

DRAWING INDEX

CIVIL

SHEET NUMBER	SHEET TITLE	ORIGINAL DATE	REVISED DATE
T0.01	COVER SHEET	11/8/2024	5/29/2025
C0.01	GENERAL NOTES (SHEET 1 OF 2)	11/8/2024	5/29/2025
C0.02	GENERAL NOTES (SHEET 2 OF 2)	11/8/2024	1/28/2025
C0.03	NCG01 NOTES (SHEET 1 OF 2)	11/8/2024	1/28/2025
C0.04	NCG01 NOTES (SHEET 2 OF 2)	11/8/2024	1/28/2025
C1.01	DEMOLITION AND EXISTING CONDITIONS PLAN	11/8/2024	5/29/2025
C1.02	ESC PH I PLAN	1/28/2025	5/29/2025
C2.01	SITE PLAN	11/8/2024	5/29/2025
C3.01	GRADING PLAN	11/8/2024	5/29/2025
C3.02	STORM PROFILES	1/28/2025	5/29/2025
C4.01	ESC PH II PLAN	11/8/2024	5/29/2025
C6.01	ESC DETAILS (SHEET 1 OF 2)	11/8/2024	5/29/2025
C6.02	ESC DETAILS (SHEET 2 OF 2)	1/28/2025	5/29/2025
C6.03	SITE DETAILS	11/8/2024	5/29/2025
C6.04	STORMWATER DETAILS (SHEET 1 OF 4)	1/28/2025	5/29/2025
C6.05	STORMWATER DETAILS (SHEET 2 OF 4)	11/8/2024	1/28/2025
C6.06	STORMWATER DETAILS (SHEET 3 OF 4)	1/28/2025	
C6.07	STORMWATER DETAILS (SHEET 4 OF 4)	1/28/2025	5/29/2025
C7.01	SIGHT DISTANCE PLAN & PROFILE	2/24/2025	5/29/2025
L1.01	LANDSCAPING PLAN	11/8/2024	5/29/2025
L1.02	ENHANCED LANDSCAPE PLANTER DETAILS (ELP-1)	1/28/2025	5/29/2025
L1.03	LANDSCAPE NOTES AND DETAILS	1/28/2025	5/29/2025

SITE INFORMATION

SITE LOCATION	
PARCEL NUMBER:	06225390A
PARCEL AREA:	3.48 AC
ETJ AREA:	MARVIN
TIME FRAME:	FALL '25 – SPRING '26
ZONING INFORMATION	
EXISTING ZONING DISTRICT:	CIV (CIVIC)
OVERLAY DISTRICT:	HD–CIV–CZ (HERITAGE DISTRICT–CIVIC HERITAGE DISTRICT)
PRINCIPAL USES:	CIVIC
WATERSHED INFORMATION	
STREAM WATERSHED:	6–MILE

SCOPE OF WORK:	CONSTRUCTION OF A NEW PARK SITE ADJACENT TO THE EXISTING VILLAGE OF MARVIN TOWN HALL TO INCLUDE A LAWN AREA, A GRADED PAD FOR A FUTURE AMPHITHEATER, 8'-WIDE ASPHALT TRAILS, A 6' WIDE GRAVEL TRAIL CONNECTION, ONE UNDERGROUND RAINWATER CISTERN, TWO ENHANCED LANDSCAPE PLANTING AREAS, SIDEWALK, STORM DRAINAGE, AND LANDSCAPING.
DENUDED LIMITS:	1.3 AC

CODE REFERENCES

MARVIN DEVELOPMENT ORDINANCE – 2024
AMERICANS WITH DISABILITIES ACT – ACCESSIBILITY GUIDELINES, 2010 (ADAAG)
NCDEQ EROSION AND SEDIMENT CONTROL MANUAL – 2013
NCDOT POLICY ON STREET AND DRIVEWAY ACCESS TO NORTH CAROLINA HIGHWAYS – 2003
UNION COUNTY PUBLIC WORKS SANITARY SEWER & WATER SPECIFICATIONS
VILLAGE OF MARVIN ENGINEERING STANDARDS AND PROCEDURES MANUAL – 2017

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1
100% CONSTRUCTION DOCUMENTS
10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA 28173

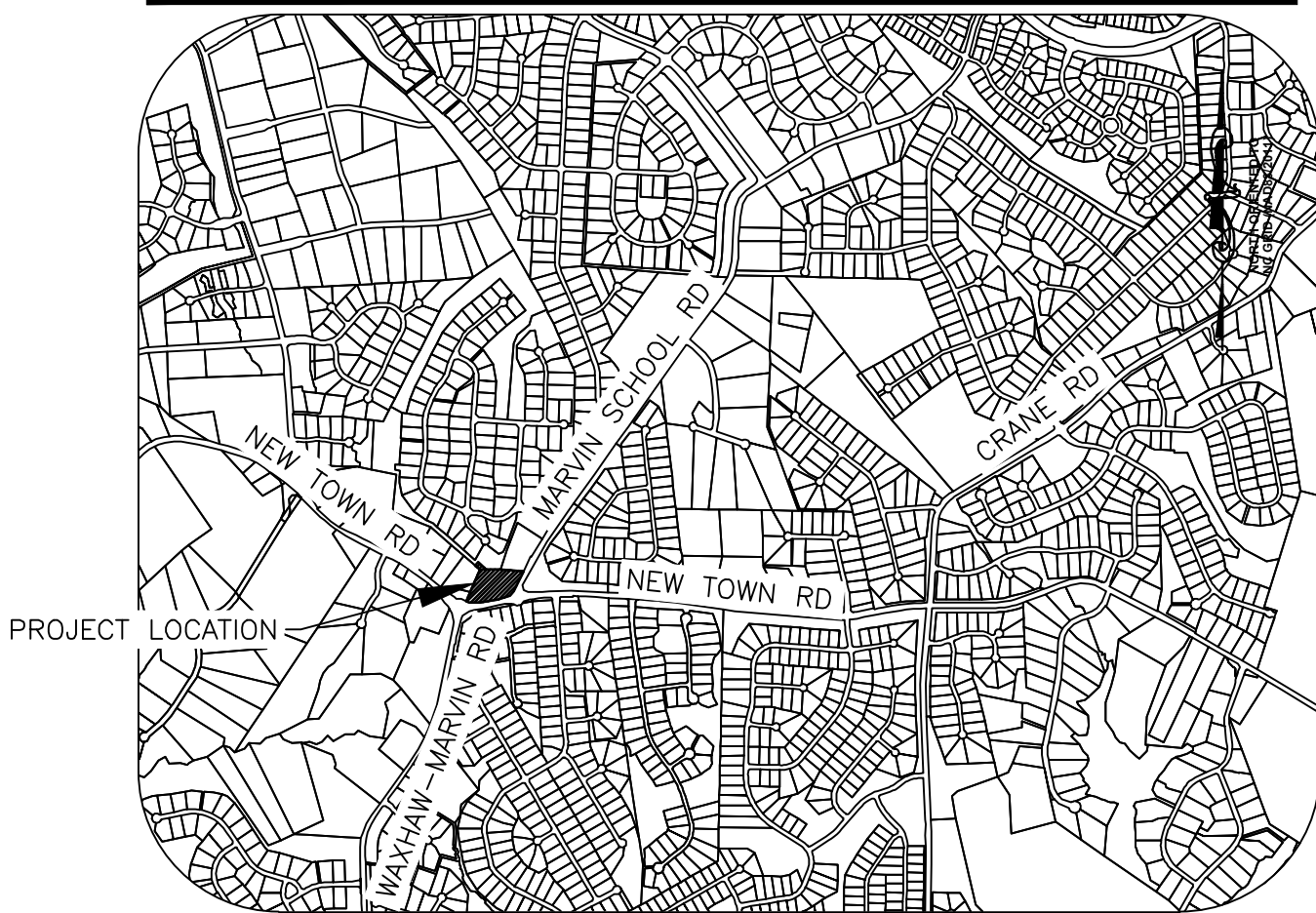
VICINITY MAP

SCALE: 1" = 250'



LOCATION MAP

SCALE: 1" = 2000'



CONTACTS

OWNER: VILLAGE OF MARVIN TYLER HUNEYCUTT RECREATION ACTIVITIES COORDINATOR 10006 MARVIN SCHOOL ROAD MARVIN, NC 28173 PH. (704)843–1680 THuneycutt@marvinncc.gov	LANDSCAPE ARCHITECT: DEWBERRY ENGINEERS INC. TRISTAN M. MCMANNIS, PLA 9300 HARRIS CORNERS PKWY, SUITE 220 CHARLOTTE, NC 28269 PH. (704) 264–1233 FAX (704) 509–9937 TMCMANNIS@DEWBERRY.COM	ENGINEER: DEWBERRY ENGINEERS INC. BRIAN LAFRANCHI, P.E. 9300 HARRIS CORNERS PKWY, SUITE 220 CHARLOTTE, NC 28269 PH. (704) 631–5206 FAX (704) 509–9937 BLAFRANCHI@DEWBERRY.COM
--	---	--

SUBMITTAL	SET NUMBER
<input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> BIDDING	<input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> REVISION <input type="checkbox"/> RECORD



Dewberry Engineers Inc.
9300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1
100% CONSTRUCTION DOCUMENTS
10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION

KEY PLAN:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
△	05/29/25	DLJ	AGENCY COMMENTS
△	02/24/25	DLJ	95% REVIEW SET
△	01/28/25	DLJ	70% REVIEW SET
△	11/08/24	BML	30% REVIEW SET

DRAWN BY	BJN
APPROVED BY	BML
CHECKED BY	DLJ
DATE	AUGUST 28, 2024
TITLE	

COVER SHEET

DEI PROJECT NO: 50181675

SHEET NO.

T0.01

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.

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.

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
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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

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.

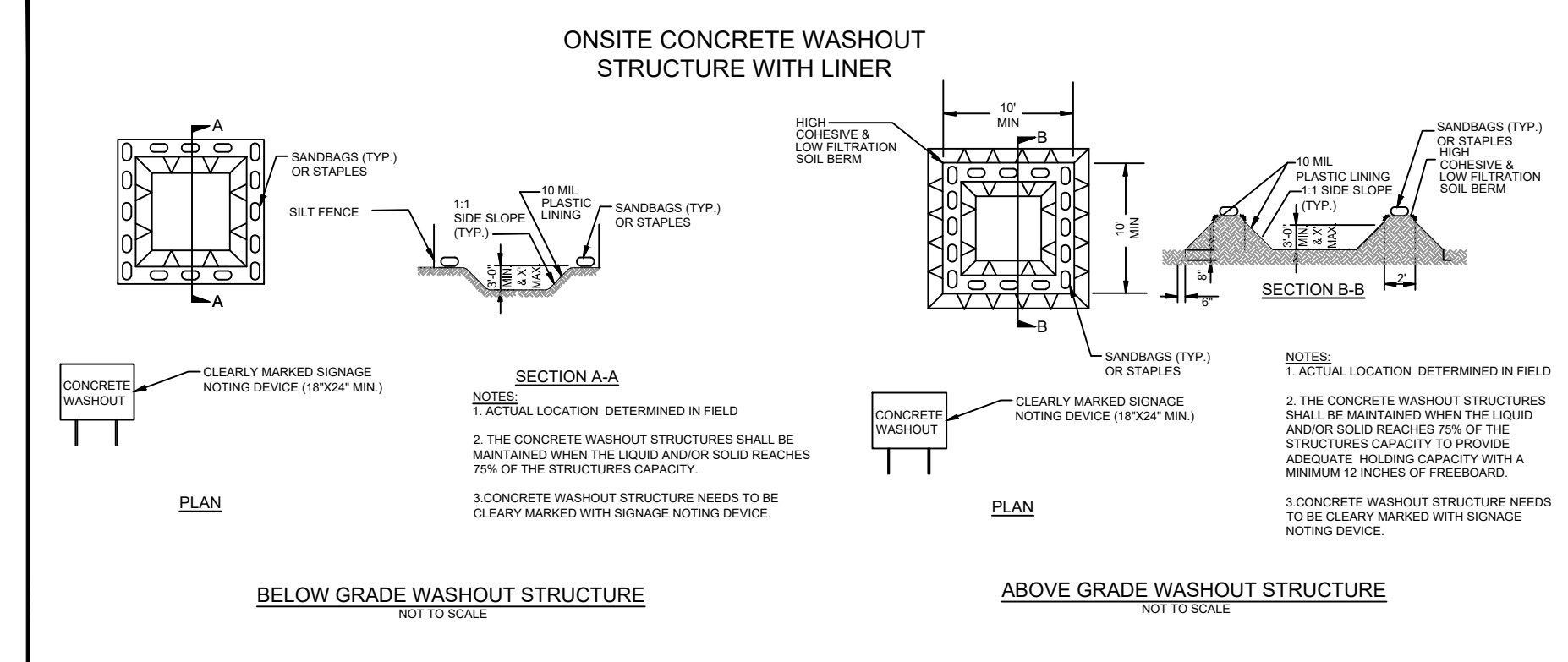
1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous 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.

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.

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.

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.

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.



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.

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.

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.



Dewberry Engineers Inc.
9300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS
10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE:

REVISIONS

A	01/28/25	DLJ	70% REVIEW SET
B	11/08/24	BML	30% REVIEW SET
NO.	DATE	BY	DESCRIPTION

DRAWN BY BJN

APPROVED BY BML

CHECKED BY DLJ

DATE AUGUST 28, 2024

TITLE

NCG01 NOTES
(SHEET 2 OF 2)

DEI PROJECT NO: 50181675

SHEET NO.

C0.04

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 unattended 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 ≥ 1.0 inch in 24 hours	<ol style="list-style-type: none"> 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 ≥ 1.0 inch in 24 hours	<ol style="list-style-type: none"> 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 ≥ 1.0 inch in 24 hours	<p>If visible sedimentation is found outside site limits, then a record of the following shall be made:</p> <ol style="list-style-type: none"> 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 ≥ 1.0 inch in 24 hours	<p>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:</p> <ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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]

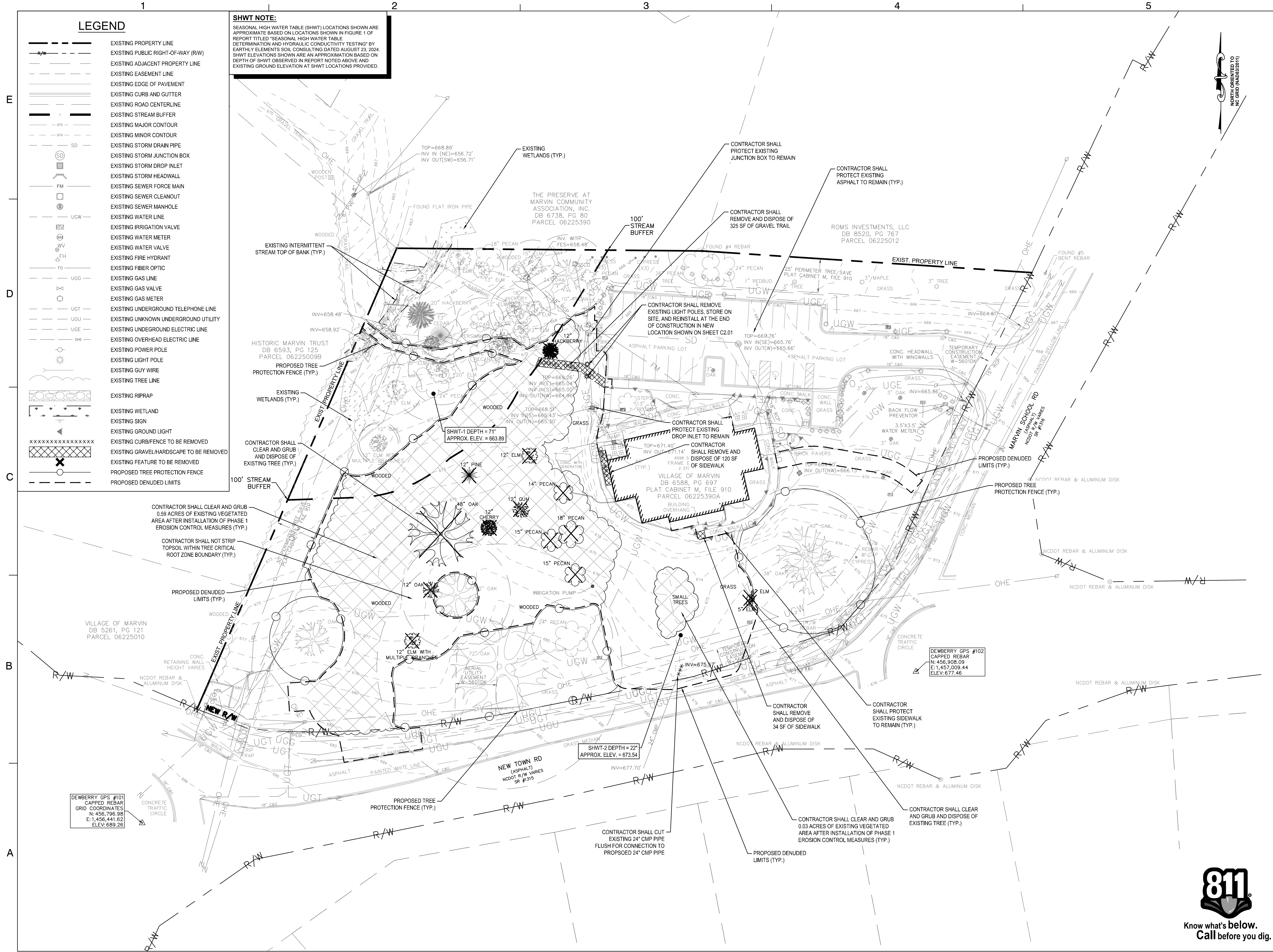
PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

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



LEGEND

- EXISTING PROPERTY LINE
- EXISTING PUBLIC RIGHT-OF-WAY (R/W)
- EXISTING ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB AND GUTTER
- EXISTING ROAD CENTERLINE
- EXISTING STREAM BUFFER
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING STORM DRAIN PIPE
- EXISTING STORM JUNCTION BOX
- EXISTING STORM DROP INLET
- EXISTING STORM HEADWALL
- EXISTING SEWER FORCE MAIN
- EXISTING SEWER CLEANOUT
- EXISTING SEWER MANHOLE
- EXISTING WATER LINE
- EXISTING IRRIGATION VALVE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING FIBER OPTIC
- EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING UNKNOWN UNDERGROUND UTILITY
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE
- EXISTING TREE LINE
- EXISTING RIPRAP
- EXISTING WETLAND
- EXISTING SIGN
- EXISTING GROUND LIGHT
- EXISTING CURB/FENCE TO BE REMOVED
- EXISTING GRAVEL/HARDSCAPE TO BE REMOVED
- EXISTING FEATURE TO BE REMOVED
- PROPOSED TREE PROTECTION FENCE
- PROPOSED DENUEDED LIMITS

SHWT NOTE:
SEASONAL HIGH WATER TABLE (SHWT) LOCATIONS SHOWN ARE APPROXIMATE BASED ON LOCATIONS SHOWN IN FIGURE 1 OF REPORT TITLED "SEASONAL HIGH WATER TABLE DETERMINATION AND HYDRAULIC CONDUCTIVITY TESTING" BY EARTHLY ELEMENTS SOIL CONSULTING DATED AUGUST 23, 2024. SHWT ELEVATIONS SHOWN ARE AN APPROXIMATION BASED ON DEPTH OF SHWT OBSERVED IN REPORT NOTED ABOVE AND EXISTING GROUND ELEVATION AT SHWT LOCATIONS PROVIDED.

Dewberry
Dewberry Engineers Inc.
6300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1
100% CONSTRUCTION DOCUMENTS

SEAL
**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 30'

0' 30' 60'

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	05/29/25	DLJ	AGENCY COMMENTS
2	01/28/25	DLJ	70% REVIEW SET
3	11/08/24	BML	30% REVIEW SET

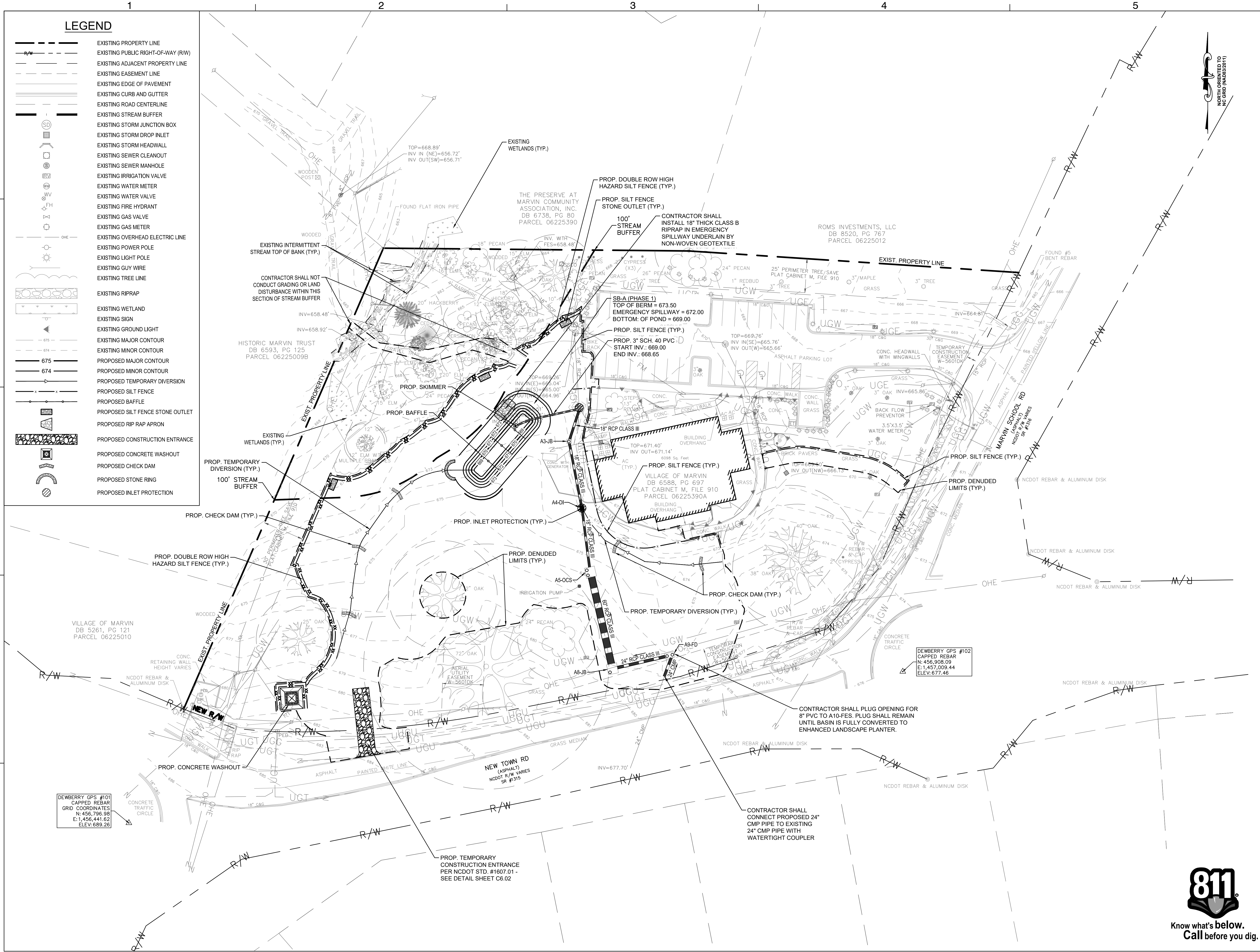
DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024

TITLE
**DEMOLITION AND
EXISTING
CONDITIONS PLAN**

DEI PROJECT NO: 50181675
SHEET NO.

811
Know what's below.
Call before you dig.

C1.01



LEGEND

- EXISTING PROPERTY LINE
- EXISTING PUBLIC RIGHT-OF-WAY (R/W)
- EXISTING ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB AND GUTTER
- EXISTING ROAD CENTERLINE
- EXISTING STREAM BUFFER
- EXISTING STORM JUNCTION BOX
- EXISTING STORM DROP INLET
- EXISTING STORM HEADWALL
- EXISTING SEWER CLEANOUT
- EXISTING SEWER MANHOLE
- EXISTING IRRIGATION VALVE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE
- EXISTING TREE LINE
- EXISTING RIPRAP
- EXISTING WETLAND
- EXISTING SIGN
- EXISTING GROUND LIGHT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED TEMPORARY DIVERSION
- PROPOSED SILT FENCE
- PROPOSED BAFFLE
- PROPOSED SILT FENCE STONE OUTLET
- PROPOSED RIP RAP APRON
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT
- PROPOSED CHECK DAM
- PROPOSED STONE RING
- PROPOSED INLET PROTECTION



Dewberry Engineers Inc.
6500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0029
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 30'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	05/29/25	DLJ	AGENCY COMMENTS
2	01/28/25	DLJ	70% REVIEW SET
3	11/08/24	BML	30% REVIEW SET

DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024
TITLE:

ESC PH I PLAN

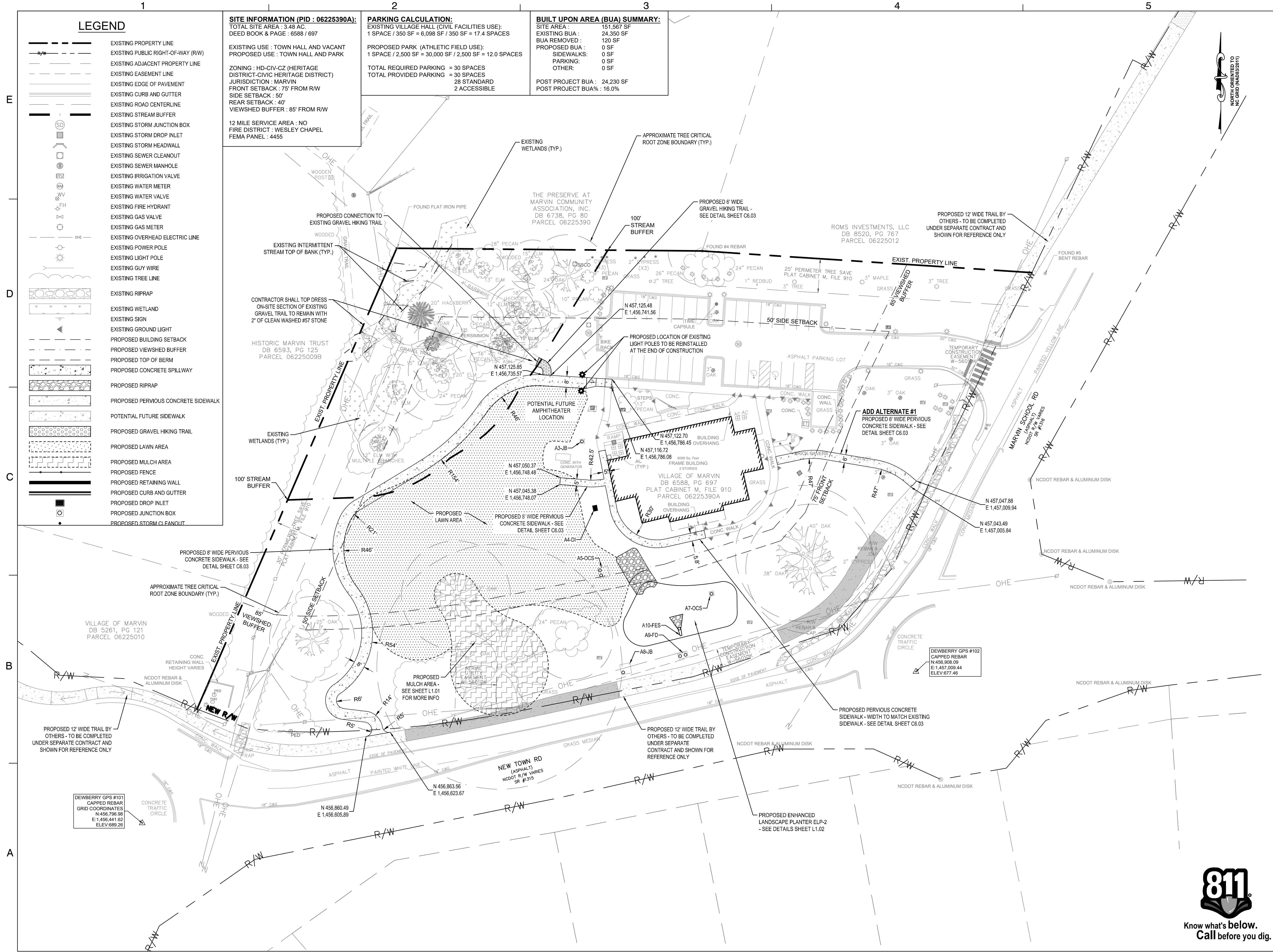
DEI PROJECT NO: 50181675

SHEET NO.

C1.02



Know what's below.
Call before you dig.



LEGEND

- EXISTING PROPERTY LINE
- EXISTING PUBLIC RIGHT-OF-WAY (R/W)
- EXISTING ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB AND GUTTER
- EXISTING ROAD CENTERLINE
- EXISTING STREAM BUFFER
- EXISTING STORM JUNCTION BOX
- EXISTING STORM DROP INLET
- EXISTING STORM HEADWALL
- EXISTING SEWER CLEANOUT
- EXISTING SEWER MANHOLE
- EXISTING IRRIGATION VALVE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE
- EXISTING TREE LINE
- EXISTING RIPRAP
- EXISTING WETLAND
- EXISTING SIGN
- EXISTING GROUND LIGHT
- PROPOSED BUILDING SETBACK
- PROPOSED VIEWSHED BUFFER
- PROPOSED TOP OF BERM
- PROPOSED CONCRETE SPILLWAY
- PROPOSED RIPRAP
- PROPOSED PERVIOUS CONCRETE SIDEWALK
- POTENTIAL FUTURE SIDEWALK
- PROPOSED GRAVEL HIKING TRAIL
- PROPOSED LAWN AREA
- PROPOSED MULCH AREA
- PROPOSED FENCE
- PROPOSED RETAINING WALL
- PROPOSED CURB AND GUTTER
- PROPOSED DROP INLET
- PROPOSED JUNCTION BOX
- PROPOSED STORM CLEANOUT

SITE INFORMATION (PID : 06225390A):
TOTAL SITE AREA : 3.48 AC.
DEED BOOK & PAGE : 6588 / 697

EXISTING USE : TOWN HALL AND VACANT
PROPOSED USE : TOWN HALL AND PARK

ZONING : HD-CIV-CZ (HERITAGE DISTRICT-CIVIC HERITAGE DISTRICT)
JURISDICTION : MARVIN
FRONT SETBACK : 75' FROM R/W
SIDE SETBACK : 50'
REAR SETBACK : 40'
VIEWSHED BUFFER : 85' FROM R/W

12 MILE SERVICE AREA : NO
FIRE DISTRICT : WESLEY CHAPEL
FEMA PANEL : 4455

PARKING CALCULATION:
EXISTING VILLAGE HALL (CIVIL FACILITIES USE):
1 SPACE / 350 SF = 6,098 SF / 350 SF = 17.4 SPACES

PROPOSED PARK (ATHLETIC FIELD USE):
1 SPACE / 2,500 SF = 30,000 SF / 2,500 SF = 12.0 SPACES

TOTAL REQUIRED PARKING = 30 SPACES
TOTAL PROVIDED PARKING = 30 SPACES
28 STANDARD
2 ACCESSIBLE

BUILT UPON AREA (BUA) SUMMARY:
SITE AREA : 151,567 SF
EXISTING BUA : 24,350 SF
BUA REMOVED : 120 SF
PROPOSED BUA : 0 SF
SIDEWALKS : 0 SF
PARKING : 0 SF
OTHER : 0 SF

POST PROJECT BUA : 24,230 SF
POST PROJECT BUA% : 16.0%

Dewberry
Dewberry Engineers Inc.
9500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1
100% CONSTRUCTION DOCUMENTS

SEAL
**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 30'
0' 30' 60'

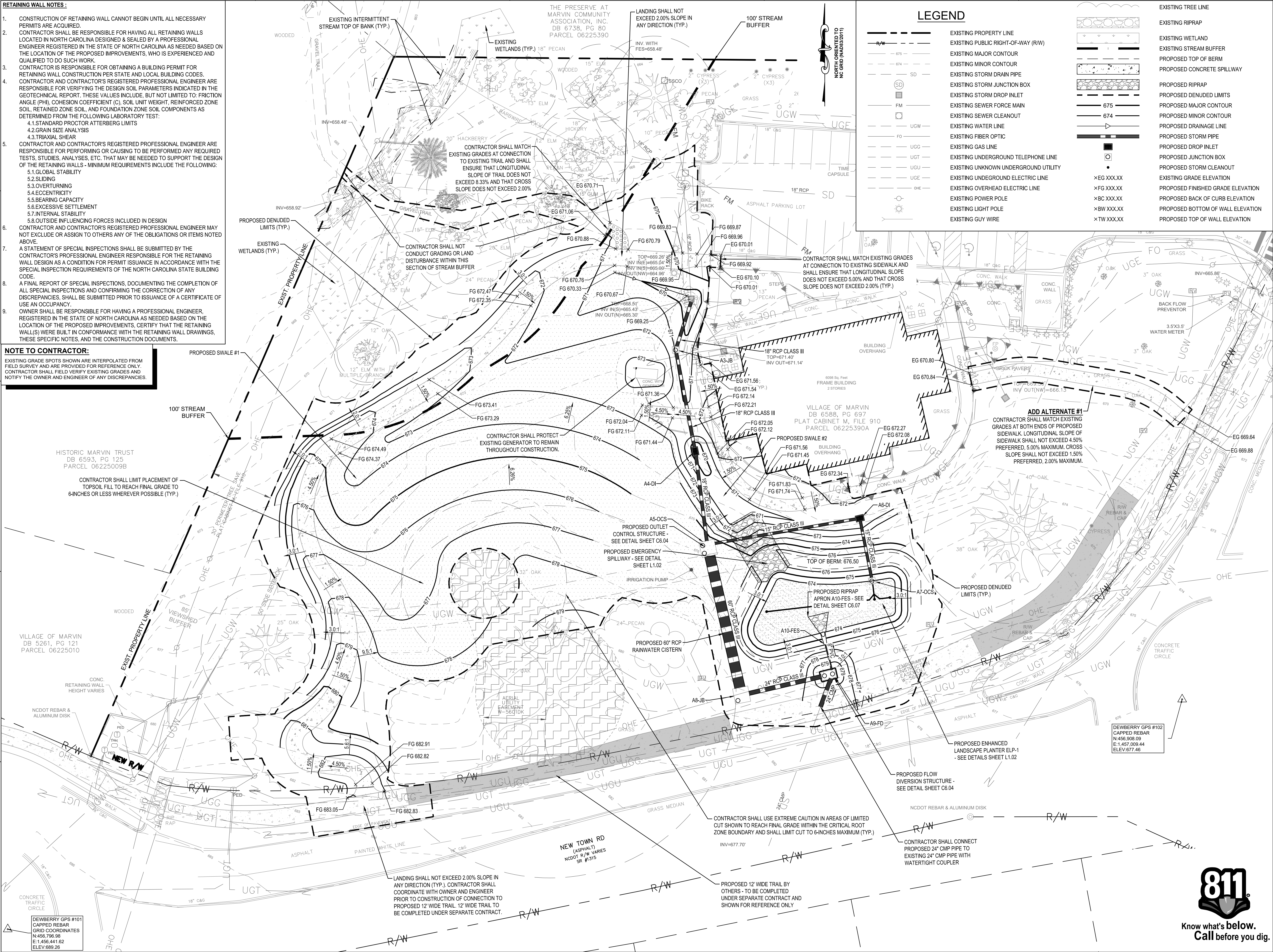
REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	05/29/25	DLJ	AGENCY COMMENTS
2	02/24/25	DLJ	95% REVIEW SET
3	01/28/25	DLJ	70% REVIEW SET
4	11/08/24	BML	30% REVIEW SET

DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024
TITLE:



- RETAINING WALL NOTES:**
- CONSTRUCTION OF RETAINING WALL CANNOT BEGIN UNTIL ALL NECESSARY PERMITS ARE ACQUIRED.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL RETAINING WALLS LOCATED IN NORTH CAROLINA DESIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA AS NEEDED BASED ON THE LOCATION OF THE PROPOSED IMPROVEMENTS, WHO IS EXPERIENCED AND QUALIFIED TO DO SUCH WORK.
 - CONTRACTOR IS RESPONSIBLE FOR OBTAINING A BUILDING PERMIT FOR RETAINING WALL CONSTRUCTION PER STATE AND LOCAL BUILDING CODES.
 - CONTRACTOR AND CONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER ARE RESPONSIBLE FOR VERIFYING THE DESIGN SOIL PARAMETERS INDICATED IN THE GEOTECHNICAL REPORT. THESE VALUES INCLUDE, BUT NOT LIMITED TO: FRICTION ANGLE (PHI), COHESION COEFFICIENT (C), SOIL UNIT WEIGHT, REINFORCED ZONE SOIL, RETAINED ZONE SOIL, AND FOUNDATION ZONE SOIL COMPONENTS AS DETERMINED FROM THE FOLLOWING LABORATORY TEST:
4.1. STANDARD PROCTOR ATTERBERG LIMITS
4.2. GRAIN SIZE ANALYSIS
4.3. TRIAXIAL SHEAR
 - CONTRACTOR AND CONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER ARE RESPONSIBLE FOR PERFORMING OR CAUSING TO BE PERFORMED ANY REQUIRED TESTS, STUDIES, ANALYSES, ETC. THAT MAY BE NEEDED TO SUPPORT THE DESIGN OF THE RETAINING WALLS - MINIMUM REQUIREMENTS INCLUDE THE FOLLOWING:
5.1. GLOBAL STABILITY
5.2. SLIDING
5.3. OVERTURNING
5.4. ECCENTRICITY
5.5. BEARING CAPACITY
5.6. EXCESSIVE SETTLEMENT
5.7. INTERNAL STABILITY
5.8. OUTSIDE INFLUENCING FORCES INCLUDED IN DESIGN
 - CONTRACTOR AND CONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER MAY NOT EXCLUDE OR ASSIGN TO OTHERS ANY OF THE OBLIGATIONS OR ITEMS NOTED ABOVE.
 - A STATEMENT OF SPECIAL INSPECTIONS SHALL BE SUBMITTED BY THE CONTRACTOR'S PROFESSIONAL ENGINEER RESPONSIBLE FOR THE RETAINING WALL DESIGN AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE.
 - A FINAL REPORT OF SPECIAL INSPECTIONS, DOCUMENTING THE COMPLETION OF ALL SPECIAL INSPECTIONS AND CONFIRMING THE CORRECTION OF ANY DISCREPANCIES, SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AN OCCUPANCY.
 - OWNER SHALL BE RESPONSIBLE FOR HAVING A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF NORTH CAROLINA AS NEEDED BASED ON THE LOCATION OF THE PROPOSED IMPROVEMENTS, CERTIFY THAT THE RETAINING WALL(S) WERE BUILT IN CONFORMANCE WITH THE RETAINING WALL DRAWINGS, THESE SPECIFIC NOTES, AND THE CONSTRUCTION DOCUMENTS.

NOTE TO CONTRACTOR:
EXISTING GRADE SPOTS SHOWN ARE INTERPOLATED FROM FIELD SURVEY AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.



LEGEND

- EXISTING PROPERTY LINE**
— R/W —
— 675 —
— 674 —
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING PUBLIC RIGHT-OF-WAY (R/W)**
— 675 —
— 674 —
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING MAJOR CONTOUR**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING MINOR CONTOUR**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING STORM DRAIN PIPE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING STORM DRAIN INLET**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING SEWER FORCE MAIN**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING SEWER CLEANOUT**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING WATER LINE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING FIBER OPTIC**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING GAS LINE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING UNDERGROUND TELEPHONE LINE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING UNKNOWN UNDERGROUND UTILITY**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING OVERHEAD ELECTRIC LINE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING POWER POLE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING LIGHT POLE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING GUY WIRE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —

- EXISTING TREE LINE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING RIPRAP**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING WETLAND**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING STREAM BUFFER**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED TOP OF BERM**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED CONCRETE SPILLWAY**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED RIPRAP**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED DENUDED LIMITS**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED MAJOR CONTOUR**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED MINOR CONTOUR**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED DRAINAGE LINE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED STORM PIPE**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED DROP INLET**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED JUNCTION BOX**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED STORM CLEANOUT**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- EXISTING GRADE ELEVATION**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED FINISHED GRADE ELEVATION**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED BACK OF CURB ELEVATION**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED BOTTOM OF WALL ELEVATION**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —
- PROPOSED TOP OF WALL ELEVATION**
— SD —
— FM —
— UGW —
— FO —
— UGG —
— UGT —
— UGU —
— UGE —
— OHE —



Dewberry Engineers Inc.
6900 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0029
NCBOLA #C-478

VILLAGE OF MARVIN VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 20'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	05/29/25	DLJ	AGENCY COMMENTS
2	02/24/25	DLJ	95% REVIEW SET
3	02/12/25	DLJ	DEMLR COMMENTS
4	01/28/25	DLJ	70% REVIEW SET
5	11/08/24	BML	30% REVIEW SET

DRAWN BY: BJN

APPROVED BY: BML

CHECKED BY: DLJ

DATE: AUGUST 28, 2024

TITLE

GRADING PLAN

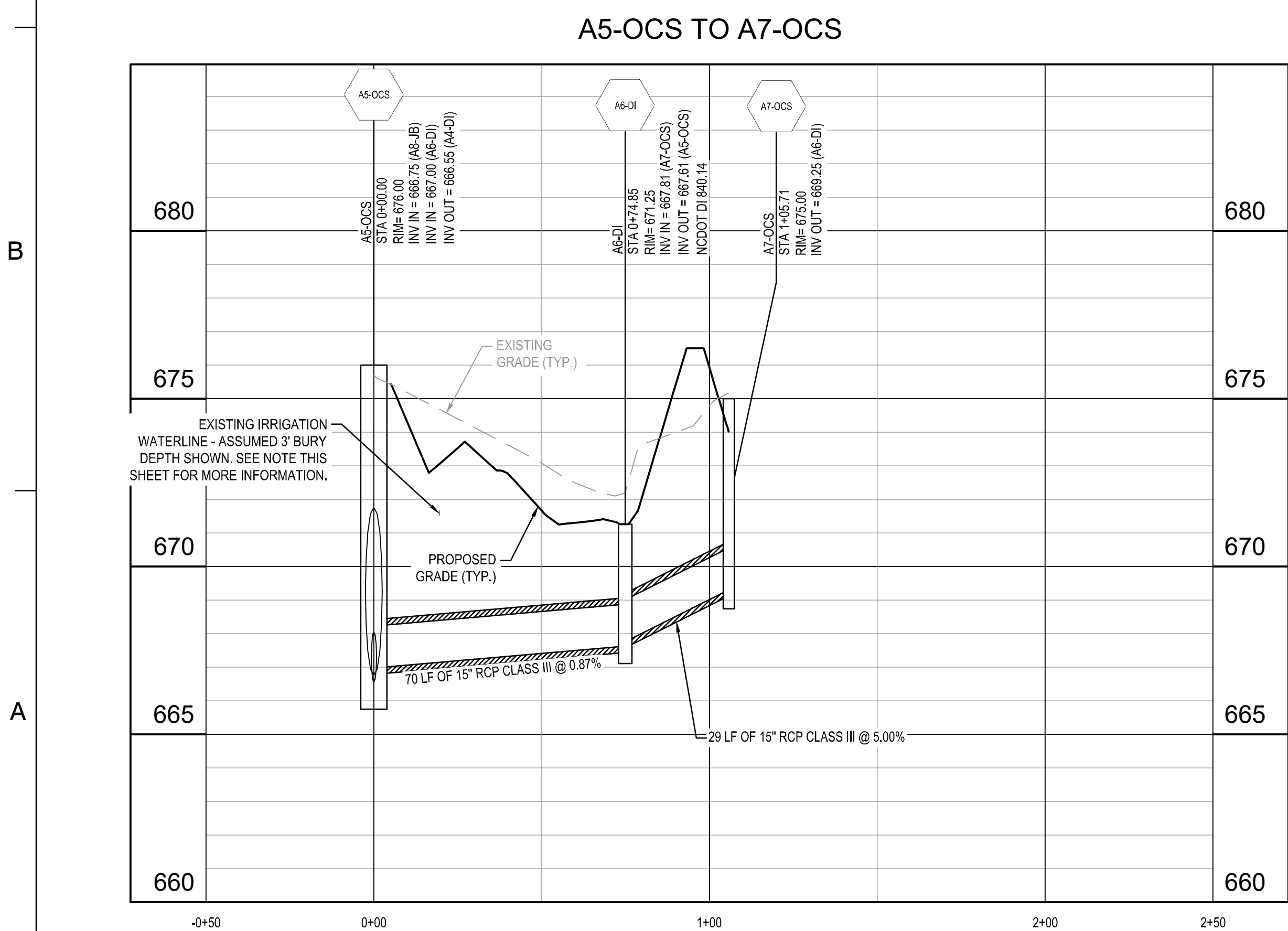
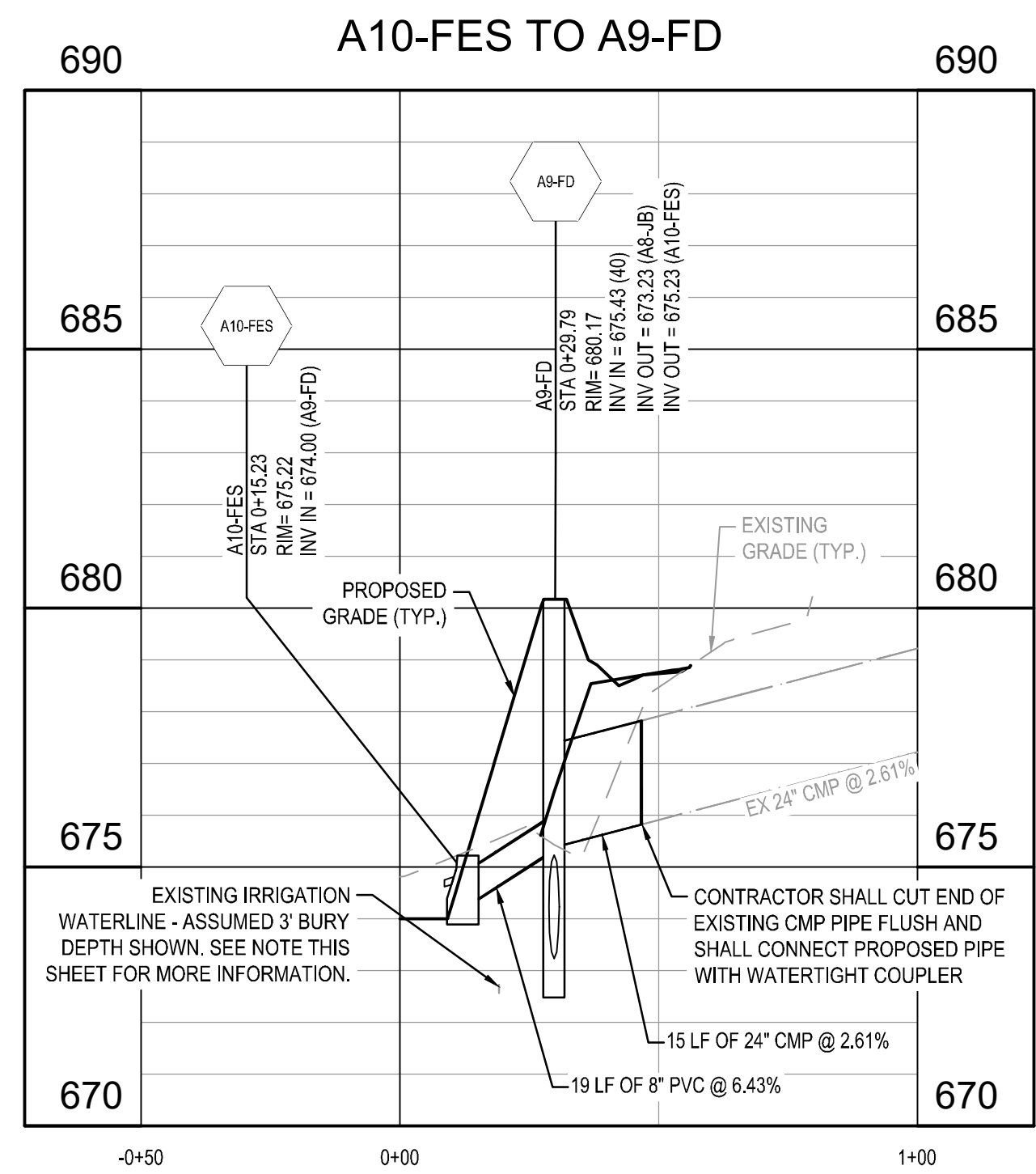
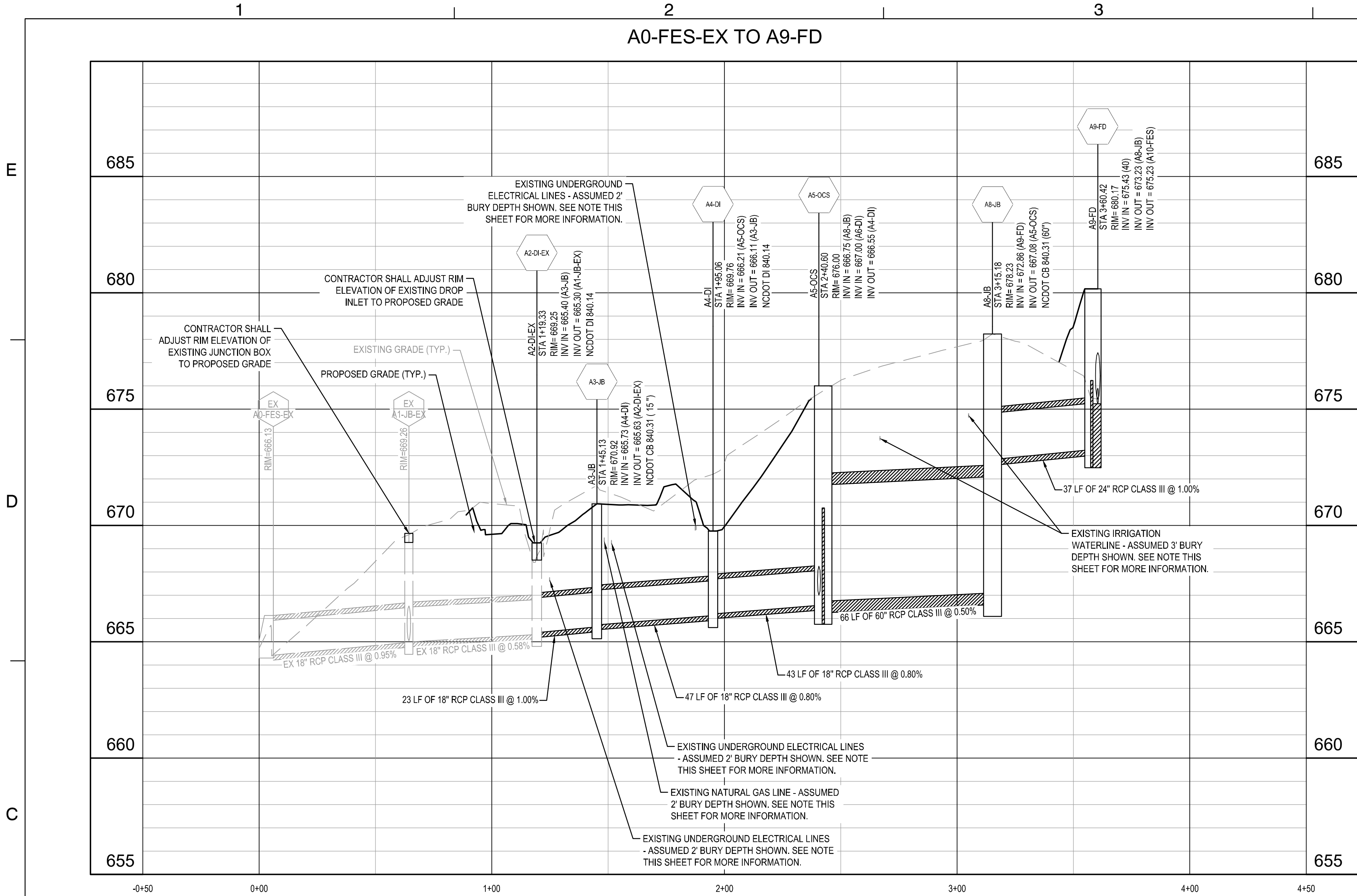
DEI PROJECT NO: 50181675

SHEET NO.

C3.01



Know what's below.
Call before you dig.



NOTE:
LOCATION OF EXISTING UTILITIES SHOWN IN STORM PROFILES IS APPROXIMATE AND BASED ON THE ASSUMED BURY DEPTHS NOTED. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND NOTIFY OWNER AND ENGINEER OF ANY DISCREPANCIES.

Dewberry

Dewberry Engineers Inc.
9500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

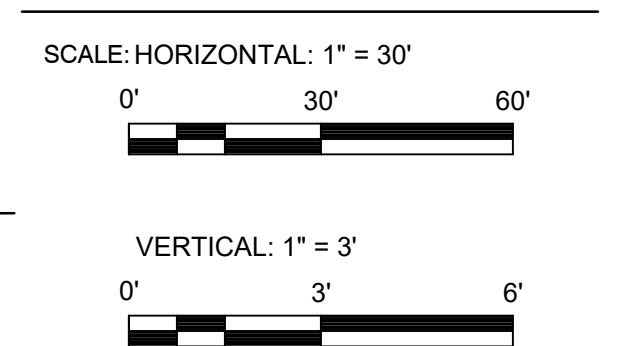
100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:



REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	05/29/25	DLJ	AGENCY COMMENTS
2	02/24/25	DLJ	95% REVIEW SET
3	01/28/25	DLJ	70% REVIEW SET

DRAWN BY: BJN

APPROVED BY: BML

CHECKED BY: DLJ

DATE: AUGUST 28, 2024

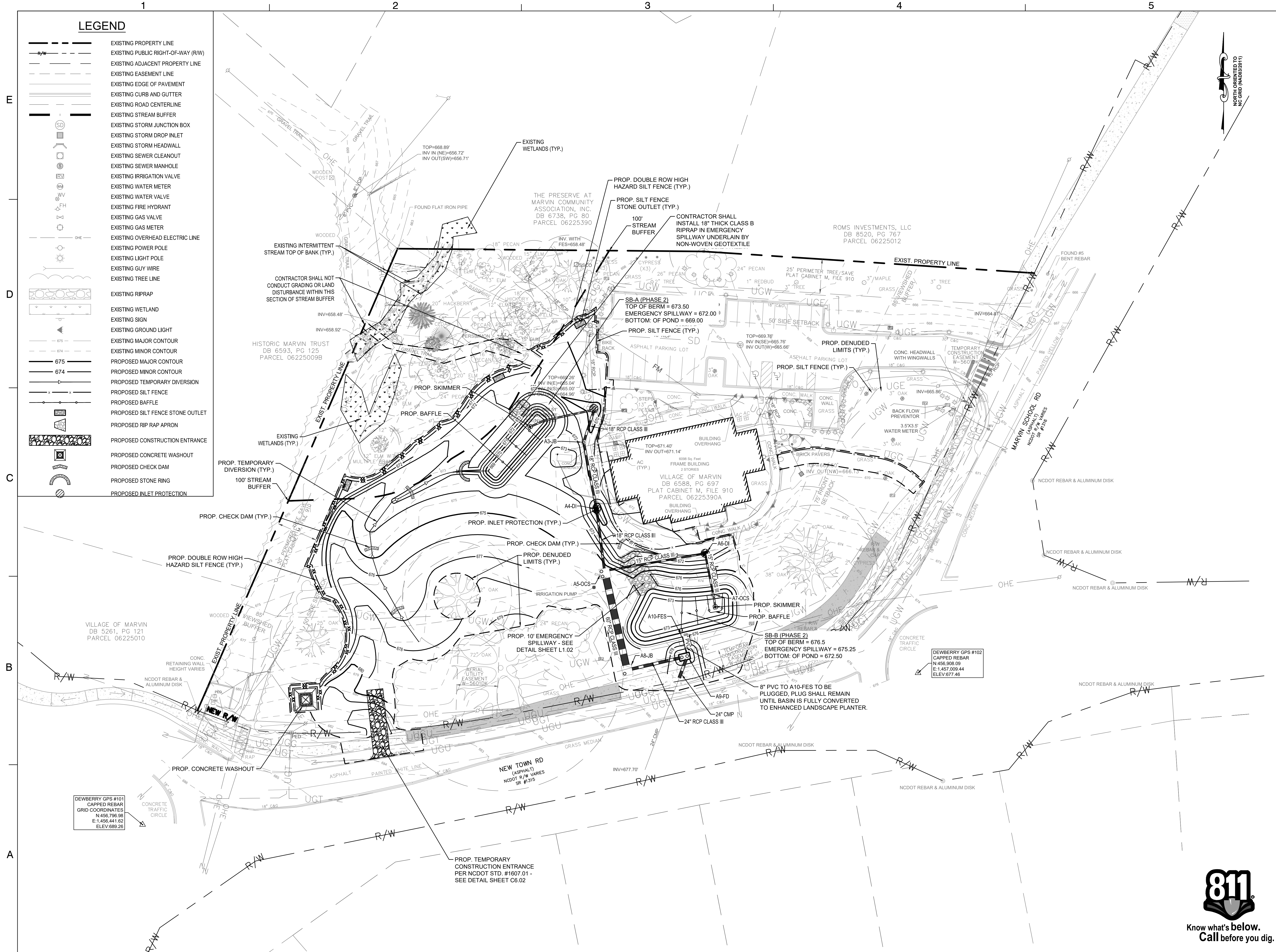
TITLE:

STORM PROFILES

DEI PROJECT NO: 50181675

SHEET NO.

C3.02



Dewberry Engineers Inc.
9300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

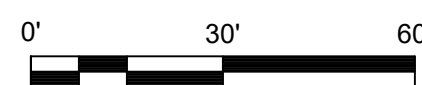
10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL





**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 30'



REVISIONS

	05/29/25	DLJ	AGENCY COMMENTS
	02/24/25	DLJ	95% REVIEW SET
	01/28/25	DLJ	70% REVIEW SET
	11/08/24	BML	30% REVIEW SET
NO.	DATE	BY	DESCRIPTION

DRAWN BY	<u>BJN</u>
APPROVED BY	<u>BML</u>
CHECKED BY	<u>DLJ</u>
DATE	<u>AUGUST 28, 2024</u>
<hr/>	
TITLE	

ESC PH II PLAN

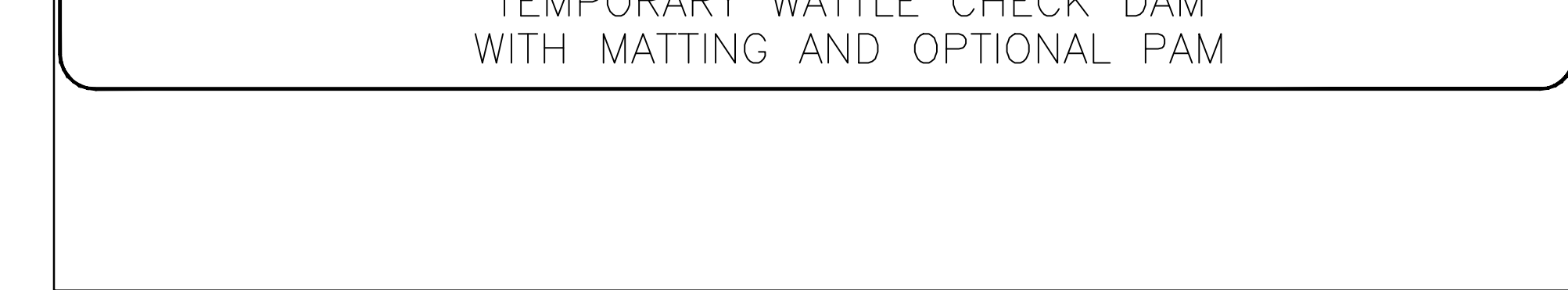
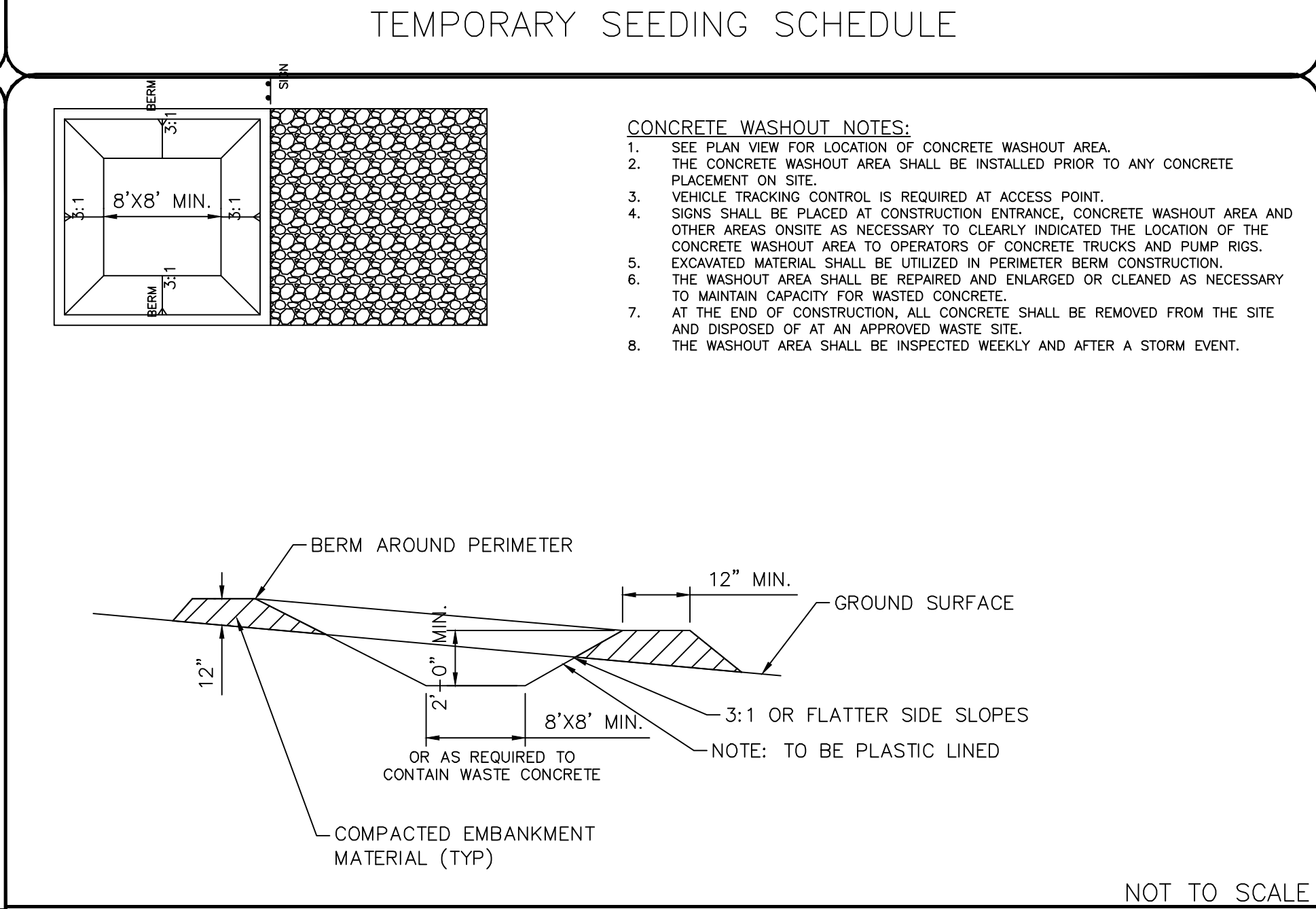
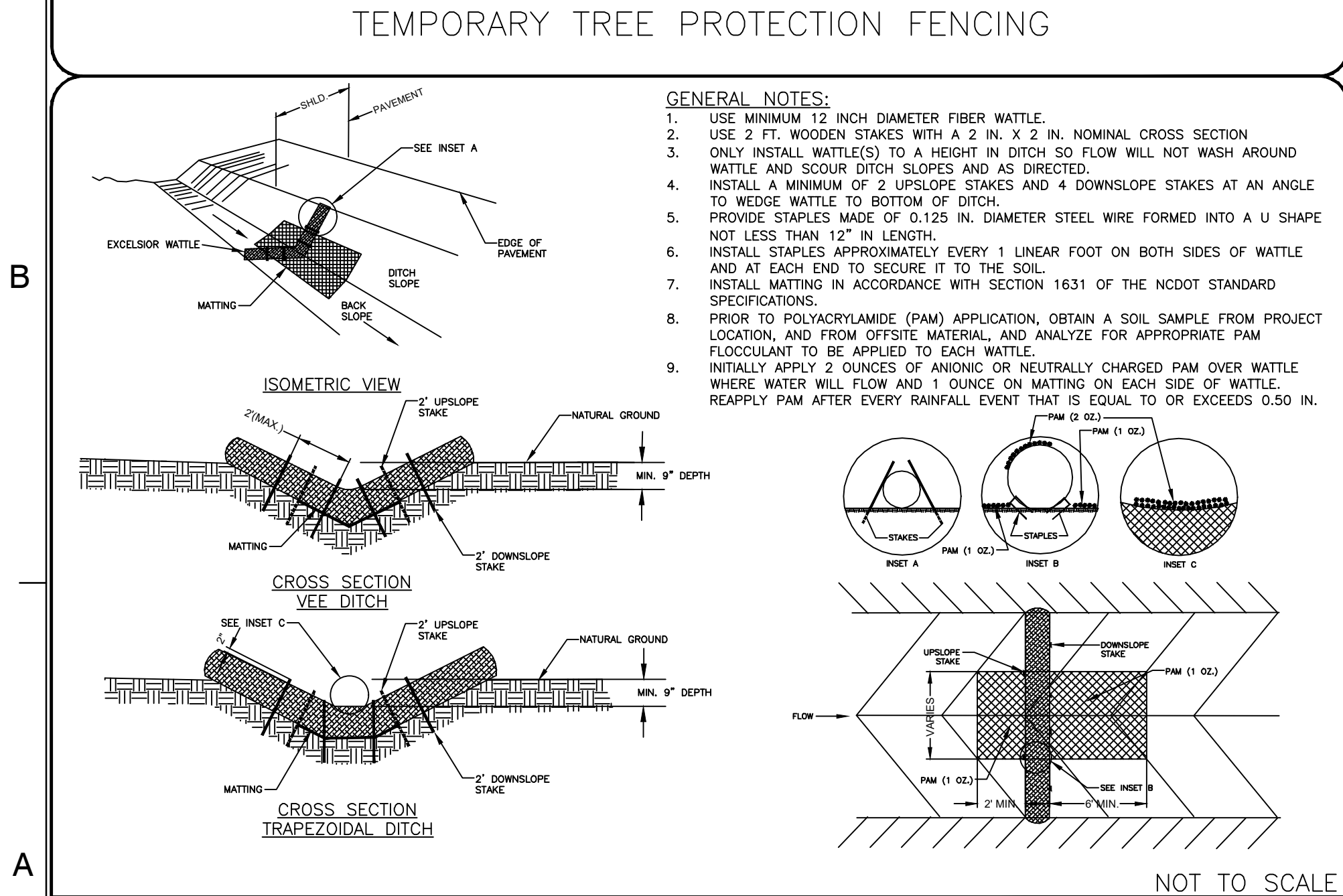
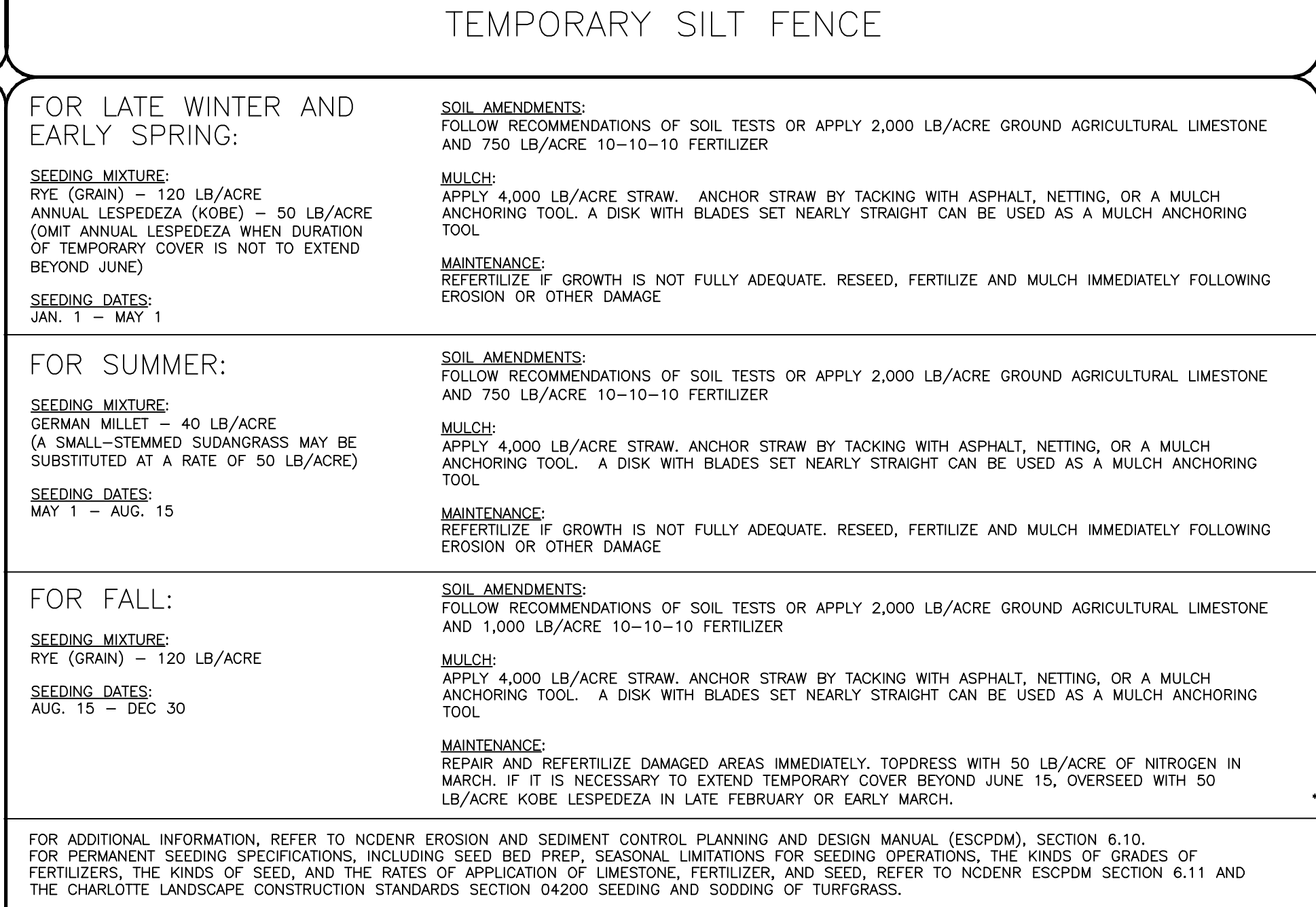
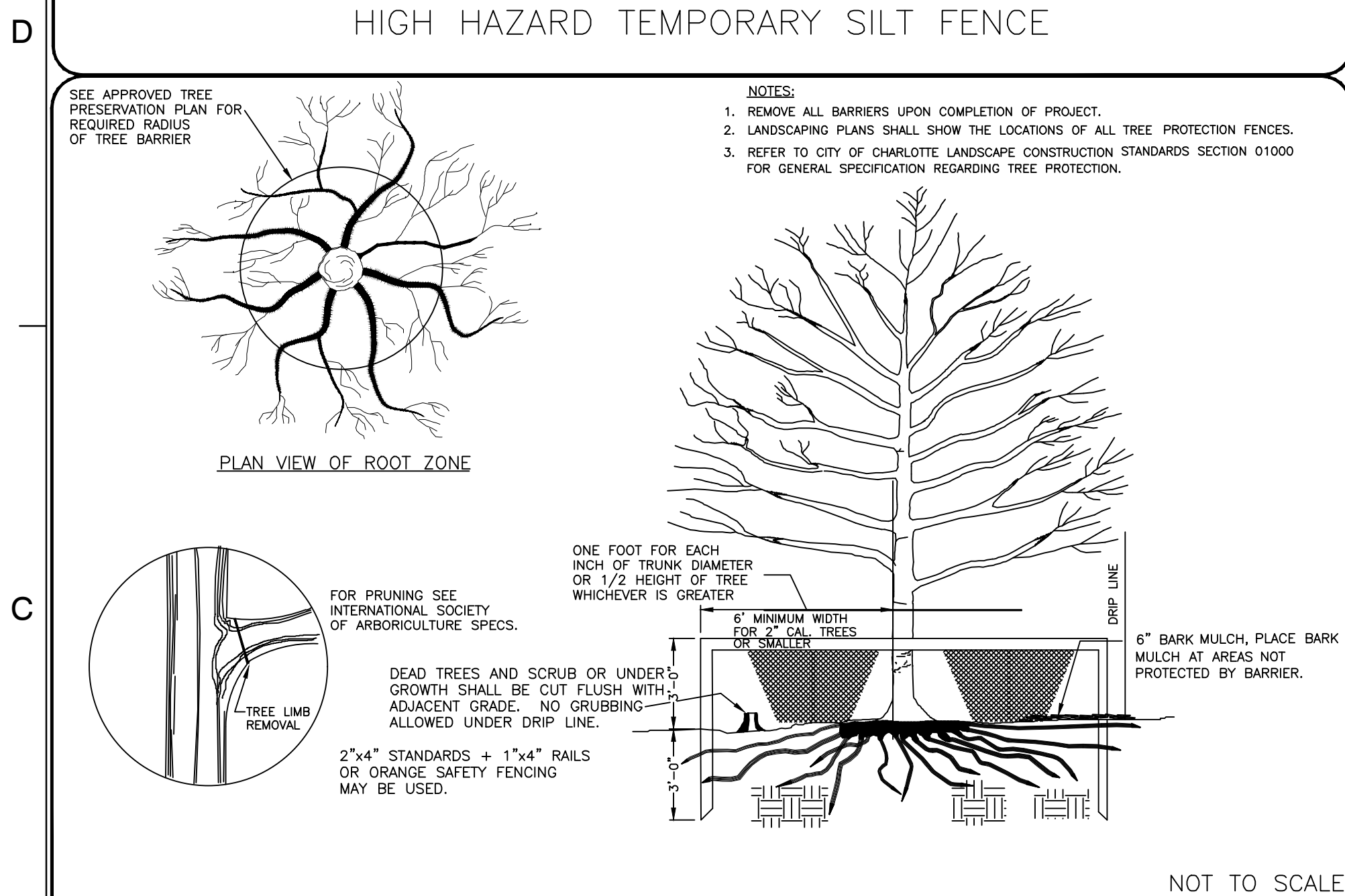
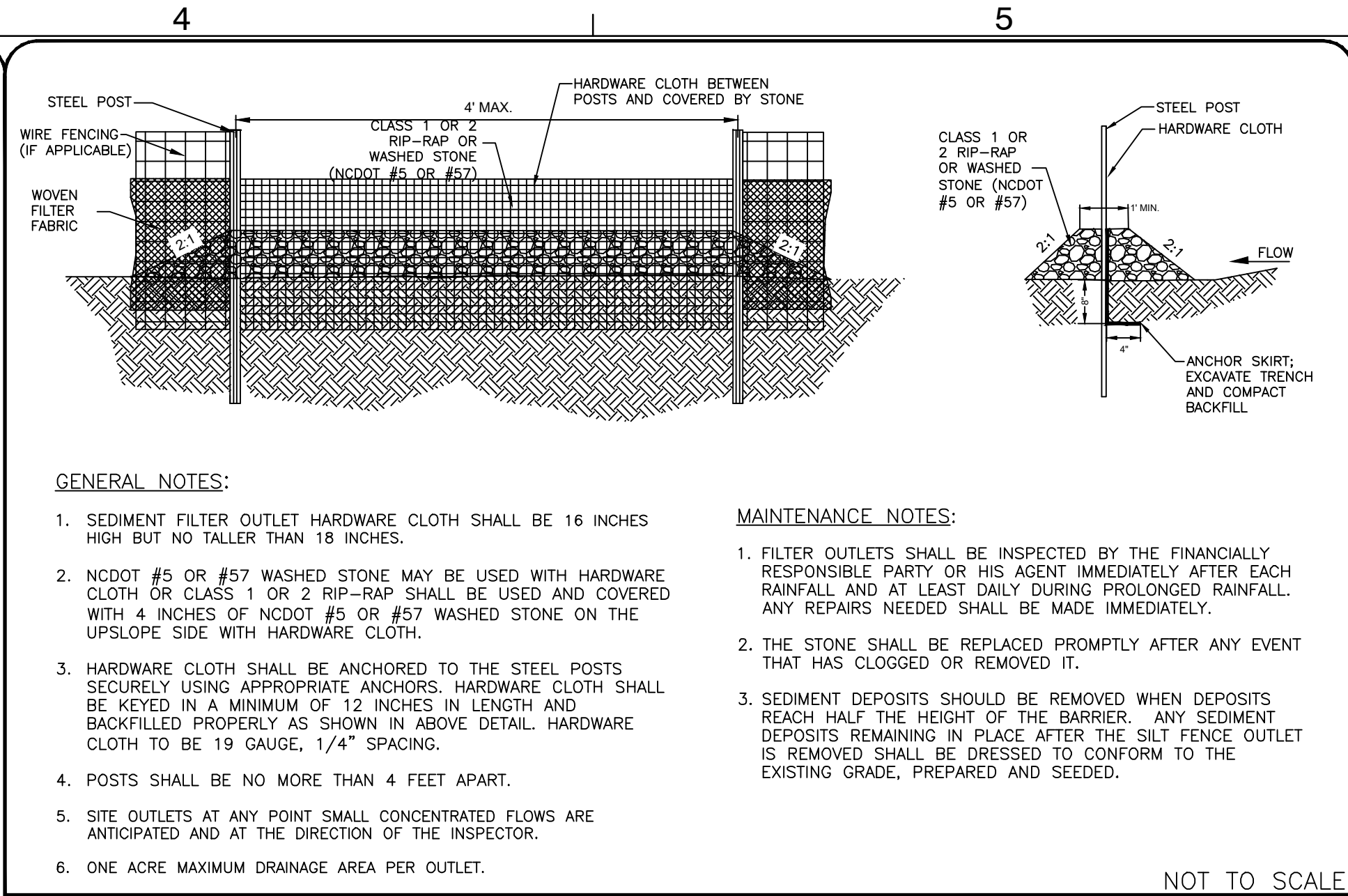
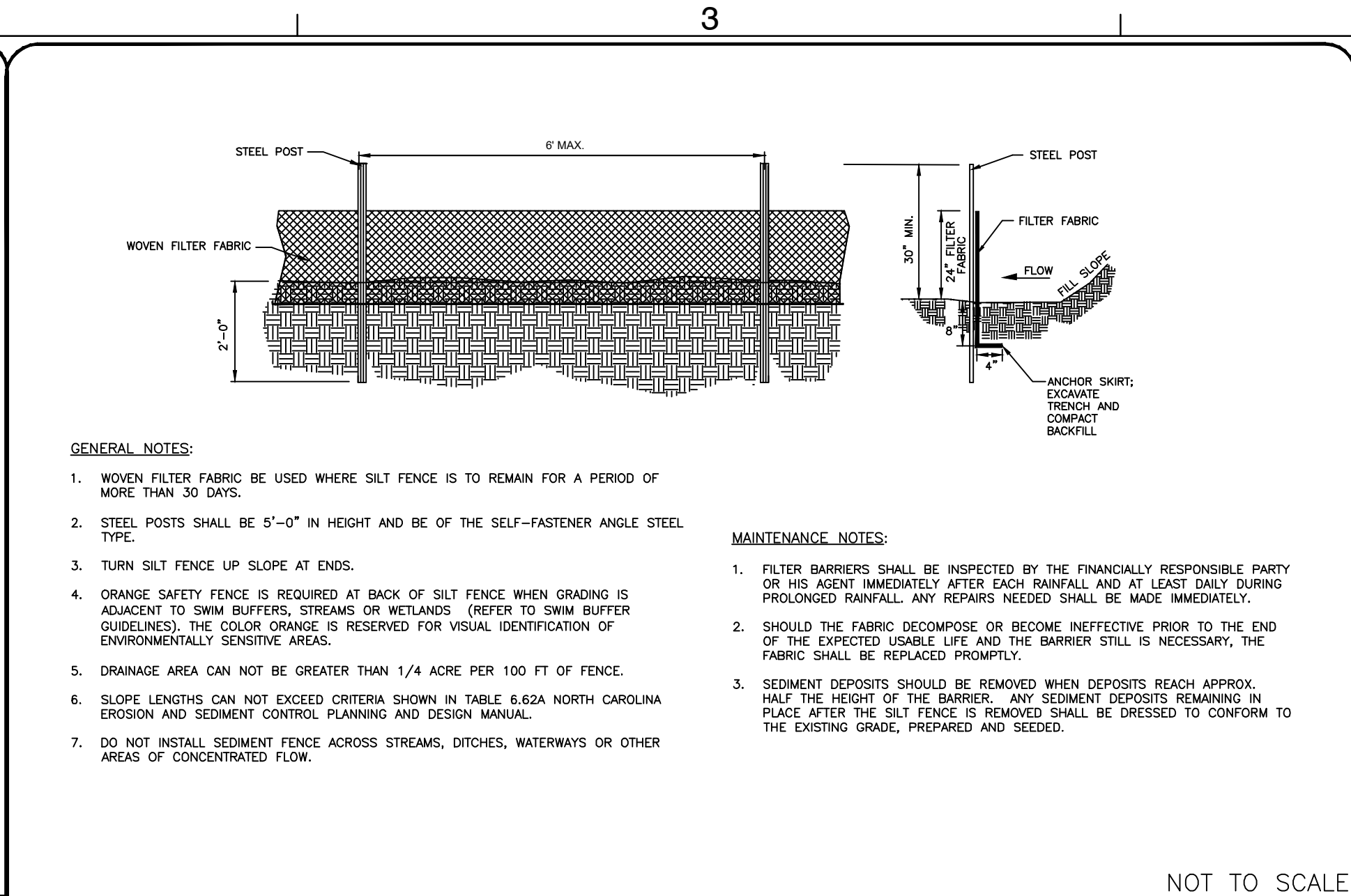
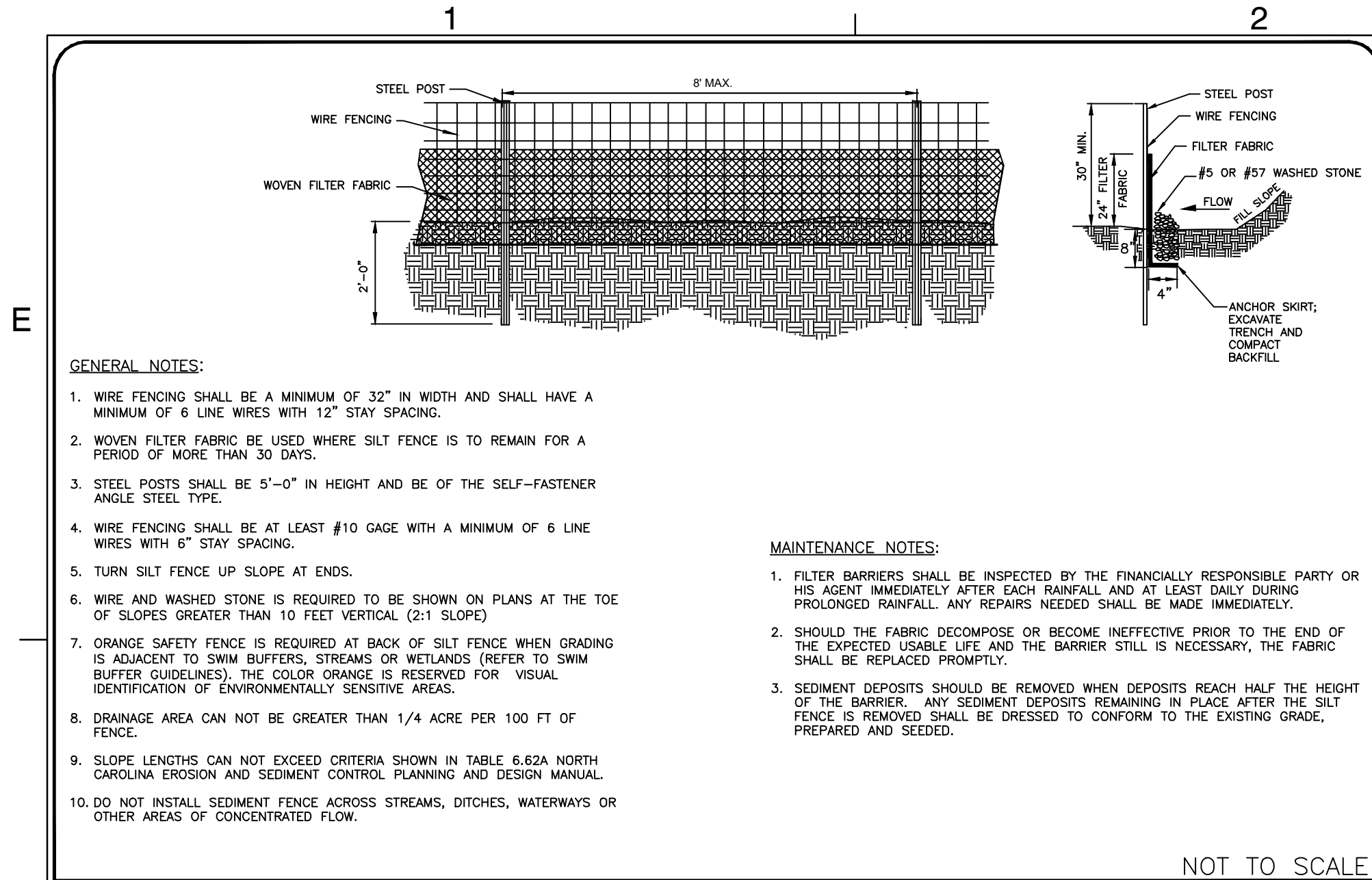
DEI PROJECT NO: 50181675

SHEET NO.

C4.01



Know what's **below**.
Call before you dig.



Dewberry Engineers Inc.
6300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28209
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS
10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE:

REVISIONS			
NO.	DATE	BY	DESCRIPTION
△	05/29/25	DLJ	AGENCY COMMENTS
△	01/28/25	DLJ	70% REVIEW SET
△	11/08/24	BML	30% REVIEW SET

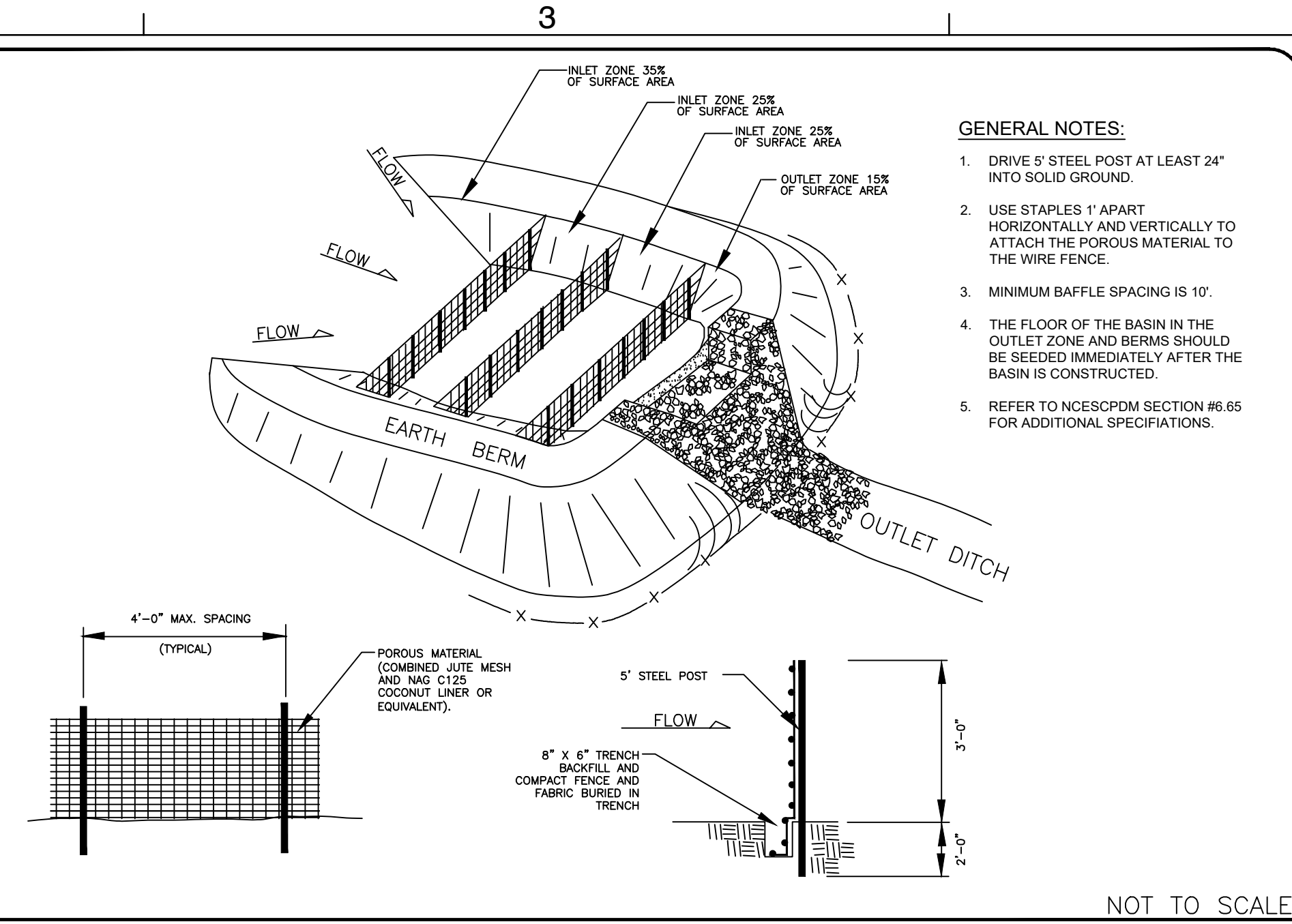
DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024
TITLE:

ESC DETAILS
(SHEET 1 OF 2)

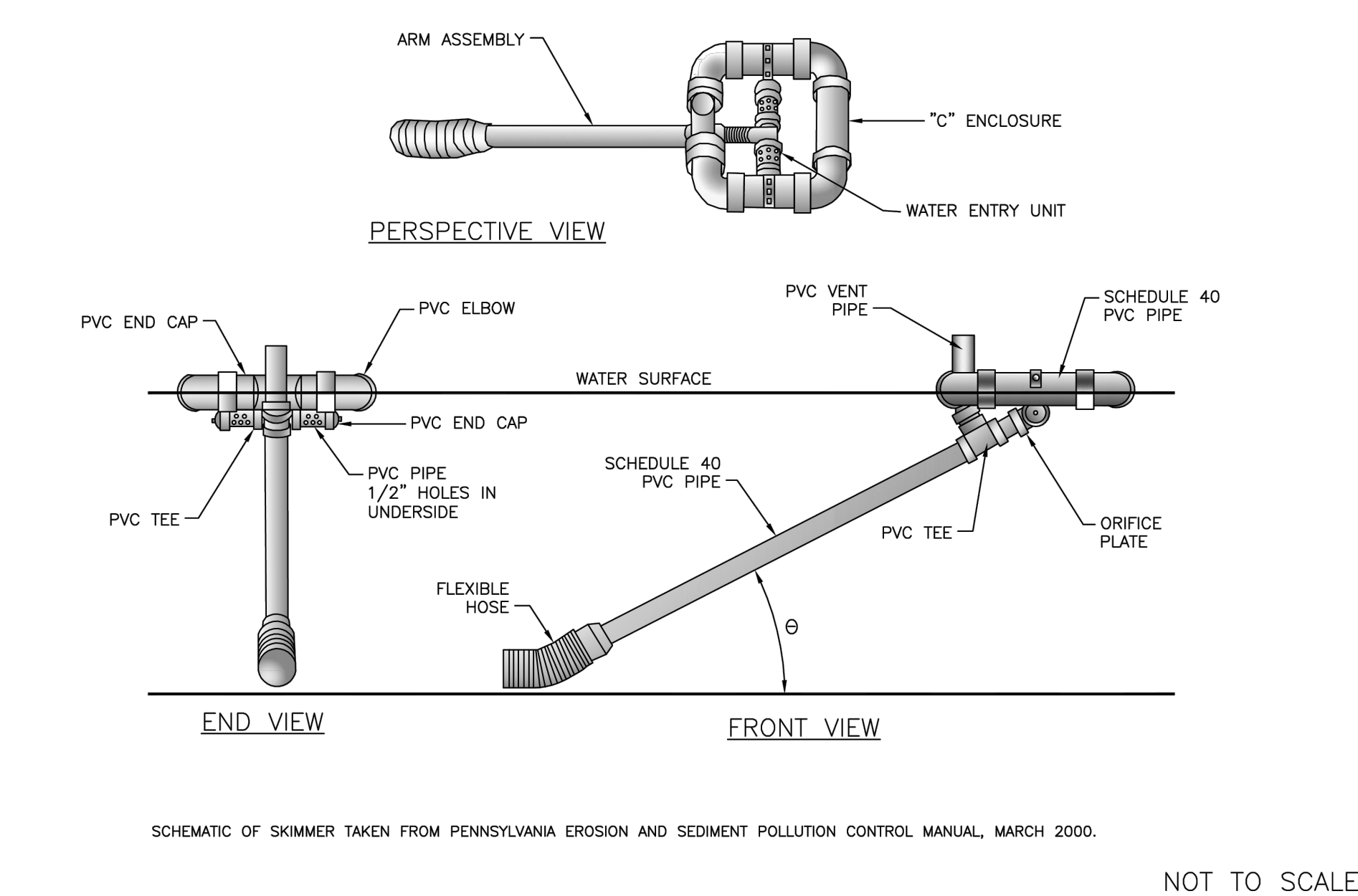
DEI PROJECT NO: 50181675

SHEET NO.

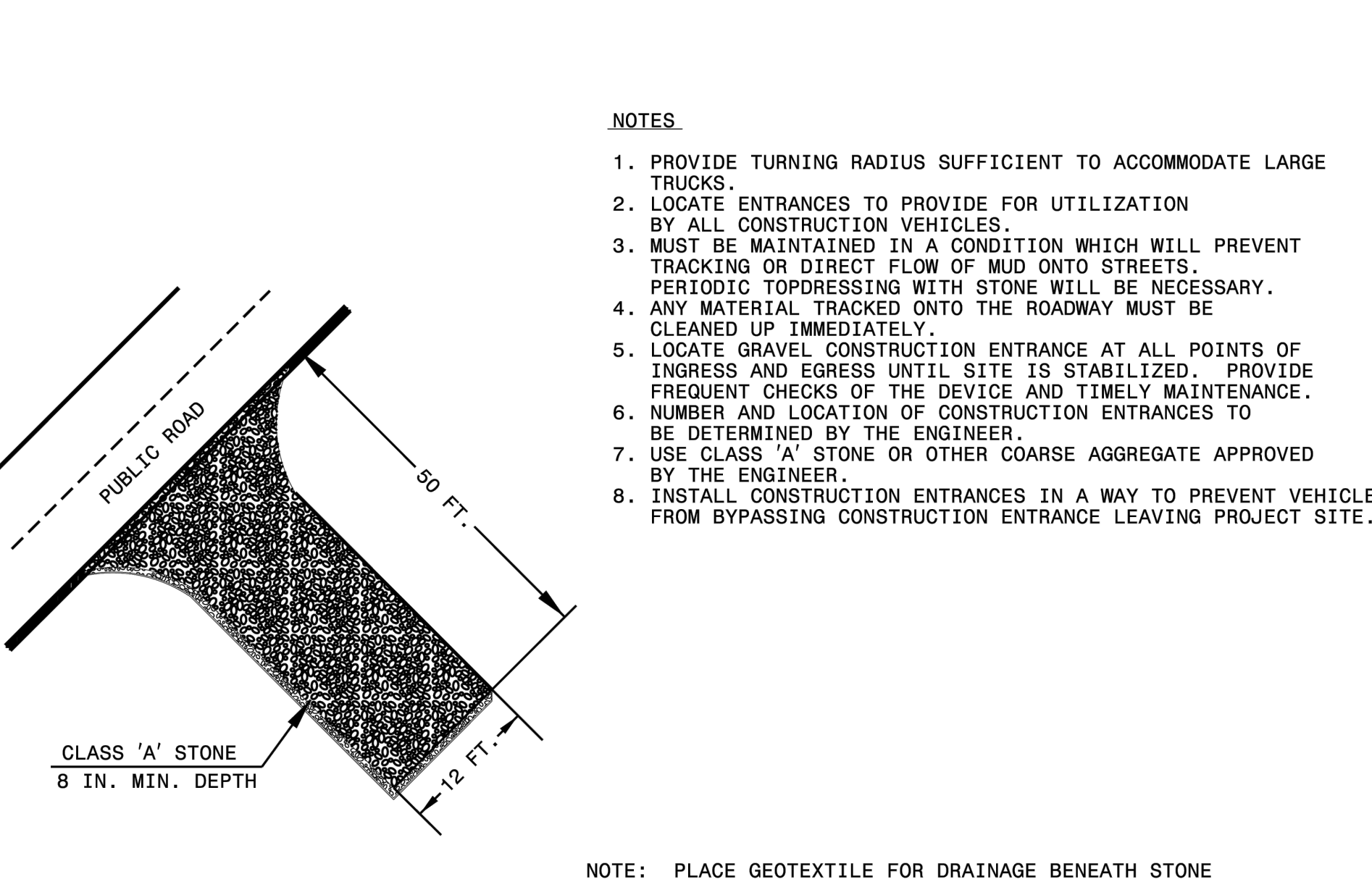
C6.01



BAFFLE INSTALLATION



SKIMMER



NOTE: PLACE GEOTEXTILE FOR DRAINAGE BENEATH STONE





SHEET 1 OF 1
1607.0

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE:

REVIEWS			
	05/29/25	DLJ	AGENCY COMMENTS
	02/24/25	DLJ	95% REVIEW SET
	01/28/25	DLJ	70% REVIEW SET
	11/08/24	BML	30% REVIEW SET
NO.	DATE	BY	DESCRIPTION

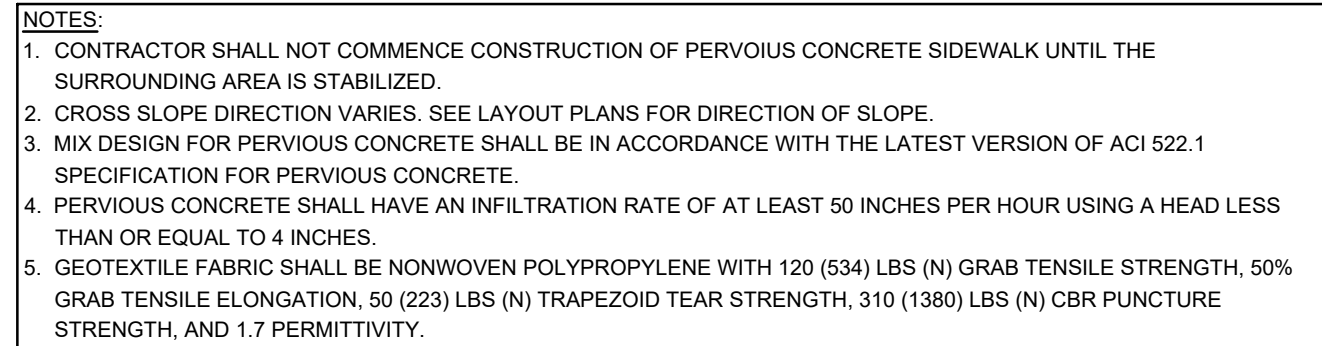
DRAWN BY	<u>BJN</u>
APPROVED BY	<u>BML</u>
CHECKED BY	<u>DLJ</u>
DATE	<u>AUGUST 28, 2024</u>
<hr/>	
TITLE	

SITE DETAILS

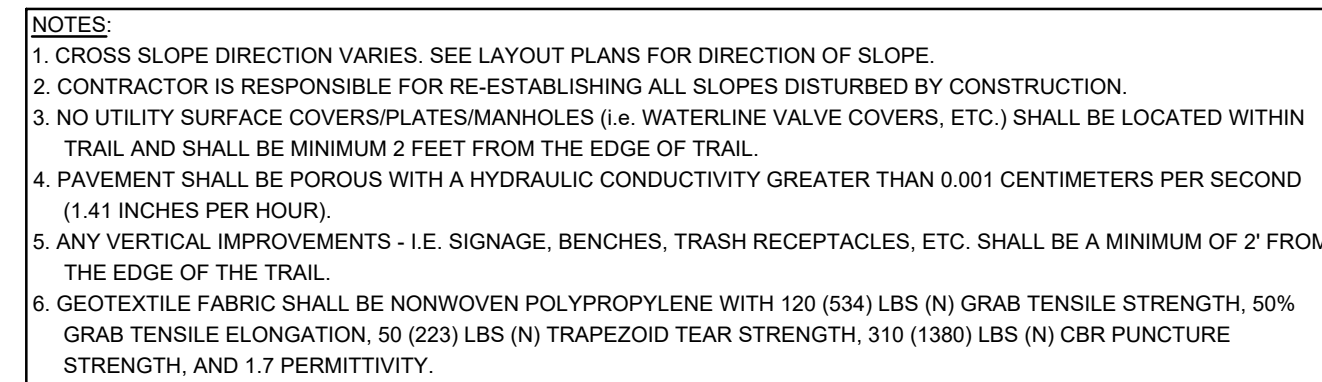
DEI PROJECT NO: 50181675

SHEET NO.

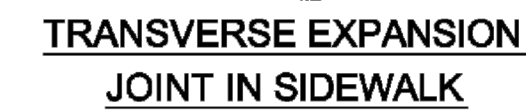
C6.03



PERVIOUS CONCRETE SIDEWALK
N.T.S.



GRAVEL HIKING TRAIL
N.T.S.



FOR CONCRETE SIDEWALK

VILLAGE OF MARVIN, NC	CONCRETE SIDEWALK	STD. 3.01	REVISIONS			
			NO	DATE	BY	COMMENT

100% CONSTRUCTION DOCUMENTS

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

SCALE:

REVISIONS			
	05/29/25	DLJ	AGENCY COMMENTS
	02/24/25	DLJ	95% REVIEW SET
	01/28/25	DLJ	70% REVIEW SET
NO.	DATE	BY	DESCRIPTION

TITLE

DEI PROJECT NO: 50181675

SHEET NO.

C6.04

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE:

REVISIONS			
②	01/28/25	DLJ	70% REVIEW SET
①	11/08/24	BML	30% REVIEW SET
NO.	DATE	BY	DESCRIPTION

DRAWN BY BJN

APPROVED BY BML

— CHECKED BY DLJ

DATE AUGUST 28, 2024

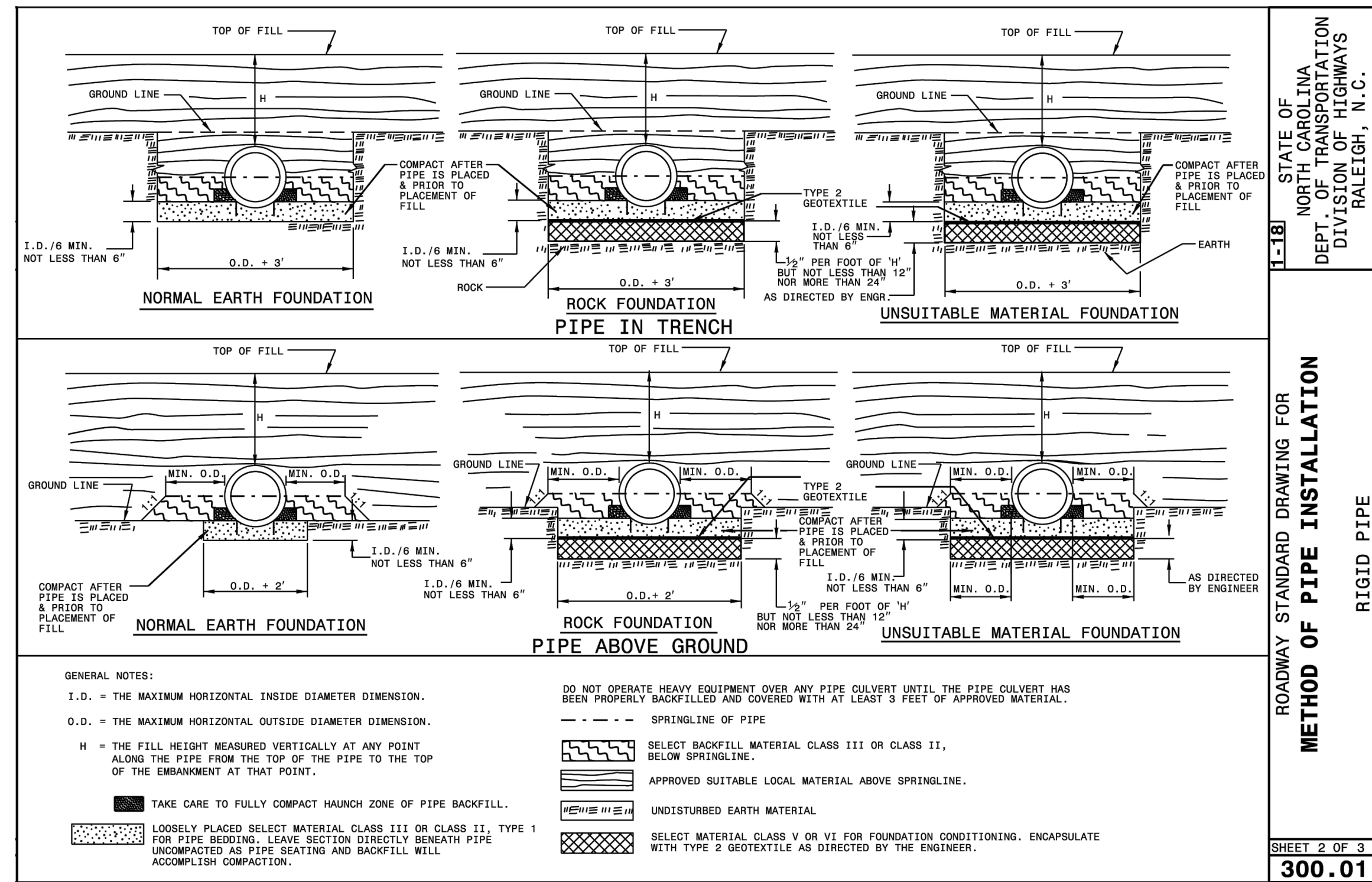
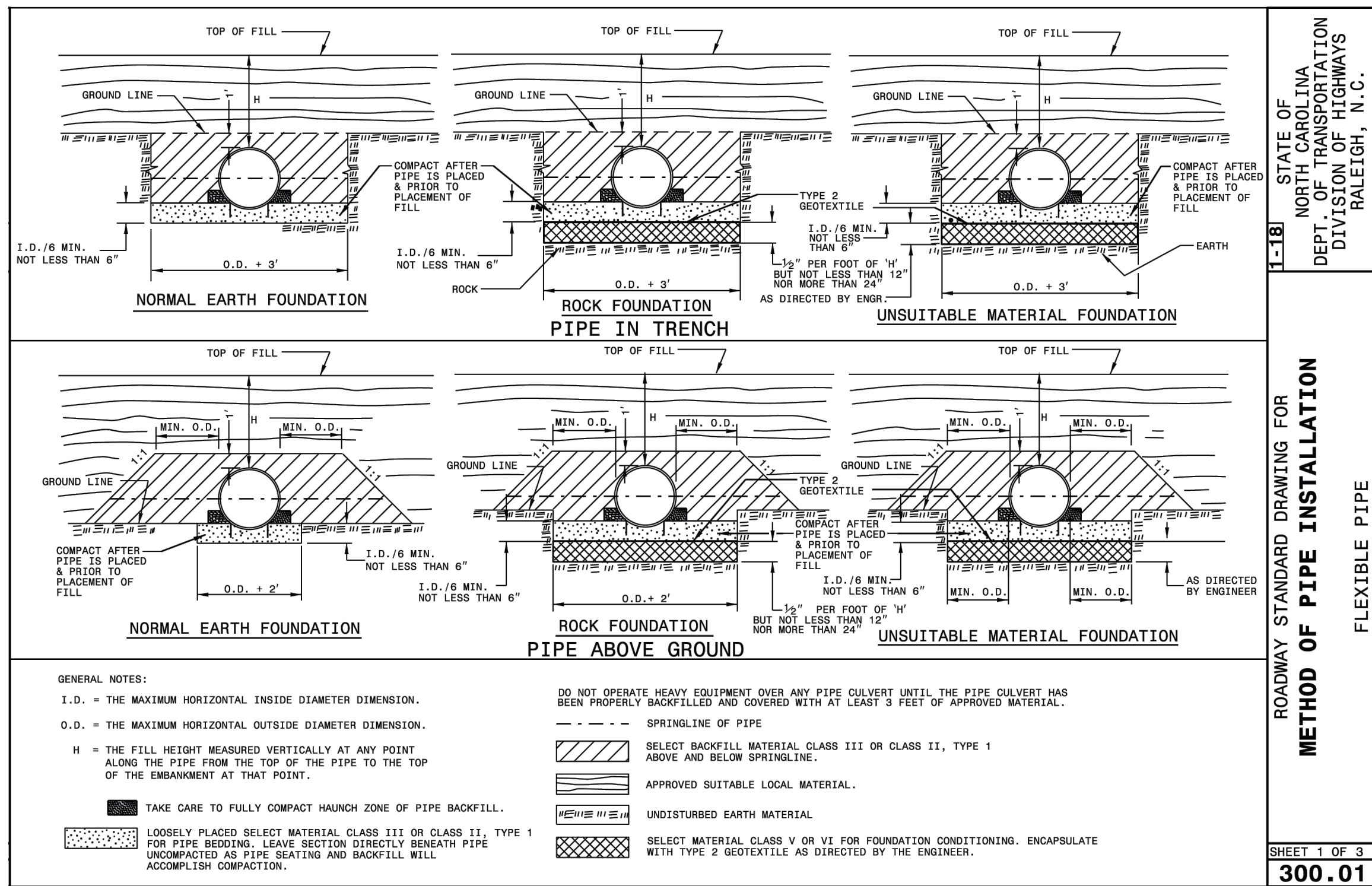
TITLE

STORMWATER
DETAILS
(SHEET 2 OF 4)

DEI PROJECT NO: 50181675

SHEET NO.

C6.05



FLEXIBLE PIPE

Round Corrugated Steel Pipe						
2 2/3 x 1/2 corrugation **						
Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)				
		(Ga) 16	14	12	10	8
12	12	204	256			
15	12	182	204			
18	12	135	169	239		
21	12	115	145	204		
24	12	100	126	178		
30	12	79	100	142		
36	12	65	83	117	152	
42	12	55	70	100	130	160
48	12	61	87	113	139	
54	12		54	77	100	123
60	12			69	90	111
66	12				81	100
72	12				74	81
78	12					81
84	12					69

HDPE	-	*	(Minimum fill)	2'	for pipe diameters ≥ 12" and ≤ 60"
		*	(Maximum fill)	20"	for pipe diameters ≤ 24"
				17'	for pipe diameters ≥ 30" and ≤ 60"
PVC	-	*	(Minimum fill)	2'	for pipe diameters ≥ 12" and ≤ 36"
		*	(Maximum fill)	30'	for pipe diameters ≥ 12" and ≤ 36"

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

RIGID PIPE

RCP	-	*	(Minimum fill)	1'	for Class IV & CLASS V
				2'	for Class III & Class II
		*	(Maximum fill)	10'	- Class II pipe
				20'	- Class III pipe
				30'	- Class IV pipe
				40'	- Class V pipe

(For fills > 40' & < 80' use LRFD Direct Design Method)

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

Round Corrugated Aluminum Pipe

2 2/3 x 1/2 corrugation **

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)				
		(Ga) 16	14	12	10	8
12	12	123	155	218	281	344
15	12	98	123	174	224	275
18	12	81	102	144	187	228
21	12	69	87	123	160	195
24	12	60	76	108	139	171
27	12		67	95	123	151
30	12		60	85	111	136
36	12		50	71	92	113
42	12			60	78	96
48	12			52	68	84
54	12			46	50	74
60	12				50	62
66	12					51
72	12					41

** FOR DIFFERENT CORRUGATIONS AND ARCH TYPES REFER TO ROADWAY DESIGN MANUAL OR MANUFACTURERS SPECIFICATION.

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

CSP	-	AASHTO M36
CAAP	-	AASHTO M196
HDPE	-	AASHTO M294
PVC	-	ASTM F349 or AASHTO M304

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

RCP	-	AASHTO M170
-----	---	-------------

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

ROADWAY STANDARD DRAWING FOR

METHOD OF PIPE INSTALLATION

SHEET 3 OF 3
300.01


100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE:

REVISIONS			
	01/28/25	DLJ	70% REVIEW SET
NO.	DATE	BY	DESCRIPTION

DRAWN BY BJN

APPROVED BY BML

CHECKED BY DLJ

DATE AUGUST 28, 2024

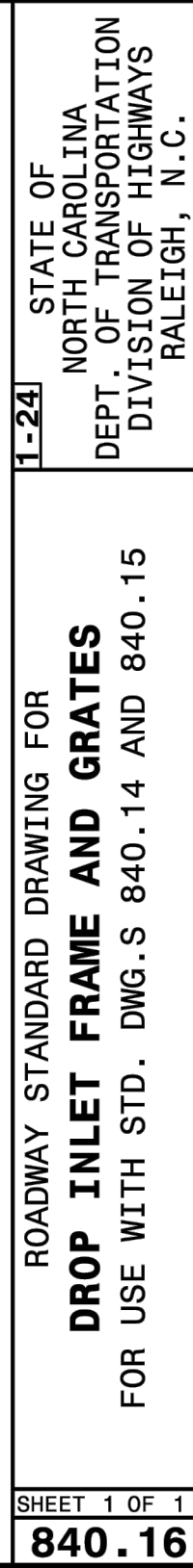
TITLE

STORMWATER
DETAILS
(SHEET 3 OF 4)

DEI PROJECT NO: 50181675

SHEET NO.

C6.06



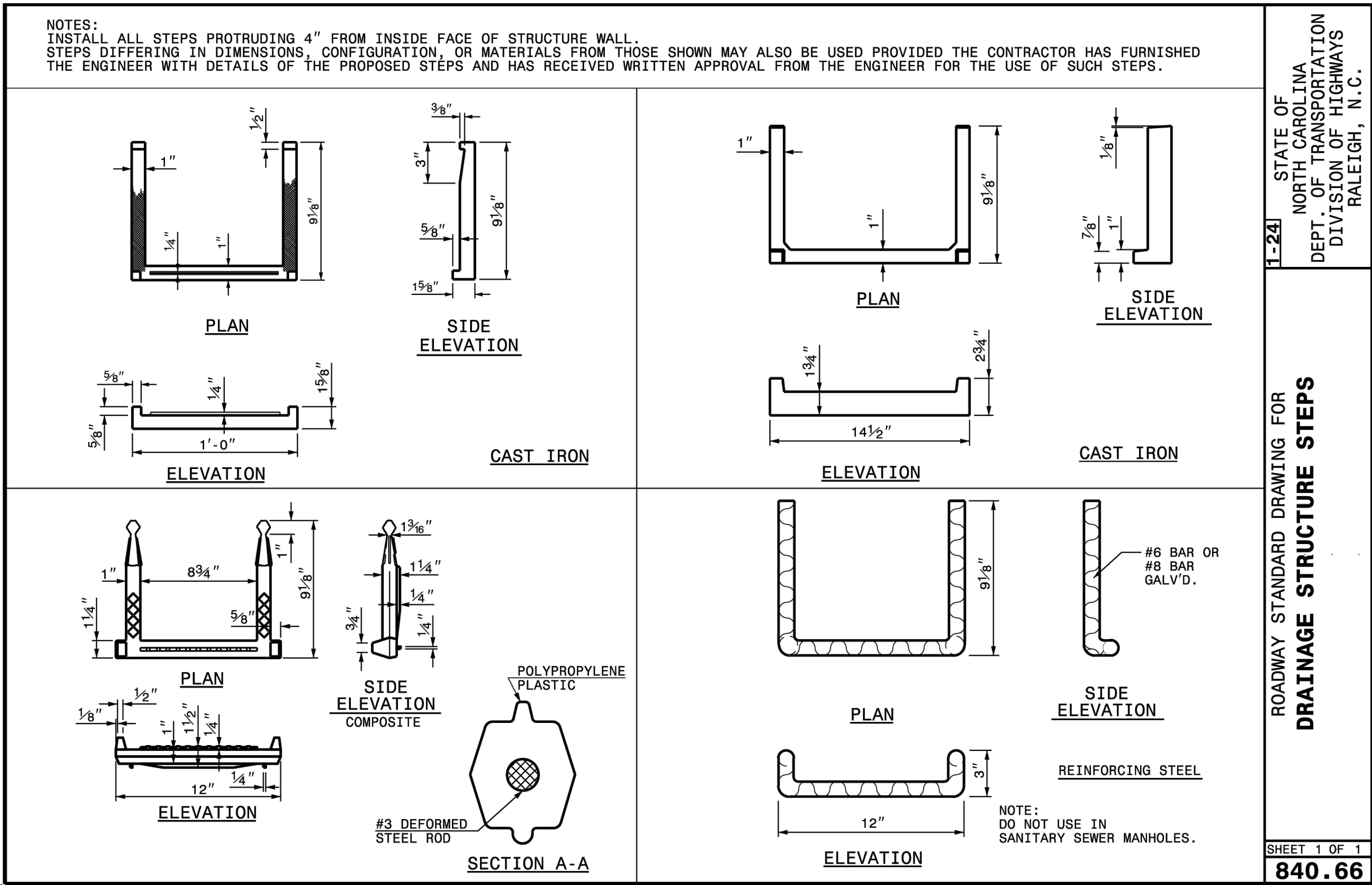
E

D

C

B

A



NOTES:

1. CLASS OR MEDIAN SIZE OF RIPRAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
2. REFER TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCEQ) EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL SECTION 6.41 FOR RIPRAP APRON DESIGN STANDARDS.
3. RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THRODS THE PIPE DIAMETER OR CULVERT HEIGHT.
4. THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIPRAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
5. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1.
6. ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
7. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
8. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
9. FILTER FABRIC SHALL BE INSTALLED ON COMPACTED SUBGRADE PRIOR TO PLACEMENT OF RIPRAP.
10. ANY DISTURBED AREA FROM END OF APRON TO RECEIVING CHANNEL MUST BE STABILIZED. USE USDA NOMOGRAPH FROM NC SEDIMENT AND EROSION CONTROL MANUAL FOR DESIGN DATA.

RIP RAP SUMMARY CHART					
OUTLET	L _o	W ₁	W ₂	T*	H
A10-FES	10.0'	11.0'	2.0'	1.0'	0.5'

* d50 (see fig 8.06 aka "NC SEDIMENT AND EROSION CONTROL MANUAL")
d_{max} = 1.5 x d50
T = 1.5 x d_{max}

RIPRAP APRON AT PIPE OUTFALLS

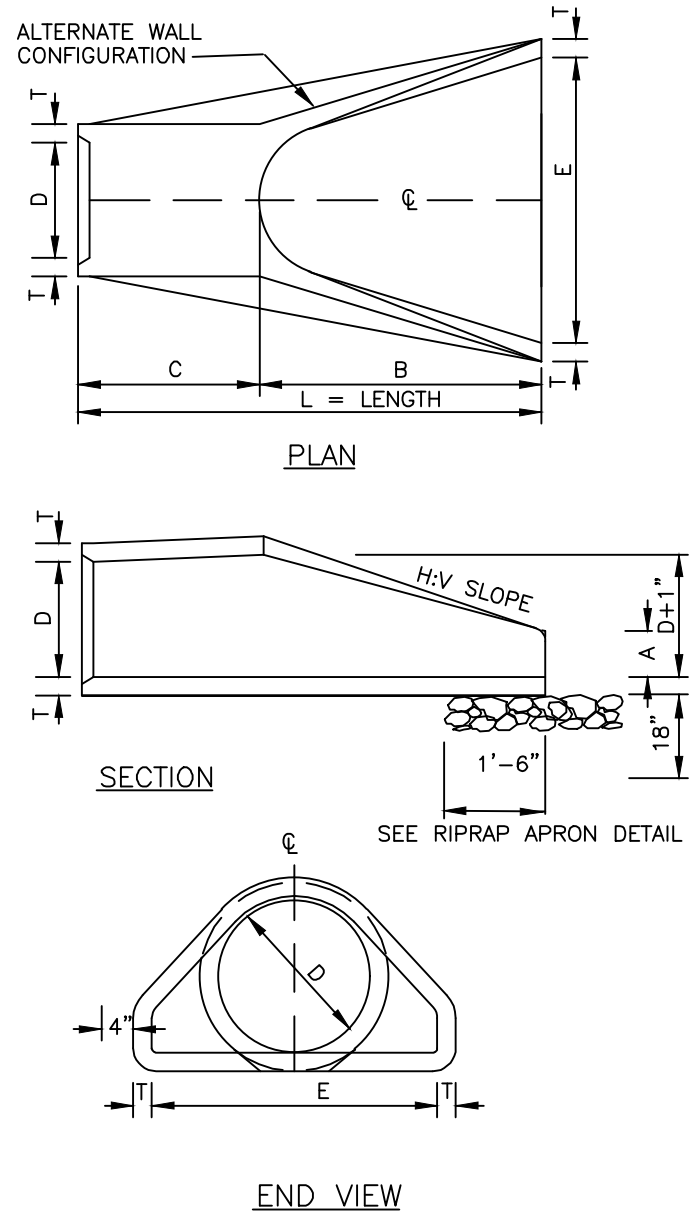
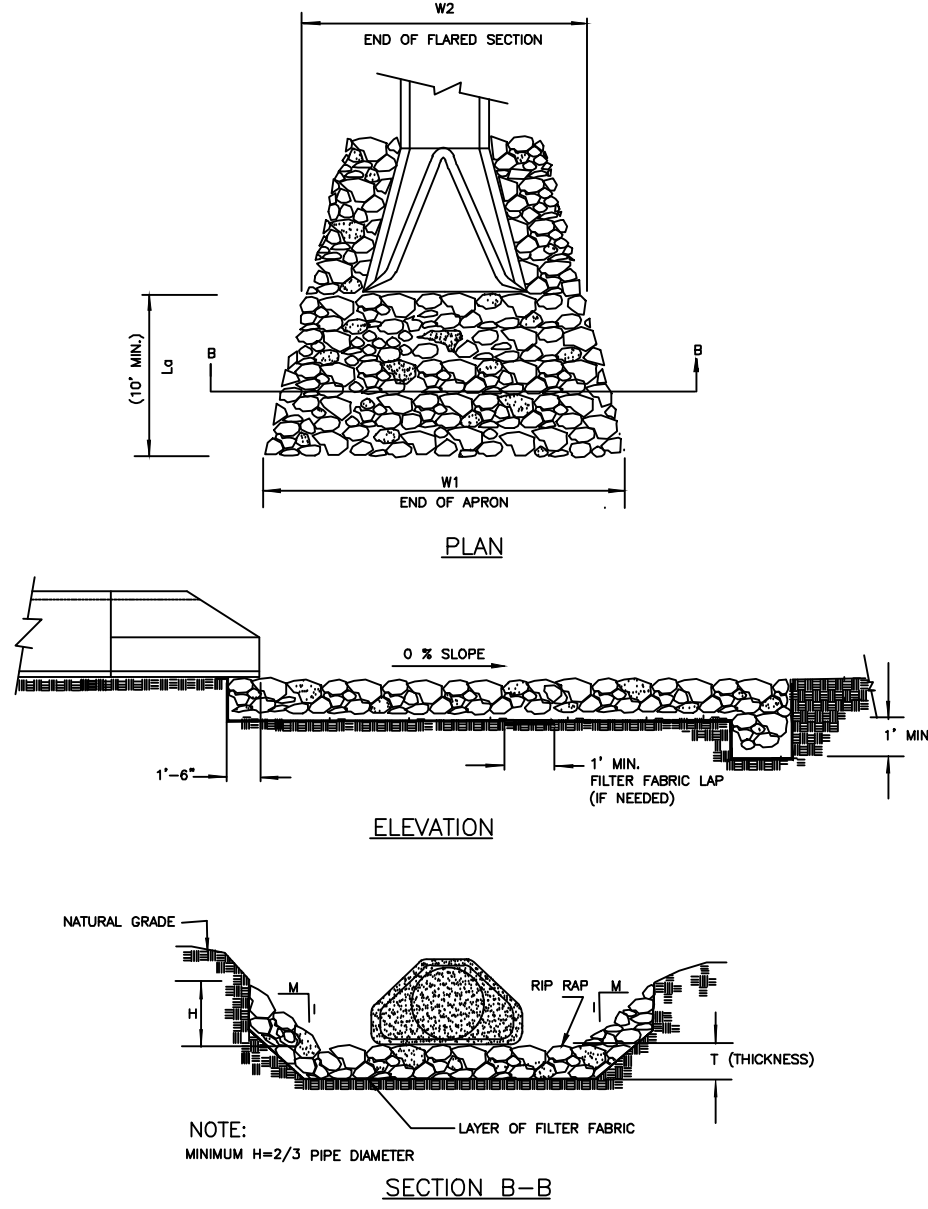


TABLE OF DIMENSIONS									
D	T	A	B	C	E	L	HV	WT.	
12"	2'-1/4"	4"	2'-0"	4'-1"	2'-0"	6'-1"	3:1	730	
15"	2'-1/4"	6"	2'-3"	3'-10"	2'-0"	6'-1"	3:1	730	
18"	2'-1/2"	9"	2'-3"	3'-10"	3'-0"	6'-1"	3:1	1190	
24"	3"	10"	3'-8"	2'-6"	4'-0"	6'-2"	3:1	1770	
30"	3'-1/2"	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"	3:1	2380	
36"	4"	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	3:1	5320	
42"	4'-1/2"	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	3:1	5920	
48"	5"	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	3:1	7470	
54"	5'-1/2"	2'-3"	5'-6"	2'-10"	7'-6"	8'-4"	3:1	8810	
60"	6"	2'-6"	5'-0"	3'-3"	8'-0"	8'-3"	3:1	11180	
66"	6'-1/2"	3'-0"	6'-0"	2'-3"	8'-6"	8'-3"	3:1	12530	
72"	7"	3'-0"	6'-6"	1'-9"	9'-0"	8'-3"	3:1	13980	

GENERAL NOTES:

1. SEE FORMER NCDOT STANDARD 310.01 FOR DETAILS.
2. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170, TABLE 2, WALL B.
3. ALL CONCRETE TO BE 4000 P.S.I. COMPRESSIVE STRENGTH.
4. PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
5. PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
6. THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD FORMS AND TEMPLATES.
7. NOT TO BE USED IN NCDOT MAINTAINED RIGHT OF WAY.

FLARED END SECTION
12" THRU 72" PIPE



Dewberry Engineers Inc.
6300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA

SEAL

PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION

KEY PLAN:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
Δ	05/29/25	DLJ	AGENCY COMMENTS
Δ	01/28/25	DLJ	70% REVIEW SET

DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024

TITLE

STORMWATER
DETAILS
(SHEET 4 OF 4)

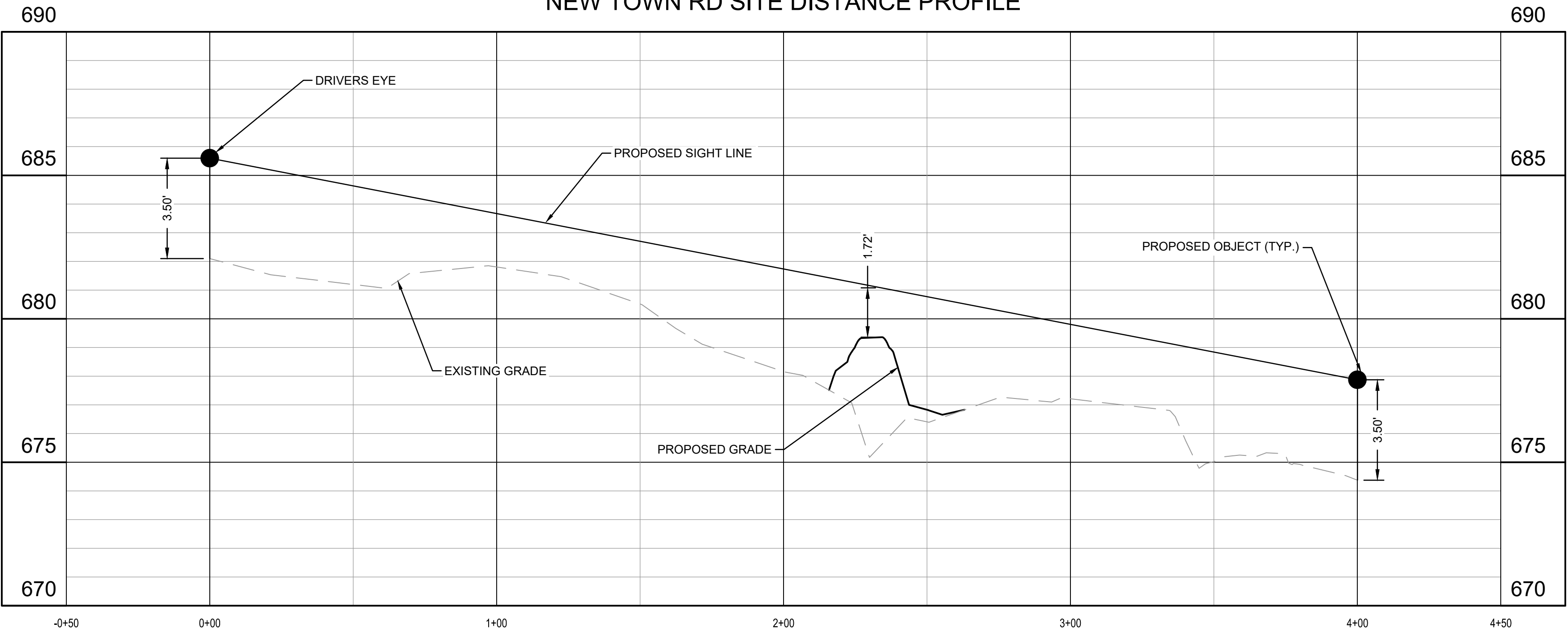
DEI PROJECT NO: 50181675

SHEET NO.

C6.07

NOTE TO OWNER:
OWNER IS RESPONSIBLE TO REMOVE EXISTING TREES/OBSTRUCTIONS LOCATED WITHIN SIGHT LINE. PERMISSION FROM ADJACENT PROPERTY OWNER IS REQUIRED PRIOR TO TREE/OBSTRUCTIONS REMOVAL FROM ADJACENT PROPERTY. IF TREES ARE ONLY TRIMMED AND NOT FULLY REMOVED AN EASEMENT WILL BE REQUIRED IN ORDER TO MAINTAIN CLEAR SIGHT DISTANCE.

NEW TOWN RD SITE DISTANCE PROFILE



SCALE:
H: 1" = 30'
V: 1" = 3'



SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 30'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	05/29/25	DLJ	AGENCY COMMENTS
2	02/25/25	DLJ	95% REVIEW SET

DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024

TITLE

**SIGHT DISTANCE
PLAN & PROFILE**

DEI PROJECT NO: 50181675

SHEET NO.

C7.01

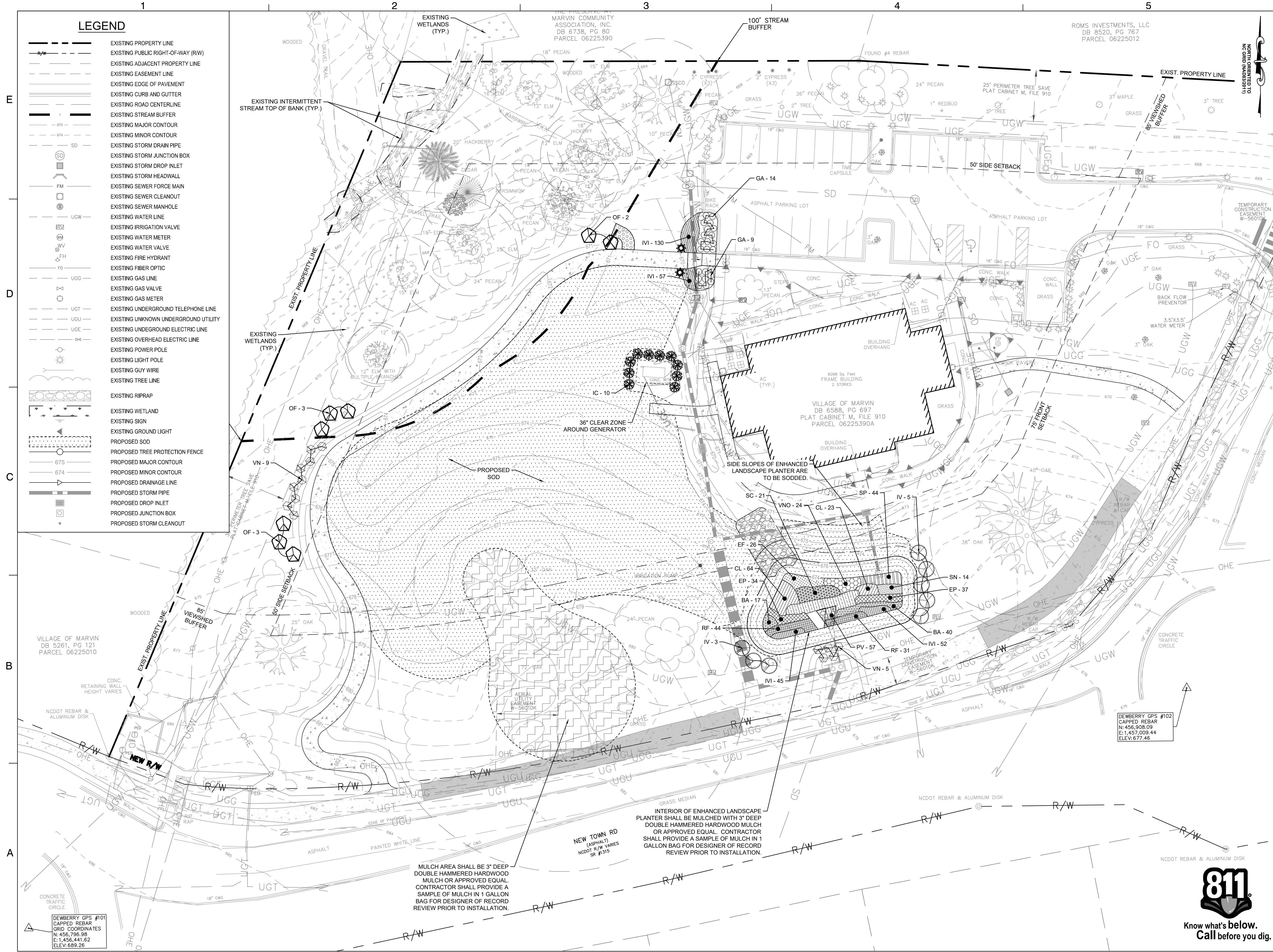
Dewberry
Dewberry Engineers Inc.
6300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0029
NCBOLA #C-478

**VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1**

100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA





LEGEND

- EXISTING PROPERTY LINE
- EXISTING PUBLIC RIGHT-OF-WAY (R/W)
- EXISTING ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB AND GUTTER
- EXISTING ROAD CENTERLINE
- EXISTING STREAM BUFFER
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING STORM DRAIN PIPE
- EXISTING STORM JUNCTION BOX
- EXISTING STORM DROP INLET
- EXISTING STORM HEADWALL
- EXISTING SEWER FORCE MAIN
- EXISTING SEWER CLEANOUT
- EXISTING SEWER MANHOLE
- EXISTING WATER LINE
- EXISTING IRRIGATION VALVE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING FIBER OPTIC
- EXISTING GAS LINE
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING UNKNOWN UNDERGROUND UTILITY
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING GUY WIRE
- EXISTING TREE LINE
- EXISTING RIPRAP
- EXISTING WETLAND
- EXISTING SIGN
- EXISTING GROUND LIGHT
- PROPOSED SOD
- PROPOSED TREE PROTECTION FENCE
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED DRAINAGE LINE
- PROPOSED STORM PIPE
- PROPOSED DROP INLET
- PROPOSED JUNCTION BOX
- PROPOSED STORM CLEANOUT

Dewberry Engineers Inc.
6300 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0929
NCBOLA #C-478

VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1
100% CONSTRUCTION DOCUMENTS

SEAL
**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 20'

REVISIONS			
NO.	DATE	BY	DESCRIPTION
Δ	05/29/25	DLJ	AGENCY COMMENTS
Δ	02/24/25	DLJ	95% REVIEW SET
Δ	01/28/25	DLJ	70% REVIEW SET
Δ	11/08/24	BML	30% REVIEW SET

DRAWN BY: BJN
APPROVED BY: BML
CHECKED BY: DLJ
DATE: AUGUST 28, 2024
TITLE:

LANDSCAPING
PLAN
L1.01

Know what's below.
Call before you dig.



VILLAGE OF MARVIN
VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

0006 MARVIN SCHOOL ROAD
MARVIN, NORTH CAROLINA



1. THE UNDERDRAIN COLLECTION SYSTEM SHOULD BE EQUIPPED WITH 6-INCH MINIMUM PERFORATED SCHEDULE 40 OR STRONGER PVC PIPE OR DOUBLE WALL HDPE PIPE. PERFORATIONS SHALL BE PER AASHTO M278 FOR PVC PIPE, AASHTO M252 FOR DOUBLE WALL HDPE PIPE, OR BE 3/8-INCH IN DIAMETER SPACED 3 INCHES ON CENTER ALONG A LONGITUDINAL ROWS THAT ARE SPACED 90" APART. THE PIPES SHALL HAVE A MINIMUM SLOPE OF 0.5% AND A MAXIMUM SPACING OF 10 FEET ON CENTER.
2. CLEANOUTS OF 6-INCH SOLID PVC MUST BE PROVIDED FOR EVERY 50 LINEAR FEET OF UNDERDRAIN, AT ALL BENDS, AND ENDS OF THE SYSTEM FOR MAINTENANCE PURPOSES. THE TOP OF THE CLEANOUTS SHOULD EXTEND 6 INCHES ABOVE THE TOP OF FILTER AND HAVE A WATERTIGHT, VANDAL PROOF CAP. AT LEAST ONE CLEANOUT SHALL BE INSTALLED AS AN EMERGENCY DRAIN THAT IS FLUSH WITH THE TOP OF FILTER AND HAVE A 6-INCH THREADED EXTENSION PIPE. THE FURTHEST CLEANOUT FROM THE OUTLET MUST HAVE THE MINIMUM REQUIRED FILTER MEDIA DEPTH.
3. THE MEDIA MIX SHALL CONSIST OF THE FOLLOWING:
 - 3.1. 75-80% PERCENT MEDIA TO COARSE WASHED SAND (ASTM C33),
 - 3.2. 8-10% PERCENT FINES (SILT AND CLAY), AND
 - 3.3. 5-10% PERCENT ORGANIC MATTER (SUCH AS PINE BARK FINES).
4. ALL DRAINAGE AREAS TO THE ENHANCED LANDSCAPE PLANTER AREA TO BE STABILIZED PRIOR TO THE INSTALLATION OF THE MEDIA MIX.
5. THE DESIGNER OF RECORD MUST VERIFY AND IN PLACE THE DRAINAGE AREA IS PROPERLY STABILIZED, MEASURES ARE IN PLACE TO PREVENT SEDIMENTATION INTO THE BMP. THE STORM DRAINS, INLETS, AND PAVEMENT HAVE BEEN PROPERLY CLEANED PRIOR TO COMMENCEMENT OF BMP CONSTRUCTION.

CONTRACTOR SHALL PROVIDE OWNER AND ENGINEER PHOTOS OF THE CONSTRUCTION OF THE UNDERDRAIN , INSTALLATION OF MEDIA MIX, AND THE FULLY COMPLETED ENHANCED LANDSCAPE PLANTER PRIOR TO PROJECT CLOSEOUT.



USE 12 INCH DIAMETER VALUES FOR PIPE DIAMETERS
LESS THAN 12 INCH.



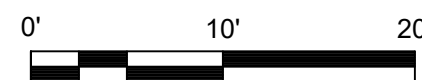
Know what's below.
Call before you dig

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 10'



REVISIONS

3	05/29/25	DLJ	AGENCY COMMENTS
2	02/24/25	DLJ	95% REVIEW SET
1	01/28/25	DLJ	70% REVIEW SET
NO.	DATE	BY	DESCRIPTION

DRAWN BY BJN

APPROVED BY BML

CHECKED BY DLJ

DATE AUGUST 28, 2024

TITLE ENHANCED LANDSCAPE PLANTER DETAILS (ELP-1)

DEI PROJECT NO: 50181675

SHEET NO

L1.02

