

STANTEC CONSULTING SERVICES INC.
 4969 CENTRE POINTE DRIVE, SUITE 200
 NORTH CHARLESTON, SC 29417
 TEL 843.740.7700

CLIENT: GEORGETOWN COUNTY
 108 SCREVEN STREET
 GEORGETOWN, SC 29442
 TRACY JONES | 843-545-3258

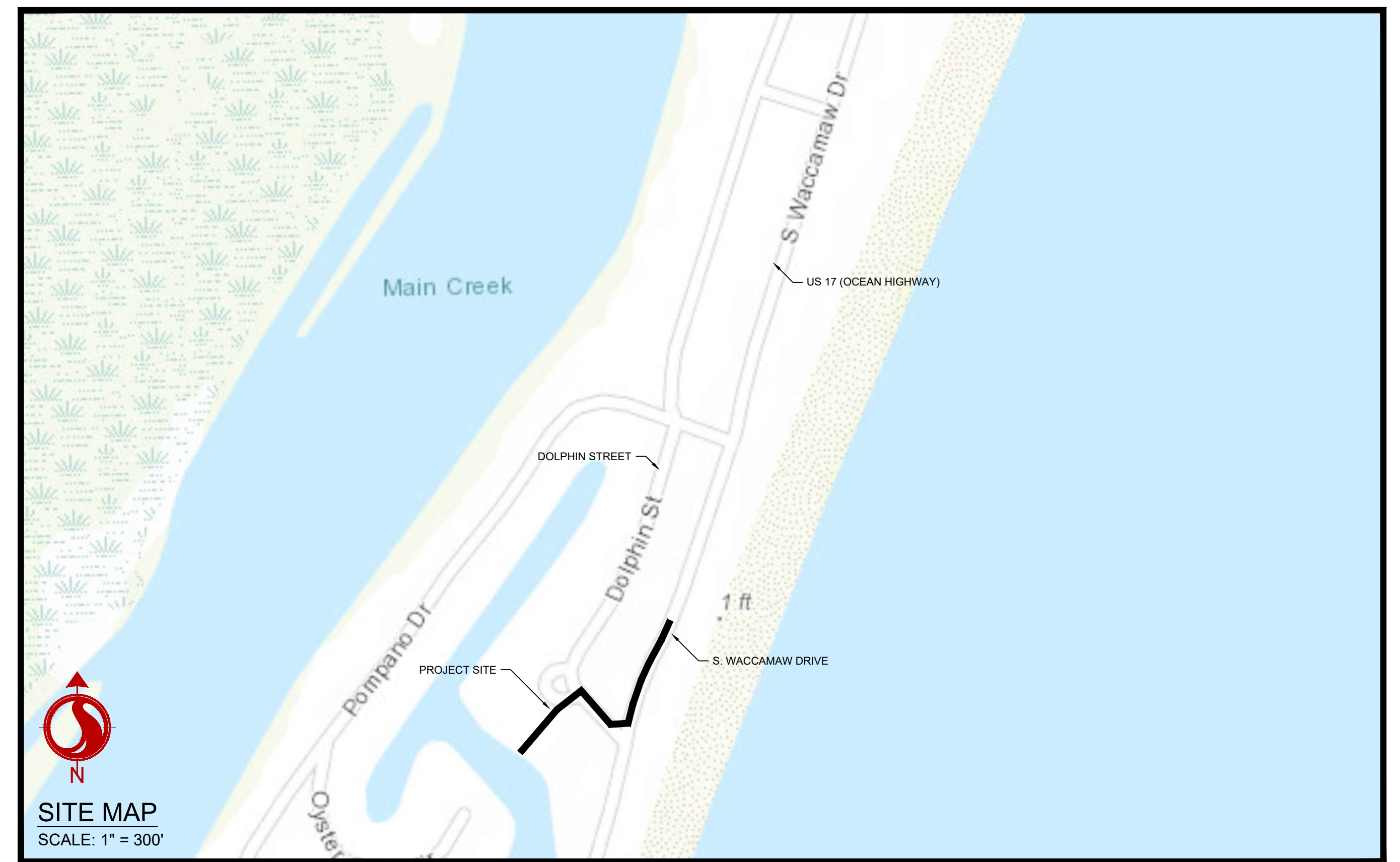
GARDEN CITY DRAINAGE IMPROVEMENTS

SITE 5
 GEORGETOWN COUNTY,
 SOUTH CAROLINA



Know what's below.
 Call before you dig.

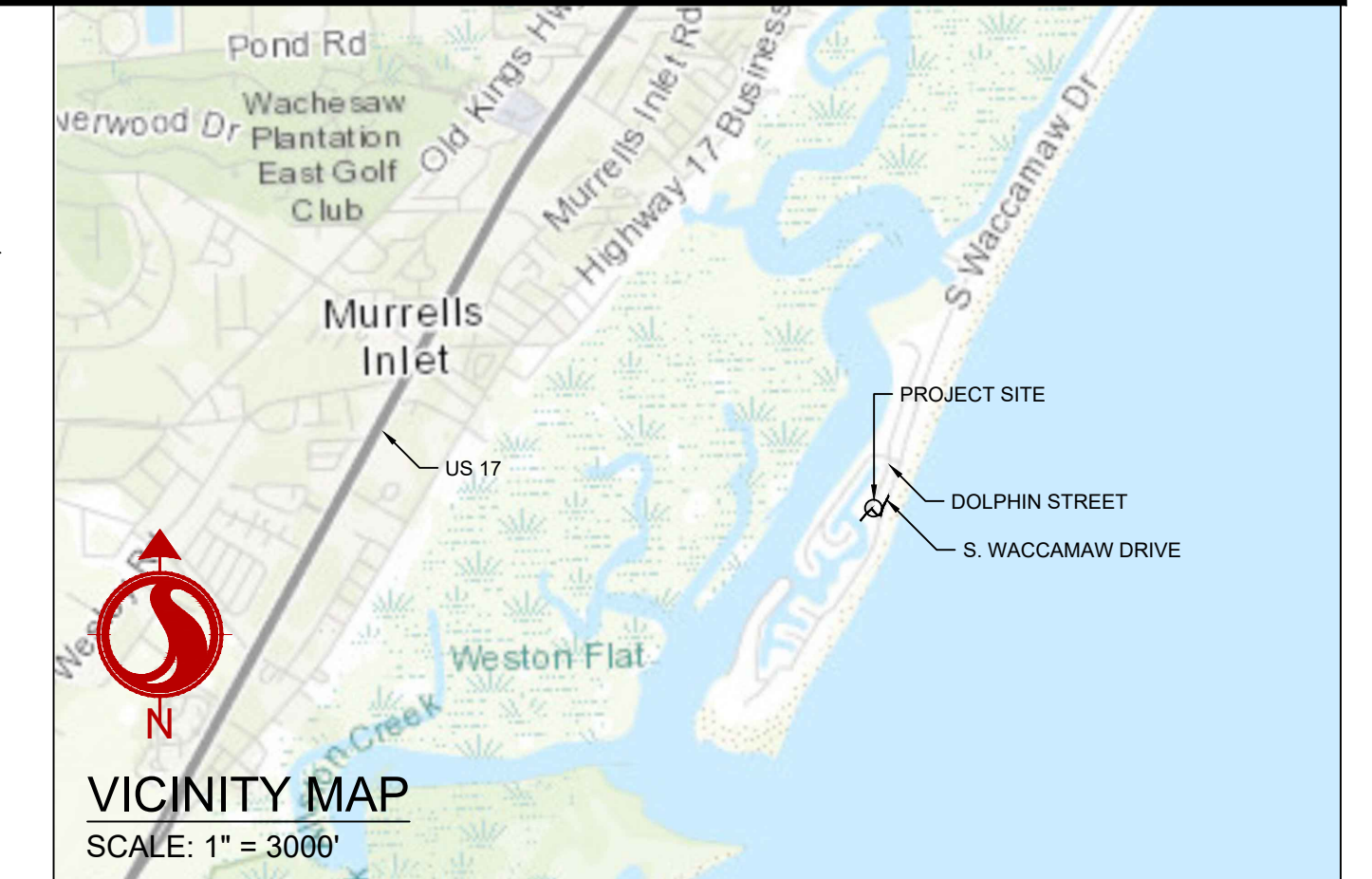
PROJECT NUMBER: 178420916



SITE MAP
 SCALE: 1" = 300'

SHEET INDEX

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VICINITY MAP
 SCALE: 1" = 3000'

PROJECT CONTACTS			
SERVICE	MUNICIPALITY/UTILITY PROVIDER	CONTACT	PHONE
PLANNING & ZONING	GEORGETOWN COUNTY DEPARTMENT OF PLANNING	BOYD JOHNSON	(843) - 545-3158
STORMWATER	GEORGETOWN COUNTY STORMWATER DIVISION	TRACY JONES	(843) - 545-3524
WATER AND SEWER	GEORGETOWN COUNTY WATER AND SEWER DISTRICT	ERNIE FUNDERBURK	(843) - 907-1535
POWER	SANTEE COOPER	JIM POSTON	(843) - 347-3399
IRRIGATION	WACCAMAW MANAGEMENT	MIKE JACOBS	(843)-241-6234
ROAD	SCDOT	BENJI SMITH	(843)-661-4710 Ext. 201

Revision	By	Appd	YYYY.MM.DD
BID SET	AS	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22
Issued	By	Appd	YYYY.MM.DD
File Name: C0_916_COVER	SGC	SGC	2018.12.11
	Dwn.	Dgrn.	Clkd.



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Legend

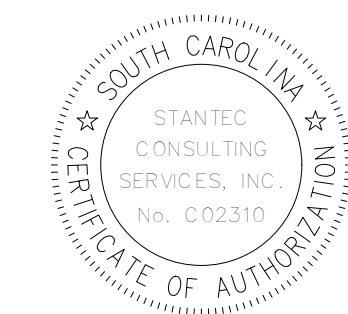
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PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22

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File Name: C3_116_GRADING	SGC	SGC	BK	2018.12.11
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Permit/Seal



Client/Project Logo

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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

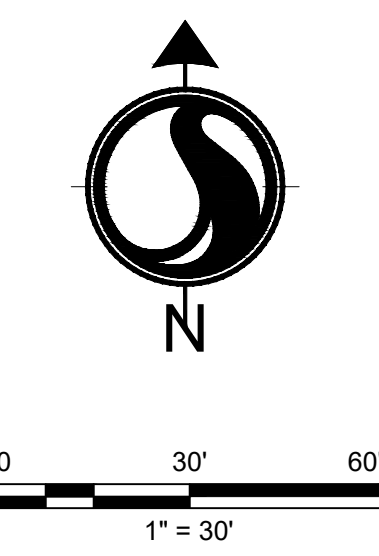
Title
OVERALL SHEET INDEX

Project No.
178420916

Scale

Revision Sheet
5 of 23

Drawing No.
C1-02



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Legend

- (PS) PERMANENT STABILIZATION (SEE LANDSCAPE PLANS)
- (TS) TEMPORARY SEEDING
- (M) MULCHING
- (DC) DUST CONTROL
- LD LIMITS OF DISTURBANCE
- TP TREE PROTECTION
- SF SILT FENCE
- ST SEDIMENT TUBE
- X TREE DEMOLITION
- A TYPE A INLET PROTECTION
- DRAINAGE FLOW ARROW

Revision

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BID SET PER GEORGETOWN COUNTY COMMENTS	AB	BK	2020.03.26	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30	
ISSUED	By	Appd	YYYY.MM.DD	
File Name: C2_ESC	SGC	BK	2018.12.11	
	Dwn.	Dgdn.	Chkd.	YYYY.MM.DD

Permit/Seal



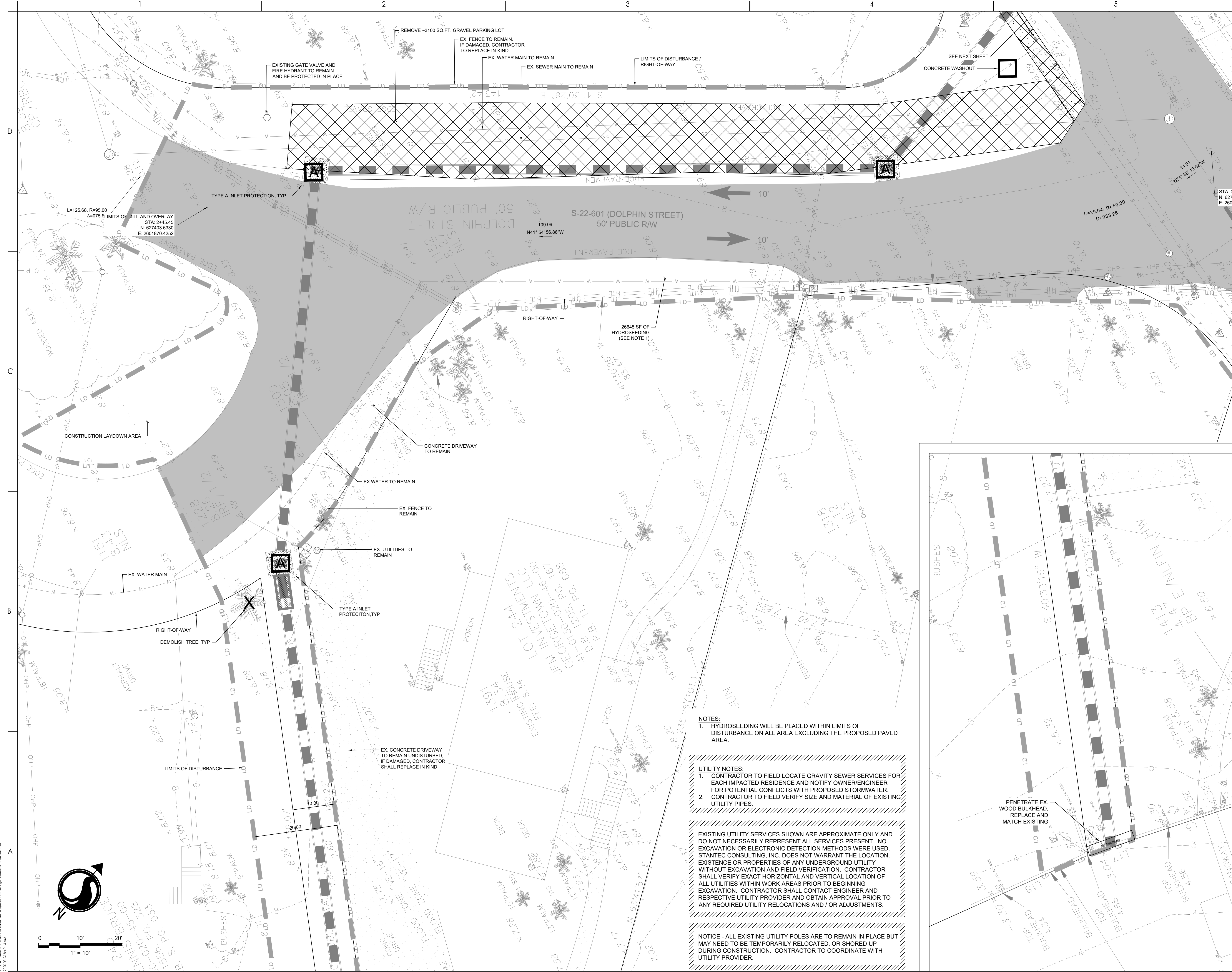
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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
DEMOLITION AND EROSION CONTROL PLAN

Project No. 178420916	Scale
Revision Sheet 6 of 23	Drawing No. C2-00



NOTES:
1. HYDROSEEDING WILL BE PLACED WITHIN LIMITS OF DISTURBANCE ON ALL AREA EXCLUDING THE PROPOSED PAVED AREA.

UTILITY NOTES:
1. CONTRACTOR TO FIELD LOCATE GRAVITY SEWER SERVICES FOR EACH IMPACTED RESIDENCE AND NOTIFY OWNER/ENGINEER FOR POTENTIAL CONFLICTS WITH PROPOSED STORMWATER EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.

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Legend

- (PS) PERMANENT STABILIZATION (SEE LANDSCAPE PLANS)
- (TS) TEMPORARY SEEDING
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- A TYPE A INLET PROTECTION
- > DRAINAGE FLOW ARROW

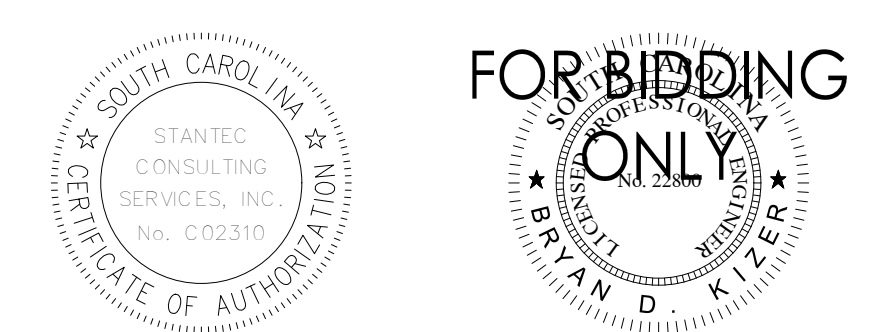
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BID SET PER GEORGETOWN COUNTY COMMENTS	AB	BK	2020.03.26
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	SGC	BK	2019.01.22

Issued

File Name: C2_ESC	By	Appd	YYYY.MM.DD
	SGC	BK	2018.12.11
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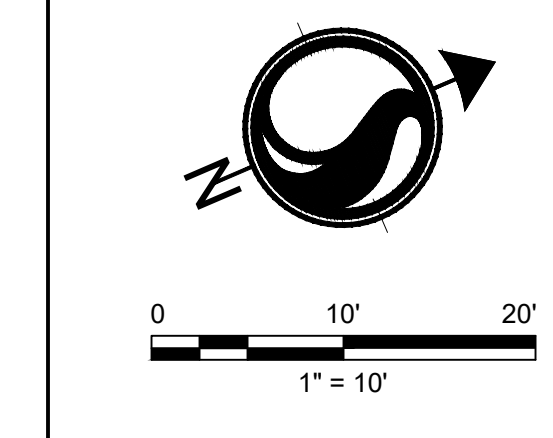
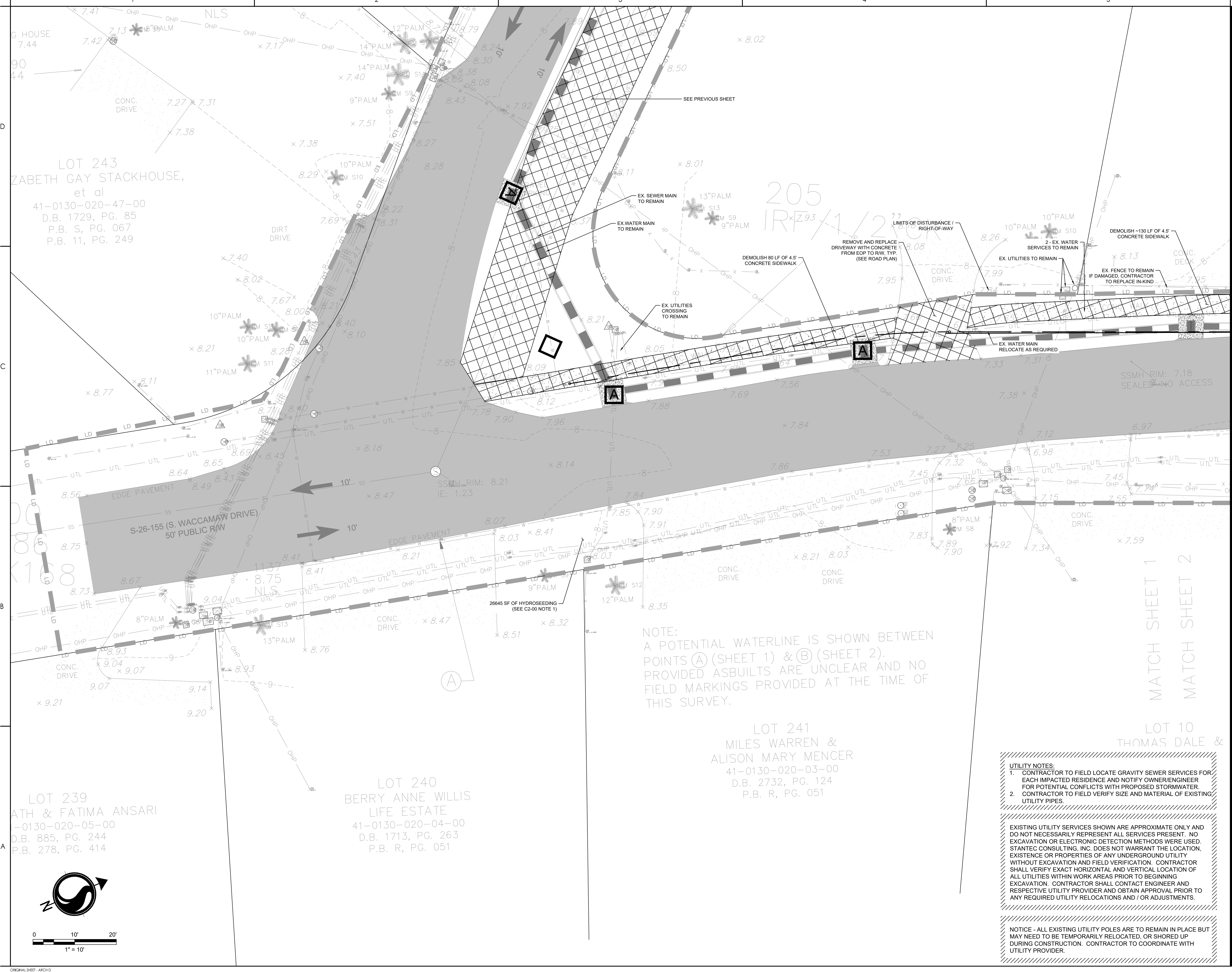
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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
DEMOLITION AND EROSION CONTROL PLAN

Project No. 178420916
Revision Sheet 7 of 23
Scale
Drawing No. C2-01



Legend

- (PS) PERMANENT STABILIZATION (SEE LANDSCAPE PLANS)
- (TS) TEMPORARY SEEDING
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Revision

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BID SET			
PER GEORGETOWN COUNTY COMMENTS	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22
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File Name: C2_BSC	SGC	BK	2018.12.11
	Dwn.	Dgnd.	Chkd.
			YYYY.MM.DD

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FOR BIDDING



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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5

MURRELLS INLET, SOUTH CAROLINA

Title
DEMOLITION AND EROSION CONTROL PLAN

Project No.
178420916

Scale

Revision Sheet
8 of 23

Drawing No.
C2-02

LOT 100
CATHERINE C. KIRBY &
MARY LEE ANDREWS
41-0130-027-00-00
D.B. 1539, PG. 159
P.B. S, PG. 067

LOT 9
CHRISTINE N. & JIM D.
PAPADEA, et al
41-0130-020-01-00
D.B. 2873, PG. 306
P.B. A, PG. 103
P.B. Q, PG. 103

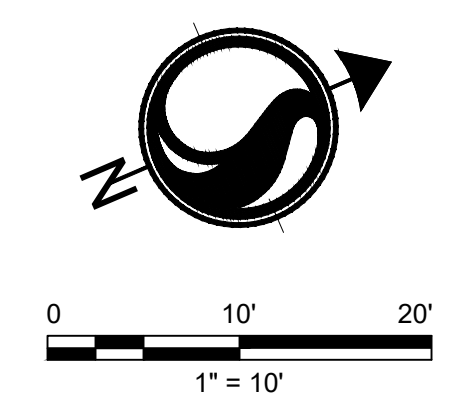
LOT 10
THOMAS DALE &
JOANNE RAINEY
41-0130-020-02-00
D.B. 2245, PG. 346
P.B. R, PG. 034

NOTE:
A POTENTIAL WATERLINE IS SHOWN BETWEEN
POINTS (A) (SHEET 1) & (B) (SHEET 2).
PROVIDED ASBULTS ARE UNCLEAR AND NO
FIELD MARKINGS PROVIDED AT THE TIME OF
THIS SURVEY.

- UTILITY NOTES:
- CONTRACTOR TO FIELD LOCATE GRAVITY SEWER SERVICES FOR EACH IMPACTED RESIDENCE AND NOTIFY OWNER/ENGINEER FOR POTENTIAL CONFLICTS WITH PROPOSED STORMWATER
 - CONTRACTOR TO FIELD VERIFY SIZE AND MATERIAL OF EXISTING UTILITY PIPES.

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.



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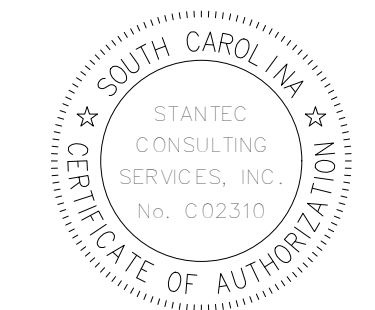
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Issued			
	By	Appd	YYYY.MM.DD
File Name: C2_ESC_GRADING_DETAILS	SGC	SGC	BK
	Dwn.	Dgnt.	Chkd.
			YYYY.MM.DD

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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
EROSION CONTROL DETAILS

Project No.
178420916
Revision Sheet
9 of 23

Scale
Drawing No.
C2-03



Know what's below.
Call before you dig.

SILT FENCE INSTALLATION

SILT FENCE - GENERAL NOTES

- Do not place silts fence across channels or in other areas subject to concentrated flows. Silts fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
- Maximum sheet or overland flow path length to the silts fence shall be 100-feet.
- Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
- Silts fence joints, when necessary, shall be completed by one of the following options:
 - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap.
 - Overlap silts fence by installing 3-feet passed the support post to which the new silts fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or,
 - Overlap entire width of each silts fence roll from one support post to the next support post.
- Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
- Install the silts fence perpendicular to the direction of the stormwater flow and place the silts fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
- Install Silts Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silts fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silts fence.

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-03 PAGE 1 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

FLAT-BOTTOM TRENCH DETAIL

V-SHAPED TRENCH DETAIL

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-03 PAGE 2 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

SILT FENCE - POST REQUIREMENTS

- Silts Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
 - Weight 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 1/2 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
- 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.
- Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE - FABRIC REQUIREMENTS

- Silts 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 polypropylene, 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 affect 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 (GPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- 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 cut to the length of the barrier to avoid joints.
- Filter fabric shall be installed at a minimum of 24-inches above the ground.

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-03 PAGE 2 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

SILT FENCE - INSPECTION & MAINTENANCE

- The key to functional silts fence is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of silts fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations along the silts fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the silts fence.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Check for areas where stormwater runoff has eroded a channel beneath the silts fence, or where the fence has sagged or collapsed due to runoff overlapping the silts fence. Install checks/tie-backs and/or reinstall silts fence, as necessary.
- Check for tears within the silts fence, areas where silts fence has begun to decompose, and for any other circumstance that may render the silts fence ineffective. Removed damaged silts fence and reinstall new silts fence immediately.
- Silts fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-03 PAGE 2 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

SPACING BETWEEN DITCH CHECK

CROSS SECTION A-A THRU STONE DITCH CHECK

TYPICAL DITCH CHECK SECTION

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-04 PAGE 1 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

ROCK DITCH CHECK - GENERAL NOTES

- Rock Ditch Checks should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
- Rock Ditch Checks should be installed in steeply sloped channels where adequate vegetation cannot be established. This BMP measure should only be used in small open channels.
- A non-woven geotextile fabric shall be installed over the soil surface where the rock ditch check is to be placed.
- The body of the rock ditch check shall be composed of 12-inch D50 Riprap. The upstream face may be composed of 1-inch D50 washed stone.
- Rock Ditch Checks should not exceed a height of 2-feet at the centerline of the channel.
- Rock Ditch Checks should have a minimum top flow length of 2-feet.
- Riprap should be placed over channel banks to prevent water from cutting around the ditch check.
- The riprap should be placed by hand or mechanical placement (no dumping of rock to form dams) to achieve complete coverage of the channel. Doing so will also ensure that the center of the check is lower than the edges.
- The maximum spacing between the dams should be such that the toe of the upstream check is at the same elevation as the top of the downstream check.

ROCK DITCH CHECK - INSPECTION & MAINTENANCE

- The key to functional rock ditch check is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of rock ditch checks shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations in front of the rock ditch check is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the rock ditch check.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Inspect Rock Ditch Checks' edges for erosion and evidence of runoff bypassing the installed check. If evident repair promptly as necessary to prevent erosion and bypassing.
- In the case of grass-lined ditches, channels, and swales, rock ditch checks should be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4%.
- After construction is completed and final stabilization is reached, the entirety of the rock ditch check should be removed if vegetation will be used for permanent erosion control measures. The area beneath the removed rock ditch check must be addressed with permanent stabilization measures.

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-04 PAGE 2 of 2
FEBRUARY 2014 DATE
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POST INSTALLATION DETAIL

FILTER FABRIC INSTALLATION DETAIL

FILTER FABRIC BURIAL DETAIL

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-07 PAGE 1 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

TYPE A - FILTER FABRIC REQUIREMENTS

- Silts 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 polypropylene, 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 affect 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 (GPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
- 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 cut to the length of the barrier to avoid joints.
- Filter fabric shall be installed at a minimum of 24-inches above the ground.

TYPE A - POST REQUIREMENTS

- Silts Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
 - Weight 1.25 pounds per foot (± 8%).
- Posts shall be equipped with projections to aid in fastening of filter fabric.
- 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.
- Post spacing shall be at a maximum of 3-feet on center.

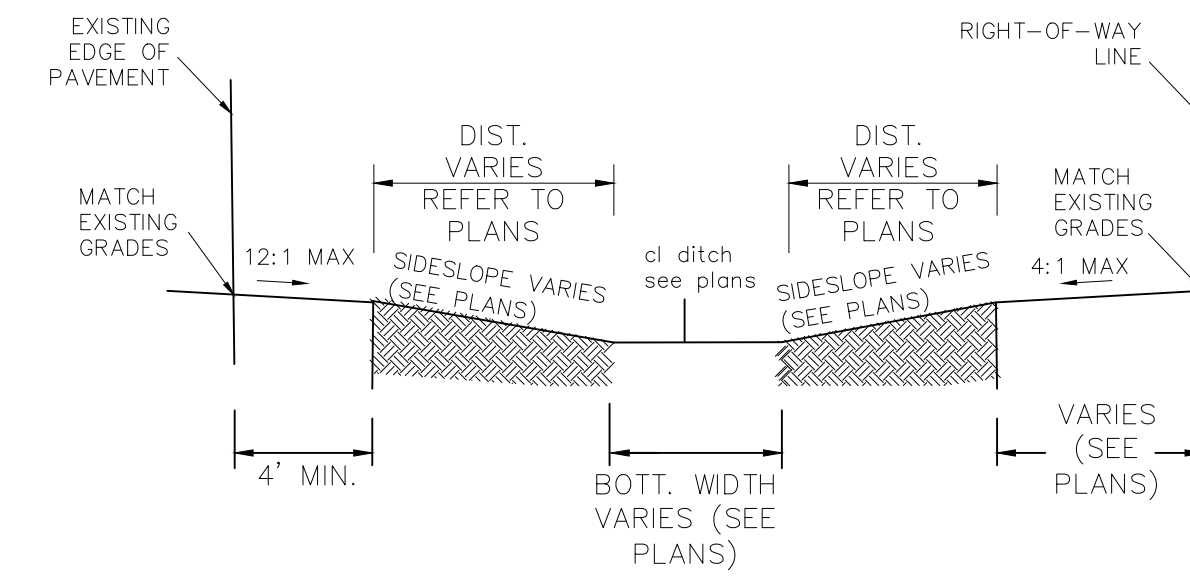
South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-07 PAGE 2 of 2
FEBRUARY 2014 DATE
NOT TO SCALE

TYPE A - INSPECTION & MAINTENANCE

- The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
- Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- Remove accumulated sediment when it reaches 1/3 the height of the filter fabric. When a sump is installed in front of the fabric, sediment should be removed when it fills approximately 1/3 the depth of the sump.
- Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- Check for areas where stormwater runoff has eroded a channel beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overlapping the inlet protection.
- Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new filter fabric immediately.
- Inlet protection structures should be removed after all the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

South Carolina Department of Health and Environmental Control
STANDARD DRAWING NO. SC-07 PAGE 2 of 2
FEBRUARY 2014 DATE
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 2/20/2018 8:40 AM Mr. Timm, John



GRASSED TRAPEZOIDAL DITCH DETAIL
N.T.S.

SEQUENCE OF CONSTRUCTION:	DITCHES/SWALES WITH SEEDING AND/OR SOD.
1. RECEIVE NPDES COVERAGE FROM SCDHEC.	11. REPLACE DAMAGED OR DEMOLISHED HARDSCAPE AND LANDSCAPE IN-KIND AS REQUIRED.
2. NOTIFY SCDOT, PRE-CONSTRUCTION MEETING.	12. MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.
3. NOTIFY DHEC EQC REGIONAL OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.	13. CONTACT GEORGETOWN COUNTY FOR FINAL INSPECTION AND CLOSE-OUT OF PROJECT. AS-BUILT, VIDEO AND CLOSE-OUT APPLICATION TO BE SUBMITTED FOR REVIEW AND APPROVAL AS REQUIRED BY GEORGETOWN COUNTY.
4. INSTALLATION OF TREE PROTECTION, PERIMETER SILT FENCE, AND EROSION CONTROL MEASURES.	14. REMOVAL OF TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AFTER ENTIRE WORK AREA IS FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARER OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES).
5. POTHOLE UTILITY LOCATIONS AS SHOWN ON THE PLANS, LOCATE SEWER SERVICES FOR EACH RESIDENCE, AND NOTIFY OWNER/ENGINEER OF CONFLICTS.	15. SUBMIT TO DHEC FOR N.O.T. WITHIN 30 DAYS OF FINAL STABILIZATION.
6. INSTALLATION OF COFFERDAMS (AS REQUIRED)	
7. INSTALLATION OF NEW STORMWATER PIPES AND STRUCTURES.	
8. CONSTRUCT DIVERSION SWALES AS NECESSARY TO CONVEY THE STORM WATER BEFORE THE PROPOSED STORM DRAINAGE SYSTEM IS FULLY FUNCTIONAL. INSTALLING SEDIMENT TUBES IF NECESSARY.	
9. INSTALL PERIMETER SILT FENCE WHERE SEDIMENT IS OBSERVED TO BE LEAVING CONSTRUCTION AREAS. MAINTAIN PERIMETER SILT FENCE, DIVERSIONS, AND SEDIMENT TUBES.	
10. PERMANENT/FINAL STABILIZATION OF	

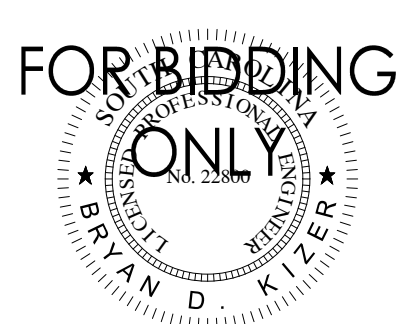
Legend

Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22
Issued	By	Appd	YYYY.MM.DD

File Name: C2_ESC_GRADING_DETAILS	SGC	SGC	BK	2018.12.11
	Dwn.	Dgnt.	Chkd.	YYYY.MM.DD

Permit/Seal



Client/Project Logo

Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
EROSION CONTROL DETAILS

Project No. 178420916	Scale
Revision Sheet	Drawing No. C2-04
10 of 23	

TEMPORARY VEGETATION SCHEDULE

SPECIES	RATE (LBS/AC)	OPTIMUM DATES TO PLANT	REMARKS
BROWNTOP MILLET (ALONE)	40	APRIL 20 - AUGUST 15	QUICK, DENSE COVER
BROWNTOP MILLET (MIX)	10	APRIL 20 - AUGUST 15	QUICK, DENSE COVER
RYE GRAIN (ALONE)	56	FEBRUARY - MARCH AUGUST 15 - NOVEMBER 20	QUICK COVER
RYE GRAIN (MIX)	10	FEBRUARY - MARCH AUGUST 15 - NOVEMBER 20	QUICK COVER
RYE GRASS (ALONE)	50	AUGUST 10 - OCTOBER 10	COMPETITIVE, DENSE
RYE GRASS (MIX)	8	AUGUST 10 - OCTOBER 10	COMPETITIVE, DENSE

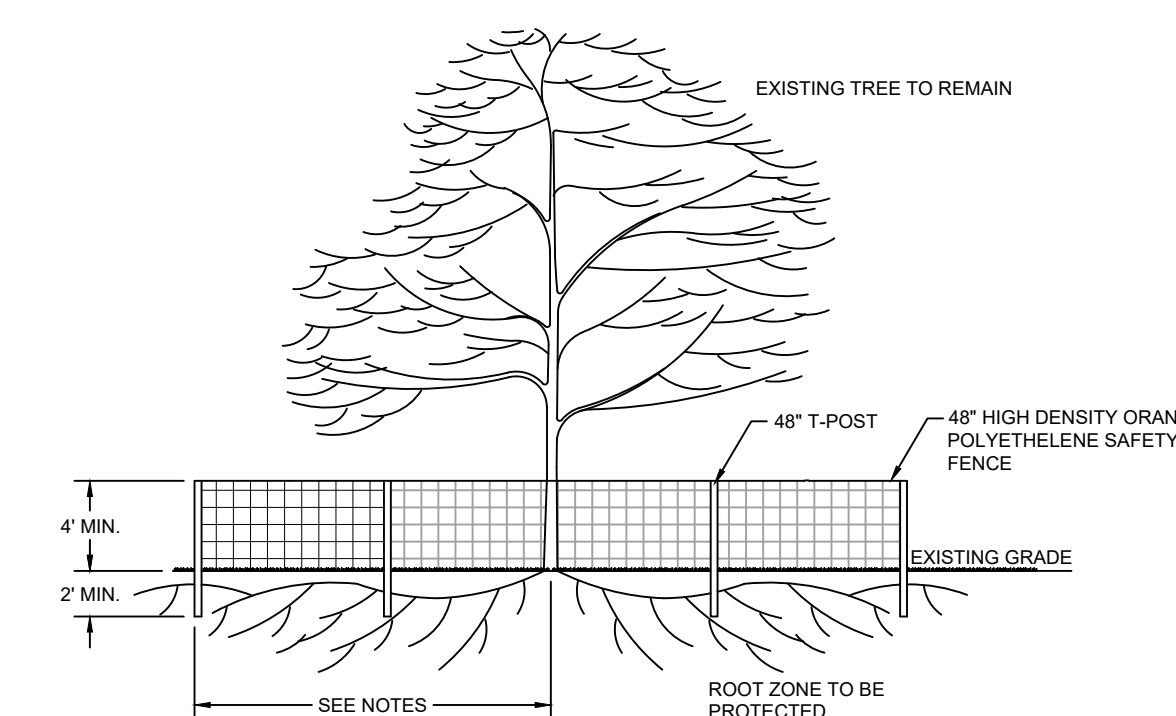
* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN INFORMATION CENTER AT (888) 656-9888 OR AT HTTP://HGIC.CLEMSON.EDU.

PERMANENT VEGETATION SCHEDULE

SPECIES	RATE (LBS/AC)	OPTIMUM DATES TO PLANT	REMARKS
BERMUDA GRASS (HULLED) (ALONE)	8-12	APRIL - JULY 15	QUICK COVER, SOD FORMING, PARTIAL WINTER KILL
BERMUDA GRASS (HULLED) (MIX)	4-6	APRIL - JULY 15	QUICK COVER, SOD FORMING, PARTIAL WINTER KILL
FESCUE, TALL (KY31) ALONE	40	AUGUST 15 - OCTOBER	SELDOM SEEDED ALONE, NOT FOR DRY OR WET SITES
FESCUE, TALL (KY31) MIX	20	AUGUST 15 - OCTOBER	SELDOM SEEDED ALONE, NOT FOR DRY OR WET SITES
ANNUAL RYE GRASS	15	AUGUST 15 - FEBRUARY	GOOD FOR SUPPRESSING WEEDS. DO NOT USE ITALIAN RYE GRASS.
CENTPEDE	10	MARCH 1 - APRIL 15	REQUIRES LOW MAINTENANCE AND FEWER CUTS.

* FOR DETAILS ON MIXES CONSULT THE CLEMSON UNIVERSITY HOME AND GARDEN INFORMATION CENTER AT (888) 656-9888 OR AT HTTP://HGIC.CLEMSON.EDU.

SEEDING SCHEDULE



NOTES:

- ALL TREE PROTECTION BARRICADES MUST HAVE TWO HORIZONTAL CROSS RAILS.
- BARRICADES SHALL BE ERRECTED AT A MINIMUM DISTANCE FROM THE BASE OF PROTECTED TREES AND GRAND TREES ACCORDING TO THE FOLLOWING STANDARDS:
 - A. FOR GRAND TREES THE BARRICADE SHALL BE PLACED AT THE DRIPLINE OF THE TREE.
 - B. FOR PROTECTED TREES TEN INCHES (10") OR LESS D.B.H. (DIAMETER BREST HEIGHT), PROTECTIVE BARRICADES SHALL BE PLACED A MINIMUM DISTANCE OF TEN FEET (10') FROM THE BASE OF EACH PROTECTED TREE, OR TO THE EDGE OF THE DRIP LINE, WHICHEVER IS GREATER.
 - C. FOR PROTECTED TREES GREATER THAN TEN INCHES (10") D.B.H., PROTECTIVE BARRICADES SHALL PROVIDE A DIAMETER OF PROTECTION AROUND THE TREE EQUAL TO THE DIAMETER BREST HEIGHT OF THE TREE (i.e., A 24" DIAMETER TREE WOULD REQUIRE A 24 FOOT DIAMETER PROTECTIVE BARRICADE), OR TO THE EDGE OF THE DRIP LINE, WHICHEVER IS GREATER.
- CONTRACTOR TO INSTALL SILT FENCING ON THE SIDE OF THE TREE ADJACENT TO THE ROADWAY.
- ALL GRADING AROUND PROTECTED TREES IS TO BE DONE BY HAND. CONTRACTOR SHALL NOT OPERATE HEAVY EQUIPMENT WITHIN THE TREE PROTECTION BARRIERS.
- CONTRACTOR SHALL NOTIFY CITY OF NORTH CHARLESTON UPON INSTALLATION OF TREE PROTECTION FOR INSPECTION AND APPROVAL PRIOR TO LAND DISTURBANCE.

TREE PROTECTION DETAIL
N.T.S.



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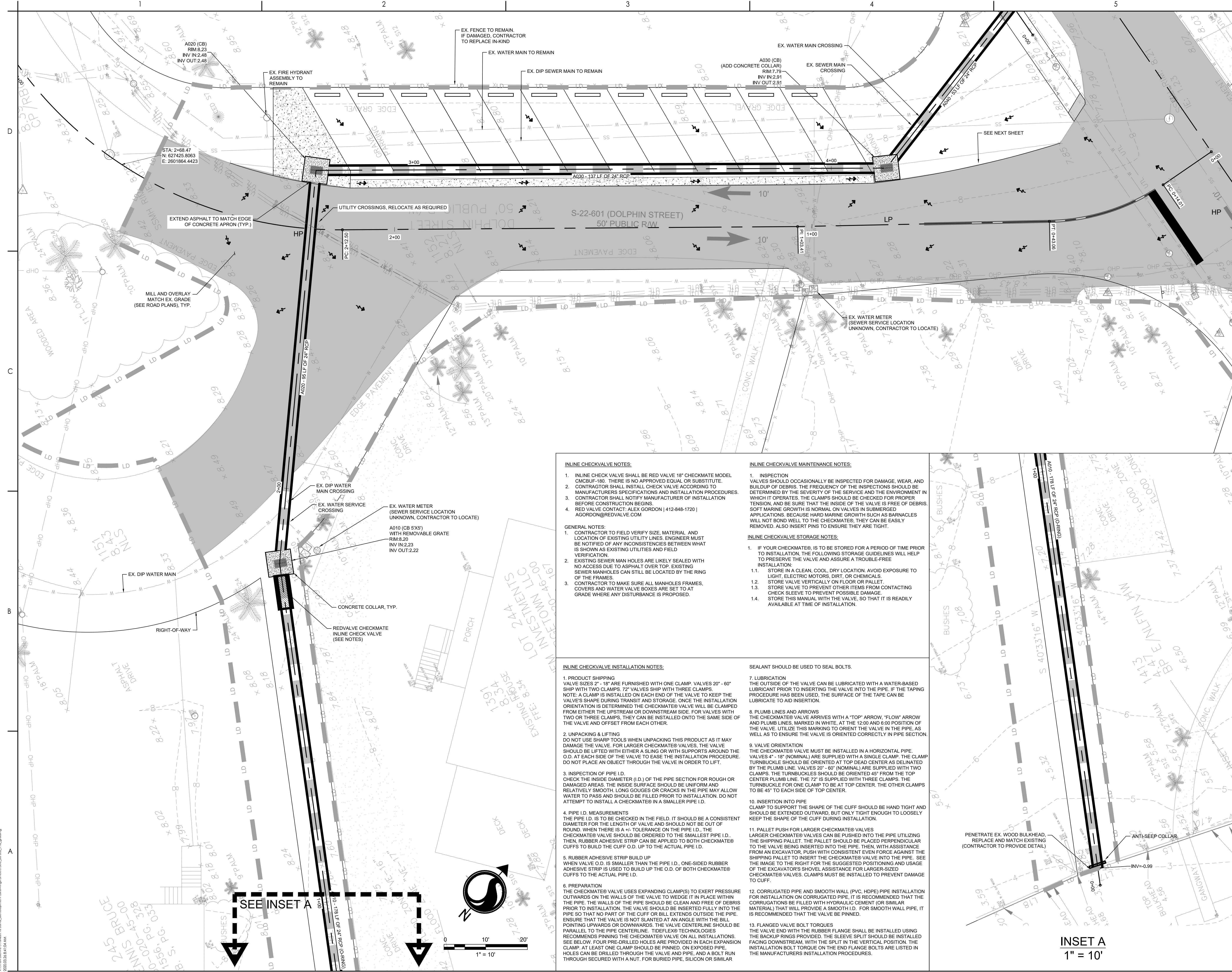
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Consultant

Legend

- LD LIMITS OF DISTURBANCE
- 15 EXISTING CONTOURS
- 20 PROPOSED CONTOUR
- SF SILT FENCE
- DRAINAGE FLOW ARROW
- SPOT ELEVATION
- CONCRETE COLLAR

- FG - FINISHED GRADE ELEVATION
- CB - CATCH BASIN (SCDOT STANDARD DETAIL 719-110-01)
- JB - JUNCTION BOX (SCDOT STANDARD DETAIL 719-110-02)
- EX - EXISTING GRADE
- LP - LOW POINT
- HP - HIGH POINT



INLINE CHECKVALVE NOTES:

1. INLINE CHECK VALVE SHALL BE RED VALVE 18" CHECKMATE MODEL CMCBUF-180. THERE IS NO APPROVED EQUAL OR SUBSTITUTE.
2. CONTRACTOR SHALL INSTALL CHECK VALVE ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND INSTALLATION PROCEDURES.
3. CONTRACTOR SHALL NOTIFY MANUFACTURER OF INSTALLATION BEFORE CONSTRUCTION BEGINS.
4. RED VALVE CONTACT: ALEX GORDON | 412-848-1700 | AGORDON@REVALVE.COM

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY SIZE, MATERIAL AND LOCATION OF EXISTING UTILITY LINES. ENGINEER MUST BE NOTIFIED OF ANY INCONSISTENCIES BETWEEN WHAT IS SHOWN AS EXISTING UTILITIES AND FIELD VERIFICATION.
2. EXISTING SEWER MAN HOLES ARE LIKELY SEALED WITH NO ACCESS DUE TO ASPHALT OVER TOP. EXISTING SEWER MANHOLES CAN STILL BE LOCATED BY THE RING OF THE FRAMES.
3. CONTRACTOR TO MAKE SURE ALL MANHOLES FRAMES, COVERS AND WATER VALVE BOXES ARE SET TO AT GRADE WHERE ANY DISTURBANCE IS PROPOSED.

INLINE CHECKVALVE MAINTENANCE NOTES:

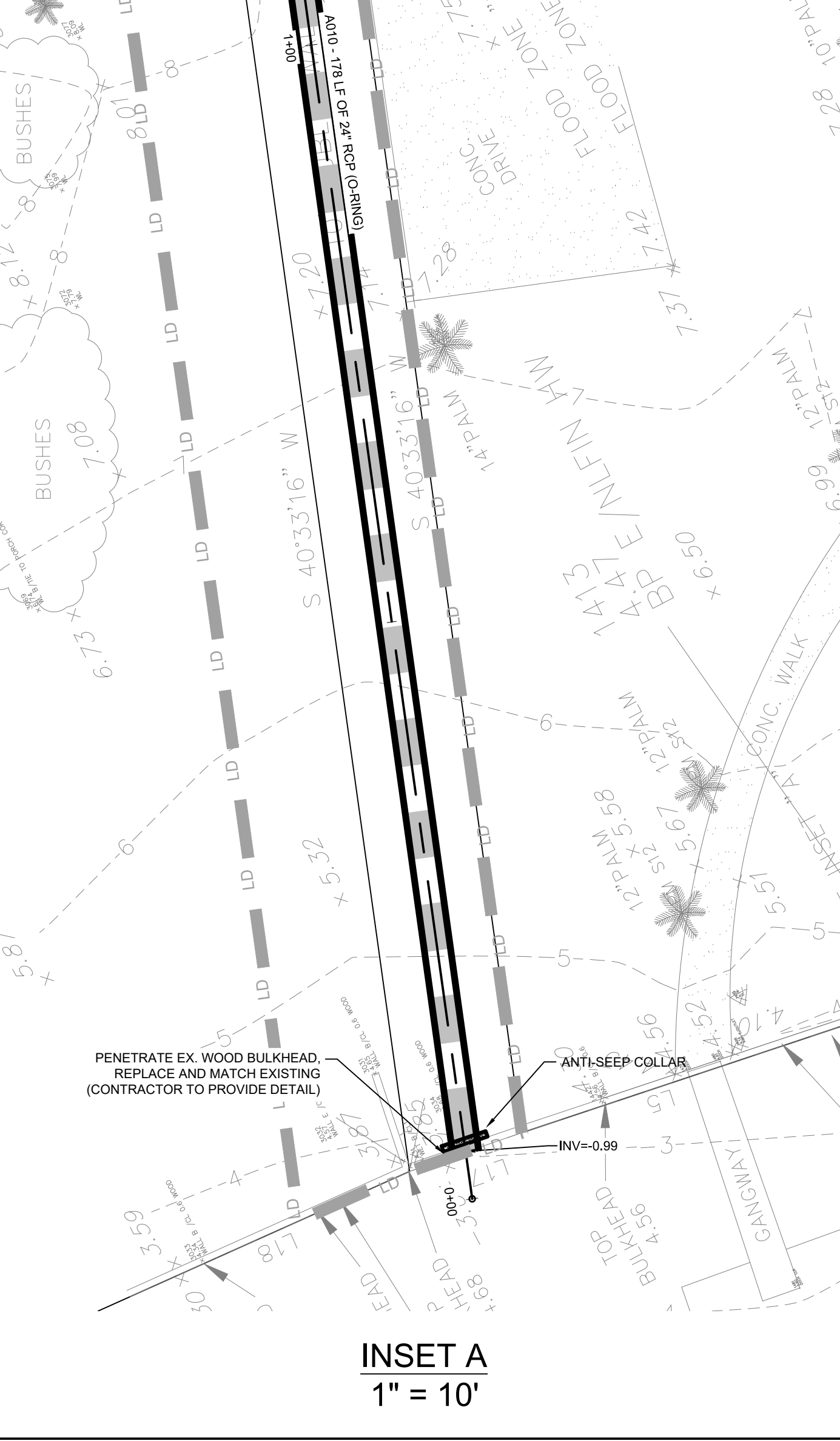
1. INSPECTION VALVES SHOULD OCCASIONALLY BE INSPECTED FOR DAMAGE, WEAR, AND BUILDUP OF DEBRIS. THE FREQUENCY OF THE INSPECTIONS SHOULD BE DETERMINED BY THE SEVERITY OF THE SERVICE AND THE ENVIRONMENT IN WHICH IT OPERATES. THE CLAMPS SHOULD BE CHECKED FOR PROPER TENSION, AND BE SURE THAT THE INSIDE OF THE VALVE IS FREE OF DEBRIS. SOFT MARINE GROWTH IS NORMAL ON VALVES IN SUBMERGED APPLICATIONS BECAUSE HARD MARINE GROWTH SUCH AS BARNACLES WILL NOT BOND WELL TO THE CHECKMATE®. THEY CAN BE EASILY REMOVED. ALSO INSERT PINS TO ENSURE THEY ARE TIGHT.

INLINE CHECKVALVE STORAGE NOTES:

1. IF YOUR CHECKMATE® IS TO BE STORED FOR A PERIOD OF TIME PRIOR TO INSTALLATION, THE FOLLOWING STORAGE GUIDELINES WILL HELP TO PRESERVE THE VALVE AND ASSURE A TROUBLE-FREE INSTALLATION:
 - 1.1. STORE IN A CLEAN, COOL, DRY LOCATION AVOID EXPOSURE TO LIGHT, ELECTRIC MOTORS, DIRT, OR CHEMICALS.
 - 1.2. STORE VALVE VERTICALLY ON FLOOR OR PALLET.
 - 1.3. STORE VALVE TO PREVENT OTHER ITEMS FROM CONTACTING CHECK SLEEVE TO PREVENT POSSIBLE DAMAGE.
 - 1.4. STORE THIS MANUAL WITH THE VALVE, SO THAT IT IS READILY AVAILABLE AT TIME OF INSTALLATION.

INLINE CHECKVALVE INSTALLATION NOTES:

1. PRODUCT SHIPPING VALVES SIZES 2" - 18" ARE FURNISHED WITH ONE CLAMP. VALVES 20" - 60" SHIP WITH TWO CLAMPS. 72" VALVES SHIP WITH THREE CLAMPS. NOTE: A CLAMP IS INSTALLED ON EACH END OF THE VALVE TO KEEP THE VALVE'S SHAPE DURING TRANSPORT AND STORAGE. ONCE THE INSTALLATION ORIENTATION IS DETERMINED THE CHECKMATE® VALVE WILL BE CLAMPED FROM EITHER THE UPSTREAM OR DOWNSTREAM SIDE. FOR VALVES WITH TWO OR THREE CLAMPS, THEY CAN BE INSTALLED ONTO THE SAME SIDE OF THE VALVE AND OFFSET FROM EACH OTHER.
2. UNPACKING & LIFTING DO NOT USE SHARP TOOLS WHEN UNPACKING THIS PRODUCT AS IT MAY DAMAGE THE VALVE. FOR LARGER CHECKMATE® VALVES, THE VALVE SHOULD BE LIFTED WITH EITHER A SLING OR WITH SUPPORTS AROUND THE O.D. AT EACH SIDE OF THE VALVE TO EASE THE INSTALLATION PROCEDURE. DO NOT PLACE AN OBJECT THROUGH THE VALVE IN ORDER TO LIFT.
3. INSPECTION OF PIPE I.D. CHECK THE INSIDE DIAMETER (I.D.) OF THE PIPE SECTION FOR ROUGH OR DAMAGED AREAS. THE INSIDE SURFACE SHOULD BE UNIFORM AND RELATIVELY SMOOTH. LONG GOUGES OR CRACKS IN THE PIPE MAY ALLOW WATER TO PASS AND SHOULD BE FILLED PRIOR TO INSTALLATION. DO NOT ATTEMPT TO INSTALL A CHECKMATE® IN A SMALLER PIPE I.D.
4. PIPE I.D. MEASUREMENTS THE PIPE I.D. IS TO BE CHECKED IN THE FIELD. IT SHOULD BE A CONSISTENT DIAMETER FOR THE LENGTH OF VALVE AND SHOULD NOT BE OUT OF ROUND. WHEN THERE IS A +/- TOLERANCE ON THE PIPE I.D., THE CHECKMATE® VALVE SHOULD BE ORDERED TO THE SMALLEST PIPE I.D. THEN, RUBBER ADHESIVE STRIP CAN BE APPLIED TO BOTH CHECKMATE® CUFFS TO BUILD THE CUFF O.D. UP TO THE ACTUAL PIPE I.D.
5. RUBBER ADHESIVE STRIP BUILD UP WHEN VALVE O.D. IS SMALLER THAN THE PIPE I.D., ONE-SIDED RUBBER ADHESIVE STRIP IS USED TO BUILD UP THE O.D. OF BOTH CHECKMATE® CUFFS TO THE ACTUAL PIPE I.D.
6. PREPARATION THE CHECKMATE® VALVE USES EXPANDING CLAMPS TO EXERT PRESSURE OUTWARDS ON THE WALLS OF THE VALVE TO WEDGE IT IN PLACE WITHIN THE PIPE. THE WALLS OF THE PIPE SHOULD BE CLEAN AND FREE OF DEBRIS PRIOR TO INSTALLATION. THE VALVE SHOULD BE INSERTED FULLY INTO THE PIPE SO THAT NO PART OF THE CUFF OR BILL EXTENDS OUTSIDE THE PIPE. ENSURE THAT THE VALVE IS NOT SLANTED AT AN ANGLE WITH THE BILL POINTING UPWARDS OR DOWNWARDS. THE VALVE CENTERLINE SHOULD BE PARALLEL TO THE PIPE CENTERLINE. TIDELIX® TECHNOLOGIES RECOMMEND PINNING THE CHECKMATE® VALVE ON ALL INSTALLATIONS. SEE BELOW. FOUR PRE-DRILLED HOLES ARE PROVIDED IN EACH EXPANSION CLAMP. AT LEAST ONE CLAMP SHOULD BE PINNED. ON EXPOSED PIPE, HOLES CAN BE DRILLED THROUGH THE VALVE AND PIPE, AND A BOLT RUN THROUGH SECURED WITH A NUT. FOR BURIED PIPE, SILICON OR SIMILAR SEALANT SHOULD BE USED TO SEAL BOLTS.
7. LUBRICATION THE OUTSIDE OF THE VALVE MUST BE LUBRICATED WITH A WATER-BASED LUBRICANT PRIOR TO INSERTING THE VALVE INTO THE PIPE. IF THE TAPING PROCEDURE HAS BEEN USED, THE SURFACE OF THE TAPE CAN BE LUBRICATED TO AID INSERTION.
8. PLUMB LINES AND ARROWS THE CHECKMATE® VALVE ARRIVES WITH A "TOP" ARROW, "FLOW" ARROW AND PLUMB LINES, MARKED IN WHITE, AT THE 12:00 AND 6:00 POSITION OF THE VALVE. UTILIZE THIS MARKING TO ORIENT THE VALVE IN THE PIPE, AS WELL AS TO ENSURE THE VALVE IS ORIENTED CORRECTLY IN PIPE SECTION.
9. VALVE ORIENTATION THE CHECKMATE® VALVE MUST BE INSTALLED IN A HORIZONTAL PIPE. VALVES 14" - 18" (NOMINAL) ARE SUPPLIED WITH A SINGLE CLAMP. THE CLAMP TURNBUCKLE SHOULD BE ORIENTED AT TOP DEAD CENTER AS DELINEATED BY THE PLUMB LINE. VALVES 20" - 60" (NOMINAL) ARE SUPPLIED WITH TWO CLAMPS. THE TURNBUCKLES SHOULD BE ORIENTED 45° FROM THE TOP CENTER PLUMB LINE. THE 72" IS SUPPLIED WITH THREE CLAMPS. THE TURNBUCKLE FOR ONE CLAMP TO BE AT TOP CENTER. THE OTHER CLAMPS TO BE 45° TO EACH SIDE OF TOP CENTER.
10. INSERTION INTO PIPE CLAMP TO SUPPORT THE SHAPE OF THE CUFF SHOULD BE HAND TIGHT AND SHOULD BE EXTENDED OUTWARD, BUT ONLY TIGHT ENOUGH TO LOOSELY KEEP THE SHAPE OF THE CUFF DURING INSTALLATION.
11. PALLET PUSH FOR LARGER CHECKMATE® VALVES LARGER CHECKMATE® VALVES CAN BE PUSHED INTO THE PIPE UTILIZING THE SHIPPING PALLET. THE PALLET SHOULD BE PLACED PERPENDICULAR TO THE VALVE BEING INSERTED INTO THE PIPE. THEN, WITH ASSISTANCE FROM AN EXCAVATOR, PUSH WITH CONSISTENT EVEN FORCE AGAINST THE SHIPPING PALLET TO INSERT THE CHECKMATE® VALVE INTO THE PIPE. SEE THE IMAGE TO THE RIGHT FOR THE SUGGESTED POSITIONING AND USAGE OF THE EXCAVATOR'S SHOVEL ASSISTANCE FOR LARGER-SIZED CHECKMATE® VALVES. CLAMPS MUST BE INSTALLED TO PREVENT DAMAGE TO CUFF.
12. CORRUGATED PIPE AND SMOOTH WALL (PVC, HDPE) PIPE INSTALLATION FOR INSTALLATION ON CORRUGATED PIPE, IT IS RECOMMENDED THAT THE CORRUGATIONS BE FILLED WITH HYDRAULIC CEMENT (OR SIMILAR MATERIAL) THAT WILL PROVIDE A SMOOTH I.D. FOR SMOOTH WALL PIPE. IT IS RECOMMENDED THAT THE VALVE BE PINNED.
13. FLANGED VALVE BOLT TORQUES THE VALVE END WITH THE RUBBER FLANGE SHALL BE INSTALLED USING THE BACKUP RINGS PROVIDED. THE SLEEVE SPLIT SHOULD BE INSTALLED FACING DOWNSTREAM, WITH THE SPLIT IN THE VERTICAL POSITION. THE INSTALLATION BOLT TORQUE ON THE END FLANGE BOLTS ARE LISTED IN THE MANUFACTURER'S INSTALLATION PROCEDURES.



INSET A
1" = 10'

Revision	By	Appd	YYYY.MM.DD	
BID SET PER GEORGETOWN COUNTY COMMENTS	AB	BK	2020.03.26	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22	
Issued	By	Appd	YYYY.MM.DD	
File Name: C3_116_GRADING	SGC	SGC	BK	2018.12.11
	Dwn.	Dgrn.	Chkd.	YYYY.MM.DD

Permit/Seal

FOR BIDDING ONLY

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Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
GRADING AND DRAINAGE PLAN

Project No. 178420916	Scale
Revision Sheet 11 of 23	Drawing No. C3-00

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Legend

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- SPOT ELEVATION
- CONCRETE COLLAR

FG - FINISHED GRADE ELEVATION
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Revision

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BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22

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C3_116_GRADING	SGC	BK	2018.12.11
	Dwn.	Dgrn.	Chkd.

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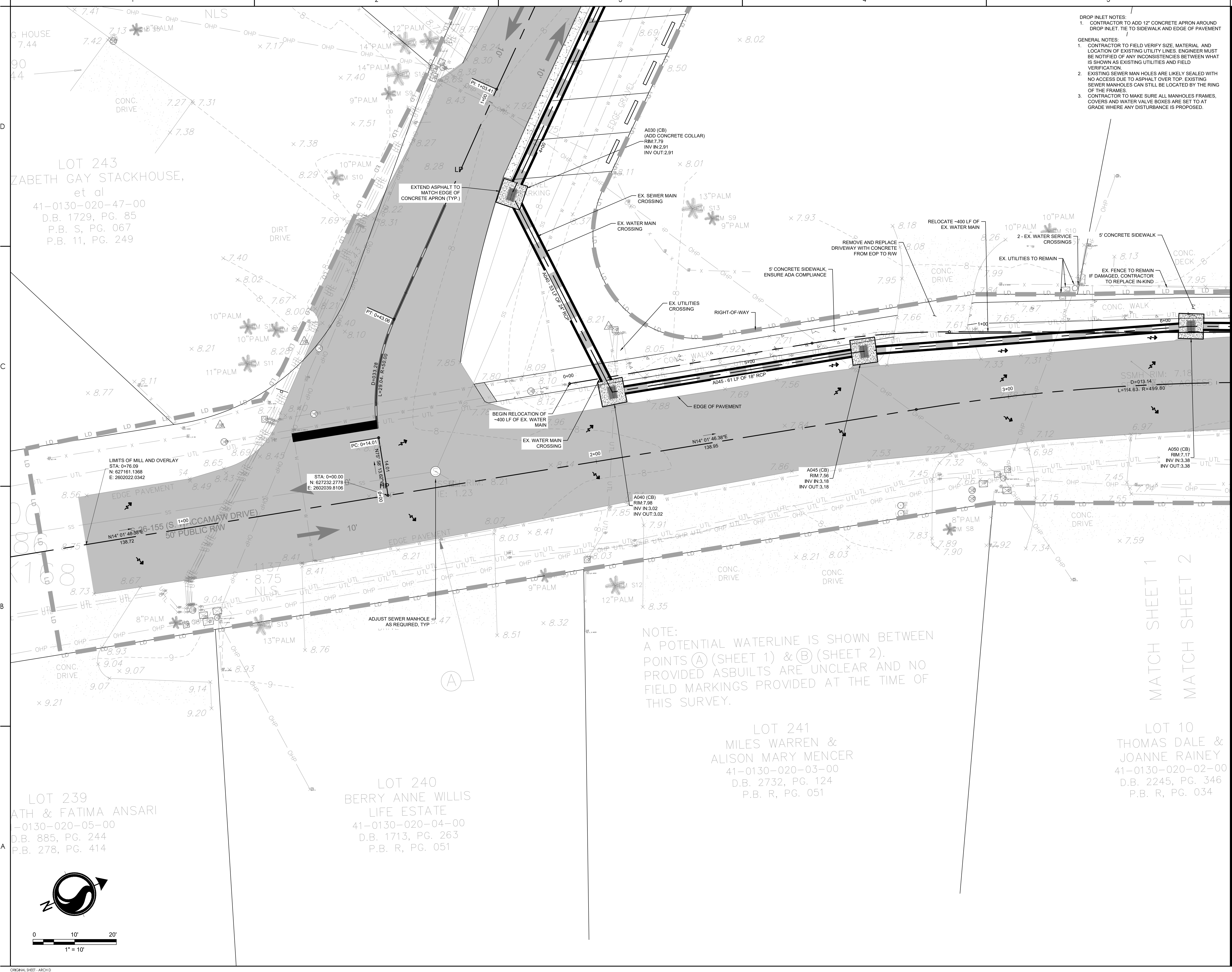
Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
GRADING AND DRAINAGE PLAN

Project No. 178420916	Scale
Revision Sheet 12 of 23	Drawing No. C3-01

- DROP INLET NOTES:
1. CONTRACTOR TO ADD 12" CONCRETE APRON AROUND DROP INLET. TIE TO SIDEWALK AND EDGE OF PAVEMENT
- GENERAL NOTES:
1. CONTRACTOR TO FIELD VERIFY SIZE, MATERIAL AND LOCATION OF EXISTING UTILITY LINES. ENGINEER MUST BE NOTIFIED OF ANY INCONSISTENCIES BETWEEN WHAT IS SHOWN AS EXISTING UTILITIES AND FIELD VERIFICATION.
2. EXISTING SEWER MAN HOLES ARE LIKELY SEALED WITH NO ACCESS DUE TO ASPHALT OVER TOP. EXISTING SEWER MANHOLES CAN STILL BE LOCATED BY THE RING OF THE FRAMES.
3. CONTRACTOR TO MAKE SURE ALL MANHOLES FRAMES, COVERS AND WATER VALVE BOXES ARE SET TO AT GRADE WHERE ANY DISTURBANCE IS PROPOSED.

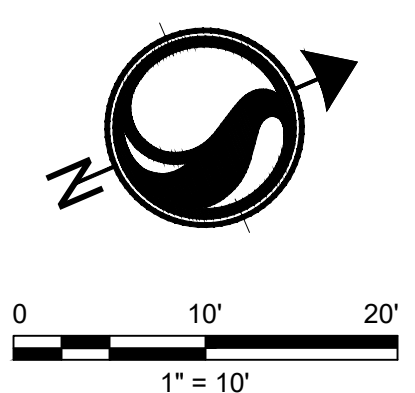


LOT 239
ATH & FATIMA ANSARI
-0130-020-05-00
D.B. 885, PG. 244
P.B. 278, PG. 414

LOT 240
BERRY ANNE WILLIS
LIFE ESTATE
41-0130-020-04-00
D.B. 1713, PG. 263
P.B. R, PG. 051

LOT 241
MILES WARREN &
ALISON MARY MENCER
41-0130-020-03-00
D.B. 2732, PG. 124
P.B. R, PG. 051

LOT 10
THOMAS DALE &
JOANNE RAINEY
41-0130-020-02-00
D.B. 2245, PG. 346
P.B. R, PG. 034



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 - DRAINAGE FLOW ARROW
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Revision

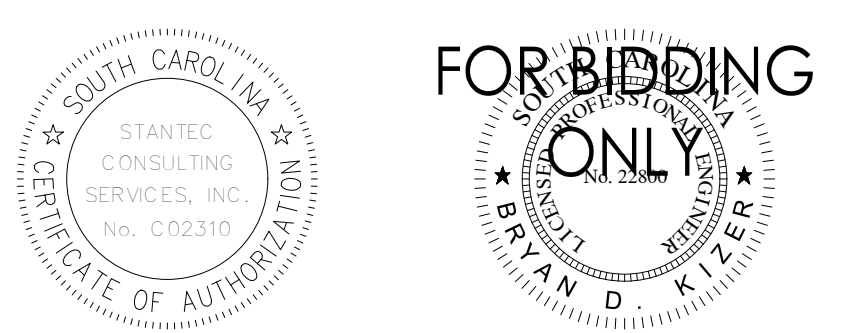
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PER GEORGETOWN COUNTY COMMENTS SGC BK 2019.10.30
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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5

MURRELLS INLET, SOUTH CAROLINA

Title
GRADING AND DRAINAGE PLAN

Project No. 178420916 Scale

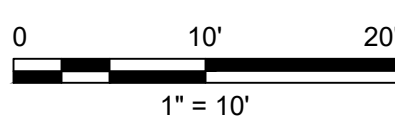
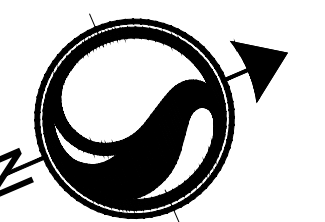
Revision Sheet Drawing No.
13 of 23 C3-02

LOT 100
CATHERINE C. KIRBY & 1874
MARY LEE ANDREWS · 7.42
41-0130-027-00-00 FF
D.B. 1539, PG. 159
P.B. S, PG. 067

LOT 9
CHRISTINE N. & JIM D.
PAPADEA, et al
41-0130-020-01-00
D.B. 2873, PG. 306
P.B. A, PG. 103
P.B. Q, PG. 103

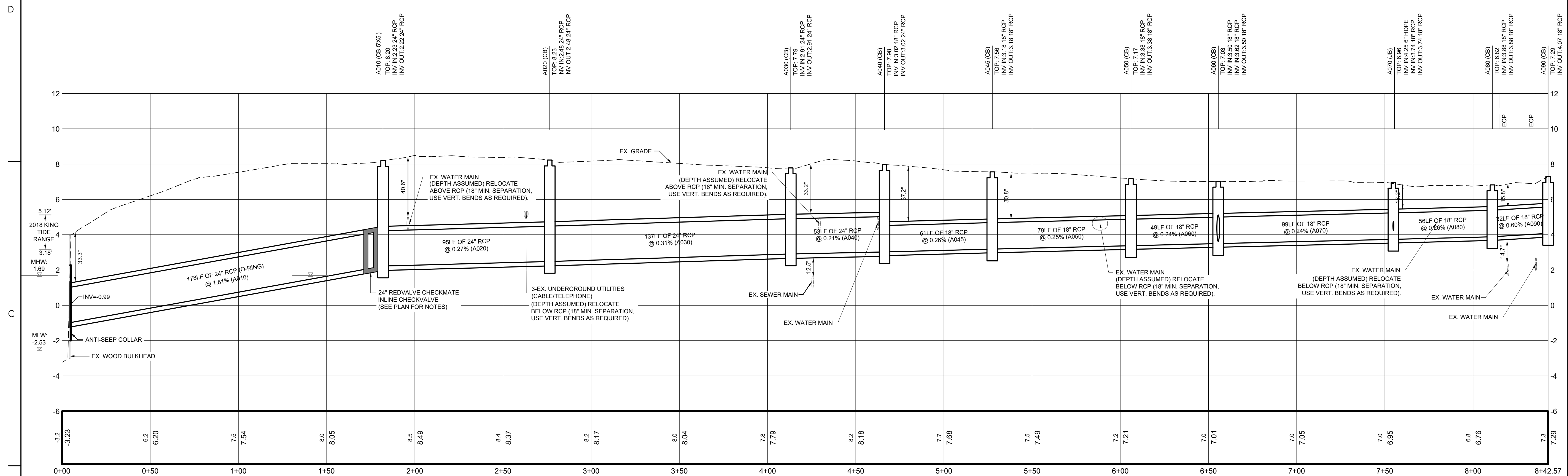
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JEAN & ROZALIJA ROZIN
41-0130-019-00-00
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P.B. P, PG. 075

LOT 10
THOMAS DALE &
JOANNE RAINEY
41-0130-020-02-00
D.B. 2245, PG. 346
P.B. R, PG. 034

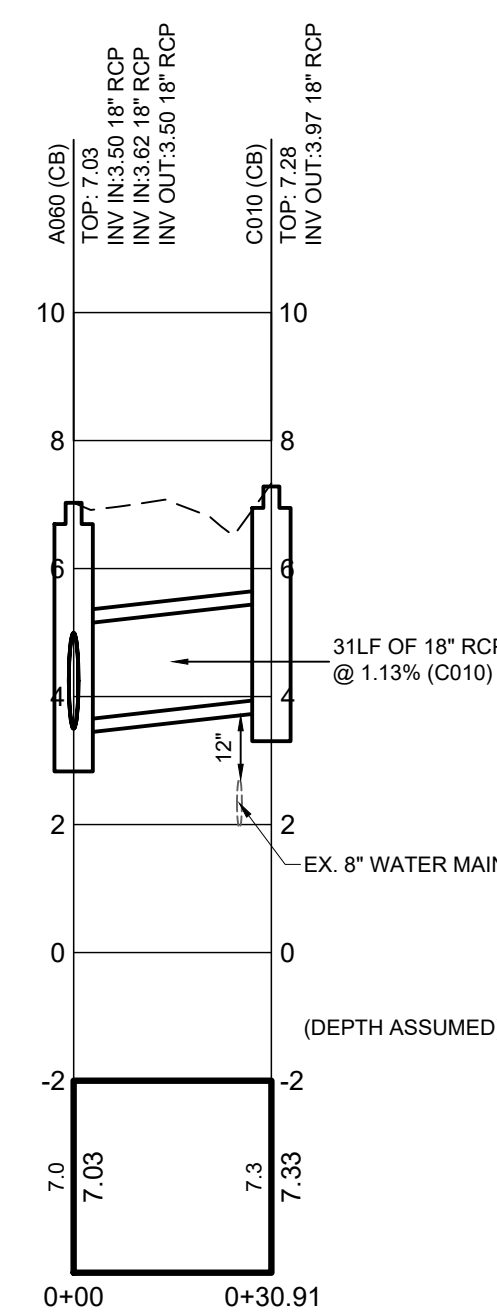


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ORIGINAL SHEET - ARCH D



STORM A PROFILE
SCALE: H: 1"=10'
V: 1"=1'



STORM C PROFILE
SCALE: H: 1"=10'
V: 1"=1'

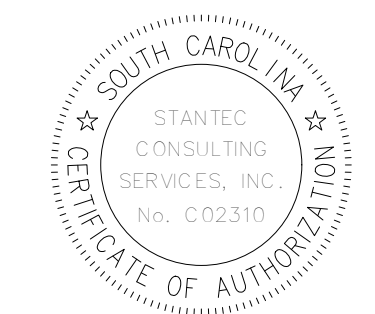
Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22

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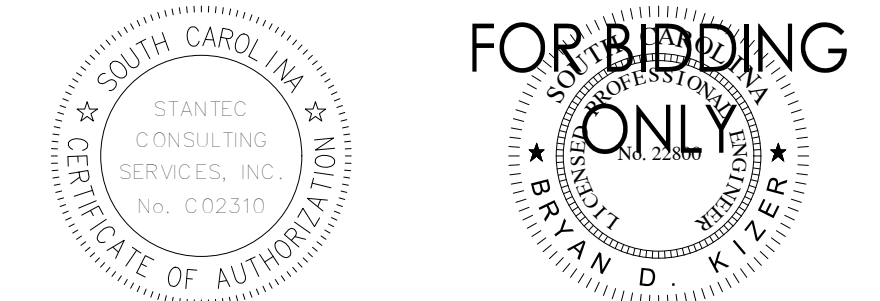
Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
GRADING AND DRAINAGE PROFILE

Project No.	Scale
178420916	

Revision	Sheet	Drawing No.
		C3-03



Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
GRADING DETAILS

Sheet 714-105-00: STANDARD TRENCH TERMINOLOGY (COMPLETED RIGID PIPE INSTALLATION). Includes references, notes, and detailed diagrams of trench installation methods.

Sheet 714-120-00: TRENCH TERMINOLOGY WITH IMPROVED FOUNDATION (COMPLETED RIGID PIPE INSTALLATION). Includes references, notes, and detailed diagrams of trench installation with improved foundations.

Sheet 714-205-01: STANDARD DRAWING PIPE CULVERTS RIGID PIPE COMPLETED TRENCH (IMPROVED FOUNDATION). Includes references, notes, and diagrams of pipe joint sealant installation.

Table 714-205B: REINFORCED CONCRETE PIPE (RCP) SMOOTH WALL PIPE AASHTO M118 B & C WALL PIPE WITH CIRCULAR REINFORCEMENT ONLY (AS NOTED). Includes indirect design table with pipe diameter and depth of cover columns.

NOTES:
1. CONTRACTOR SHALL NOT USE MASTIC AS A PIPE JOINT SEALANT.
2. ALL JOINT CONNECTIONS SHALL BE WATER TIGHT WITH "O-RING" GASKETS IN ACCORDANCE WITH ASTM C443 (AASHTO M315).

NOTES:
1. USE MATERIALS AND METHODS OF CONSTRUCTION FOR PERMANENT PIPE IN CONFORMANCE WITH SCDOT SUPPLEMENTAL SPECIFICATION SC-M-714.
2. SEE SHEET 714-205-XX FOR RCP FILL HEIGHT TABLES.
3. WHEN CONNECTING DISSIMILAR PIPE, USE DRAINAGE STRUCTURE OR DESIGN INTERFACE. DO NOT MIX PIPE TYPE, CLASS, OR DETAILS WITHIN A SINGLE RUN OF PIPE BETWEEN DRAINAGE STRUCTURES. SEE QUALIFIED PRODUCT LIST 14 FOR PRECAST REINFORCED CONCRETE DRAINAGE STRUCTURES.

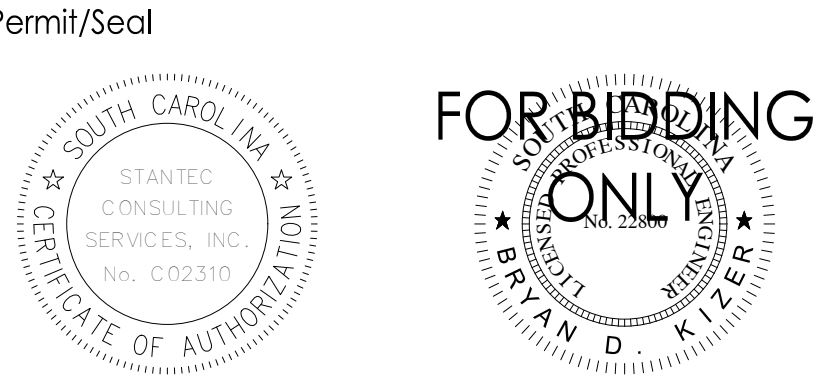
Engineering drawing for Drop Inlet (24"x36") Details. Includes references, notes, and detailed diagrams showing front elevation, section, and detail views of the inlet and grate assembly.

Engineering drawing for Drainage Access Manhole Heavy Duty Casting. Includes references, notes, and detailed diagrams showing section and detail views of the manhole structure.

Engineering drawing for Drop Inlet (24"x36") Inlet Adapter. Includes references, notes, and detailed diagrams showing side elevation, section, and detail views of the adapter and its connection to the inlet.

Engineering drawing for Drainage Access Manhole Heavy Duty Casting (continued). Includes references, notes, and detailed diagrams showing section and detail views of the manhole structure.

Revision table with columns for Revision, By, Appd, and Yyyy.Mm.Dd. Includes entries for Bid Set, Issued, and Permit/Seal.



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GARDEN CITY DRAINAGE IMPROVEMENTS SITE 5 MURRELLS INLET, SOUTH CAROLINA

Title: GRADING DETAILS

Project information table with columns for Project No., Revision, Sheet, Drawing No., Scale, and Drawing No. Includes Project No. 178420916 and Drawing No. C3-05.

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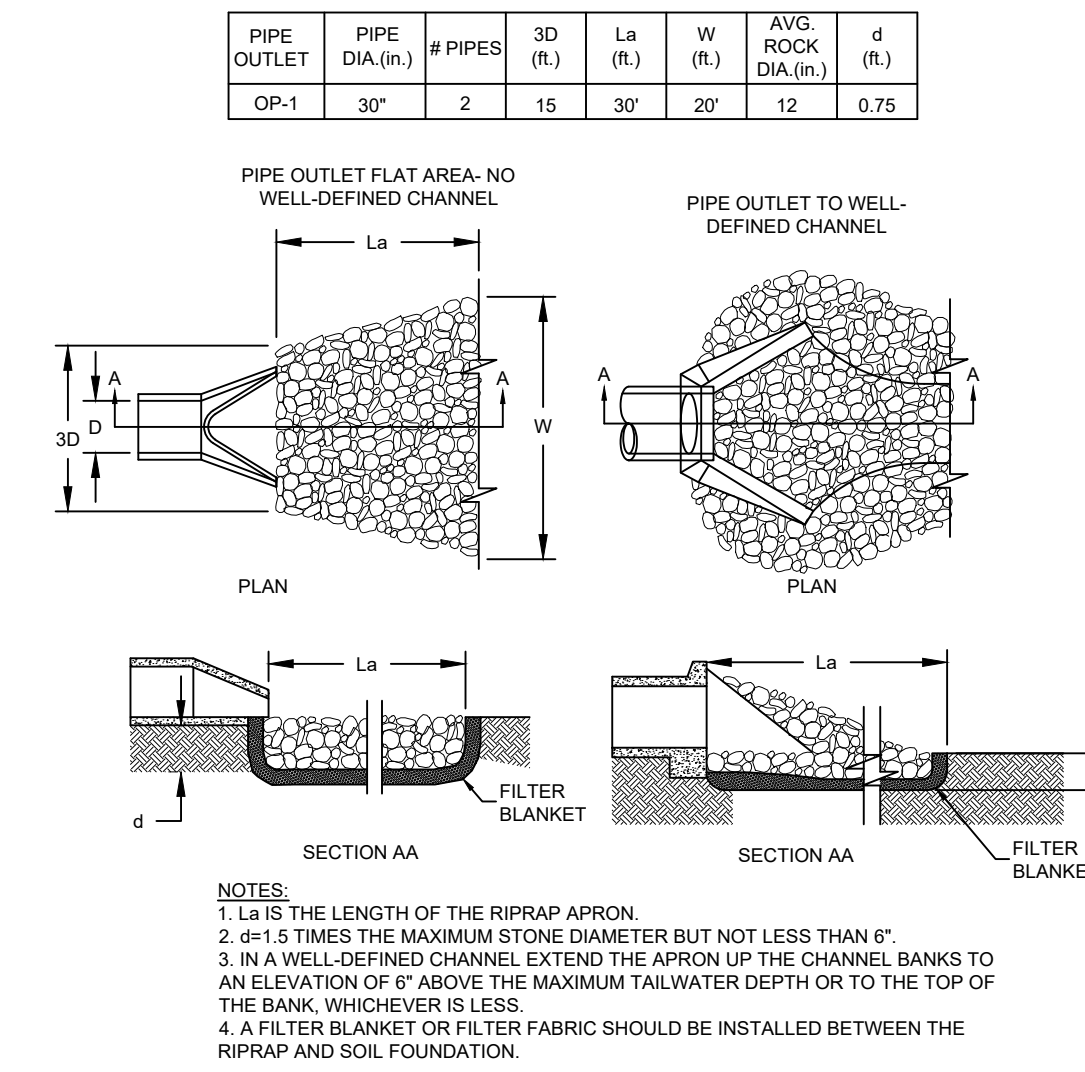
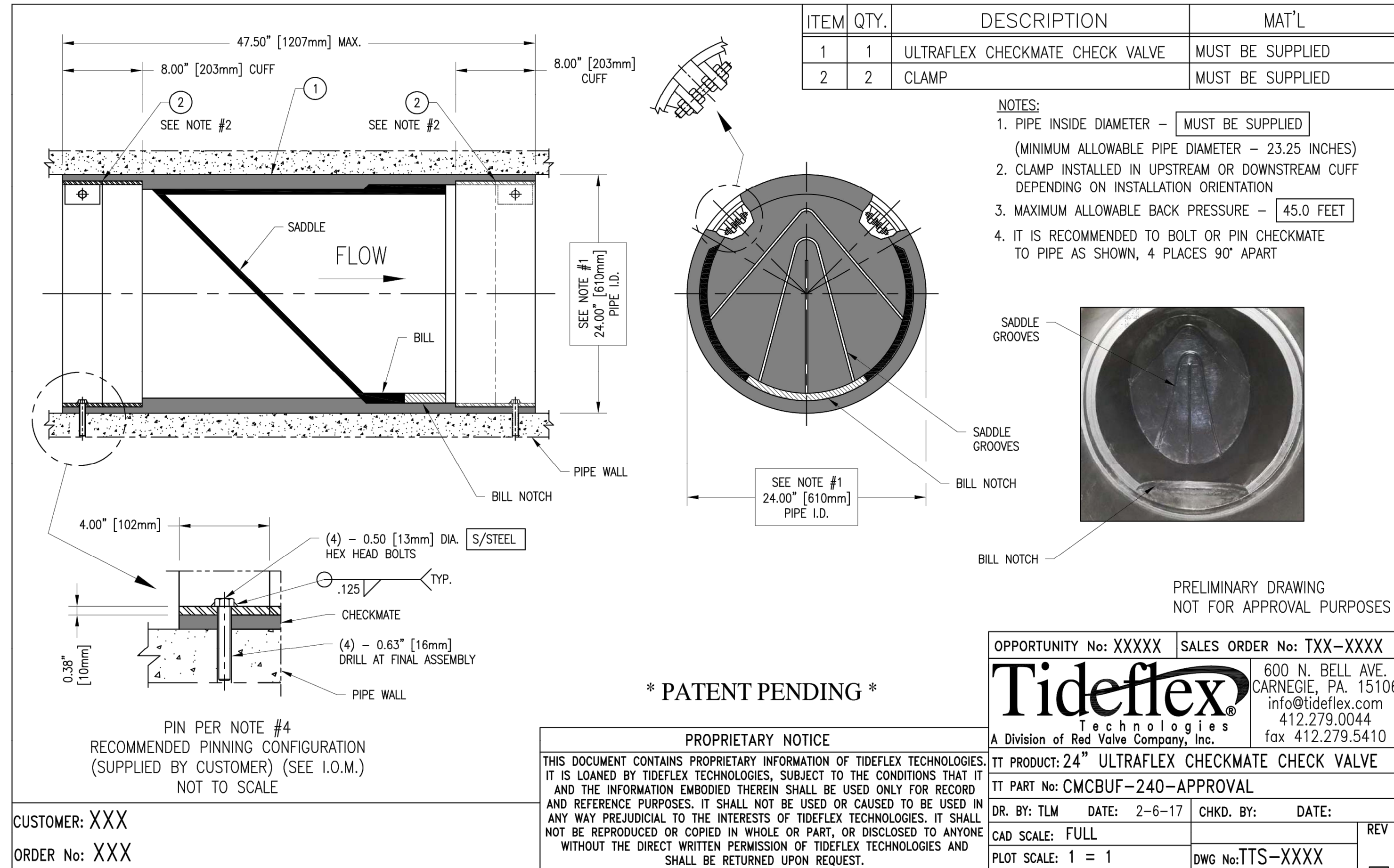
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Consultant

Legend

ITEM	QTY.	DESCRIPTION	MAT'L
1	1	ULTRAFLEX CHECKMATE CHECK VALVE	MUST BE SUPPLIED
2	2	CLAMP	MUST BE SUPPLIED

- NOTES:
- PIPE INSIDE DIAMETER - MUST BE SUPPLIED (MINIMUM ALLOWABLE PIPE DIAMETER - 23.25 INCHES)
 - CLAMP INSTALLED IN UPSTREAM OR DOWNSTREAM CUFF DEPENDING ON INSTALLATION ORIENTATION
 - MAXIMUM ALLOWABLE BACK PRESSURE - 45.0 FEET
 - IT IS RECOMMENDED TO BOLT OR PIN CHECKMATE TO PIPE AS SHOWN, 4 PLACES 90° APART



OUTLET STABILIZATION STRUCTURE
N.T.S.

Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22

Issued	By	Appd	YYYY.MM.DD

File Name: C2_ESC_GRADING_DETAILS	SGC	SGC	BK	2018.12.11
	Dwn.	Dgdn.	Chkd.	YYYY.MM.DD

Permit/Seal



Client/Project Logo

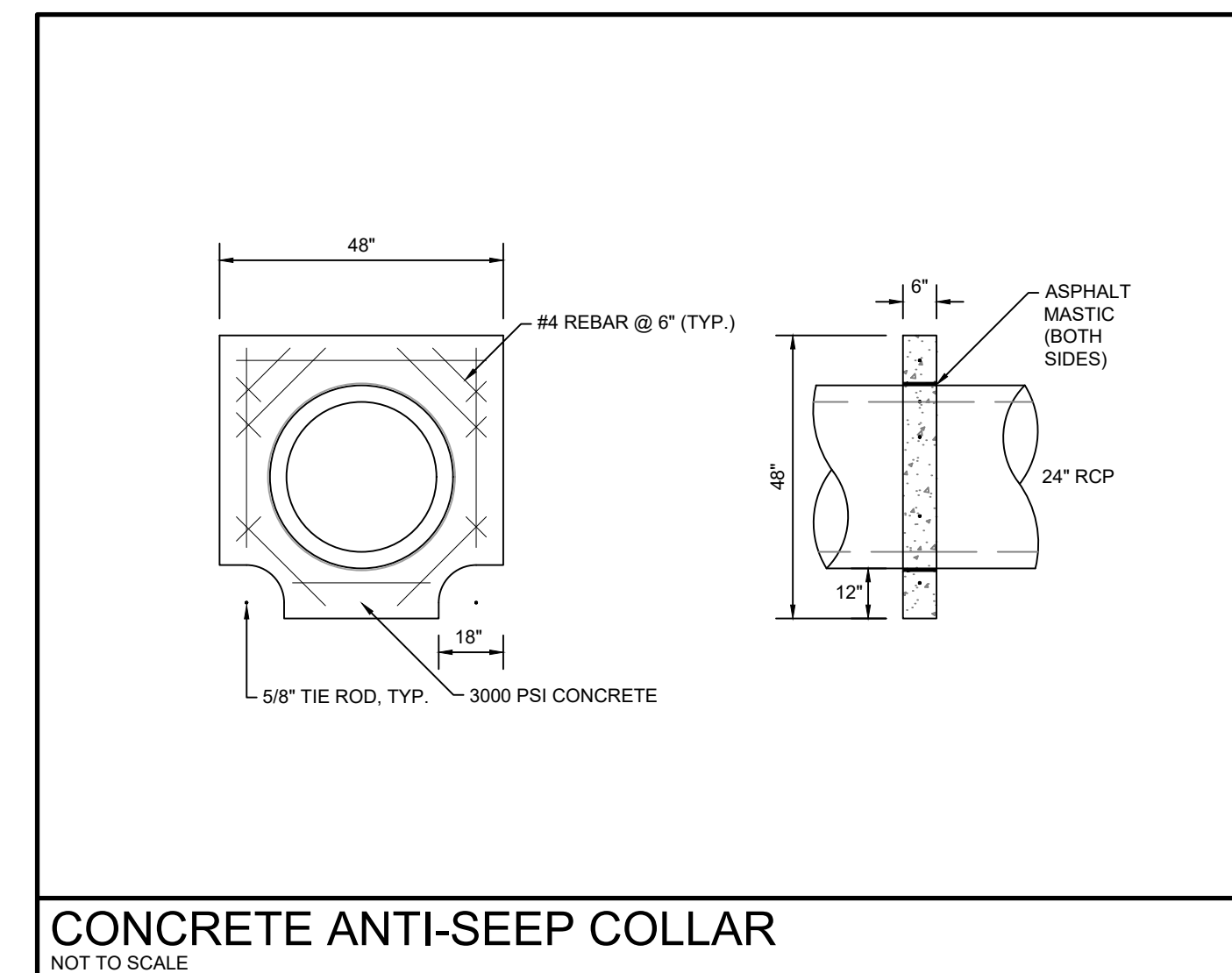
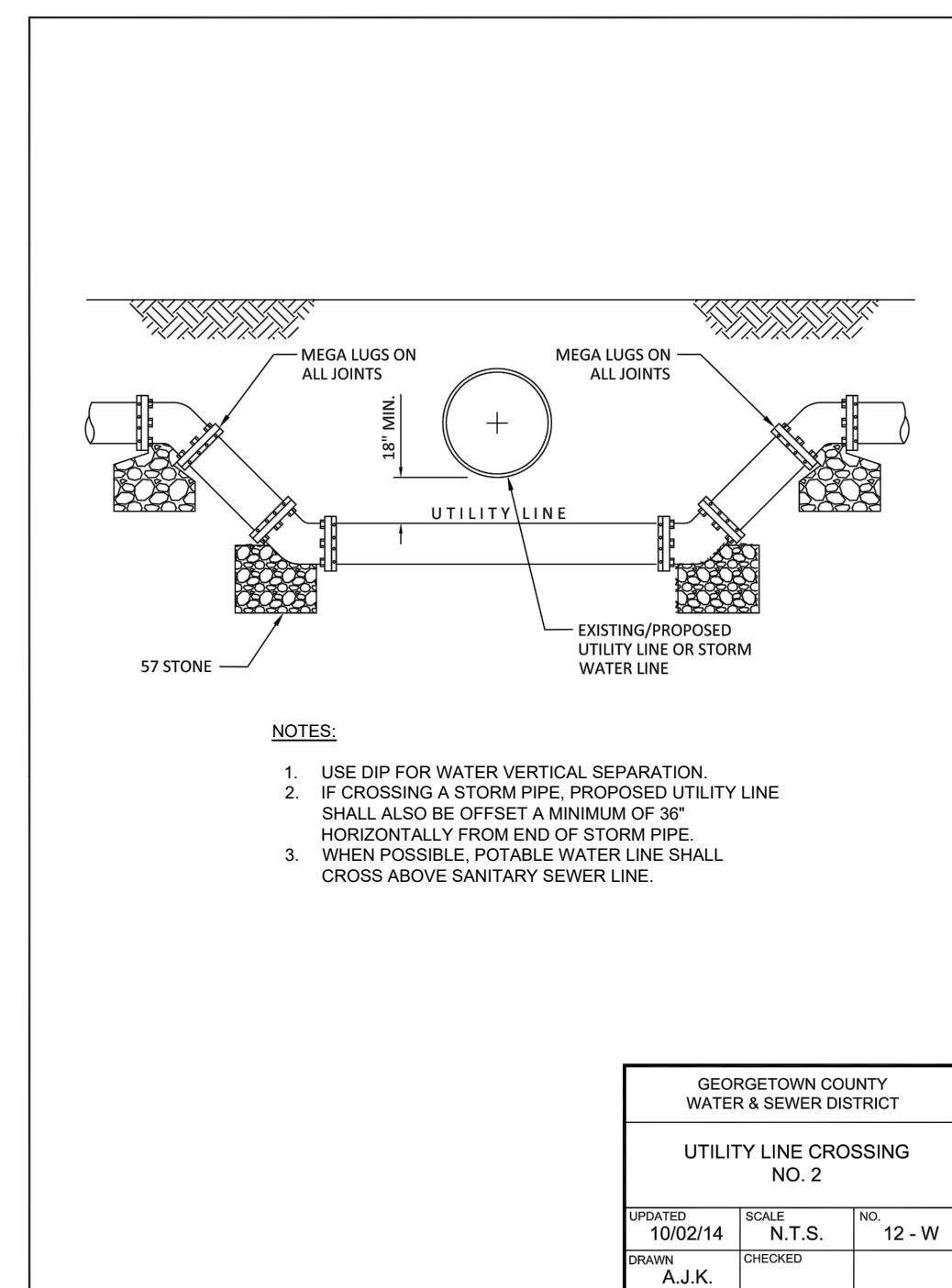
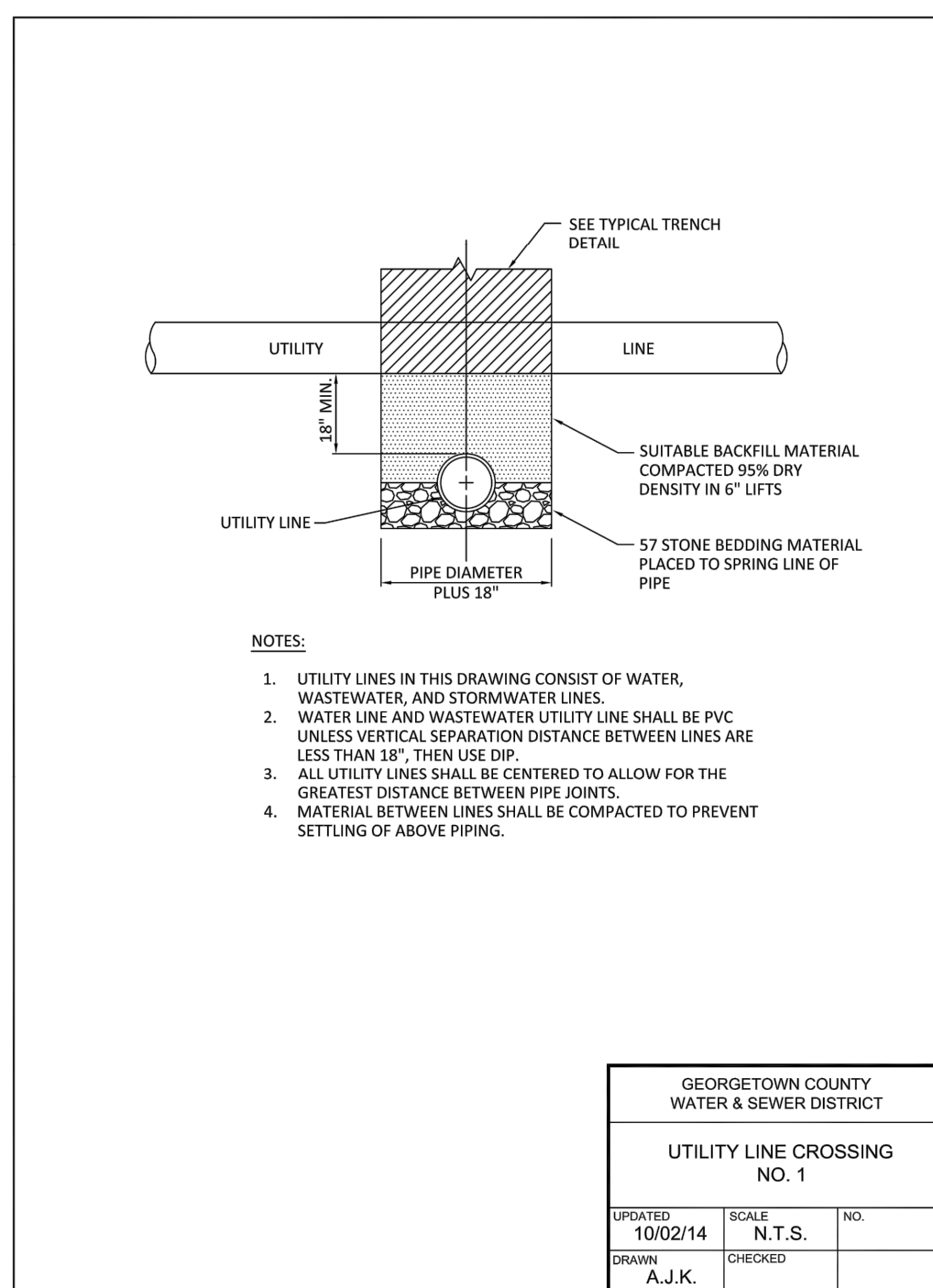
Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
GRADING DETAILS

Project No.	Scale
178420916	

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	17 of 23	C3-06



Consultant

Legend

- PROPOSED MILL AND OVERLAY
- PROPOSED ASPHALT FULL DEPTH REPLACEMENT
- PROPOSED ASPHALT

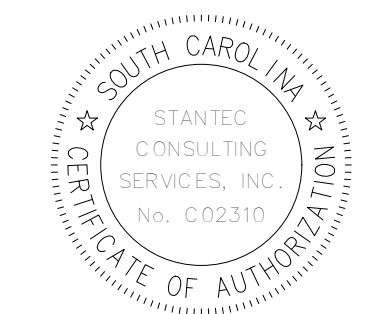
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BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22

Issued	By	Appd	YYYY.MM.DD

File Name: C4_016_ROAD	SGC	SGC	BK	2018.12.11
	Dwn.	Dgdn.	Chkd.	YYYY.MM.DD

Permit/Seal



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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

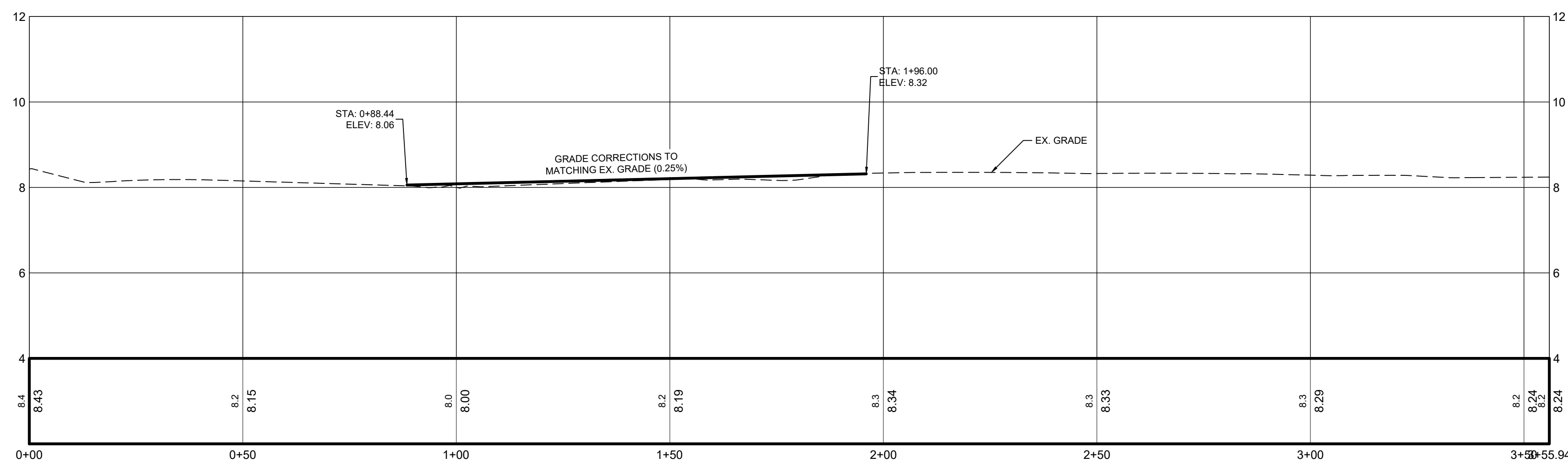
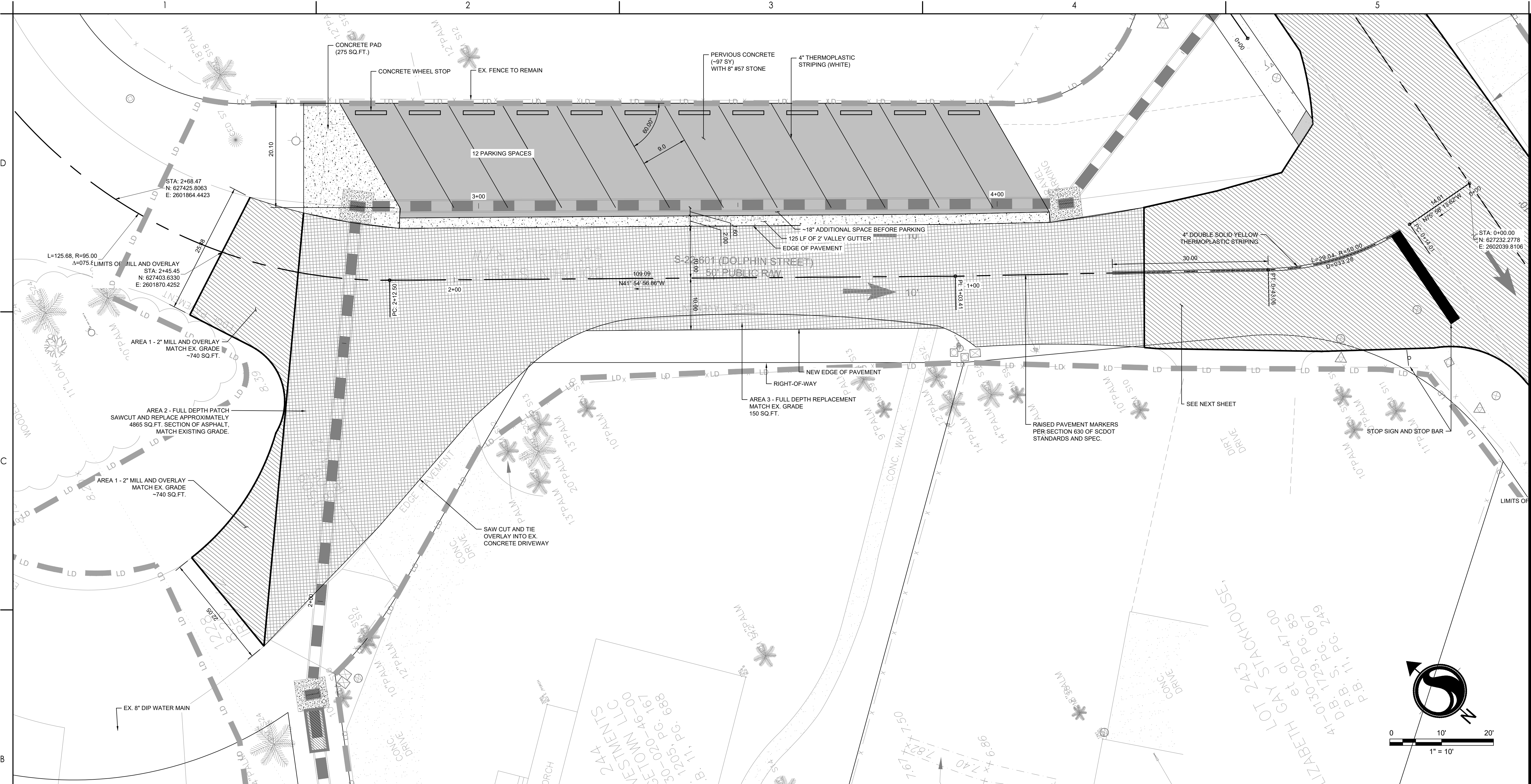
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ROADWAY PLAN AND PROFILE

Project No.
178420916

Scale

Revision Sheet
18 of 23

Drawing No.
C4-00

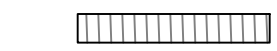




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Legend

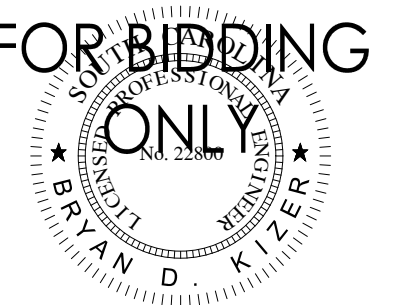
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-  PROPOSED ASPHALT FULL DEPTH REPLACEMENT
-  PROPOSED ASPHALT

Revision

Revision	By	Appd	YYYY.MM.DD
BID SET			
PER GEORGETOWN COUNTY COMMENTS	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
	SGC	BK	2019.01.22
Issued			
	By	Appd	YYYY.MM.DD

File Name:	SGC	SGC	BK	2018.12.11
C4_016_ROAD	Dwn.	Dgn.	Chkd.	YYYY.MM.DD

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GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5

MURRELLS INLET, SOUTH CAROLINA

Title
ROADWAY PLAN AND PROFILE

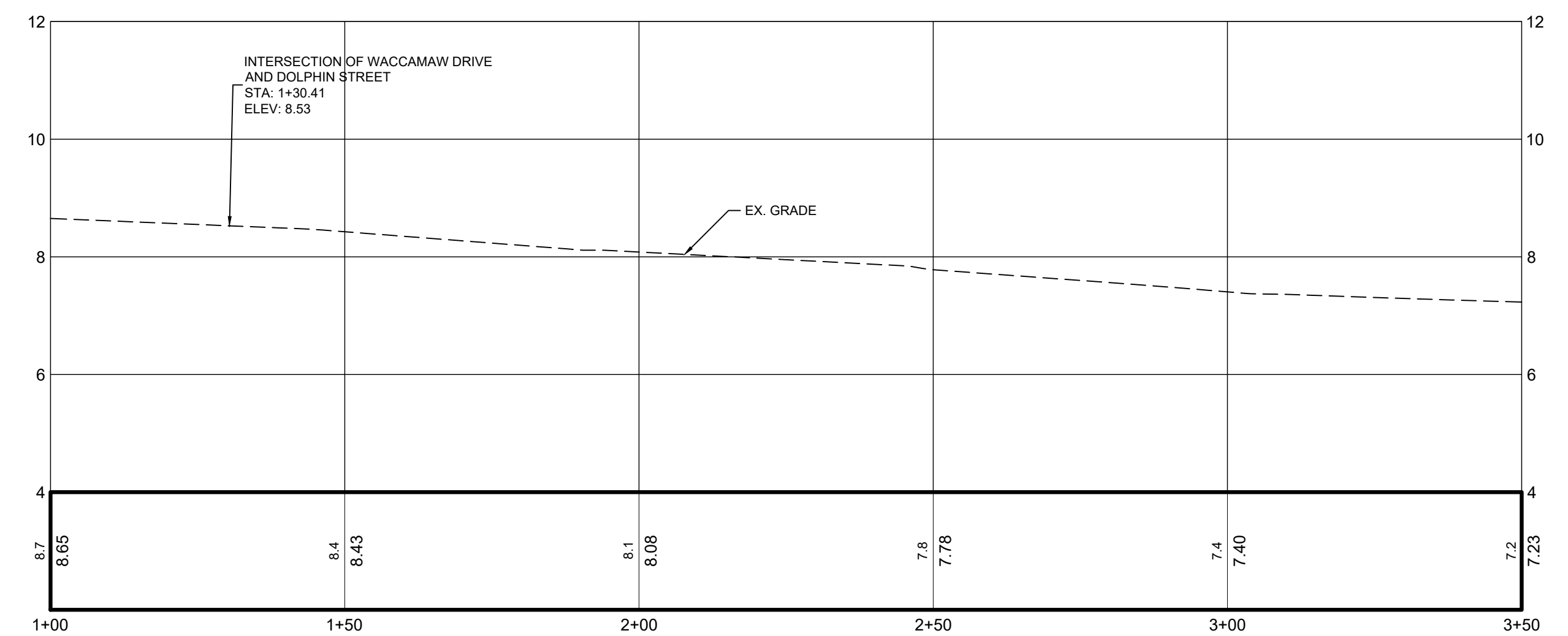
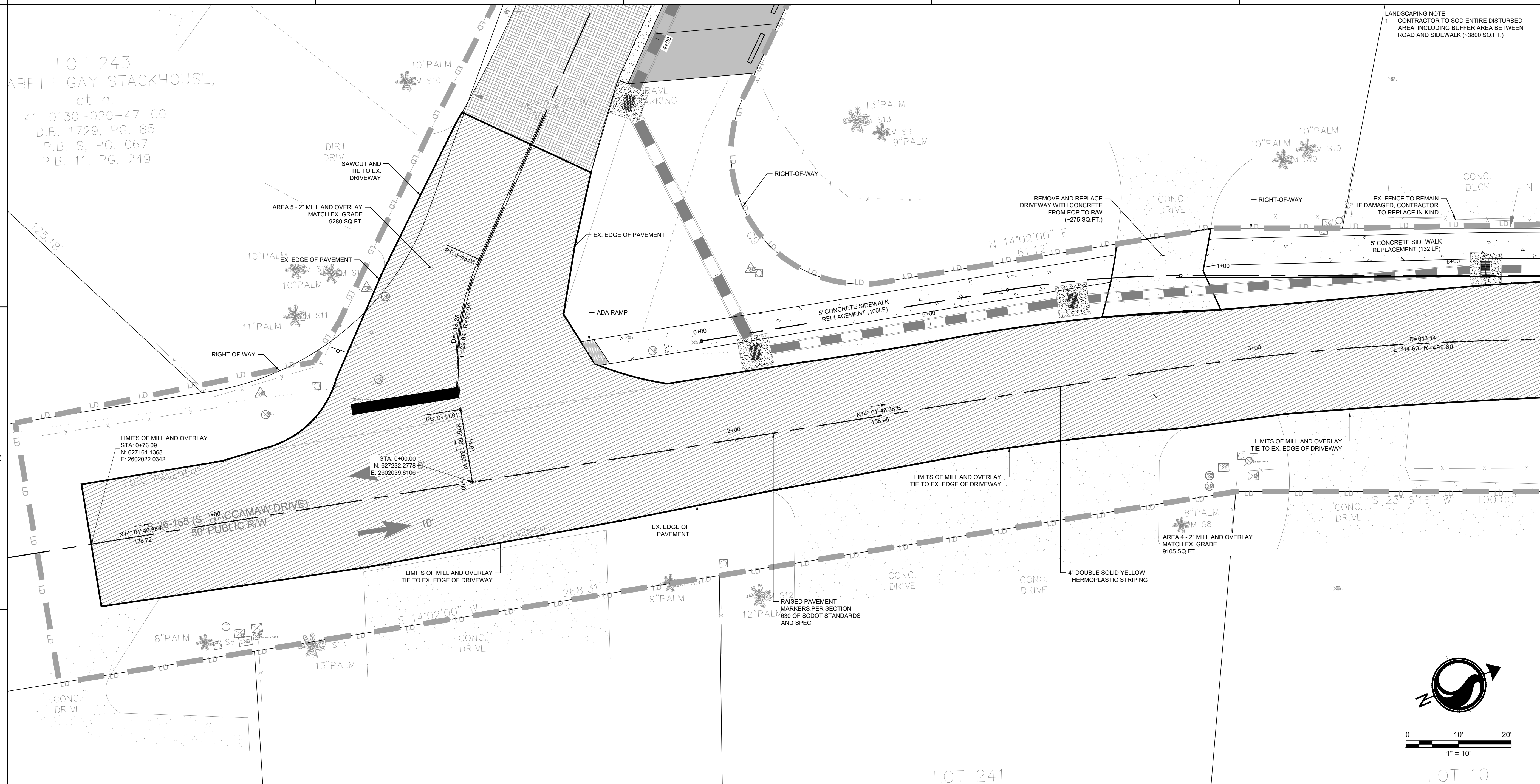
Project No.
178420916

Scale

Revision Sheet
19 of 23

Drawing No.
C4-01

LOT 243
ABETH GAY STACKHOUSE,
et al
41-0130-020-47-00
D.B. 1729, PG. 85
P.B. S, PG. 067
P.B. 11, PG. 249



S. WACCAMAW DRIVE PROFILE
SCALE: H: 1"=10'
V: 1"=1'

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Legend

- PROPOSED MILL AND OVERLAY
- PROPOSED ASPHALT FULL DEPTH REPLACEMENT
- PROPOSED ASPHALT

Revision

Revision	By	Appd	YYYY.MM.DD
BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22
Issued	By	Appd	YYYY.MM.DD
File Name: C4_R16_ROAD	SGC	BK	2018.12.11
	Dwn.	Dgnt.	Chkd.
			YYYY.MM.DD

Permit/Seal



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Client/Project
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5

MURRELLS INLET, SOUTH CAROLINA

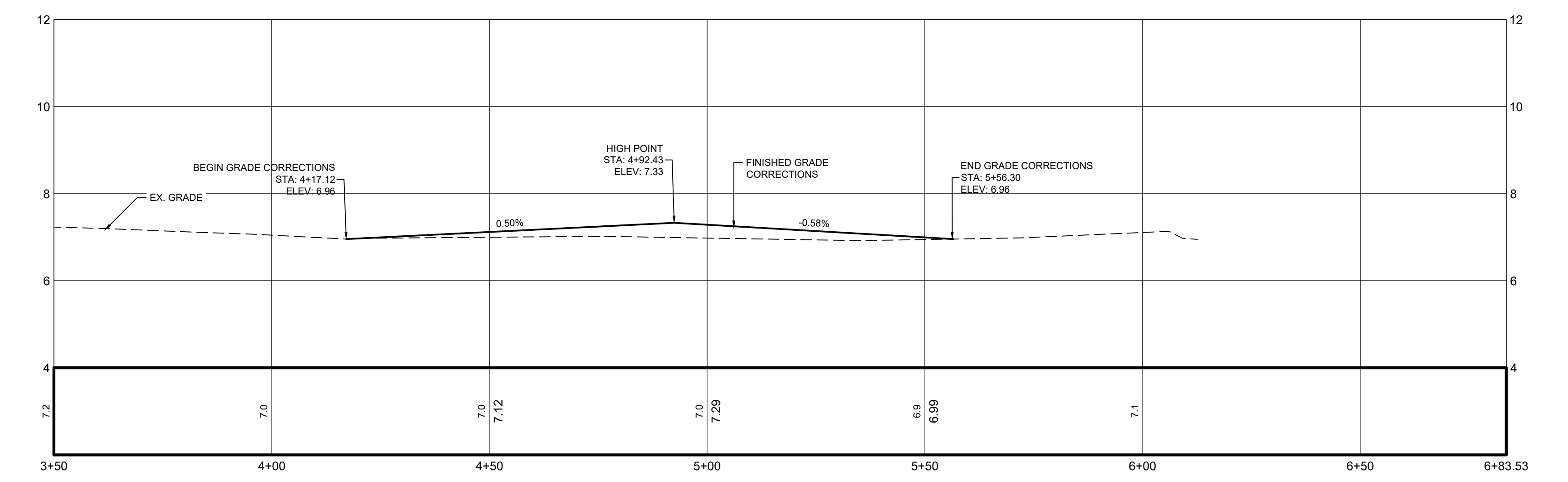
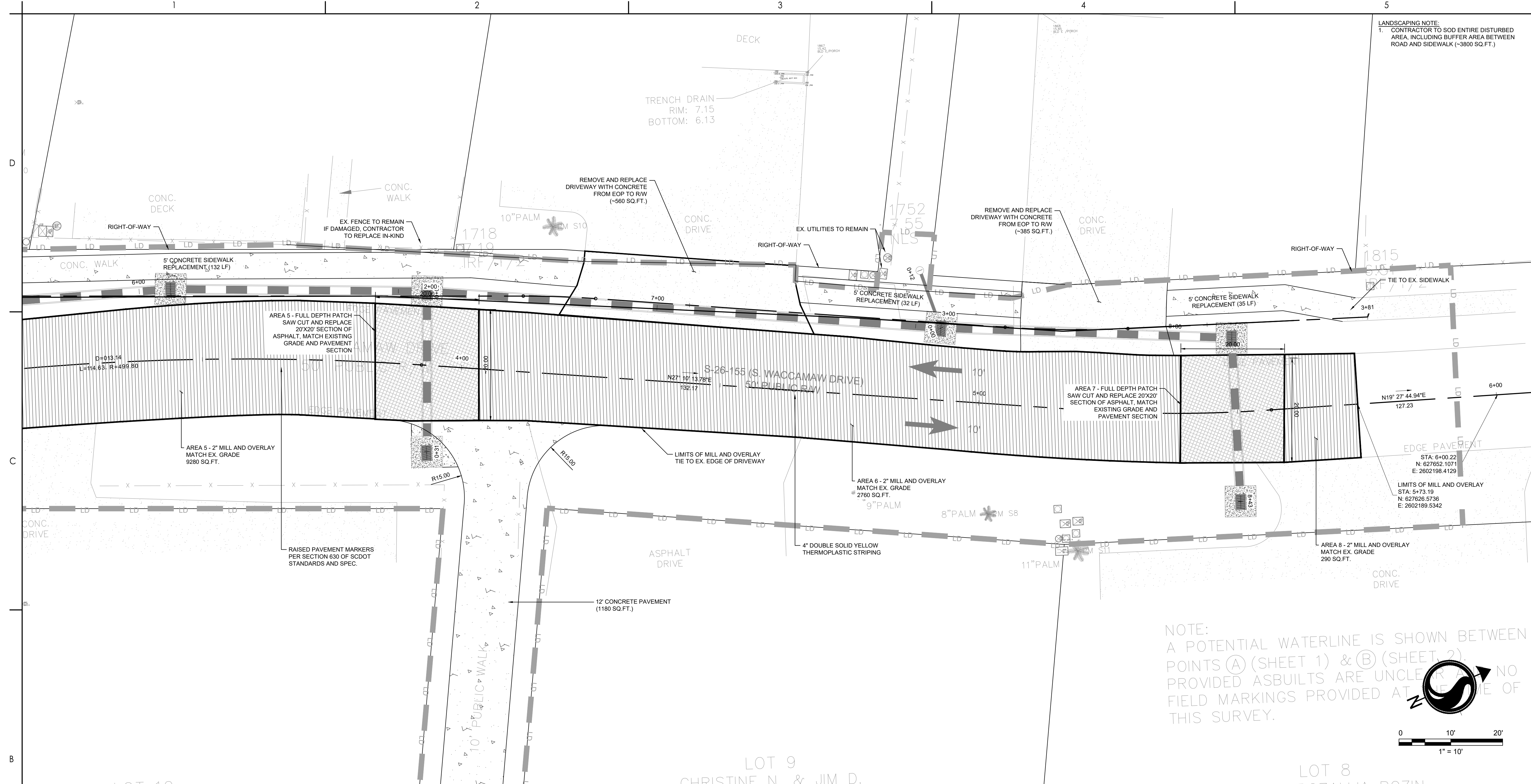
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ROADWAY PLAN AND PROFILE

Project No.
178420916

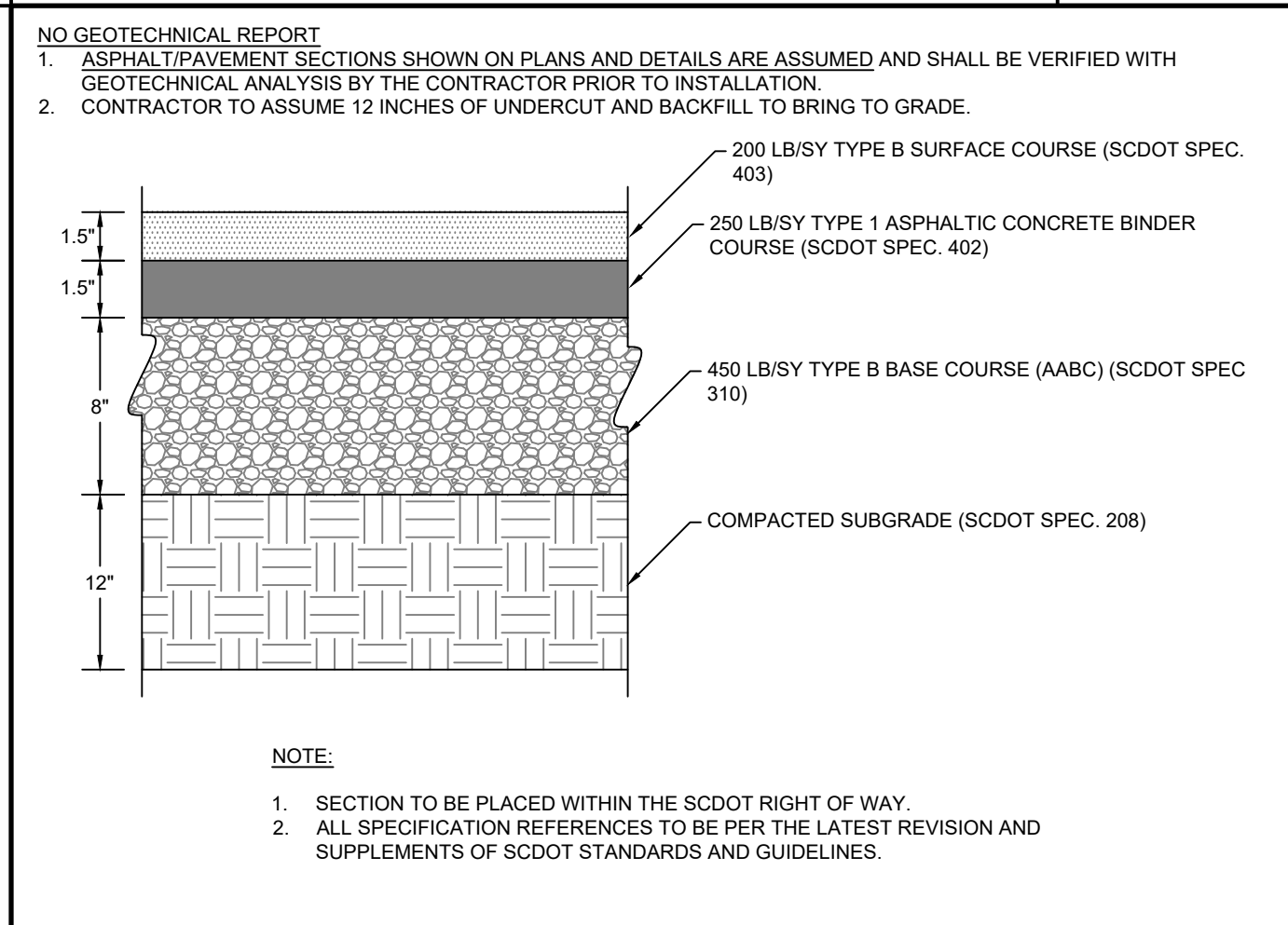
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Revision Sheet
20 of 23

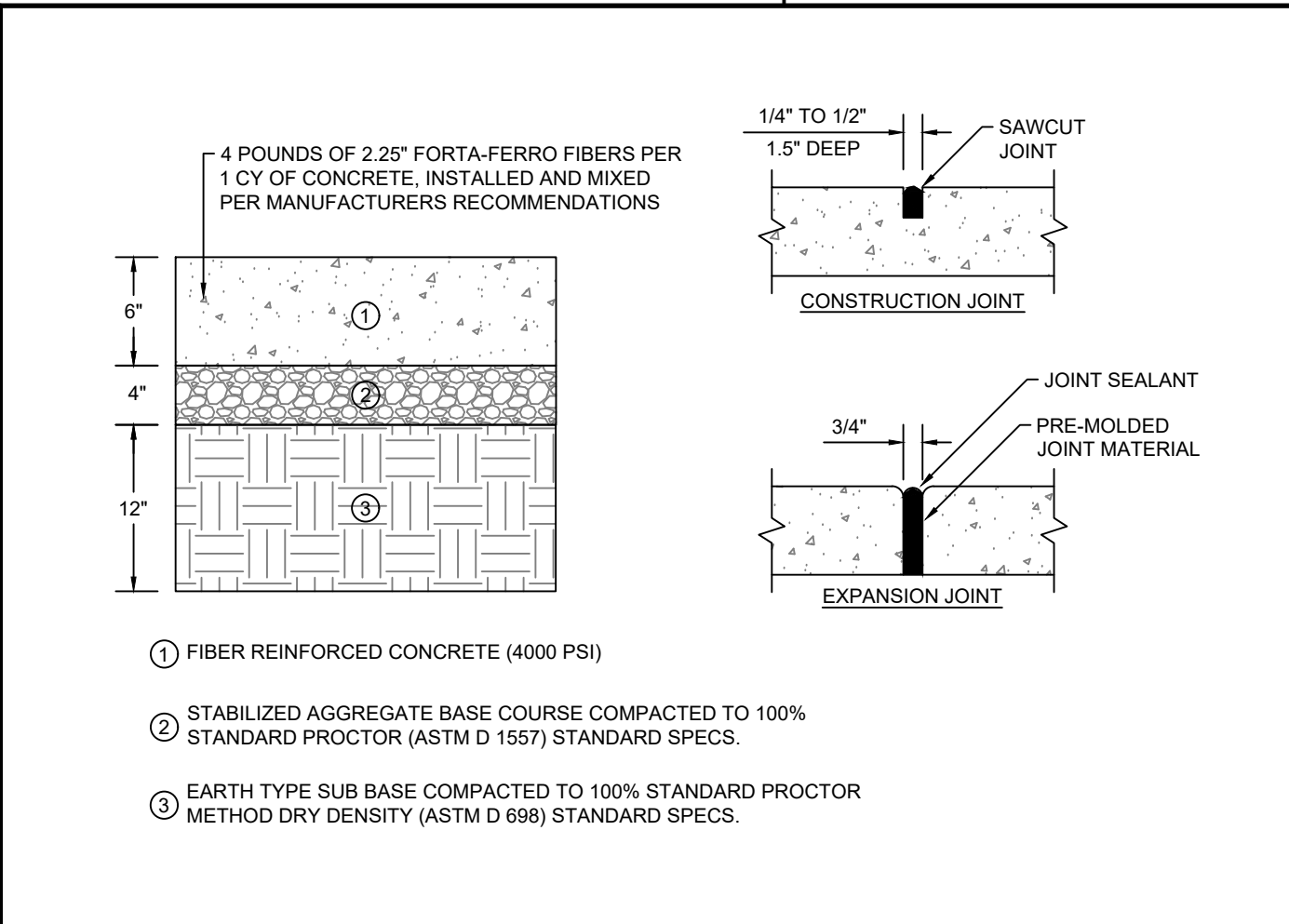
Drawing No.
C4-02



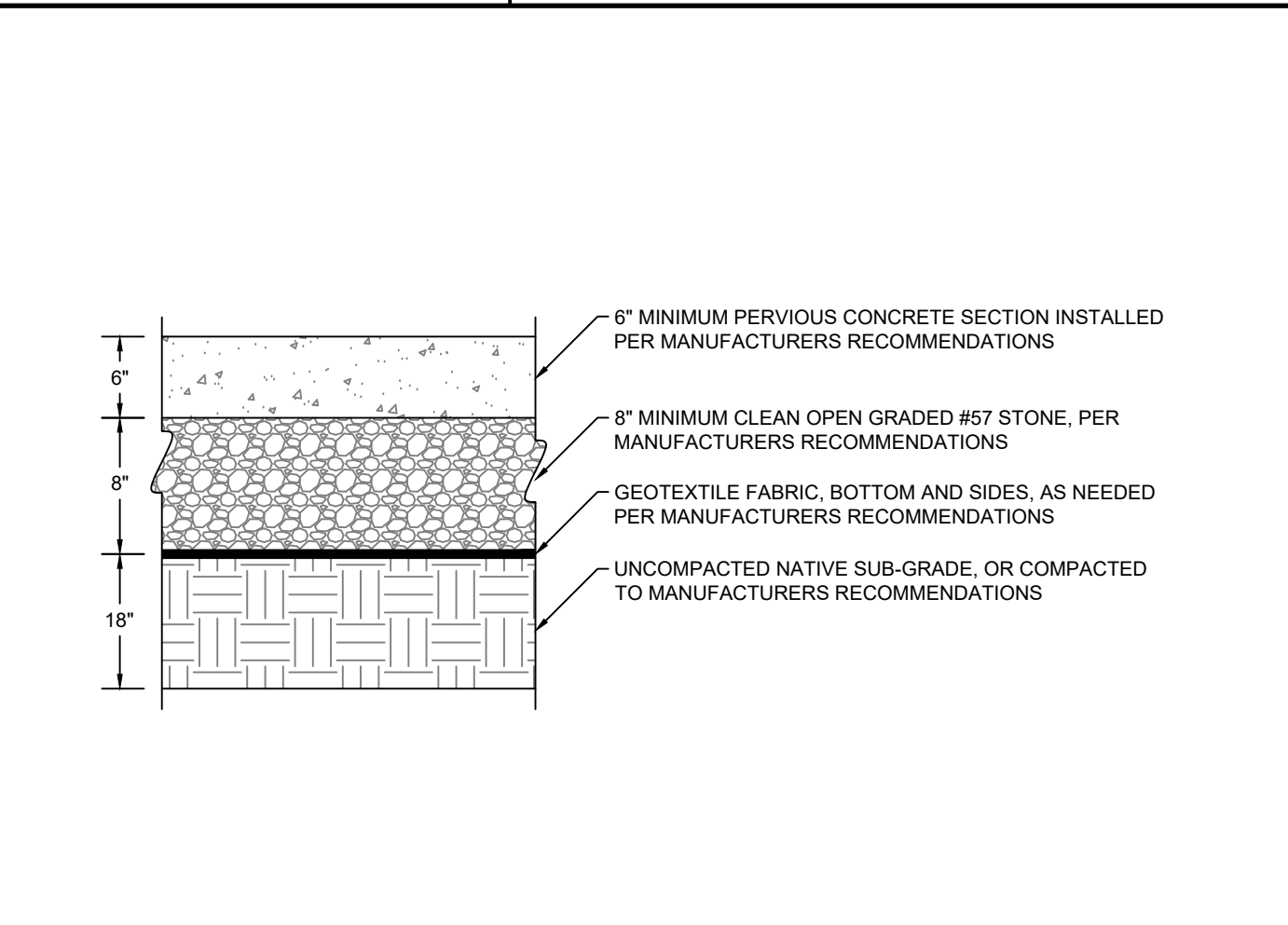
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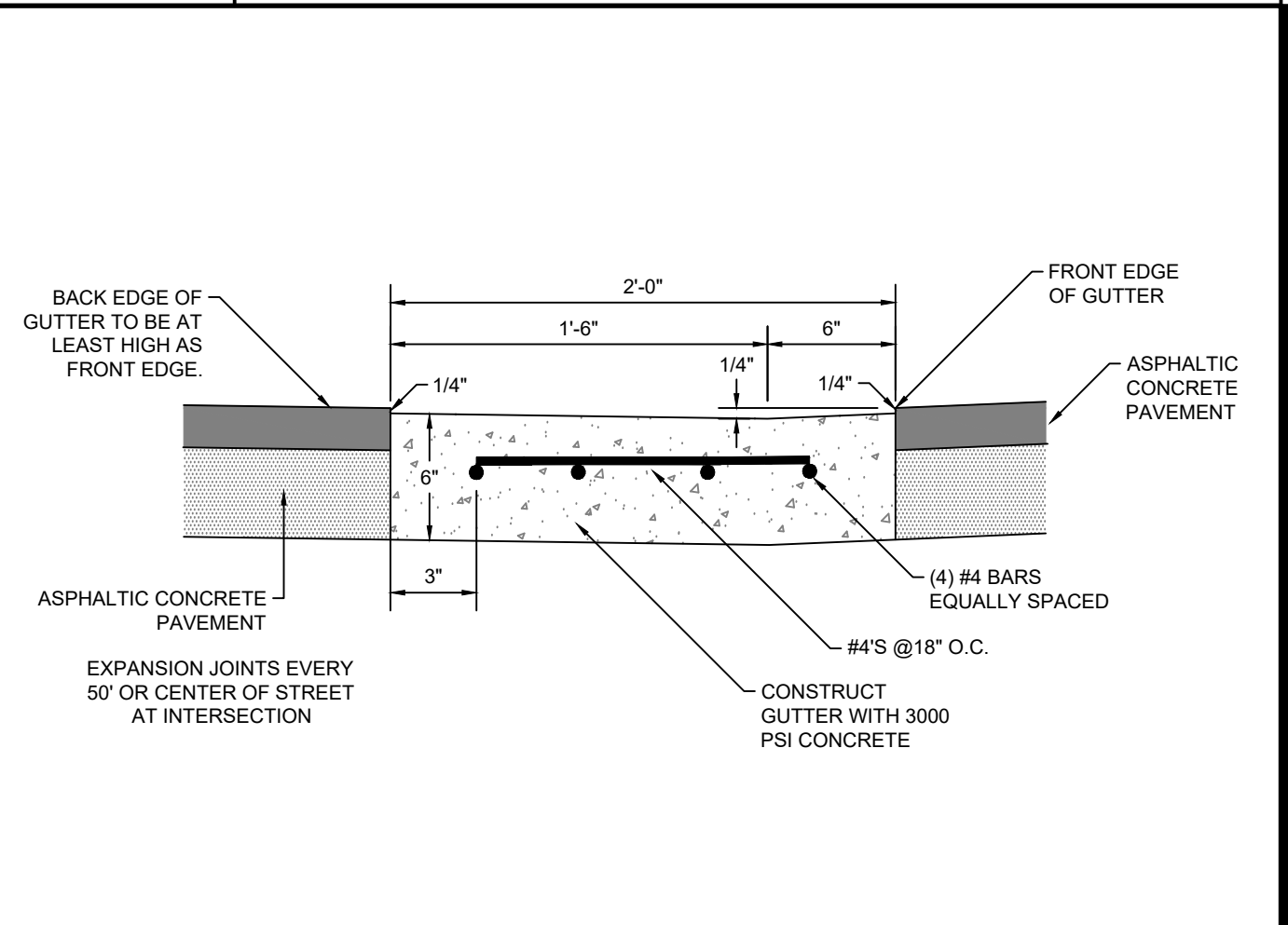
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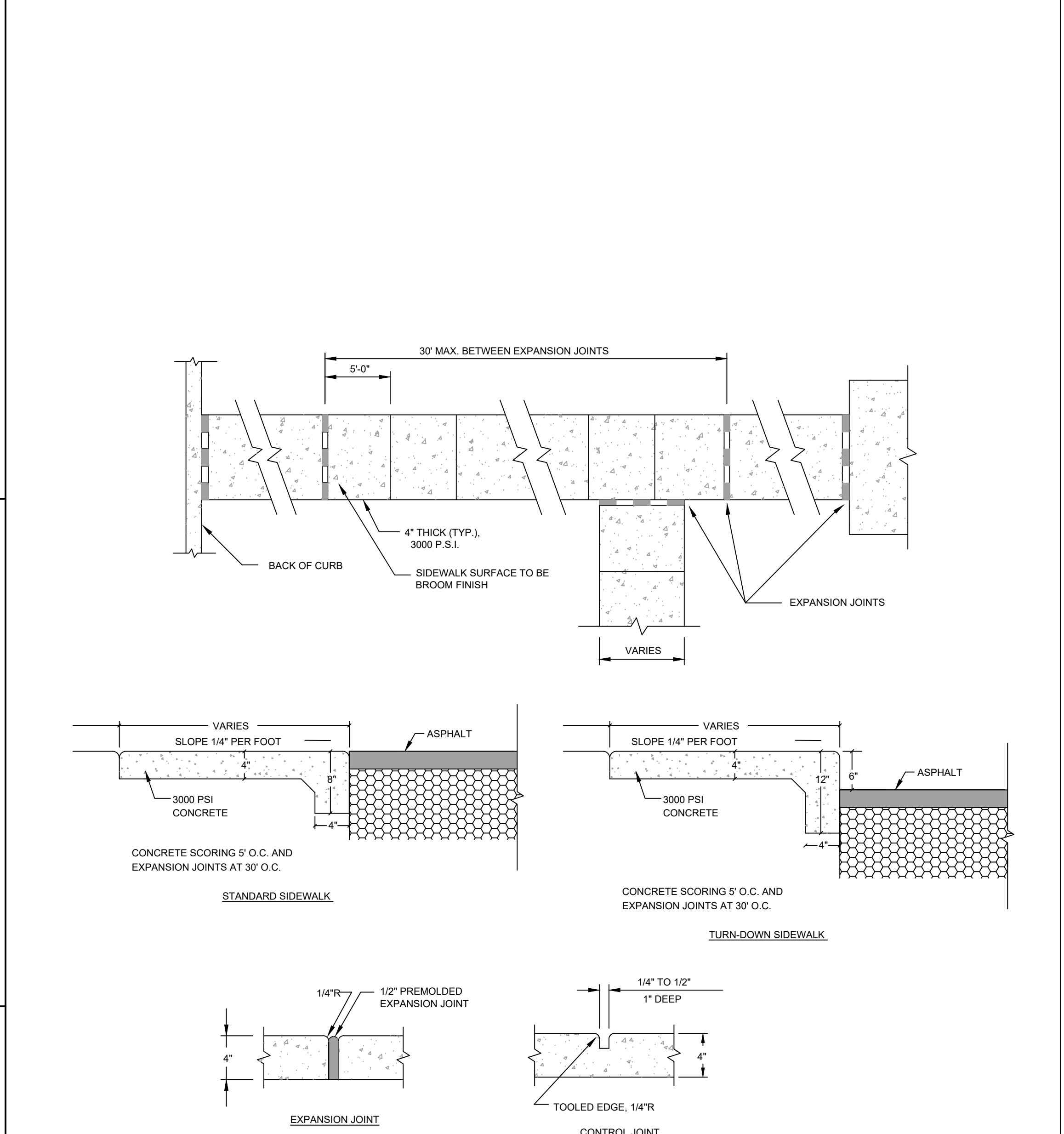
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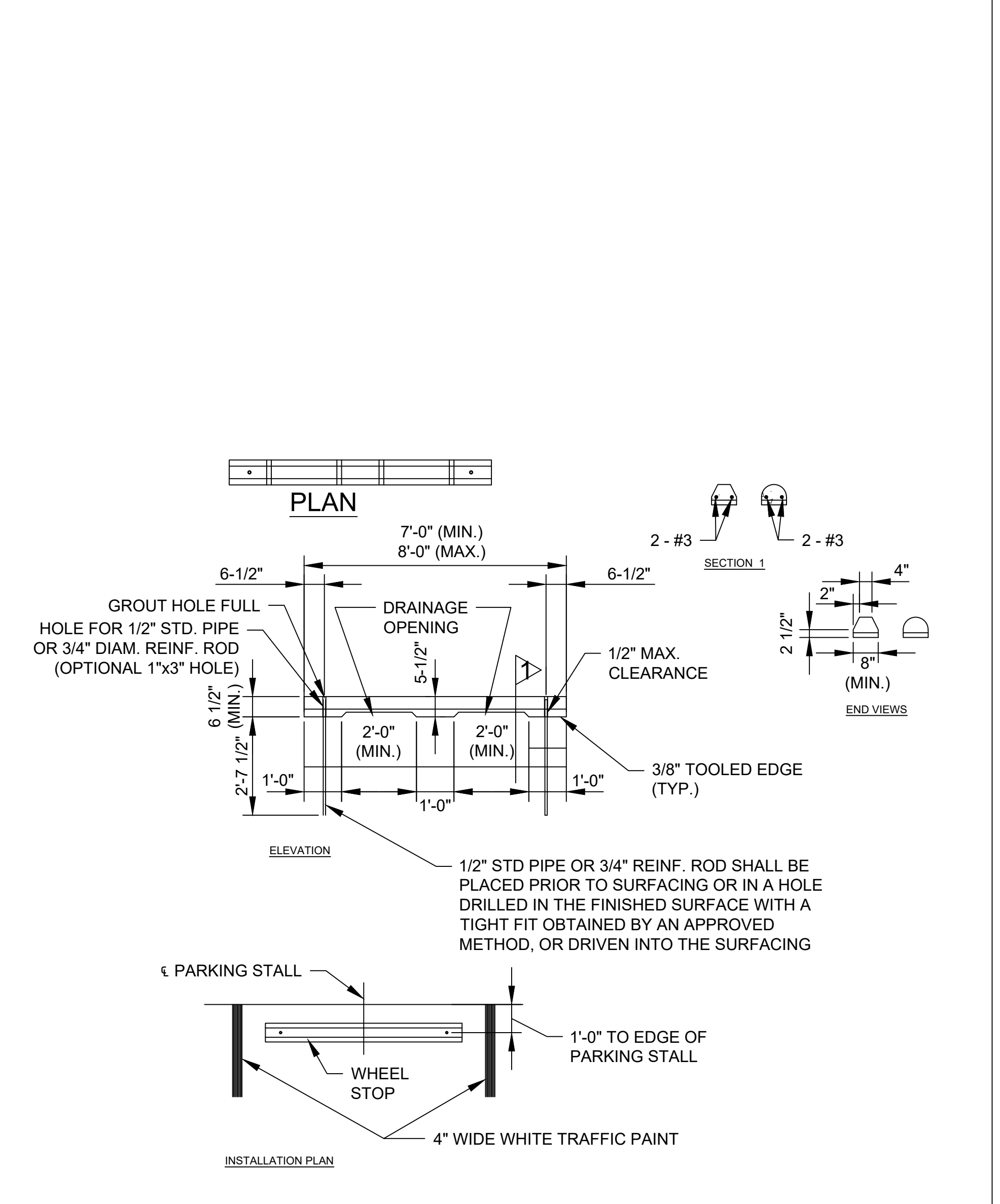
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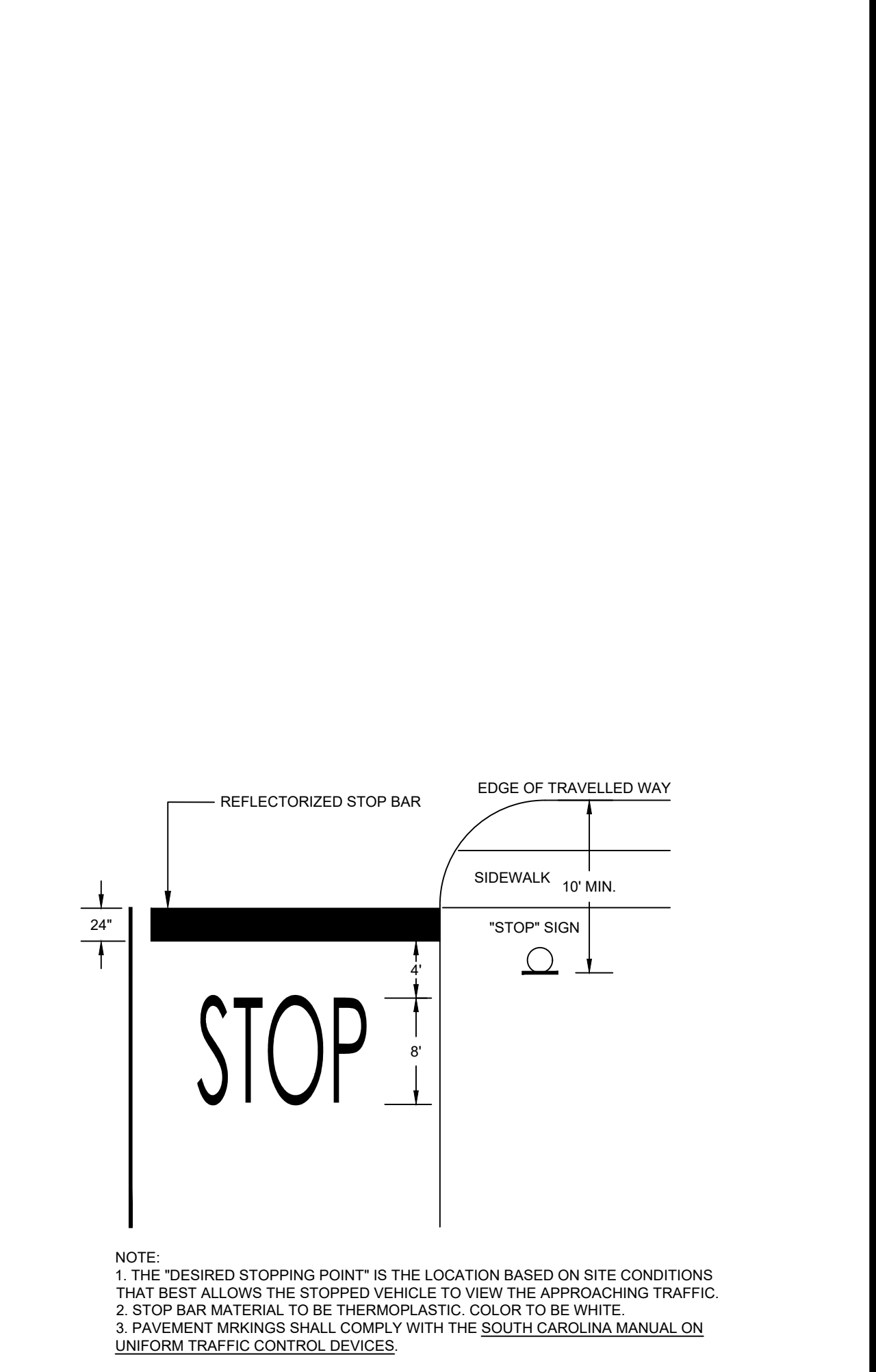
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CONCRETE SIDEWALK
N.T.S.



CONCRETE WHEEL STOP
N.T.S.



STOP BAR DETAIL
N.T.S.

Revision	By	Appd	YYYY.MM.DD	
BID SET PER GEORGETOWN COUNTY COMMENTS	AB	BK	2020.03.26	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22	
Issued	By	Appd	YYYY.MM.DD	
File Name: C4_016_ROAD	SGC	SGC	BK	2018.12.11
	Dwn.	Dgdn.	Chkd.	YYYY.MM.DD

Permit/Seal

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GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
ROADWAY DETAILS

Project No. 178420916	Scale
Revision Sheet 21 of 23	Drawing No. C4-03

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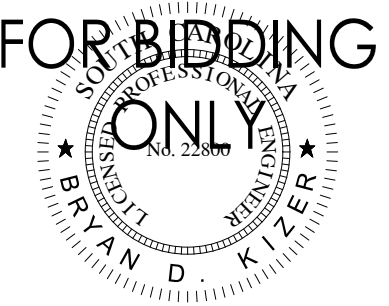
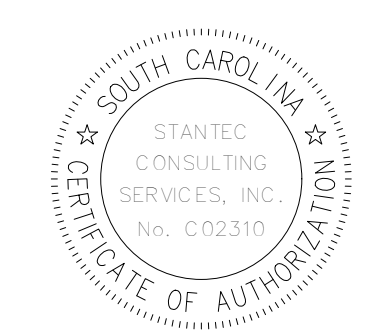
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Legend

Revision	By	Appd	YYYY.MM.DD	
BID SET	AB	BK	2020.03.26	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.10.30	
PER GEORGETOWN COUNTY COMMENTS	SGC	BK	2019.01.22	
Issued	By	Appd	YYYY.MM.DD	
File Name: C5_916_TRAFFIC	SGC	BK	2018.12.11	
	Dwn.	Dgnd.	Chkd.	YYYY.MM.DD

Permit/Seal



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GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS
SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
TRAFFIC CONTROL PLAN

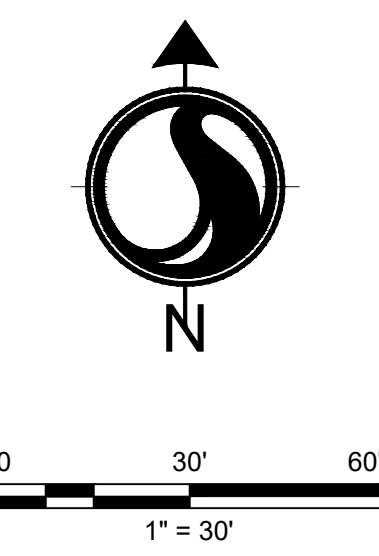
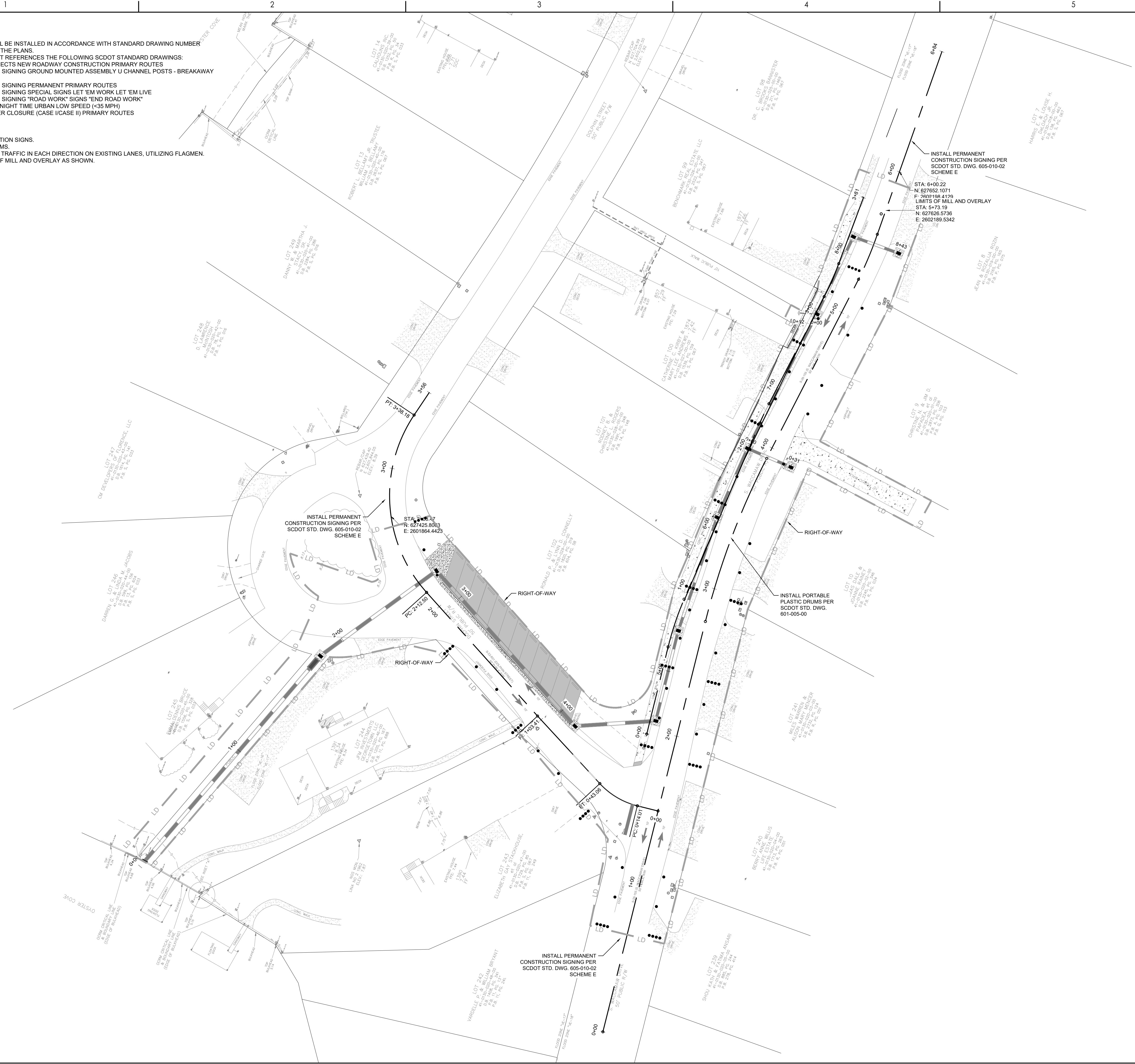
Project No. 178420916	Scale
Revision Sheet 22 of 23	Drawing No. C5-00

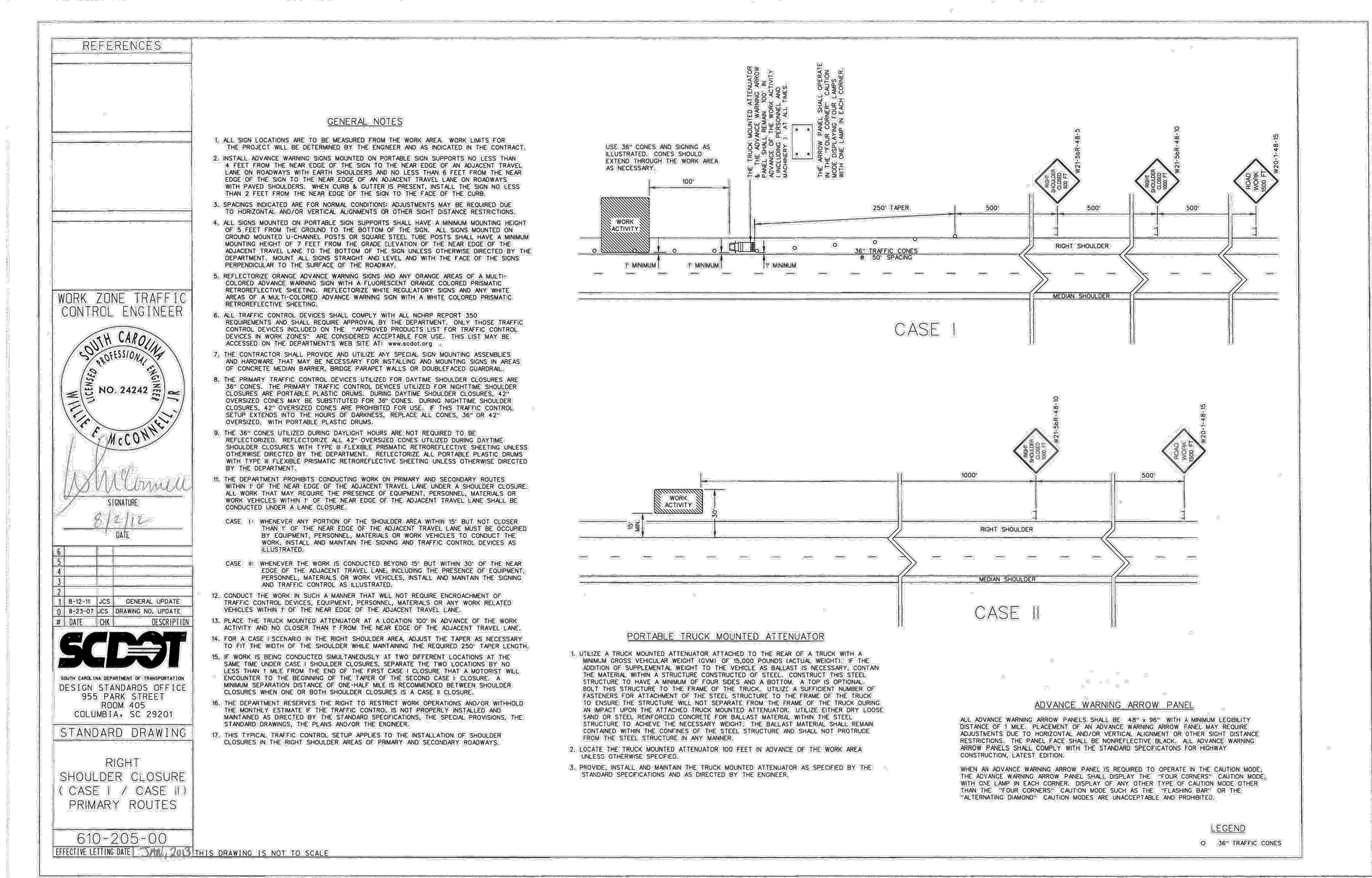
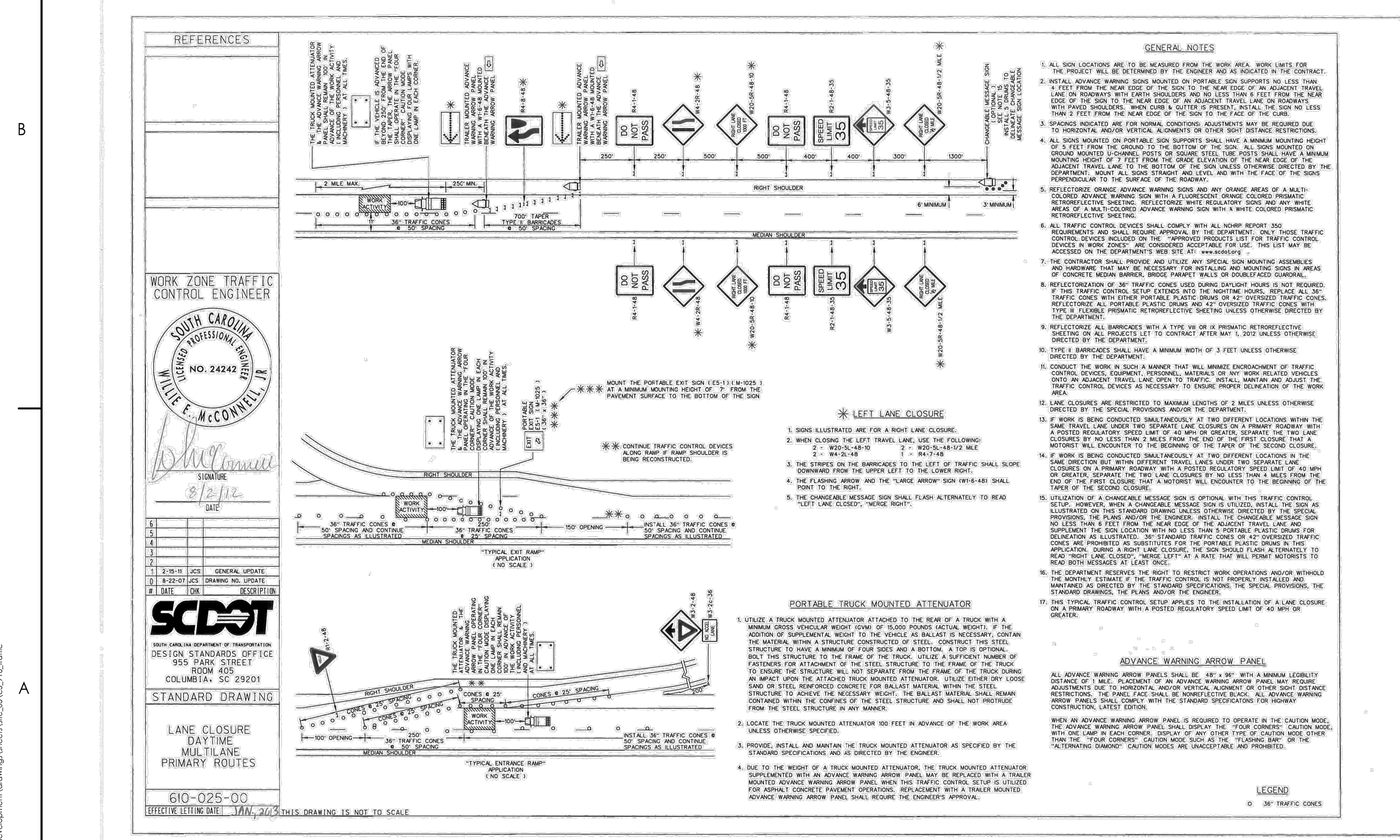
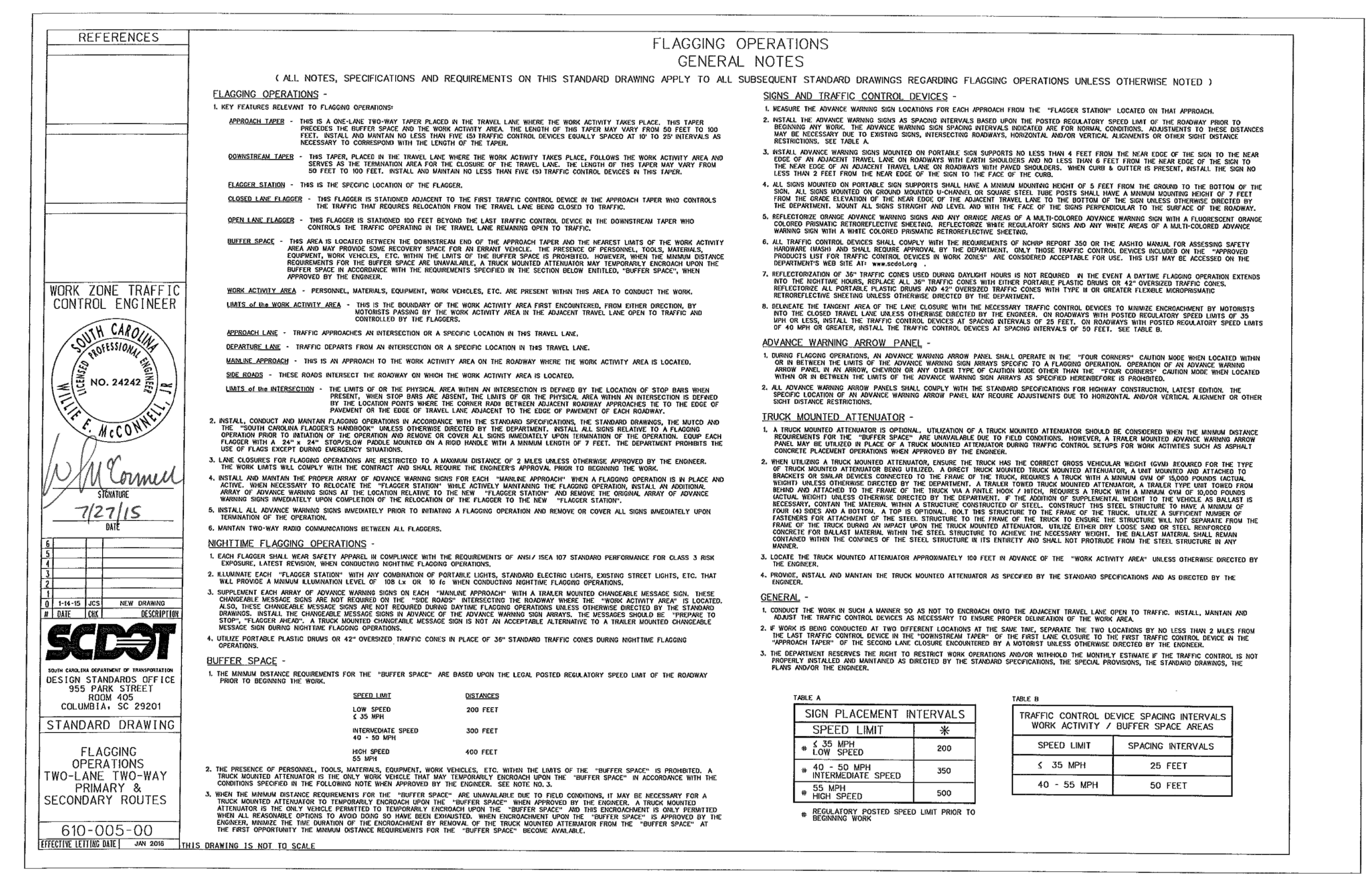
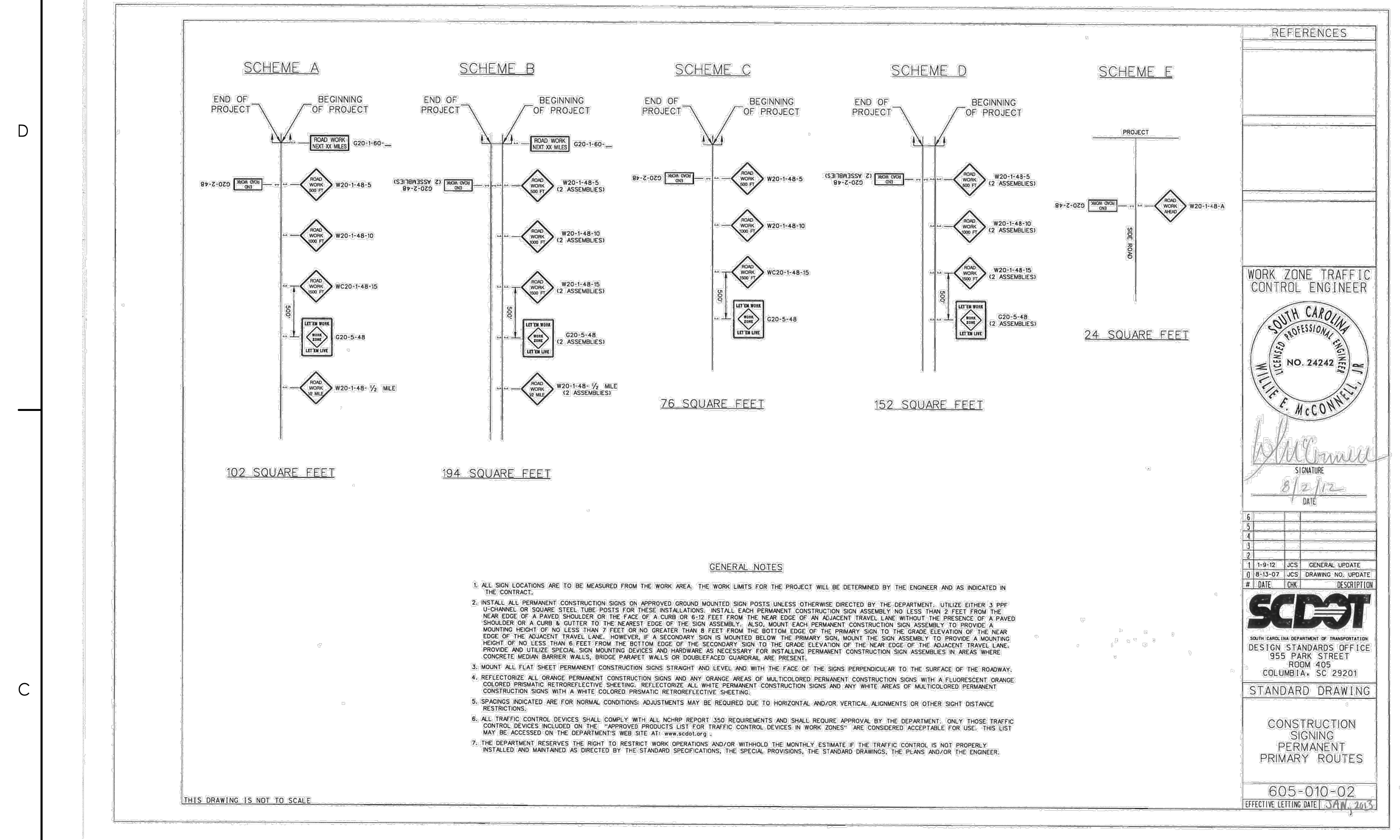
CONSTRUCTION NOTES:

- PORTABLE PLASTIC DRUMS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NUMBER 601-005-00, AND AS DIRECTED BY THE PLANS.
- CONSTRUCTION OF THIS PROJECT REFERENCES THE FOLLOWING SCDOT STANDARD DRAWINGS:
 - 601-005-00 WIDENING PROJECTS NEW ROADWAY CONSTRUCTION PRIMARY ROUTES
 - 605-005-01 CONSTRUCTION SIGNING GROUND MOUNTED ASSEMBLY U CHANNEL POSTS - BREAKAWAY INSTALLATION
 - 605-010-02 CONSTRUCTION SIGNING PERMANENT PRIMARY ROUTES
 - 605-025-01 CONSTRUCTION SIGNING SPECIAL SIGNS LET 'EM WORK LET 'EM LIVE
 - 605-030-02 CONSTRUCTION SIGNING "ROAD WORK" SIGNS "END ROAD WORK"
 - 610-015-00 LANE CLOSURE NIGHT TIME URBAN LOW SPEED (<35 MPH)
 - 610-205-00 RIGHT SHOULDER CLOSURE (CASE I/CASE II) PRIMARY ROUTES

CONSTRUCTION SEQUENCE:

- INSTALL PERMANENT CONSTRUCTION SIGNS.
- INSTALL PORTABLE PLASTIC DRUMS.
- MAINTAIN MINIMUM ONE LANE OF TRAFFIC IN EACH DIRECTION ON EXISTING LANES, UTILIZING FLAGMEN.
- CONSTRUCT SHADED PORTION OF MILL AND OVERLAY AS SHOWN.





Revision	By	App'd	YYYY.MM.DD
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BID SET	AB	BK	2020.03.26
PER GEORGETOWN COUNTY COMMENTS	SGC	SK	2019.10.30
	SCC	BK	2019.12.22
ISSUED	By	App'd	YYYY.MM.DD

File Name: C5_114_TRAFFIC	SGC	SGC	BK	2018.12.11
	Dwn.	Dgrn.	Chkd.	YYYY.MM.DD

Permit/Seal

W. E. McConnell
Professional Engineer
No. 24242

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GARDEN CITY DRAINAGE IMPROVEMENTS SITE 5
MURRELLS INLET, SOUTH CAROLINA

Title
TRAFFIC CONTROL DETAILS

Project No.	Scale
178420916	
Revision	Sheet
	23 of 23
Drawing No.	C5-01