

DRAWING INDEX

CIVIL

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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)
 CIVIC

PRINCIPAL USES:
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

LOCATION MAP



CONTACTS

OWNER:
 VILLAGE OF MARVIN
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 RECREATION ACTIVITIES COORDINATOR
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LANDSCAPE ARCHITECT:
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SUBMITTAL		SET NUMBER
<input type="checkbox"/> PRELIMINARY	<input type="checkbox"/> CONSTRUCTION	
<input checked="" type="checkbox"/> APPROVAL	<input type="checkbox"/> REVISION	
<input type="checkbox"/> BIDDING	<input type="checkbox"/> RECORD	

VILLAGE OF MARVIN

VILLAGE HALL PARK PHASE 1

100% CONSTRUCTION DOCUMENTS

10006 MARVIN SCHOOL ROAD

MARVIN, NORTH CAROLINA 28173

VICINITY MAP



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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

GENERAL NOTES

- 1. BASE DATA FROM UNION COUNTY GIS AND FIELD SURVEY PERFORMED BY DEWBERRY ENGINEERS INC. ON JULY 12, 2024. WETLAND DELINEATION PERFORMED BY DYLAN IRBY WITH DEWBERRY ENGINEERS INC.
2. EXISTING PROPERTY LINE SHOWN ON PLANS BASED ON FIELD LOCATED PROPERTY CORNERS AND NOT BASED ON A CERTIFIED BOUNDARY SURVEY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ILLUSTRATED KNOWN UNDERGROUND ELEMENTS. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXERCISING REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. THE CONTRACTOR SHALL NOTIFY THE OWNER AND DESIGNER OF RECORD IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE ILLUSTRATED DESIGN.
4. PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC, AND ALL OF THE OWNER'S FACILITIES. SHOULD DAMAGES OCCUR, CONTRACTOR SHALL REPAIR IMMEDIATELY AS DIRECTED BY THE OWNER OR DESIGNER OF RECORD. REPAIRS SHALL BE MADE AT NO COST TO THE VILLAGE/OWNER.
5. CONTRACTOR SHALL HOLD HARMLESS THE OWNER AND THE DESIGNER OF RECORD FOR DAMAGES, INJURIES OR OTHER ACCIDENTS WHICH OCCUR DURING THESE CONSTRUCTION ACTIVITIES.
6. TREES AND EXISTING LANDSCAPING NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES DURING CONSTRUCTION INCLUDING DAMAGES TO OTHER CONTRACTORS & CONSULTANTS WORK AND SHALL MAKE REPAIRS OR HAVE REPAIRS MADE BY OTHERS AT THEIR EXPENSE.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION ADJUSTMENTS OF ALL EXISTING VAULTS (REGARDLESS OF FUNCTION), METER BOXES, FIRE HYDRANTS, CLEAN OUTS, MANHOLES ETC. TO MATCH FINISHED GRADES AND SITE PLAN. ALL SUCH WORK SHALL BE COORDINATED WITH THE DESIGNER OF RECORD AND OWNER.
9. UTILIZE SIGNS, BARRICADES, ETC. TO ENSURE THE SAFETY OF THE GENERAL PUBLIC.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LAYOUT OF ALL WORK AS ILLUSTRATED ON PLANS. IF EXISTING CONDITIONS DIFFER FROM THOSE ILLUSTRATED ON PLANS, NOTIFY DESIGNER OF RECORD AND VILLAGE/OWNER PRIOR TO CONSTRUCTION.
11. VERIFY ALL DIMENSIONS AND GRADES AT THE JOB SITE. IF DIFFERENCES ARE FOUND, NOTIFY DESIGNER OF RECORD SO THAT MODIFICATIONS TO THESE DRAWINGS CAN BE MADE.
12. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
13. ANY LAND DISTURBANCE ACTIVITY >1 ACRE REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (PERMIT NO NCGO10000). ANY PERMIT NONCOMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY. (FOR QUESTIONS CONTACT MOORESVILLE REGIONAL OFFICE WATER QUALITY STAFF AT 704-235-2100.
14. SPOT ELEVATIONS SHOWN ON THE PLANS ARE LOCATED AT THE BACK OF CURB UNLESS OTHERWISE SPECIFIED ON THE PLANS.
15. ALL SUBSURFACE DRAINAGE PIPE SHALL BE REINFORCED CONCRETE (RCP) PIPE, AS APPROVED BY THE VILLAGE OF MARVIN. PIPES IN R/W MUST BE RCP.
16. EXISTING TREES ON THIS SITE ARE RECOGNIZED AS A NATURAL MARKETING ASSET; THEREFORE, THE VILLAGE WILL ENDEAVOR TO RETAIN EXISTING TREES WHERE POSSIBLE THROUGHOUT THE SITE, ESPECIALLY IN THE OUTER BOUNDARY PERIMETER AREAS WHERE THE SITE ADJOINS OTHER PROPERTIES.
17. CONTRACTOR TO COORDINATE PLANTING LOCATIONS WITH THE VILLAGE OF MARVIN PRIOR TO PLACEMENT.

EROSION AND SEDIMENT CONTROL NOTES

- 1. IF THE SAME PERSON CONDUCTS THE LAND-DISTURBING ACTIVITY & ANY RELATED BORROW OR WASTE ACTIVITY, THE RELATED BORROW OR WASTE ACTIVITY SHALL CONSTITUTE PART OF THE LAND-DISTURBING ACTIVITY UNLESS THE BORROW OR WASTE ACTIVITY IS REGULATED UNDER THE MINING ACT OF 1971, OR IS A LANDFILL REGULATED BY THE DIVISION OF WASTE MANAGEMENT. IF THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR WASTE ACTIVITY ARE NOT CONDUCTED BY THE SAME PERSON, THEY SHALL BE CONSIDERED SEPARATE LAND-DISTURBING ACTIVITIES AND MUST BE PERMITTED EITHER THROUGH THE SEDIMENTATION POLLUTION CONTROL ACT AS A ONE-USE BORROW SITE OR THROUGH THE MINING ACT.
2. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF STATE LAW AND IS SUBJECT TO A FINE.
4. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE NCDEQ EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
5. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
6. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
7. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY THE EROSION CONTROL INSPECTOR.
8. DEWATERING TO BE AUTHORIZED BY THE EROSION CONTROL INSPECTOR AS RELATED TO SITE CONDITIONS. CONTRACTOR SHALL OBTAIN EROSION CONTROL INSPECTOR AUTHORIZATION PRIOR TO DEWATERING ACTIVITIES.
9. TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.
10. ALL EMBANKMENTS MUST BE CONSTRUCTED PER EMBANKMENT CONSTRUCTION NOTES PROVIDED ON SHEET C0.02.
11. SITE PREPARATION SHALL BE AS DIRECTED IN REPORT TITLED "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING SERVICES: VILLAGE HALL PARK - PHASE 1 MARVIN, NORTH CAROLINA" BY FROEHLING & ROBERTSON, INC. DATED SEPTEMBER 20, 2024. SLOPES GREATER THAN 10 VERTICAL FEET REQUIRE ADEQUATE TERRACING. SOILS ENGINEER TO VERIFY STABILITY OF SLOPES GREATER THAN 3:1.
12. SOIL COMPACTION TESTS ARE REQUIRED ON ANY BERM >= 5' IN HEIGHT FROM THE NATURAL GRADE. SOIL COMPACTION MUST BE AT 95% PROCTOR PER ASTM D-1557 AND CERTIFIED BY A LICENSED SOIL ENGINEER.
13. ALL LAND-DISTURBING ACTIVITIES, INCLUDING THOSE THAT DISTURB LESS THAN AN ACRE, SHALL PROVIDE ADEQUATE EROSION CONTROL MEASURES, STRUCTURES, OR DEVICES IN ACCORDANCE WITH THE NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
14. SURFACE WATER DRAW DOWN DEVICES (RISERS OR SKIMMERS) SHALL BE INSTALLED IN ALL SEDIMENT BASIN. ROCK COFFER FOREBAYS SHALL BE USED IN CONJUNCTION WITH ALL SEDIMENT BASINS. THE BASIN SHALL ALSO HAVE A VOLUME TWENTY-FIVE (25) PERCENT GREATER THAN THE 1,800 CUBIC FEET PER DRAINAGE ACRE, WHEN POSSIBLE.
15. POLYACRYLAMIDES (PAM) SHALL BE USED TO REDUCE TURBIDITY AND SUSPENDED SOLIDS WHENEVER A SEDIMENT TRAP, BASIN, PIT, HOLE, OR BUILDING FOUNDATION IS BEING PUMPED OUT TO REMOVE SEDIMENT LADEN WATER. PAM IS NOT REQUIRED WHEN ANY OF THE ABOVE IS BEING PUMPED TO AN APPROVED SEDIMENT BASIN ON SITE. THIS ACTIVITY MUST BE INSPECTED AND APPROVED BY THE NCDEQ EROSION CONTROL INSPECTOR. CONTRACTOR SHALL APPLY PAM AS DIRECTED BY MANUFACTURER.
16. POLYACRYLAMIDES MAY BE REQUIRED ON SITE, AS DETERMINED BY THE NCDEQ EROSION CONTROL INSPECTOR OR THEIR REPRESENTATIVE.
17. DOUBLE ROW OF HIGH HAZARD SILT FENCE WITH WIRE BACKING AND STONE SHALL BE USED ALONG WETLANDS, STREAMS, LAKES OR OTHER SURFACE WATER BODIES AS WELL AS ADJACENT TO ALL S.W.I.M. OR OTHER WATER QUALITY BUFFERS. SINGLE ROW OF SILT FENCE WITH WIRE BACKING AND WASHED STONE MAY BE REQUIRED ON ALL OTHER AREAS, AS DETERMINED NECESSARY BY THE TOWN ENGINEER OR FIELD INSPECTOR.
18. THE AMOUNT OF UNCOVERED AREA AT ANY ONE TIME SHALL BE LIMITED TO NO MORE THAN 20 ACRES, UNLESS APPROVED BY NCDEQ.
19. A 10-FOOT UNDISTURBED BUFFER SHALL BE PROVIDED AROUND THE OUTSIDE EDGE OF DRAINAGE FEATURES SUCH AS INTERMITTENT AND PERENNIAL STREAMS, PONDS, AND WETLANDS. INCIDENTAL DRAINAGE IMPROVEMENTS OR REPAIRS WILL BE PERMITTED WITHIN THE BUFFER AS APPROVED BY VILLAGE STAFF.
20. A GROUND COVER SUFFICIENT TO RESTRAIN ACCELERATED EROSION MUST BE PROVIDED WITHIN 7 CALENDAR DAYS OF THE DATE OF LAST LAND-DISTURBING ACTIVITY ON ANY PORTION OF THE PROJECT.
21. APPLY EROSION CONTROL MATTING TO DIVERSION DITCHES AND INTERIOR BASIN SLOPES AS SHOWN ON THE PLANS.
22. ALL BASIN SPILLWAYS SHALL BE SIZED TO PASS THE 50-YR STORM EVENT.
23. FILL SLOPE STEEPNESS SHALL BE LIMITED TO 3:1. SLOPES STEEPER THAN 3:1 MUST BE TERRACED OR OTHERWISE PROVIDE AN APPROVED ENGINEERED SOLUTION. SLOPES 3:1 OR FLATTER MUST BE DESIGNED AS SET FORTH IN THE NC SOIL EROSION & SEDIMENT PLANNING & DESIGN MANUAL, STANDARD 6.02A.
24. ALL PLANS WILL CARRY A "PERFORMANCE RESERVATION".

- 25. ALL SELF-INSPECTION LOG BOOK ENTRIES WILL BE ELECTRONICALLY SENT TO THE AREA INSPECTOR, WITHIN 2 WORKING DAYS OF A QUALIFYING RAIN EVENT OR WEEKLY (WHICHEVER IS SHORTER). FOR EROSION CONTROL BASINS WITH A DRAINAGE AREA GREATER THAN 10 ACRES, TURBIDITY MEASUREMENTS MAY BE REQUIRED AT THE DISCRETION OF THE NCDEQ EROSION CONTROL INSPECTOR TO MEASURE CLARITY OF BASIN EFFLUENT AND ANY POTENTIAL IMPACT TO RECEIVING WATERS AT THE TIME OF RAINFALL-TRIGGERED INSPECTIONS. READINGS MUST BE COLLECTED AT THE BASIN OUTFALL, (TO MEASURE CLARITY OF BASIN EFFLUENT), UPSTREAM OF THE DISCHARGE POINT (TO MEASURE BASELINE CONDITIONS) AND DOWNSTREAM OF THE DISCHARGE POINT (TO MEASURE STREAM IMPACTS OF THE BASIN EFFLUENT) WHEN POSSIBLE. THE RESULTS MUST BE LOGGED IN THE INSPECTION REPORTS.
26. AFTER CONSTRUCTION IS COMPLETED AND THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

THE SCOPE OF THIS PROJECT INCLUDES THE 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. THE DENUDED LIMITS FOR THE PROJECT ARE APPROXIMATELY 1.3 AC.

ADJACENT PROPERTY

IT DOES NOT APPEAR ADJACENT PROPERTIES SHALL BE AFFECTED BY THE PERFORMANCE OF WORK ASSOCIATED WITH THIS PROJECT.

CRITICAL AREAS

NO CRITICAL AREAS ARE WITHIN THE PROJECT LIMITS.

NCDEQ INSPECTOR: LILY KAY (704) 235-2137 LILY.KAY@DEQ.NC.GOV

MANAGEMENT STRATEGIES

- 1. CONSTRUCTION SHALL BE SEQUENCED SO THAT DISTURBANCE, CONSTRUCTION, AND STABILIZATION CAN BE ACHIEVED AS SOON AS PRACTICABLE.
2. HARDSCAPE INSTALLATION SHALL BEGIN IMMEDIATELY FOLLOWING RETURN TO EXISTING SUBGRADE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
4. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION & SEDIMENT CONTROLS SHALL BE CLEANED UP AND REMOVED IMMEDIATELY.

EROSION AND SEDIMENT CONTROL MEASURES

THE INTENT OF THE EROSION AND SEDIMENT CONTROLS SHOWN ON THESE DRAWINGS IS TO GUIDE THE CONTRACTOR IN IMPLEMENTING ACCEPTABLE MEASURES, INFRASTRUCTURE, AND MAINTENANCE PROGRAMS THAT WILL MINIMIZE THE AMOUNT OF EROSION AND RESULTING SEDIMENT THAT WILL TAKE PLACE DURING THE CONSTRUCTION OF THIS PROJECT.

EROSION AND SEDIMENT CONTROL MAINTENANCE

IN GENERAL, ALL THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED WEEKLY AND AFTER EACH 1/2" RAINFALL TO ENSURE THEY ARE IN WORKING ORDER. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- 1. INLET PROTECTION: SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE DESIGN DEPTH OF THE TRAP.
2. SILT FENCE SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT TO FUNCTION PER THE STANDARD DETAILS. WHEN/WHERE NECESSARY CONTRACTOR SHALL REPLACE/REPAIR DAMAGED SILT FENCE PER STANDARD DETAILS.

CONSTRUCTION SEQUENCE

PHASE 1:

- 1. OBTAIN ALL NECESSARY PERMITS FROM GOVERNMENT AGENCIES.
2. SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH THE EROSION CONTROL INSPECTOR.
3. INSTALL CONSTRUCTION ENTRANCE, CONCRETE WASHOUT, SILT FENCE, TREE PROTECTION FENCE, SKIMMER BASIN, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
4. INSTALL PERMANENT STORM DRAIN BYPASS PIPING FOR CLEAN WATER BYPASS. UPSTREAM END OF STORM DRAINAGE FOR CLEAN WATER BYPASS SHALL CONNECT TO EXISTING NCDOT 24" CMP CULVERT IMMEDIATELY UPSTREAM OF STRUCTURE A9-FD. DOWNSTREAM END OF STORM DRAINAGE SHALL CONNECT TO EXISTING DROP INLET IMMEDIATELY DOWNSTREAM OF A3-JB. OPENING FOR 8" PVC PIPE ON STRUCTURE A9-FD SHALL REMAIN PLUGGED DURING CONSTRUCTION UNTIL SKIMMER BASIN SB-B IS CONVERTED INTO AN ENHANCED LANDSCAPE PLANTER.
5. CALL FOR ON-SITE INSPECTION BY INSPECTOR. ONCE THE INSPECTOR REVIEWS ALL MEASURES IN THE FIELD, INCLUDING PERMANENT STORM DRAIN BYPASS PIPING, AND DEEMS THEM ACCEPTABLE, A GRADING PERMIT WILL BE ISSUED.
6. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL AND U.S. DEPARTMENT OF AGRICULTURE STANDARDS.
7. BEGIN CLEARING, GRUBBING, AND DEMOLITION OPERATIONS.

PHASE 2:

- 1. COMMENCE WITH ROUGH GRADING OF THE SITE
2. VERIFY SILT FENCE AND OTHER MEASURES INSTALLED DURING PHASE 1 ARE STILL PROVIDING PROTECTION TO KEEP SEDIMENT FROM LEAVING THE SITE. ADJUST MEASURES AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING PROJECT LIMITS.
3. INSTALL ADDITIONAL RUNOFF PREVENTION MEASURES SHOWN ON PLANS.
4. INSTALL PERMANENT STORM PIPES, STRUCTURES, AND UTILITIES AS SHOWN ON PLANS. CONTRACTOR SHALL CALL FOR ON-SITE INSPECTION BY INSPECTOR. INSPECTOR SHALL VERIFY INSTALLATION OF STORM PIPES AND STRUCTURES AND THAT SITE DRAINAGE PATTERNS MATCH CONDITIONS SHOWN ON THE PHASE 2 ESC PLAN.
5. COMMENCE FINE GRADING OF THE SITE.
6. COMMENCE PAVING, INSTALLATION OF SIDEWALKS AND TRAILS, AND BRING ALL GRADES TO FINAL GRADES AS SHOWN ON PLANS.
7. STABILIZE ALL DENUDED AREAS. ONCE THE SITE HAS BEEN STABILIZED, CONTRACTOR SHALL CONVERT THE SEDIMENT BASINS INTO ENHANCED LANDSCAPE PLANTERS AS SHOW ON THE PLANS. CONTRACTOR SHALL CLEAN OUT SEDIMENT THAT HAS ACCUMULATED IN THE BASINS DURING EROSION CONTROL PHASES.
8. ONCE CONSTRUCTION IS COMPLETE, COORDINATE WITH EROSION CONTROL INSPECTOR FOR FINAL SITE INSPECTION.

GENERAL DEMOLITION NOTES

- 1. SAW CUT AND REMOVE ALL ASPHALT AND CONCRETE TO LIMITS REQUIRED FOR PROPOSED WORK. SAW CUTS FOR CONCRETE SHALL OCCUR AT THE NEAREST CONTROL JOINT OR EXPANSION JOINT. SAW CUTS BETWEEN CONTROL JOINTS ARE NOT ACCEPTABLE. ALL DECORATIVE SCORING PATTERNS SHALL BE REPLACED TO THE OWNER'S SATISFACTION. CONTRACTOR SHALL DOCUMENT AND PHOTOGRAPH ALL DECORATIVE SCORING PATTERNS PRIOR TO DEMOLITION.
2. REMOVE VEGETATION, GRASS, & ROOTMATS IN AREAS TO RECEIVE NEW ASPHALT AND CONCRETE PAVEMENTS.
3. ALL PRIMARY UTILITIES DISCOVERED DURING DEMOLITION OPERATIONS SHALL BE PROPERLY PRESERVED AND PROTECTED.
4. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY UNFORESEEN OR ADVERSE CONDITIONS DISCOVERED DURING DEMOLITION OPERATIONS.
5. CONTRACTOR SHALL PROTECT EXISTING PLANT MATERIAL NOT DESIGNATED FOR REMOVAL OR RELOCATION FROM DAMAGE DURING CONSTRUCTION.
6. CONTRACTOR SHALL KEEP ALL SURROUNDING PUBLIC ROADWAYS AND DRAINAGE SYSTEMS FREE FROM DIRT, MUD, AND CONSTRUCTION DEBRIS AT ALL TIMES.
7. CONTRACTOR SHALL REMOVE ASPHALT PAVEMENT, CONCRETE AND MISCELLANEOUS ITEMS AS NECESSARY TO FACILITATE CONSTRUCTION IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY ITEMS DAMAGED DURING THE CONSTRUCTION.
9. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, FOOTING, AND SLABS WITHIN THE PROJECT LIMITS TO FULL DEPTH OR AS INDICATED ON THESE PLANS.
10. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEBRIS AND CONSTRUCTION WASTE AT A LANDFILL LEGALLY ABLE TO ACCEPT SUCH MATERIAL IN THE STATE OF NORTH CAROLINA.

GRADING NOTES

- 1. ALL STORM STRUCTURES SHALL MEET CURRENT NCDOT STANDARDS APPROVED FOR USE IN THE VILLAGE OF MARVIN UNLESS OTHERWISE NOTED.
2. ALL STORM INLETS LABELED "CB" SHALL BE GRATE TYPE INLETS (NCDOT 840.02).
3. ALL STORM STRUCTURES LABELED "JB" SHALL BE JUNCTION BOXES (NCDOT 840.52).
4. ALL STORM STRUCTURES LABELED "DI" SHALL BE GRATE DROP TYPE INLET (NCDOT 840.14 & 840.17 IF PIPE GREATER THAN 30" DIA.).
5. THE MINIMUM COVER FOR CLASS III RCP SHALL BE 2'. WHERE 2' OF COVER CANNOT BE PROVIDED THE PIPE SHALL BE CLASS IV.
6. ALL INCOMING PIPES SHALL BE CUT FLUSH WITH THE INSIDE OF STORM STRUCTURES AND THE INVERTS GROUTED AND TROWELED TO PROVIDE POSITIVE DISCHARGE THROUGH THE STRUCTURE.
7. ALL STORM DRAINAGE STRUCTURES GREATER THAN 42" DEPTH SHALL HAVE STEPS CAST INTO THEM.
8. RIM ELEVATIONS FOR CATCH BASINS ARE AT THE CENTER OF THE GRATE AT THE EDGE OF PAVEMENT. RIM ELEVATIONS FOR DROP INLETS AND MANHOLES ARE AT THE CENTER OF THE LID OR GRATE.
9. ALL SPOT ELEVATIONS SHOWN ARE TOP BACK OF CURB (BC) UNLESS OTHERWISE NOTED.
10. ALL SIDEWALKS AND PAVED AREAS FOR PEDESTRIAN TRAFFIC SHALL BE GRADED IN ACCORDANCE WITH THE 2010 ADA GUIDELINES AND SHALL HAVE A CROSS SLOPE OF 1.5% PREFERRED, 2% MAXIMUM. THE LONGITUDINAL SLOPE OF WALKS SHALL NOT EXCEED 5% UNLESS THESE DRAWINGS INDICATE A RAMP CONDITION. ANY LANDINGS, AND LOADING AREA ADJACENT TO BUS STOP SHALL NOT HAVE A SLOPE GREATER THAN 2% IN ANY DIRECTION.
11. WHERE ADJACENT PLACEMENT SLOPES AWAY FROM THE PROPOSED CURB & GUTTER THE CONTRACTOR SHALL PROVIDE SPILL CURB.
12. IN ORDER TO ENSURE PROPER DRAINAGE, CURB SHALL HAVE A MINIMUM OF 0.5% SLOPE, UNLESS SPILL CURB IS INDICATED ON THE PLANS. SHADED CURB & GUTTER INDICATES LOCATION FOR SPILL CURBS.
13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING POSITIVE DRAINAGE AT ALL INTERSECTIONS. SPECIAL CARE MUST BE TAKEN WHERE SPILL CURB IS CALLED OUT.
14. NO STORM PIPE SHALL BE INSTALLED WITHIN THE S.W.I.M. BUFFERS.
15. GENERALLY, SOIL MATERIALS FOR CONSTRUCTION SHALL BE AS RECOMMENDED IN THE GEOTECHNICAL REPORT TITLED "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING SERVICES: VILLAGE HALL PARK - PHASE 1 MARVIN, NORTH CAROLINA" PREPARED BY FROEHLING & ROBERTSON, INC. DATED SEPTEMBER 20, 2024.
16. FILL AND BACKFILL MATERIAL SHALL CONSIST OF SOIL, GRANULAR SAND, GRAVEL, AND COBBLE MATERIAL, FREE FROM FROZEN MATERIAL, ORGANIC MATERIAL, TRASH, GLASS, BROKEN CONCRETE, AND OTHER CORROSIVE OR DELETERIOUS MATERIAL. APPROVAL OF FILL AND BACKFILL MATERIAL IS CONTINGENT ON THE MATERIAL HAVING A MAXIMUM DRY DENSITY OF NOT LESS THAN 100 POUNDS PER CUBIC FOOT. THE MATERIAL MUST BE STABLE AND HAVE A LIQUID LIMIT LESS THAN 40 AND A PLASTIC INDEX LESS THAN 30 WHEN TESTED IN ACCORDANCE WITH ASTM D4318. SIZE RESTRICTIONS ARE AS FOLLOWS:
16.1. NO MATERIAL SHALL HAVE DIMENSIONS LARGER THAN THREE (3") INCHES. WHERE THE SUBGRADE LAYER IS LESS THAN SIX (6") INCHES THE MAXIMUM SIZE SHALL NOT EXCEED TWO THIRDS (2/3) THE DEPTH OF THE LAYER. WHERE UNSTABLE SUBGRADE IS ENCOUNTERED, THE CONTRACTOR SHALL OBTAIN RECOMMENDATIONS FROM THE OWNER'S GEOTECHNICAL ENGINEER AND PROVIDE RECOMMENDATIONS AND VARIANCE PRICING TO OWNER TO STABILIZE THE MATERIAL BY TECHNIQUES SUCH AS OVER EXCAVATION AND BACKFILL WITH IMPORTED MATERIAL. USE OF GEOTECHNICAL REINFORCEMENT, CHEMICAL STABILIZATION OR OTHER METHODS. THE CONTRACTOR SHALL NOTIFY THE OWNER OF PROPOSED SOLUTION TO STABILIZE THE SUBGRADE AND SHALL NOT COMMENCE UNTIL THEY HAVE RECEIVED WRITTEN APPROVAL FROM THE OWNER. IF TESTS OR OBSERVATION REVEAL THAT MATERIAL BEING PLACED IS NOT OF SUITABLE QUALITY AND STRUCTURAL VALUE, THE CONTRACTOR SHALL PROVIDE OTHER MATERIAL AS APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER.
17. EXCAVATION OF ALL MATERIALS SHALL BE PERFORMED IN CONFORMITY WITH THE LINES AND GRADES INDICATED ON THE DRAWINGS. SUITABLE MATERIAL REMOVED FROM THE EXCAVATION MAY BE USED AS FILL AND BACKFILL OR ANY OTHER AREAS WITHIN THE LIMITS OF WORK AS PERMITTED BY THE ENGINEER. WHERE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF THE WORK IS CONSIDERED UNSUITABLE BY THE OWNER'S GEOTECHNICAL ENGINEER, SUCH MATERIAL SHALL BE EXCAVATED AS DIRECTED BY THESE STANDARDS, THE PLANS, OR THE OWNER'S GEOTECHNICAL ENGINEER AND REPLACED WITH SUITABLE MATERIAL.
18. BUILDING PADS AND THE PAVEMENT STRUCTURE SHALL BE FOUNDED ON ORIGINAL, UNDISTURBED SOIL OR ON STRUCTURAL BACKFILL EXTENDED TO THE UNDISTURBED SOIL. BUILDING PADS AND THE PAVEMENT STRUCTURE SHALL NOT BE FOUNDED ON EXISTING FILL IF ENCOUNTERED AT THE PROJECT SITE UNLESS APPROVED BY THE ENGINEER. IF EXISTING FILL IS ENCOUNTERED AT THE SUBGRADE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHO SHALL EVALUATE THE EXISTING FILL FOR SUITABILITY OF ACCEPTING NEW FILL.
19. THE CONTRACTOR SHALL BLEND THE INTERSECTION OF CUT SLOPES WITH THE SLOPES OF ADJACENT NATURAL GROUND SURFACES IN A UNIFORM MANNER. THE TOPS OF CUT SLOPES SHALL BE FLATTENED AND ROUNDED.
20. ALL EXCAVATED MATERIAL SHALL BE STOCKPILED IN A MANNER THAT DOES NOT ENDANGER THE WORK OR WORKERS AND DOES NOT OBSTRUCT SIDEWALKS, STREETS, ALLEYS, AND/OR DRIVEWAYS. THE WORK SHALL BE DONE IN A MANNER THAT WILL MINIMIZE INTERFERENCE WITH TRAFFIC AND/OR DRAINAGE. THE CONTRACTOR AT THE END OF EACH DAY SHALL BARRICADE ALL EXCAVATIONS AND DITCH LINES, REMOVE EXCESS EXCAVATED MATERIAL FROM TRAVEL WAYS, AND THOROUGHLY CLEAN ALL STREETS, ALLEYS, AND/OR SIDEWALKS AFFECTED BY THE EXCAVATION.
21. MATERIAL ENCOUNTERED DURING EXCAVATION; SUCH AS, RUBBISH, ORGANIC, OR FROZEN MATERIAL, AND ANY OTHER MATERIAL WHICH IS UNSATISFACTORY FOR USE AS BACKFILL IN THE OPINION OF THE OWNER'S GEOTECHNICAL ENGINEER, SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. STONES, CONCRETE, OR ASPHALT CHUNKS LARGER THAN THREE (3") INCHES OR FROZEN MATERIAL SHALL BE CONSIDERED UNSATISFACTORY BACKFILL AND REMOVED BY THE CONTRACTOR. FROZEN MATERIAL, HOWEVER, MAY BE THAWED OUT AND USED AT A LATER DATE.
22. FILL AND BACKFILL SHALL CONSIST OF APPROVED MATERIAL UNIFORMLY DISTRIBUTED IN 8-INCH UNCOMPACTED LIFTS. EACH LIFT OF BACKFILL SHALL BE COMPACTED TO THE REQUIRED DENSITY BEFORE SUCCESSIVE LAYERS ARE PLACED. STRUCTURAL FILL AND BACKFILL SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY WITHIN +/- TWO (2%) PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. IN CONFINED AREAS SUCH AS UTILITY TRENCHES, PORTABLE COMPACTION EQUIPMENT AND THIN LIFTS OF 3 TO 4-INCHES MAY BE REQUIRED TO ACHIEVE THE SPECIFIED DEGREES OF COMPACTION.
23. BEFORE ANY FILL IS PLACED, CLEARING, TREE REMOVAL, SOD AND TOPSOIL REMOVAL OVER THE ENTIRE AREA SHALL BE PERFORMED IN ACCORDANCE WITH THESE STANDARDS. THE BASE OF FILL AREA SHALL BE PROOFROLLED WITH A PNEUMATIC TIRED VEHICLE WEIGHING 20-30 TONS AND OBSERVED BY THE OWNER'S GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE OWNER'S GEOTECHNICAL ENGINEER NO LESS THAN 24 HOURS PRIOR TO PLACING FILL TO SCHEDULE THE PROOFROLL. NO FILL MATERIAL SHALL BE PLACED UPON SOFT, SPONGY, OR FROZEN MATERIAL OR OTHER MATERIAL, THE STABILITY OF WHICH IS IN THE OPINION OF THE OWNER'S GEOTECHNICAL ENGINEER, UNSUITABLE FOR THE PLACEMENT THEREOF.
24. WHEN FILL IS TO BE PLACED ON SLOPES, IT SHALL BE CONTINUOUSLY BENCHED IN HORIZONTAL LAYERS TO KEY INTO THE EXISTING SLOPE. EACH LIFT OF THE FILL MATERIAL SHALL NOT EXCEED EIGHT (8") INCHES IN LOOSE DEPTH. THE CONTRACTOR SHALL THOROUGHLY MIX AND INSURE UNIFORM DENSITY AND MOISTURE FOR PROPER COMPACTION.
25. GRADED SLOPES SHALL NOT EXCEED 3:1 OR AS RECOMMENDED BY THE OWNER'S GEOTECHNICAL ENGINEER.
26. BACKFILL MATERIAL SHALL NOT BE DEPOSITED AGAINST NEWLY CONSTRUCTED MASONRY OR CONCRETE STRUCTURES UNTIL THE CONCRETE HAS DEVELOPED A FIELD COMPRESSIVE STRENGTH OF EQUAL TO THE DESIGN COMPRESSIVE STRENGTH.
27. COMPACTION METHODS THAT PRODUCE HORIZONTAL OR VERTICAL EARTH PRESSURES, WHICH MAY CAUSE EXCESSIVE DISPLACEMENT OR OVERTURNING, OR MAY DAMAGE STRUCTURES, BURIED PIPE, OR UTILITIES, SHALL NOT BE USED.
28. UNLESS OTHERWISE INDICTED IN THE CONTRACT OR DIRECTED BY THE ENGINEER, ALL SHEETING AND BRACING USED IN EXCAVATION SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO BACKFILLING.
29. THE CONTRACTOR IS RESPONSIBLE FOR THE SCHEDULING THE QUALITY CONTROL TESTING AND PROTECTION OF WORK UNTIL ACCEPTED BY THE OWNER. ALL QUALITY CONTROL TEST RESULTS SHALL BE MADE AVAILABLE TO THE OWNER AND ENGINEER IMMEDIATELY AFTER TESTING. ACCEPTANCE TESTING MAY INCLUDE BUT NOT LIMITED TO TESTS ASSOCIATED WITH PLACING OF CONCRETE, ASPHALT, AND BASE COURSE SUBGRADE PREPARATION, AND SOIL COMPACTION. THE CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION MATERIAL TESTING FIRM AS TO WHEN HE OR SHE IS READY FOR TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH RE-TESTING DUE TO FAILED ACCEPTANCE TEST.
30. UPON COMPLETION OF THE STRIPPING OPERATIONS, THE EXPOSED SUBGRADE IN AREA TO RECEIVE FILL SHOULD BE PROOFROLLED WITH A LOADED DUMP TRUCK OR SIMILAR PNEUMATIC TIRED VEHICLE (LOADED WIGHT OF 20-30 TONS) UNDER THE OBSERVATION OF THE A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER.
31. THE PROOFROLLING PROCEDURES SHOULD CONSIST OF COMPLETE PASSES OF THE EXPOSED AREA, WITH HALF OF THE PASSES BEING IN A DIRECTION PERPENDICULAR TO THE PRECEDING ONES. AFTER EXCAVATION OS THE SITE HAS BEEN COMPLETED, THE EXPOSED SUBGRADE IN CUT AREAS SHOULD ALSO BY PROOFROLLED AS PREVIOUSLY DESCRIBED. ANY AREA WHICH DEFLECT, RUT, OR PUMP EXCESSIVELY DURING PROOFROLLING OR FAIL TO IMPROVE SUFFICIENTLY AFTER SUCCESSIVE PASSES SHOULD BE UNDERCUT TO SUITABLE SOILS AND REPLACED WITH STRUCTURAL FILL. THE EXTENT OF THE UNDERCUT REQUIRED SHOULD BE EVALUATED IN THE FIELD BY AN EXPERIENCED REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER WHILE MONITORING CONSTRUCTION ACTIVITY. THE EVALUATION SHOULD CONSIST OF A COMPREHENSIVE PROOFROLLING PROGRAM AND THOROUGH FIELD EVALUATION DURING CONSTRUCTION.
32. AFTER THE PROOFROLLING OPERATION HAS BEEN COMPLETED AND APPROVED, FINAL SITE GRADING SHOULD PROCEED IMMEDIATELY. IF CONSTRUCTION IMMEDIATELY DURING WET WEATHER, THE PROOFROLLING OPERATION SHOULD BE REPEATED WITH AT LEAST ONE PASS IN EACH DIRECTION PRIOR TO PLACING BASE COURSE IN THE PARKING/DRIVE AREAS. IF UNSTABLE CONDITIONS AREA EXPOSED DURING THE OPERATION, THEN UNDERCUTTING SHOULD BE PERFORMED.



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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

Table with 4 columns: NO., DATE, BY, DESCRIPTION. Contains revision entries for 05/29/25, 01/28/25, and 11/08/24.

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

TITLE

GENERAL NOTES (SHEET 1 OF 2)

DEI PROJECT NO: 50181675

SHEET NO.

C0.01

SITE NOTES

1. DIMENSIONS AND COORDINATE POINTS ARE TO FACE OF CURB, EDGE OF PAVEMENT, OR CORNER OF BUILDING UNLESS OTHERWISE NOTED.
2. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL STANDARDS.
3. ANY DISCREPANCIES FOUND IN THE FIELD SHALL BE CALLED TO THE ATTENTION OF THE OWNER OR ENGINEER OF RECORD PRIOR TO PROCEEDING WITH WORK.
4. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND APPROVALS FROM ALL REGULATORY AUTHORITIES.
5. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES, AND RIGHT-OF-WAYS, PUBLIC AND PRIVATE, PRIOR TO WORKING IN THESE AREAS.
6. GENERAL CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND THE PUBLIC SHALL BE PROTECTED FROM INJURY.
7. DO NOT SCALE DRAWINGS FROM ACTUAL DIMENSIONS, AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
8. CONTRACTOR SHALL SAW-CUT EXISTING ASPHALT PAVEMENT AREAS TO TIE IN SMOOTHLY TO PROPOSED PAVEMENT.
9. LAND DEVELOPMENT INSPECTOR TO BE GIVEN 24 HOURS NOTICE PRIOR TO START OF CONSTRUCTION.
10. THE (VILLAGE OF MARVIN/UNION COUNTY) ENGINEERING DEPARTMENT HAS NOT REVIEWED THE STRUCTURAL STABILITY OF ANY RETAINING WALLS ON THE SITE AND DOES NOT ASSUME RESPONSIBILITY FOR THEM.
11. THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH AN ELECTRONIC FILE OF THESE DRAWINGS UPON REQUEST.
12. ALL RETAINING WALLS SHALL HAVE A 48" HEIGHT BLACK ALUMINUM FENCE WITH PICKETS NOT PERMITTING THE PASSAGE OF A 4" DIAMETER SPHERE LOCATED ON THE TOP OF WALL. SEE WALL DESIGN BY OTHERS FOR DETAILED INFORMATION.
13. IF REQUIRED BY VILLAGE OF MARVIN/UNION COUNTY, P.E. SEALED SHOP DRAWINGS FOR RETAINING WALLS MUST BE SUBMITTED TO VILLAGE/COUNTY ENGINEER PRIOR TO CONSTRUCTION.
14. ALL PAVED AREAS SHALL COMPLY WITH THE LATEST ADA ACCESSIBILITY (2010) AND ANSI A117.1 GUIDELINES.
15. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,600-PSI AT 28 DAYS, AND SHALL HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO THE PATH OF TRAVEL.
16. ALL PROPOSED PAVEMENT ADJACENT TO EXISTING PAVEMENT SHALL TIE FLUSH TO ADJACENT SURFACES.

ENHANCED LANDSCAPE PLANTER EMBANKMENT CONSTRUCTION NOTES

EMBANKMENT REQUIREMENTS:

THE FOLLOWING EMBANKMENT SPECIFICATIONS APPLY TO ALL BMPS WITH EMBANKMENTS THAT ARE DESIGNED TO HOLD WATER, EVEN IF THE EMBANKMENT IS DESIGNED TO HOLD WATER ONLY DURING A STORM EVENT.

EMBANKMENT FILL MATERIALS:

THE FOLLOWING PARAMETERS APPLY TO MATERIALS USED TO CONSTRUCT EMBANKMENTS:

1. BORROW MATERIAL SHALL BE CLASSIFIED AS ML, MH, SC, SM, CL, OR CH SOILS ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487) OR ANY MIXTURE OF THESE SOILS.
2. BORROW MATERIALS SHALL HAVE A LIQUID LIMIT (LL) BETWEEN 40 AND 60 AND A PLASTICITY INDEX (PI) BETWEEN 15 AND 30 (ASTM D4318)
3. MATERIALS SHALL BE FREE OF TOPSOIL, ORGANIC MATERIAL, ROOTS, STUMPS, BRUSH, ROCKS LARGER THAN 3 INCHES, SUBSOIL, DEBRIS, VEGETATION, AND OTHER FOREIGN MATTER.
4. ALL MATERIAL CLODS WILL BE BROKEN DOWN WITH TILLERS AND/OR DISCS TO PROVIDE A HOMOGENEOUS SOIL THAT IS FREE OF CLAY CLODS GREATER THAN 3 INCHES IN DIAMETER.

THE FOLLOWING STEPS APPLY TO CONSTRUCTION OF AN EMBANKMENT:

STEP 1: SUBGRADE PREPARATION:

- COMPACT SUBGRADE TO DENSITY REQUIREMENTS FOR SUBSEQUENT FILL MATERIALS.
- CUT OUT SOFT AREAS OF SUBGRADE NOT CAPABLE OF COMPACTION IN PLACE.
- SCARIFY SUBGRADE SURFACE TO DEPTH OF 6 INCHES.
- PROOF ROLL SUBGRADE TO IDENTIFY SOFT SPOTS; FILL AND COMPACT TO DENSITY EQUAL TO OR GREATER THAN REQUIREMENTS FOR SUBSEQUENT FILL MATERIAL.

STEP 2: SEEPAGE KEY PLACEMENT:

- SEEPAGE KEY TRENCH WILL BE LOCATED BETWEEN EMBANKMENT ABUTMENTS.
- SEEPAGE KEY SHALL EXTEND TO A MINIMUM DEPTH OF 4 FEET OR AS REQUIRED THROUGH GEOTECHNICAL SEEPAGE ANALYSIS. A MINIMUM BOTTOM TRENCH WIDTH SHALL BE 10 FEET AND THE TRENCH SIDEWALLS SHALL BE SLOPED OR BENCHED TO PROMOTE STABILITY AND BONDING BETWEEN THE SIDEWALL SOILS AND SEEPAGE KEY FILL.

STEP 3: EMBANKMENT FILL PLACEMENT:

- EMBANKMENT FILL SHALL BE CONSTRUCTED AT 3 (HORIZONTAL); 1 (VERTICAL) OR AS SHOWN ON THE DRAWINGS. DEMONSTRATION OF APPROPRIATE SAFETY FACTORS AGAINST FAILURE THROUGH GEOTECHNICAL ANALYSIS SHALL BE REQUIRED FOR SLOPES STEEPER THAN 3 (HORIZONTAL); 1 (VERTICAL).
- FILL SOILS SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 8 INCHES IN THICKNESS AND BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE SOILS STANDARD PROCTOR (ASTM D698) MAXIMUM DRY DENSITY, OR AS SPECIFIED ON THE DRAWINGS.
- COMPACTED MOISTURE CONTENT SHALL BE BETWEEN 3 PERCENT BELOW AND 3 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT FOR ALL FILL PLACED, OR AS OTHERWISE APPROVED BY ENGINEER.
- FILL SOILS SHOULD BE PLACED IN CONTINUOUS, HORIZONTAL LAYERS FROM ABUTMENT TO ABUTMENT. EXISTING SLOPES GREATER THAN 4 (HORIZONTAL); 1 (VERTICAL) SHALL BE BENCHED TO PROMOTE BONDING OF NEWLY PLACED FILL WITH EXISTING SOILS. BENCHING SHALL BE PERFORMED AT MAXIMUM OF 2 FEET VERTICAL INTERVALS AND SHALL EXTEND A MINIMUM OF 4 FEET HORIZONTALLY OR AS SPECIFIED ON DRAWINGS.
- WITHIN THE UPPER 12 INCHES OF EMBANKMENT, FILL SOILS SHOULD BE COMPACTED TO 100% OF ITS STANDARD PROCTOR (ASTM D698) MAXIMUM DRY DENSITY.
- FILL AGAINST SUPPORTED STRUCTURES. DO NOT FILL AGAINST UNSUPPORTED STRUCTURES.
- PLACE FILL SIMULTANEOUSLY ON EACH SIDE OF UNSUPPORTED STRUCTURES UNTIL SUPPORTS ARE IN PLACE.
- PLACE A MINIMUM OF 6 INCHES OF TOPSOIL ACROSS DAM EMBANKMENT TO PROMOTE VEGETATIVE GROWTH.

STEP 4: OUTLET PIPE FILL PLACEMENT:

- FILL OF THE CULVERTS SHALL BE PLACED AND COMPACTED IN 6-INCH THICK LOOSE LIFTS AROUND THE DROP INLETS AND UP TO 2 FEET ABOVE THE CULVERTS.
- COMPACTION SHALL BE PERFORMED BY HAND TAMPERS OR SMALL HAND OPERATED COMPACTORS.
- COMPACTION SHALL BE AT A MINIMUM OF 95 PERCENT OF THE STANDARD PROCTOR (ASTM D698) MAXIMUM DRY DENSITY. COMPACTED MOISTURE CONTENT SHALL BE BETWEEN 3 PERCENT BELOW AND 3 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT FOR ALL FILL PLACED, OR AS OTHERWISE APPROVED BY ENGINEER.
- ADDITIONAL COMPACTION OF LIFTS 2 FEET OR GREATER ABOVE CULVERTS SHALL CONFORM TO THE EMBANKMENT FILL PLACEMENT SECTION OF THIS SPECIFICATION

STEP 5: FIELD QUALITY CONTROL:

LABORATORY TESTING:

- PERFORM LABORATORY MATERIAL TESTS IN ACCORDANCE WITH ASTM D422, ASTM D698, ASTM D2216, AND ASTM D4318.
- TEST AT A FREQUENCY OF EVERY 500 CUBIC YARDS OF EMBANKMENT FILL MATERIAL PLACED, WHEN MATERIALS USING FOR EMBANKMENT FILL CHANGE, AND/OR AS DIRECTED BY THE ENGINEER.
- SAMPLE SIZE SHALL BE 50-LBS.

IN PLACE COMPACTION AND NATURAL MOISTURE CONTENT TESTS:

- PERFORM IN PLACE COMPACTION TESTS IN ACCORDANCE WITH ASTM D1556, ASTM D2922, OR ASTM D2937 AND NATURAL MOISTURE CONTENT TEST IN ACCORDANCE WITH ASTM D2216.

FREQUENCY OF COMPACTION/NATURAL MOISTURE CONTENT TESTS:

- EMBANKMENT FILL: EACH LIFT AT A MINIMUM FREQUENCY OF 1 PER 2,500 SQ. FT.
- PIPE INSTALLATION: EACH LIFT AT A MINIMUM FREQUENCY OF 1 PER 30 LF OF PIPE.

- WHEN TESTS INDICATE WORK DOES NOT MEET SPECIFIED REQUIREMENTS, REMOVE WORK, REPLACE AND RETEST.

ALLOWABLE VARIANCES:

- EMBANKMENT SPECIFICATIONS MAY BE MODIFIED BASED ON SITE-SPECIFIC GEOTECHNICAL INVESTIGATION AND ENGINEERING DESIGN.



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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
△	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

**GENERAL NOTES
 (SHEET 2 OF 2)**

DEI PROJECT NO. 50181675

SHEET NO.

C0.02

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
<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

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

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

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- 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

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- 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.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

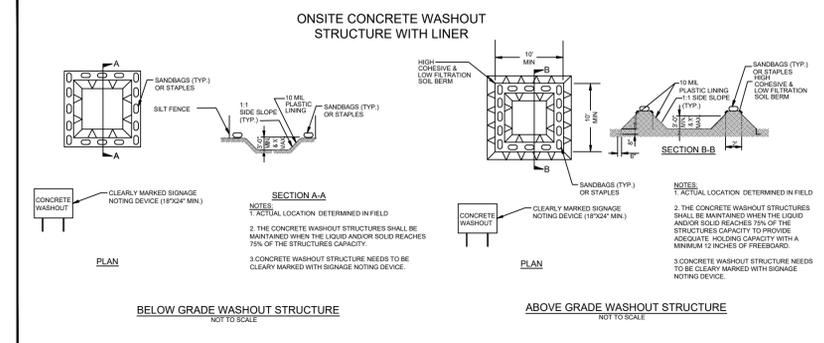
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled,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

PORTABLE TOILETS

- 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.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- 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

- 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.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- 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

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- 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.
- 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.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

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

SEAL

**PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION**

KEY PLAN:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
△	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:

**NCG01 NOTES
(SHEET 1 OF 2)**

DEI PROJECT NO: 50181675

SHEET NO.

C0.03



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

SEAL

PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION

KEY PLAN:

SCALE:

REVISIONS

Table with 4 columns: NO., DATE, BY, DESCRIPTION. Includes revision entries for 01/28/25 and 11/08/24.

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 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...
(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.

Table with 2 columns: Occurrence, Reporting Timeframes (After Discovery) and Other Requirements. Lists reporting requirements for sediment, oil spills, and bypasses.

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.

Table with 2 columns: Item to Document, Documentation Requirements. Lists requirements for E&SC measures, grading, ground cover, maintenance, and corrective actions.

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.

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 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.

Table with 3 columns: Inspect, Frequency (during normal business hours), Inspection records must include: Details inspection requirements for rain gauge, E&SC measures, stormwater outfalls, perimeter, streams, and ground stabilization.

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

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.
(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.
(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

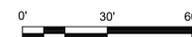
EFFECTIVE: 04/01/19

SEAL

**PRELIMINARY-
 DO NOT USE FOR
 CONSTRUCTION**

KEY PLAN:

SCALE: 1" = 30'



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

SITE PLAN

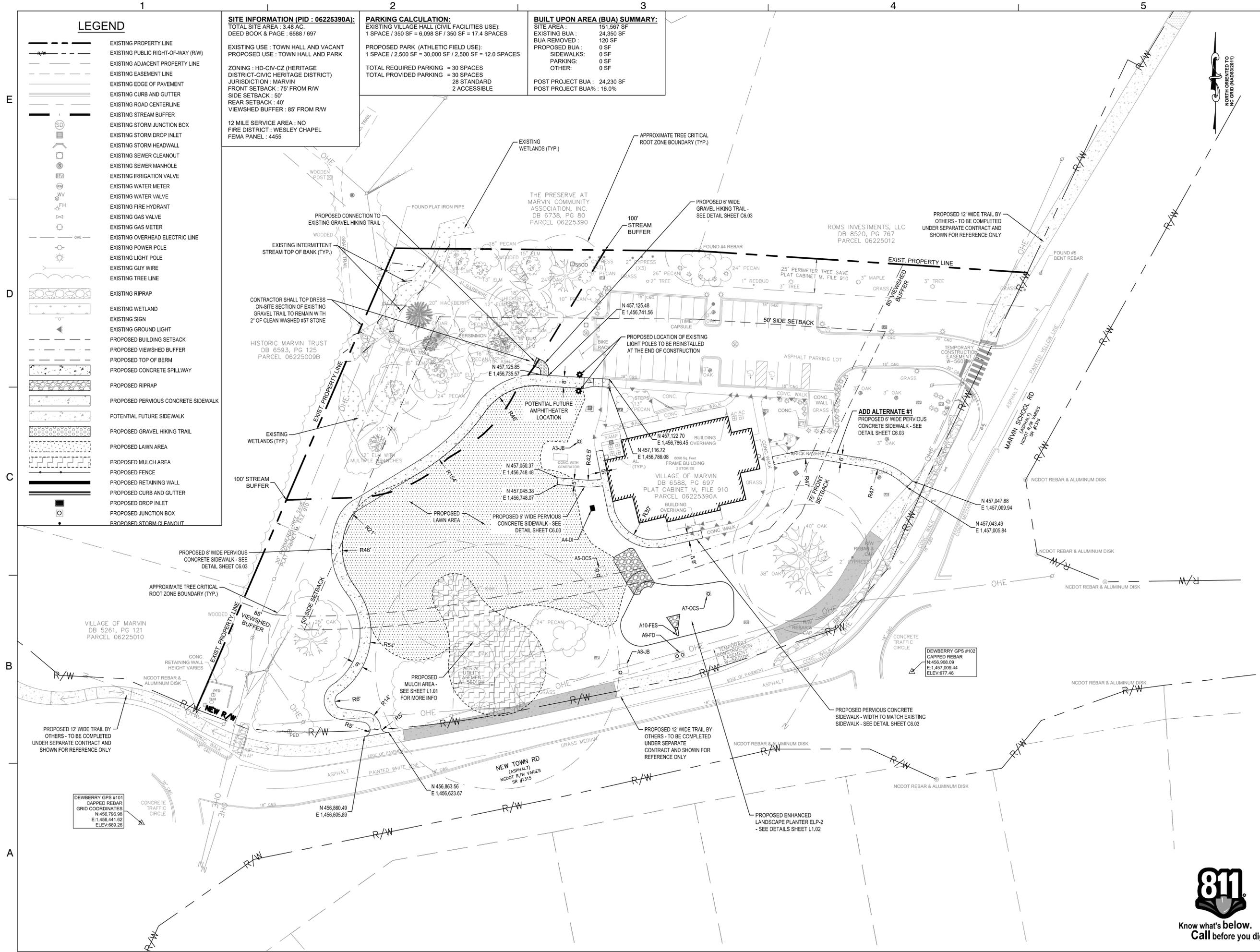
DEI PROJECT NO: 50181675

SHEET NO.

C2.01



Know what's below.
 Call before you dig.



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%

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

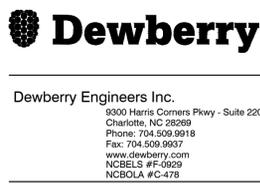
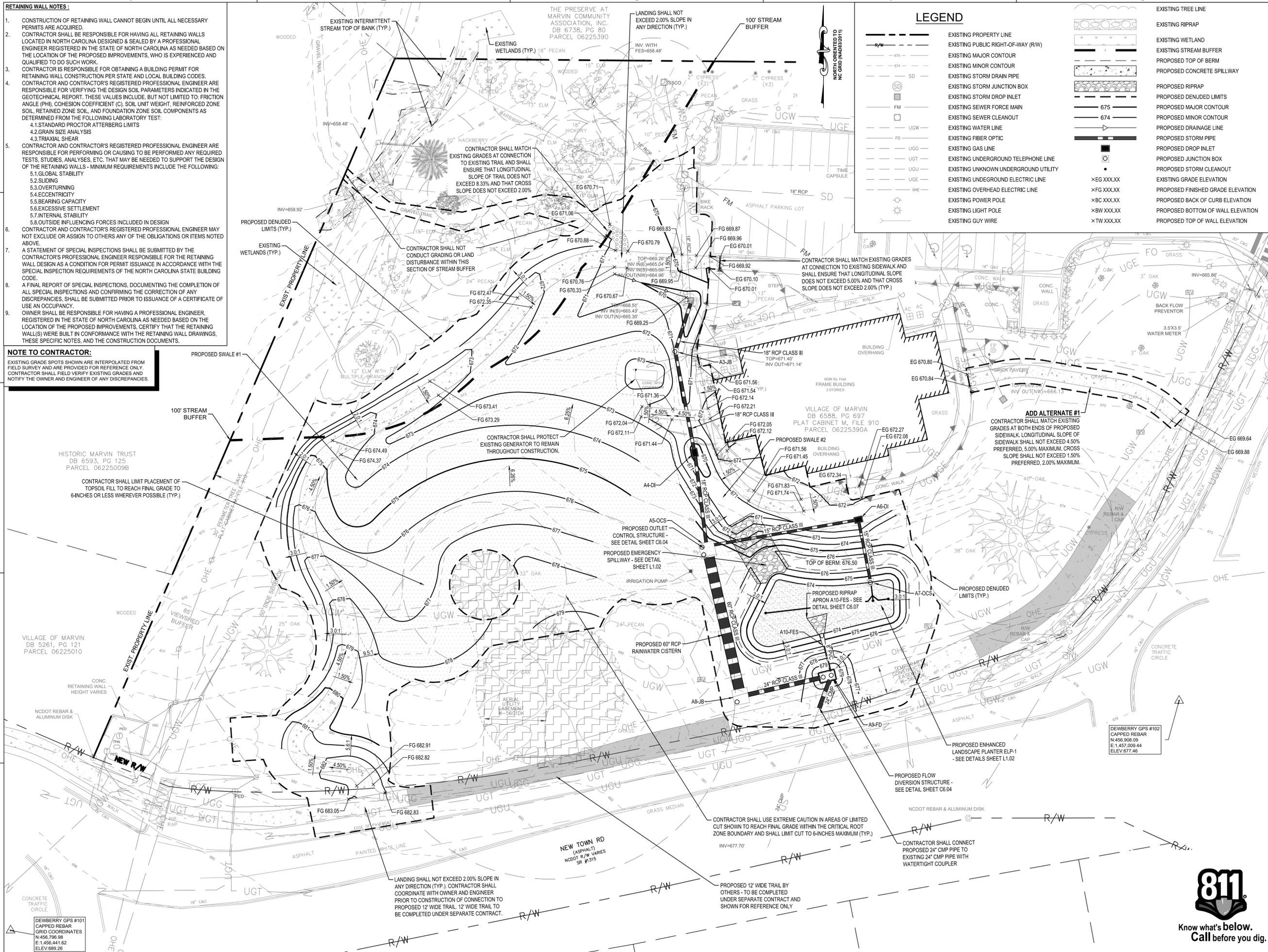
DEWBERRY GPS #101
 CAPPED REBAR
 N 456,796.98
 E 1,456,441.52
 ELEV: 699.28

DEWBERRY GPS #102
 CAPPED REBAR
 N 456,908.09
 E 1,457,009.44
 ELEV: 677.46

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:
 - STANDARD PROCTOR ATTERBERG LIMITS
 - GRAIN SIZE ANALYSIS
 - 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:
 - GLOBAL STABILITY
 - SLIDING
 - OVERTURNING
 - ECCENTRICITY
 - BEARING CAPACITY
 - EXCESSIVE SETTLEMENT
 - INTERNAL STABILITY
- 5.2. 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.



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

PRELIMINARY-
DO NOT USE FOR
CONSTRUCTION

KEY PLAN:
 SCALE: 1" = 20'

NO.	DATE	BY	DESCRIPTION
△	05/29/25	DLJ	AGENCY COMMENTS
△	02/24/25	DLJ	95% REVIEW SET
△	02/12/25	DLJ	DEMLR 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:

GRADING PLAN
 DEI PROJECT NO: 50181675
 SHEET NO.
C3.01

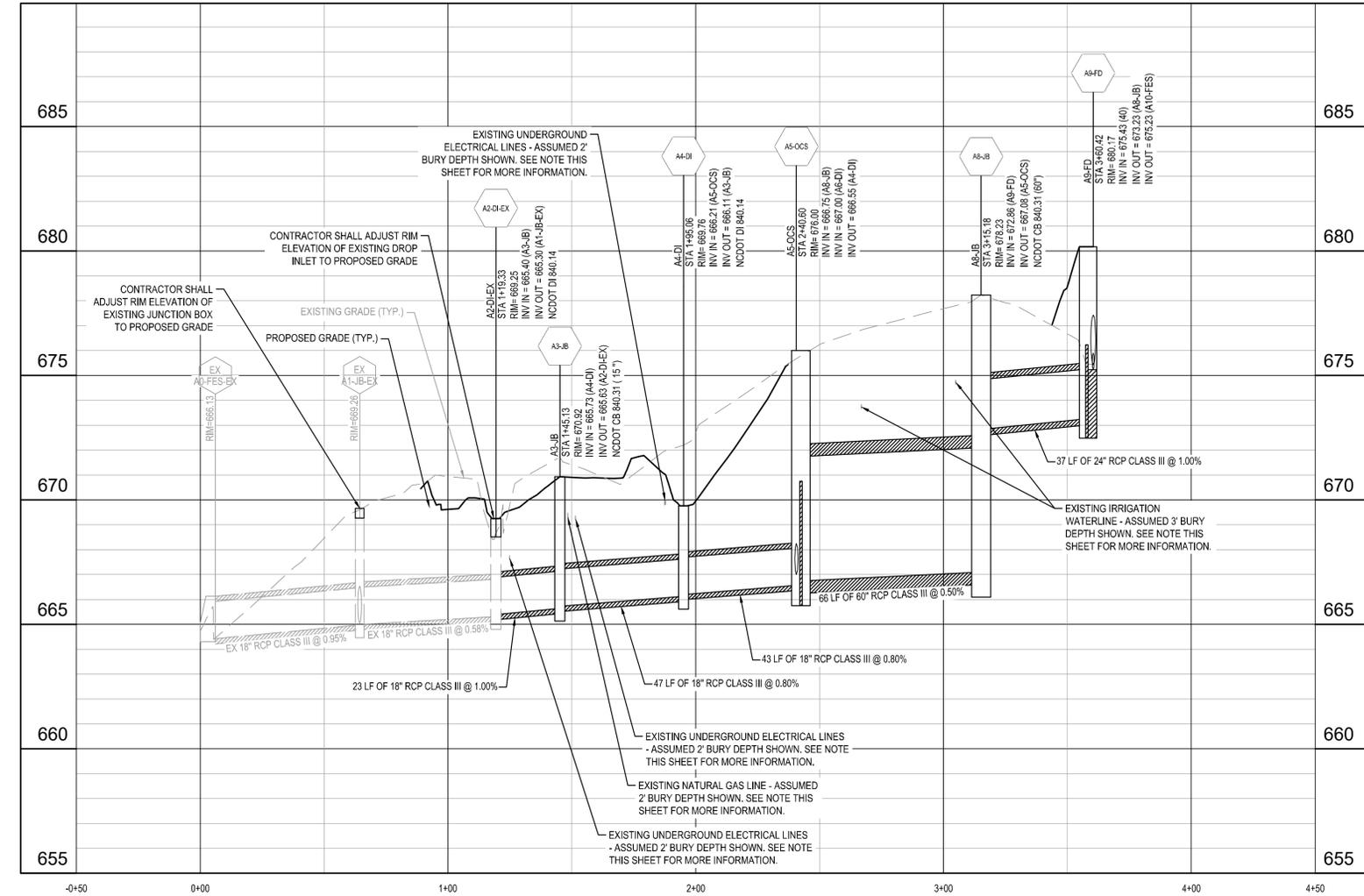


A0-FES-EX TO A9-FD

E

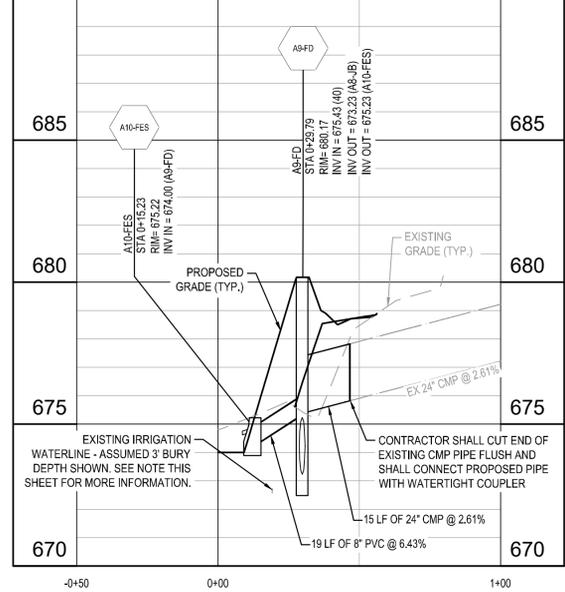
D

C



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.

A10-FES TO A9-FD



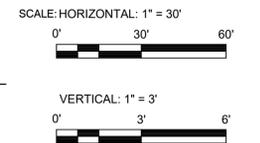
Dewberry
 Dewberry Engineers Inc.
 9500 Harris Corners Pkwy - Suite 220
 Charlotte, NC 28269
 Phone: 704.509.9918
 Fax: 704.509.9937
 www.dewberry.com
 NCBELS #F-0929
 NCBOLA #C-478

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
△ 05/29/25	DLJ	AGENCY COMMENTS	
△ 02/24/25	DLJ	95% REVIEW SET	
△ 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

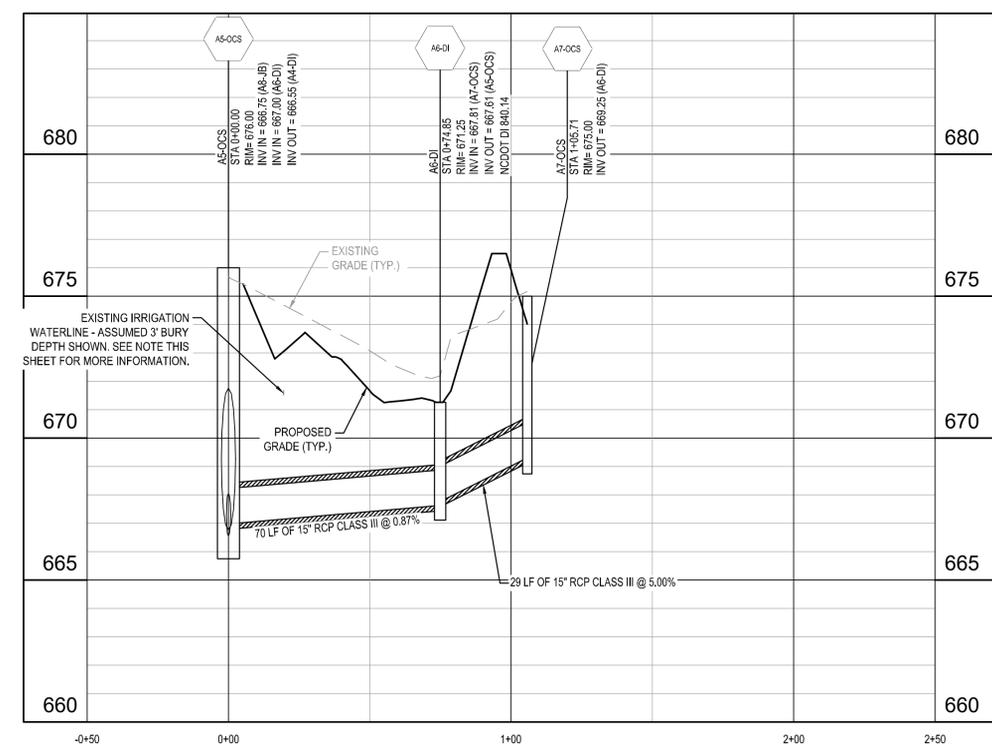
SHEET NO.

C3.02

A5-OCS TO A7-OCS

B

A



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

KEY PLAN:

SCALE: 1" = 30'

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

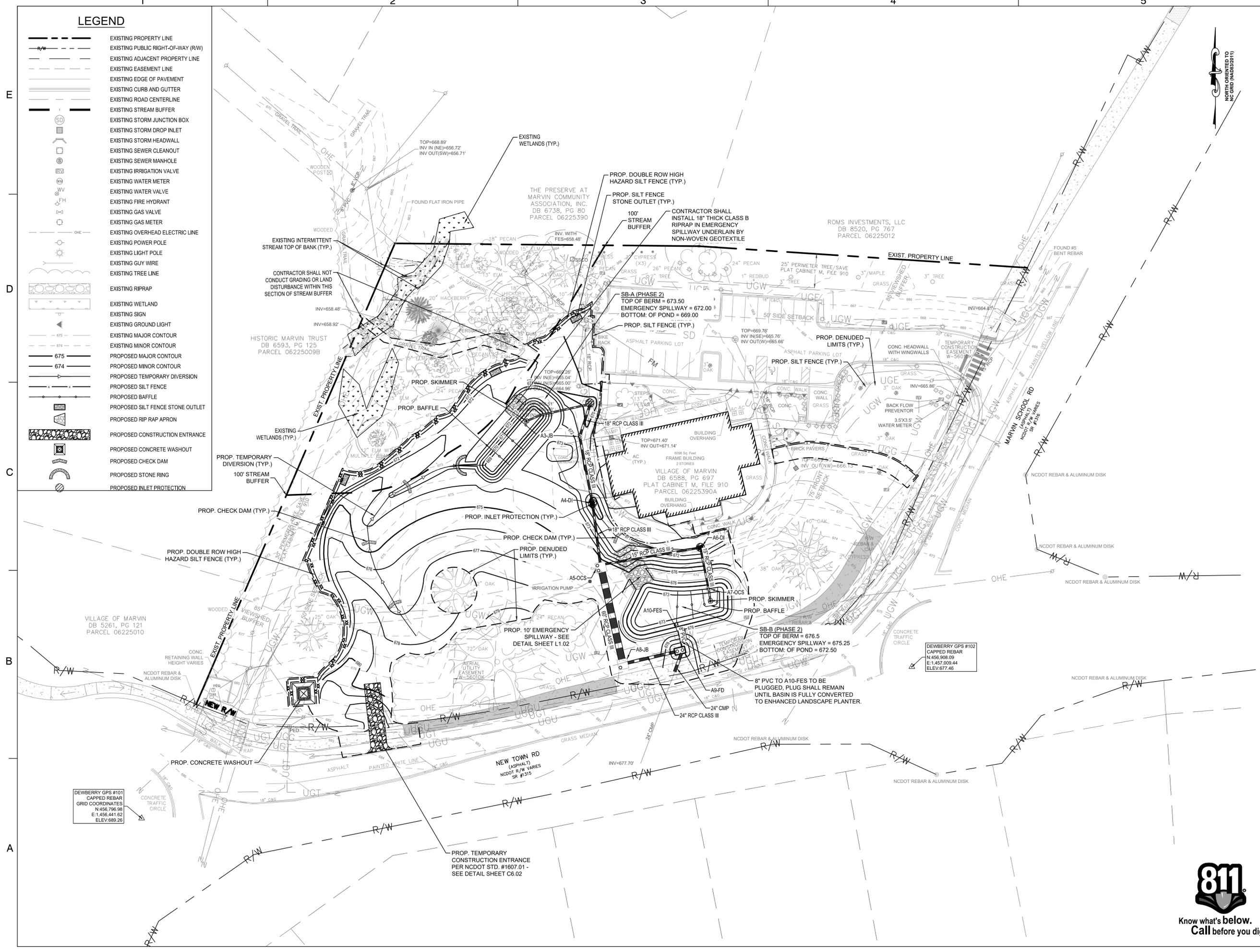
DRAWN BY: BJN
 APPROVED BY: BML
 CHECKED BY: DLJ
 DATE: AUGUST 28, 2024
 TITLE:

ESC PH II PLAN

DEI PROJECT NO: 50181675

SHEET NO.

C4.01



LEGEND

	EXISTING PROPERTY LINE
	EXISTING PUBLIC RIGHT-OF-WAY (RW)
	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 GPS #101
 CAPPED REBAR
 GRID COORDINATES
 N=456,796.98
 E=1,456,441.52
 ELEV=699.28

DEWBERRY GPS #102
 CAPPED REBAR
 N=456,908.09
 E=1,457,009.44
 ELEV=677.46

PROP. TEMPORARY
 CONSTRUCTION ENTRANCE
 PER NCDOT STD. #1607.01 -
 SEE DETAIL SHEET C6.02

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

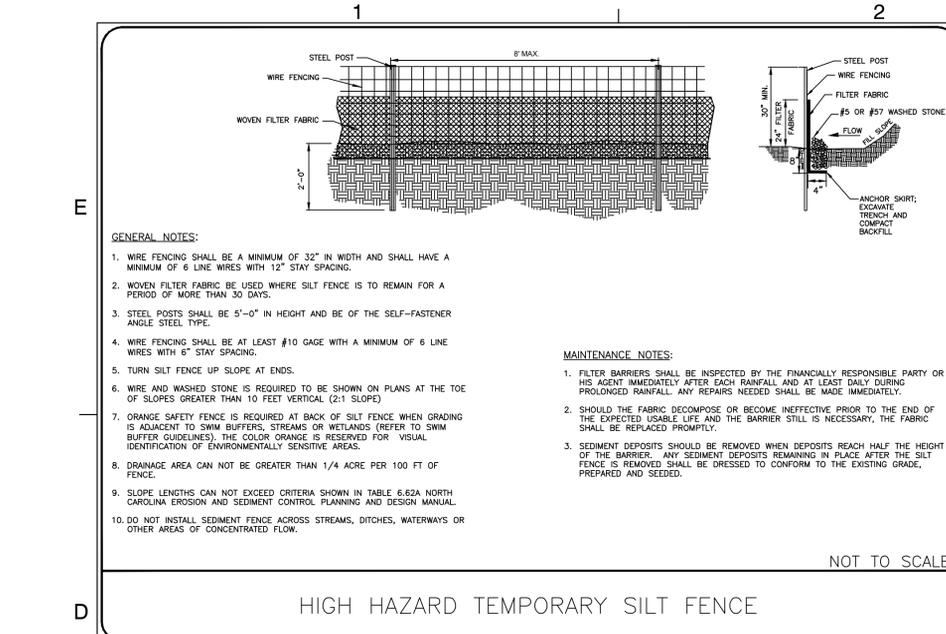
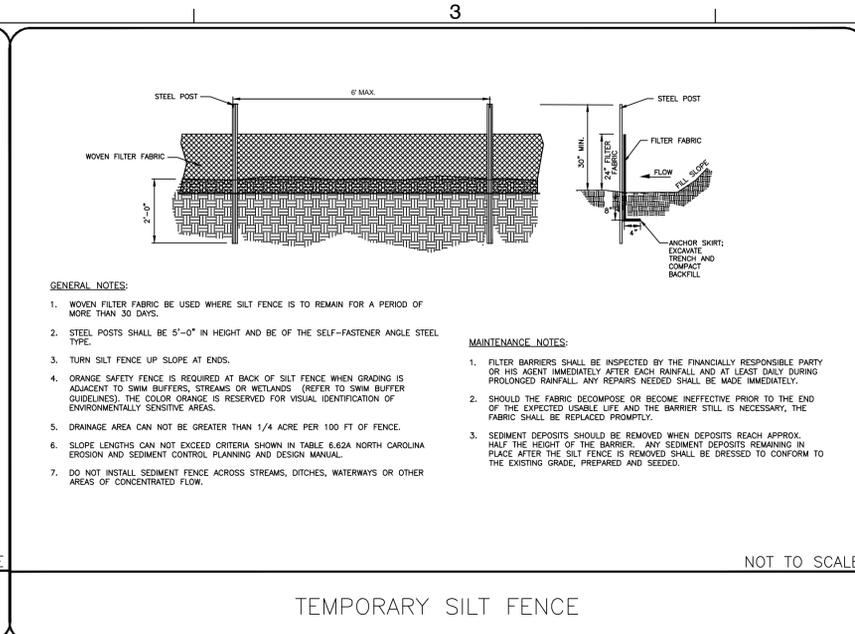
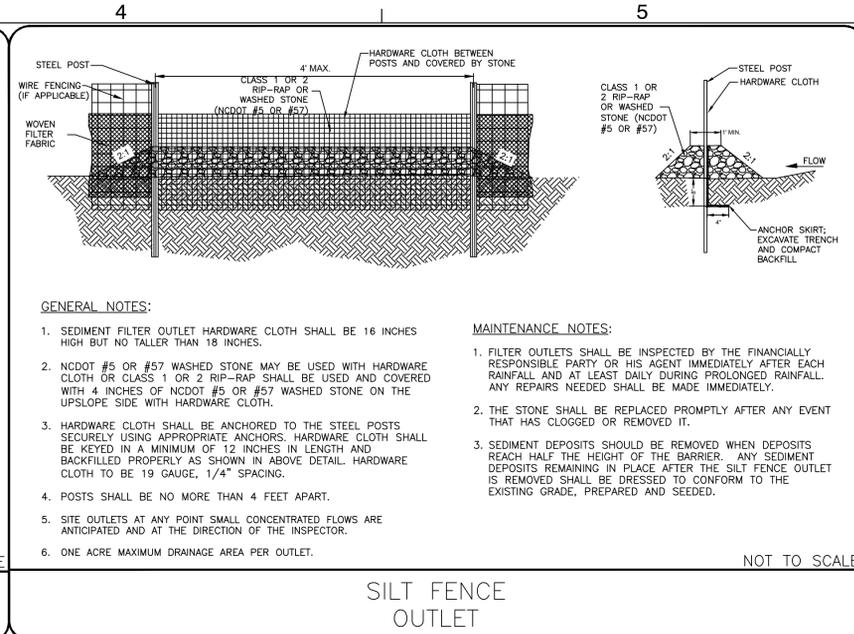
TITLE

**ESC DETAILS
 (SHEET 1 OF 2)**

DEI PROJECT NO: 50181675

SHEET NO.

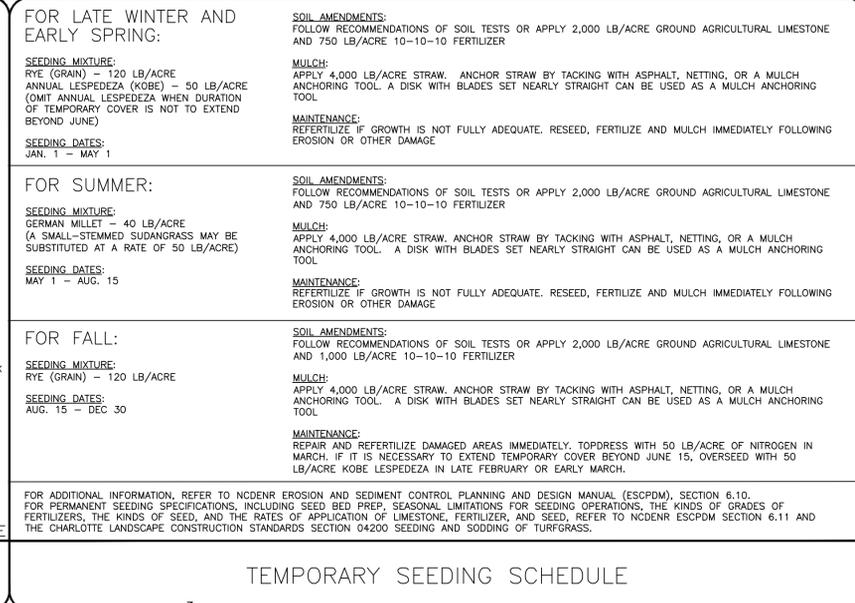
C6.01



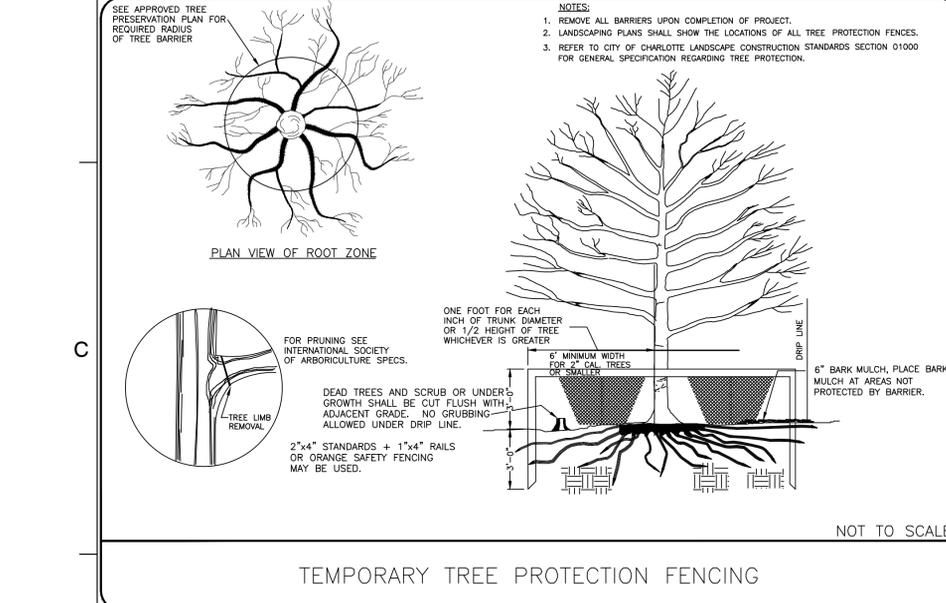
HIGH HAZARD TEMPORARY SILT FENCE

TEMPORARY SILT FENCE

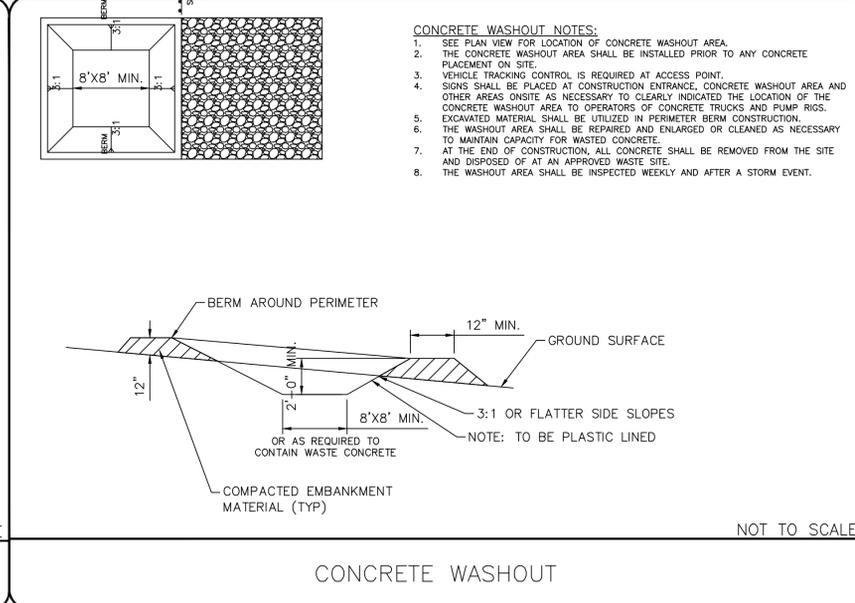
SILT FENCE OUTLET



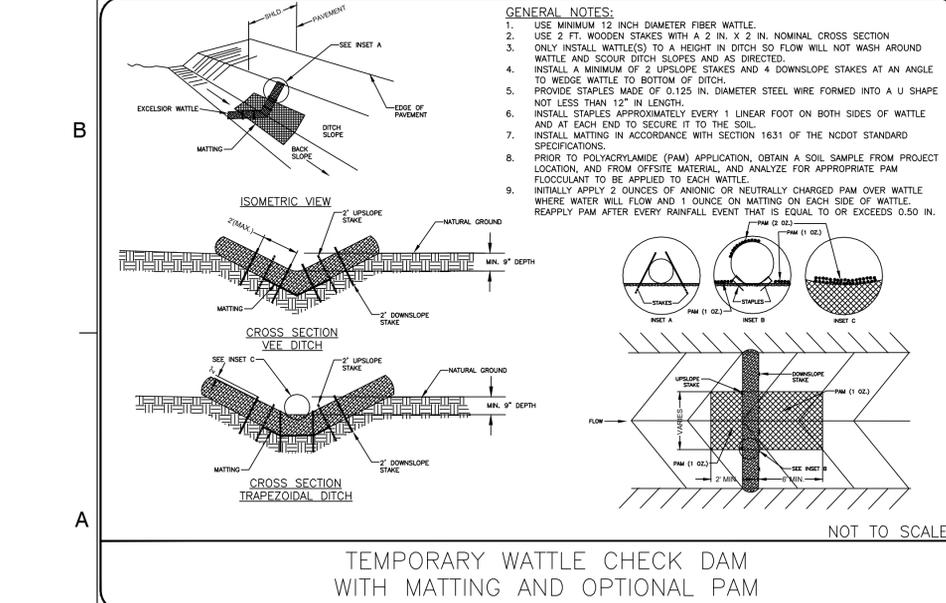
TEMPORARY SEEDING SCHEDULE



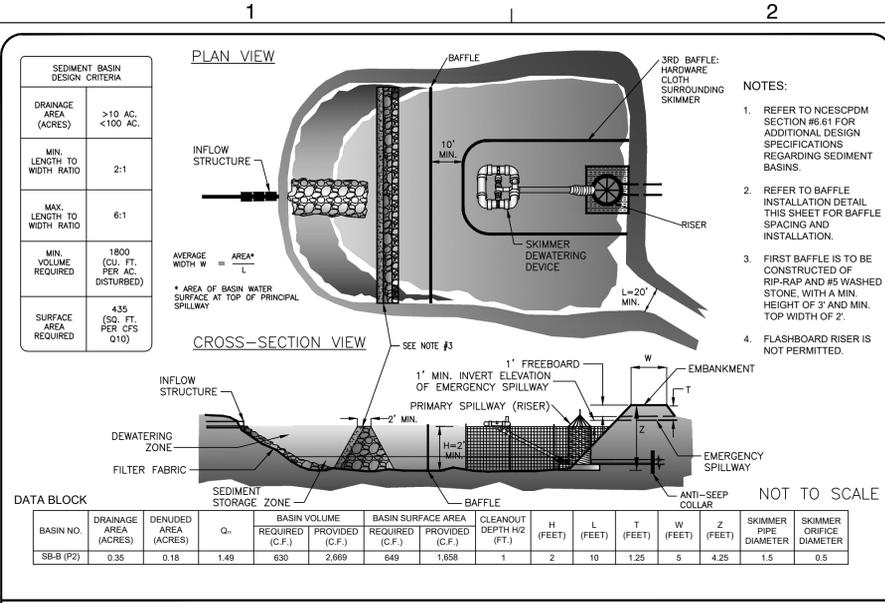
TEMPORARY TREE PROTECTION FENCING



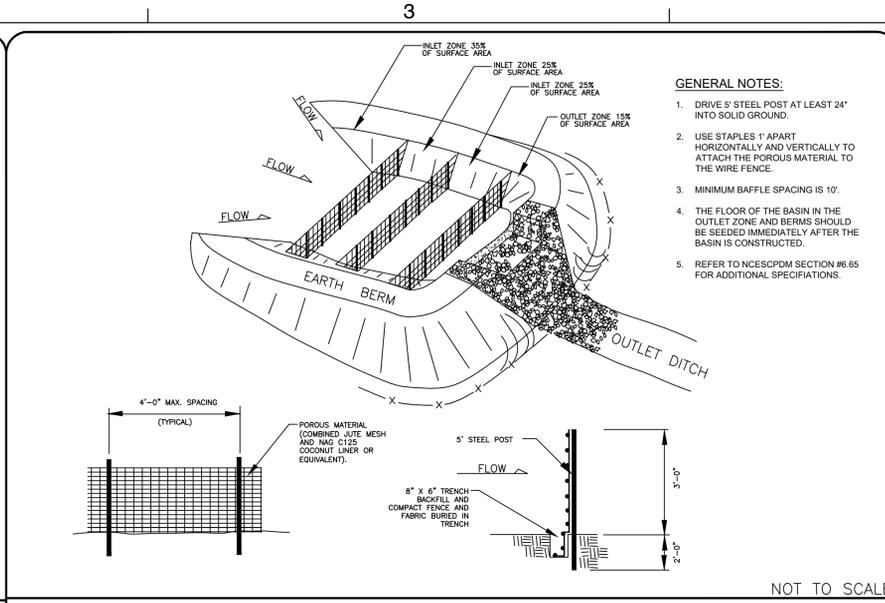
CONCRETE WASHOUT



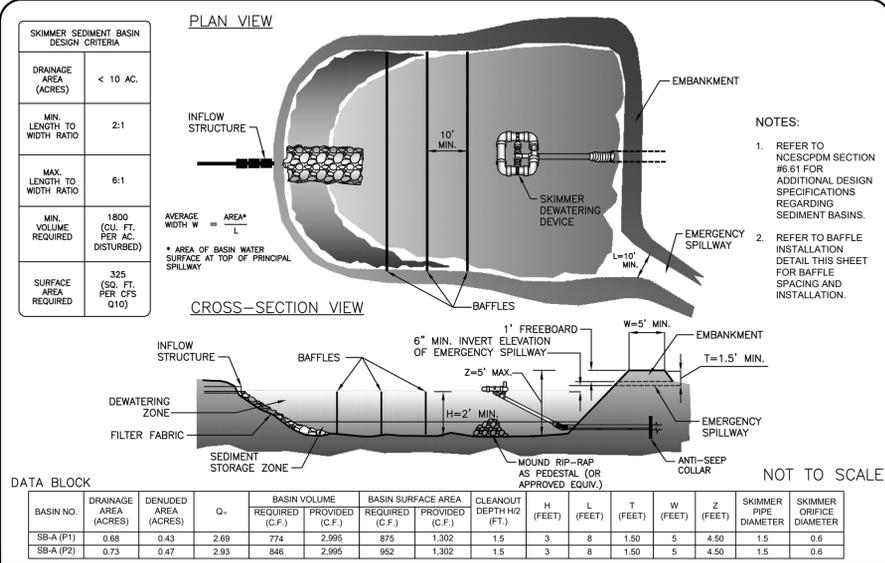
TEMPORARY WATTLE CHECK DAM WITH MATTING AND OPTIONAL PAM



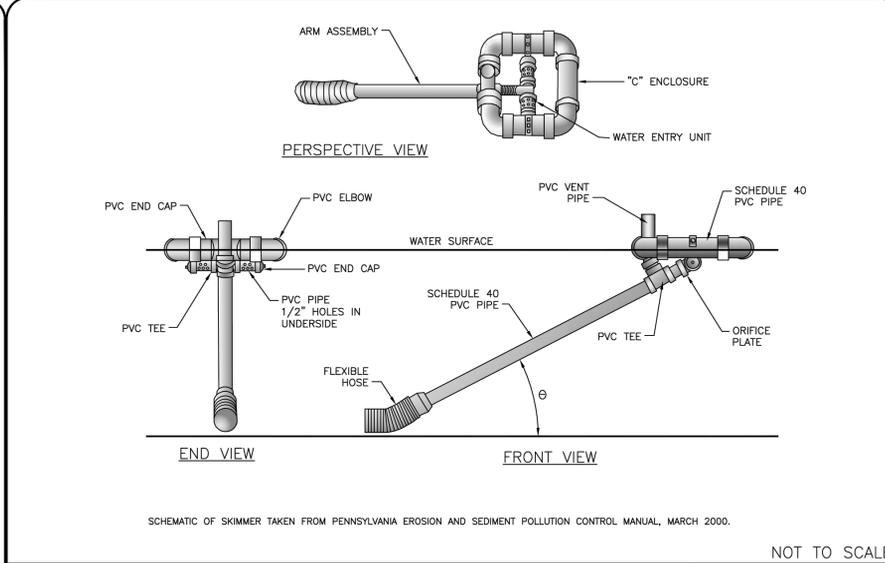
SKIMMER BASIN SB-B (ELP-1)



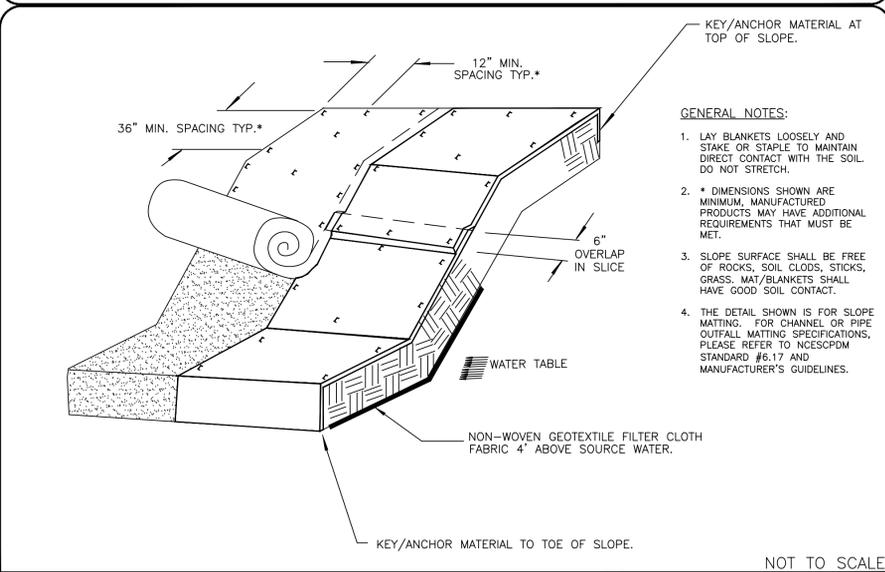
BAFFLE INSTALLATION



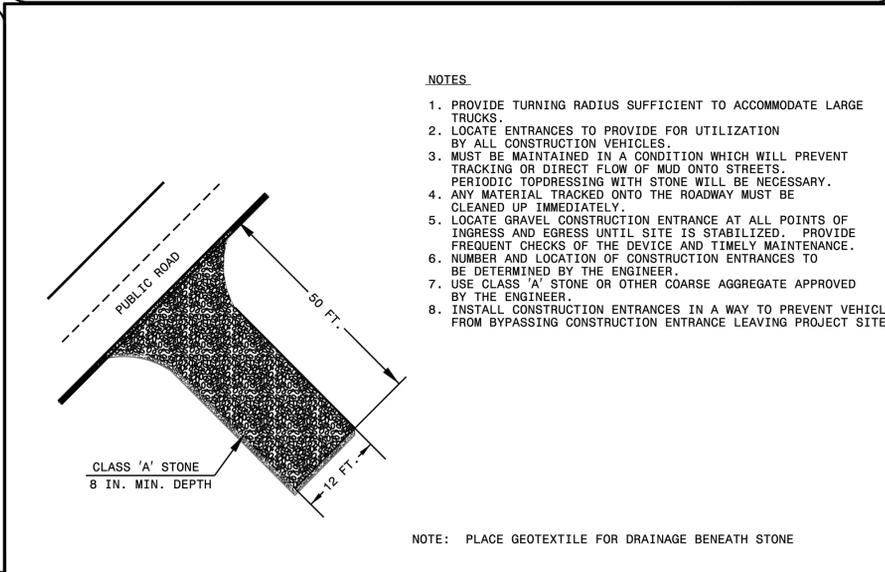
SKIMMER BASIN SB-A



SKIMMER



EMBANKMENT MATTING DETAIL



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
GRAVEL CONSTRUCTION ENTRANCE

SHEET 1 OF 1
1607.01

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

DRAWN BY: BJN

APPROVED BY: BML

CHECKED BY: DLJ

DATE: AUGUST 28, 2024

TITLE

**ESC DETAILS
(SHEET 2 OF 2)**

DEI PROJECT NO: 50181675

SHEET NO.

C6.02

1

2

3

4

5

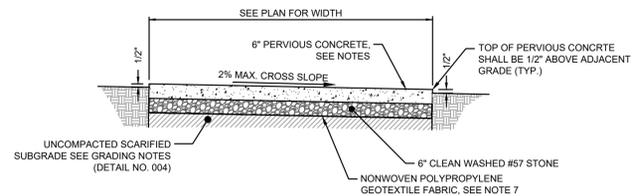
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C

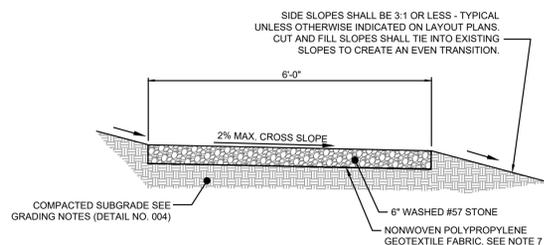
B

A



- NOTES:**
- CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION OF PERVIOUS CONCRETE SIDEWALK UNTIL THE SURROUNDING AREA IS STABILIZED.
 - CROSS SLOPE DIRECTION VARIES. SEE LAYOUT PLANS FOR DIRECTION OF SLOPE.
 - MIX DESIGN FOR PERVIOUS CONCRETE SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF ACI 522.1 SPECIFICATION FOR PERVIOUS CONCRETE.
 - PERVIOUS CONCRETE SHALL HAVE AN INFILTRATION RATE OF AT LEAST 50 INCHES PER HOUR USING A HEAD LESS THAN OR EQUAL TO 4 INCHES.
 - GEOTEXTILE FABRIC SHALL BE NONWOVEN POLYPROPYLENE WITH 120 (534) LBS (N) GRAB TENSILE STRENGTH, 50% GRAB TENSILE ELONGATION, 50 (223) LBS (N) TRAPEZOID TEAR STRENGTH, 310 (1380) LBS (N) CBR PUNCTURE STRENGTH, AND 1.7 PERMITTIVITY.

PERVIOUS CONCRETE SIDEWALK
N.T.S.



- NOTES:**
- CROSS SLOPE DIRECTION VARIES. SEE LAYOUT PLANS FOR DIRECTION OF SLOPE.
 - CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ALL SLOPES DISTURBED BY CONSTRUCTION.
 - NO UTILITY SURFACE COVERS/PLATES/MANHOLES (i.e. WATERLINE VALVE COVERS, ETC.) SHALL BE LOCATED WITHIN TRAIL AND SHALL BE MINIMUM 2 FEET FROM THE EDGE OF TRAIL.
 - PAVEMENT SHALL BE POROUS WITH A HYDRAULIC CONDUCTIVITY GREATER THAN 0.001 CENTIMETERS PER SECOND (1.41 INCHES PER HOUR).
 - ANY VERTICAL IMPROVEMENTS - I.E. SIGNAGE, BENCHES, TRASH RECEPTACLES, ETC. SHALL BE A MINIMUM OF 2' FROM THE EDGE OF THE TRAIL.
 - GEOTEXTILE FABRIC SHALL BE NONWOVEN POLYPROPYLENE WITH 120 (534) LBS (N) GRAB TENSILE STRENGTH, 50% GRAB TENSILE ELONGATION, 50 (223) LBS (N) TRAPEZOID TEAR STRENGTH, 310 (1380) LBS (N) CBR PUNCTURE STRENGTH, AND 1.7 PERMITTIVITY.

GRAVEL HIKING TRAIL
N.T.S.

GENERAL NOTES:

- A GROOVE JOINT 1" DEEP WITH 1/8" RADIUS SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
- SIDEWALK AT DRIVEWAY ENTRANCES TO BE 6" THICK.
- WIDTH OF SIDEWALK ON ALL STREETS SHALL BE A MINIMUM OF 5'.
- CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI. IN 28 DAYS.
- ZONING CONDITIONS MAY REQUIRE ADDITIONAL WIDTH SIDEWALKS WHICH SHALL SUPERSEDE THESE STANDARD DIMENSIONS SHOWN.

GROOVE JOINT IN SIDEWALK

TRANSVERSE EXPANSION JOINT IN SIDEWALK

CONCRETE SIDEWALK WITH PLANTER STRIP

DETAILS SHOWING EXPANSION JOINTS FOR CONCRETE SIDEWALK

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



Dewberry Engineers Inc.
9500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
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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

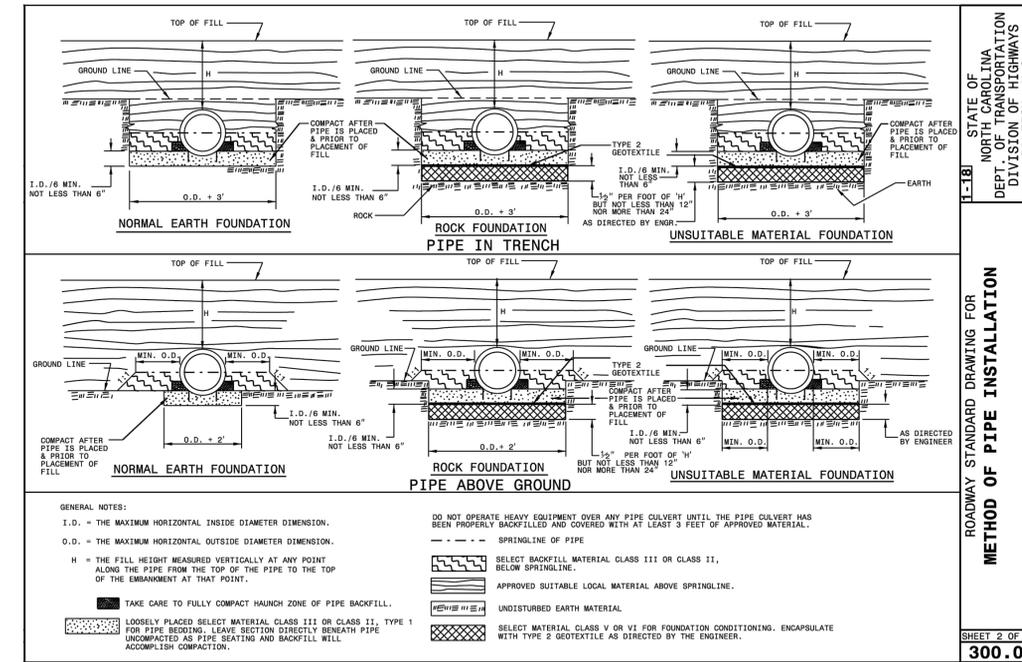
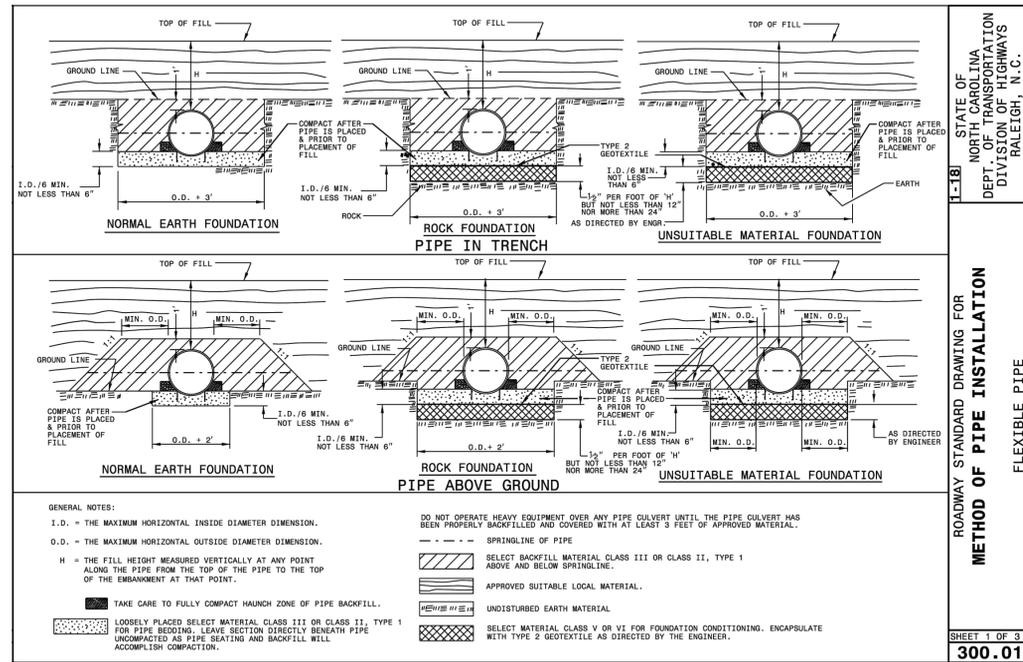
TITLE

SITE DETAILS

DEI PROJECT NO: 50181675

SHEET NO.

C6.03



FLEXIBLE PIPE

Round Corrugated Steel Pipe 2 2/3 x 1/2 corrugation **				
Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)		
		18	14	10
12	12	204	256	8
15	12	162	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
42	12	55	70	100
48	12	48	61	87
54	12	44	54	77
60	12		49	69
66	12		44	61
72	12		40	54
78	12		36	48
84	12		32	42

Round Corrugated Aluminum Pipe 2 2/3 x 1/2 corrugation **				
Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)		
		18	14	10
12	12	123	155	218
15	12	98	123	174
18	12	81	102	144
21	12	69	87	123
24	12	60	76	108
27	12	53	67	95
30	12	47	60	86
36	12	40	51	72
42	12	35	45	63
48	12	31	40	56
54	12	27	36	50
60	12	24	32	45
66	12	21	29	41
72	12	19	26	37

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

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

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS
 CSP - AASHTO M36
 CAAP - AASHTO M196
 HDPE - AASHTO M294
 PVC - ASTM F949 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

SHEET 3 OF 3
300.01

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

SEAL

**PRELIMINARY-
 DO NOT USE FOR
 CONSTRUCTION**

KEY PLAN:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
△	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

**STORMWATER
 DETAILS
 (SHEET 2 OF 4)**

DEI PROJECT NO: 50181675

SHEET NO.

C6.05

NOTE TO OWNER:
 OWNER IS RESPONSIBLE TO REMOVE EXISTING TREES/OBSTRUCTIONS LOCATED WITHIN SIGHT LINE. PERMISSION FROM ADJACENT PROPERTY OWNER IS REQUIRED PRIOR TO TREES/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.



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 NCBELS #F-0629
 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
△	05/29/25	DLJ	AGENCY COMMENTS
△	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**

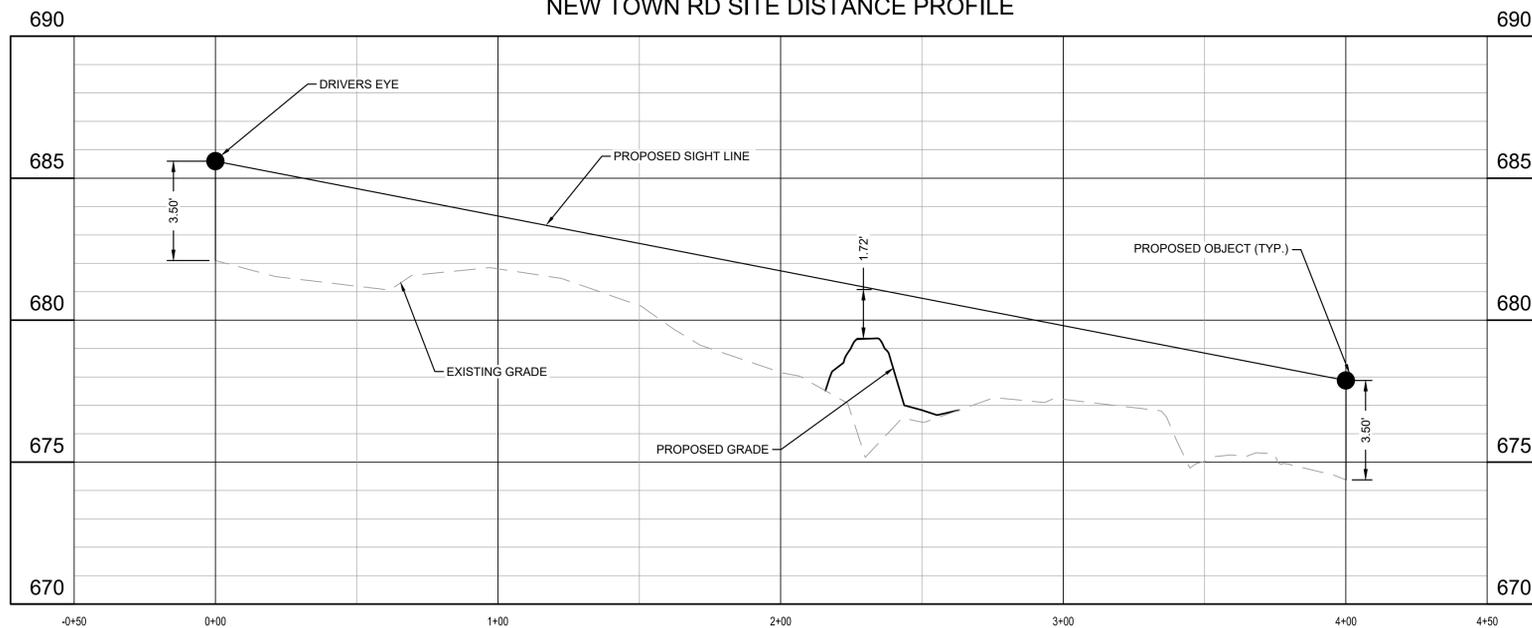
DEI PROJECT NO: 50181675

SHEET NO.

C7.01



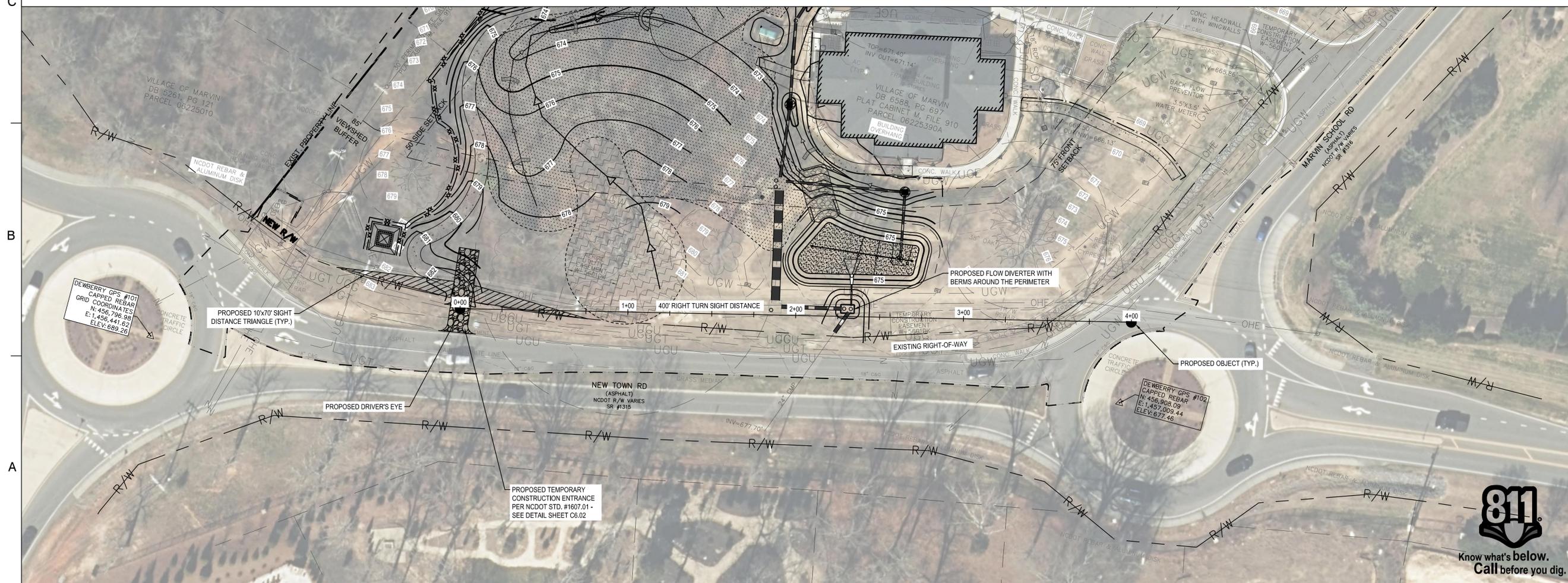
NEW TOWN RD SITE DISTANCE PROFILE



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

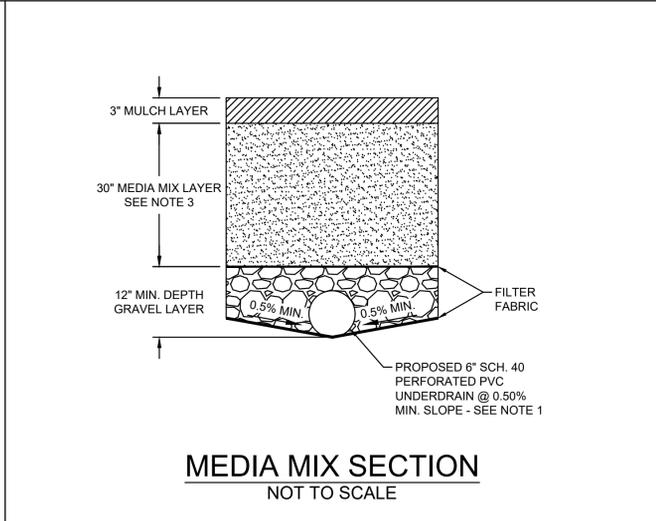
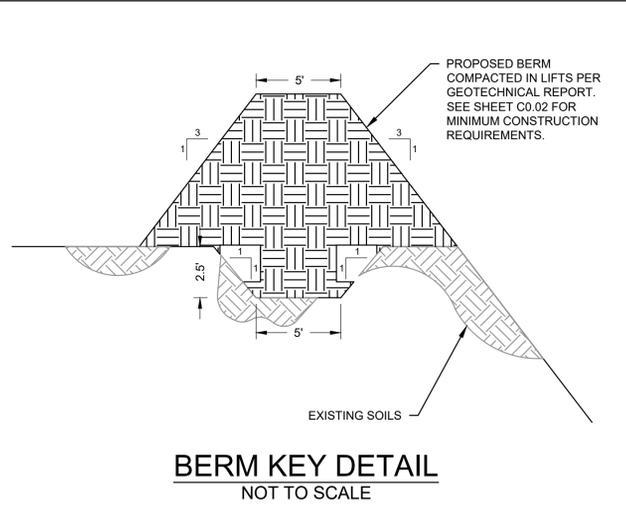
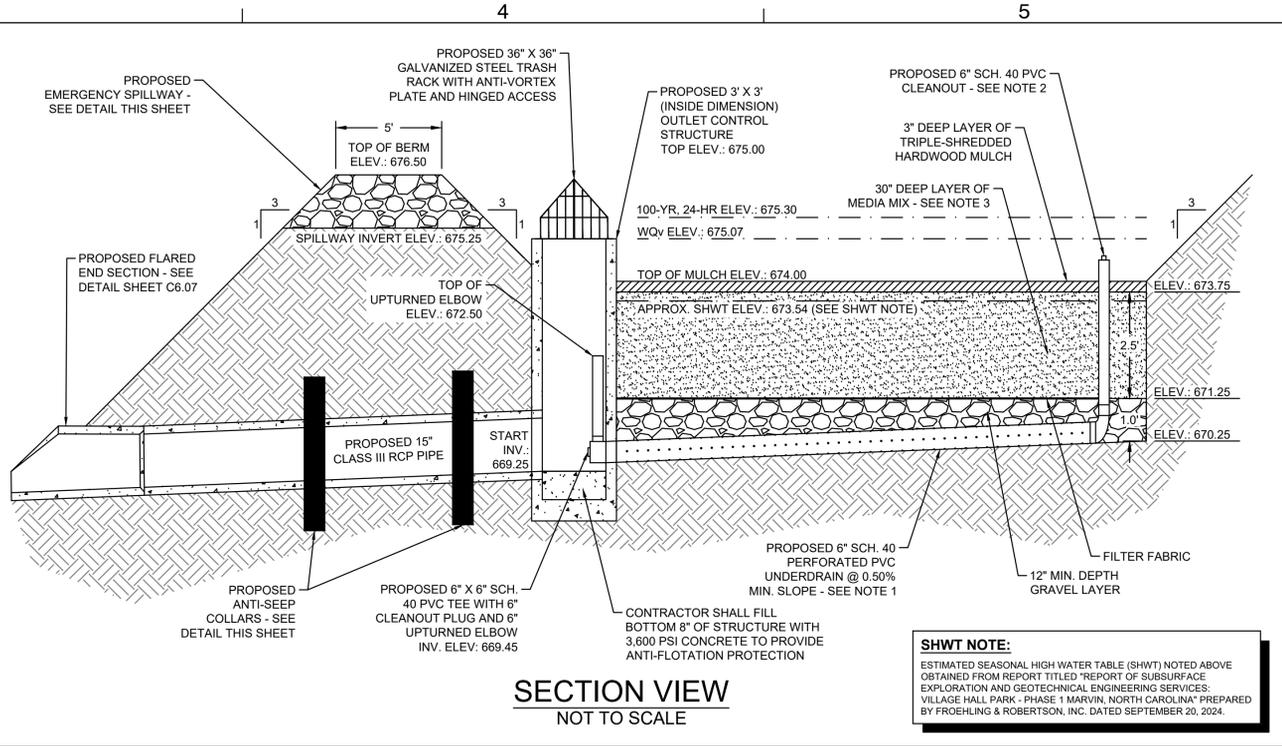
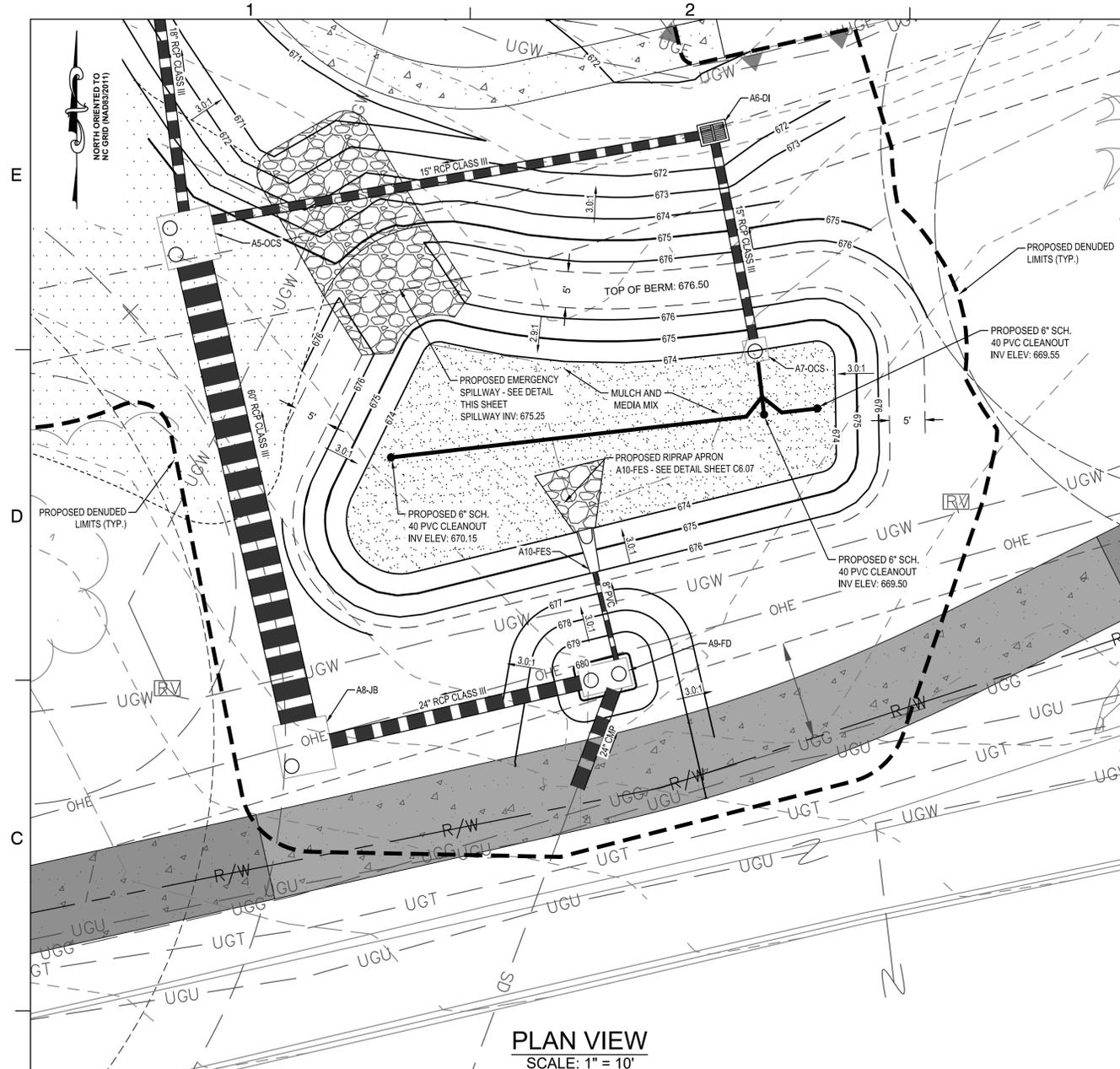


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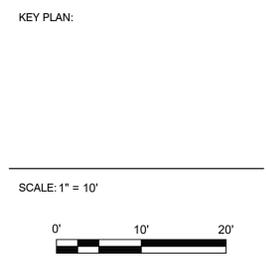
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 CAPPED REBAR
 GRID COORDINATES
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 E: 1,456,441.62
 ELEV: 689.26

DEWBERRY GPS #102
 CAPPED REBAR
 N: 456,908.09
 E: 1,457,009.44
 ELEV: 677.46



SHWT NOTE:
 ESTIMATED SEASONAL HIGH WATER TABLE (SHWT) NOTED ABOVE OBTAINED FROM REPORT TITLED "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING SERVICES: VILLAGE HALL PARK - PHASE 1 MARVIN, NORTH CAROLINA" PREPARED BY FROEHLING & ROBERTSON, INC. DATED SEPTEMBER 20, 2024.

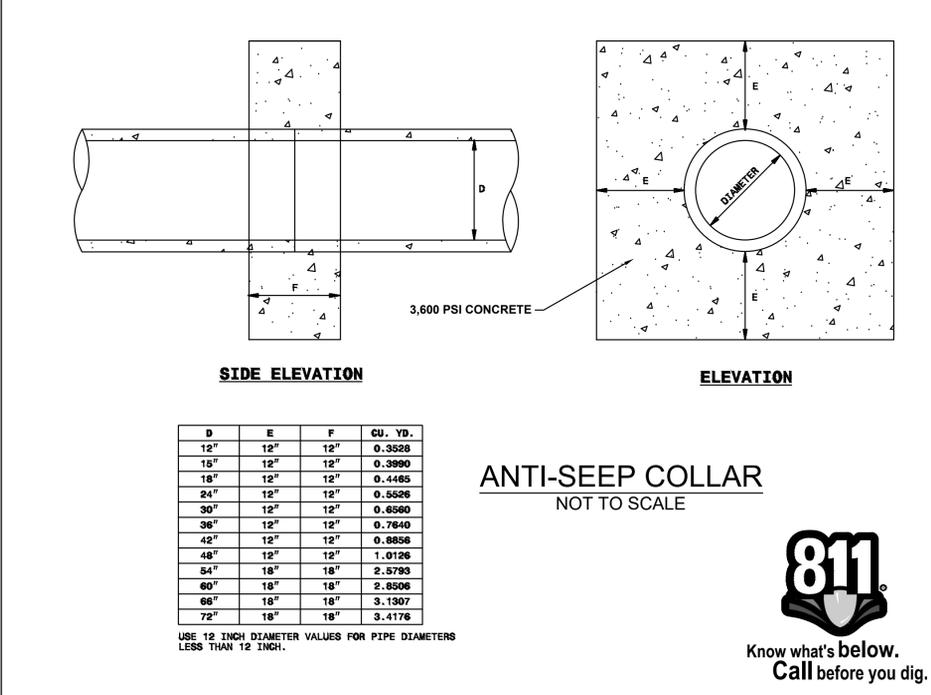
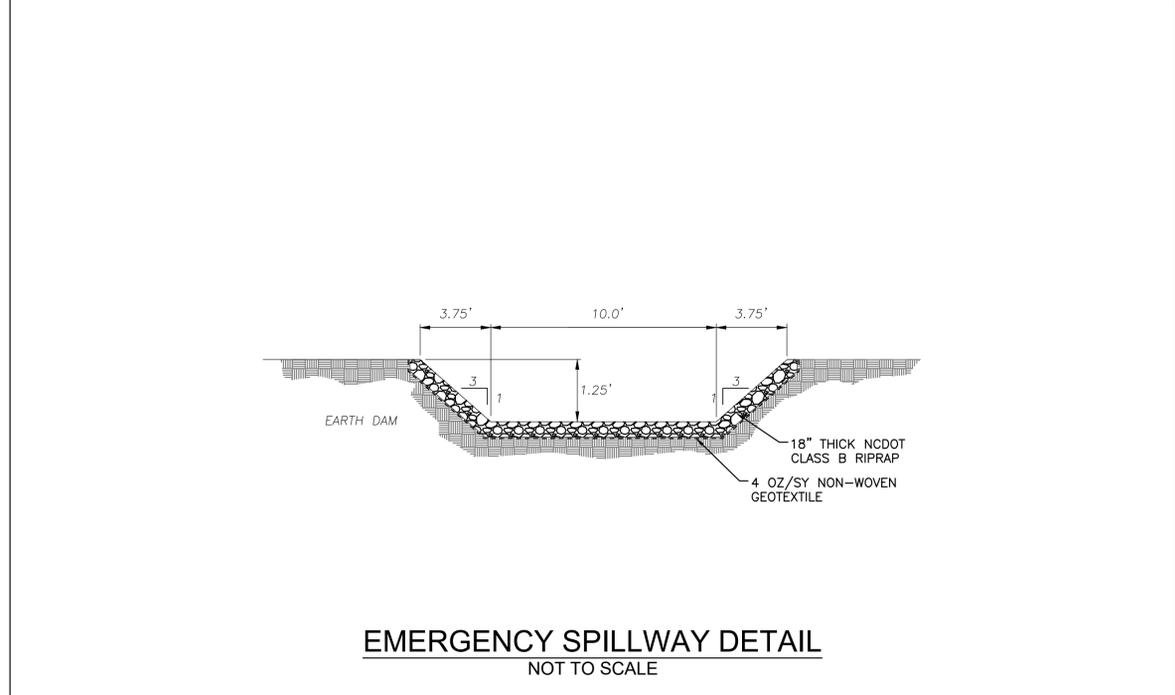
SEAL
PRELIMINARY- DO NOT USE FOR CONSTRUCTION



ENHANCED LANDSCAPE PLANTER NOTES:

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 4 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 MEDIUM 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 ARE TO BE STABILIZED PRIOR TO THE INSTALLATION OF THE MEDIA MIX.
5. THE DESIGNER OF RECORD MUST VERIFY AND CERTIFY 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.

NOTICE TO CONTRACTOR:
 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.



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

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



LANDSCAPE NOTES

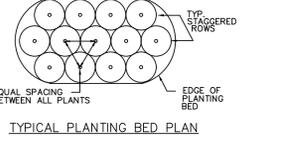
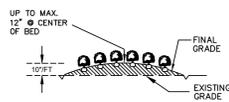
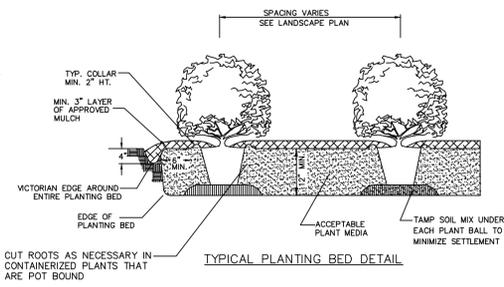
1. SIZE, QUALITY AND OVERALL HEALTH OF ALL PLANT MATERIAL USED SHALL CONFORM TO THE LATEST EDITION OF "USA STANDARDS FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
2. CONTRACTOR SHALL MULCH SHRUB BEDS AND TREES WITH PINE STRAW NEEDLES EXCEPT WHERE OTHERWISE NOTED ON PLANS.
3. ALL AREAS OUTSIDE OF PLANTING BEDS WITHIN LIMITS OF WORK LIMITS OF DISTURBANCE TO BE PLANTED WITH FESCUE SOD OR FESCUE SEED-SEE PLAN FOR DETAILS.
4. CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANS. QUANTITIES ARE FOR CONVENIENCE ONLY. IF THERE IS A DISCREPANCY BETWEEN THE PLAN AND PLANT SCHEDULE, PLAN SHALL PREVAIL.
5. ALL CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM WITH UNION COUNTY AND VILLAGE OF MARVIN STANDARDS.
6. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO INSTALLATION AND NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF FIELD CONDITIONS WARRANT ADJUSTMENT OF PLAN MATERIALS.
7. COORDINATE LANDSCAPE INSTALLATION WITH ANY LIGHTING/IRRIGATION CONSTRUCTION.
8. NO TREES TO BE PLANTED WITHIN 15' OF UTILITIES OR LIGHT POLE. LARGE MATURING TREES MUST BE A MINIMUM 25' FROM OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. COORDINATE PLANTINGS WITH THE PROPER POWER COMPANY IF NECESSARY. IF TREES CONFLICT WITH POWER LINES OR SIGNS NOTIFY LANDSCAPE ARCHITECT TO RESOLVE BEFORE PLANTING.
9. WITHIN PLANT BED AREAS CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR A MIN. PERIOD OF 90 DAYS AFTER ACCEPTANCE FROM OWNER BUT MAY ALSO BE BONDED FOR WARRANTY BY LOCAL ORDINANCE OR DEVELOPMENT CONDITIONS IN THE EVENT THAT LANDSCAPE MAINTENANCE IS PROVIDED BY ANOTHER CONTRACTOR, 90 DAY WARRANTY SHALL BE TRANSFERABLE TO MAINTENANCE CONTRACTOR.
10. CONTRACTOR SHALL REMOVE ALL LUMPS OF CLAY, STONES OVER 1" IN DIAMETER AND ALL COMPACTED SOIL OR CONSTRUCTION DEBRIS INCLUDING PAVEMENT, GRAVEL, ROOTS, LIMBS AND OTHER DELETERIOUS MATTER WHICH WOULD BE HARMFUL OR PREVENT PROPER ESTABLISHMENT AND/OR MAINTENANCE OF LAWN AND TREE PLANTING AREAS.
11. CONTRACTOR SHALL REPAIR (RESEED OR SOD) ANY LAWN AREAS DAMAGED DUE TO PLANT MATERIAL INSTALLATION.
12. CONTRACTOR SHALL COORDINATE ALL PLANTING AND IRRIGATION IN ANY RIGHT-OF-WAY WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL TRANSPORTATION DEPARTMENT AND RECEIVE ANY NECESSARY ENCROACHMENT AGREEMENTS.
13. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT ALL UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.
14. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES, USING FLAG MEN, AND MAINTENANCE OF TRAFFIC AS NECESSARY TO INSURE PUBLIC SAFETY.
15. ALL STRAPPING AND TOP 1/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACK FILLING PLANTING PITS. REMOVE TOP 1/3 OF BURLAP FROM BALL.
16. PROVIDE AT LEAST 150 SQUARE FEET OF MINIMUM PLANTING AREA PER TREE WITH AMENDED ON SITE SOIL OR SOIL MIX, OR AS SPECIFIED IN THE UNION COUNTY/VILLAGE OF MARVIN GUIDELINES AND SPECIFICATIONS ON TREE PLANTING TO A DEPTH OF 18" INCHES.
17. FIELD ADJUSTMENTS TO PLAN MATERIAL AS NECESSARY BY OWNERS.
18. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL SPECIFICATIONS AND INSTALLATION REQUIREMENTS OF IRRIGATION, LIGHTING, AND VINYL FENCING TO ENSURE THAT PRODUCTS ARE INSTALLED PROPERLY AND PER MANUFACTURER REQUIREMENTS AND LOCAL AGENCY CODES & RESTRICTIONS.
19. DEWBERRY ENGINEERS INC. IS NOT RESPONSIBLE FOR INSTALLATION OR DESIGN OF LIGHTING, FENCING, OR IRRIGATION. THE INSTALLATION REQUIREMENTS AND DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR.
20. CONTRACTOR RESPONSIBLE FOR LOCATING SIGHT DISTANCE AND SIGHT TRIANGLES PRIOR TO INSTALLATION OF PLANT MATERIALS, MONUMENTS, SIGNS, LIGHTING, AND/OR FENCES. CONTRACTOR SHALL INSTALL PLANT MATERIALS, MONUMENTS, SIGNS, LIGHTING, AND/OR FENCES OUTSIDE OF SIGHT TRIANGLES AND/OR SIGHT DISTANCE LINES.
21. WATER DISTRIBUTION IS TO BE LOCATED A MINIMUM OF 2' FROM BACK OF SIDEWALK WITH A MINIMUM 36" OF COVER.
22. CANOPY TREES SHALL BE MINIMUM OF 3" CALIPER AND HAVE A MINIMUM HEIGHT OF 10 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING. UNDERSTORY TREES SHALL BE A MINIMUM OF 2" CALIPER AND HAVE A MINIMUM HEIGHT OF 8 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING. EVERGREEN TREES SHALL BE A MINIMUM OF 3" CALIPER AND HAVE A MINIMUM OF 6 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING. EVERGREEN SHRUBS SHALL BE A MINIMUM OF 2" CALIPER AND HAVE A MINIMUM HEIGHT OF 3 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING.

SOIL AMENDMENTS
 ALL PLANTING BEDS/PLANTING PITS TO BE TILLED AT A MINIMUM OF 1'-0" DEPTH AND RECEIVE AN AMENDED TOPSOIL MIXTURE APPROPRIATE FOR GOOD PLANT GROWTH AND ADEQUATE DRAINAGE. SOIL MIXTURE SHALL BE COMPOSED OF A MINIMUM 20% GOOD GARDEN SOIL (3 1/2 PARTS GOOD GARDEN SOIL, 1 PART COMPOST OR ORGANIC MATTER, 1 POUND OF LIME PER CUBIC FOOT) OR RECOMMENDED SOIL AMENDMENTS AND SOIL COMPOSITE BASED UPON RECOMMENDATION FROM SOIL TESTS. A MINIMUM OF ONE SOIL TEST IS REQUIRED FOR THIS SITE.

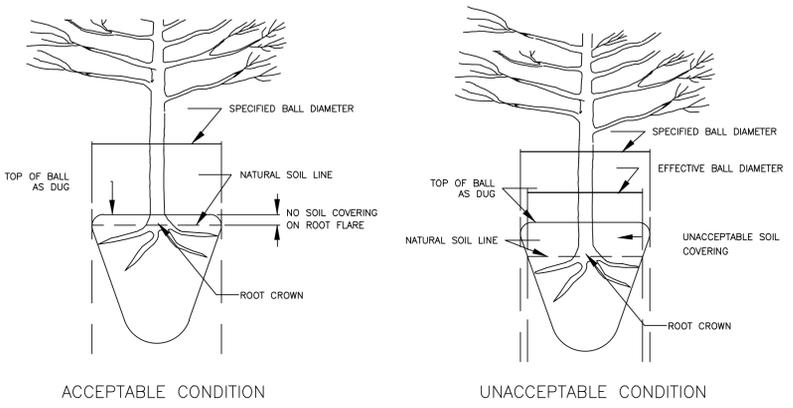
PLANT SCHEDULE									
ABBR	QTY	BOTANICAL NAME	COMMON NAME	CONT.	HEIGHT/SPREAD	CALIPER	SPACING	REMARKS	
SHRUBS									
GA	23	RHODODENDRON X 'GUMPO PINK'	GUMPO PINK AZALEA	3 GAL.	18" HT	N/A	SEE PLAN	FULL MATCHED SPECIMEN	
IC	10	ILEX CORNUTA 'CARISSA'	CARISSA HOLLY	3 GAL.	18" HT	N/A	SEE PLAN	FULL MATCHED SPECIMEN	
IV	8	ILEX VOMITORIA	YAUPON HOLLY	3 GAL.	18" HT	N/A	SEE PLAN	FULL MATCHED SPECIMEN	
OF	8	OSMANTHUS FRAGRANS	TEA OLIVE	B&B	6' HT	N/A	SEE PLAN	FULL MATCHED SPECIMEN	
VN	14	VIBURNUM NUDUM	POSSUMHAW VIBURNUM	1 GAL.	18" HT	N/A	SEE PLAN	FULL MATCHED SPECIMEN	
GROUNDCOVERS									
BA	57	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	1 GAL.	24" HT	N/A	18" O.C.	FULL MATCHED SPECIMEN	
CL	87	CHASMANTHIUM LATIFOLIUM	NORTHERN SEA OATS	8" CONT.		N/A	18" O.C.	FULL MATCHED SPECIMEN	
EP	71	ECHINACEA PURPUREA	PURPLE CONEFLOWER	8" CONT.		N/A	18" O.C.	FULL MATCHED SPECIMEN	
EF	26	EUTROCHIUM FISTULOSUM	HOLLOW JOE-PYE WEED	1 GAL.		N/A	24" O.C.	FULL MATCHED SPECIMEN	
IVI	284	IRIS VIRGINICA	SOUTHERN BLUE FLAG	8" CONT.		N/A	12" O.C.	FULL MATCHED SPECIMEN	
PV	57	PANICUM VIRGATUM	SWITCHGRASS	1 GAL.	36" HT	N/A	24" O.C.	FULL MATCHED SPECIMEN	
RF	75	RUDBECKIA FULGIDA	BLACK EYED SUSAN	8" CONT.	15" HT	N/A	18" O.C.	FULL MATCHED SPECIMEN	
SP	44	SILPHIUM PERFOOLIATUM	CUP PLANT	1 GAL.		N/A	18" O.C.	FULL MATCHED SPECIMEN	
SC	21	SOLIDAGO CANADENSIS	GOLDENROD	1 GAL.		N/A	30" O.C.	FULL MATCHED SPECIMEN	
SN	14	SORGHASTRUM NUTANS	INDIAN GRASS	1 GAL.		N/A	24" O.C.	FULL MATCHED SPECIMEN	
VNO	24	VERNONIA NOVEBORACENSIS	COMMON IRONWEED	1 GAL.		N/A	24" O.C.	FULL MATCHED SPECIMEN	

NOTES:

1. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
2. INSTALL TOP OF PLANT BALL 2" ABOVE ADJACENT GRADE.
3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
4. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
5. SAME PRINCIPLES AND TECHNIQUE APPLIES TO PERENNIAL PLANTING.



SHRUB PLANTING BED
 NOT TO SCALE

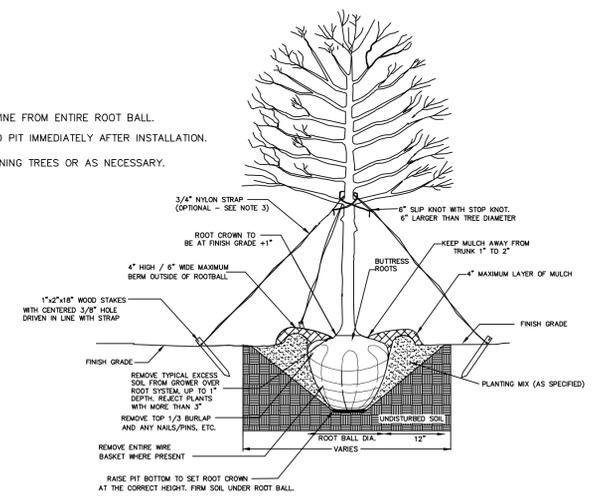


ROOT CROWN DEPTHS DETAIL
 NOT TO SCALE

NOTE: A ROOT COLLAR EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF IT IS DETERMINED THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.

NOTES:

1. REMOVE WIRE OR NYLON TWINE FROM ENTIRE ROOT BALL.
2. SOAK EACH ROOT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
3. STAKING REQUIRED FOR LEANING TREES OR AS NECESSARY.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (AMSI, 1980, PART 1, "SHADE AND FLOWERING TREES")
 FOR EXAMPLE: CALIPER HEIGHT (RANGE) MAX. HEIGHT MIN. ROOT BALL DIA. MIN. ROOT BALL DEPTH
 2" 12-14' 15' 16" 24" 16" 21"
 3" 14-16' 18' 32"

TREE PLANTING
 NOT TO SCALE



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

SEAL

**PRELIMINARY-
 DO NOT USE FOR
 CONSTRUCTION**

KEY PLAN:

SCALE: N/A

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

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

LANDSCAPE NOTES
 AND DETAILS

DEI PROJECT NO: 50181675

SHEET NO.

L1.03



Know what's below.
 Call before you dig.