AND PROFILE - STA 0+00 - STA 8+49
C6.0	WASTEWATER FORCE MAIN PLAN AND PROFILE - STA 0+00 - STA 12+00
C6.1	WASTEWATER FORCE MAIN PLAN AND PROFILE - STA 12+00 - STA 24+36
C7.0	WASTEWATER PUMP STATION PLAN
C8.0	EROSION AND SEDIMENT CONTROL PLAN - PHASE I
C8.1	EROSION AND SEDIMENT CONTROL PLAN - PHASE II
C8.2	EROSION AND SEDIMENT CONTROL PLAN - PHASE III
C9.0	ROADWAY DETAILS
C10.0	WATER MAIN DETAILS
C11.0	WASTEWATER GRAVITY MAIN DETAILS
C12.0	WASTEWATER FORCE MAIN DETAILS
C13.0	WASTEWATER PUMP STATION DETAILS
C14.0	EROSION AND SEDIMENT CONTROL DETAILS (1 OF 2)
C14.1	EROSION AND SEDIMENT CONTROL DETAILS (2 OF 2)
E001	ELECTRICAL SYMBOLS, NOTES, AND DETAILS
ES01	ELECTRICAL PLAN AND POWER RISER DIAGRAM

I have placed my signature and seal on the design documents submitted signifying that I accept responsibility for the design of the system. Further, I certify to the best of my knowledge and belief that the design is consistent with the requirements of Title 48, Chapter 14 of the Code of Laws of SC, 1976 as amended, pursuant to Regulation 72-300 et seq. (if applicable), and in accordance with the terms and conditions of

NPDES PERMIT INFORMATION

NPDES DISTURBED AREA = 4.2 ACRES

OWNER INFORMATION

DEVELOPER: CLARENDON COUNTY ECONOMIC DEVELOPMENT CONTACT: MR. GEORGE KOSINSKI, SCCED EXECUTIVE DIRECTOR ADDRESS: 411 SUNSET DRIVE CITY, STATE: MANNING, SOUTH CAROLINA 29102

EMAIL: GKÓSINSKI@CLARENDONCOUNTYGOV.ORG

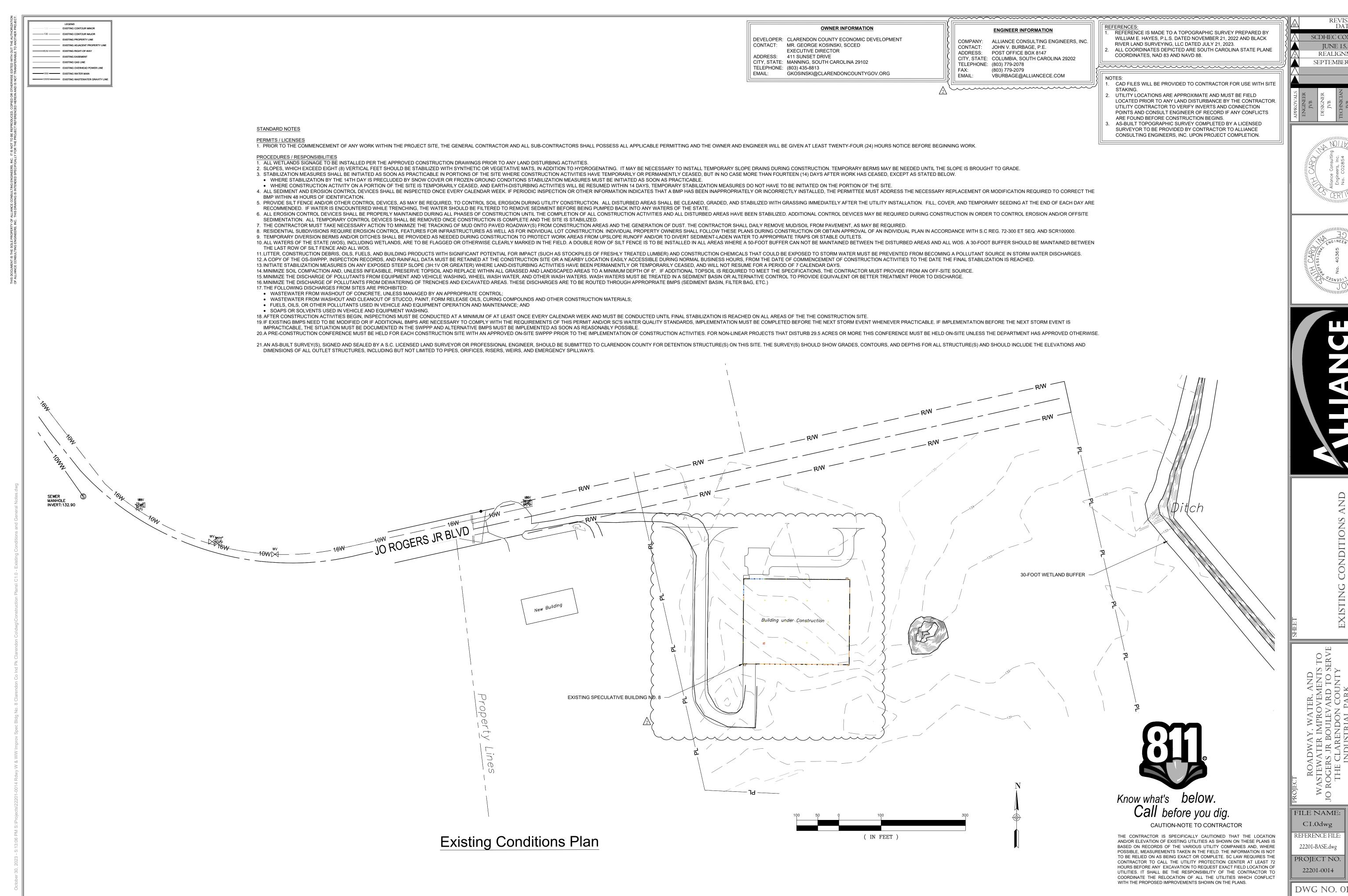
TELEPHONE: (803) 435-8813

COMPANY: ALLIANCE CONSULTING ENGINEERS, INC. CONTACT: JOHN V. BURBAGE, P.E. ADDRESS: POST OFFICE BOX 8147 CITY, STATE: COLUMBIA, SOUTH CAROLINA 29202 TELEPHONE: (803) 779-2078 (803) 779-2079 EMAIL: VBURBAGE@ALLIANCECE.COM

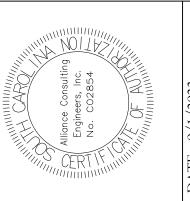
ENGINEER INFORMATION

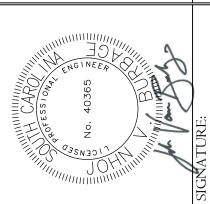
JANUARY 2023

Project No. 2220I-00I4

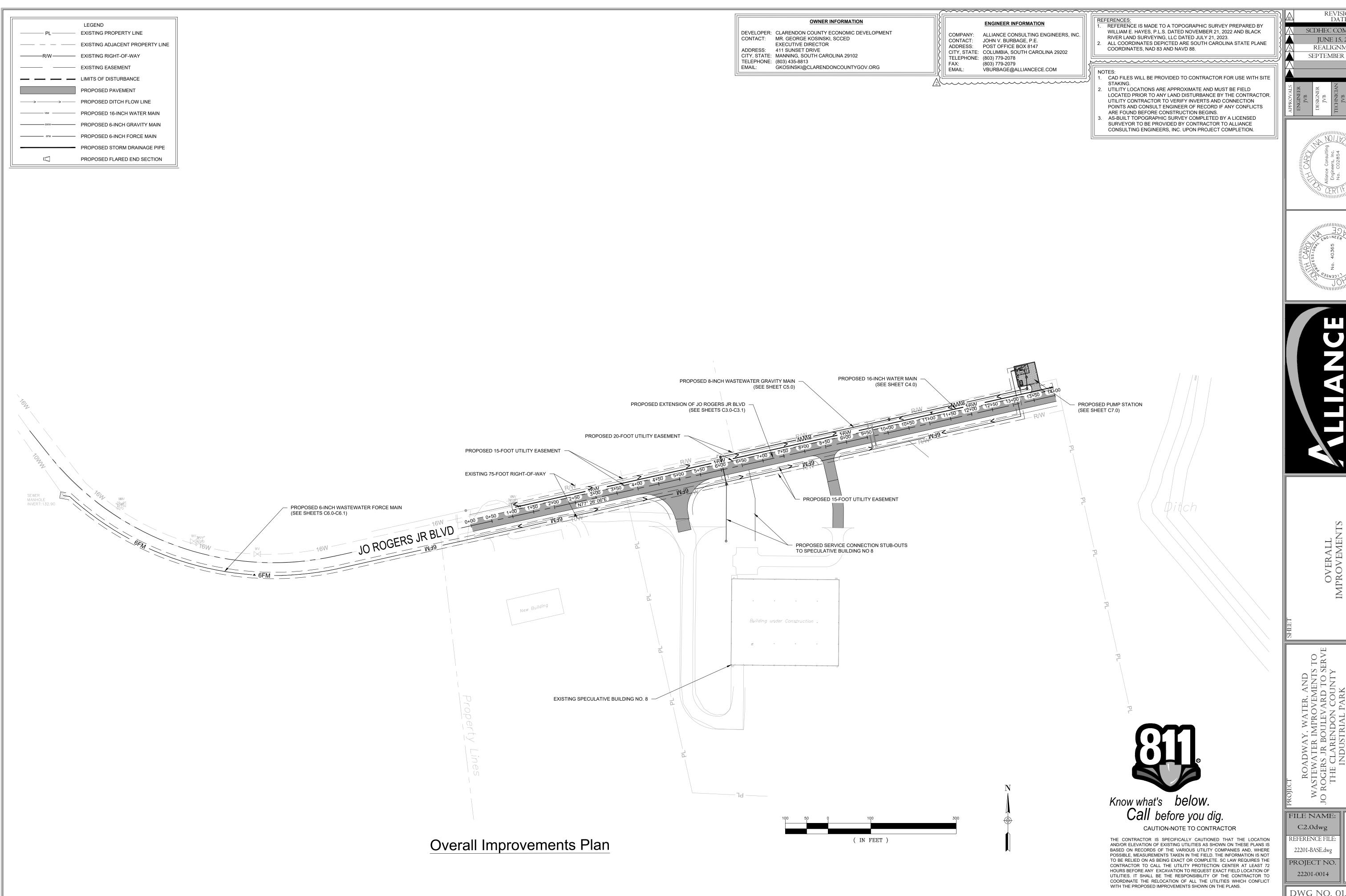


REVISION SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023



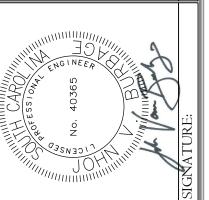


SHEET C1.0

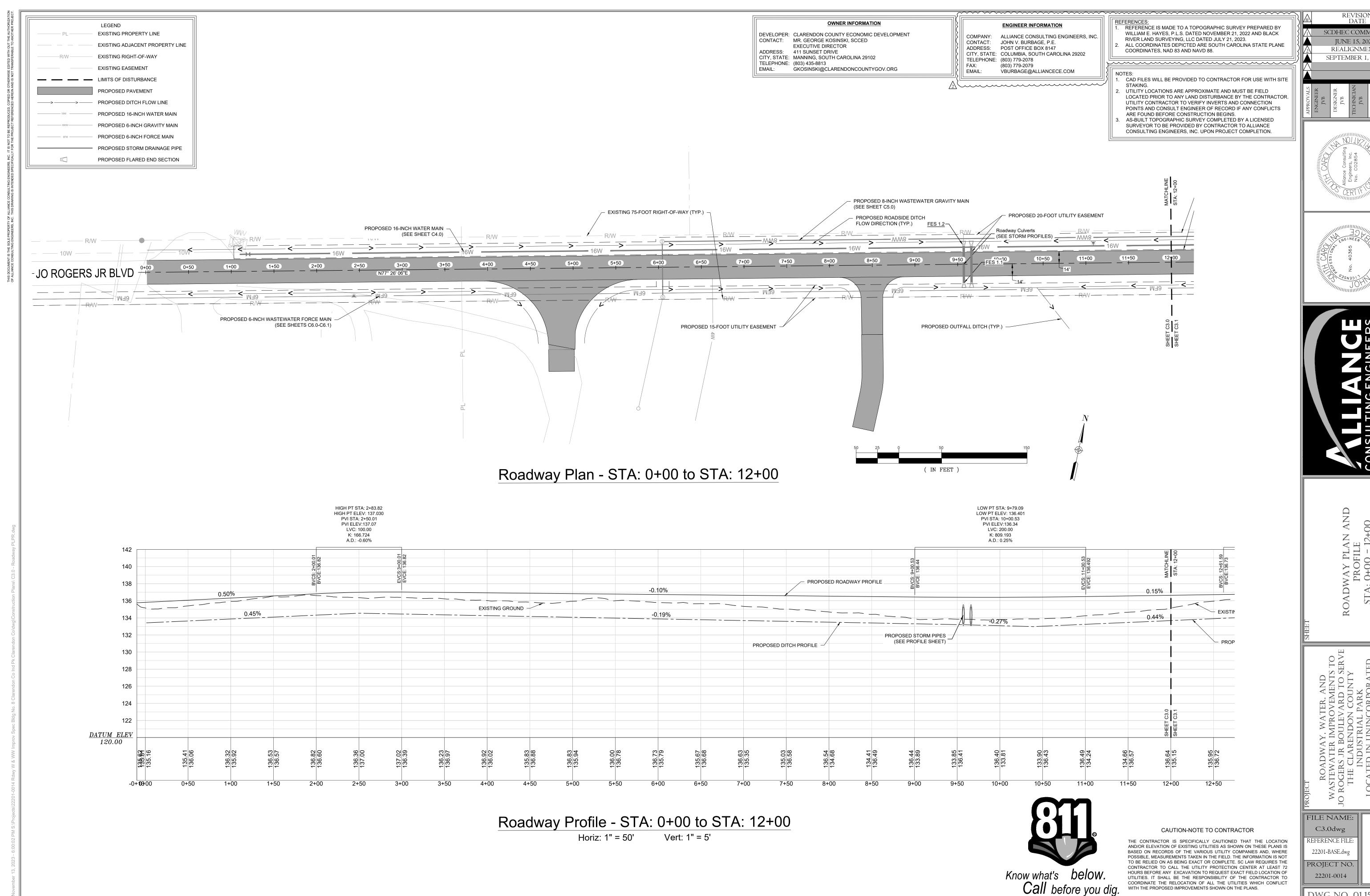


REVISION SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023

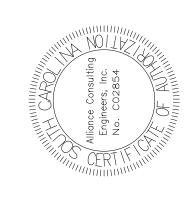


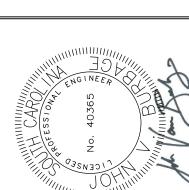


SHEET



REVISION DATE SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023





ROADWAY PLAN ANI PROFILE STA: 0+00 - 12+00

SHEET

DEVELOPER: CLARENDON COUNTY ECONOMIC DEVELOPMENT CONTACT: MR. GEORGE KOSINSKI, SCCED

EXECUTIVE DIRECTOR ADDRESS: 411 SUNSET DRIVE CITY, STATE: MANNING, SOUTH CAROLINA 29102 TELEPHONE: (803) 435-8813 EMAIL: GKOSINSKI@CLARENDONCOUNTYGOV.ORG **ENGINEER INFORMATION**

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TELEPHONE: (803) 779-2078 (803) 779-2079 EMAIL: VBURBAGE@ALLIANCECE.COM WILLIAM E. HAYES, P.L.S. DATED NOVEMBER 21, 2022 AND BLACK RIVER LAND SURVEYING, LLC DATED JULY 21, 2023. ALL COORDINATES DEPICTED ARE SOUTH CAROLINA STATE PLANE COORDINATES, NAD 83 AND NAVD 88.

REFERENCE IS MADE TO A TOPOGRAPHIC SURVEY PREPARED BY

UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD LOCATED PRIOR TO ANY LAND DISTURBANCE BY THE CONTRACTOR. UTILITY CONTRACTOR TO VERIFY INVERTS AND CONNECTION POINTS AND CONSULT ENGINEER OF RECORD IF ANY CONFLICTS ARE FOUND BEFORE CONSTRUCTION BEGINS.

AS-BUILT TOPOGRAPHIC SURVEY COMPLETED BY A LICENSED SURVEYOR TO BE PROVIDED BY CONTRACTOR TO ALLIANCE CONSULTING ENGINEERS, INC. UPON PROJECT COMPLETION.

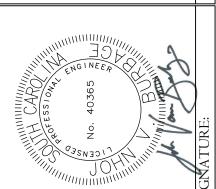
REVISION DATE

SCDHEC COMMENTS

JUNE 15, 2023

REALIGNMENT

SEPTEMBER I, 2023





ROADWAY PLAN AND PROFILE STA: 12+00 - 14+00

FILE NAME: C3.0dwg SHEET REFERENCE FILE: 22201-BASE.dwg PROJECT NO.

CAUTION-NOTE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT

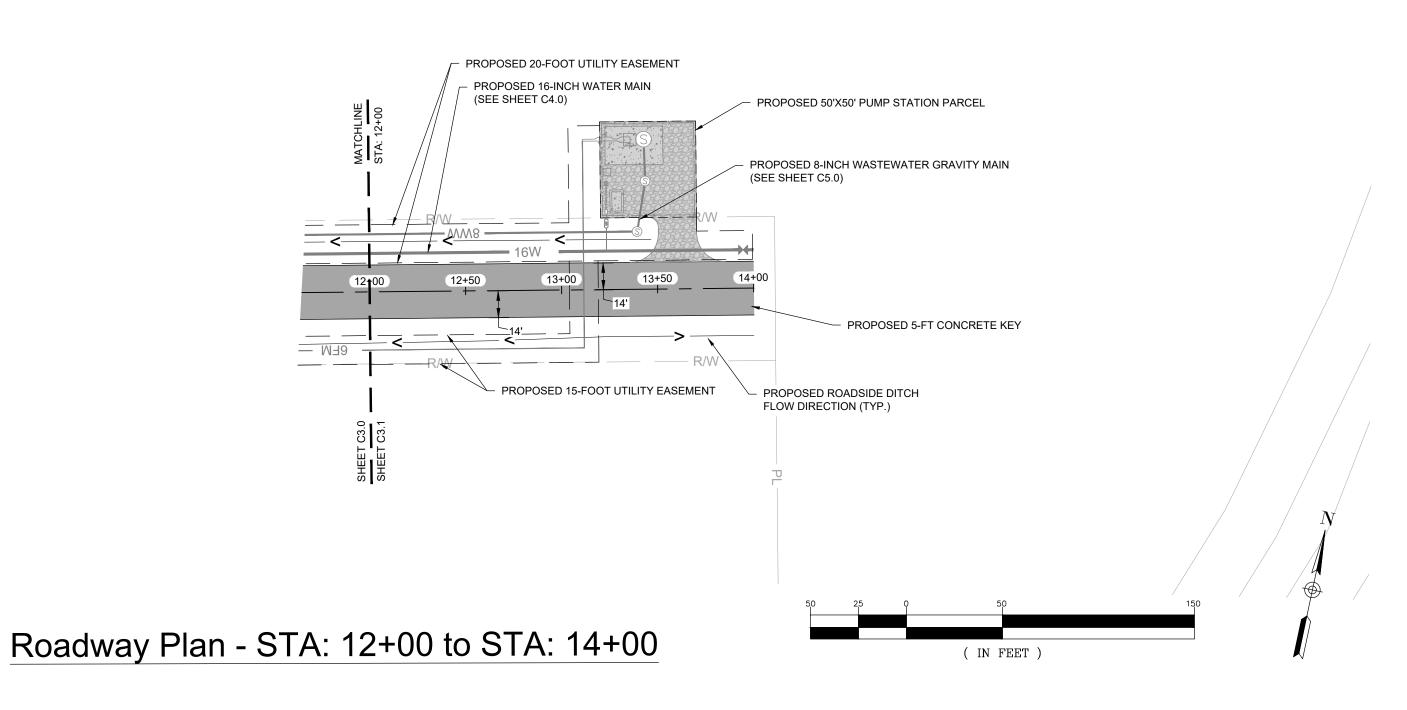
TO BE RELIED ON AS BEING EXACT OR COMPLETE. SC LAW REQUIRES THE

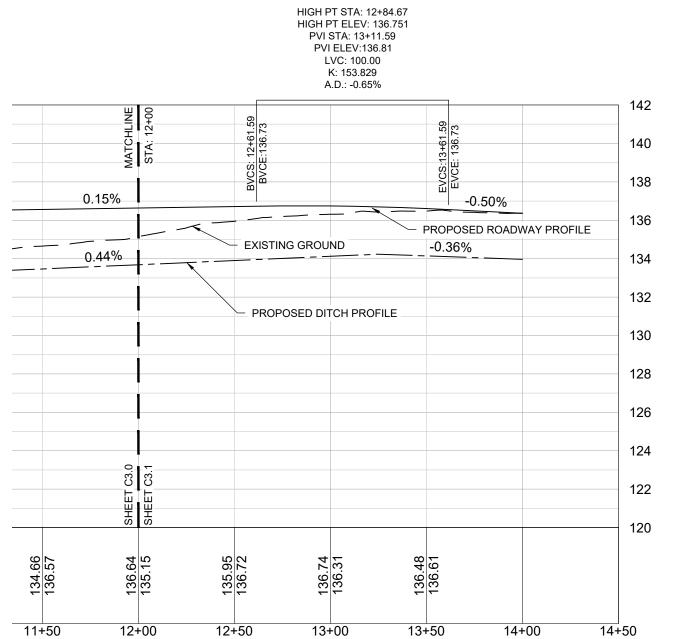
CONTRACTOR TO CALL THE UTILITY PROTECTION CENTER AT LEAST 72

HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF

UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE RELOCATION OF ALL THE UTILITIES WHICH CONFLICT 22201-0014

DWG NO. 01,1598-D28





Roadway Profile - STA: 12+00 to STA: 14+00 Horiz: 1" = 50'

Vert: 1" = 5'

Know what's below.

Call before you dig.

OWNER INFORMATION

DEVELOPER: CLARENDON COUNTY ECONOMIC DEVELOPMENT CONTACT: MR. GEORGE KOSINSKI, SCCED

EXECUTIVE DIRECTOR

ADDRESS: 411 SUNSET DRIVE CITY, STATE: MANNING, SOUTH CAROLINA 29102 TELEPHONE: (803) 435-8813 EMAIL: GKOSINSKI@CLARENDONCOUNTYGOV.ORG **ENGINEER INFORMATION**

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CITY, STATE: COLUMBIA, SOUTH CAROLINA 29202 TELEPHONE: (803) 779-2078 (803) 779-2079 EMAIL: VBURBAGE@ALLIANCECE.COM

/2\\.....

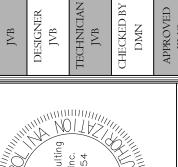
REFERENCE IS MADE TO A TOPOGRAPHIC SURVEY PREPARED BY

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AS-BUILT TOPOGRAPHIC SURVEY COMPLETED BY A LICENSED SURVEYOR TO BE PROVIDED BY CONTRACTOR TO ALLIANCE CONSULTING ENGINEERS, INC. UPON PROJECT COMPLETION.



REVISION DATE

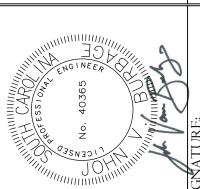
SCDHEC COMMENTS

JUNE 15, 2023

REALIGNMENT

SEPTEMBER I, 2023







FILE NAME: C3.0dwg REFERENCE FILE:

CAUTION-NOTE TO CONTRACTOR

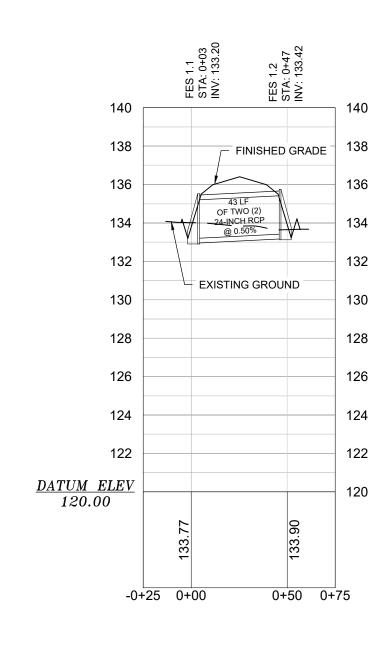
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TO BE RELIED ON AS BEING EXACT OR COMPLETE. SC LAW REQUIRES THE

SHEET 22201-BASE.dwg

C3.2 PROJECT NO. 22201-0014

DWG NO. 01,1598-D28



Roadway Culverts

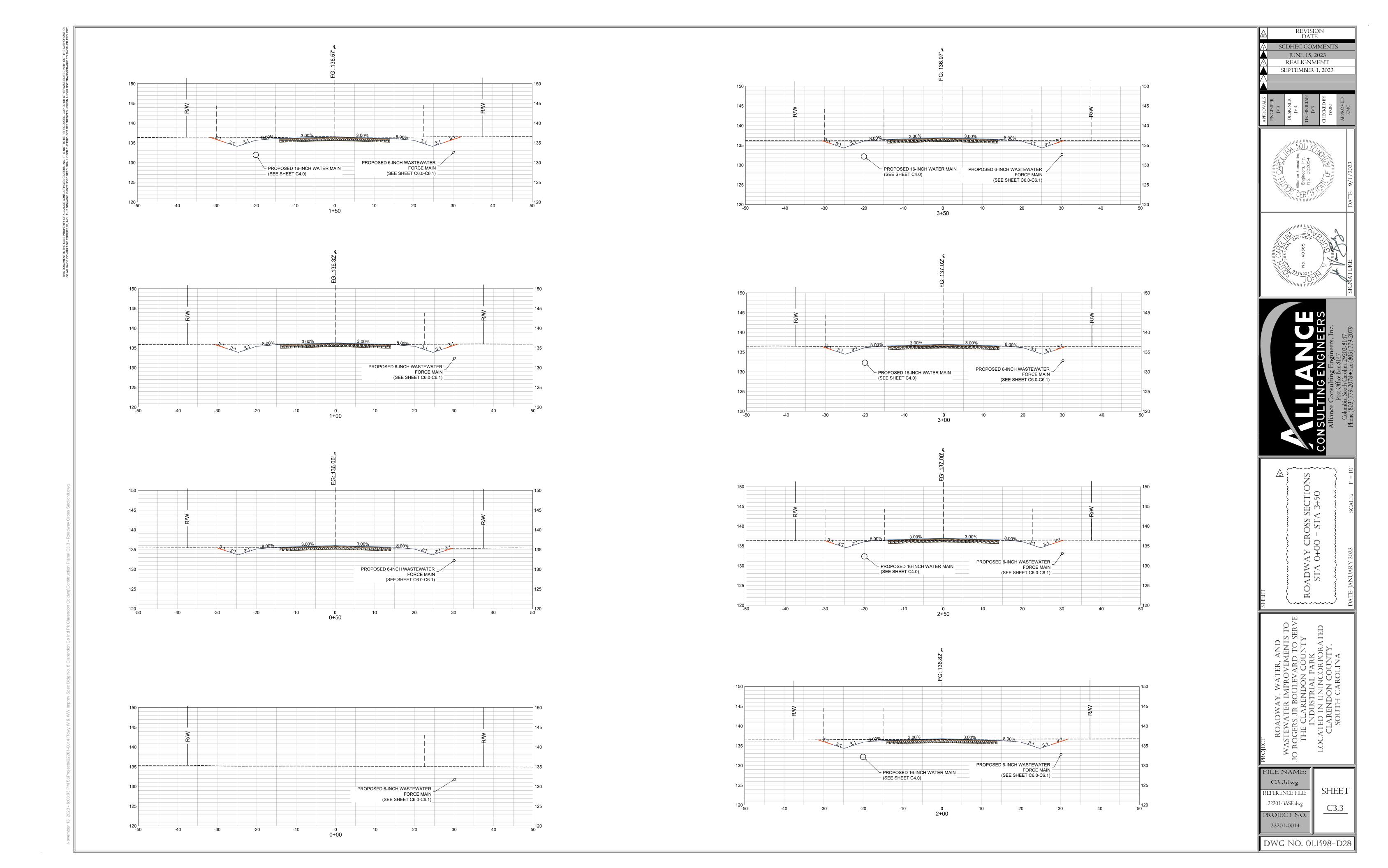
Storm Drainage Profiles

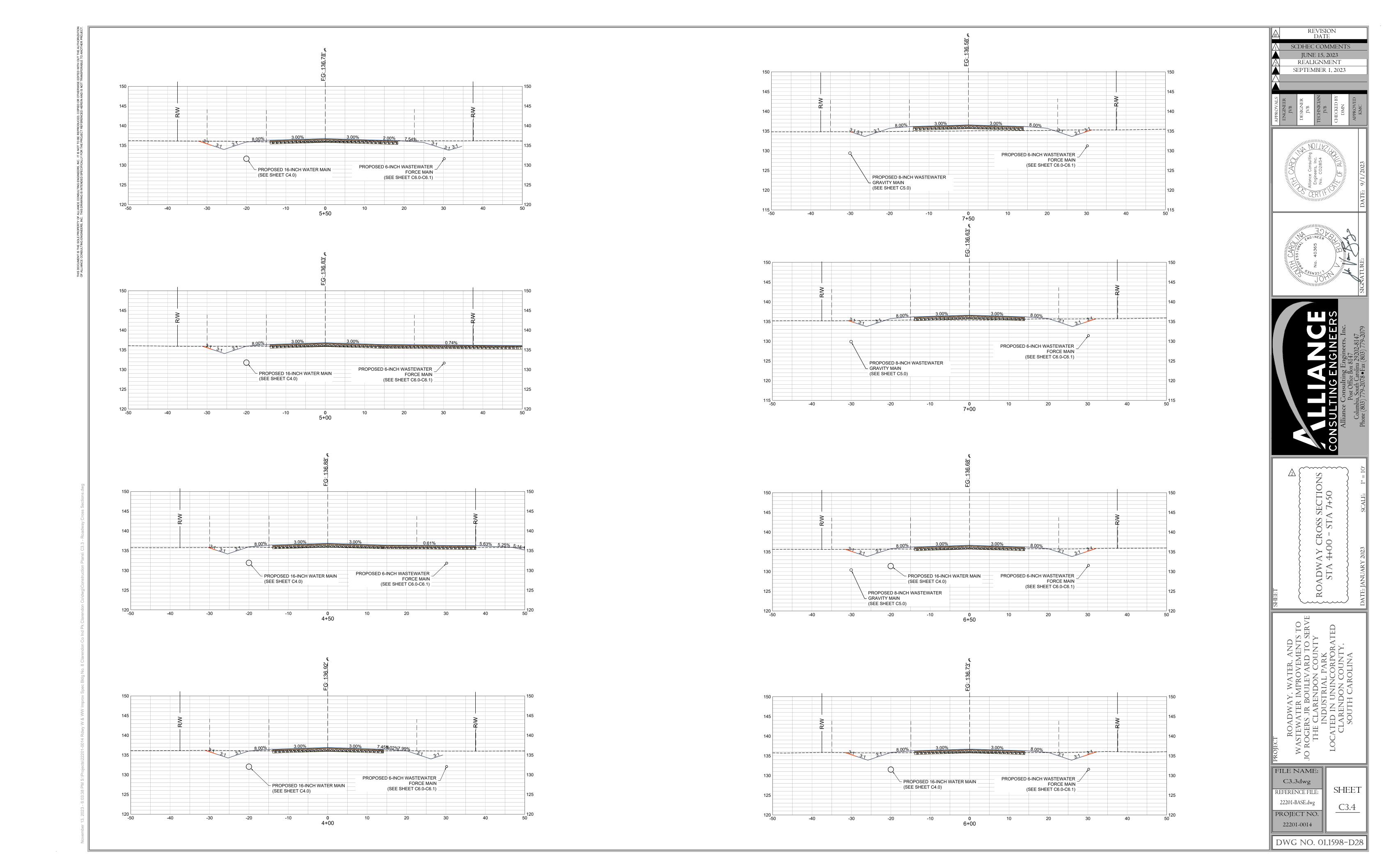
Horiz: 1" = 50' Vert: 1" = 5'

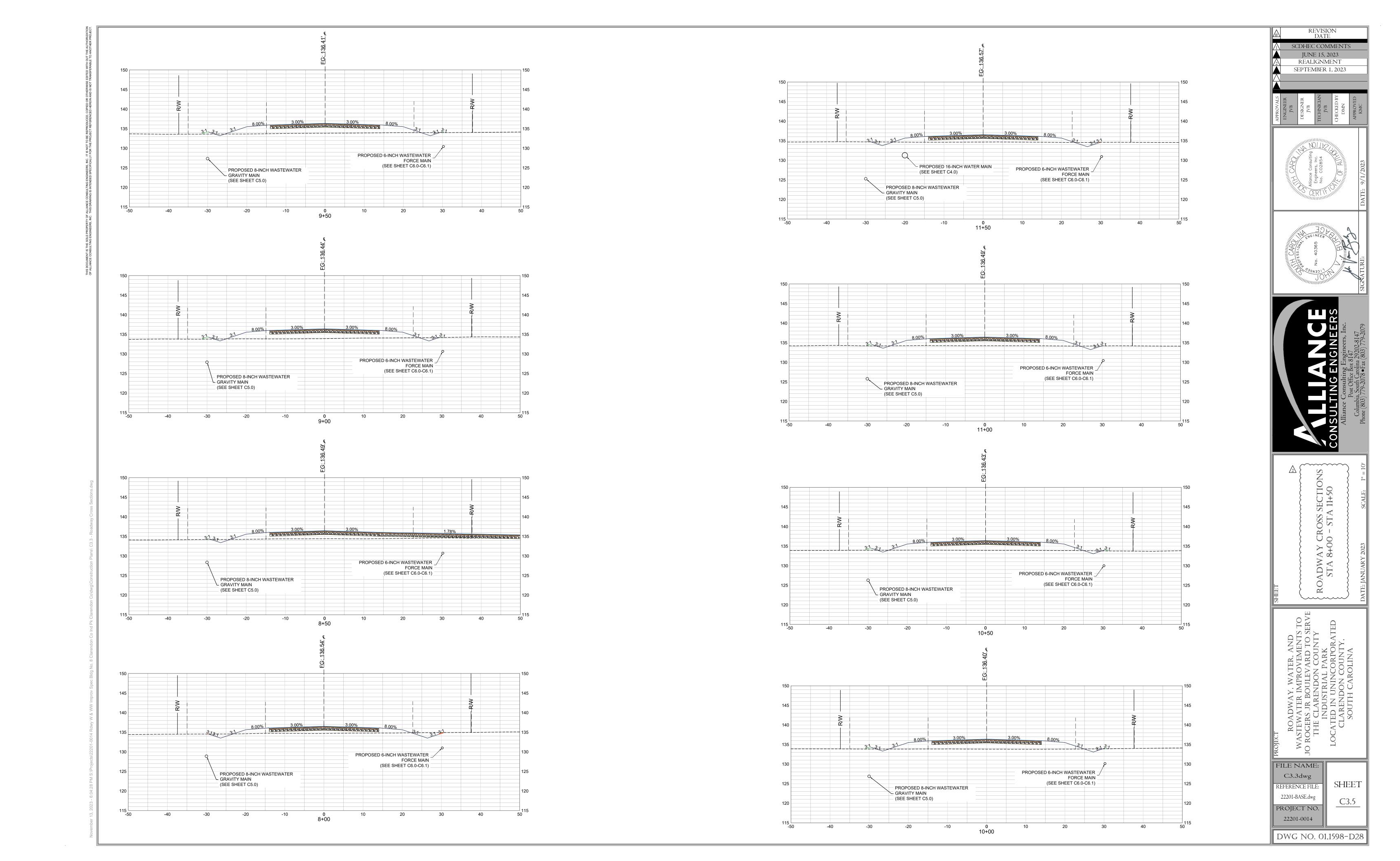
LEGEND — — EXISTING GRADE — FINISHED GRADE

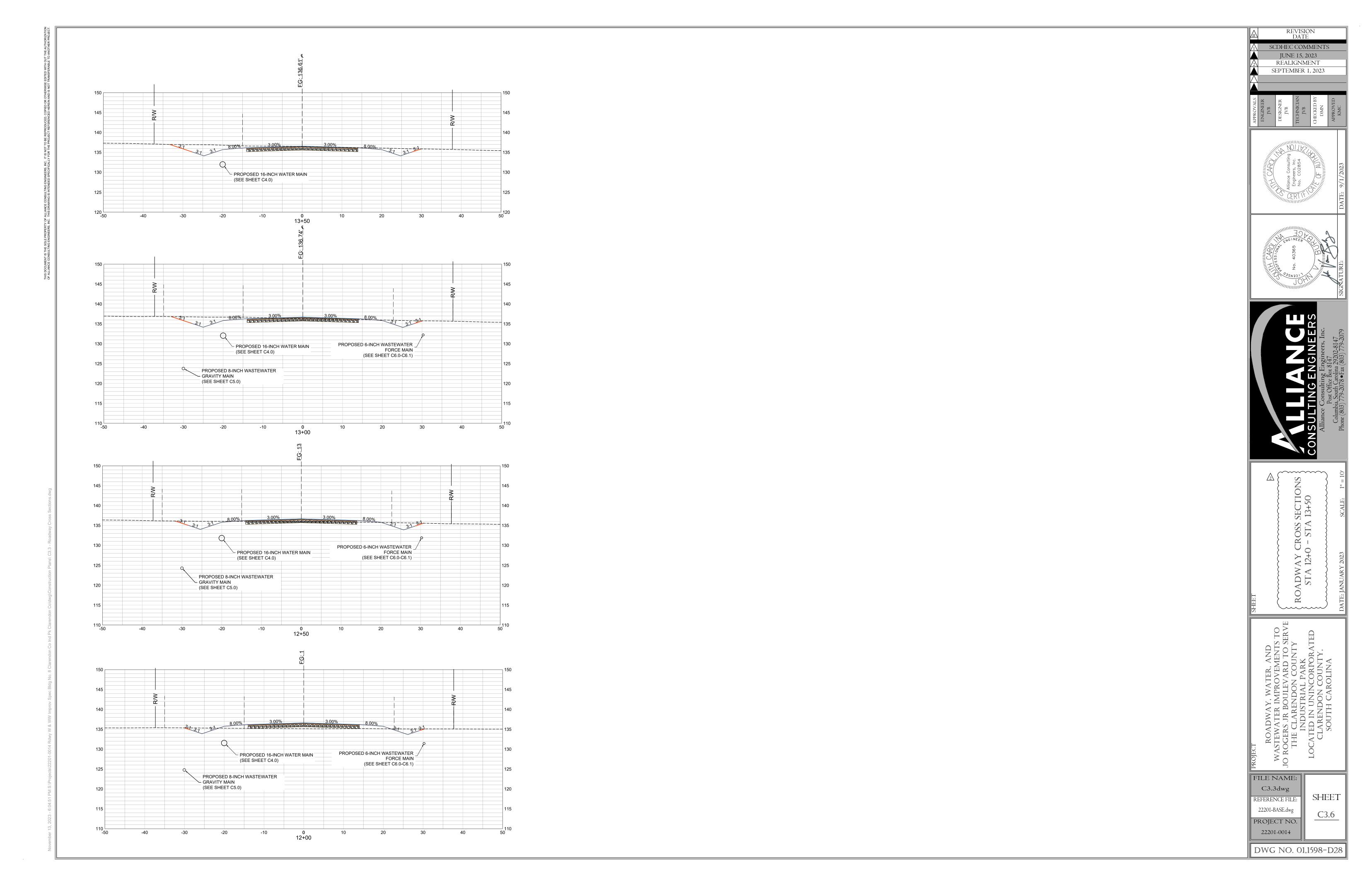


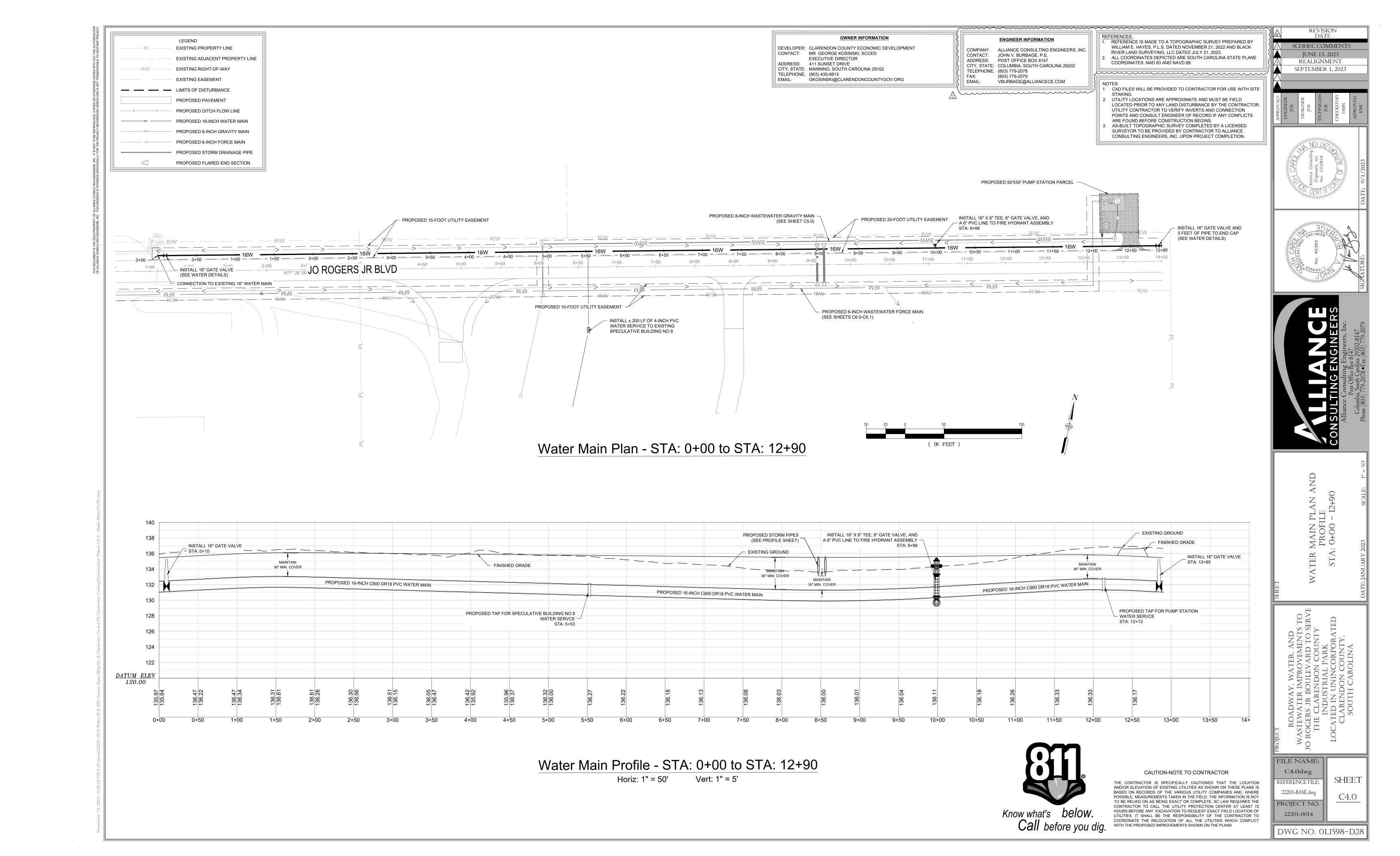
CONTRACTOR TO CALL THE UTILITY PROTECTION CENTER AT LEAST 72 Know what's below.
Call before you dig. HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE RELOCATION OF ALL THE UTILITIES WHICH CONFLICT

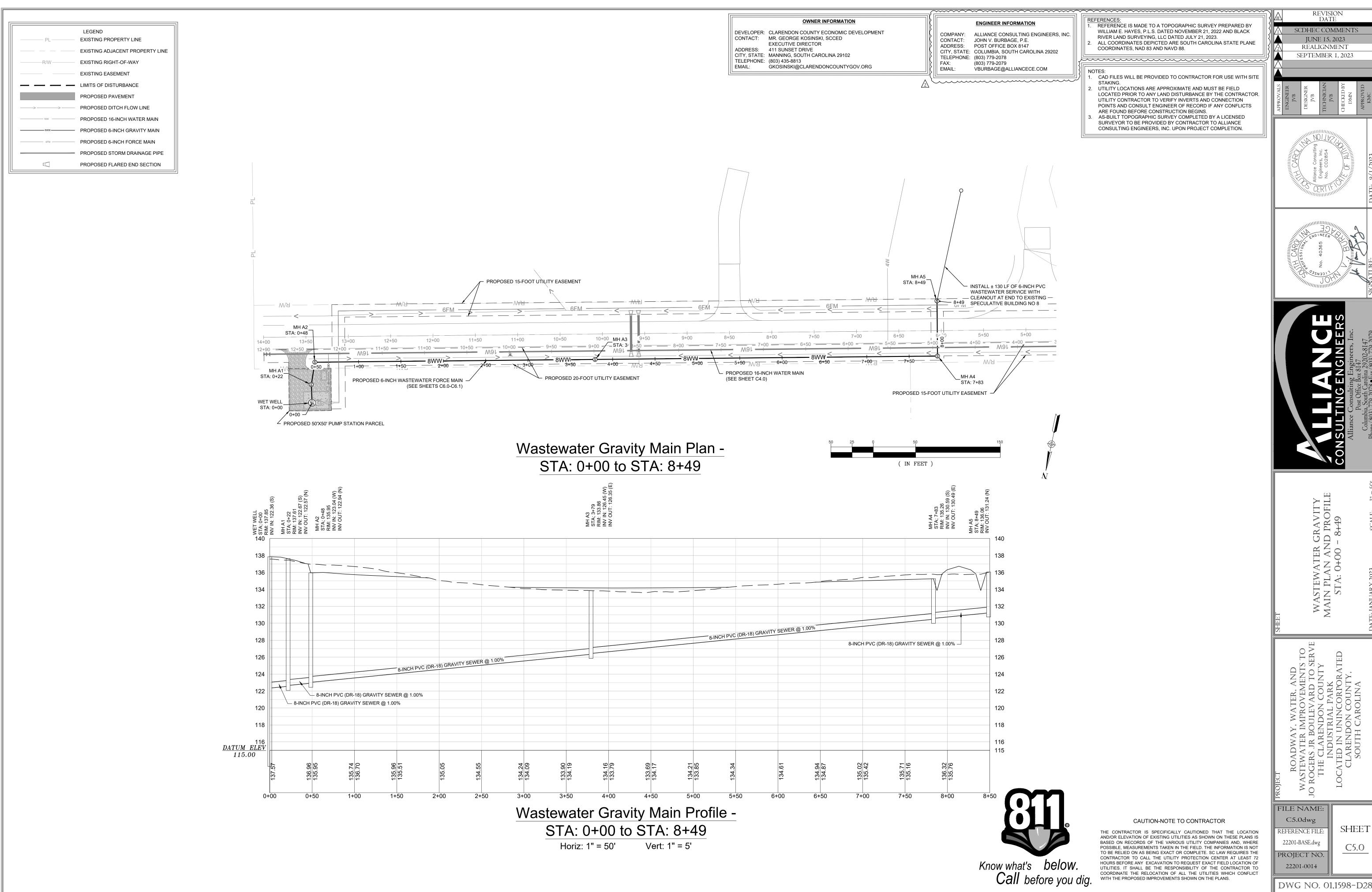






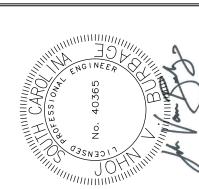






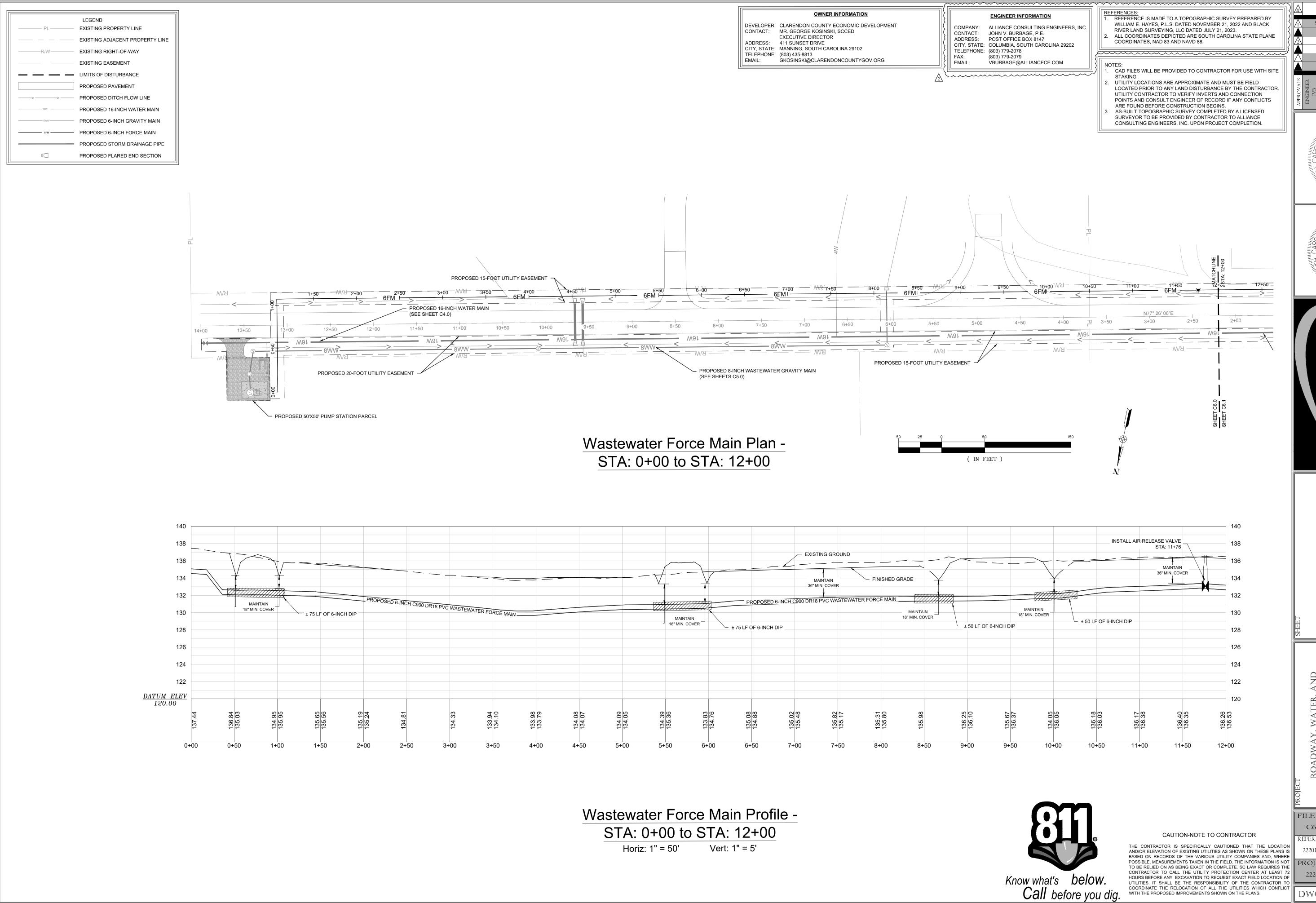
SCDHEC COMMENTS



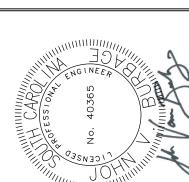




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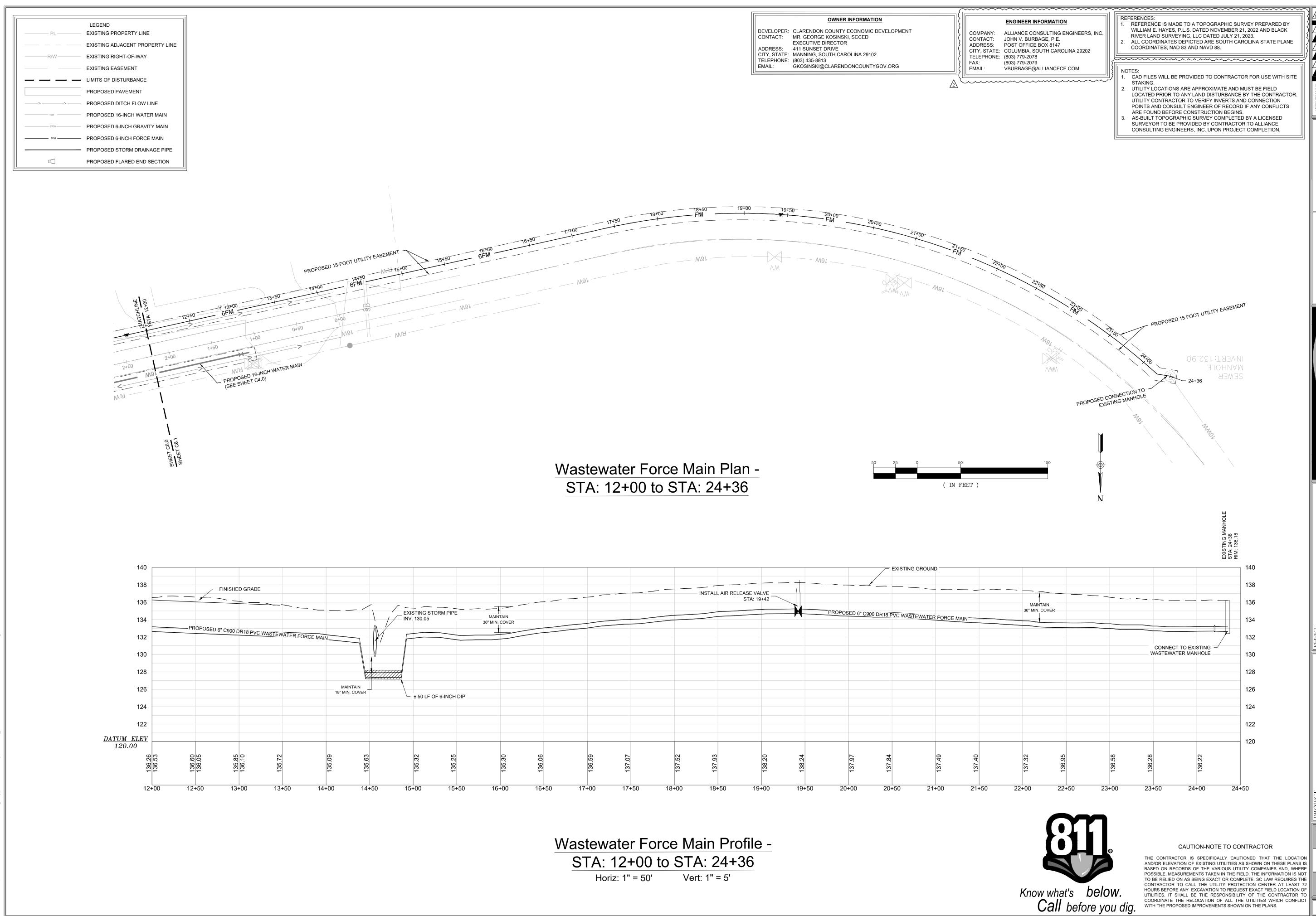


REVISION DATE SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023



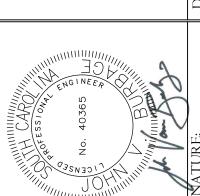
FILE NAME: C6.0dwg SHEET C6.0 PROJECT NO. 22201-0014

COORDINATE THE RELOCATION OF ALL THE UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. DWG NO. 01,1598-D28



REVISION DATE SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023





FILE NAME: C6.0dwg SHEET 2220I-BASE.dwg PROJECT NO.

C6.1 22201-0014

	LEGEND
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE
R/W	EXISTING RIGHT-OF-WAY
	EXISTING EASEMENT
	LIMITS OF DISTURBANCE
	PROPOSED PAVEMENT
>>	PROPOSED DITCH FLOW LINE
16W	PROPOSED 16-INCH WATER MAIN
	PROPOSED 6-INCH GRAVITY MAIN
6FM	PROPOSED 6-INCH FORCE MAIN
	PROPOSED STORM DRAINAGE PIPE
	PROPOSED FLARED END SECTION

OWNER INFORMATION DEVELOPER: CLARENDON COUNTY ECONOMIC DEVELOPMENT

CONTACT: MR. GEORGE KOSINSKI, SCCED EXECUTIVE DIRECTOR ADDRESS: 411 SUNSET DRIVE

CITY, STATE: MANNING, SOUTH CAROLINA 29102 TELEPHONE: (803) 435-8813 EMAIL: GKOSINSKI@CLARENDONCOUNTYGOV.ORG **ENGINEER INFORMATION**

COMPANY: ALLIANCE CONSULTING ENGINEERS, INC. CONTACT: JOHN V. BURBAGE, P.E. ADDRESS: POST OFFICE BOX 8147

CITY, STATE: COLUMBIA, SOUTH CAROLINA 29202 TELEPHONE: (803) 779-2078 (803) 779-2079 VBURBAGE@ALLIANCECE.COM

REFERENCE IS MADE TO A TOPOGRAPHIC SURVEY PREPARED BY WILLIAM E. HAYES, P.L.S. DATED NOVEMBER 21, 2022 AND BLACK RIVER LAND SURVEYING, LLC DATED JULY 21, 2023.

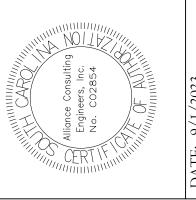
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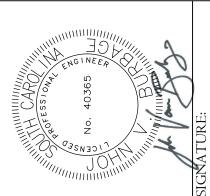
CAD FILES WILL BE PROVIDED TO CONTRACTOR FOR USE WITH SITE UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD LOCATED PRIOR TO ANY LAND DISTURBANCE BY THE CONTRACTOR. UTILITY CONTRACTOR TO VERIFY INVERTS AND CONNECTION POINTS AND CONSULT ENGINEER OF RECORD IF ANY CONFLICTS ARE FOUND BEFORE CONSTRUCTION BEGINS.

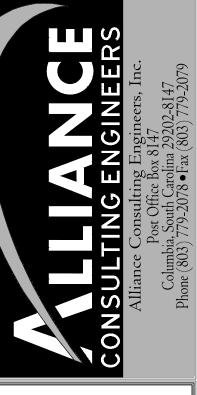
AS-BUILT TOPOGRAPHIC SURVEY COMPLETED BY A LICENSED SURVEYOR TO BE PROVIDED BY CONTRACTOR TO ALLIANCE CONSULTING ENGINEERS, INC. UPON PROJECT COMPLETION.

REVISION DATE SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023









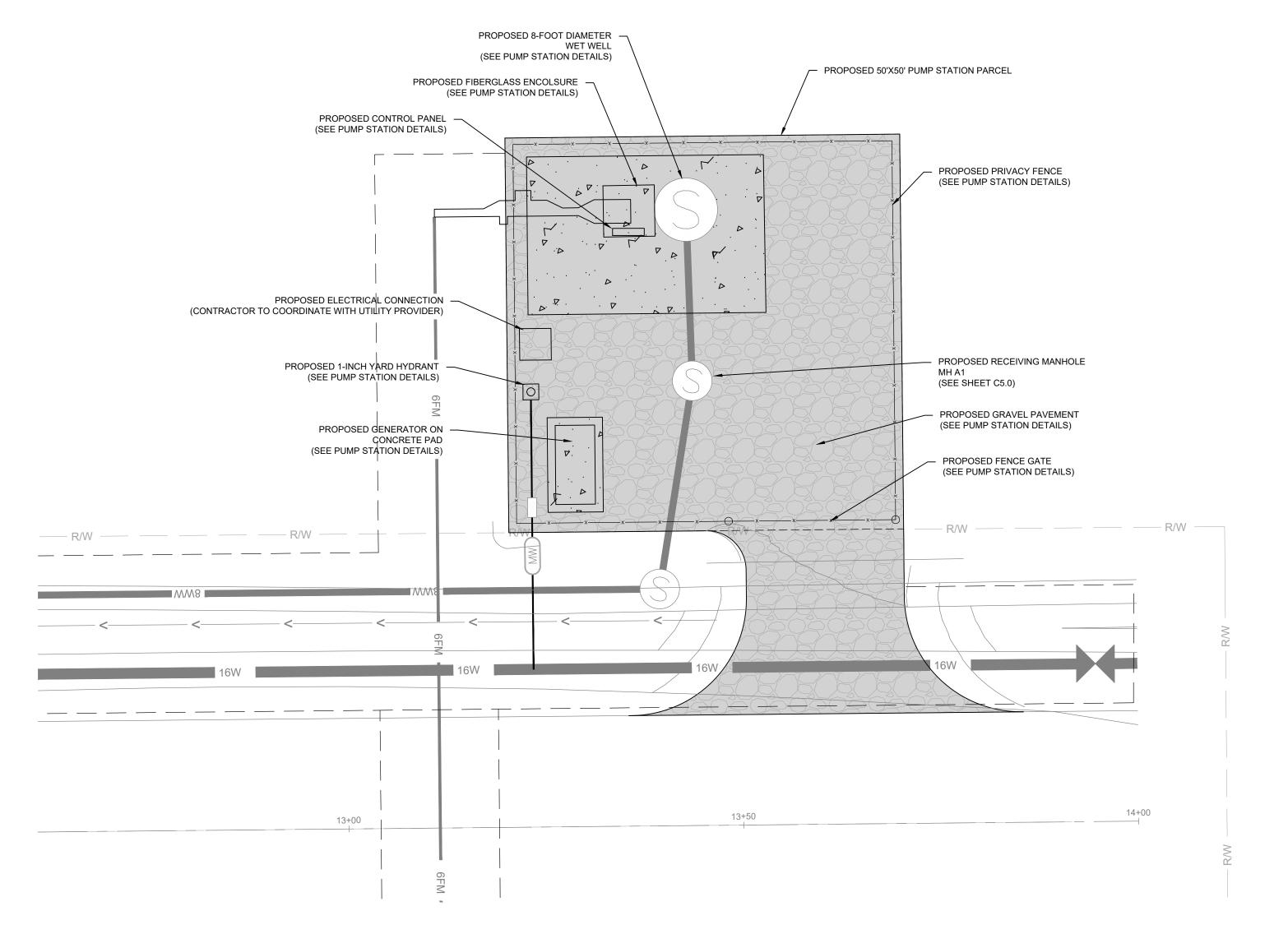
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CAUTION-NOTE TO CONTRACTOR

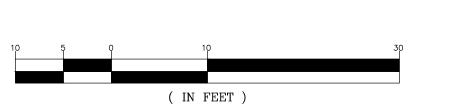
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION

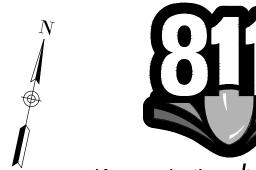
PROJECT NO. 22201-0014

DWG NO. 01,1598-D28

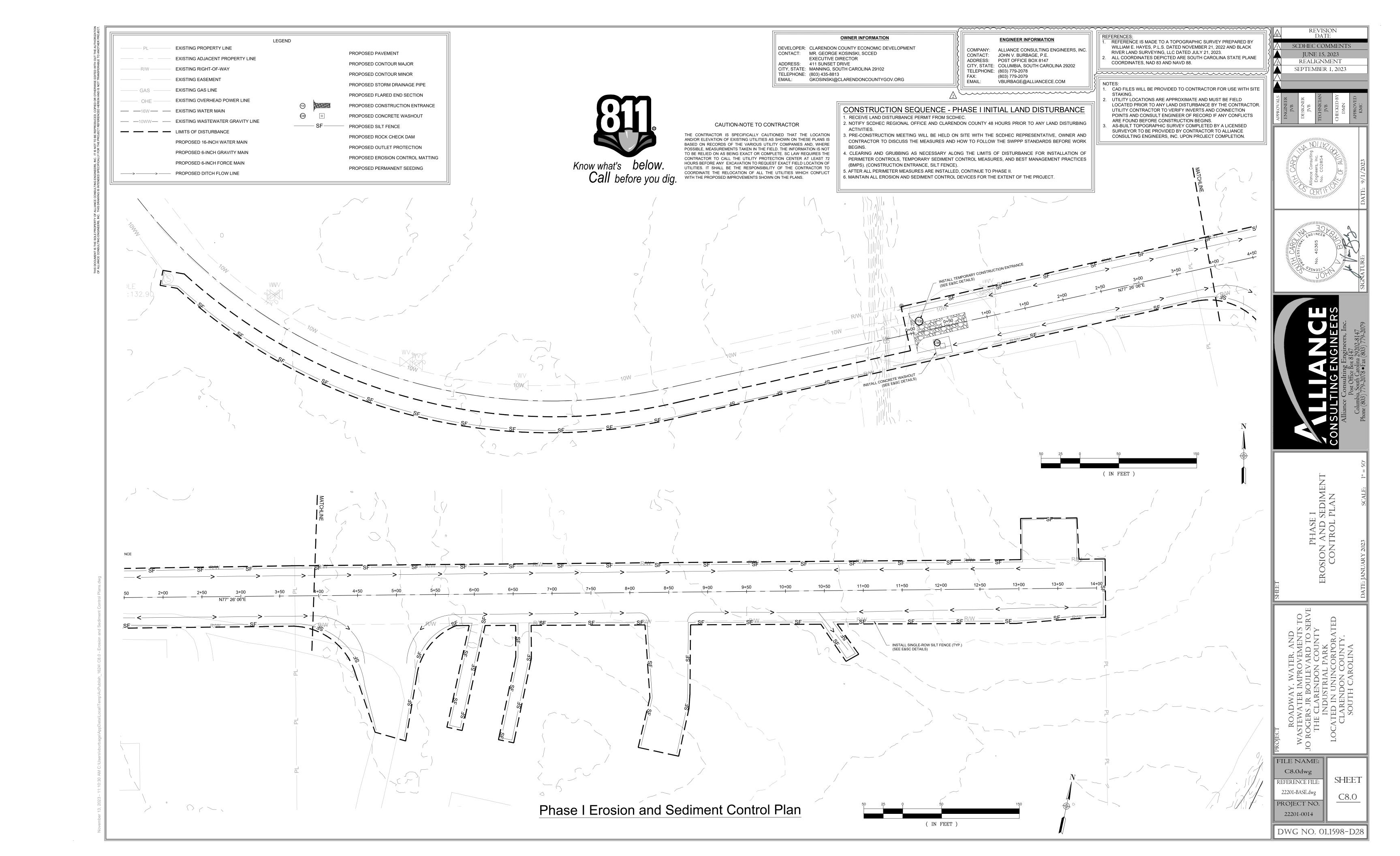


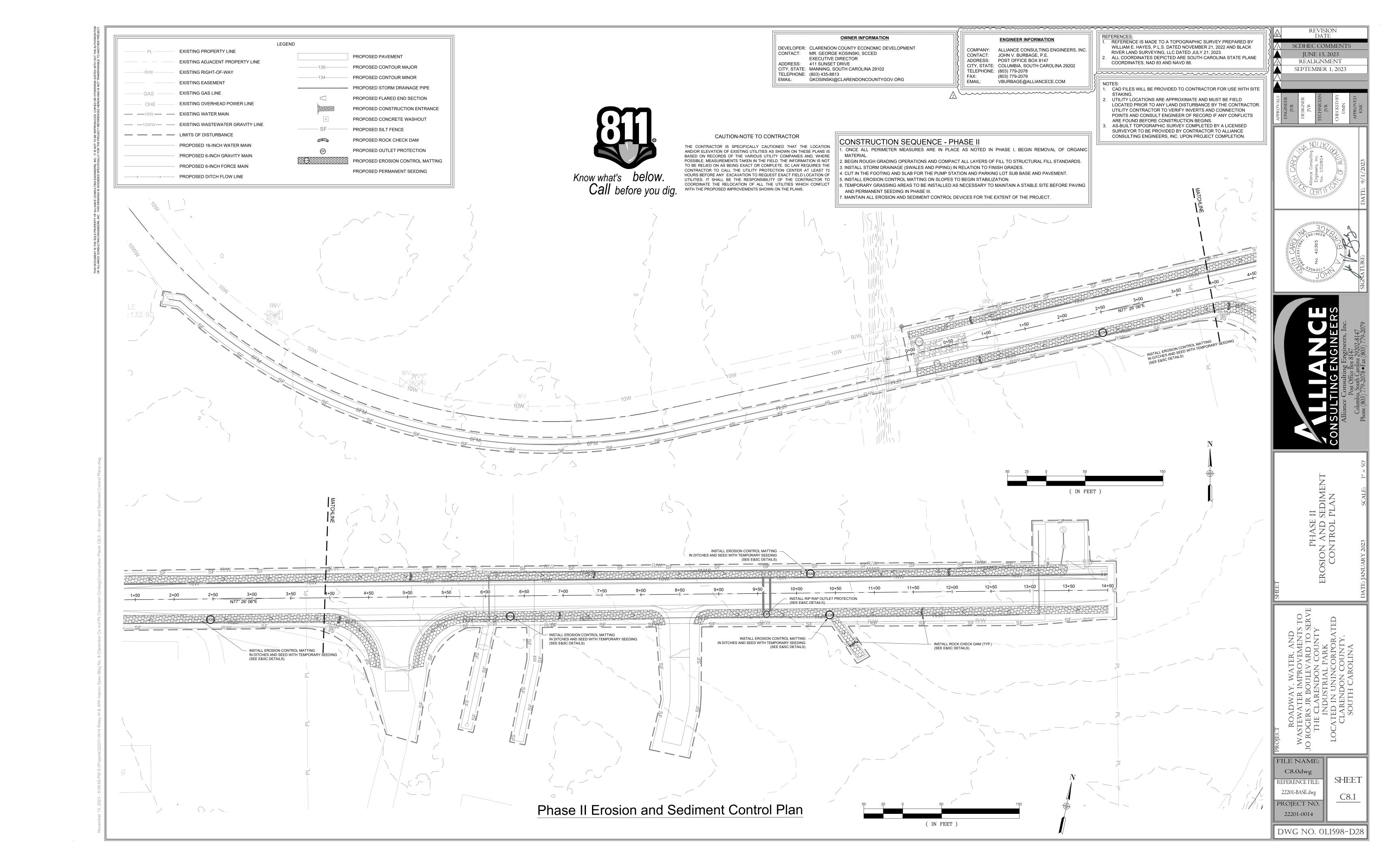
Pump Station Site Plan

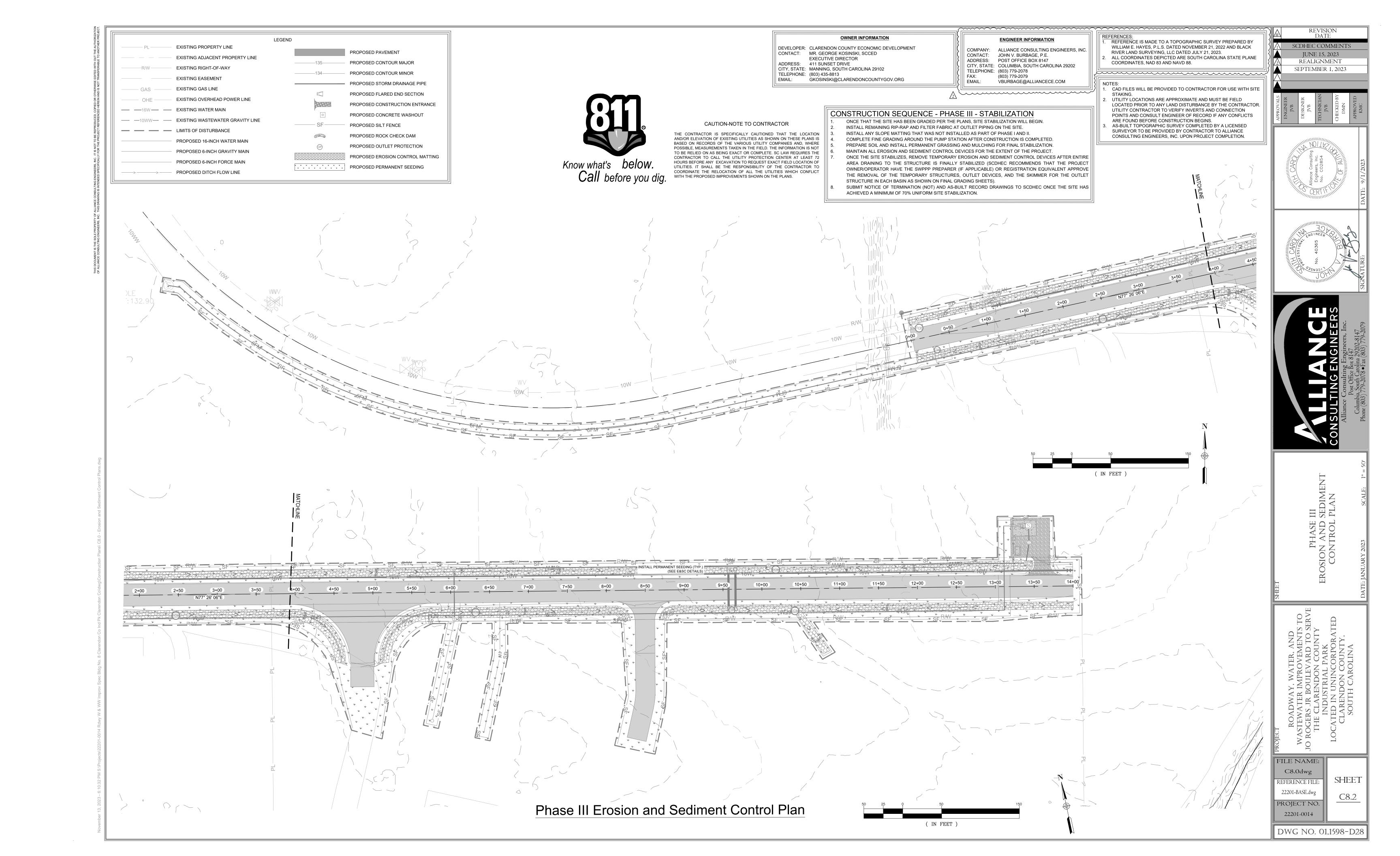


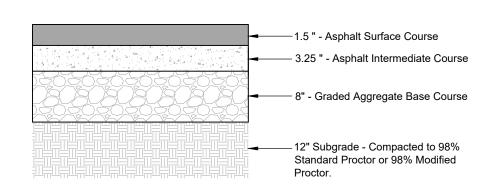


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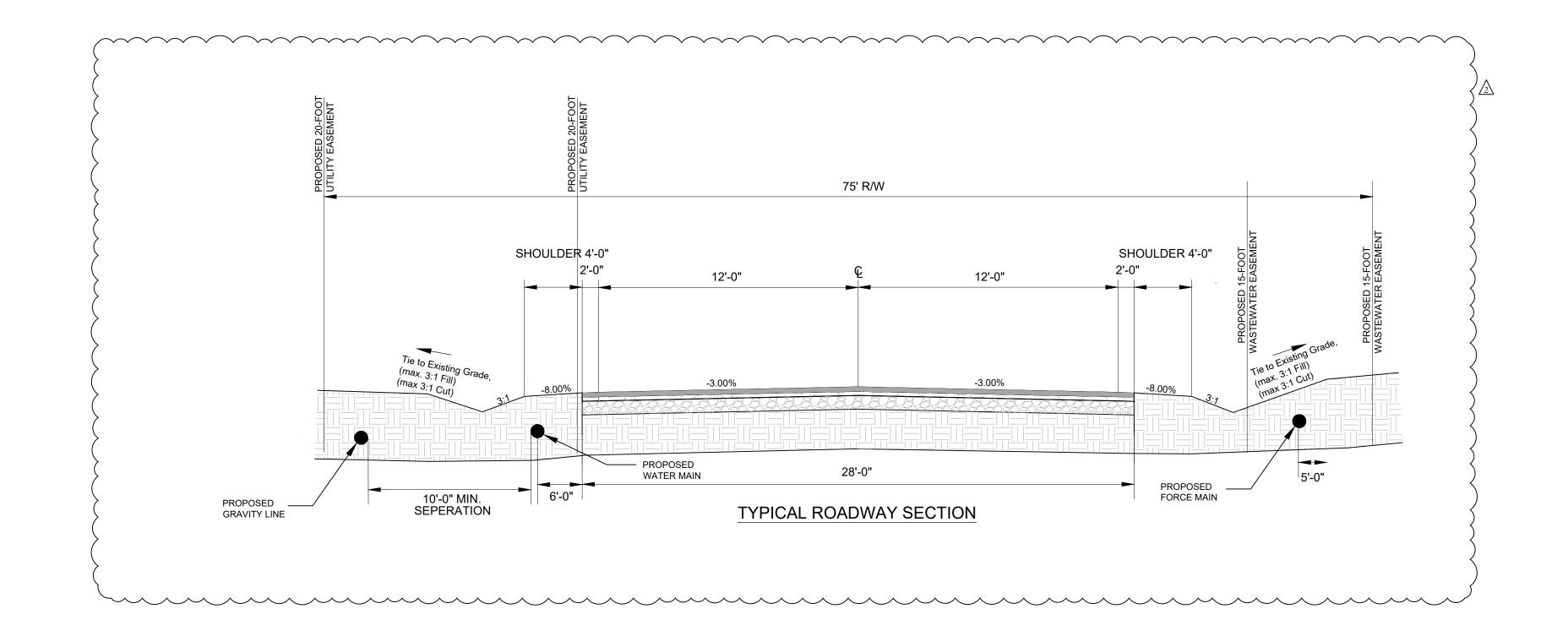


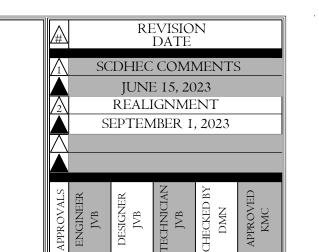




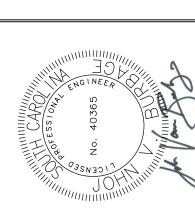
TYPICAL PAVEMENT SECTION

(NOT TO SCALE)











ROADWAY DETAILS

MATER IMPROVEMENTS TO
RS JR BOULEVARD TO SERVE
CLARENDON COUNTY
INDUSTRIAL PARK
TED IN UNINCORPORATED

FILE NAME:

C9.0dwg

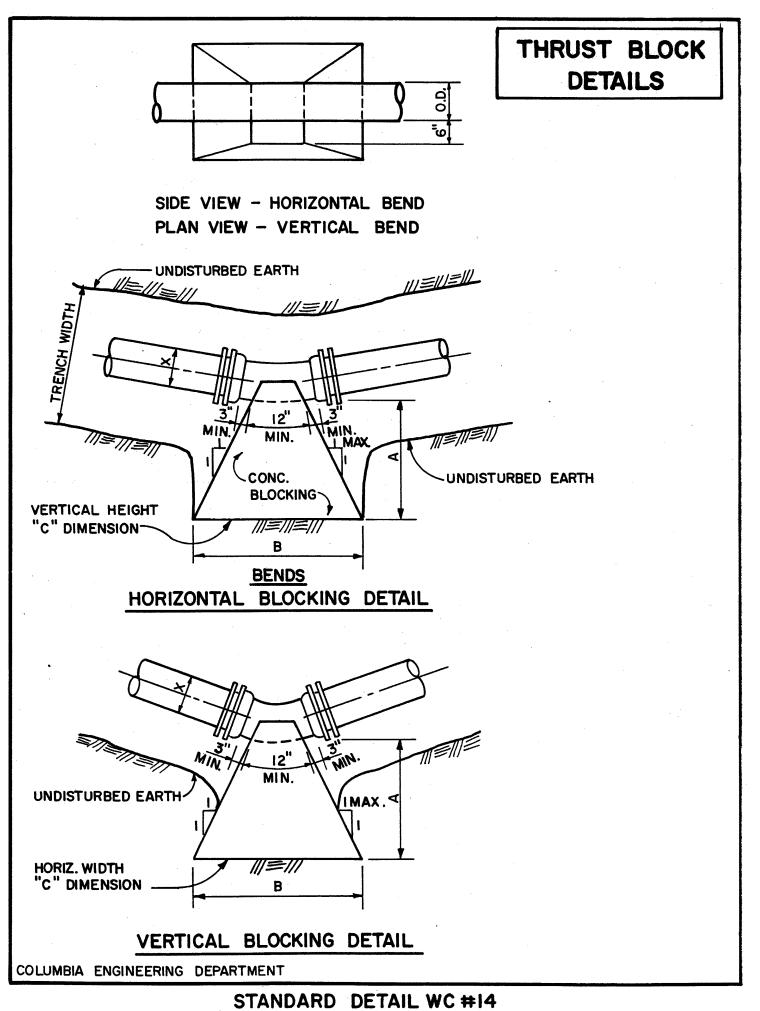
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2220I-BASE.dwg

PROJECT NO.

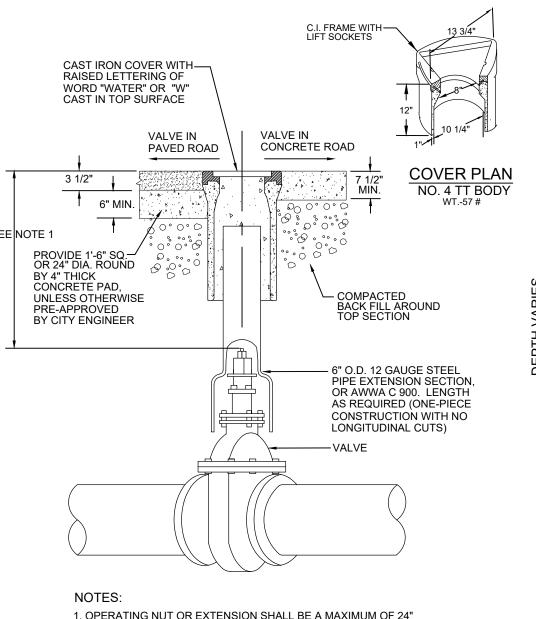
C9.0

22201-0014 01 1509



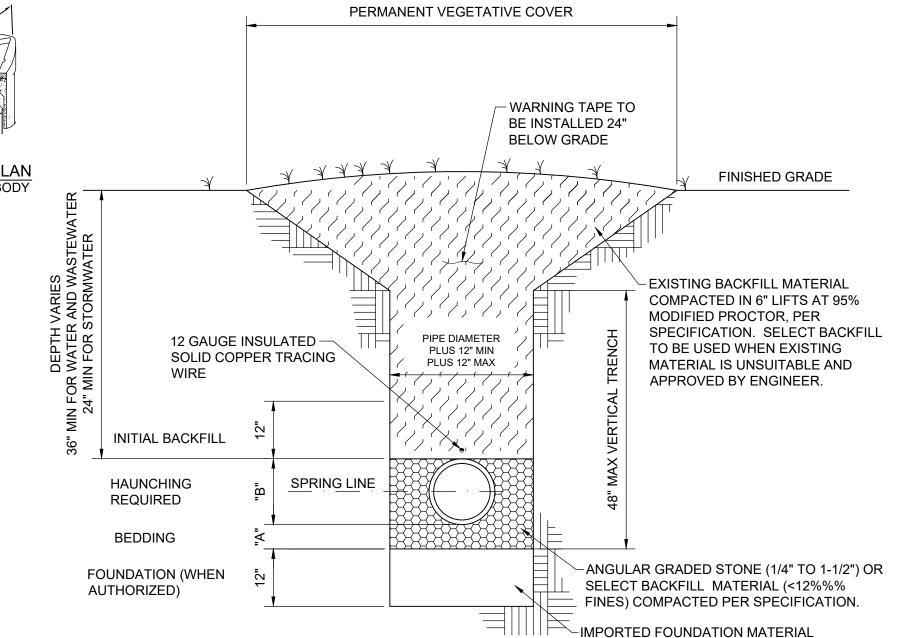
PIPE	Α	В	С	MBA *2	*1
SIZE X				(SQ. FT.)	
	(* DI	ENOTES BE	RANCH SIZ		1
*2" - 6"	2' - 0"	2' - 0"	1' - 4"	2.7	0.13
* 8"	2' - 0"	2' - 6"	1' - 10"	4.6	0.2
* 10"	2' - 6"	3' - 6"	2' - 0"	7	0.39
* 12"	2' - 6"	4' - 6"	2' - 3"	10.1	0.54
* 16"	3' - 0"	6' - 0"	2' - 10"	17	1.08
* 18"	3' - 0"	7' - 0"	3' - 0"	21	1.33
* 24"	4' - 0"	10' - 0"	3' - 9"	37.5	3.17
* 30"	5' - 0"	12' - 0"	4' - 10"	58	5.96
	•	90 DEG	REE BEND	S	
2" - 6"	2' - 0"	2' - 9"	1' - 3"	3.4	0.16
8"	2' - 0"	3' - 3"	2' - 0"	6.5	0.28
10"	2' - 6"	4' - 0"	2' - 6"	10	0.53
12"	2' - 6"	5' - 0"	2' - 9"	13.8	0.73
16"	3' - 0"	6' - 0"	4 - 0"	24	1.5
18"	3' - 0"	7' - 0"	4' - 0"	29.3	1.85
24"	4' - 6"	12' - 0"	4' - 5"	53	4.94
30"	6' - 0"	14' - 0"	5' - 10"	81.7	9.97
		45 DEG	REE BEND	S	
2" - 6"	2' - 0"	2' - 0"	1' - 0"	2	0.11
8"	2' - 0"	2' - 6"	1' - 5"	3.5	0.17
10"	2' - 6"	3' - 6"	1' - 6"	5.2	0.29
12"	2' - 6"	4' - 6"	1' - 8"	7.5	0.4
16"	3' - 0"	6' - 0"	2' - 2"	13	0.8
18"	3' - 0"	6' - 4"	2' - 6"	15.8	1.1
24"	3' - 0"	6' - 9"	4' - 3"	28.7	1.75
30"	3' - 6"	9' - 3"	4' - 9"	43.9	3.22
	•	22 1/2 DE	GREE BEN	DS	
2" - 6"	2' - 0"	1' - 0"	1' - 0"	1	0.08
8"	2' - 0"	1' - 9"	1' - 0"	1.7	0.11
10"	2' - 6"	2' - 3"	1' - 3'	2.8	0.19
12"	2' - 6"	2' - 6"	1' - 6"	3.7	0.24
16"	3' - 0"	3' - 0"	2' - 3"	6.5	0.48
18"	3' - 0"	3' - 4"	2' - 6"	8.3	0.68
24"	3' - 0"	4' - 6"	3' - 5"	15.4	1.04
30"	3' - 6"	5' - 0"	4' - 6"	22.5	1.93
		11 1/4" DI	EGREE BE	NDS	
2" - 6"	2' - 0"	1' - 0"	0' - 6"	0.5	0.06
8"	2' - 0"	1' - 3"	0' - 9"	0.9	0.08
10"	2' - 6"	1' - 6"	1' - 0"	1.5	0.14
12"	2' - 6"	2' - 0"	1' - 0"	2	0.17
16"	3' - 0"	2' - 6"	1' - 4"	3.3	0.3
18"	3' - 0"	2' - 9"	1' - 6"	4.1	0.38
24"	3' - 0"	3' - 3"	2' - 3"	7.3	0.65
30"	3' - 6"	3' - 9"	3' - 0"	11.2	1.22

- *1 ESTIMATED C.Y. CONC. FOR TEES & BENDS
- *2 MINIMUM BEARING AREA (MBA) IS BASED ON SOIL BEARING CAPACITY OF 2000 PSF.



1. OPERATING NUT OR EXTENSION SHALL BE A MAXIMUM OF 24" BELOW FINISHED GRADE. SEE DETAIL NO. 614. 2. VALVE TYPE, SIZE AND ENDS AS SPECIFIED OR SHOWN ON PLANS. 3. ALL VALVES 2" AND LARGER SHALL HAVE AN OPERATING NUT.

GATE VALVE AND VALVE BOX DETAILS



DEPTH SCHEDULE FOR HAUNCHING AND BEDDING 24" PIPE DIA | 4"-10" | 12"-18" 10"

27" TO TOP OF PIPE 20" EMBEDMENT COMPACTION SHALL BE THE MINIMUM DENSITIES INDICATED IN TABLE 2 OF ASTM D2321-LR TRENCH EXCAVATION:

CONTRACTOR SHALL EXCAVATE REQUIRED TRENCH TO PREVENT CAVE-IN AND PROVIDE TRENCH SIDEWALL STABILITY. TRENCH EXCAVATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH OSHA AND OTHER GOVERNING SAFETY REGULATIONS TO INCLUDE ALL DEWATERING AND SHEETIING AND SHORING NECESSARY TO INSTALL PIPELINE.

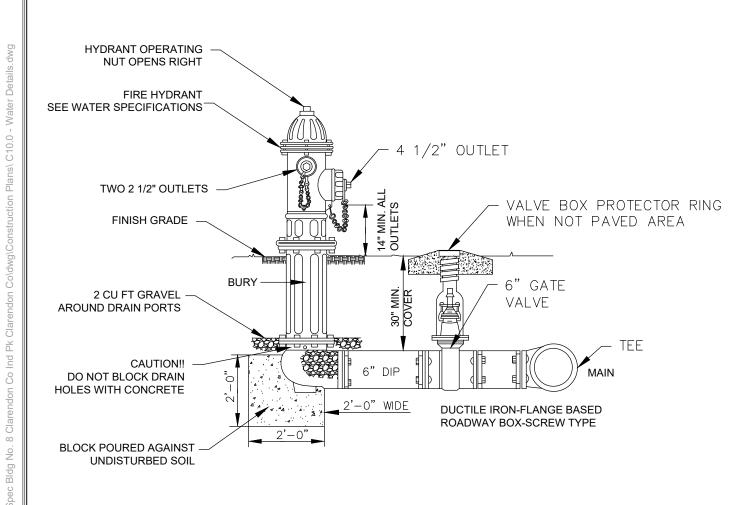
ENGINEER.

(ANGULAR GRADED STONE OR AS

STATED ON BID FORM) WHEN

DIRECTED AND APPROVED BY

PIPELINE TRENCH DETAIL NOT TO SCALE



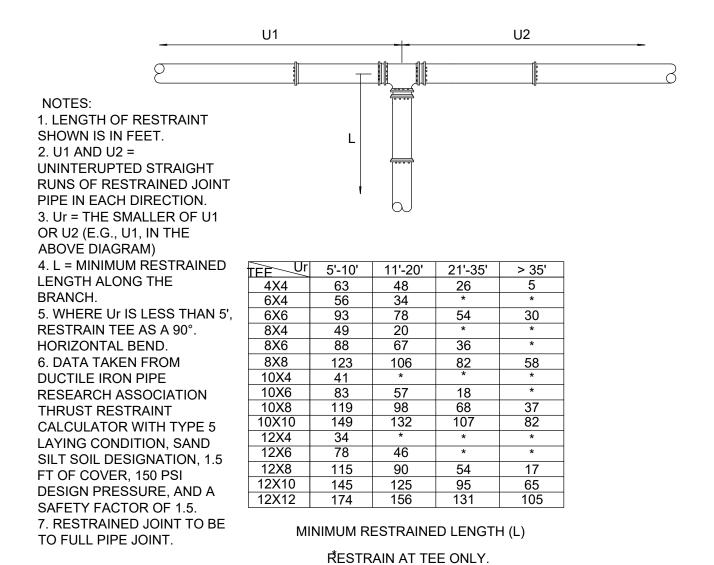
NOTE:

1. ALL JOINTS SHALL BE RESTRAINED MECHANICAL JOINTS. 2. HYDRANTS SHALL BE NO LESS THAN 3' NOR MORE THAN 6' FROM THE CURB OR THE EDGE OF A HARD SURFACE STREET OR ACCESS ROAD, EXCEPT THAT ALONG RURAL ROADS THROUGH UNDEVELOPED AREAS THE MAXIMUM DISTANCE MAY BE INCREASED TO 10'. 3. HYDRANTS MUST BE LOCATED SO AS TO BE UNOBSTRUCTED FOR 15' EITHER SIDE AS MEASURED ALONG THE CURB OR THE EDGE OF A HARD SURFACE STREET OR ACCESS ROAD. THIS AREA MUST BE FREE OF GROWTH AND OTHER OBSTRUCTIONS WHICH WOULD HINDER ACCESS TO THE HYDRANT 4. MINIMUM DISTANCE BETWEEN VALVE AND HYDRANT SHALL BE 3'.

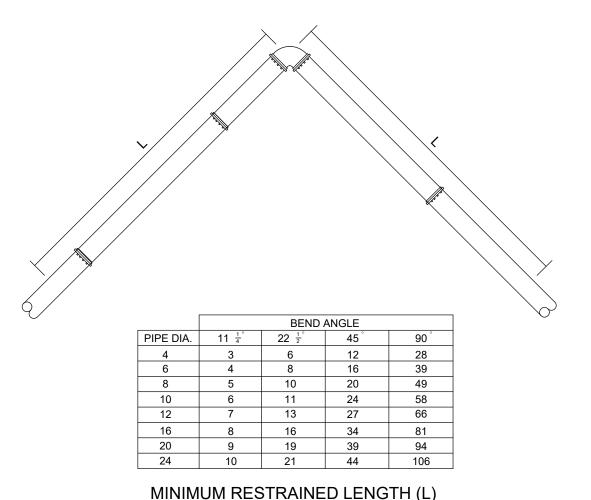
5. BENDS MAY BE USED IN HYDRANT LEAD TO FACILITATE HYDRANT LOCATION. 6. GATE VALVES TO OPEN TO THE LEFT (COUNTER CLOCKWISE). 7. HYDRANT TO BE PAINTED RED.

STANDARD HYDRANT DETAIL

(NOT TO SCALE)

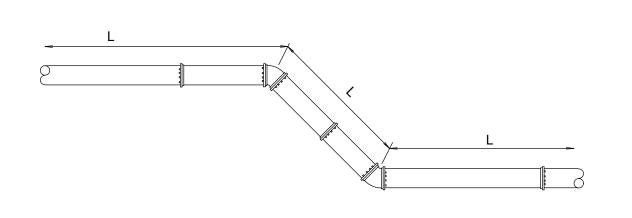


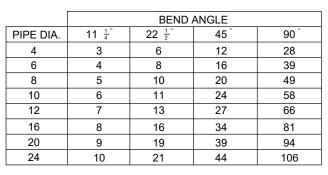
TEE FITTING MECHANICAL JOINT RESTRAINT DETAIL (NOT TO SCALE)



NOTES: 1. LENGTH OF RESTRAINT SHOWN IS IN FEET. 2. DATA TAKEN FROM DUCTILE IRON PIPE RESEARCH ASSOCIATION THRUST RESTRAINT CALCULATOR WITH TYPE 5 LAYING CONDITION, SAND SILT SOIL DESIGNATION, 1.5 FT OF COVER, 150 PSI DESIGN PRESSURE, AND A SAFETY FACTOR OF 1.5 3. RESTRAINED JOINT TO BE TO FULL PIPE JOINT

HORIZONTAL BEND MECHANICAL JOINT RESTRAINT DETAIL





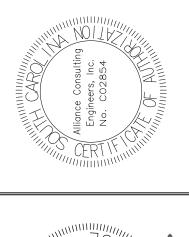
MINIMUM RESTRAINED LENGTH (L)

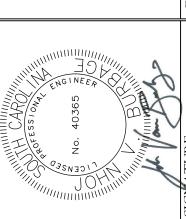
NOTES: 1. LENGTH OF RESTRAINT SHOWN IS IN FEET. 2. DATA TAKEN FROM DUCTILE IRON PIPE RESEARCH ASSOCIATION THRUST RESTRAINT CALCULATOR WITH TYPE 5 LAYING CONDITION, SAND SILT SOIL DESIGNATION, 1.5 FT OF COVER, 150 PSI DESIGN PRESSURE, AND A SAFETY FACTOR OF 1.5 3. RESTRAINED JOINT TO BE TO FULL PIPE JOINT

VERTICAL BEND MECHANICAL JOINT RESTRAINT DETAIL

(NTS)

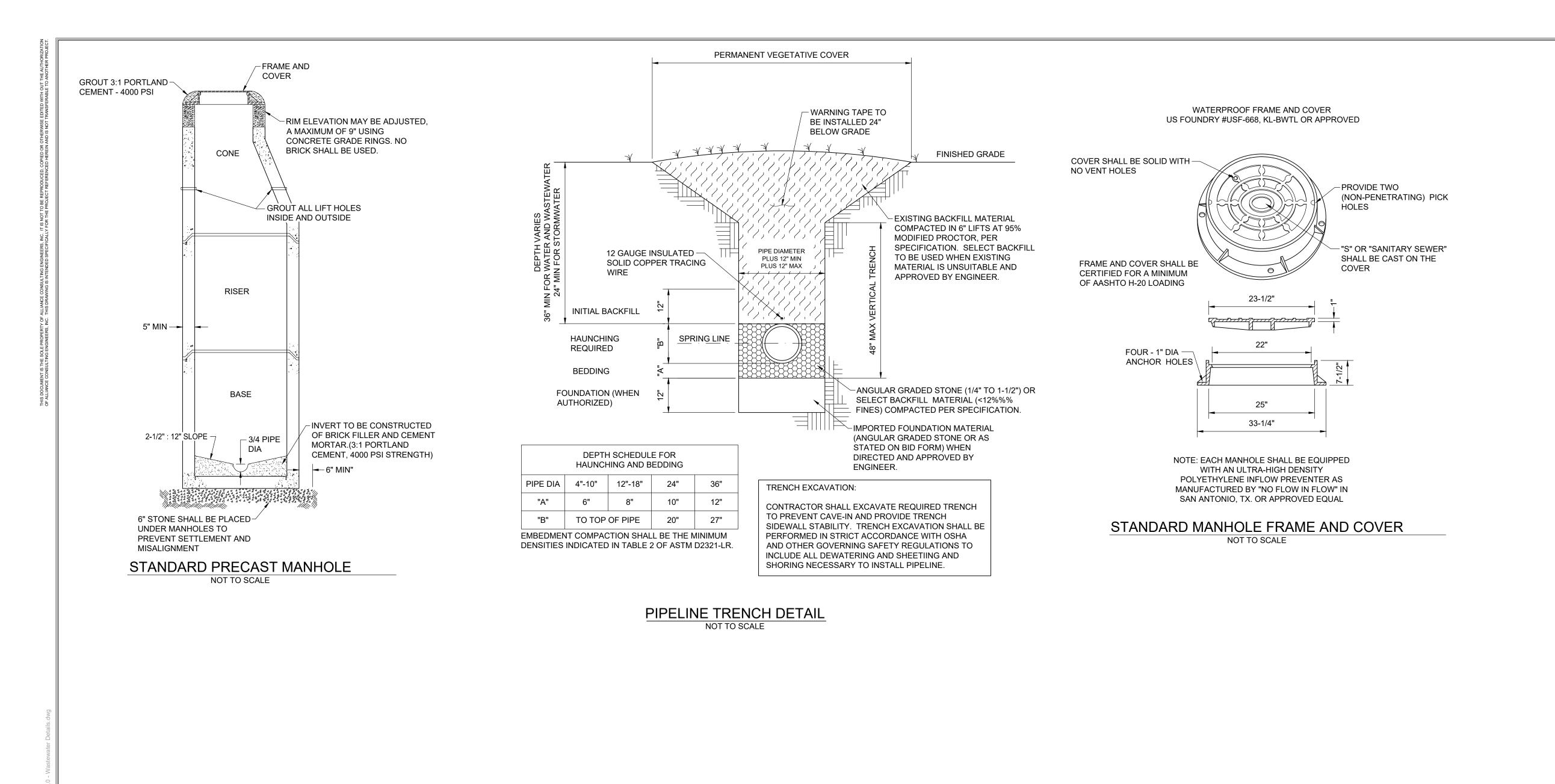
REVISION SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023





ROADWA WASTEWATER JO ROGERS JR B THE CLARI INDUS LOCATED IN CLARENI FILE NAME:

CI0.0dwg SHEET REFERENCE FILE 22201-BASE.dwg C10.0 PROJECT NO. 22201-0014



REVISION DATE

SCDHEC COMMENTS

JUNE 15, 2023

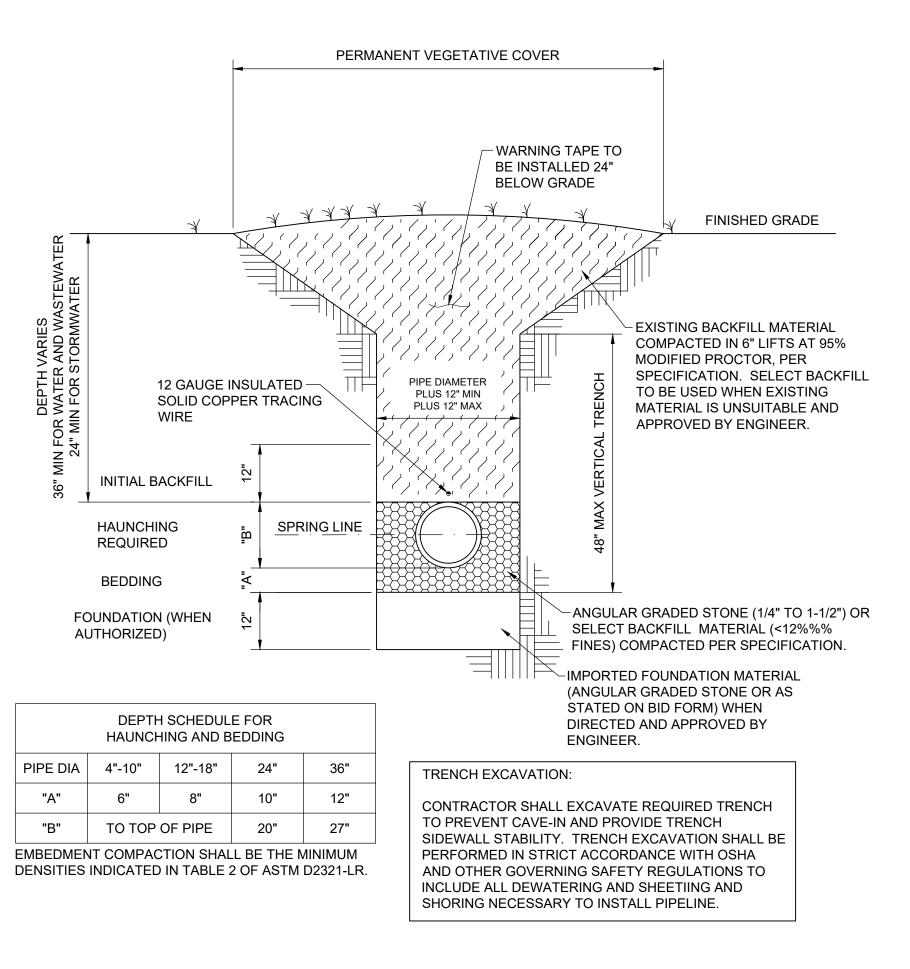
REALIGNMENT

SEPTEMBER I, 2023

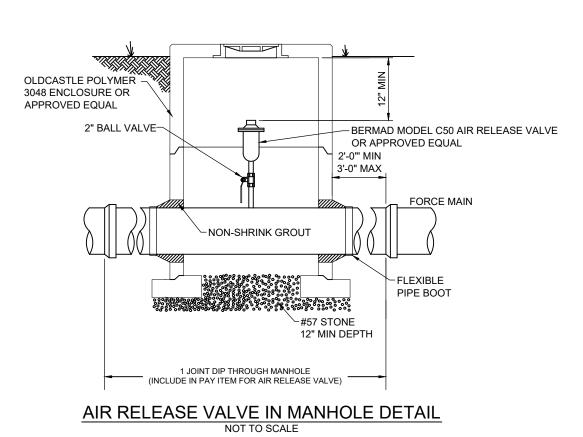
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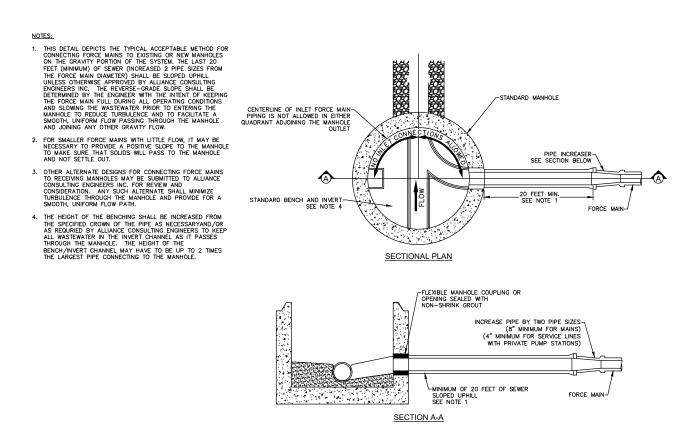
SHEET 22201-BASE.dwg PROJECT NO.

22201-0014



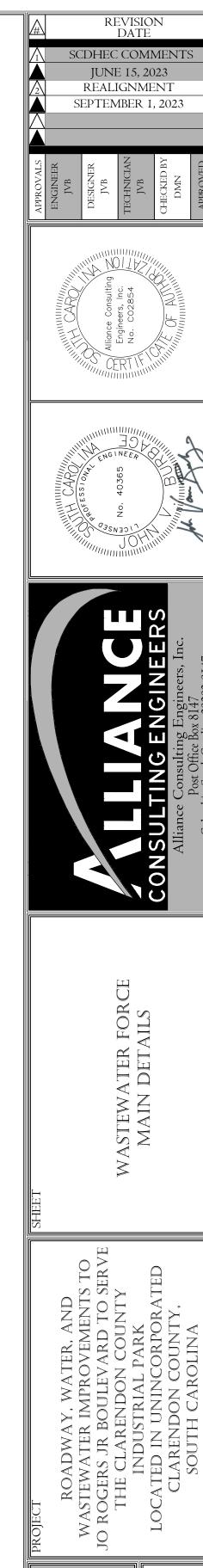
PIPELINE TRENCH DETAIL





EXISTING MANHOLE CONNECTION DETAIL

NOT TO SCALE

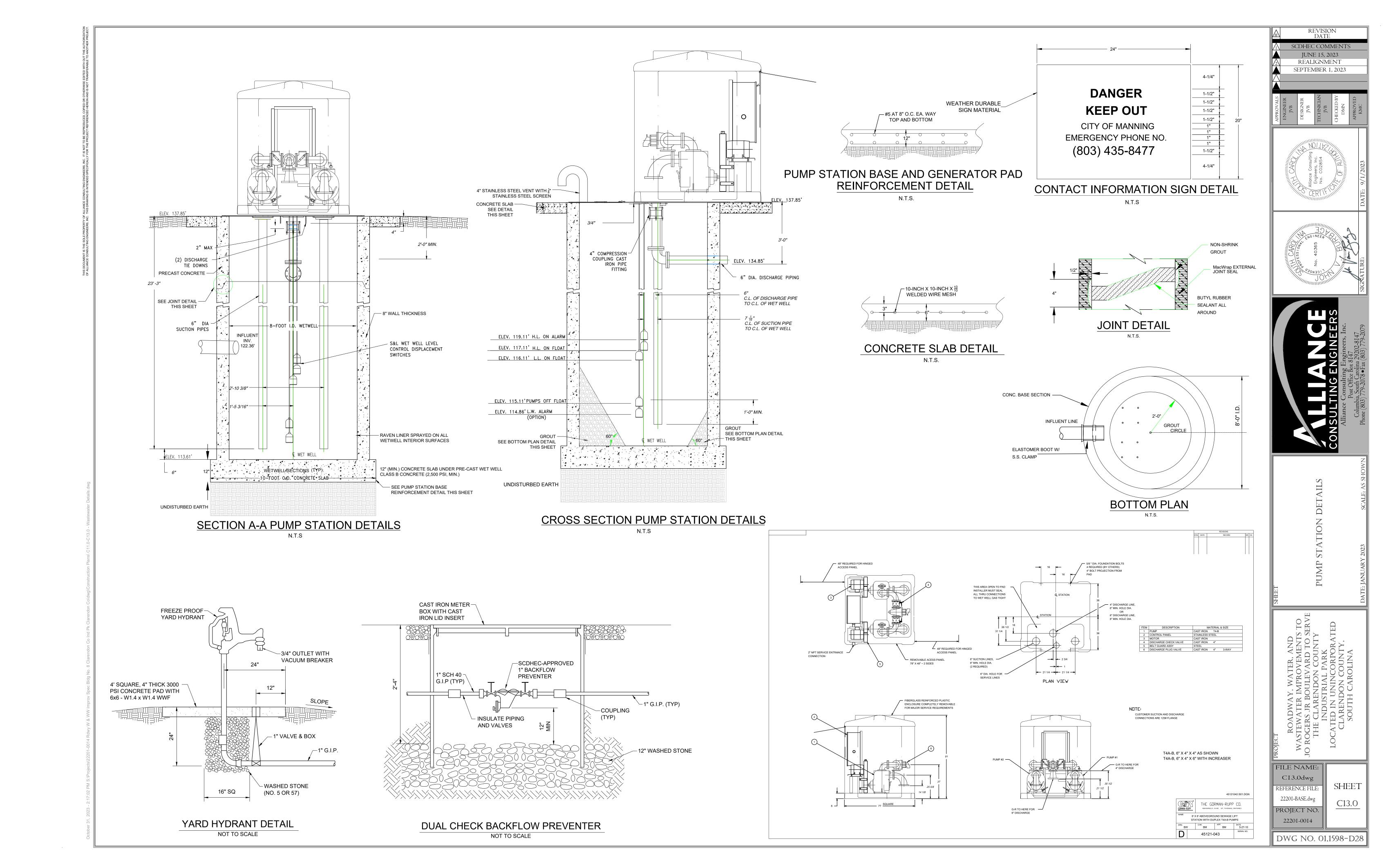


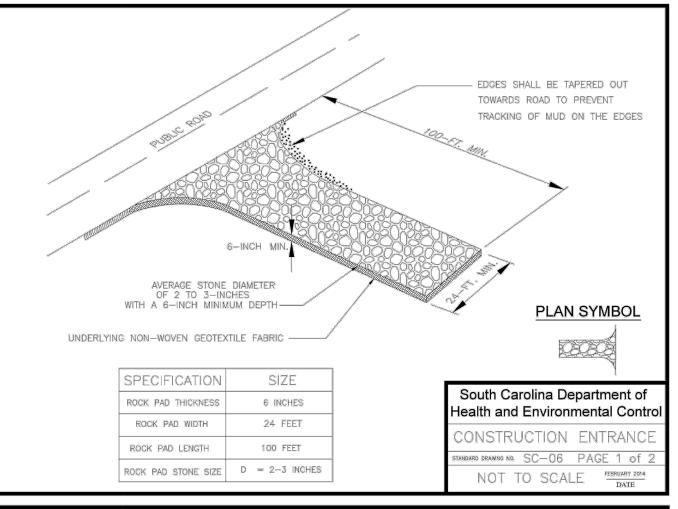
FILE NAME:
C12.0dwg
REFERENCE FILE:
2220I-BASE.dwg
PROJECT NO.
2220I-0014

DWG NO. 01,1598-D28

SHEET

C12.0





CONSTRUCTION ENTRANCE — GENERAL NOTES

1. Stabilized construction entrances should be used at all points

- Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
- Install a non-woven geotextile fabric prior to placing any stone.
- Install a culvert pipe across the entrance when needed to provide positive drainage.
- The entrance shall consist of 2—inch to 3—inch D50 stone placed at a minimum depth of 6—inches.

5. Minimum dimensions of the entrance shall be 24-feet wide

- 100—feet long, and may be modified as necessary to accommodate site constraints.

 6. The edges of the entrance shall be tapered out towards the
- road to prevent tracking at the edge of the entrance.

 7. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping
- 8. Limestone may not be used for the stone pad.

- CONSTR. ENTRANCE INSPECTION & MAINTENANCE

 1. The key to functional construction entrances is weekly
- inspections, routine maintenance, and regular sediment removal.

 2. Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24—hours after each rainfall even that produces
- 1/2—inch or more of precipitation.

 3. During regular inspections, check for mud and sediment
- 3. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to
- be more frequent during long periods of wet weather.

 4. Reshape the stone pad as necessary for drainage and runoff
- 5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off—site by vehicles. Frequent washing will
- mud being carried off—site by vehicles. Frequent washing will extend the useful life of stone pad.

 6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping.
- Flushing should only be used when the water can be discharged to a sediment trap or basin.

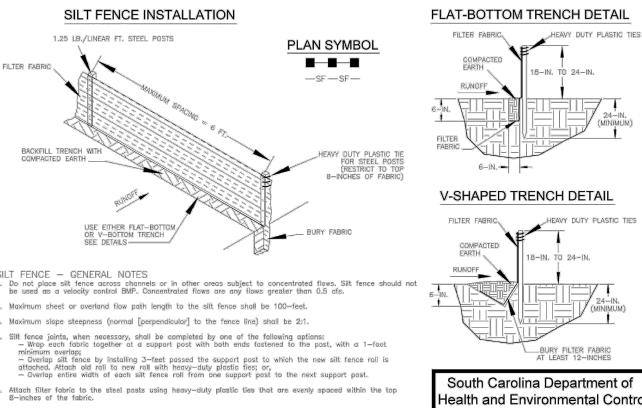
 7. During maintenance activities any broken payement should be
- During maintenance activities, any broken pavement should be repaired immediately.
 Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious

surface to serve post—construction.

South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE
STANDARD DRAWING NO. SC—06 PAGE 2 of 2

GENERAL NOTES FEBRUARY 2014
DATE



Attach filter fabric to the steel posts using heavy—duty plastic ties that are evenly spaced within the top B—inches of the fabric. Install Silt Fence Checks (Tie—Backs) every 50–100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

- SILT FENCE POST REQUIREMENTS

 SILT Fence posts must be 48—finch long steel posts that meet, at a minimum, the following physical characteristics.

 Composed of a high strength steel with a minimum yield strength of reg
- Suppose Standard "T" section with a nominal face width of 1,38-inches and a nominal "T" length of 1,48-inches.

 Weigh 1.25 pounds per foot (± 8%)

 Posts shall be equipped with projections to aid in fastening of filter fabric.

 Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be appealed to the second of 15 gauge steel, at a minimum.
- should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.

 4. Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- feet shall be maintained above the ground.

 5. Post spacing shall be at a maximum of 6—feet on center.
- SILT FENCE FABRIC REQUIREMENTS

 1. Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:

 Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;

 Free of any treatment or coating which might adversely alter its physical properties after installation;

 Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,

 Have a minimum width of 36—inches.
- Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- the SC DOT Standard Specifications for Highway Construction.

 3. 12—inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
- Filter Fabric shall be purchased in continuous rolls and out to the length of the barrier to avoid joints.

 Filter Fabric shall be installed at a minimum of 24—inches above the ground.

- SILT FENCE INSPECTION & MAINTENANCE

 1. The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24—hours after each rainfall even that produces 1/2—inch or more of precipitation.
 Attention to sediment accumulations along the silt fence is extremely important.
 Accumulated sediment should be continually monitored and removed when
- Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
 Removed sediment shall be placed in stockpile storage areas or spread

NOT TO SCALE FEBRUARY 2

- Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
- 7. Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence
- Silt fence should be removed within 30 days after final stabilization is achieved and ance it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

SILT FENCE

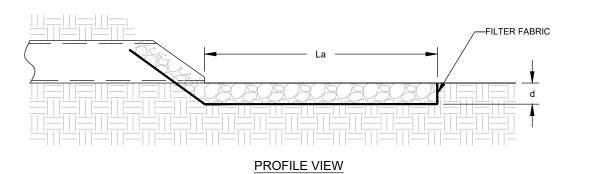
NDARD DRAWING NO. SC-03 PAGE 2 OF

BENERAL NOTES FEBRUARY 2014

DATE

Wu Do Wd NOTE: ALL PIPES SHOWN TO HAVE FLARED END SECTIONS BEVELED END SECTION (SEE DETAIL C9.0) Wd Wd

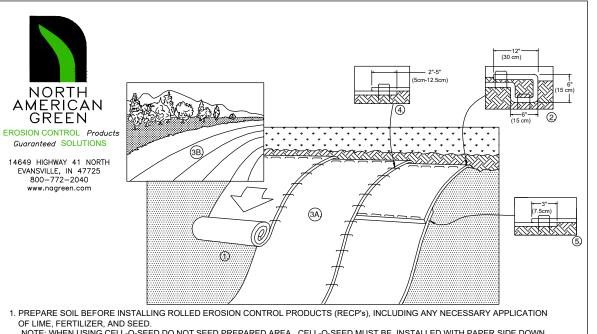
SINGLE OUTLET PIPE



RIP RAP OUTLET PROTECTION DETAIL

NTS

OUTLET PROTECTION SIZING CHART											
OUTLET LABEL	Do(IN)	NO. PIPES	Wu(FT)	La(FT)	Wd(FT)	d50(FT)	d(FT)				
POADWAY	2/	2	6.0	13.0	15.0	0.50	0.75				



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 cm) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH.

BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.

3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING

5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.

NOTE:

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

1. PREPARE EL TERRENO ANTES DE INSTALAR LAS MANTAS, INCLUYENDO LA APLICACION DE CAL, FERTILIZANTE Y SEMILLA. NOTA: CUANDO ESTE USANDO CELL-O-SEED NO SIEMBRE EL AREA PREPARADA. CELL-O-SEED TIENE QUE INSTALARSE CON EL JADO DE PAPEL HACIA BASIO.

2. COMIENCE EN LA CABECERA DEL TALUD SUJETANDO LA MANTA EN UNA ZANJA DE 6" (15 CM) DE PROFUNDIDAD FOR 6" (15 CM)

2. COMINICAE EN LA CABECERA DEL TALUD SUETANDO LA MANTA EN UNA ZANJA DE 6 (13 CM) DE PROPUNDIAD FOR 6 (13 CM)

DE ANCHO CON APROXIMADAMENTE 12" (30 CM) DE LA MANTA EXTENDIDA MAS ALLA DE LA PENDIENTE ALTA DE LA ZANJA. SUJETE

LA MANTA AL FONDO DE LA ZANJA CON UNA LINEA DE GRAPAS O ESTACAS APROXIMADAMENTE 12" (30 CM) UNA DE LA OTRA.

RELLENE Y COMPACTE LA ZANJA DESPUES DEL ENGRAPE. RIEGE LA SEMILLA EN EL SUELO COMPACTADO Y DOBLE LAS 12" (30 CM)

REMANENTES DE MANTA SOBRE LA SEMILLA EL SUELO COMPACTADO. ASEGURE LA MANTA SOBRE EL SUELO CON UNA LINEA DE

GRAPAS O ESTACAS APROXIMADAMENTE 12" (30 CM) UNA DE LA OTRA A TRAVES DEL ANCHO DE LA MANTA.

3. DESENROLLE LAS MANTAS (3A) HACIA ABAJO U (3B) HORIZONTALMENTE A TRAVES DEL TALUD CON EL LADO APROPIADO HACIA LA

SUPERFICIE DEL SUELO. TODAS LAS MANTAS DEBERAN ASEGURARSE A LA SUPERFICIE DEL SUELO POR MEDIO DE GRAPAS O

SUPERFICIE DEL SUELO. TODAS LAS MANTAS DEBERAN ASEGURARSE A LA SUPERFICIE DEL SUELO POR MEDIO DE GRAPAS O ESTACAS EN LUGARES APROPIADOS TAL Y COMO SE INDICA EN EL PATRON GUIA DE ENGRAPADO. CUANDO ESTE USANDO EL DOT SYSTEM[™]. LAS GRAPAS O ESTACAS DEBEN COLOCARSE A TRAVES DE CADU UNDO DE LOS PUNTOS CON COLOR CORRESPONDIENTES AL PATRON DE ENGRAPADO APROPIADO.

4. LOS BORDES DE LAS MANTAS PARALELAS TIENEN QUE ENGRAPARSE CON UN TRASLAPE DE APROXIMADAMENTE 2" - 5"

(5 CM - 12.5 CM) DEPENDIENDO DEL TIPO DE MANTA.

CON UN TRASLAPE DE APROXIMADAMENTE 3" (7.5 CM). ENGRAPE EL AREA TRASLAPADA CON UNA SEPARACIÓN DE APROXIMADAMENTE 12" (30 CM) A TRAVES DE TODO EL ANCHO DE LA MANTA.

NOTA:

* EN CONDICIONES DE SUELTO, PUEDE QUE SE NECESITEN GRAPAS O ESTACAS DE MAS DE 6" (15 CM) DE LARGO PARA ASEGURAR LAS MANTAS CORRECTAMENTE.

5. MANTAS CONSECUTIVAS UNIDAS EN LA BAJADA DE LOS TALUDES, DEBEN COLOCARSE ORILLA SOBRE ORILLA (TIPO EXCALONADO)

SLOPE INSTALLATION
APLICACIONES PARA TALUDES

Temporary Seeding - Upstate

Species	lbs./ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet (Alone)	40												
Browntop Millet (Mix)	10												
Rye Grain (Alone)	56												
Rye Grain (Mix)	10												
Rye Grass (Alone)	50												
Rye Grass (Mix)	8												
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												

Permanent Seeding - Upstate

						9	•р.						
Species	Lbs/Ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bahia Grass (Alone)	40												
Bahia Grass (Mix)	30												
Bermuda Grass (hulled) (Alone)	8-12												
Bermuda Grass (hulled) (Mix)	4-6												
Fescue, Tall (KY31) Alone	40												
Fescue, Tall (KY31) mix	20												
Sericea Lespedeza (Scarified) Alone or Mix (inoculate with EL Innoculant	40												
Ladino Clover (mix only) Innoculate with AB Innoculant	2												
		F	or St	eep S	lope	s/Cut	Slope	es					
Weeping Lovegrass (Alone)	4												
Weeping	2												

Sediment and Erosion Control Notes

Standard Notes: 1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the

slope is brought to grade.

2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.

> Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions

Lovegrass (Mix)
Crownvetch (Mix)
(Inoculate with
Type M Innoculant

stabilization measures must be initiated as soon as practicable.

> Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within fourteen (14) days, temporary stabilization measures do not have to be initiated on that portion of the Site.

3. All sediment and erosion control devices shall be inspected every seven (7) days. If site

inspections identify BMPs that are damaged or are not operating effectively, maintenance must be performed as soon as practical or as reasonably possible and before the next

storm event whenever practicable.

4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove any sediments before being pumped back into any waters of

5. All erosion control devices shall be properly maintained during all phases of construction

until the completion of all construction activities and all disturbed areas have been

stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.

6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.

roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.

7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.

8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly

appropriate traps of stable outlets.

All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.

10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in

storm water discharges.

11. A copy of the SWPPP, inspection records, and rainfall data must be retained at the construction site or a nearby location easily accesible during normal business hours, from the date of commencement of construction activities to the date that final

stabilization is reached.

12. Initiate stabilization measures on any exposed steep slope
(3H:1V or greater) where land—disturbing activities have permanently
or temporarily ceased, and will not resume for a period of 7 calendar

13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and special washing wheel wash water and other wash water. Wash

vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).

The following discharges from sites are prohibited:
 Wastewater from washout of concrete, unless managed by an appropriate control;
 Wastewater form washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and

Soaps or solvents used in vehicle and equipment washing.

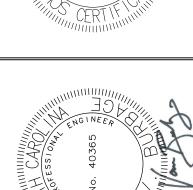
Soaps or solvents used in vehicle and equipment washing.
 17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
 18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with

the requirements of this permit and/or SC's Water Quality Standards, implementations must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.

19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP priop to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the

Department has approved otherwise.

REVISION DATE SCDHEC COMMENTS JUNE 15, 2023 REALIGNMENT SEPTEMBER I, 2023 REALIGNMENT SEPTEMBER I, 2023



NO SESSION OF THE STANDARD OF

NSULTING ENGINEERS
Alliance Consulting Engineers, Inc.
Post Office Box 8147

AILS CONSU

osion and sedimen Control details

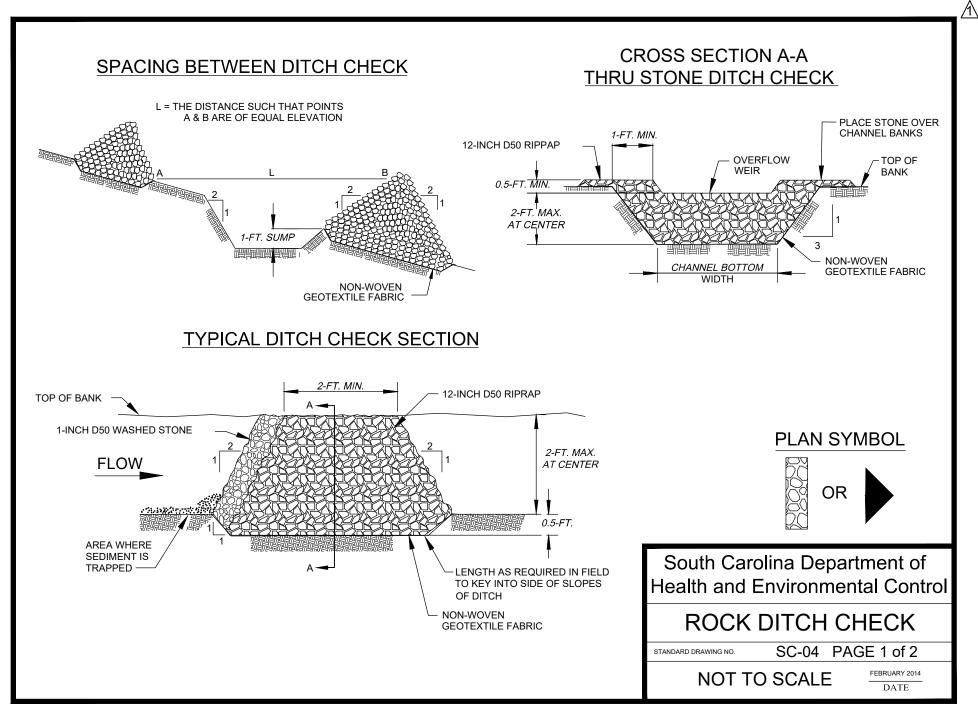
ATER IMPROVEMENTS TO JR BOULEVARD TO SERVE LARENDON COUNTY NDUSTRIAL PARK O IN UNINCORPORATED RENDON COUNTY,

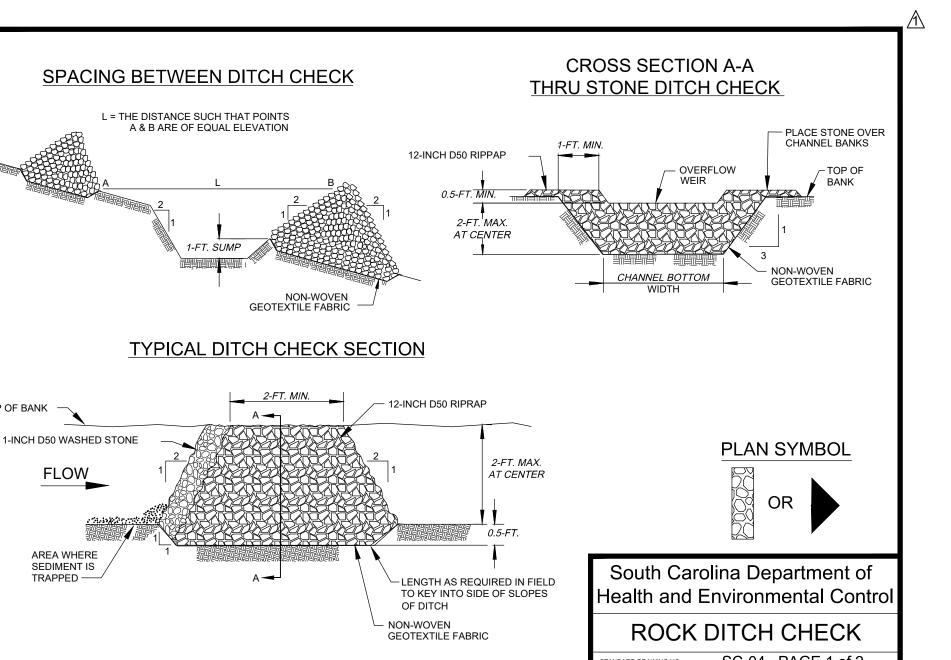
ROADWAY, W WASTEWATER IMF JO ROGERS JR BOUI THE CLAREND INDUSTRIZ LOCATED IN UNIT

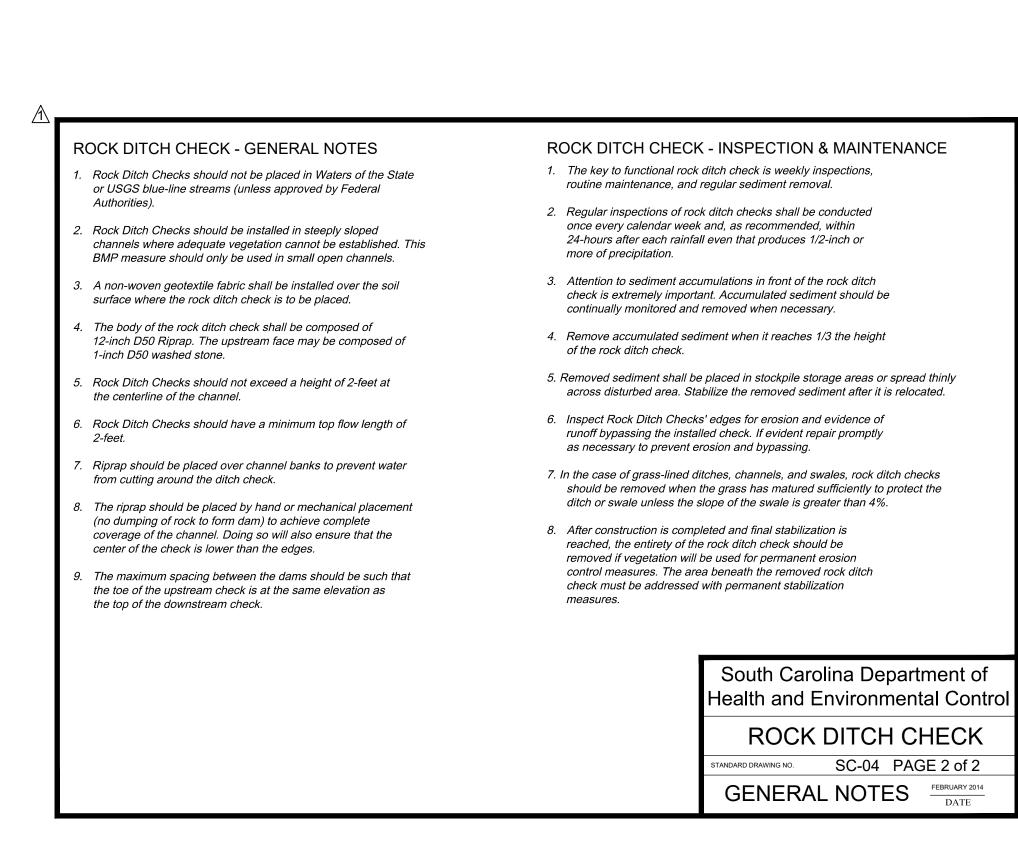
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C14.0dwg
REFERENCE FILE:
22201-BASE.dwg
PROJECT NO.

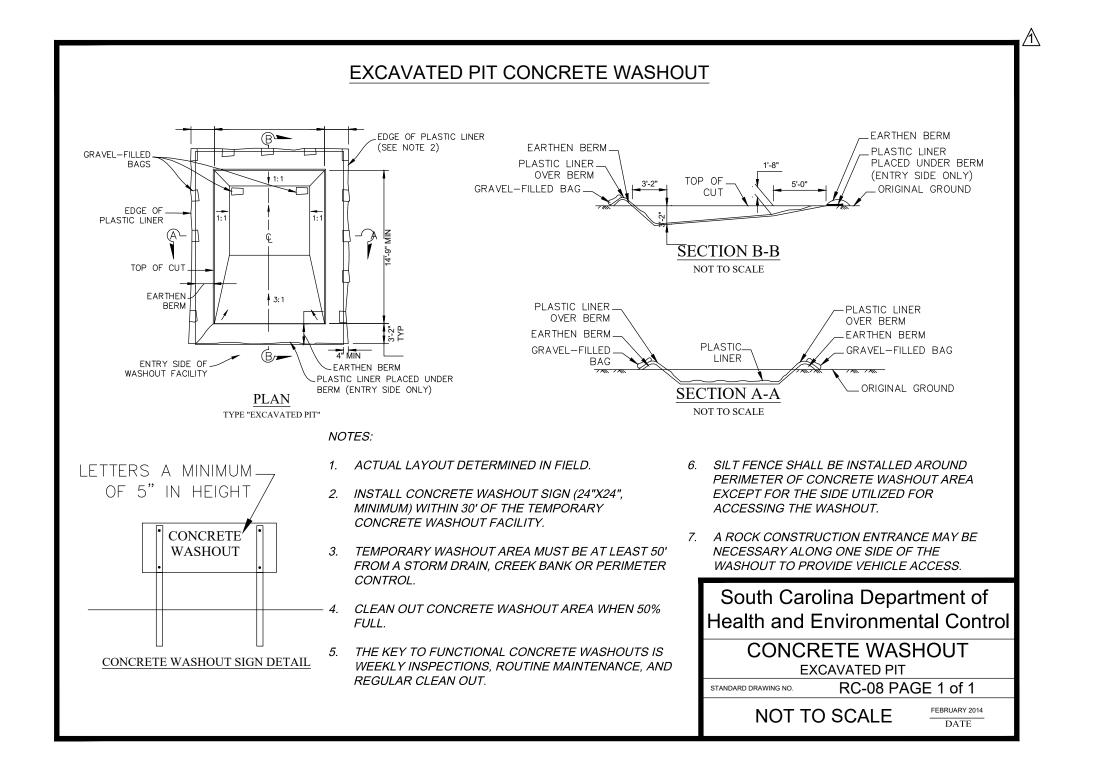
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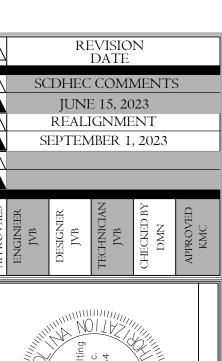
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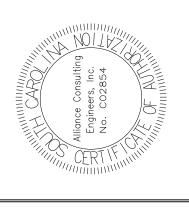


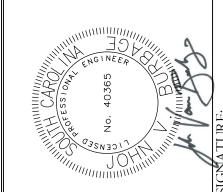














I AND SEDIMER

SHEET

C14.0

FILE NAME: CI4.0dwg REFERENCE FILE 22201-BASE.dwg

PROJECT NO. 22201-0014

RACEWAY MATERIAL USE TABLE

	RACEWAT WATERIAL USE TABLE											
	APPLICATION					RACEV	VAY MA	TERIAL				
	CONTRACTOR MAY USE ANY MATERIAL MARKED () FOR APPLICATION LISTED. IF MATERIAL IS NOT MARKED FOR AN APPLICATION, IT SHALL NOT BE USED FOR THAT APPLICATION.	EMT	IMC	GRS	RAC	SCH. 40 PVC	HDPE	AC/MC CABLE	MFD. WIRING			
	CONCEALED ABOVE CEILING		•	•	•							
	CONCEALED IN WALLS		•	•	•							
STIUS	EXPOSED FROM FLOOR TO 7'-0" A.F.F. (INTERIOR)	ED	•	•	•			9	ED			
CIRC	EXPOSED FROM 7'-0" A.F.F. AND ABOVE (INTERIOR)	PERMITED	•	•	•			PERMITED	RMIT			
BRANCH CIRCUITS	IN OR UNDER CONCRETE FLOORS	151	(1) •	(1) •		•	•	NOT PE	NOT PERMITED			
HR H	OUTDOORS - BELOW GRADE	Z	(1)	(1)		•	•	Z	Z			
	OUTDOORS - EXPOSED		•	•	•							
	STUB-UPS BELOW PANELS & ENCLOSURES		•	•	•							
	FEEDER CONDUITS		•	•	•	(2) •						
	SERVICE ENTRANCE			•		(2)						
	(1) WITH BITHMINOUS COATING, SEE SPEC											

(1) WITH BITUMINOUS COATING. SEE SPEC.

(2) OUTDOORS - BELOW GRADE.

FINAL OVERCURRENT DEVICE SERVICE PANEL **BRANCH CIRCUIT EQUIPMENT** UTILITY RECEPTACLE ✓ SERVICE DISCONNECT • • BRANCH CIRCUIT **FEEDER** SERVICE ENTRANCE **MOTOR** FINAL OVERCURRENT DEVICE

ABBREVIATIONS

THE FOLLOWING STANDARD ABBREVIATIONS ARE USED IN THESE PLANS AND SPECIFICATIONS. CONTRACTOR IS CAUTIONED THAT ALL ABBREVIATIONS LISTED MAY NOT BE USED; CONSULT PLANS AND SPECIFICATIONS FOR ABBREVIATIONS APPLICABLE TO THIS PROJECT.

A.F.F. ABOVE FINISHED FLOOR B.F.F. BELOW FINISHED FLOOR A.F.G. ABOVE FINISHED GRADE B.F.G. BELOW FINISHED GRADE

U.N.O. UNLESS NOTED OTHERWISE CKT. CIRCUIT CONDUIT EMPTY CONDUIT

A.T.S.

S.P.D.

GRS

FLX. FLEXIBLE CONDUIT WFLX WEATHERPROOF FLEXIBLE CONDUIT PUMP W.P. WEATHER PROOF

AUTOMATIC TRANSFER SWITCH

SCHEDULE - PANELBOARD HA

LOAD DESCRIPTION REMARK

100 AMP ■ MLO □ MCB

NEMA 4X ENCLOSURE

____ TYPE:

NQOD
I-LINE

BRKR

CONNECTED LOAD, KVA: A 9.4 B 9.4 C 9.4

KVA, THIS SECTION:

■ NF □ LDCTR

AMP | Ø | WIRE | COND | A | B | C

SURGE PROTECTION DEVICE GALVANIZED RIGID STEEL

GENERAL NOTES

3. ALL FUSES SHALL BE DUAL-ELEMENT TYPE, "FUSETRON" BY BUSSMAN, OR "ECON" BY

BRANCH CIRCUIT SIZES ARE AWG 12-3/4"C. UNLESS OTHERWISE NOTED IN PANELBOARD

ALL BRANCH CIRCUIT LOADS SHALL BE BALANCED ACROSS PANELBOARD BUSSES TO OBTAIN MINIMUM NEUTRAL CURRENT.

ALL FLEXIBLE CONDUIT SHALL CONTAIN A GREEN WIRE BONDED TO RIGID RACEWAY, BOX OR FIXTURE AT EACH END OF FLEX. SIZE GROUND WIRE PER N.E.C. TABLE 250-122.

VOLTAGE ■ 208/120V, 3Ø, 4W, WYE MOUNTING: □ FLUSH ■ SURFACE AIC RATING 22K

A B C CONDIWIRE | Ø AMP

2.5

☐ 480/277V, 3Ø, 4W, WYE ACCESSORY: ☐ FEED-THRULUGS TOTAL SPACES 12

CIRCUIT BRKR

REMARK LOAD DESCRIPTION

GFI = GFI BRKR.

VFY = VERIFY LOAD

__ CONNECTED LOAD, KVA:

REMARK ABBREVIATION LEGEND

STB = SHUNT TRIP BRKR.

SFB = SUB-FEED BRKR.

DO NOT SCALE DRAWINGS UNLESS DIMENSIONS ARE SHOWN. LOCATE OUTLETS AND EQUIPMENT AS OBVIOUSLY INDICATED AND COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS.

2. MINIMUM SIZE CONDUCTOR FOR POWER SHALL BE NO. 12 AWG.

ECONOMY.

NOTE: ALL DEVICES SHOWN ON THIS SCHEDULE ARE SYMBOLIC ONLY. SEE ELECTRICAL SPECIFICATIONS FOR EXACT DEVICE REQUIREMENTS AND PERFORMACE CHARACTERISTICS.

TRANSFORMER

PANELBOARD

SAFETY SWITCH

CONDUIT STUB

ELECTRIC MOTOR

DUPLEX RECEPTACLE (HIGH MOUNT)

WEATHERPROOF DUPLEX RECEPTACLE. 16" UP

T

NOTES TO PUMP STATION WORK

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL COUNTY WATER AND SANITATION GUIDELINES AND STANDARDS.

ELECTRICAL SYMBOLS

BRANCH CIRCUIT RACEWAY - CONCEALED IN

BRANCH CIRCUIT RACEWAY - CONCEALED IN

BRANCH CIRCUIT RACEWAY - EXPOSED

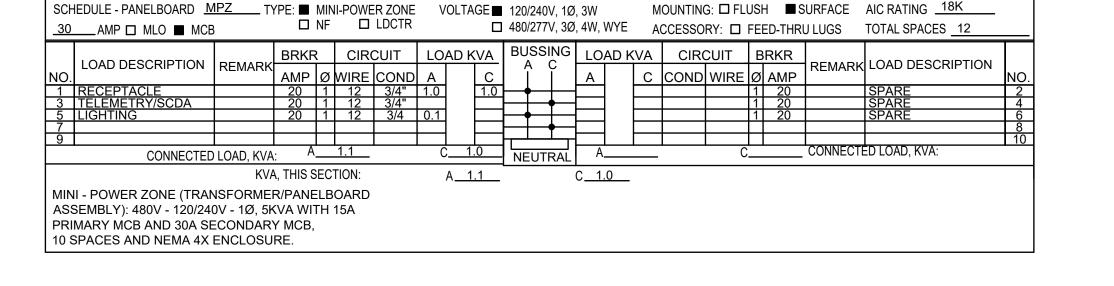
WALL OR CEILING

FLOOR OR UNDERGROUND

- ALL WORK SHALL COMPLY WITH NFPA 820, NEC AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL COORDINATE WITH UTILITY FOR ELECTRICAL SERVICE WITH CHARACTERISTICS AS INDICATED. PROVIDE METERING PROVISIONS AS DIRECTED BY UTILITY. CONTRACTOR SHALL PAY ALL SERVICE AND PERMIT FEES AS REQUIRED BY
- REFER TO CIVIL PLANS FOR UNDERGROUND UTILITY LOCATIONS. PLAN AND ROUTE RACEWAYS IN LOGICAL, EFFICIENT MANNER AND AS REQUIRED TO AVOID CONFLICT WITH OTHER UTILITIES. DOCUMENT ALL RACEWAY ROUTINGS, STUB OUTS AND LOCATIONS IN RESPECT TO MAJOR SITE COMPONENTS ON RECORD DRAWINGS.
- SEE CIVIL DOCUMENTS FOR ADDITIONAL ELECTRICAL WORK REQUIRED. PROVIDE ALL FINAL EQUIPMENT CONNECTIONS, CONTROL WIRING AND ASSOCIATED WORK FOR A COMPLETE AND OPERABLE PUMP STATION.
- CONTRACTOR IS CAUTIONED THAT THESE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT REPRESENT PRECISE LOCATIONS FOR EQUIPMENT. CONTRACTOR SHALL COORDINATE WITH CIVIL AND VENDOR PROVIDED DRAWINGS AND INFORMATION FOR EXACT LOCATIONS AND ORIENTATIONS OF EQUIPMENT, WIRING DIAGRAMS, TERMINATION POINTS AND OTHER REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL SUPPORTING ELECTRICAL WORK IN ASSOCIATION WITH EQUIPMENT VENDORS FOR A COMPLETE AND OPERABLE SYSTEM.
- ALL GROUNDING CONNECTIONS SHALL BE BY EXOTHERMIC WELD WITH THE EXCEPTION OF LUGS INSTALLED IN EQUIPMENT/ENCLOSURES.
- 8. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED ABOVE THE 100 YEAR FLOOD LEVEL.
- 9. SEAL ALL PENETRATIONS INTO WET WELL WITH WATER-TIGHT PUTTY.
- 10. PROVIDE STRAIN RELIEF FOR ALL CORDS INSTALLED IN WET WELL ALL REQUIRED HARDWARE AND MATERIALS SHALL BE STAINLESS STEEL. SUPPORT GRIPS SHALL BE AMTEC 2202 SERIES (SS) OR EQUAL.
- 1. PROVIDE HANDHOLES AS REQUIRED FOR LONG RUNS OR EXCESSIVE BENDS. HANDHOLES SHALL BE FIBERGLASS REINFORCED POLYMER CONCRETE INSTALLED ON GRAVEL BASE. FRAMES AND COVERS SHALL BE RATED FOR VEHICULAR TRAFFIC.
- THE ELECTRICAL DESIGN IS BASED ON A PUMPING STATION UTILIZING EQUIPMENT WITH THE FOLLOWING CHARACTERISTICS. CONTRACTOR SHALL VERIFY THAT EQUIPMENT FURNISHED MATCHES THE DESIGNED CHARACTERISTICS AND NOTIFY THE ENGINEER IMMEDIATELY OF

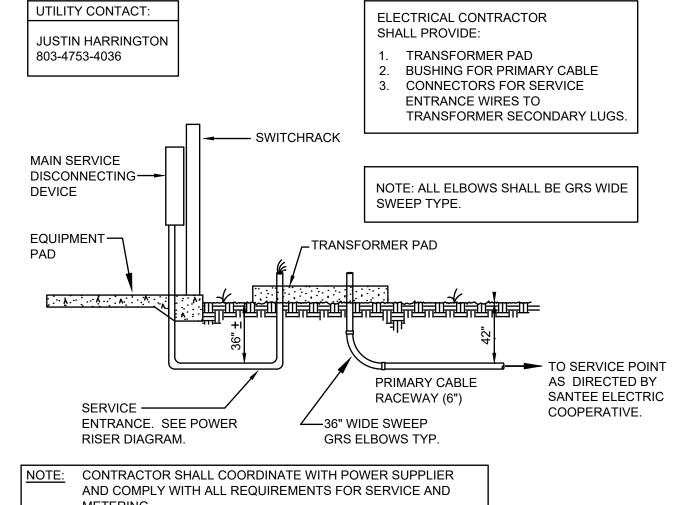
STARTERS: DIRECT-ON-LINE (DOL)

<u>PUMPS</u>: TWO (2) 10HP

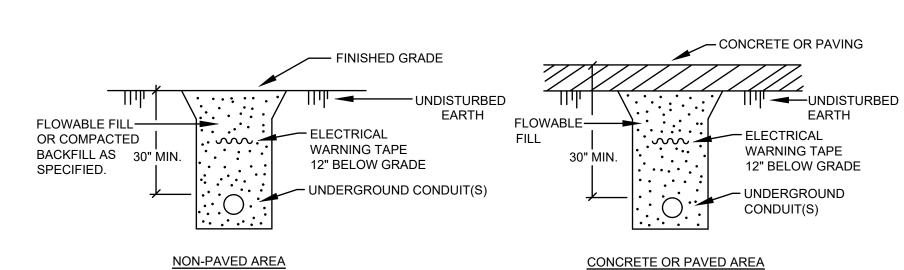


CIRCUIT | LOAD KVA | BUSSING | LOAD KVA |

A 11.9 B 11.9 C 9.4



UNDERGROUND SERVICE ENTRANCE TO PAD-MOUNTED



UNDERGROUND CONDUIT NOT IN A DUCTBANK NO SCALE



168 Laurelhurst Avenue Columbia, SC 29210 (803)252-6919 Fax (803)799-5494

gwa@gwainc.net http://www.gwainc.net

DWG NO. 01,1598-D28

SHEET

E001

FILE NAME

REFERENCE FILE

2220I-BASE.dwg

PROJECT NO

22201-0014

No. 19845

07/13/2023

ENGINEERS

No. C0082

AL SYMBOLS, AND DETAILS

RIC

EQUIPMENT RACK MIN. 20' LONG #4 AWG OR LARGER BARE COPPER CONDUCTOR OR STEEL REINFORCING BAR/ROD, M/N 1/2" DIA. NON-METALLIC -PROTECTION SLEEVE PENN-UNION #GPL **GROUND CLAMP OR** EQUAL OR CADWELD. CONCRETE FOUNDATION

PENN-UNION #PNL OR EQUAL OR

CONNECTION. SEE

-GROUND BLOCK

CADWELD

SPEC.

GROUNDING OF MAIN SERVICE

MAIN SERVICE

AND FEEDER

SEE SPEC.

MAIN

EQUIP.

MAIN BONDING JUMPER

INSULATED GROUNDING

NEUTRAL BLOCK

BUSHINGS WITH

TYPICAL: CONNECT GROUND CONDUCTOR —

TO GROUNDING BUSHING PENN-UNION

#KCH CLAMP OR EQUAL.

THOMPSON #693

GROUND CLAMP

3/4" X 10' ———

GROUND RODS

BUILDING.

DRIVEN OUTSIDE

OR CADWELD

CONNECTION.

OR EQUAL

BONDING JUMPERS

SEE POWER RISER —

12'0"±

12'0"±

SERVICE /

TRANSFORMER

