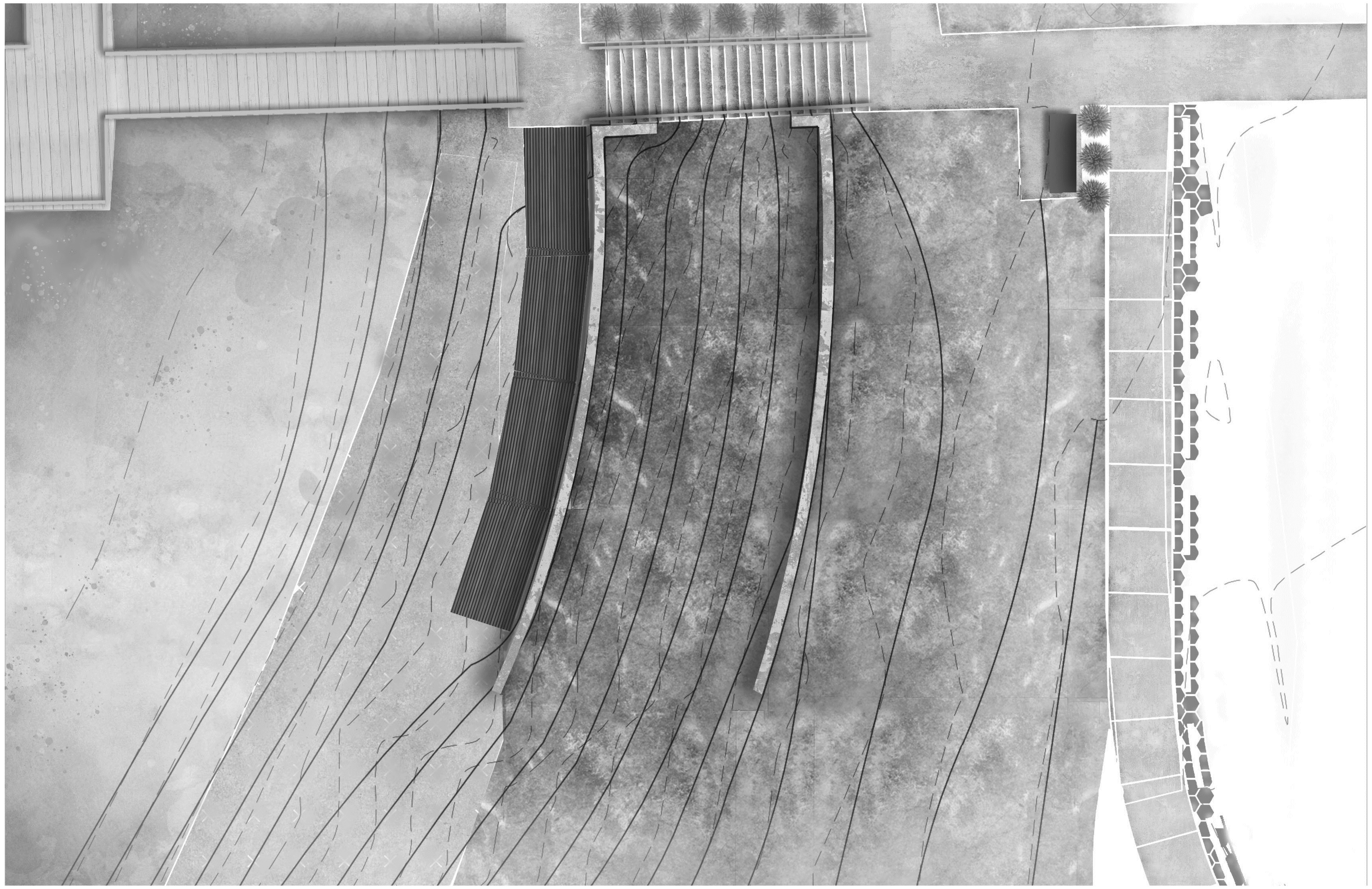

WILDWOOD PARK BEACH IMPROVEMENTS

100% CONSTRUCTION DOCUMENTS
GREENVILLE, NC

CITY OF GREENVILLE PROJECT:######
TEG PROJECT: 20240120

DRAWING INDEX

SHEET NUMBER	*SHEET TITLE*
L0.0	*COVER*
L0.2	*EXISTING CONDITIONS*
L1.0	*SITE PLAN*
L2.0	*GRADING & DRAINAGE PLAN*
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L2.5	*GROUND STABILIZATION & MATERIALS HANDLING*
L2.6	*SELF-INSPECTION, RECORDKEEPING & REPORTING*
L2.7	*EROSION DETAILS*
L4.0	*PLANTING PLAN*
L6.0	*WALL DETAILS & SECTIONS*
L6.1	*SITE DETAILS*

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SHEET NAME

COVER

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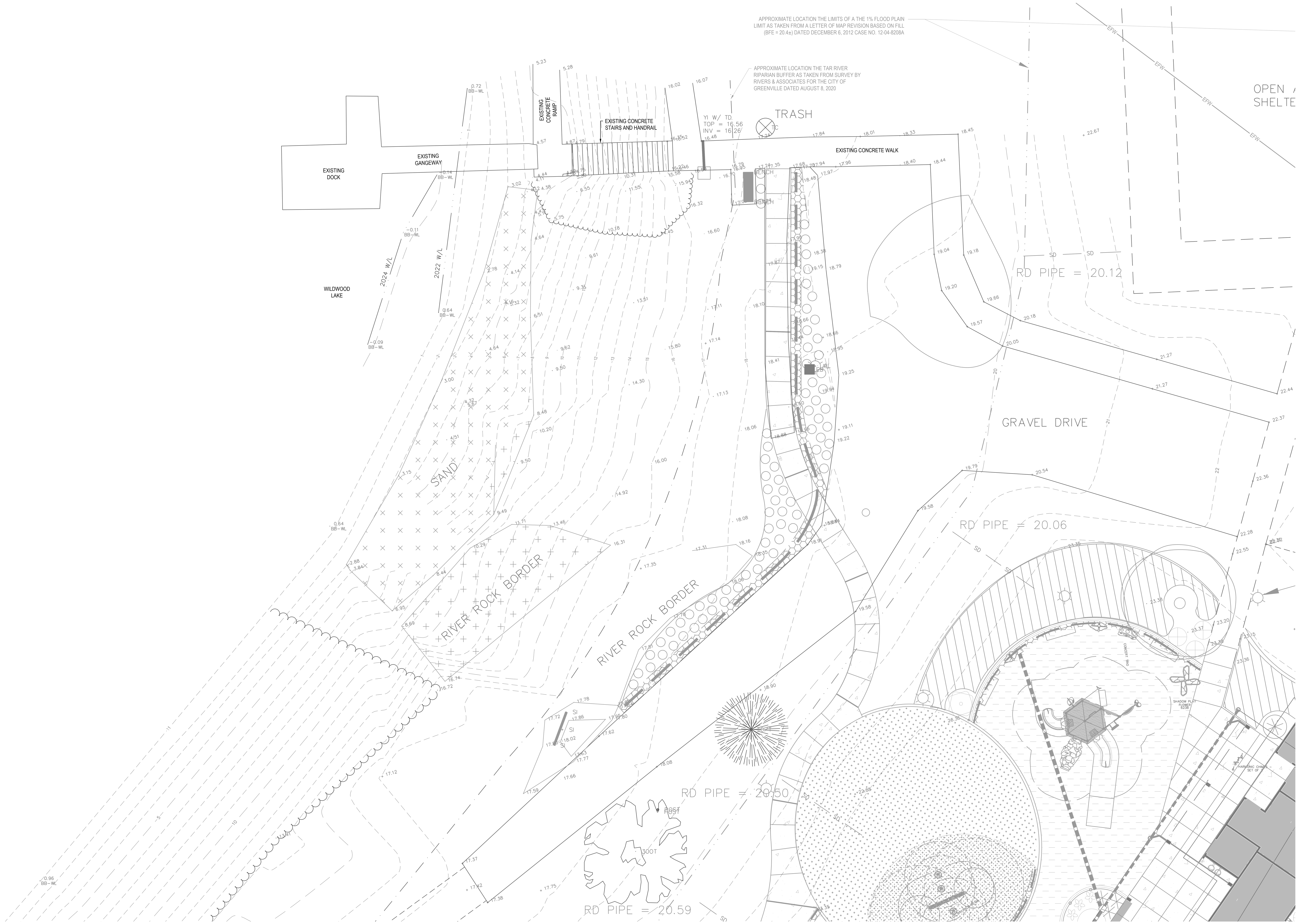

1 EXISTING CONDITIONS
L0.2
SCALE: 1" = 10'-0"

SCALE 1"=10'
10' 5' 0' 10'
N

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NC Landscape Architectural Lic. No. C-427

REV.#	DATE	DESCRIPTION	BY	CHK
A	09.10.2024	100% CD BID SET		

TEG PROJECT NO. 20240120

CLIENT PROJECT NO. JOB#

PROJECT TITLE
WILDWOOD PARK BEACH IMPROVEMENTS
100% CONSTRUCTION DOCUMENTS
3450 BLUE HERON DR.
GREENVILLE, NC 27834
PITT COUNTY

SHEET NAME
EXISTING CONDITIONS

SHEET NO.
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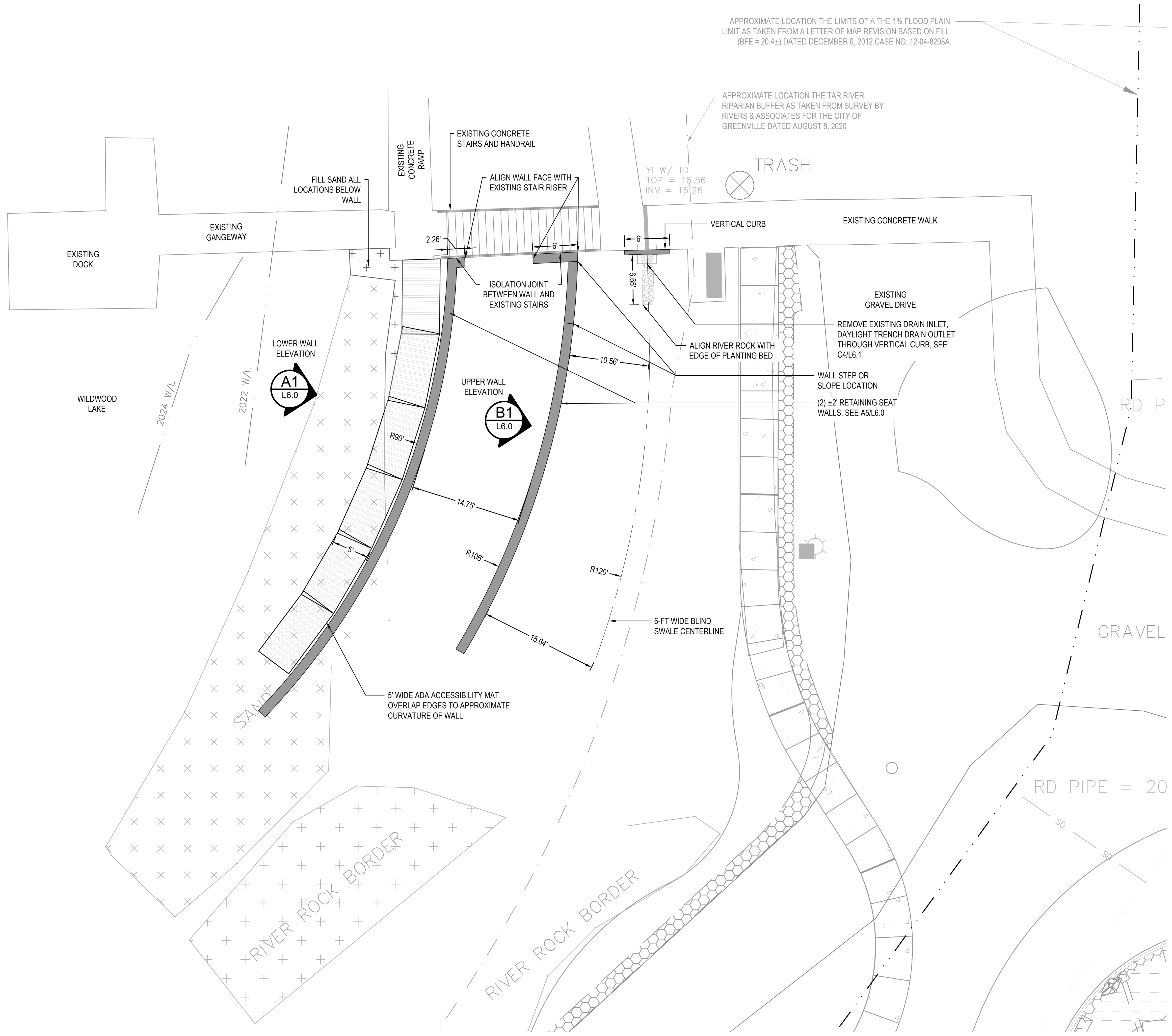

1 L1.0 SITE PLAN

SCALE: 1" = 10'-0"

SCALE 1"=10'

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 2407

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SHEET NAME
SITE PLAN

SHEET NO.
L1.0

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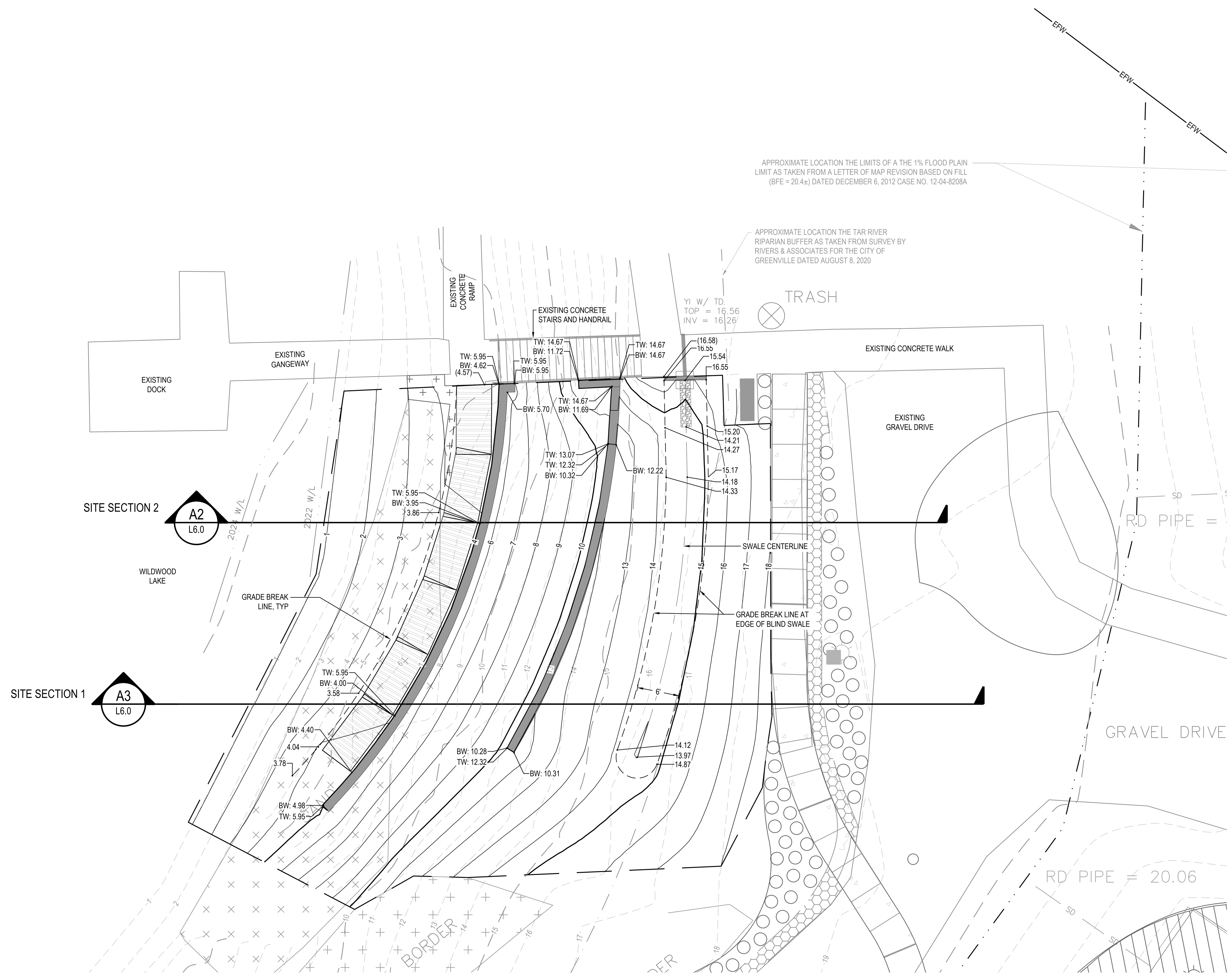

1 L2.0 GRADING & DRAINAGE PLAN

SCALE: 1" = 10'-0"

GRADING NOTES

1. ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED FROM FILL AREAS PRIOR TO PLACING FILL. ANY QUESTIONABLE OR UNSUITABLE SOIL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. AFTER STRIPPING TOPSOIL AND PRIOR TO PLACING FILL, IT IS RECOMMENDED THAT ALL BUILDING, PARKING AND DRIVEWAY AREAS BE ROLLED WITH A VIBRATORY ROLLER TO CONSOLIDATE LOOSE SOILS IN THE UPPER SUBGRADE. COMPACTION TEST RESULTS OF AT LEAST 95 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY WILL BE REQUIRED PRIOR TO ENGINEER'S APPROVAL FOR FILL PLACEMENT.
3. CONTRACTOR SHALL CONTACT THE ENGINEER AND SCHEDULE A PROOF ROLL FOR SUBGRADE AND WHEN AGGREGATE BASE COURSE HAS BEEN INSTALLED. ALL FILL SHALL BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698).
4. ALL CULVERT CLEANOUT MUST BE DONE SUCH THAT THE SEDIMENT IS EITHER EXTRACTED OR BLOWN UPSTREAM FOR CLEANUP. UNDER NO CIRCUMSTANCES SHALL SEDIMENT BE BLOWN DOWNSTREAM.
5. GRADING CONTRACTOR SHALL TEMPORARY SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE SPECIFICATIONS WITHIN 14 DAYS OF COMPLETION OF GRADING WORK. UPON COMPLETION OF THE PROJECT, THE GENERAL CONTRACTOR SHALL INSTALL PERMANENT SEEDING AS OUTLINED IN THE SPECIFICATIONS. ALL DRAINAGE PIPES SHALL BE CLEANED BY THE GENERAL CONTRACTOR TO REMOVE ANY SEDIMENTS THAT HAVE ACCUMULATED.
6. ALL EXCESS TOPSOIL STRIP MATERIAL TO BE HAULED OFF-SITE AND DISPOSED OF AT AN APPROVED SITE.
7. ALL PLANTING AREAS SHALL BE BACKFILLED WITH TOPSOIL & RAKED DOWN, REMOVING ALL CLODS AND ROOTS, AND LEFT READY FOR SEEDING & PLANTING.
8. ALL DEWATERING OPERATIONS SHALL BE FILTERED PRIOR TO LEAVING THE SITE.

GRADING LEGEND

CB	CATCH BASIN
CO	CLEAN OUT
C.T.	CURB TAPER
EC	EDGE OF CONCRETE
EX.	EXISTING
FE	FINISHED ELEVATION
FFE	FINISH FLOOR ELEVATION
FL	FLOW LINE
FOCB	FIBER OPTIC CABLE BOX
INV.	INVERT
JB	JUNCTION BOX
LF	LINEAR FEET
M.E.	MATCH EXISTING
RCP	REINFORCED CONCRETE PIPE
TA	TOP OF ASPHALT
TC	TOP OF CURB
TSW	TOP OF SIDEWALK
TYP.	TYPICAL
YI	YARD INLET
x 26.00	EX. SPOT ELEVATION
26	EXISTING CONTOUR
SD	EX. STORM DRAIN
	PROPOSED STORM PIPE
X	SILT FENCE
	LIMITS OF DISTURBANCE
26	PROPOSED CONTOUR
RD	PROPOSED ROOF DRAIN
	INLET PROTECTION

SCALE 1"=10'

10' 5' 0' 10'

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 2407 ANDREW HARRELL

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PITT COUNTY

SHEET NAME
GRADING & DRAINAGE PLAN

SHEET NO.
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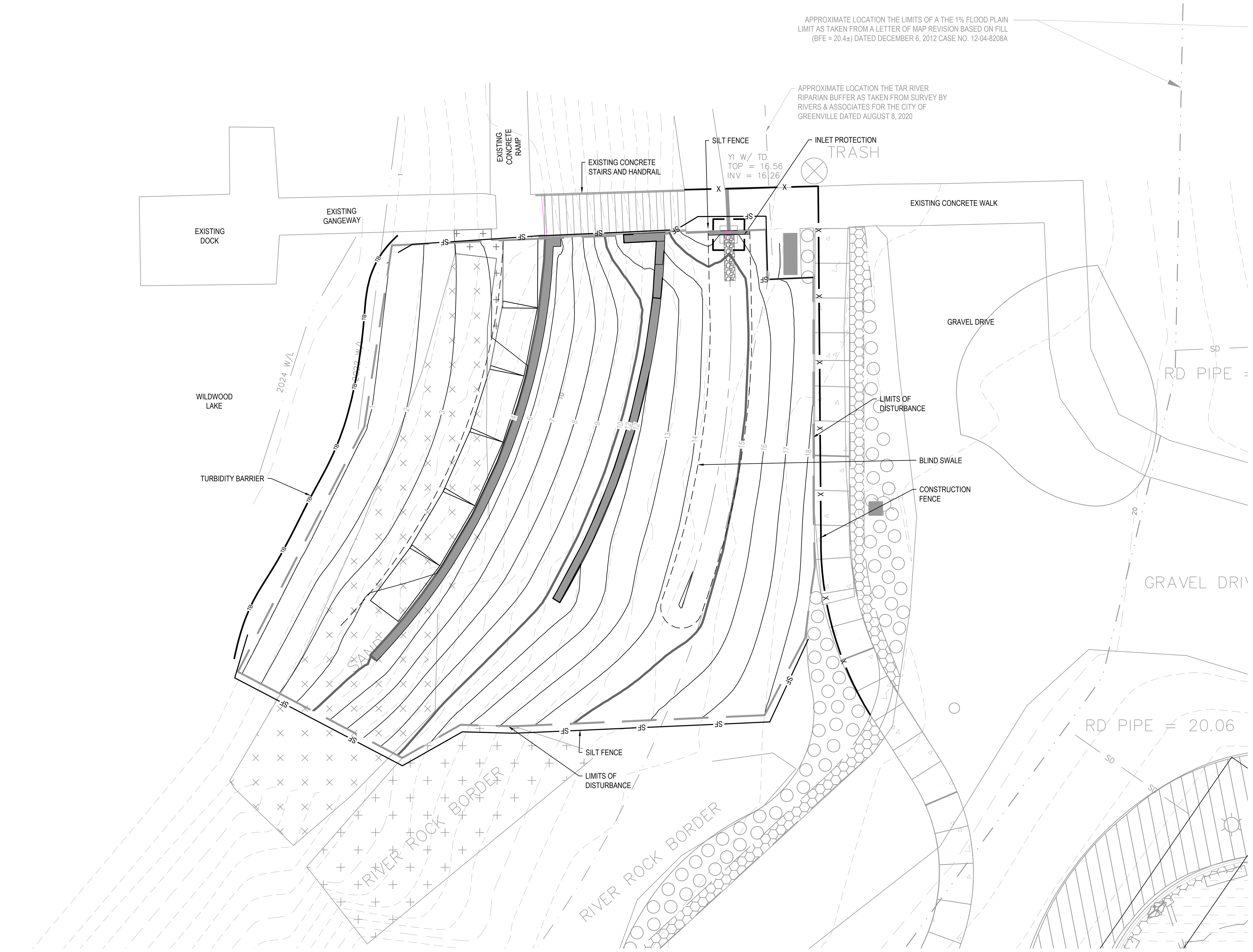

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L2.4
PRE-CONSTRUCTION EROSION CONTROL PLAN
SCALE: 1" = 10'-0"

CITY OF GREENVILLE EROSION NOTES:

1. SCHEDULING OF A PRECONSTRUCTION CONFERENCE WITH THE ENGINEERING DIVISION IS REQUIRED PRIOR TO INITIATING LAND DISTURBING ACTIVITIES. FOR SCHEDULING PLEASE CALL (252) 329-4467. A 24-HOUR NOTICE IS REQUIRED. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING THE CITY OF THE DATE OF LAND DISTURBING ACTIVITY.
2. NO LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MEASURES MAY PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED AND APPROVED BY CITY OF GREENVILLE.
3. SEED AND MULCHING OR OTHERWISE PROVIDE GROUND COVER DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION FOR ALL EXPOSED SLOPES WITHIN 14 WORKING DAYS OF COMPLETING ANY PHASE OF GRADING.
4. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH 0.5" OVER 24-HOUR PERIOD RAINFALL EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN ISSUANCE OF A STOP WORK ORDER OR CIVIL PENALTIES UP TO $5,000 PER DAY OF VIOLATION. STIES UTILIZING SEDIMENT TRAPS MUST ALSO SPECIFY A MAXIMUM DEPTH OF SEDIMENT PRIOR TO CLEAN OUT.
5. THE CITY ENGINEER RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES SHOULD THE PLAN OR ITS IMPLEMENTATION PROVE TO BE INADEQUATE.
6. ACCEPTANCE AND APPROVAL OF THIS PLAN IS CONDITIONED UPON YOUR COMPLIANCE WITH FEDERAL AND STATE WATER QUALITY LAWS, REGULATIONS, AND RULES. IN ADDITION, LOCAL CITY AND COUNTY ORDINANCES OR RULES MAY ALSO APPLY TO THIS LAND-DISTURBING ACTIVITY. APPROVAL BY THE CITY DOES NOT SUPERCEDE ANY OTHER PERMIT OR APPROVAL.
   -PLEASE BE ADVISED OF THE RULES TO PROTECT AND MAINTAIN EXISTING BUFFERS ALONG WATERCOURSES IN THE NEUSE AND TAR RIVER BASINS. THESE RULES ARE ENFORCED BY THE DIVISION OF WATER QUALITY (DWQ). DIRECT ANY QUESTIONS ABOUT THE APPLICABILITY OF THESE RULES TO YOUR PROJECT TO THE REGIONAL WATER QUALITY SUPERVISOR, WASHINGTON REGIONAL OFFICE AT (252) 946-6481.
7. ALL DEWATERING OPERATIONS SHALL BE FILTERED PRIOR TO LEAVING THE SITE.
8. ALL STREETS SHOULD BE SWEPT AS NEEDED BUT AT LEAST WEEKLY TO CONTROL SEDIMENT FROM LEAVING THE SITE DURING GRADING ACTIVITIES.

NPDES INSPECTION REQUIREMENTS:

1. MUST KEEP A RAIN GAUGE ON THE PROJECT SITE.
2. DEDICATED DEMOLITION AND OTHER WASTE AREAS AND EARTHEN MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FORM STORM DRAINS OR STREAMS UNLESS NO ALTERNATIVE IS FEASIBLE.
3. MUST INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN A HALF-INCH (DURING A 24 HOUR PERIOD). MUST TAKE IMMEDIATE CORRECTIVE ACTION FOR ANY DEVICE FAILURE.
4. MUST INSPECT ALL OUTLETS WHERE STORMWATER RUNOFF LEAVES THE SITE AND EVALUATE THE EFFECT ON NEARBY STREAMS OR WETLANDS.
5. CORRECTIVE ACTION MUST BE TAKEN IF SEDIMENT IS DEPOSITED OFF-SITE OR INTO A STREAM OR WETLAND, OR CAUSES A VISIBLE INCREASE IN TURBIDITY OF ANY WATERBODY.
6. MUST KEEP RECORDS OF THESE INSPECTIONS AND ANY CORRECTIVE ACTIONS TAKEN.

SEED BED PREPARATION NOTES:

1. SCARIFY SOIL TO A DEPTH OF THREE (3) INCHES AND WORK INTO A SATISFACTORY SEED BED BY DISKING, USE OF CULTIPACKERS, HARROWS, DRAGS AND OTHER APPROVED MEANS.

2. PREPARATION OUTLINED ABOVE SHALL NOT BE DONE WHEN THE SOIL IS FROZEN, WET OR OTHERWISE IN AN UNFAVORABLE CONDITION.

3. BEGIN AND COMPLETE SEEDING OPERATIONS AS OUTLINED AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED, BUT IN NO EVENT LATER THAN 14 CALENDAR DAYS AFTER COMPLETION OF FINAL GRADING.

4. SEEDING AND MULCHING OPERATIONS SHALL NOT BEGIN UNTIL ELECTRICAL SERVICE HAS BEEN INSTALLED WITHIN THE PROJECT, UNLESS DIRECTED BY THE ARCHITECT/ENGINEER.

5. DISTRIBUTE LIME AND FERTILIZER, UNIFORMLY OVER SEED BED AND HARROW, RAKE, OR OTHERWISE WORK SAME INTO SEED BEDS.

6. DISTRIBUTE SEED UNIFORMLY OVER SEED BED. COVER SEED LIGHTLY AFTER SEEDING.

7. NO LIME, FERTILIZER, OR SEED SHALL BE APPLIED DURING A STRONG WIND, WHEN SOIL IS WET OR OTHERWISE UNWORKABLE. SHOULD RAIN FOLLOW SEEDING BEFORE ROLLING IS BEGUN, THE BED SHALL NOT BE ROLLED.

TEMPORARY SEEDING

DATE		
APR 15-AUG 14	GERMAN MILLET	50 LBS/ACRE
AUG 15-APR 14	RYE (GRAIN)	50 LBS/ACRE
YEAR ROUND	FERTILIZER 10-20-20	400 LBS/ACRE

VEGETATIVE PLAN:

VEGETATIVE COVER SHALL BE IN ACCORDANCE WITH THE SEEDING SCHEDULE AND THE FOLLOWING SPECIFICATION SECTIONS:

SECTION 02110	SITE CLEARING
SECTION 02120	EROSION & POLLUTION CONTROL
SECTION 02228	CLEAN-UP & SEEDING

SEEDING AND MULCHING

ALL ROADWAY AREAS

MARCH 1 - AUGUST 31		SEPTEMBER 1 - FEBRUARY 28	
50#	TALL FESCUE	50#	TALL FESCUE
10#	CENTIPEDE	10#	CENTIPEDE
25#	BERMUDAGRASS (HULLED)	35#	BERMUDAGRASS (HULLED)
500#	FERTILIZER	500#	FERTILIZER
4000#	LIMESTONE	4000#	LIMESTONE

WATER AND BORROW LOCATIONS

MARCH 1 - AUGUST 31		SEPTEMBER 1 - FEBRUARY 28	
75#	TALL FESCUE	75#	TALL FESCUE
25#	BERMUDAGRASS (HULLED)	35#	BERMUDAGRASS (HULLED)
500#	FERTILIZER	500#	FERTILIZER
4000#	LIMESTONE	4000#	LIMESTONE

NOTE: 50# BAHIAGRASS MAY BE SUBSTITUTED FOR EITHER CENTIPEDE OR BERMUDAGRASS ONLY UPON ENGINEER'S REQUEST.

CONSTRUCTION SEQUENCE

1. OBTAIN AND POST A COPY OF CERTIFICATE OF EROSION AND SEDIMENT CONTROL PLAN APPROVAL NOTIFY THE CITY GREENVILLE PRIOR TO COMMENCING CONSTRUCTION. A PRE-CONSTRUCTION MEETING WILL BE REQUIRED BY THE CITY OF GREENVILLE.

2. INSTALL ADDITIONAL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AS REQUIRED TO BEGIN STAGE 3 CONSTRUCTION. AS CONSTRUCTION PROGRESSES, INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES AS OR AS DIRECTED BY THE ENGINEER.

3. INSTALL SEDIMENT FENCE, TEMPORARY CONSTRUCTION ENTRANCES AND TEMPORARY EROSION CONTROL MEASURES.

4. BEGIN STRIPPING TOPSOIL, CLEARING THE SITE AND DEMOLITION OF SITE IMPROVEMENTS .

5. BEGIN CONSTRUCTION OF NEW UTILITIES AND DEMOLITION OF EXISTING UTILITIES.

6. INSTALL DRAINAGE PIPE, INLETS AND SWALES AND CONSTRUCT TEMPORARY SEDIMENT BASINS. PROVIDE INLET PROTECTION AND TRANSITION TO SEDIMENT BAGS AS CONSTRUCTION PROGRESSES.

7. INSTALL TEMPORARY SEEDING AS NEEDED THROUGHOUT THE CONSTRUCTION PROJECT.

8. COMPLETE CONSTRUCTION OF THE BUILDING AND SITE IMPROVEMENTS INCLUDING UTILITY TIE-INS, SIDEWALKS, FENCING AND COURTYARD AREAS.

9. INSTALL LANDSCAPING MULCH AND SEED ALL DISTURBED AREAS. ANY SLOPES LEFT EXPOSED WILL, WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.

10. UPON SITE STABILIZATION REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

11. TIME OF EXPOSURE IS APPROXIMATELY 24 MONTHS.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND SEPARATION FOLLOWING EVERY RUN-OFF PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5' DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
3. SEDIMENT BAGS SHALL BE CHECKED, SEDIMENT AND DEBRIS REMOVED AND REPLACED AS NEEDED BY AS A MINIMUM WEEKLY OR AFTER EACH RAINFALL EVENT.
4. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY AND MULCHED ACCORDING TO SPECIFICATION IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
5. THE SEDIMENT BASINS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 3' BELOW THE TOP OF THE RISER. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERTY.
6. TEMPORARY EROSION CONTROL ENTRANCES SHALL BE BLADED OFF AND REPAIRED AS NECESSARY WHEN SEDIMENT BUILDS UP DURING CONSTRUCTION ACTIVITIES.
7. SEDIMENT WILL BE REMOVED FROM INLET PROTECTION DEVICES WHEN STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERTY.

GROUND STABILIZATION		
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
* PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
* HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
* SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
* SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
* ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

EROSION CONTROL LEGEND:

SF — SILT FENCE
TB — TURBIDITY BARRIER
INLET PROTECTION

SCALE 1"=10'
10' 5' 0' 10'
N

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GREENVILLE, NC 27834
PITT COUNTY

SHEET NAME
PRE-CONSTRUCTION EROSION CONTROL PLAN

SHEET NO.
L2.4

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	**Stabilize within this many calendar days after ceasing land disturbance**	**Timeframe variations**
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

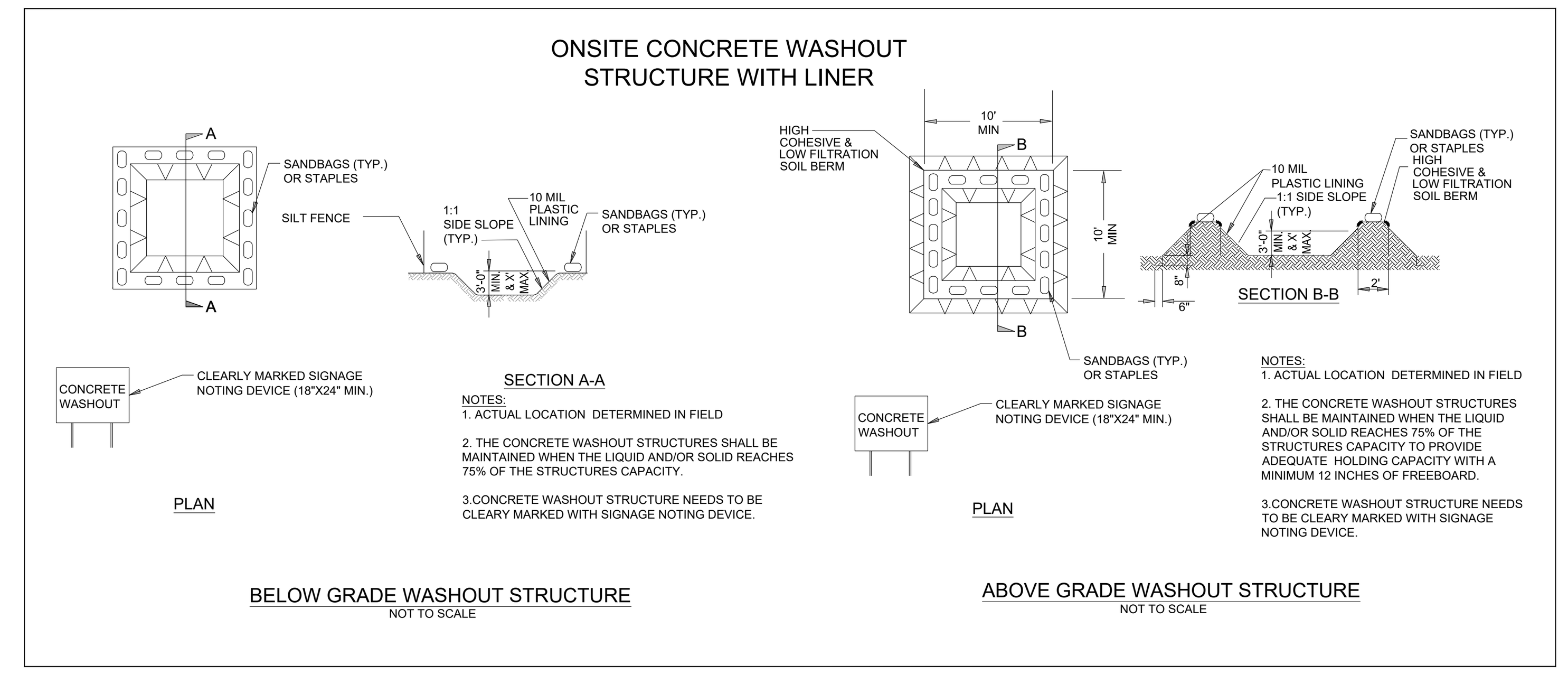
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 2407 ANDREW HARRELL

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Date: 2024.09.10 13:32:08-04'00'

REV #	DATE	DESCRIPTION	BY	CHK
A	09.10.2024	100% CD BID SET		

TEG PROJECT NO. *20240120*

CLIENT PROJECT NO. *JOB#*

PROJECT TITLE
WILDWOOD PARK BEACH IMPROVEMENTS
100% CONSTRUCTION DOCUMENTS
3450 BLUE HERON DR.
GREENVILLE, NC 27834
PITT COUNTY

SHEET NAME
GROUND STABILIZATION & MATERIALS HANDLING

SHEET NO.
L2.5

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event $\geq$ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 2407 ANDREW HARRELL

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TEG PROJECT NO. 20240120

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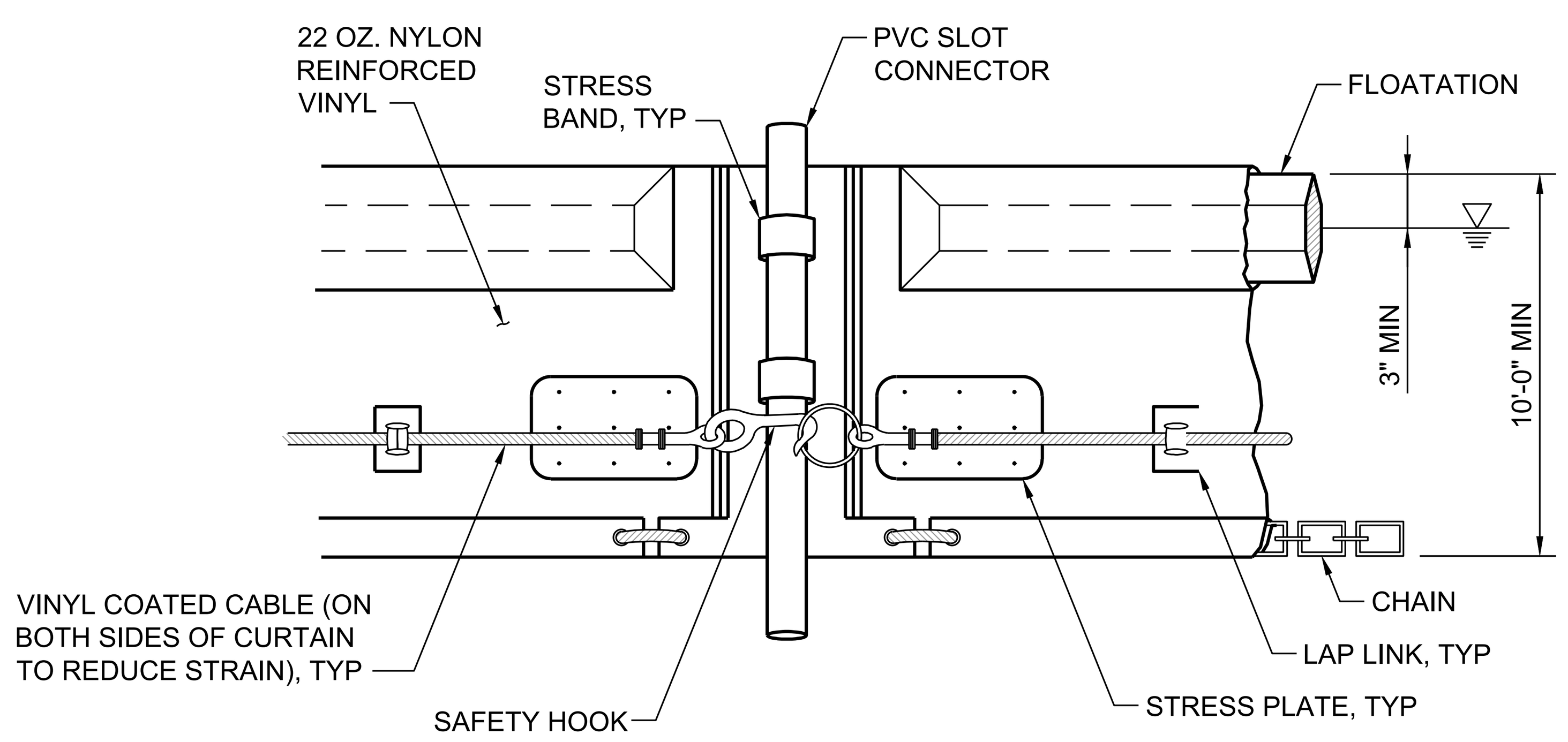
SHEET NAME
SELF-INSPECTION, RECORDKEEPING & REPORTING

SHEET NO.
L2.6



TURBIDITY CURTAIN DETAIL

NOTE:
ANCHORING WITH BUOYS, AS SHOWN, REMOVES ALL VERTICAL FORCES FROM THE CURTAIN. HENCE, THE CURTAIN WILL NOT SINK FROM WIND OR CURRENT LOADS. FINAL CONFIGURATION AND DETAILS AS RECOMMENDED BY MANUFACTURER.

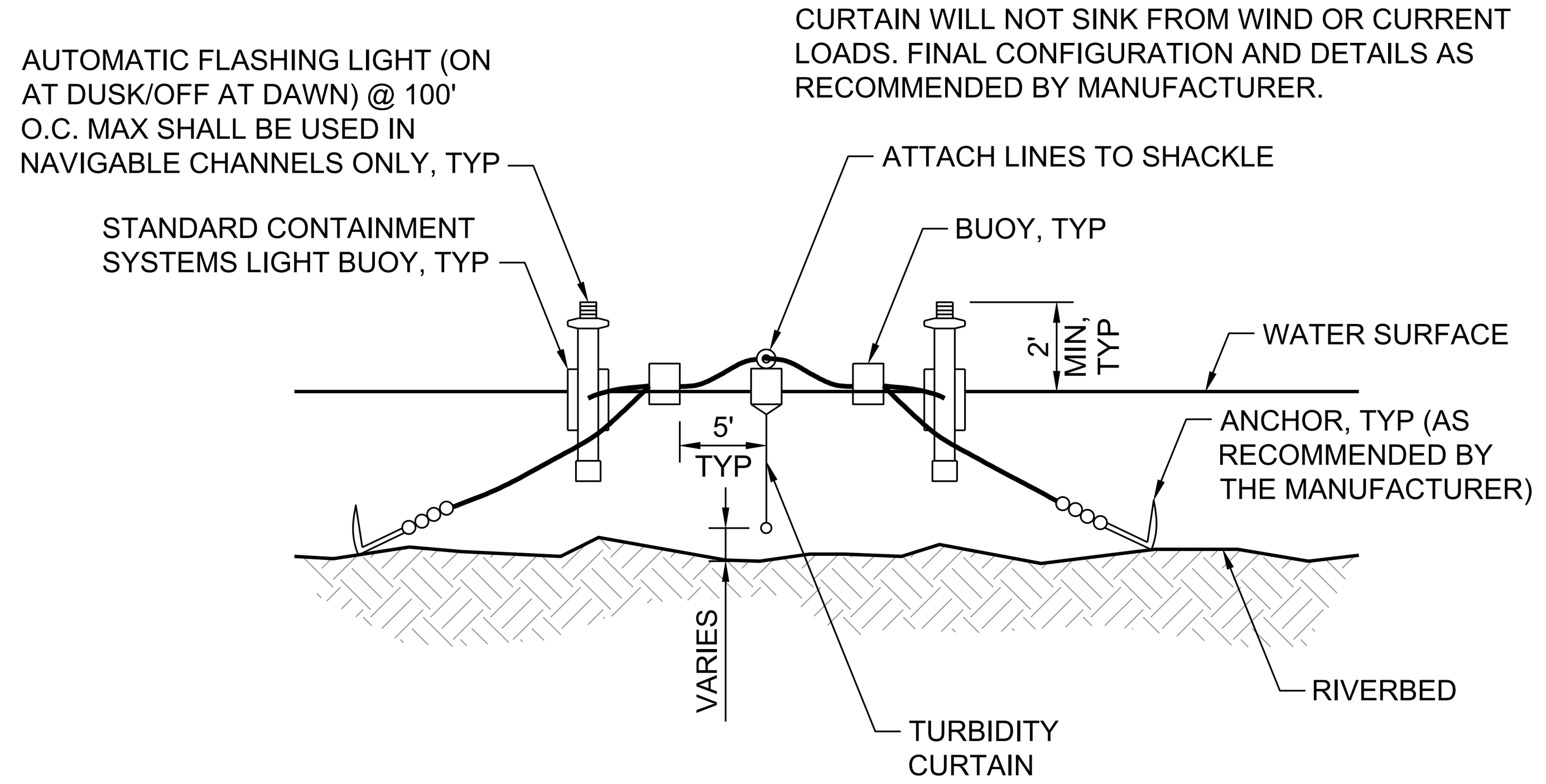
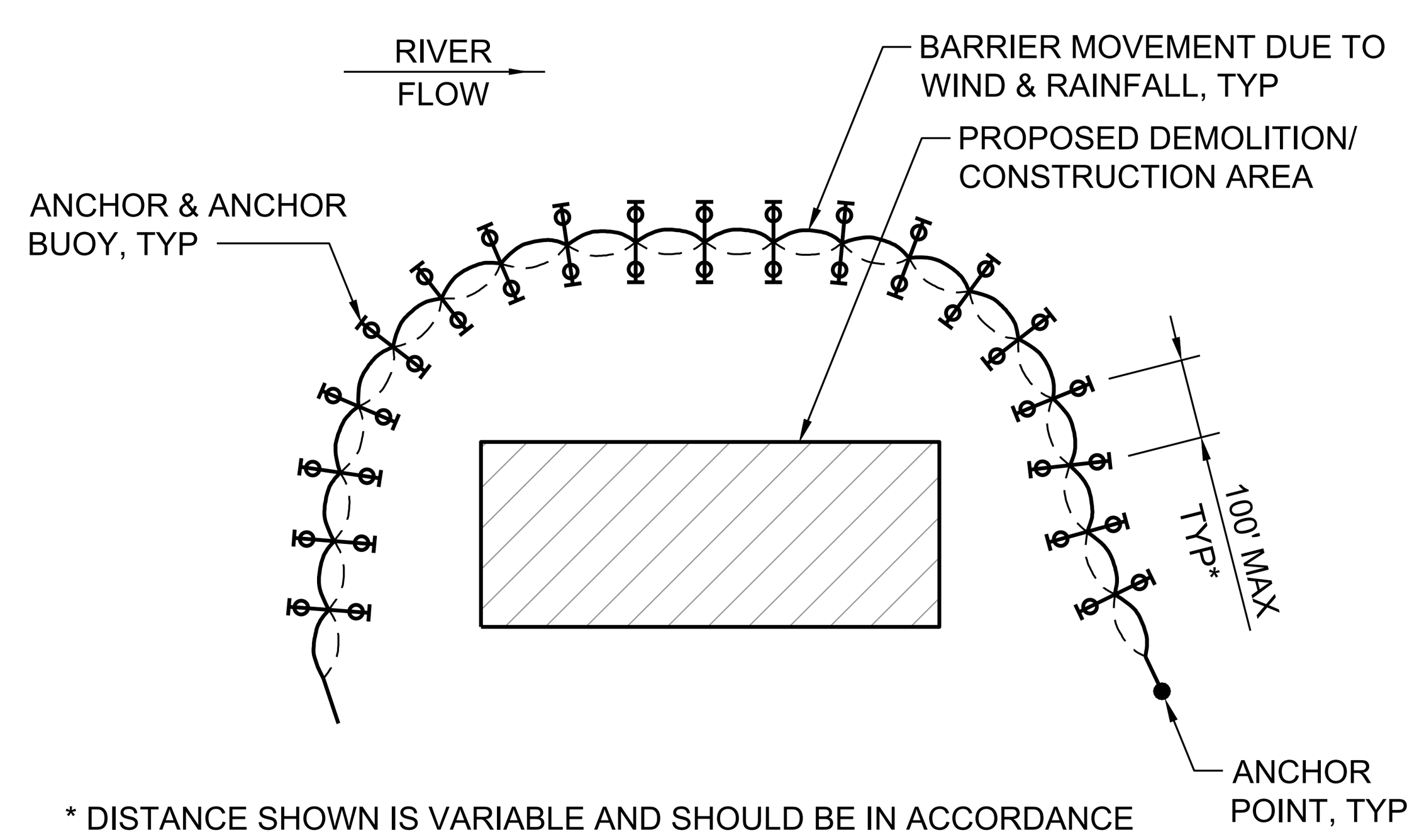


FIGURE 1 - SECTION



* DISTANCE SHOWN IS VARIABLE AND SHOULD BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

FIGURE 2 - PLAN

TABLE 1 - FABRIC PROPERTIES	
PHYSICAL PROPERTY	REQUIREMENT
THICKNESS (MILS)	45
WEIGHT (OZ./SY)	22
TENSILE STRENGTH (LB)	300
UV INHIBITOR	REQUIRED

MATERIALS:

1. TURBIDITY CURTAIN BARRIERS SHALL BE ORANGE IN COLOR IN ORDER TO ATTRACT THE ATTENTION OF NEARBY BOATERS.
2. THE TURBIDITY CURTAIN FABRIC SHALL MEET THE MINIMUM REQUIREMENTS NOTED IN TABLE 1 ON THIS DRAWING.
3. SEAMS IN THE TURBIDITY CURTAIN FABRIC SHALL BE EITHER VULCANIZE WELDED OR SEWN, AND SHALL DEVELOP THE FULL STRENGTH OF THE FABRIC.
4. FLOATATION DEVICES SHALL BE FLEXIBLE, BUOYANT UNITS CONTAINED IN AN INDIVIDUAL FLOTATION SLEEVE OR COLLAR ATTACHED TO THE CURTAIN. BUOYANCY PROVIDED BY THE FLOATATION UNITS SHALL BE SUFFICIENT TO SUPPORT THE WEIGHT OF THE CURRENT AND MAINTAIN A FREEBOARD OF AT LEAST 3 INCHES ABOVE THE WATER SURFACE LEVEL AS INDICATED IN THE TURBIDITY CURTAIN DETAIL ON THIS DRAWING.
5. LOAD LINES MUST BE FABRICATED INTO THE TOP AND BOTTOM OF ALL FLOATING TURBIDITY CURTAINS. THE TOP LOAD LINE SHALL CONSIST OF WOVEN WEBBING OR VINYL-SHEATHED STEEL CABLE AND SHALL HAVE A BREAK STRENGTH IN EXCESS OF 10,000 POUNDS. THE SUPPLEMENTAL (BOTTOM) LOAD LINE SHALL CONSIST OF A CHAIN INCORPORATED INTO THE BOTTOM HEM OF THE CURTAIN OF SUFFICIENT WEIGHT TO SERVE AS BALLAST TO HOLD THE CURTAIN IN A VERTICAL POSITION. ADDITIONAL ANCHORAGE SHALL BE PROVIDED AS NECESSARY. THE LOAD LINES SHALL HAVE SUITABLE CONNECTING DEVICES WHICH DEVELOP THE FULL BREAKING STRENGTH FOR CONNECTING TO LOAD LINES IN ADJACENT SECTIONS (SEE TURBIDITY CURTAIN DETAIL ON THIS DRAWING).
6. BOTTOM ANCHORS ARE REQUIRED. BOTTOM ANCHORS MUST BE SUFFICIENT TO HOLD THE CURTAIN IN THE SAME POSITION RELATIVE TO THE BOTTOM OF THE WATERCOURSE WITHOUT INTERFERING WITH THE ACTION OF THE CURTAIN. THE ANCHOR MAY DIG INTO THE BOTTOM (GRAPPLING HOOK, PLOW, OR FLUKE TYPE) OR MAY BE WEIGHTED (MUSHROOM TYPE), AND SHOULD BE ATTACHED TO A FLOATING ANCHOR BUOY VIA AN ANCHOR LINE. THE ANCHOR LINE WOULD THEN RUN FROM THE BUOY TO THE TOP LOAD LINE OF THE CURTAIN. THESE LINES MUST CONTAIN ENOUGH SLACK TO ALLOW THE BUOY AND CURTAIN TO FLOAT FREELY WITH A WATER SURFACE ELEVATION INCREASE FROM THE MEAN LOWER LOW WATER (MLLW) ELEVATION TO THE MEAN HIGHER HIGH WATER (MHHW) ELEVATION WITHOUT PULLING THE BUOY OR CURTAIN DOWN. THESE LINES MUST BE CHECKED REGULARLY TO MAKE SURE THEY DO NOT BECOME ENTANGLED WITH DEBRIS. ANCHOR SPACING WILL VARY WITH CURRENT VELOCITY AND POTENTIAL WIND AND WAVE ACTION, THEREFORE THE MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED. SEE ORIENTATION OF EXTERNAL ANCHORS AND ANCHOR BUOYS AS SHOWN IN FIGURE 1 ON THIS DRAWING FOR INSTALLATION.

INSTALLATION:

1. THE CURTAIN SHOULD NEVER TOUCH THE BOTTOM. A MINIMUM 1 FOOT "GAP" SHOULD EXIST BETWEEN THE WEIGHTED LOWER END OF THE SKIRT AND THE BOTTOM AT MLLW. MOVEMENT OF THE LOWER SKIRT OVER THE BOTTOM DUE TO CURRENT OR ELEVATION FLUCTUATION ON THE FLOTATION SYSTEM MAY FAN AND STIR SEDIMENTS ALREADY SETTLED OUT.
2. TURBIDITY CURTAINS SHOULD BE LOCATED PARALLEL TO THE DIRECTION OF FLOW OF A MOVING BODY OF WATER. TURBIDITY CURTAIN SHOULD NOT BE PLACED ACROSS THE MAIN FLOW OF A SIGNIFICANT BODY OF MOVING WATER.
3. WHEN SIZING THE LENGTH OF A FLOATING CURTAIN, ALLOW AN ADDITIONAL 10 TO 20 PERCENT VARIANCE TO STRAIGHT LINE MEASUREMENTS. THIS WILL ALLOW FOR MEASURING ERRORS, MAKE INSTALLING EASIER AND REDUCE STRESS FROM POTENTIAL WAVE ACTION DURING HIGH WINDS.
4. AN ATTEMPT SHOULD BE MADE TO AVOID AN EXCESSIVE AMOUNT OF JOINTS IN THE CURTAIN. A MINIMUM CONTINUOUS SPAN OF 50 FEET BETWEEN JOINTS IS REQUIRED.
5. FOR STABILITY REASONS, A MAXIMUM SPAN OF 100 FEET BETWEEN JOINTS (ANCHOR OR STAKE LOCATIONS) IS REQUIRED. IF SPACINGS EXCEEDING THIS ARE ALLOWED BY THE MANUFACTURER, DATA SHALL BE SUBMITTED FOR REVIEW.
6. THE ENDS OF THE CURTAIN (BOTH FLOATING UPPER AND WEIGHTED LOWER) SHOULD EXTEND WELL UNDER THE EXISTING STRUCTURE TO BE REMOVED. THE ENDS SHOULD BE SECURED FIRMLY TO FULLY ENCLOSE THE AREA WHERE SEDIMENT MAY ENTER THE WATER.
7. TYPICAL ALIGNMENTS OF TURBIDITY CURTAINS CAN BE SEEN IN FIGURE 2 ON THIS DRAWING. THE NUMBER AND SPACING OF EXTERNAL ANCHORS MAY VARY DEPENDING ON CURRENT VELOCITIES AND POTENTIAL WIND AND WAKE ACTION. THE MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED.
8. IN RIVERS OR IN OTHER MOVING WATER, IT IS IMPORTANT TO SET ALL THE CURTAIN ANCHOR POINTS. CARE MUST BE TAKEN TO ENSURE THAT ANCHOR POINTS ARE OF SUFFICIENT HOLDING POWER TO RETAIN THE CURTAIN UNDER THE EXISTING CURRENT CONDITIONS, PRIOR TO PUTTING THE FURLED CURTAIN INTO THE WATER. AGAIN, ANCHOR BUOYS SHOULD BE EMPLOYED ON ALL ANCHORS TO PREVENT THE CURRENT FROM SUBMERGING THE FLOTATION AT THE ANCHOR POINTS.
9. WHEN THE ANCHORS ARE SECURE, THE FURLED CURTAIN SHOULD BE SECURED TO THE UPSTREAM ANCHOR POINT AND THEN SEQUENTIALLY ATTACHED TO EACH NEXT DOWNSTREAM ANCHOR POINT UNTIL THE ENTIRE CURTAIN IS IN POSITION. AT THIS POINT, AND BEFORE UNFURLING, THE "LAY" OF THE CURTAIN SHOULD BE ASSESSED AND ANY NECESSARY ADJUSTMENTS MADE TO THE ANCHORS. FINALLY, WHEN THE LOCATION IS ASCERTAINED TO BE AS DESIRED, THE FURLING LINES SHOULD BE CUT TO ALLOW THE SKIRT TO DROP.
10. ALWAYS ATTACH ANCHOR LINES TO THE FLOATATION DEVICE, NOT TO THE BOTTOM OF THE CURTAIN. THE ANCHORING LINE ATTACHED TO THE FLOATATION DEVICE ON THE DOWNSTREAM SIDE WILL PROVIDE SUPPORT FOR THE CURTAIN. ATTACHING THE ANCHORS TO THE BOTTOM OF THE CURTAIN COULD CAUSE PREMATURE FAILURE OF THE CURTAIN DUE TO THE STRESSES IMPARTED ON THE MIDDLE SECTION OF THE CURTAIN.

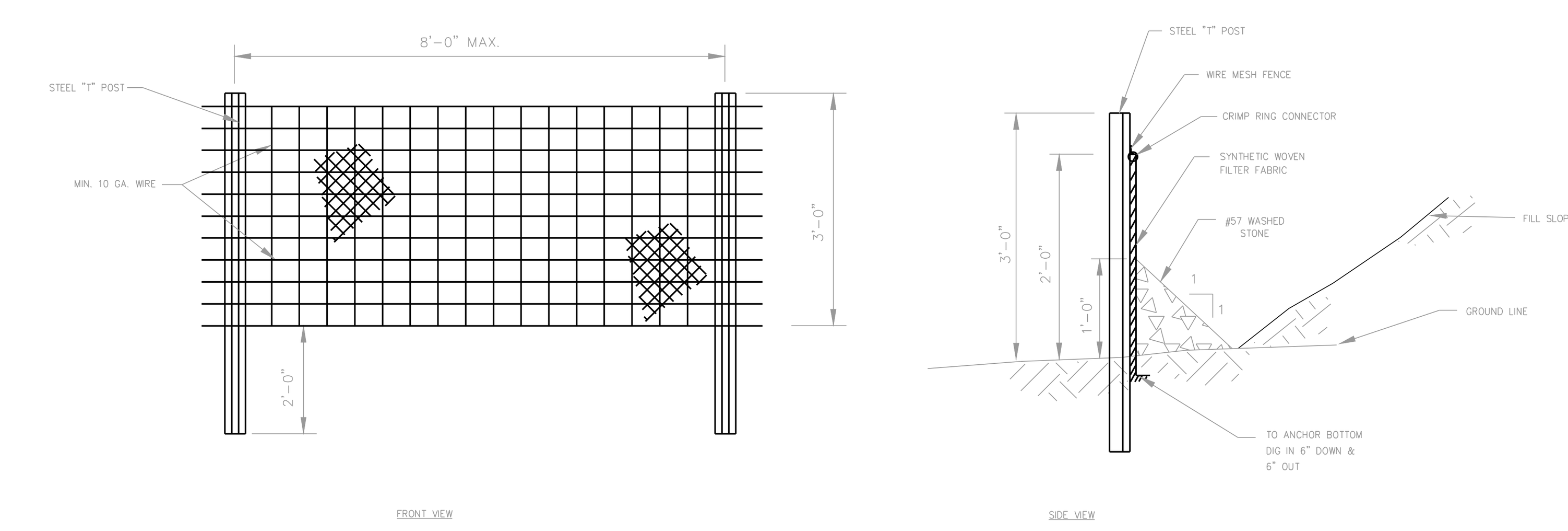
REMOVAL:

1. CARE SHOULD BE TAKEN TO PROTECT THE SKIRT FROM DAMAGE AS THE TURBIDITY CURTAIN IS DRAGGED FROM THE WATER.
2. IF THE CURTAIN IS TO BE REUSED AT THE SITE, THE AREA SELECTED TO BRING THE CURTAIN ASHORE SHOULD BE FREE OF SHARP ROCKS, BROKEN CEMENT, DEBRIS, ETC SO AS TO MINIMIZE DAMAGE WHEN HAULING THE CURTAIN. ANY DAMAGE TO THE CURTAIN SHALL BE REPAIRED AS SPECIFIED.
3. IF THE CURTAIN HAS A DEEP SKIRT, IT CAN BE FURTHER PROTECTED BY RUNNING A SMALL BOAT ALONG ITS LENGTH WITH A CREW INSTALLING FURLING LINES BEFORE ATTEMPTING TO REMOVE THE CURTAIN FROM THE WATER.

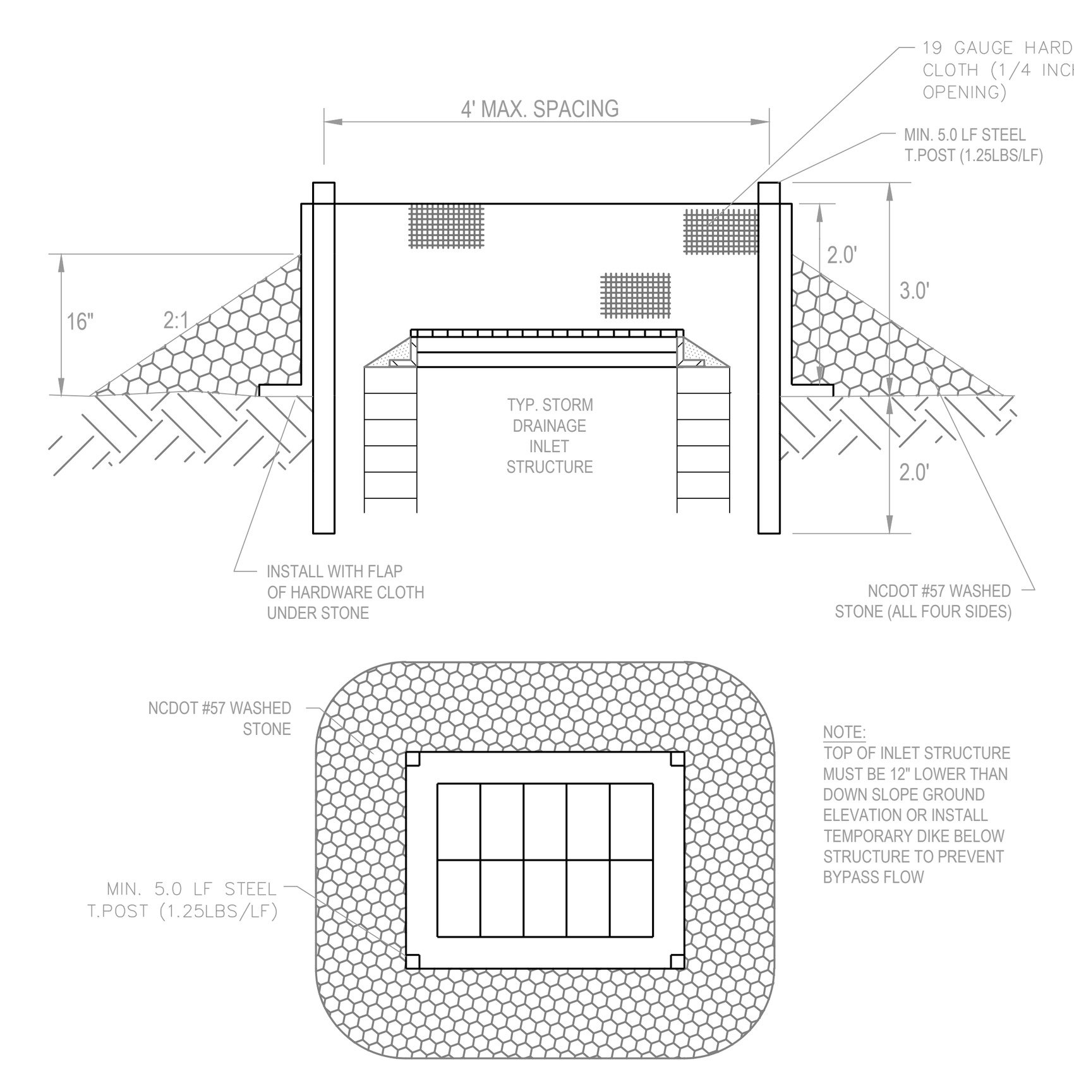
MAINTENANCE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE TURBIDITY CURTAIN FOR THE DURATION OF THE PROJECT IN ORDER TO ENSURE THE CONTINUOUS PROTECTION OF THE WATERWAY.
2. SHOULD REPAIRS TO THE GEOTEXTILE FABRIC BECOME NECESSARY, REPAIR KITS AVAILABLE FROM THE ORIGINAL MANUFACTURER SHALL BE USED. MANUFACTURER'S INSTRUCTIONS MUST BE FOLLOWED TO ENSURE THE ADEQUACY OF THE REPAIR.
3. WHEN THE CURTAIN IS NO LONGER REQUIRED, THE CURTAIN AND RELATED COMPONENTS SHALL BE REMOVED IN SUCH A MANNER AS TO MINIMIZE TURBIDITY. REMAINING SEDIMENT SHALL BE SUFFICIENTLY SETTLED BEFORE REMOVING THE CURTAIN.

A1 L2.7 TERBIDITY BARRIER
NTS



A2 L2.7 SILT FENCE DETAIL
NTS



A3 L2.7 HARDWARE CLOTH & GRAVEL
NTS

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PITT COUNTY

SHEET NAME
EROSION DETAILS

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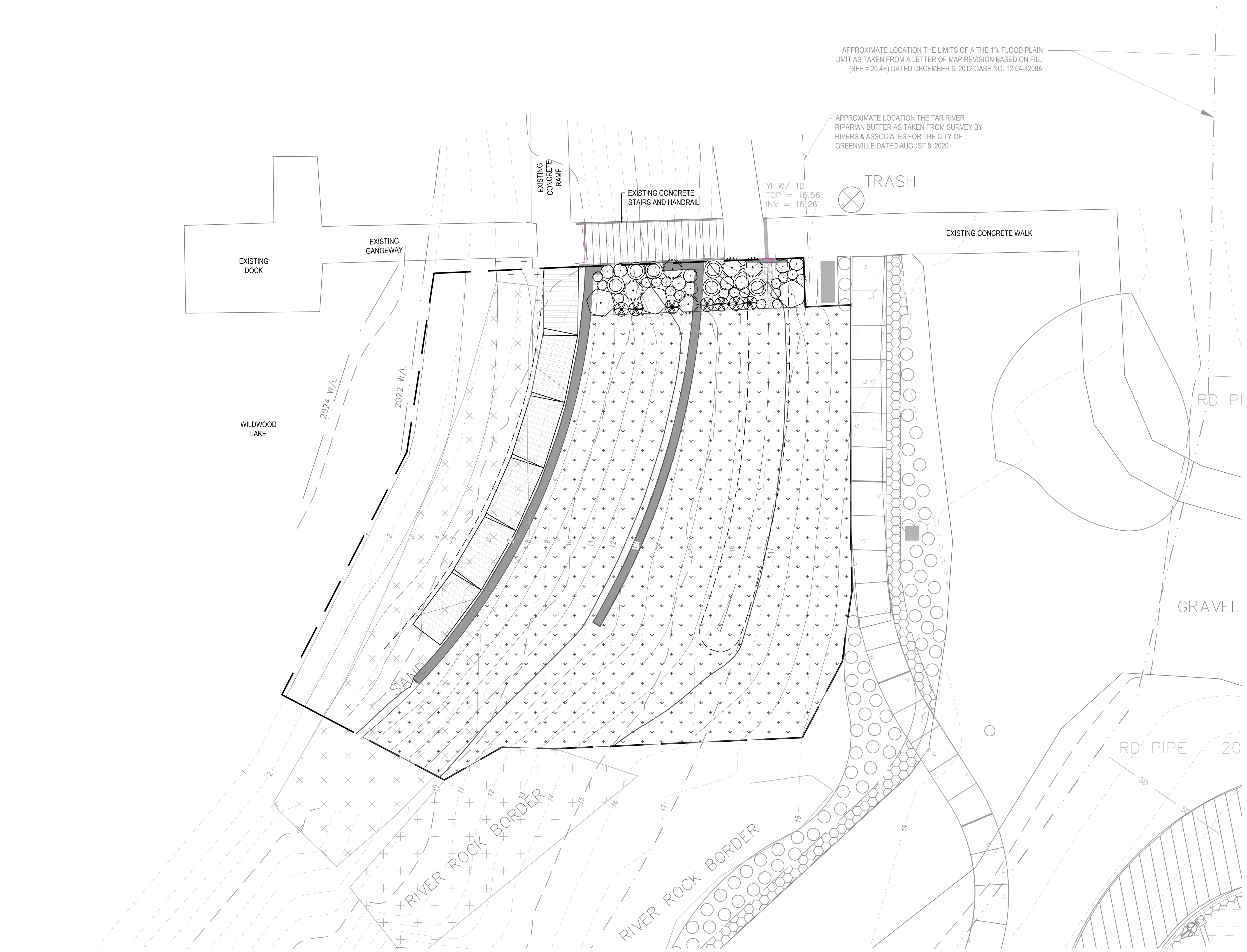

1 PLANTING PLAN
L4.0 SCALE: 1" = 10'-0"

TURFGRASS SOD NOTES

Certification - The Contractor shall furnish and install Certified 'TifTuf' Bermuda Sod, grown from certified high quality seed of local origin. Sod shall be inspected by the official certification agency of the state to assure satisfactory genetic identity and purity, overall high quality and freedom from noxious weeds and excessive amounts of other crop and weedy plants at time of harvest. Sod must meet the published state standards for certification. Install only between September and May inclusive.

Material - Sod should be of uniform thickness, approximately 1" plus or minus 1/4" at the time of cutting. Sod should be vigorous and dense and be able to retain its own shape and weight when suspended vertically with a firm grasp from the upper 10% of the strip. Broken pads or torn and uneven ends will not be acceptable. Only moist, fresh unheated sod should be used. Sod should be harvested, delivered and installed within a period of 16 hours.

Soil Amendments - All fertilizers shall be uniform in composition, free flowing and suitable for application with approved equipment. Fertilizer application rates shall be determined by soil tests. Distribute evenly over area to be sodded. Lime and fertilizer shall be uniformly mixed into the top 2 inches of soil by discing, harrowing or other approved methods.

The final determination of the use and application rates of all soil amendments including fertilizers, low and high pH correction materials shall be based upon recommendations of the state agricultural extension service for the variety of turfgrass being specified.

Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet using 10-20-10 or equivalent. In addition, 300 pounds 38-0-0 per acre or equivalent of slow release nitrogen shall be used in lieu of top dressing. Apply limestone (equivalent of 50 percent calcium plus magnesium oxides) as follows:

Soil Texture	Tons/Acre	lbs/1000 sf
Clay and clay loam and high organic soil	4	180
Sandy loam, loam, silt loam	3	135
Loamy sand, sand	2	90

Work pulverized dolomitic limestone lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow or other suitable equipment. The final harrowing or discing operation should be on the general contour. Continue tillage until a reasonable uniform, fine seedbed is prepared.

TOPSOIL: Topsoil used shall be fertile agricultural soil; typical for locality; capable of sustaining vigorous plant growth; taken from drained sites; free of subsoil, stones, clay or impurities, plants, weeds and roots; pH value minimum 5.4, maximum 7.0; organic content 5 to 7 percent.

All seed and sod areas shall have a minimum 6" of topsoil applied (depth after rolling).

Soil Preparation - Remove from the surface all objects that would prevent good sod to soil contact and remove all other debris such as wire, rocks, tree roots, pieces of concrete, clods, lumps or other unsuitable material. Inspect site just before sodding. If traffic has left the soil compacted, the area must be retilled and firmed as above.

Installation - Place sod strips with snug even joints that are staggered open, spaces invite erosion. Roll or tamp sod immediately following placement to insure solid contact or foot mat and soil surface. Do not overlap sod. All joints should be butted tightly in order to prevent voids, which would cause drying of the roots.

Slopes - Sod strips shall be laid on the contour, never up and down the slope. Starting at the bottom of the slope, and working up on steep slopes, the use of ladders will facilitate the work and prevent damage to the sod. During periods of high temperature, lightly irrigate the soil immediately prior to laying the sod.

On slopes greater than 3 to 1, secure sod to surface soil with wood pegs, wire staples, or split shingles (8 to 10 inches long by 3/4 inch wide). When surface water cannot be diverted from flowing over the face of the slope, provide a capping strip of heavy jute or plastic netting, properly secured, along the crown of the slope and edges to provide extra protection against lifting and undercutting of the sod. The same technique can be used to anchor sod in water-carrying channels and other critical area. Wire staples must be used to anchor netting in channel work.

Watering - immediately following installation, sod should be watered until moisture penetrates the soil layer beneath sod to a depth of 4 inches. The Contractor shall insure the maintenance of optimum moisture for at least two weeks.

Topdressing - if slow release nitrogen (300 pounds 38-0-0 per acre or equivalent) is used in addition to suggested fertilizer, then a follow-up of topdressing is not mandatory. Sod will require an application of fertilizer such as 10-20-10 or equivalent at 400 pounds per acre or 10 pounds per 1,000 square feet.

Protection - The Contractor shall provide adequate protection for lawn areas at all times against damage of any kind during installation or other related operations. Such protection shall be maintained from the completion of site preparation to the completion of Contract work.

Mowing - Turfgrass shall be allowed to grow to a height of 3 inches prior to the first mowing. The grass shall be properly mowed to a height of 2 to 2 ½ inches. Never, in any case, cut more than 1/3 the height of the grass. The Contractor shall be responsible for at least the first 2 mowings and any other mowing necessary until final acceptance.

Guarantee - The Contractor shall guarantee that upon completion and acceptance of the work, all portions thereof will be in accordance with the Contract and specifications. The same condition shall remain for a period of one year. The Contractor shall further warrant that during the period of the guarantee, he will make good any defects to the work and all damage caused to property of the Owner by such defects or by the work required to remedy such defects.

PLANTING NOTES

The Contractor shall furnish plant material shown on the drawings, as specified and as indicated on the plant list. The Owner or his/her authorized representative shall be notified prior to the beginning of planting operations.

PRE-CONSTRUCTION CONFERENCE: Prior to commencing plant and irrigation installation, a Pre-Construction Conference shall be held. Attendees shall include Owner, General Contractor, Landscape and Irrigation Contractor(s) and Project Consultant or their designated representatives.

STANDARDS: All plants shall be in accordance with the American Standard For Nursery Stock, latest edition, published by the American Association of Nurserymen, Inc. with regard to sizing and description.

QUALITY: All plants shall be nursery grown and hardy under climatic conditions similar to those in the locality of the project. All plants shall be typical of their species or variety and shall have a normal habit of growth. They shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They should be free of disease and insect pests, eggs or larvae. They shall have healthy, well-developed root system.

SUBSTITUTIONS: When plants of a specified kind or size are not available within a reasonable distance, the contractor may make substitutions upon request, if approved by the Project Consultant. Proposal for substitution of plant material shall be submitted at least 10 days prior to the final bid date for consideration.

SIZE: All plants shall conform to all measurements specified on the plant list unless otherwise authorized in writing by the Project Consultant.

PRUNING: Each tree and shrub shall be pruned in accordance with American Association of Nurserymen, Inc. standards to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed.

ROOT SYSTEMS: Ball & burlap plants shall be dug with firm natural balls of earth of diameter and depth to include most of the fibrous roots. Container grown stock shall have been grown in a container long enough for the root system to have developed sufficiently to hold its soil together firm and whole. No plants shall be loose in container or ball.

PROTECTION: Root balls trunks, branches and foliage of plants shall be adequately protected at all times from sun and drying wind or frost. Plants with broken root balls or excessive damage to the crown shall be replaced, in kind, prior to installation.

MULCH: Immediately following plant installations all tree and shrub planting pits shall be covered with three-inch (3") layer of non-dyed, triple shredded mulch. Ornamental Grasses and Perennial Flowers shall be covered with two-inch (2") larger Final grade of mulch shall be ½" below adjacent surface or steel edging to prohibit washout or migration of mulch to adjacent surface.

ANTI-DESICCANT SPRAY: Trees and when planted in leaf shall be treated with anti-desiccant such as "Wilt-Proof".

TOPSOIL: Topsoil used shall be fertile agricultural soil; typical for locality; capable of sustaining vigorous plant growth; taken from drained sites; free of subsoil, rocks, stones, clay or impurities, plants, weeds and roots; pH value minimum 5.4, maximum 7.0; organic content 5 to 7 percent.

- All seed and sod areas shall have a minimum 6" of topsoil applied (depth after rolling).
- All groundcover and ornamental grasses shall have a minimum 12" of topsoil applied (depth after rolling).
- All tree and shrub beds shall have a minimum 18" of topsoil applied (depth after rolling).

STAKING & GUYING: Trees shall be staked and guyed as is detailed on the drawings and according to accepted industry practice, only when directed by Project Consultant.

LAYOUT: The contractor shall layout with identifiable stakes , the location of all plants and the the arrangement and outlines of planting beds as indicated on the drawings. Prior to any excavation of plant pits or preparation of plant beds, the Project Consultant shall approve the layout of planting. All planting shall be at the locations indicated on the drawings. The Contractor shall be responsible for planting at the correct grades, alignment and layout of planting beds. Minor adjustments to tree locations may be necessary due to field conditions and final grading. The Contractor shall notify the Project Consultant if major adjustments are anticipated.

ADVERSE CONDITIONS: The contractor shall notify the Project Consultant in writing of any soil or drainage conditions which the Contractor considers detrimental to plant growth. The documented conditions shall include a proposal for correcting the situation, including any change in cost, for review and acceptance by the Project Consultant.

QUANTITY: The quantity of plants in the Plant Schedule is for general reference only. The Contractor shall obtain quantities for pricing by compiling numbers from the plants illustrated on the drawings. Should there be a discrepancy between the drawings and the plant schedule, the quantities illustrated on the drawings shall take precedence.

GUARANTEE: The Contractor shall guarantee all plant material for a full year from the date of initial acceptance. It is the Contractors responsibility to monitor the project during the guarantee period and notify the Owner in writing if problems are occurring or situations developed that appear detrimental to the plant material. Any plant material that is 25% dead or more shall be considered dead and must be replaced at no charge to the Owner. A tree is considered dead when the main leader has died back or there is 25% of the crown dead.

PLANT SCHEDULE

Symbol	Key	Quantity	Botanical Name (Common Name)	Height	Spread	Caliper	Cont.	Notes
SHRUBS								
	CB	9	Coleonema 'Sunset Gold' (Breath of Heaven)	2' min	-	-	#5	Full; Plant @ 18" oc
	EK	7	Erica x darleyensis 'Kramer's Rote' (Winter Heath)	1' min	-	-	#2	Full; Plant @ 4' oc
GROUNDCOVER & PERENNIALS								
	JW	3	Juniperus horizontalis 'Wiltonii' (Blue Rug Juniper)	3" min	4' min	-	#3	Full; Plant @ 6' oc
	PS	6	Panicum virgatum 'Shenandoah' (Shenandoah Switch Grass)	3' min	-	-	#1	Full; Plant @ 3' oc
	PF	5	Pennisetum alopecuroides 'Foxtrot' (Giant Fountain Grass)	5' min	-	-	#3	Full; Plant @ 5' oc
	RG	18	Rudbeckia fulgida 'Goldsturm' (Black Eyed Susan)	1.5' min	-	-	#1	Full; Plant @ 18" oc
	TB	2640.5 sqft	'TifTuf' Bermuda Sod	-	-	-	-	See Turfgrass Sod Notes

SCALE 1"=10'
10' 5' 0' 10'
N

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 2407 ANDREW HARRELL

Digitally signed by Andrew Harrell, PLA
Date: 2024.09.10 13:31:24-04'00'

REV #	DATE	DESCRIPTION	BY	CHK
A	09.10.2024	100% CD BID SET		

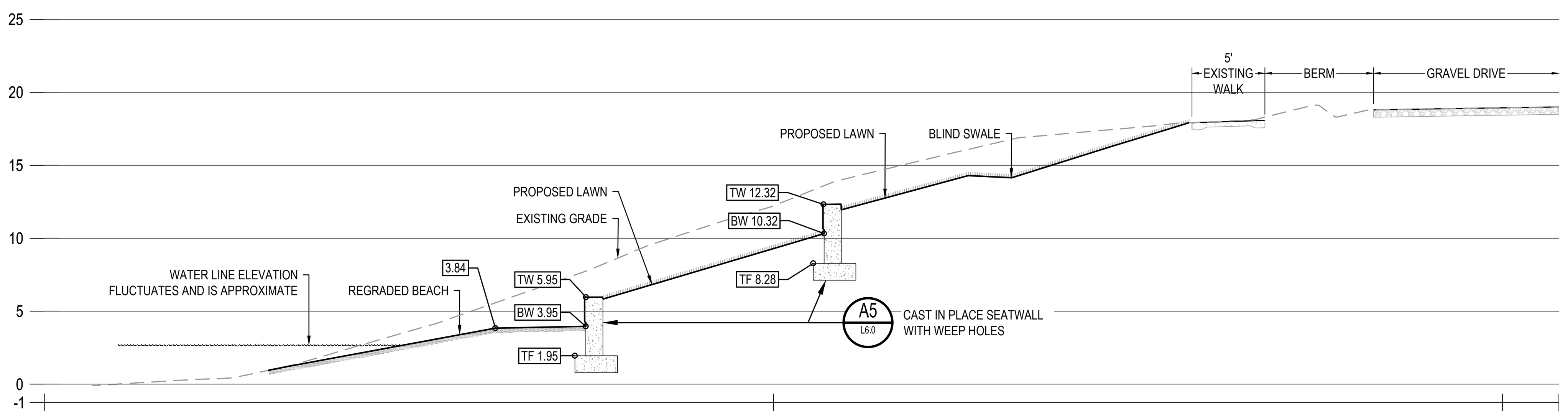
TEG PROJECT NO. 20240120

CLIENT PROJECT NO. JOB#

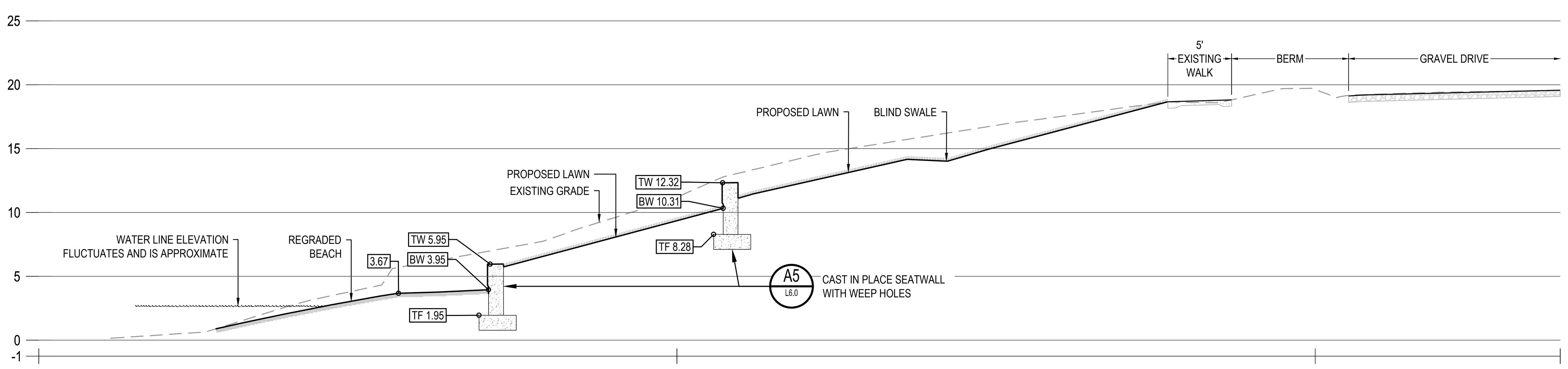
PROJECT TITLE
WILDWOOD PARK BEACH IMPROVEMENTS
100% CONSTRUCTION DOCUMENTS
3450 BLUE HERON DR.
GREENVILLE, NC 27834
PITT COUNTY

SHEET NAME
PLANTING PLAN

SHEET NO.
L4.0



D1 L6.0 **SITE SECTION 2**
SCALE: 1/8" = 1'-0"



C1 L6.0 **SITE SECTION 1**
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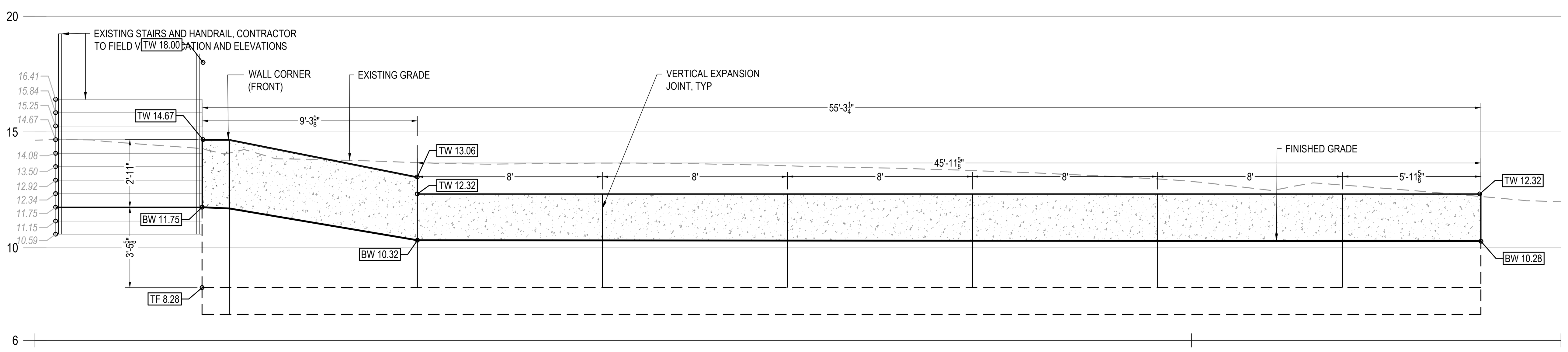
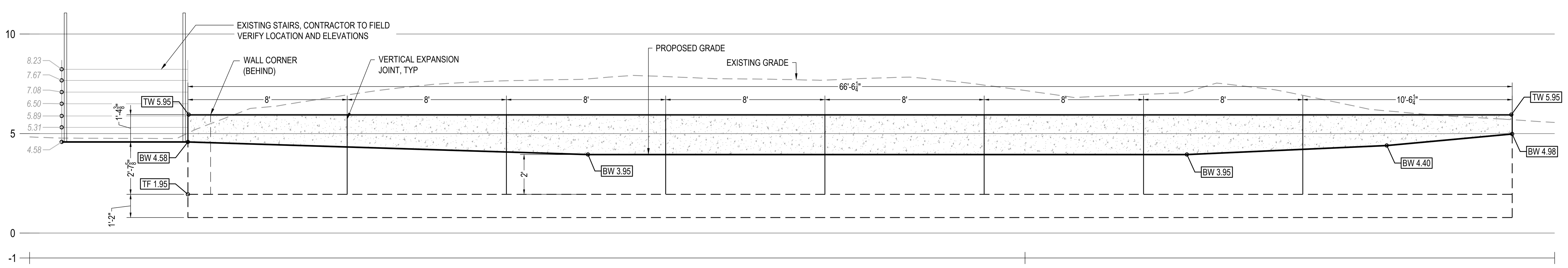


B1 L6.0 **UPPER WALL ELEVATION**
SCALE: 1/4" = 1'-0"



A1 L6.0 **LOWER WALL ELEVATION**
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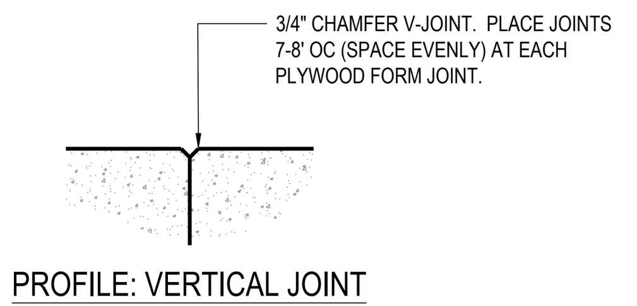
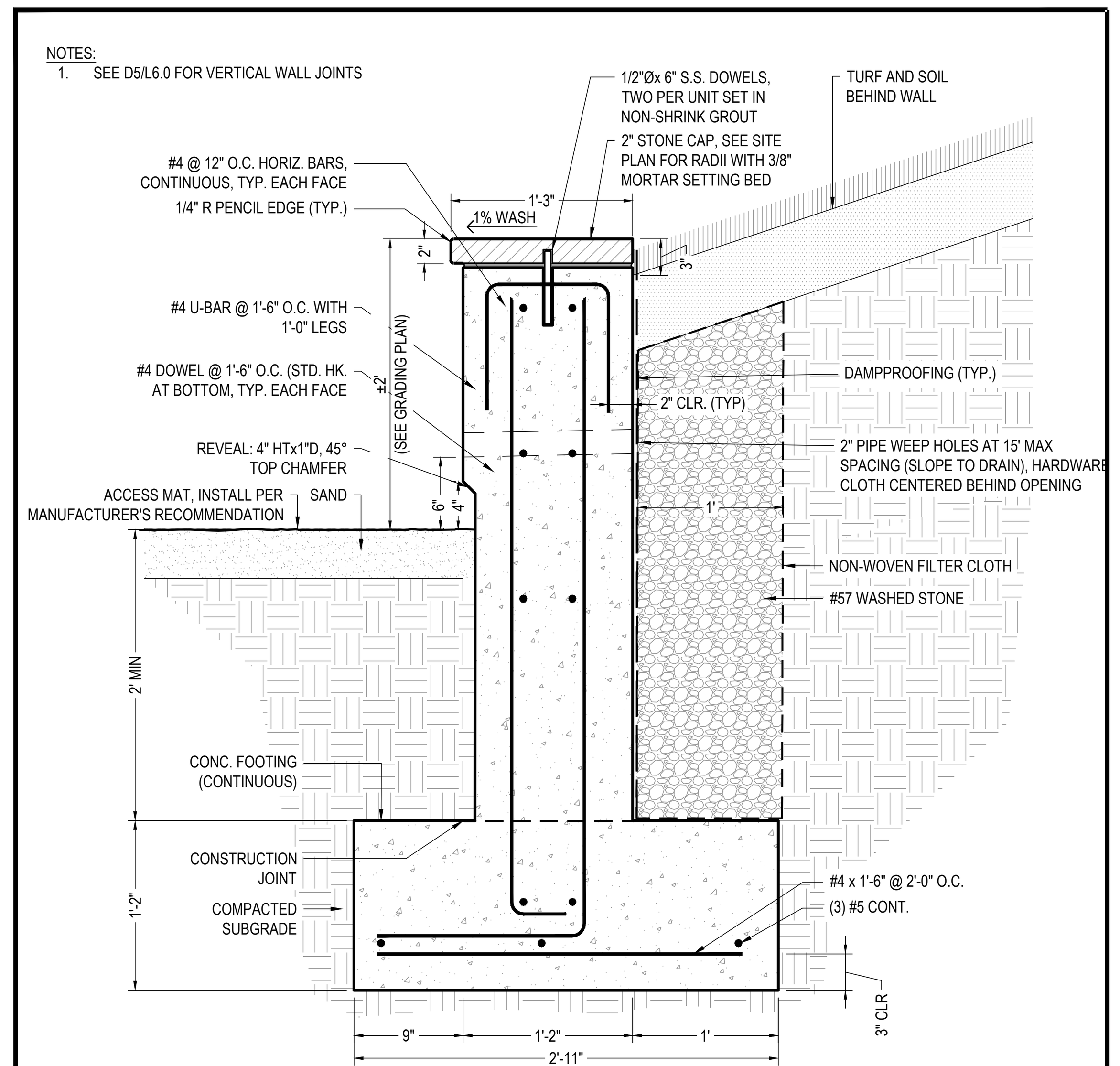
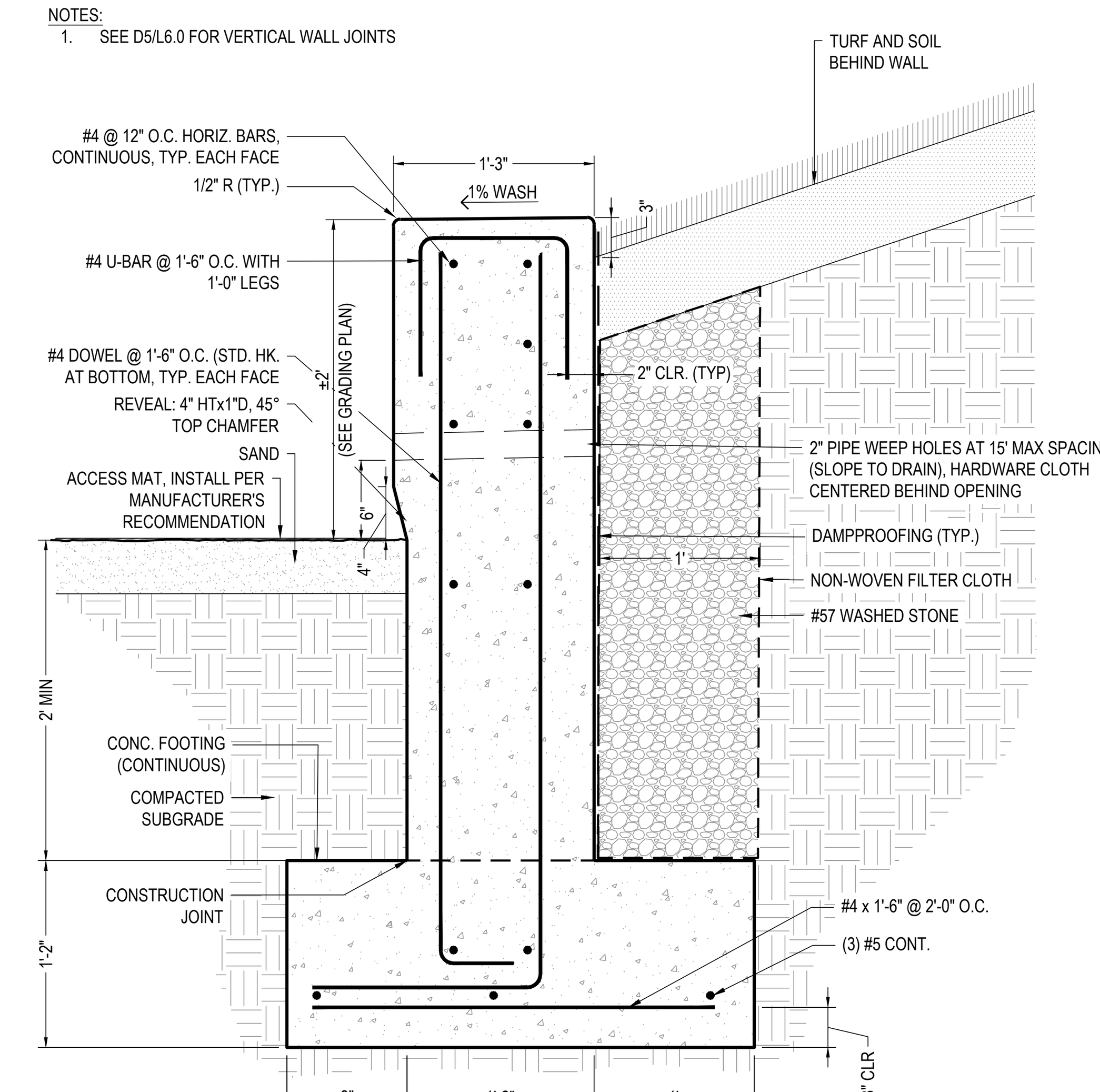


D5 L6.0 **CONCRETE WALL VERTICAL JOINT**
SCALE: NTS

ALTERNATE A: CONCRETE WALL WITH STONE TOP



B5 L6.0 **CAST IN PLACE SEAT WALL W/ STONE CAP**
SCALE: 1" = 1'-0"



A5 L6.0 **CAST IN PLACE WALL WITH WEEP HOLES**
SCALE: 1" = 1'-0"

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 2407 ANDREW HARRELL

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Date: 2024.09.10 13:30:53-04'00'

REV #	DATE	DESCRIPTION	BY	CHK
A	09.10.2024	100% CD BID SET		

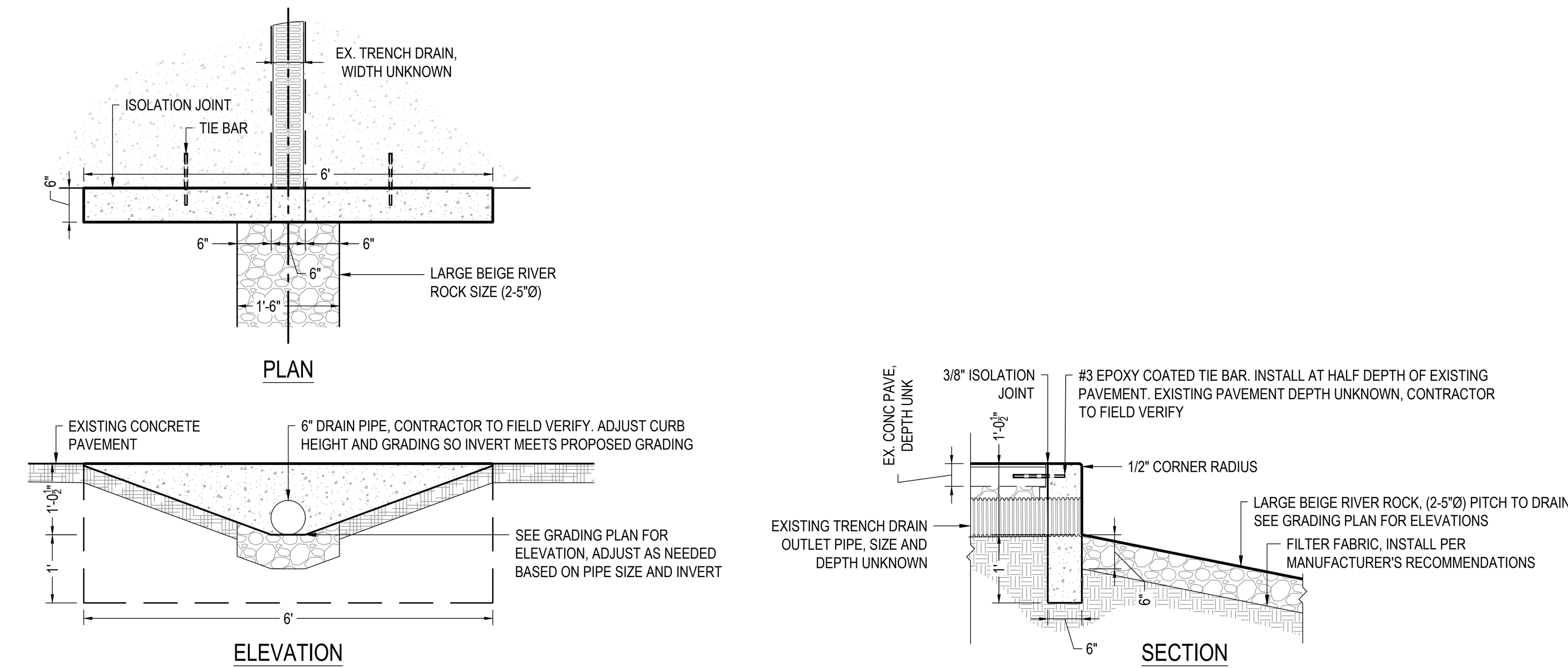
TEG PROJECT NO. 20240120

CLIENT PROJECT NO. JOB#

PROJECT TITLE
WILDWOOD PARK BEACH IMPROVEMENTS
100% CONSTRUCTION DOCUMENTS
3450 BLUE HERON DR.
GREENVILLE, NC 27834
PITT COUNTY

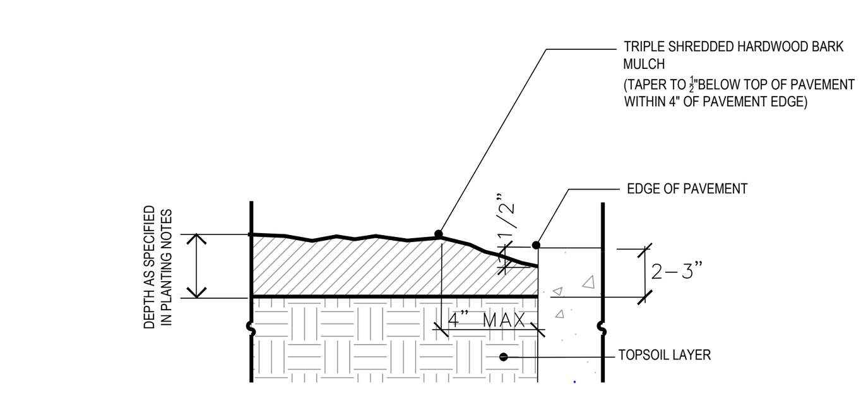
SHEET NAME
WALL DETAILS & SECTIONS

SHEET NO.
L6.0



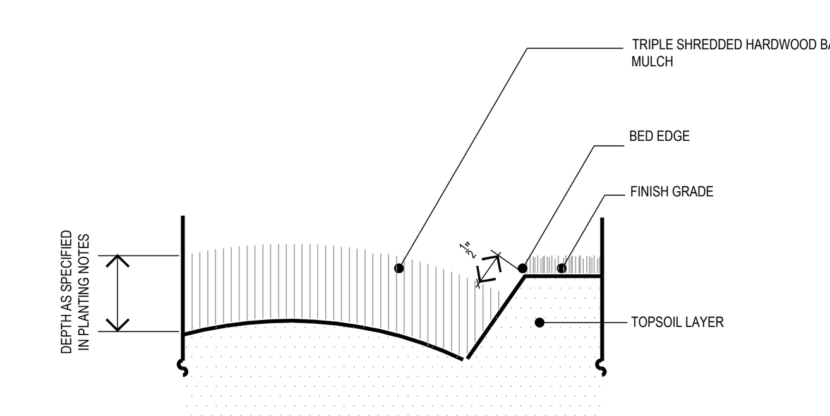
C4 / L6.1 — VERTICAL CURB WITH TRENCH DRAIN OUTLET

SCALE: 1/2" = 1'-0"



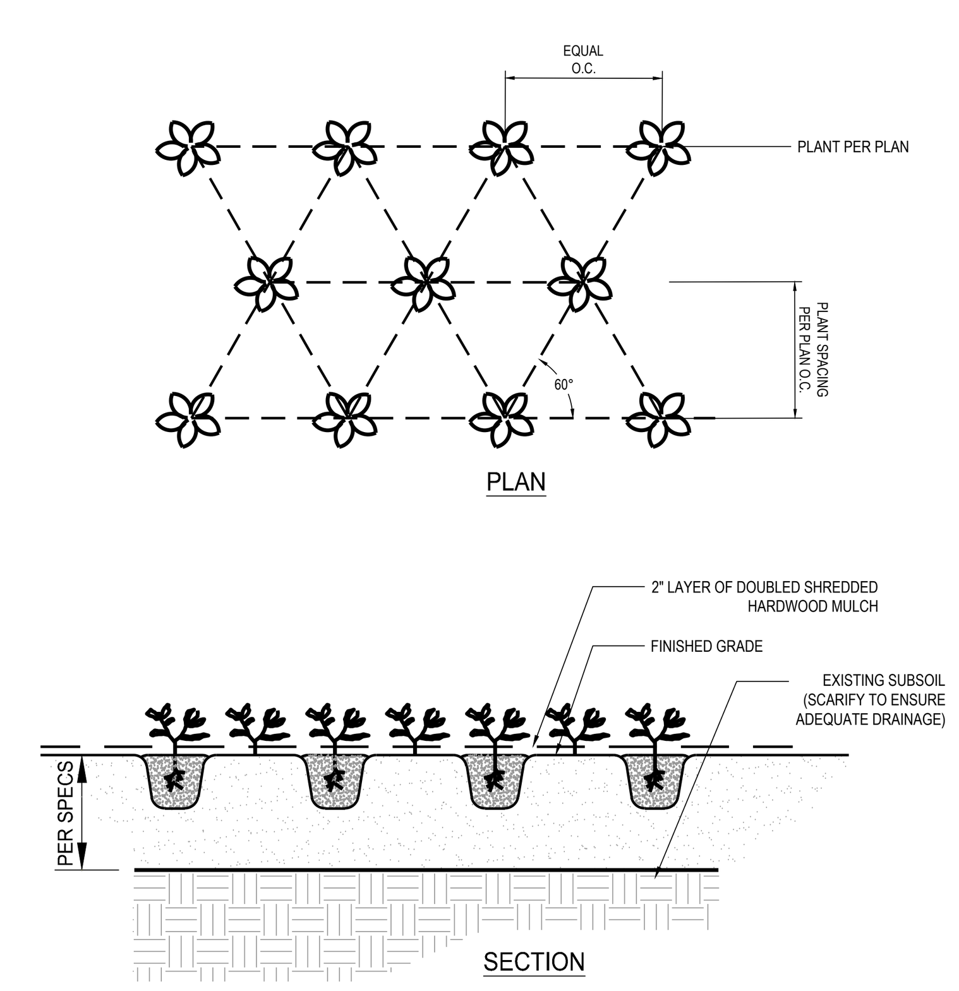
B4 / L6.1 — PLANTING BED EDGE (AT HARDSCAPE)

NTS



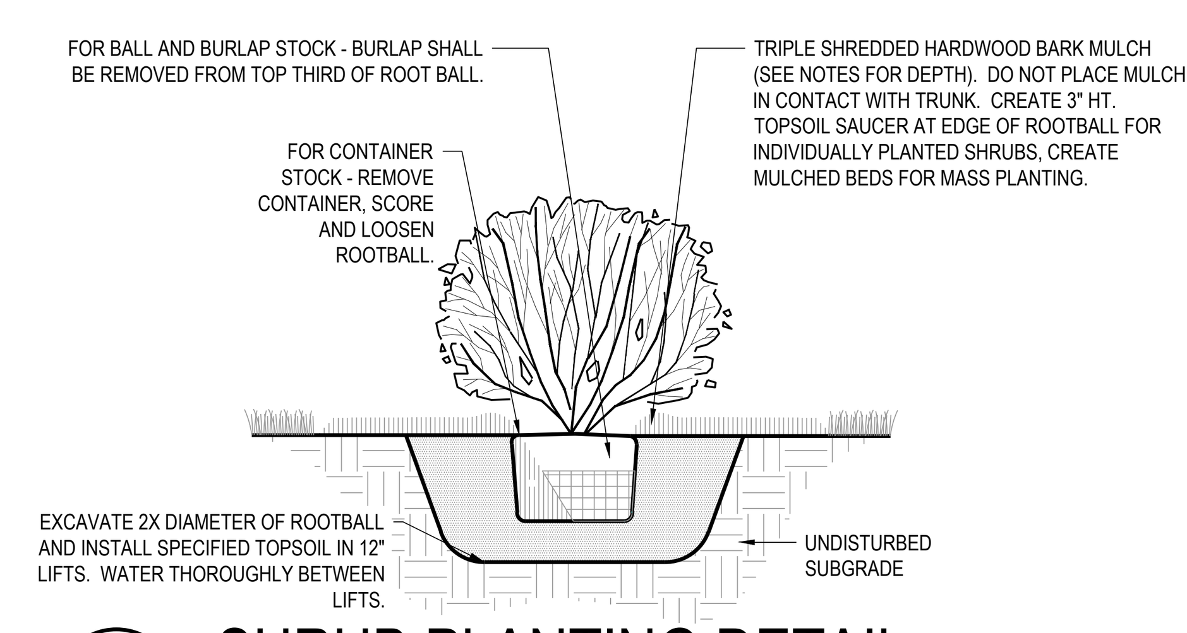
B5 / L6.1 — PLANTING BED (AT SOD)

NTS



A4 / L6.1 — GROUNDCOVER/GRASS PLANTING DETAIL

NTS



A5 / L6.1 — SHRUB PLANTING DETAIL

NTS

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Date: 2024.09.10 13:29:47-04'00'

REV #	DATE	DESCRIPTION	BY	CHK
A	09.10.2024	100% CD BID SET		

TEG PROJECT NO. 20240120

CLIENT PROJECT NO. JOB#

PROJECT TITLE
WILDWOOD PARK BEACH IMPROVEMENTS
100% CONSTRUCTION DOCUMENTS
3450 BLUE HERON DR,
GREENVILLE, NC 27834
PITT COUNTY

SHEET NAME
SITE DETAILS

SHEET NO.
L6.1