CONSTRUCTION DOCUMENTS FOR

YOUNG STREET CONNECTOR

408 E YOUNG STREET ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

> INITIAL SUBMITTAL: JULY 3, 2023 SECOND SUBMITTAL: OCTOBER 9, 2023

SITE DATA TABLE									
OWNER	TOWN OF ROLESVILLE								
	T								
DEVELOPER	LENNAR COR	PORATION							
PIN #	AREA (SF)	AREA (AC)							
1768094465	101059	2.32							
1768098727	583268.4	13.39							
GROSS AREA	684328	15.7							
PREVIOUS ZONING	EXEMPT								
PROPOSED R/W WIDTH:	60 ft								
PROPOSED R/W AREA:	1.86 ac								
SITE NET AREA:	13.85	13.85 ac							

PUBLIC IMPROVEMENT QUANTITY TABLE								
PHASE NUMBER	PHASE 1	PUBLIC SEWER (LF)	145					
NUMBER OF LOTS	2	PUBLIC STREET (LF) - FULL	1359					
LOT NUMBER BY PHASE		PUBLIC STREET (LF) - PARTIAL	0					
NUMBER OF UNITS	0	PUBLIC SIDEWALK (LF) - FULL	2676					
LIVABLE BUILDINGS	0	PUBLIC SIDEWALK (LF) - PARTIAL	0					
NUMBER OF OPEN SPACE LOTS	0	WATER SERVICE STUBS	0					
PUBLIC WATER (LF)	1333	SEWER SERVICE STUBS	0					

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SITE LOCATION MAP
NOT TO SCALE

SHEET LIST TABLE						
SHEET NUMBER	SHEET TITLE					
C0-0	COVER SHEET					
C0-1	GENERAL NOTES					
C1-0	EXISTING CONDITIONS					
C2-0	SITE PLAN					
C3-0	UTILITY PLAN					
C4-0	GRADING AND DRAINAGE PLAN					
C5-0	EROSION CONTROL PHASE 1					
C5-1	EROSION CONTROL PHASE 2					
C6-0	YOUNG STREET CONNECTOR PLAN & PROFILE					
C6-1	PAVEMENT MARKING DETAILS					
C6-2	EROSION CONTROL DETAILS (1 OF 2)					
C6-3	EROSION CONTROL DETAILS (2 OF 2)					

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT APPROVED

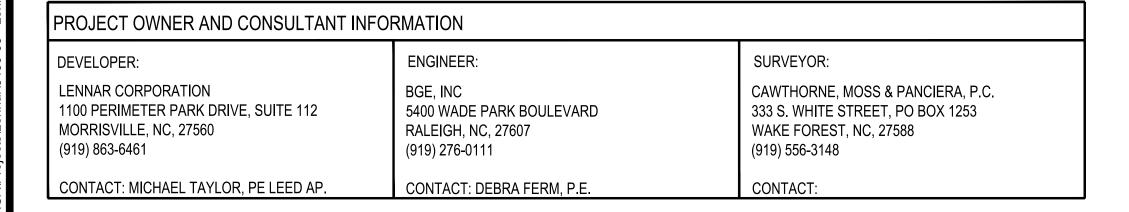
EROSION CONTROL

S-____
STORMWATER MGMT.

FLOOD STUDY

DATE_____

ENVIRONMENTAL CONSULTANT SIGNATURE





C0-0

NO WORK WITHIN NCDOT OR TOWN OF ROLESVILLE RIGHT OF WAY SHALL TAKE PLACE WITHOUT ALL PERMITS.

EXISTING STRUCTURES WITHIN THE CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR

RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID. AREAS TO BE DISTURBED SHALL BE IMPROVED PER THE CIVIL PLANS OR RESTORED TO THEIR ORIGINAL OR BETTER CONDITION. CONTRACTOR SHALL REPAIR ANY EXISTING FEATURES THAT ARE DAMAGED DURING CONSTRUCTION TO THE EXISTING OR BETTER CONDITION.

SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY CAWTHORNE MOSS, & PANCIERA, P.C. ALL INFORMATION IS TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, FLASHING LIGHTS, TRAFFIC MEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY THE NORTH CAROLINA DEPT. OF TRANSPORTATION NCDOT AS APPLICABLE

THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.

APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. ANY GRADING BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING AND DRAINAGE PLAN WITHOUT AUTHORIZATION IS SUBJECT TO A FINE. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS AND THE TOWN OF ROLESVILLE.

CONTRACTOR AGREES TO REPAIR ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE STANDARDS OF THE NCDOT AND THE TOWN OF ROLESVILLE.

ALL STANDARD NUMBERS REFER TO THE NCDOT STANDARD DETAILS AND SPECIFICATIONS AND THE LATEST EDITION OF THE RALEIGH UNIFIED DEVELOPMENT ORDINANCE.

THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR

THE CONTRACTOR SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN A UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.

CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH

CONTRACTOR SHALL POST ASSIGNED BUILDING PERMIT NUMBER AND ADDRESS ON BUILDING.

IN ROLLING OR HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR AND BASED ON FIELD CONDITIONS.

CONTACT APPROPRIATE UTILITY COMPANIES TO RELOCATE ANY EXISTING UTILITY AND/OR LIGHT POLES. 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND ALL EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE OF THIS PROJECT MUST BE RELOCATED AT THE EXPENSE OF THE CONTRACTOR.

UTILITY NOTES

INSTRUCTION PRIOR TO PROCEEDING.

FIT AND CONTINUOUS GRADE.

THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC OR PRIVATE UTILITIES (SHOWN OR NOT SHOWN) WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL CONTACT NORTH CAROLINA 811 (NC811) AT 811 OR (800)632-4949 TO COORDINATE FOR THE IDENTIFICATION OF EXISTING UTILITIES WITHIN THE SITE.

SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER IMMEDIATELY FOR DIRECTIONS.

CONTRACTOR SHALL COORDINATE ANY INTERRUPTION OF UTILITY SERVICE WITH OWNER AND RESPECTIVE UTILITY COMPANY REPRESENTATIVE.

THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY THE CONTRACTOR SHALL NOTIFY THE UTILITY PROVIDER FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.

ANY PLANNED INTERRUPTION OF UTILITY SERVICE SHALL BE GIVEN A 48 HOUR NOTICE TO THE UTILITY COMPANY AND THE OWNER.

CONTRACTOR SHALL SAW CUT, REMOVE, AND REPLACE ASPHALT PAVEMENT AS NECESSARY TO INSTALL UNDERGROUND ELECTRIC, TELEPHONE, SEWER, WATER, AND COMMUNICATION CONDUITS.

ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE PER DUKE ENERGY STANDARDS.

ALL UTILITIES ARE TO BE UNDERGROUND.

TRAFFIC CONTROL & PEDESTRIAN PLAN (TCPED) NOTES

PRIOR TO ANY WORK THAT IMPACTS THE RIGHT-OF-WAY, CLOSING OR DETOURING OF ANY STREET LANE, OR SIDEWALK, THE CONTRACTOR MUST APPLY FOR A PERMIT WITH RIGHT-OF-WAY SERVICES. PLEASE DIRECT ANY QUESTIONS TO RIGHTOFWAYSERVICES@RALEIGHNC.GOV.

STREETS AND ALL NCDOT STREETS WITHIN RALEIGH'S JURISDICTION. A PERMIT REQUEST WITH A TCPED PLAN SHALL BE SUBMITTED TO RIGHT-OF-WAY SERVICES

THE STREET, LANE, SIDEWALK, CLOSURE PERMIT IS REQUIRED FOR ANY CLOSURE ON CITY

- THROUGH THE CITY OF RALEIGH PERMIT AND DEVELOPMENT PORTAL.
- PRIOR TO THE START OF WORK, THE CLIENT SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE ENGINEERING INSPECTIONS COORDINATOR TO REVIEW THE SPECIFIC COMPONENTS OF THE APPROVED PLAN, AND ENSURE ALL PERMITS ARE ISSUED.
- ALL TCPED PLANS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS AND STANDARDS, INCLUDING BUT NOT LIMITED TO:
- MANUAL ON UNIFORM TRAFFIC CONTROL (MUTCD);
- PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG);
- AMERICAN DISABILITY ACT (ADA) REQUIREMENTS;
- RALEIGH STREET DESIGN MANUAL (RSDM).
- ALL PUBLIC SIDEWALKS MUST BE ACCESSIBLE TO PEDESTRIANS WHO ARE VISUALLY IMPAIRED AND/OR PEOPLE WITH MOBILITY CONCERNS. EXISTING AND ALTERNATIVE PEDESTRIAN ROUTES DURING CONSTRUCTION SHALL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), THE ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- ALL PERMITS MUST BE AVAILABLE AND VISIBLE ON SITE DURING THE OPERATION

PAVING, GRADING AND DRAINAGE NOTES

- ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTIONAL RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR NCDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
- ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
- TRAFFIC CONTROL ON ALL NCDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
- ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SEEDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
- ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
- WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
- WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
- 10. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
- 11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO NCDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- 12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
- 13. ALL CUT OR FILL SLOPES SHALL BE 3 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
- SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 15. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE.
- SEED, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
- 17. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
- 18. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

RETAINING WALL NOTES

DESIGN OF ALL RETAINING WALLS IS TO BE PER INTERNATIONAL BUILDING CODE SECTION 1610.3.

CONTRACTOR SHALL PROVIDE DETAILED RETAINING WALL DESIGN DRAWINGS, SEALED BY A NC LICENSED ENGINEER, AND SHALL SUBMIT TO THE LOCAL AUTHORITY FOR APPROVAL PRIOR TO CONSTRUCTION.

A NC LICENSED ENGINEER MUST PERFORM CONSTRUCTION OBSERVATION, VERIFYING IN A SEALED LETTER TO THE LOCAL AUTHORITY, ENGINEER AND OWNER THAT RETAINING WALLS ARE CONSTRUCTED PER THE ENGINEERING DRAWINGS IN COMPLIANCE WITH INTERNATIONAL BUILDING CODE.

WALLS OVER 30" IN HEIGHT REQUIRE A SAFETY FENCE TO BE INSTALLED. DESIGN OF FALL PROTECTION SHALL COMPLY WITH NC STATE BUILDING CODE SECTION 1015.

THE WALL PLAN & PROFILE SHOWN IS FOR ILLUSTRATIVE PURPOSES ONLY. BGE, INC. IS NOT RESPONSIBLE FOR RETAINING WALL DESIGN.

ANY REFERENCE TO A RETAINING WALL WITHIN THE PLAN SET IS FOR APPROVAL PERTAINING TO LOCATION, APPEARANCE, AND SIZE ONLY.

EROSION CONTROL MAINTENANCE REQUIREMENTS

SILT FENCE SHALL BE MAINTAINED AROUND THE PERIMETER OF ALL EARTHWORK AREAS TO PREVENT SEDIMENT TRANSPORT ONTO ADJACENT PROPERTIES OR OFFSITE ROADWAYS. AS APPLICABLE.

SILT FENCE FILTER BARRIERS SHALL BE INSTALLED AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE

CONSTRUCTION ENTRANCE

- THE GRAVEL CONSTRUCTION ENTRANCE MUST BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO ADJACENT ROADWAYS.
- REPLACEMENT OF STONE MAY BE NECESSARY TO ENSURE THE GRAVEL ENTRANCE FUNCTIONS PROPERLY.
- REPLENISHMENT OF STONE MAY BE NECESSARY.
- FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE SHOULD BE COMPLETED.
- ANY MATERIAL TRACKED ONTO THE ROADWAY SHALL BE CLEANED UP IMMEDIATELY.

- INSPECT THE SILT FENCE ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT. MAKE ANY REPAIRS IMMEDIATELY.
- INSPECT THE SILT FENCE TO BE SURE THE BOTTOM OF THE GEOTEXTILE IS KEYED IN PROPERLY.
- AT A MINIMUM, REMOVE AND DISPOSE OF ALL SILT ACCUMULATIONS WHEN DEPTH REACHES 1/2 THE HEIGHT OF THE GEOTEXTILE. DO NOT UNDERMINE THE FENCE DURING CLEANOUT.
- DISPOSE OF SEDIMENT BY HAULING IT TO AN APPROVED WASTE SITE WITH APPROPRIATE PERIMETER PROTECTION.
- REMOVE AND REPLACE DETERIORATED OR CLOGGED SILT FENCE.
- REPLACE SILT FENCE REMOVED FOR ACCESS AT THE END OF EACH DAY'S OPERATION.
- INSTALL ADDITIONAL POSTS OR WIRE BACKING IF FENCE IS SAGGING.

- DEVICES SHOULD BE INSPECTED ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT.
- AT A MINIMUM, SEDIMENT SHOULD BE REMOVED FROM THE CHANNEL WHEN THE TEMPORARY DIVERSION IS 50 PERCENT OF THE DESIGN DEPTH
- TEMPORARY DIVERSIONS SHOULD BE IMMEDIATELY REPAIRED IF DAMAGED BY EQUIPMENT OR BREACHED BY RUNOFF

SILT FENCE OUTLET

- INSPECT THE DEVICE ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT FOR DAMAGE AND SEDIMENT ACCUMULATION TO CONFIRM THE DEVICE IS FUNCTIONING PROPERLY.
- AT A MINIMUM, REMOVE SEDIMENT FROM THE DEVICE WHEN ACCUMULATIONS REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL STONE.
- REPLACE OR CLEAN THE SEDIMENT CONTROL STONE AS NEEDED TO ALLOW WATER TO DRAIN THROUGH THE DEVICE BETWEEN RAINFALL EVENTS.
- REBUILD AND/OR REPAIR THE DEVICE WHEN IT IS DAMAGED.
- REPAIR AREAS WHERE SSCF BECOMES UNDERMINED DUE TO CONCENTRATED FLOWS.

TEMPORARY SLOPE DRAIN

- INSPECT SLOPE DRAINS ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT.
- REBUILD EARTH BERMS AND INLETS THAT HAVE WEAKENED DUE TO SCOURING.
- EXTEND SLOPE DRAINS AND REBUILD INLET PROTECTION AS SLOPE IS BUILT, AFTER EACH 2-FOOT INCREASE IN HEIGHT.
- REBUILD OR REPAIR SLOPE DRAINS IF NEEDED WHEN SEEDING AND MULCHING IS PERFORMED.
- REFURBISH CLASS B STONE OUTLET PROTECTION AND CLEAN AS NEEDED.

- REPAIR EROSION AND/OR UNDERMINING AT THE TOP OF THE SLOPE.
- REPAIR UNDERMINING BENEATH MATTING. PULL BACK MATTING, FILL AND COMPACT ERODED AREA, RESEED AND THEN SECURE MATTING FIRMLY.
- REPOSITION OR REPLACE MATTING THAT HAS MOVED ALONG THE SLOPE OR CHANNEL AND SECURE FIRMLY.
- REPLACE DAMAGED MATTING.

- THE UP-GRADIENT SIDE OF THE WATTLE BARRIER SHOULD BE MAINTAINED TO ALLOW THE WATER TO FLOW THROUGH. REDUCE VELOCITY AND ALLOW SEDIMENTATION TO OCCUR.
- IF THE NATURAL FIBERS OF THE WATTLE BARRIER BECOME TOO SATURATED WITH DEBRIS, SEDIMENT, ETC., AND REMOVAL OF THESE ITEMS IS NOT POSSIBLE, WATTLE BARRIERS SHOULD BE REPLACED.
- STAKES SHOULD BE USED TO ANCHOR THE WATTLE BARRIER ADEQUATELY TO THE GROUND TO PREVENT SCOURING AND WASHOUT DURING STORM EVENTS.
- THE EXCELSIOR PAID BENEATH THE WATTLES IS CRITICAL TO THE PROPER FUNCTIONING OF THE WATTLES.

RISER BASIN

- INSPECT THE BASIN AND RISER ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT.
- INSPECT THE RISER FOR PROPER OPERATION. REMOVE DEBRIS FROM AROUND THE RISER OR THE TRASH RACK.
- CHECK THE SKIMMER FOR PROPER FUNCTIONING AND TO VERIFY THAT IT IS NOT CLOGGED WITH SEDIMENT.
- MAKE SURE THE VENT PIPE ON THE SKIMMER IS TURNED UPRIGHT.
- INSPECT THE BARREL FOR SEEPAGE AROUND THE PIPE AT THE OUTLET. INSPECT THE EMBANKMENT, BAFFLES, OVERFLOW SPILLWAY AND OUTLET FOR EROSION DAMAGE.
- AT A MINIMUM, REMOVE SEDIMENT WHEN THE BASIN VOLUME REACHES 50% OF THE TOTAL STORAGE VOLUME AND AS

SKIMMER BASIN

- INSPECT THE BASIN ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT.
- CLEAN OUT THE BASINS WHEN SEDIMENT ACCUMULATIONS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE
- . CHECK THE SKIMMER TO MAKE SURE THAT IT IS NOT CLOGGED WITH SEDIMENT.
- CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE.
- CHECK THE COIR FIBER MAT AT THE OUTLET OF THE SKIMMER TO DETERMINE IF A REPLACEMENT IS NEEDED.
- DURING WINTER, SUPPORT THE SKIMMER AT AN ANGLE SUCH THAT WATER DOES NOT STAND INSIDE THE BARREL. THIS COULD RESULT IN THE WATER FREEZING AND PLUGGING THE SKIMMER.
- REPAIR SEED AND REPLACE MATTING ON THE SIDE SLOPE AREAS THAT HAVE ERODED OR HAVE BECOME DAMAGED BY EQUIPMENT FROM SILT CLEANOUT.
- REMOVE SEDIMENT THAT MAY ACCUMULATE ON THE STONE PAD UNDERNEATH THE SKIMMER DEVICE. INSPECT BAFFLES AFTER EACH RAIN EVENT FOR EROSION DAMAGE AND SEDIMENT ACCUMULATIONS.

- INSPECT BAFFLES OONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL EVENT. MAKE ANY REPAIRS IMMEDIATELY.
- INSPECT COIR FIBER BAFFLE TO BE SURE THE ENDS OF THE MAT ARE ANCHORED INTO THE GROUND OR SIDE SLOPES
- AT A MINIMUM, REMOVE SEDIMENT FROM THE DEVICE WHEN IT REACHES ½ THE BAFFLE HEIGHT, AND DO NOT DAMAGE THE BAFFLES DURING SEDIMENT CLEANOUT.
- REMOVE AND REPLACE DETERIORATED OR CLOGGED BAFFLES.
- INSTALL ADDITIONAL POSTS OR WIRE BACKING IF BAFFLE IS SAGGING.

- INSPECT FILTRATION GEOTEXTILE, STONE AND PIPE(S) ONCE A WEEK AND AFTER EACH 1" OR GREATER RAINFALL
- REPLACE GEOTEXTILE AND REPLENISH THE STONE WHEN THEY BECOME CONTAMINATED WITH SEDIMENT.
- DAMAGED TEMPORARY PIPE(S) SHOULD BE REPAIRED OR REPLACED IMMEDIATELY

• REPLACE ANY CLASS B OR NO. 57 STONE THAT GETS DISLODGED OR DAMAGED.

CLEAN PIPE(S) IF CLOGGED WITH DEBRIS

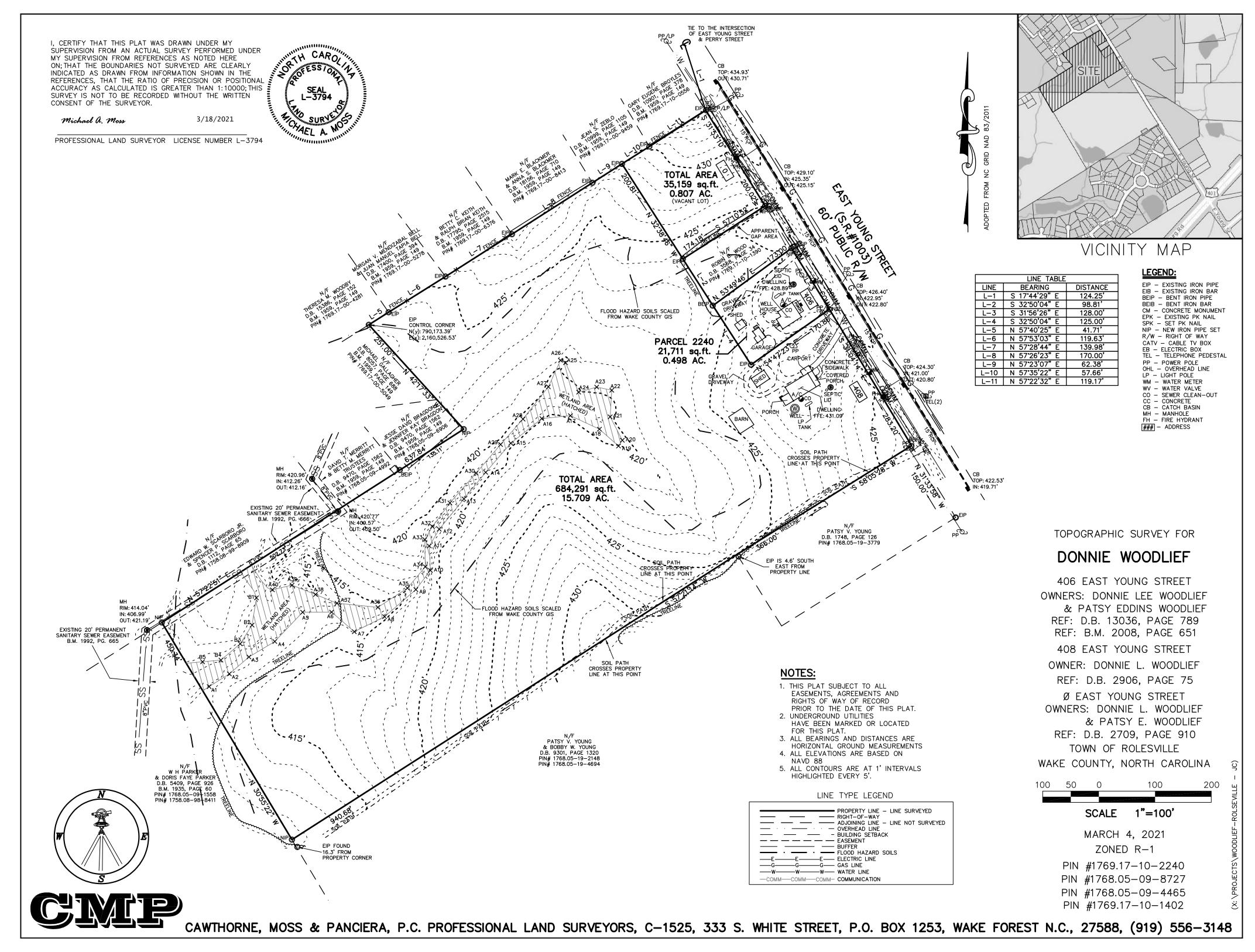
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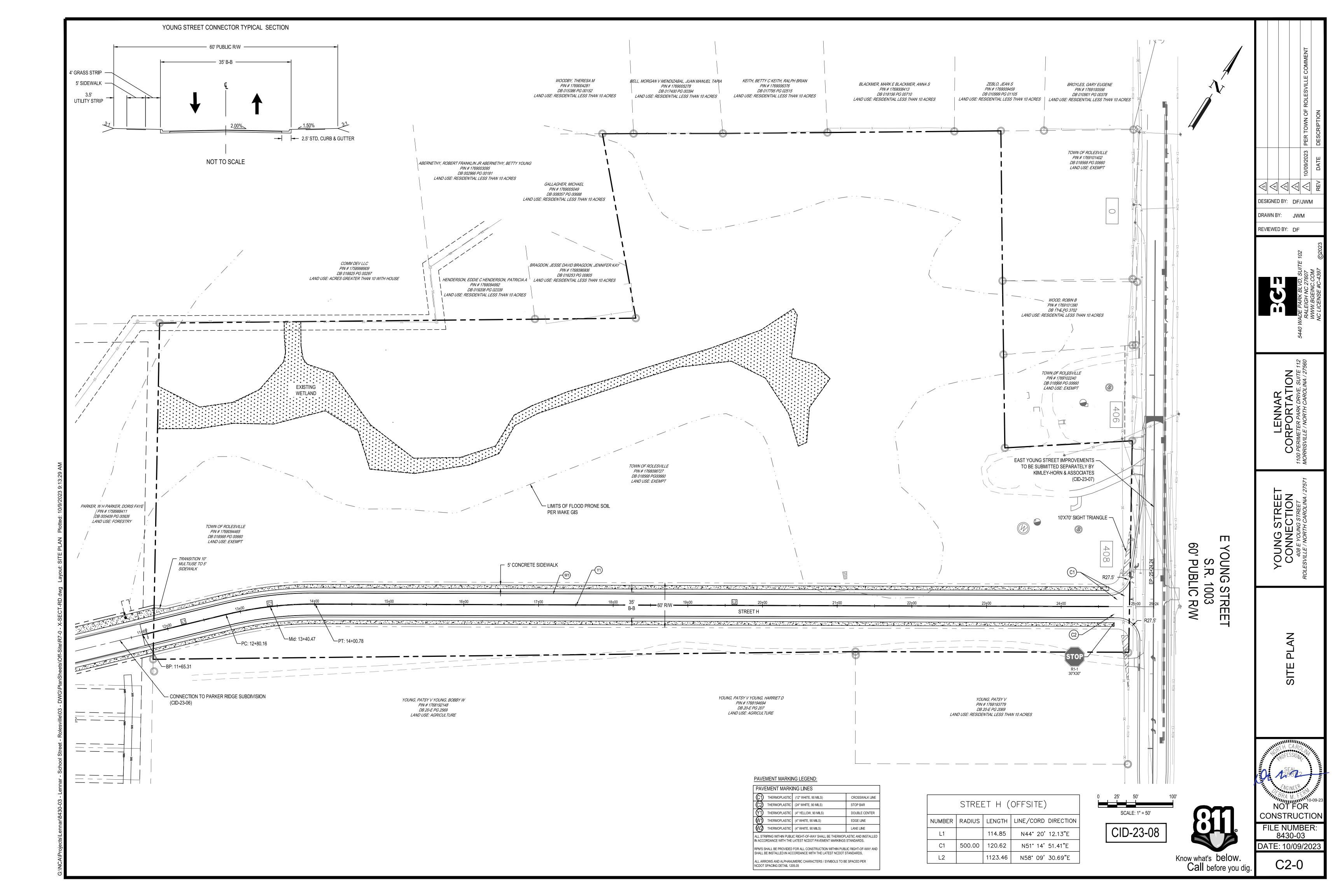
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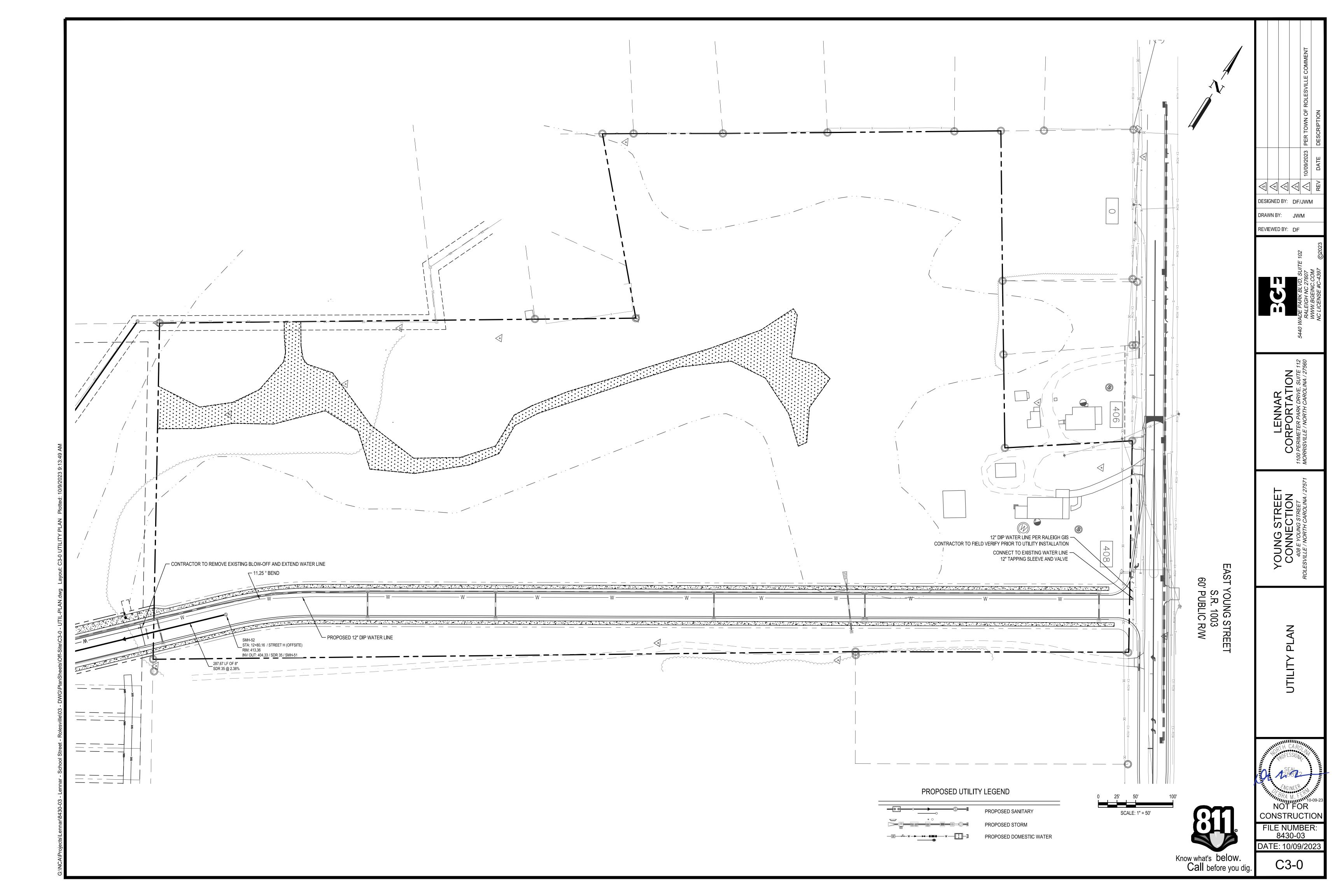
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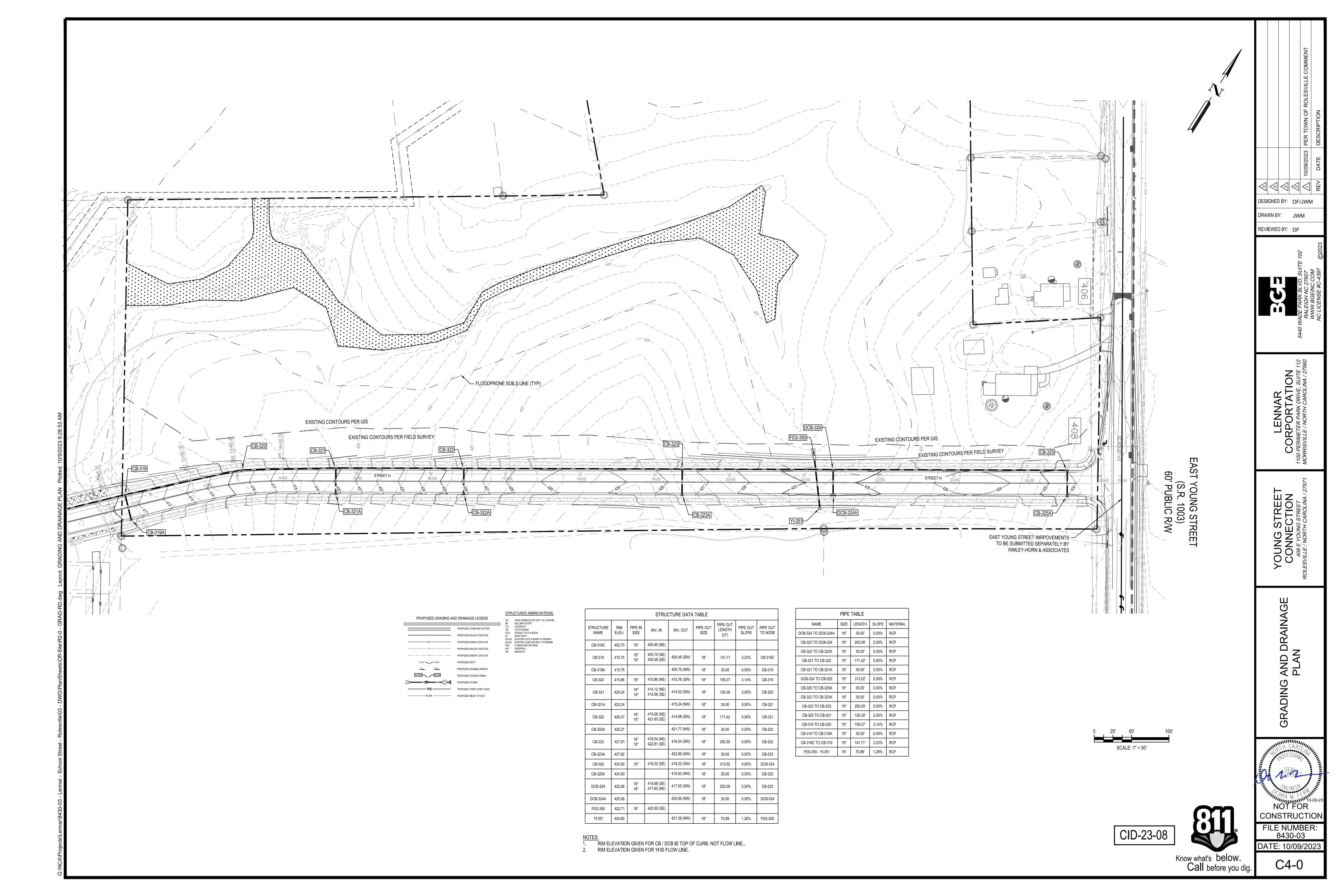
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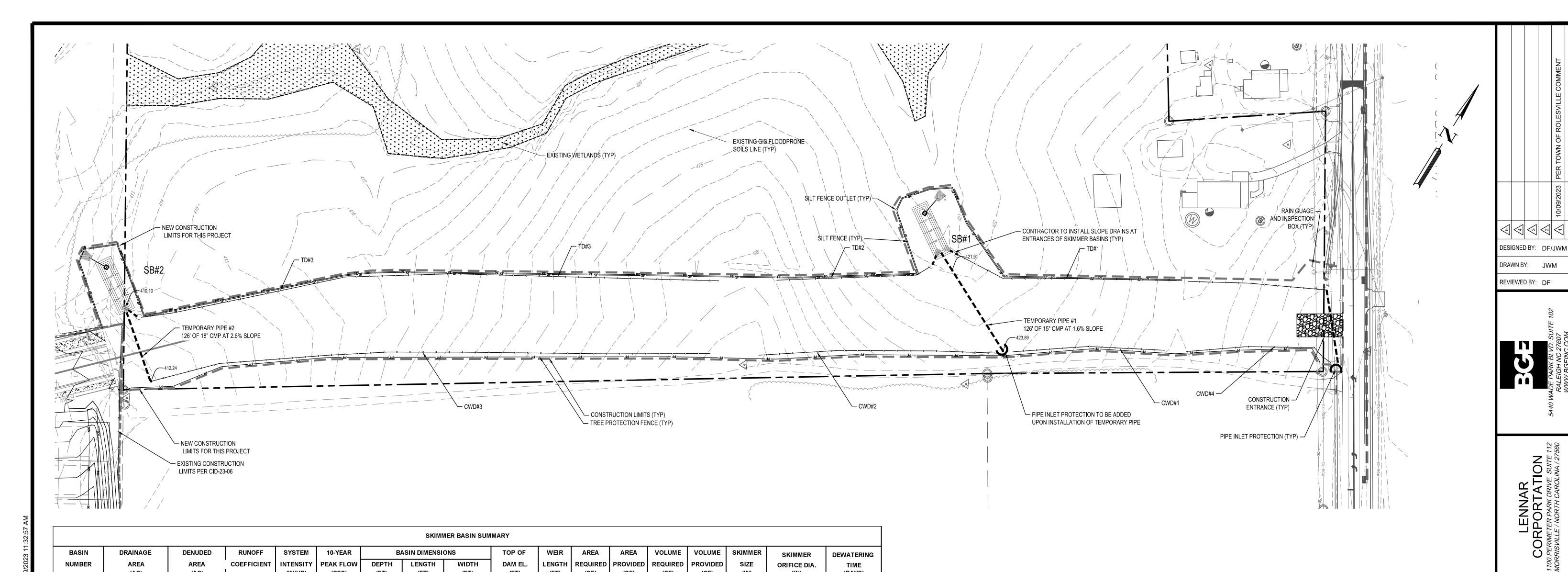
8430-03 DATE: 10/09/202 C0-1











TEMPORARY DIVERSION, CLEANWATER DIVERSION, AND PIPE SUMMARY

4.21 4.10

 $I_{10-yr} = 7.25$ in/hr Rainfall Intensity

SB #1

SB #2

Swale ID	Rational C	Drainage Area (ac)	Q _{10-yr} (cfs)	Slope (%)	Calculated Depth (ft)	Calculated Shear Stress (lbs/ft²)	Calculated Velocity (ft/s)	Bottom Width (ft)	# of Check Dams	Type of Liner	Slope Drain Type and Size (in)
TD1	0.50	0.34	1.24	2.49%	0.23	0.004	2.19	2	2	GRASS	CMP - 12"
TD2	0.50	0.43	1.55	3.65%	0.23	0.01	2.69	4	3	GRASS	CMP - 12"
TD3	0.50	1.13	4.11	2.72%	0.44	0.01	3.25	2	8	GRASS	CMP - 12"
CWD 1	0.50	0.15	0.53	4.41%	0.31	0.01	2.78	0	3	GRASS	N/A
CWD 2	0.50	0.25	0.89	3.13%	0.40	0.01	2.77	0	4	GRASS	N/A
CWD 3	0.50	0.60	2.19	4.00%	0.53	0.01	3.82	0	4	GRASS	N/A
PIPE 1	0.50	1.16	4.21	1.59%	0.98	0.01	6.81	N/A	N/A	N/A	CMP - 15"
PIPE 2	0.50	1.74	6.31	2.56%	0.92	0.01	5.83	N/A	N/A	N/A	CMP - 18"
NOTES:		•		-							

All ditches are to be trapezoidal in shape: 2:1 sideslopes, and height of 1.0' Calculated Depth and Calculated Velocity Based on Flowmaster Output NAG S150: North American Green S150 or approved equal

TD = TEMPORARY DIVERSION CWD = CLEAN WATER DIVERSION SB = SKIMMER BASIN

 1,367
 1,452
 2,088
 2,916
 4

 1,331
 1,452
 2,034
 2,916
 4

PROPERTY LINE EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR — PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR DRAINAGE AREA DRAINAGE AREA LABEL ±X.X AC SOIL SOIL TYPE DIRECTION OF OVERLAND FLOW 100.XX — 100.XX DIRECTION OF OVERLAND FLOW CONSTRUCTION ENTRANCE / EXIT EROSION CONTROL MATTING LIMITS OF DISTURBANCE TEMPORARY JUTE NETTING BAFFLES G/M2 COIR FABRIC OR HEAVIER) —→—— TEMPORARY DIVERSION DITCH OR B sr 4.00 TEMP SILT FENCE WITH OUTLET TEMP TREE PROTECTION FENCE CHECK DAM SLOPE DRAIN WITH RIP-RAP APRON PIPE INLET PROTECTION INLET PROTECTION EXCAVATED INLET PROTECTION

EROSION CONTROL LEGEND

NARRATIVE

PROJECT INCLUDES APPROXIMATELY 1,520 LINEAR FEET OF 35' BACK TO BACK STREET SECTION TO CONNECT STREET H TO YOUNG STREET AND STORM DRAINAGE IN ROLESVILLE, NC. THERE IS A FUTURE DEVELOPMENT (BY OTHERS) ON THIS PROPERTY THAT WILL REQUIRE STORMWATER CONTROL MEASURES AND WILL TREAT THE NEW IMPERVIOUS INCLUDING THIS PROJECT'S IMPERVIOUS AREAS.

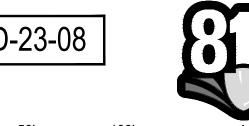
CONSTRUCTION SEQUENCE - PHASE 1

- 1. SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL CONSULTANT. OBTAIN A LAND DISTURBING PERMIT.
- 2. INSTALL GRAVEL CONSTRUCTION PAD, BYPASS PIPES AND CLEAN WATER DIVERSIONS TO BYPASS PIPES. INSTALL TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- 3. CALL ENVIRONMENTAL CONSULTANT FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.

CONSTRUCTION SEQUENCE - PHASE 2

- 1. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
- 2. INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- 3. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAMES.
- 4. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ENVIRONMENTAL CONSULTANT FOR AN
- 5. IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- 6. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

DISTURBED AREA: 3.05 AC



NOT FOR CONSTRUCTION FILE NUMBER: 8430-03 DATE: 10/09/2023 C5-0

YOUNG STREET
CONNECTION
408 E YOUNG STREET
ESVILLE / NORTH CAROLINA / 278

EROSION CONTROL PHASE 1

Call before you dig.

	SKIMMER BASIN SUMMARY																
BASIN	DRAINAGE	DENUDED	RUNOFF	SYSTEM	10-YEAR	В	ASIN DIMENSIO	ONS	TOP OF	WEIR	AREA	AREA	VOLUME	VOLUME	SKIMMER	SKIMMER	DEWATERING
NUMBER	AREA	AREA	COEFFICIENT	INTENSITY	PEAK FLOW	DEPTH	LENGTH	WIDTH	DAM EL.	LENGTH	REQUIRED	PROVIDED	REQUIRED	PROVIDED	SIZE	ORIFICE DIA.	TIME
	(AC)	(AC)		(IN/HR)	(CFS)	(FT)	(FT)	(FT)	(FT)	(FT)	(SF)	(SF)	(CF)	(CF)	(IN)	(IN)	(DAYS)
SB #1	1.16	1.16	0.50	7.25	4.21	3.0	66	22	278	6	1,367	1,452	2,088	2,916	4	0.75	2.78
SB #2	1.13	1.13	0.50	7.25	4.10	3.0	66	22	290	6	1,331	1,452	2,034	2,916	4	0.75	2.71

TEMPORARY DIVERSION, CLEANWATER DIVERSION, AND PIPE SUMMARY

Rainfall Intensity $I_{10-yr} = 7.25$ in/hr

Swale ID	Rational C	Drainage Area (ac)	Q _{10-yr} (cfs)	Slope (%)	Calculated Depth (ft)	Calculated Shear Stress (lbs/ft²)	Calculated Velocity (ft/s)	Bottom Width (ft)	# of Check Dams	Type of Liner	Slope Drain Type and Size (in)
TD1	0.50	0.34	1.24	2.49%	0.23	0.004	2.19	2	2	GRASS	CMP - 12"
TD2	0.50	0.43	1.55	3.65%	0.23	0.01	2.69	4	3	GRASS	CMP - 12"
TD3	0.50	1.13	4.11	2.72%	0.44	0.01	3.25	2	8	GRASS	CMP - 12"
CWD 1	0.50	0.15	0.53	4.41%	0.31	0.01	2.78	0	3	GRASS	N/A
CWD 2	0.50	0.25	0.89	3.13%	0.40	0.01	2.77	0	4	GRASS	N/A
CWD 3	0.50	0.60	2.19	4.00%	0.53	0.01	3.82	0	4	GRASS	N/A
PIPE 1	0.50	1.16	4.21	1.59%	0.98	0.01	6.81	N/A	N/A	N/A	CMP - 15"
PIPE 2	0.50	1.74	6.31	2.56%	0.92	0.01	5.83	N/A	N/A	N/A	CMP - 18"
NOTE C:	•	•		•	•		•		•		•

All ditches are to be trapezoidal in shape: 2:1 sideslopes, and height of 1.0' Calculated Depth and Calculated Velocity Based on Flowmaster Output NAG S150: North American Green S150 or approved equal

TD = TEMPORARY DIVERSION CWD = CLEAN WATER DIVERSION SB = SKIMMER BASIN

	Required Ground Stabilization Timeframes								
Sit	te Area Description	Stabilize within thi 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						
	nd stabilization shall b		uction activities, any areas with temporary nanent ground stabilization as soon as						
ctivi urfa i RO I tabi	ity. Temporary groun ce stable against acce	onger than 90 calen d stabilization shall be lerated erosion unti SPECIFICATION ently so that rain wil	dar days after the last land disturbing on maintained in a manner to render the last land disturbing the last land and the last last last last last last last last						
ctivi urfa GRO tabi echr	ity. Temporary groun ce stable against acce UND STABILIZATION S lize the ground suffici	onger than 90 calen d stabilization shall le lerated erosion unti SPECIFICATION ently so that rain will ow:	pe maintained in a manner to render the I permanent ground stabilization is achieved ———————————————————————————————————						

	PROPERTY LINE
600	EXISTING MAJOR CONTOUR
601	EXISTING MINOR CONTOUR
600-	PROPOSED MAJOR CONTOUR
601	PROPOSED MINOR CONTOUR
	DRAINAGE AREA
DA# ±X.X AC	DRAINAGE AREA LABEL
SOIL	SOIL TYPE
<u>H:V</u> X <u>.X%</u>	DIRECTION OF OVERLAND FLOW
100.XX 100.XX	DIRECTION OF OVERLAND FLOW
	RIP RAP APRON
	CONSTRUCTION ENTRANCE / EXIT
	EROSION CONTROL MATTING
	LIMITS OF DISTURBANCE TEMPORARY JUTE NETTING BAFFLES G/M2 COIR FABRIC OR HEAVIER) TEMPORARY DIVERSION DITCH OR E
sr 4	TEMP SILT FENCE WITH OUTLET
PF	TEMP TREE PROTECTION FENCE
SF-PF	TEMP SILT / TREE PROTECTION FEN
	CHECK DAM
200000000000000000000000000000000000000	BERM
	SLOPE DRAIN WITH RIP-RAP APRON
─	SKIMMER
C	PIPE INLET PROTECTION
Ō	INLET PROTECTION
Ø	EXCAVATED INLET PROTECTION

EROSION CONTROL LEGEND

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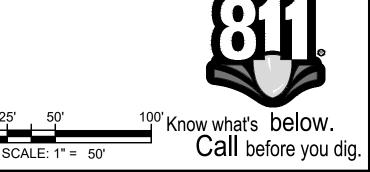
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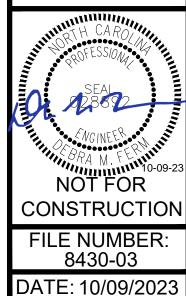


DESIGNED BY: DF/JWM DRAWN BY: JWM

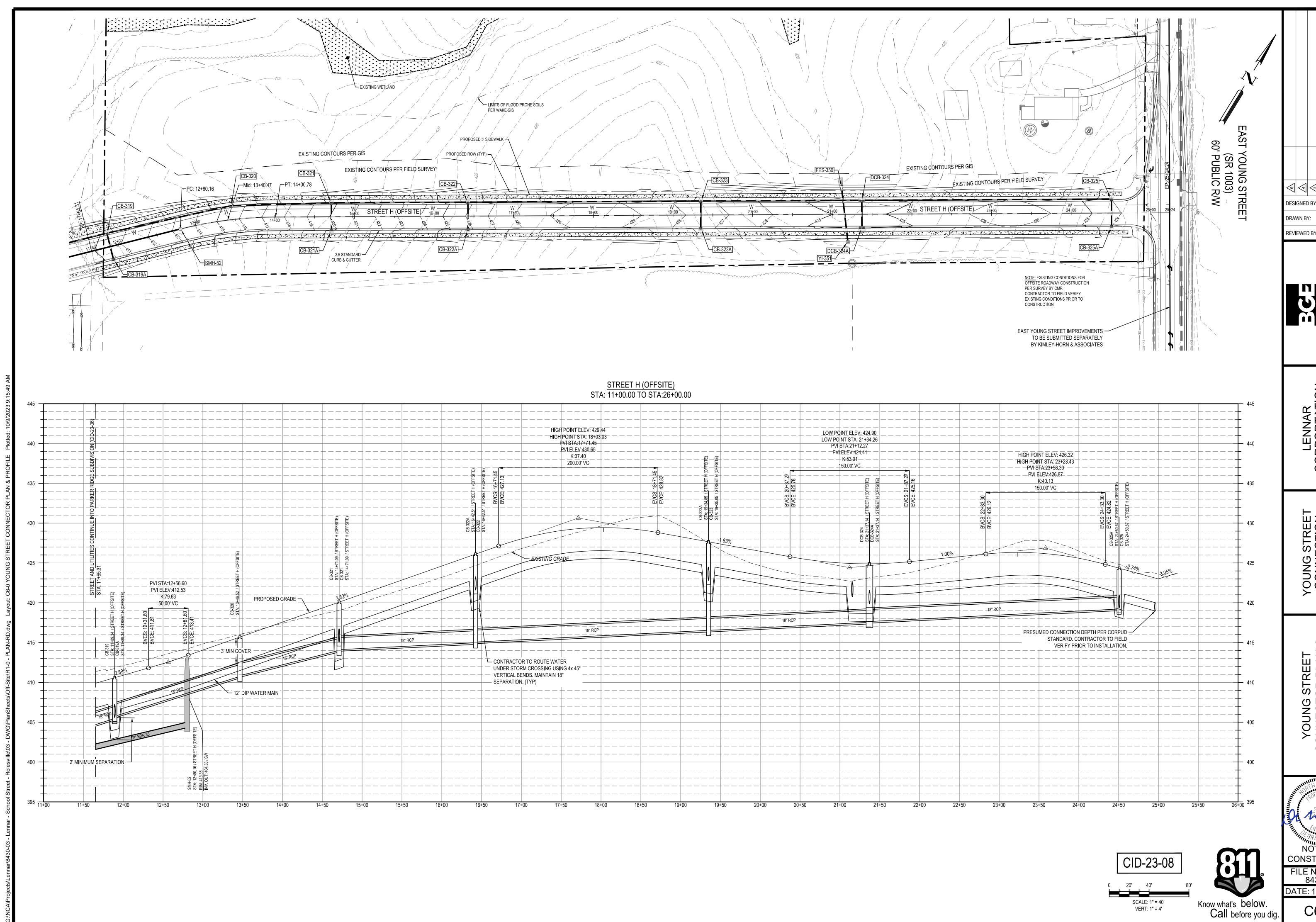
REVIEWED BY: DF

YOUNG STREET
CONNECTION
408 E YOUNG STREET
ESVILLE / NORTH CAROLINA / 278

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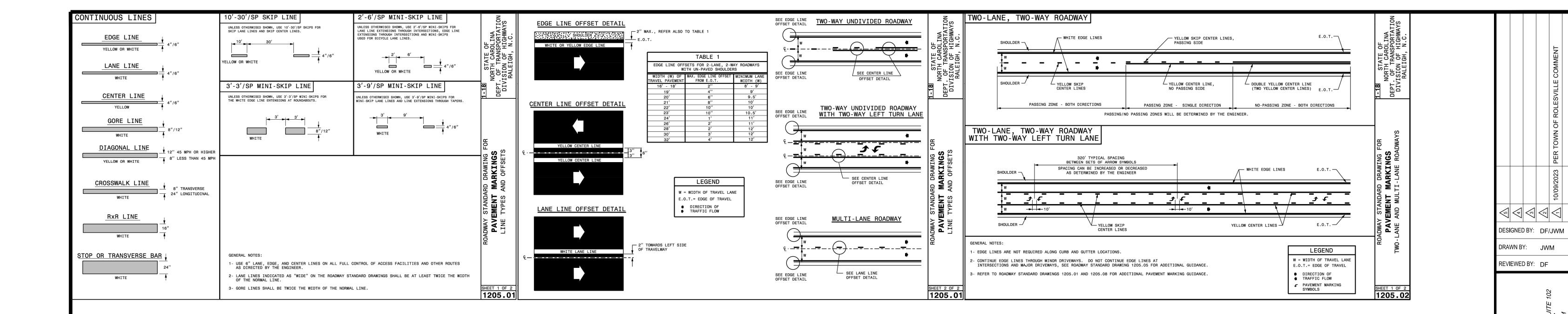
UITE 112 5440 WADE PARK BI RALEIGH NC WWW.BGEIN NC LICENSE

LENNAR
CORPORTATION
1100 PERIMETER PARK DRIVE, SUITE 1
MORRISVILLE / NORTH CAROLINA / 2755

YOUNG STREET
CONNECTION
408 E YOUNG STREET
OLESVILLE / NORTH CAROLINA / 2757

OUNG STREET NNECTOR PLAN & PROFILE

NOT FOR CONSTRUCTION
FILE NUMBER:
8430-03
DATE: 10/09/2023

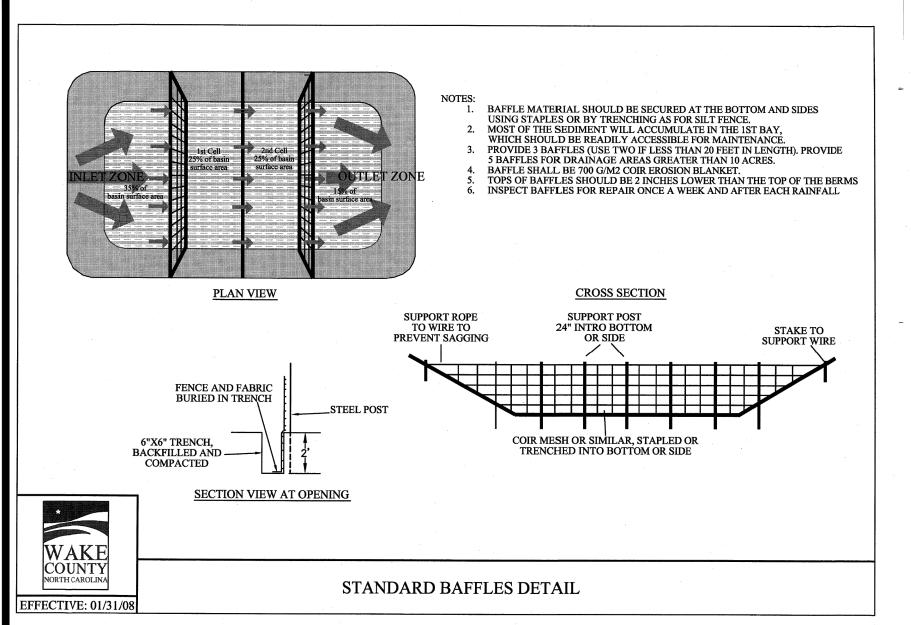


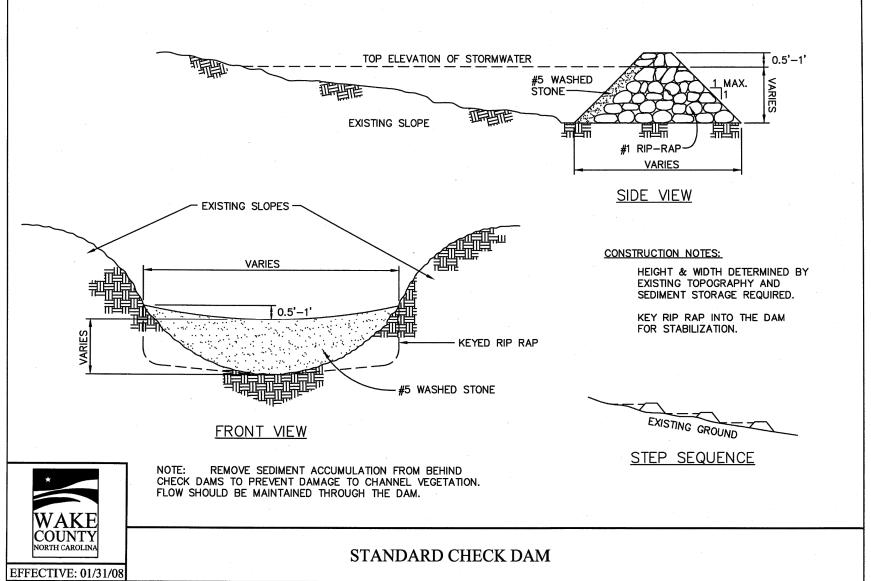
Know what's below.

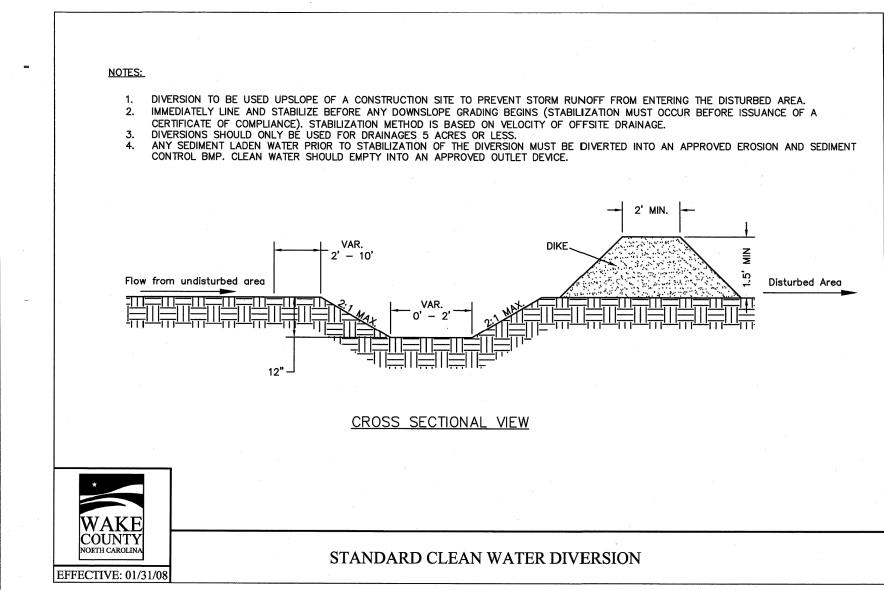
Call before you dig.

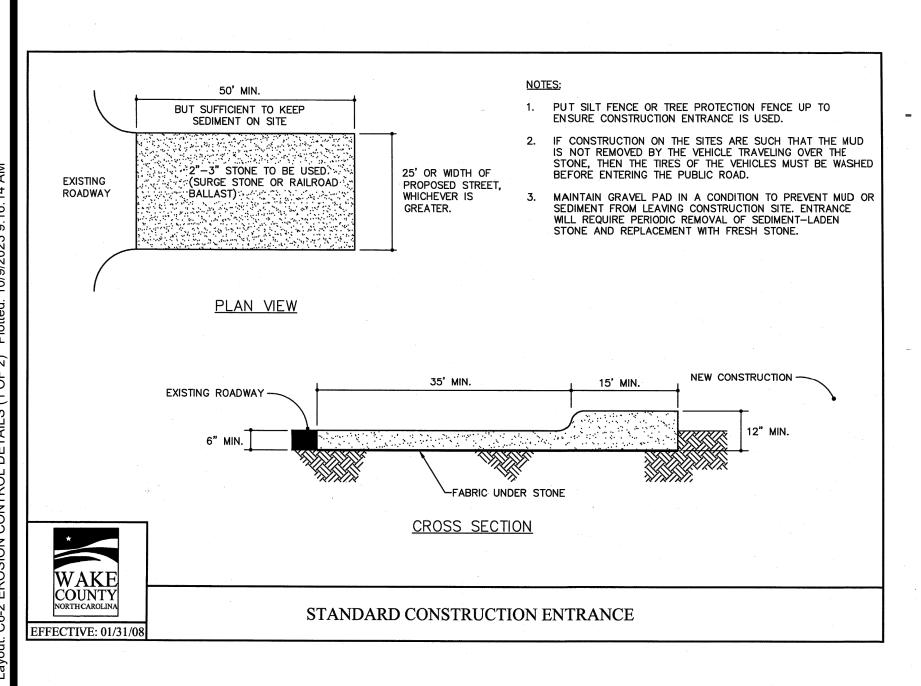
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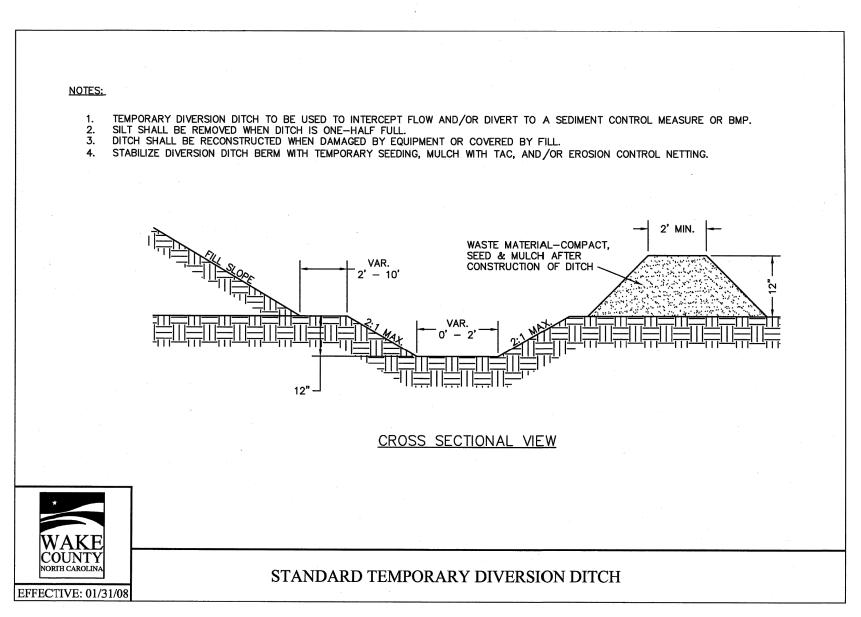
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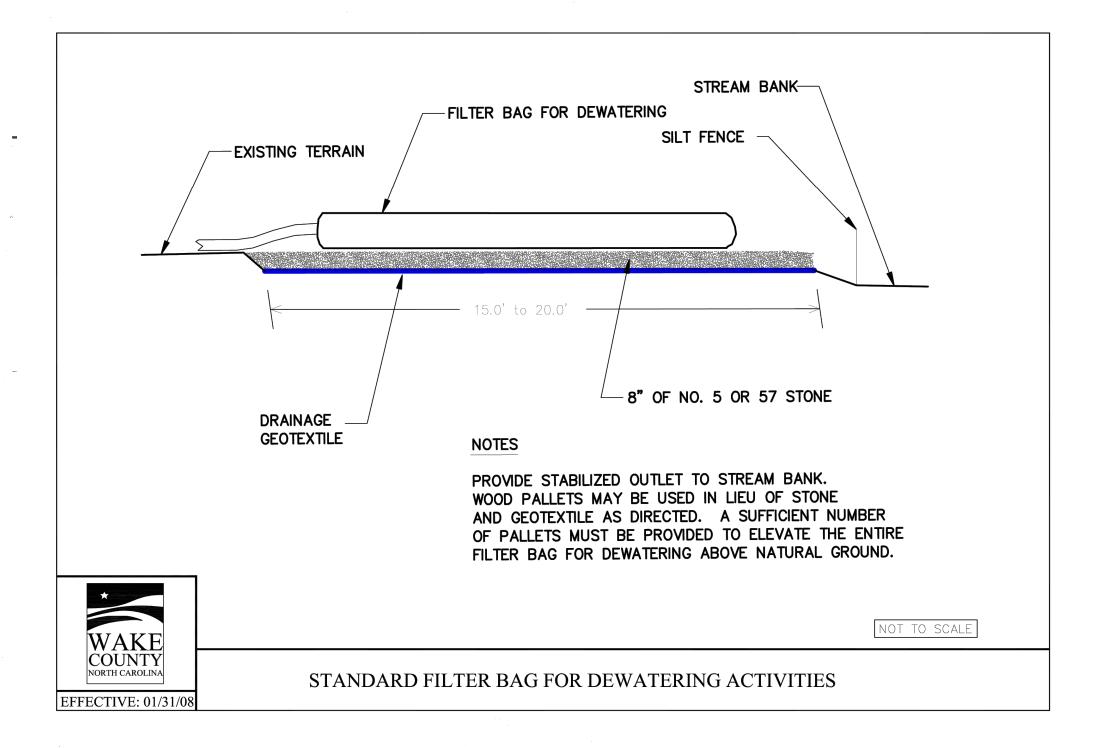


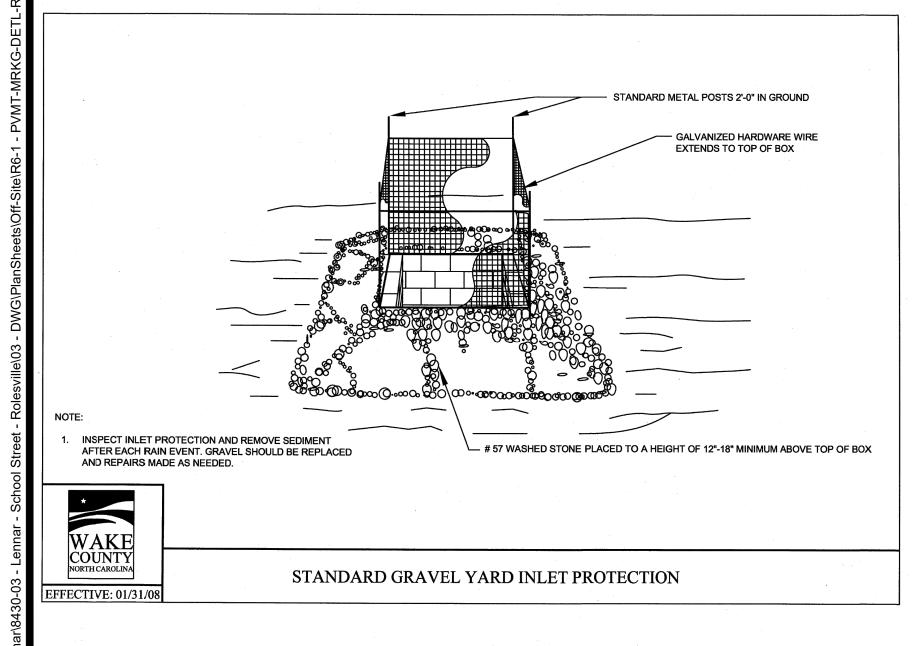


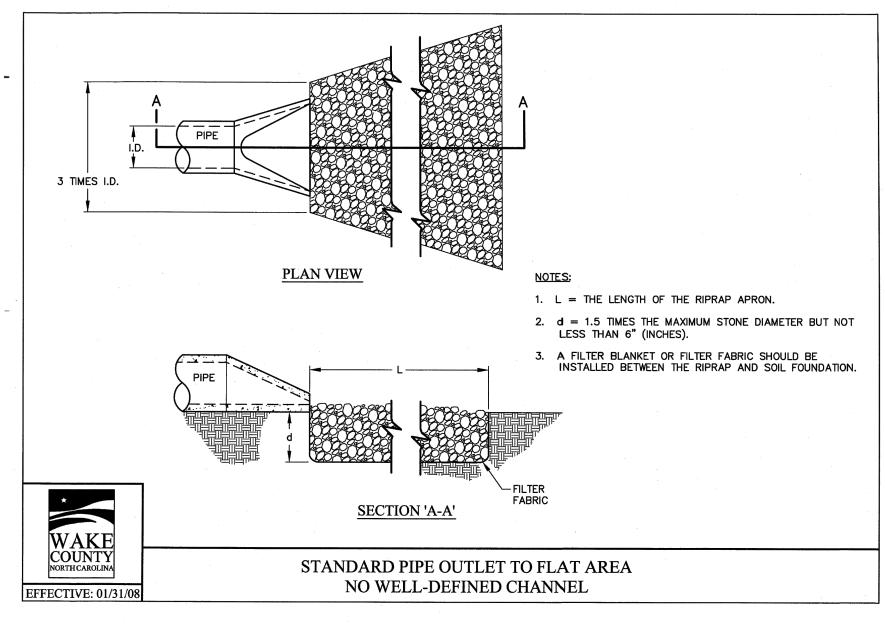


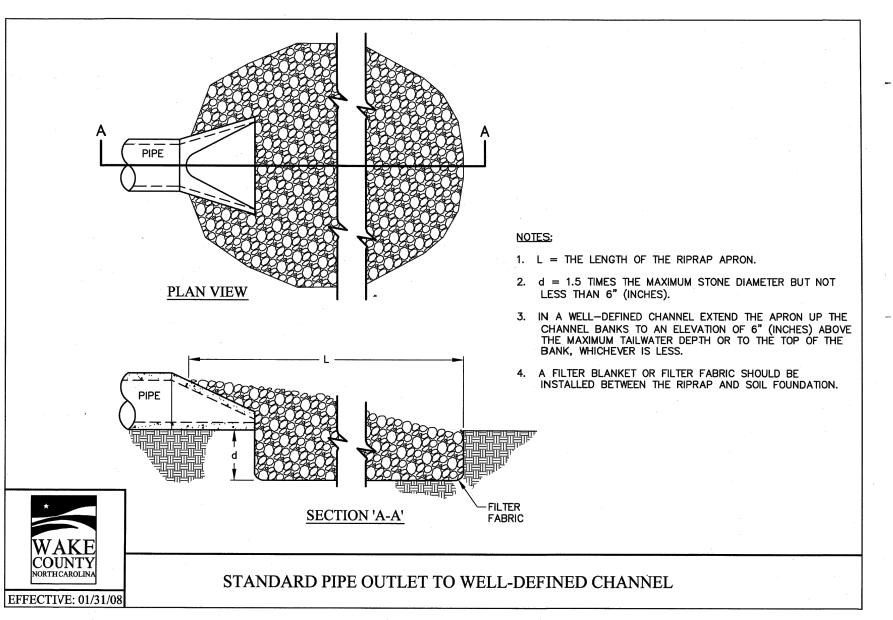




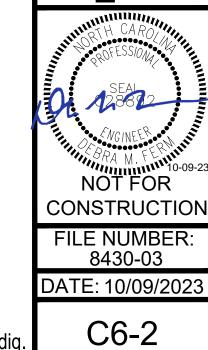










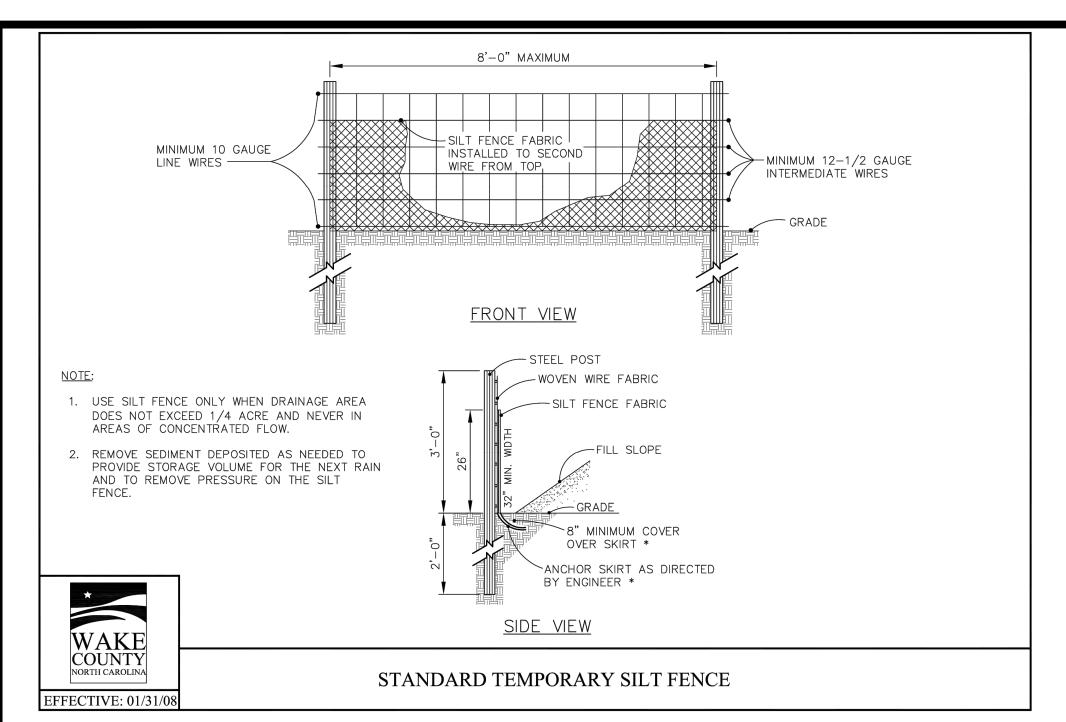


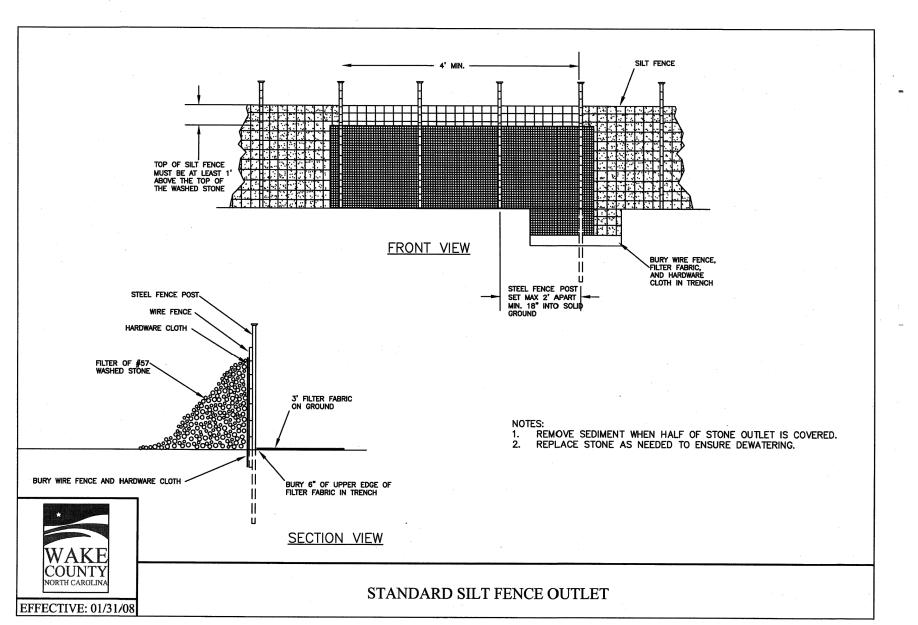
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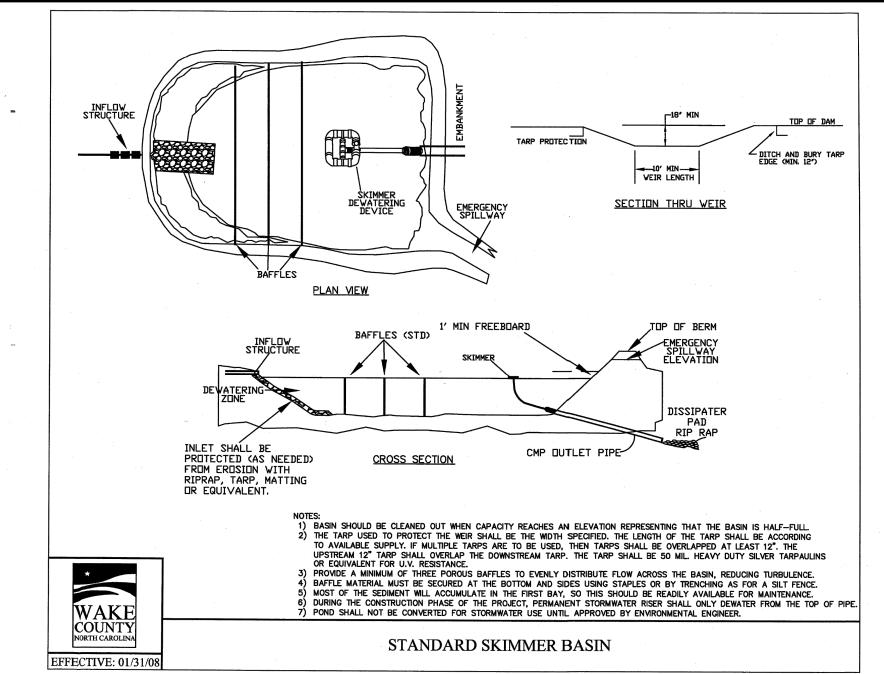
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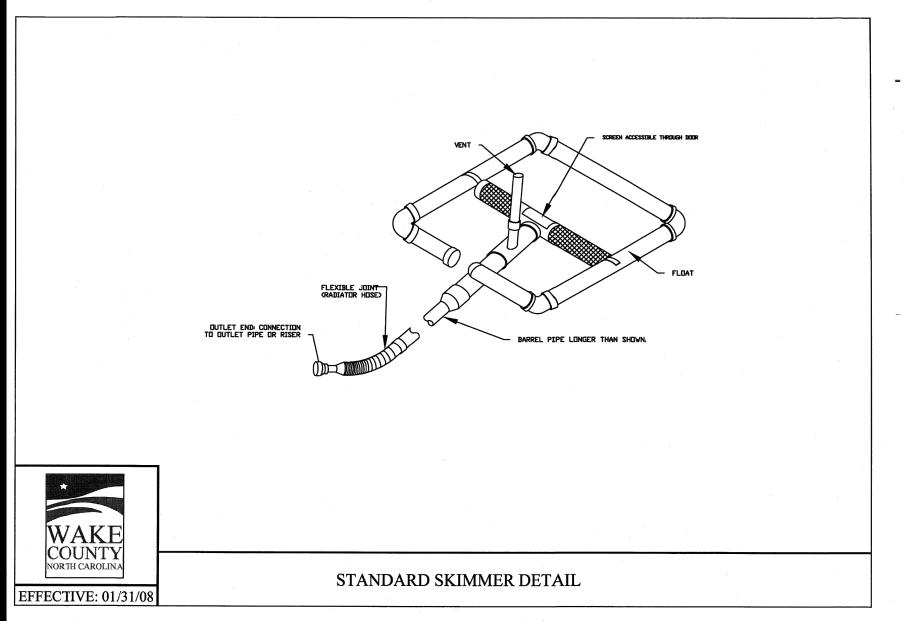
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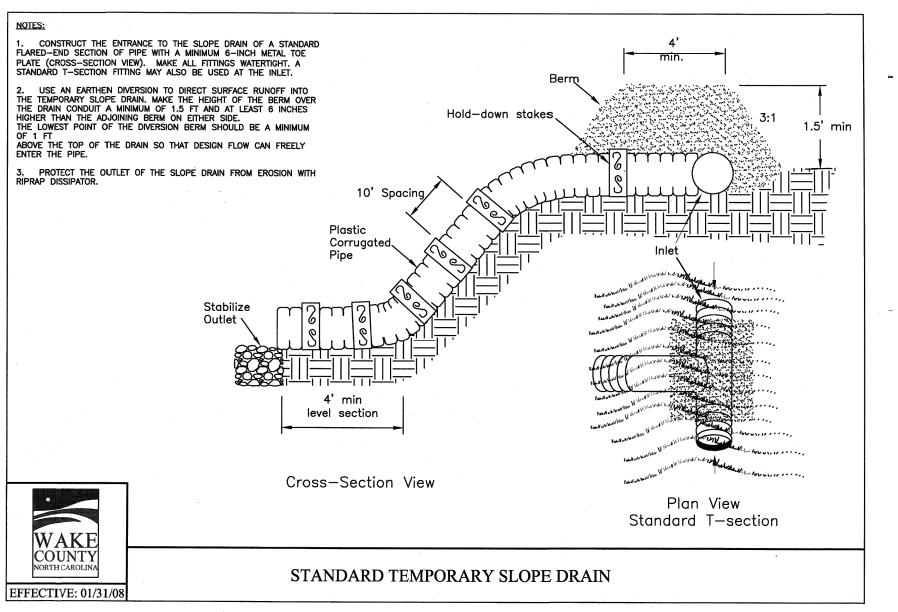
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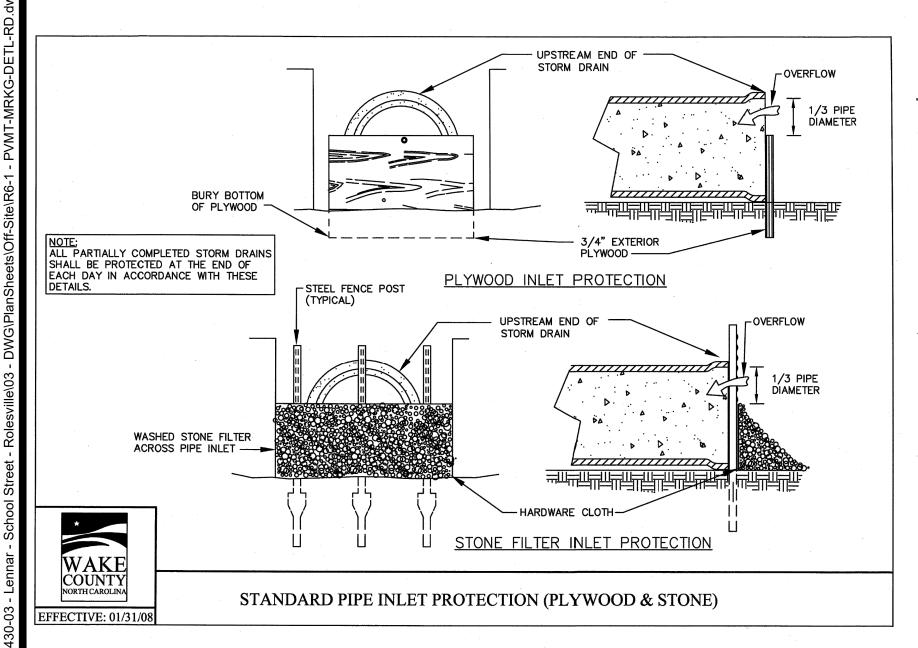


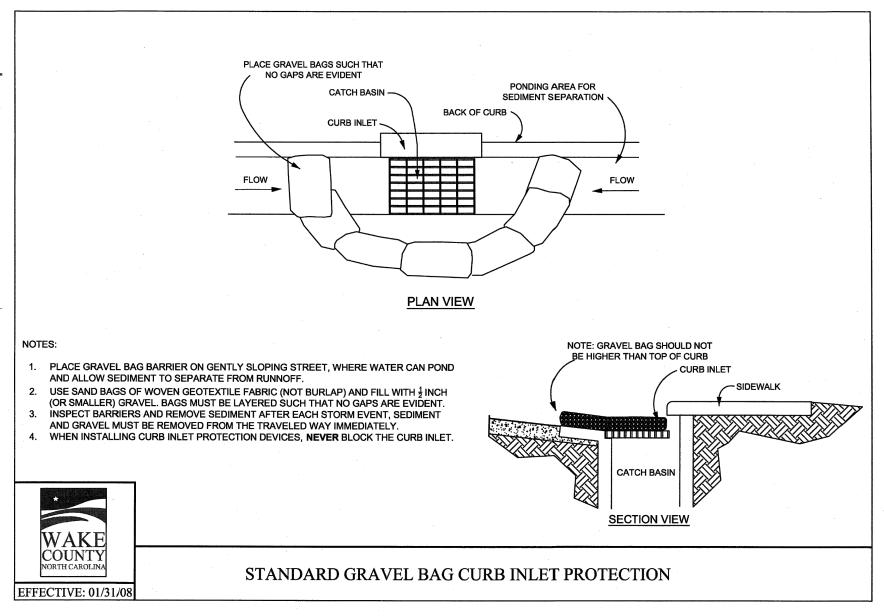


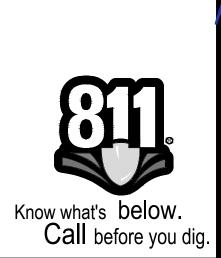














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