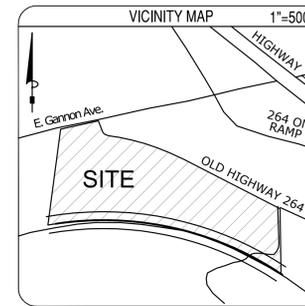


WAKE COUNTY NOTES

FINAL ZONING AND SITE IMPROVEMENT INSPECTION SHALL BE REQUIRED TO VERIFY SITE PLAN COMPLIANCE BE DONE BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED BY WAKE COUNTY BUILDING INSPECTIONS
 DETERIORATED OR DEAD SCREENING SHALL BE REPAIRED OR REPLACED WITHIN SIX MONTHS
 NO PERMANENT CONSTRUCTION CAN OCCUR WITHIN BUFFER YARDS
 SEPTIC TANKS, SEPTIC DRAIN LINES ARE PROHIBITED IN REQUIRED BUFFERYARDS
 STORMWATER RETENTION AND DETENTION FACILITIES, STORAGE TANKS FOR ANY PURPOSE, UTILITY SUBSTATIONS, AND 3 BUILDINGS HOUSING UTILITY SUBSTATIONS AND BUILDINGS HOUSING UTILITY COMMODITIES OR EQUIPMENT ARE ALSO PROHIBITED IN REQUIRED BUFFERYARDS.

CONSTRUCTION DOCUMENTS

Proposed Tractor Supply Old US Highway 264 Zebulon, North Carolina Wake County IDT# 782339



IMPERVIOUS SUMMARY TABLE			
ON-SITE AREA = 164,059 SF (3.766 AC)			
TOTAL DRAINAGE AREA = 242,500 SF (5.567 AC)			
BUILDINGS	21,147 SF	0.49 ACRE(S)	12.91 % OF AREA
PAVEMENT	81,500 SF	1.87 ACRE(S)	49.68 % OF AREA
SIDEWALK	7,100 SF	0.16 ACRE(S)	4.33 % OF AREA
ON-SITE IMPERVIOUS AREA	109,774 SF	2.52 ACRE(S)	66.91 % OF AREA
OFF-SITE IMPERVIOUS AREA	10,051 SF	0.23 ACRE(S)	6.13 % OF AREA
GREEN/OPEN SPACE	54,285 SF	1.25 ACRE(S)	33.09 % OF AREA
EXISTING IMPERVIOUS AREA	0 SF	0 ACRE(S)	0.0 % OF AREA
INCREASE IN IMPERVIOUS AREA	119,825 SF	2.75 ACRE(S)	73.04 % OF AREA

DEVELOPMENT DATA	
DEVELOPMENT NAME:	TRACTOR SUPPLY
STREET ADDRESS:	OLD US HIGHWAY 264 ZEBULON, NC
OWNER:	SEA MOUNTAIN VENTURES II, LLC 1100 E. MOREHEAD STREET CHARLOTTE, NC 28204
PROPERTY IDENTIFICATION #(PIN):	2705-97-3150 (ORDINANCE 2022-36)
PROPERTY #:	0504606
DEED BOOK/PAGE:	019275 / 01679
EXISTING ZONING:	HC - HEAVY COMMERCIAL (ORDINANCE 2022-36)
FUTURE LAND USE MAP:	GC-GENERAL COMMERCIAL
LATITUDE & LONGITUDE	N35.828782, W-78.293752
TOTAL SITE ACRES:	164,059 SF (3.77 AC) PROPOSED TRACTOR SUPPLY
WATER SERVICE:	PUBLIC - CITY OF RALEIGH
SANITARY SEWER SERVICE:	PUBLIC - CITY OF RALEIGH
INSIDE TOWN LIMITS:	NO - ANNEXATION REQUIRED
EXISTING USE:	VACANT
PROPOSED BUILDING USE:	21,147 SF TRACTOR SUPPLY RETAIL STORE
FLOOD ZONE:	NONE (FEMA FIRM 3720270500K, 7/19/22)
HEAVY COMMERCIAL (HC) ZONING REQUIREMENTS	
MIN LOT AREA:	6,000 SF
MIN LOT WIDTH:	50 FT
MAX LOT COVERAGE:	80%
MIN OPEN SPACE:	3% OF SITE (4,922SF) 5,000 SF OPEN SPACE PROVIDED ALONG US 264
SIDE SETBACK(STREET):	30 FT
SIDE SETBACK(INTERIOR):	0, 5FT IF PROVIDED
REAR SETBACK:	0 IF ABUTTED BY AN ALLEY, OTHERWISE 25FT 50FT; MAY INCREASE BY 2FT FOR EACH ADDITIONAL FOOT OF SETBACK UP TO 100FT IN HEIGHT
MAX BUILDING HEIGHT	ADDITIONAL FOOT OF SETBACK UP TO 100FT IN HEIGHT
MIN SPACING BETWEEN PRINCIPLE BUILDINGS:	25FT
PARKING REQUIREMENTS:	
RETAIL- 1 SPACE PER 200 SF	
21,147 SF / 200=106 SPACES	
79 SPACES REQUESTED (PARKING STUDY)	
BIKE PARKING - 1 SPACE PER 20 PARKING SPACES	
4 BIKE PARKING SPACES PROVIDED	
TOTAL PROVIDED:	79
PARKING SPACE DIMENSIONS	10' X 19' MIN 8.5' X 18' COMPACT (30% MAX)
MIN DRIVE AISLE	20 FT ONE-WAY, 24 FT TWO-WAY
ACCESSIBLE SPACES PROVIDED:	4
TREE RETENTION	5% OF SITE REQUIRED (8,203SF) 19,000SF OF TREE RETENTION PROPOSED
LANDSCAPE BUFFERS	10FT TYPE A BUFFER (ADJACENT HC) 15FT STREETSCAPE BUFFER ALONG OLD US 264

PUBLIC IMPROVEMENT QUANTITY TABLE	
SEWER MAIN	
LENGTH OF PIPE (L.F.)	2,330 L.F.
STUB COUNT	1 SERVICE STUB 1 TIE-IN TO EXISTING MAIN
MANHOLES	9

REZONING - ORDINANCE 2022-36

ORDINANCE 2022-36
AMENDMENT TO ZONING MAP FOR
0 Old US 264 (Pin # 2705973068)

The proposed Zoning Map Amendment for approximately 9.8 acres located at 0 Old US 264 with associated Wake County Pin # 2705973068 will be rezoned from R-2 Residential to Heavy Commercial (HC) in accordance with Section 2.2.24 of the Town of Zebulon Unified Development Ordinance and the attached map.

Adopted this the 4th day of April 2022

Glenn L. York
Glenn L. York - Mayor

Lisa M. Markland
Lisa M. Markland, CMC - Town Clerk

DEVELOPER
Primax Properties, LLC
Attn. Adam Sellner
1100 E. Morehead Street
Charlotte, NC 28204
704-954-7224
asellner@primaxproperties.com

CIVIL ENGINEER
Bowman North Carolina, Ltd.
4006 Barrett Drive, Suite 104
Raleigh, NC 27609
(919) 553-6570
mlowder@bowman.com
FIRM# F-1445

CURRENT PROPERTY OWNERS
Sea Mountain Ventures II, LLC
1100 E. Morehead Street
Charlotte, NC 28204

PRECONSTRUCTION NOTE
A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE TOWN OF ZEBULON CONSTRUCTION INSPECTOR. CONTACT JASON AT 919-790-5640.

Approved
Town of Zebulon
Adam Culpepper
07/24/2024

PUBLIC
Sewer Collection/Extension System
The City of Raleigh consents to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh
Public Utilities Department Permit # S-5172
Authorization to Construct See digital signature

ATTENTION CONTRACTORS
The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least twenty four hours prior to beginning any of their construction.
Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.
Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

Carrie Mitchell 07/24/2024
ENVIRONMENTAL CONSULTANT SIGNATURE

Index of Drawings	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	GENERAL NOTES, ABBREVIATIONS, AND LEGEND
C2.0	DEMOLITION PLAN
C2.1	EROSION CONTROL PLAN
C2.2	EROSION CONTROL PLAN
C2.3	EROSION CONTROL PLAN
C2.4	EROSION CONTROL PLAN - FINAL
C2.5	EROSION CONTROL NOTES
C2.6	NC CONSTRUCTION GENERAL PERMIT (NCG01) NOTES
C3.0	SITE PLAN
C4.0	GRADING & DRAINAGE PLAN
C4.1	ROADWAY PLAN
C4.2	ROADWAY CROSS SECTIONS
C4.3	ROADWAY CROSS SECTIONS
C4.4	ROADWAY CROSS SECTIONS
C4.5	ROADWAY CROSS SECTIONS
C4.6	ROADWAY CROSS SECTIONS
C5.0	UTILITY PLAN
C5.1	OVERALL SANITARY SEWER EXTENSION
C5.2	SANITARY SEWER PLAN & PROFILE
C5.3	SANITARY SEWER PLAN & PROFILE
C5.4	SANITARY SEWER PLAN & PROFILE
C5.5	SANITARY SEWER PLAN & PROFILE
C6.0	EROSION CONTROL DETAILS
C6.1	EROSION CONTROL DETAILS
C6.2	CONSTRUCTION DETAILS
C6.3	CONSTRUCTION DETAILS
C6.4	CONSTRUCTION DETAILS
C6.5	CONSTRUCTION DETAILS
C6.6A	UTILITY DETAILS
C6.6B	UTILITY DETAILS
C6.7	STORMWATER MANAGEMENT DETAILS
C6.8	STORMWATER MANAGEMENT DETAILS
C6.9	STORMWATER MANAGEMENT DETAILS
C7.0	LANDSCAPE PLAN
1 OF 14	CONCEPTUAL ELEVATION
2 OF 14	FRONT ELEVATION
3 OF 14	FRONT ELEVATION
4 OF 14	FRONT-RIGHT ELEVATION
5 OF 14	GREENHOUSE CONNECTION
6 OF 14	GREENHOUSE CONNECTION
7 OF 14	REAR ELEVATION - RIGHT SIDE
8 OF 14	LOADING AREA
9 OF 14	REAR ELEVATION - LEFT SIDE
10 OF 14	REAR ELEVATION - LEFT SIDE
11 OF 14	LEFT ELEVATION
12 OF 14	LEFT ELEVATION
13 OF 14	FRONT-LEFT ELEVATION
14 OF 14	FRONT-LEFT ELEVATION
1 OF 1	PARKING LOT LIGHTING LAYOUT

Bowman

Bowman North Carolina Ltd.
4006 BARRETT DR
Suite 104
RALEIGH, NC 27609
Phone: (919) 553-6570
bowman.com



COVER SHEET
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
5/28/24	PER CITY OF RALEIGH REVIEW	
MEL	MEL	XXX
DESIGN	DRAWN	CHKD
SCALE	H: 1" = 40'	V: 1" = XXX'
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	

SHEET C1.0



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
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SCALE	H: 1" = XXX'	V: 1" = XXX'
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	

GENERAL NOTES (CONT.)

- THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF THE WORK REQUIRED TO MAKE THE PROPOSED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE NATURE AND LOCATION OF THE WORK, CONDITIONS, AND CONFIRMATION OF EXISTING GROUND SURFACE AND THE CHARACTER OF THE EQUIPMENT AND FACILITIES NEEDED PRIOR TO AND DURING EXECUTION OF THE WORK. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE CHARACTER, QUANTITY AND QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED. ANY INACCURACIES OR DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS MUST BE BOUGHT TO THE OWNER'S ATTENTION IN ORDER TO CLARIFY THE EXACT NATURE OF THE WORK TO BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING ROADS AND UTILITIES WHICH OCCURS AS A RESULT OF THE PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE EXISTING RIGHT-OF-WAY.
- ALL STREET CUT AND PATCH WORK IN PUBLIC RIGHT-OF-WAY REQUIRED FOR UTILITIES INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH CITY, COUNTY, AND/OR APPROPRIATE GOVERNING AGENCY STANDARDS AND SPECIFICATIONS. REFER TO THE TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS MANUAL.
- THE APPROVAL OF THIS PLAN SHALL IN NO WAY GRANT PERMISSION FOR THE CONTRACTOR TO TRESPASS ON OFF-SITE PROPERTIES.
- THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- THESE PLANS MAKE NO REPRESENTATION AS TO THE SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL NECESSARY INSPECTIONS.
- EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER.
- THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIGGING OF TEST HOLES PRIOR TO BEGINNING OF ANY CONSTRUCTION ON THE PROJECT. IF CONFLICTS ARE DISCOVERED AS A RESULT OF TEST HOLE FINDINGS, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
- EXCAVATION SUPPORT SYSTEMS SHALL CONFORM TO THE PROVISIONS OF OSHA CONSTRUCTION STANDARD 29 CFR PART 1926 SUBPART P, OR CURRENT EDITION.
- AT LOCATIONS WHERE THE FINAL SURFACE COURSE OF ASPHALT PAVEMENT IS TO BE FEATHERED INTO THE EXISTING SURFACE COURSE, THE EXISTING SURFACE COURSE IS TO BE SCABBLED TO A MINIMUM DEPTH OF 1" AND A TACK COAT APPLIED PRIOR TO FINAL PAVING TO INSURE A SMOOTH, WELL BONDED JOINT.
- ANY NEW PAVEMENT OPENED TO TRAFFIC SHALL RECEIVE A TACK COAT PRIOR TO PLACEMENT OF ANY OVERLYING ASPHALT COURSE.
- ALL SIDEWALKS TO BE 4" THICK CONCRETE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ALL DEMOLITION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE APPROPRIATE GOVERNING AGENCY.
- ALL APPLICABLE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING DEMOLITION.
- ITEMS SHOWN TO BE RELOCATED SHALL BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR UNTIL SUCH TIME AS THEY CAN BE PLACED IN THEIR NEW LOCATION. CONTRACTOR SHALL VERIFY THESE ITEMS WITH THE OWNER, PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE REMOVAL OR RELOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD ELECTRICAL, TELEPHONE AND CABLE TV LINES AND REMOVAL OF UTILITY POLES, PEDESTALS AND TRANSFORMERS WITH UTILITY COMPANIES AND WITH DEVELOPER PRIOR TO DEMOLITION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS AND/OR RECONSTRUCTION OF ALL UTILITY COVER (MANHOLE FRAMES AND COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES OF THE AREAS EFFECTED BY THE CONSTRUCTION.
- THE CONTRACTOR MUST HAVE THE APPROVED CONSTRUCTION DRAWINGS IN POSSESSION PRIOR TO THE START OF CONSTRUCTION. AT LEAST ONE (1) COPY OF THE APPROVED PLANS, WITH REVISIONS, MUST BE KEPT ON-SITE AT ALL TIMES.
- ALL HANDICAP RAMPS SHALL BE BUILT IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE APPROPRIATE GOVERNING AGENCY STANDARDS, NCDOT STANDARDS, AND CURRENT ADA REQUIREMENTS.
- THE STORM DRAIN, STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES MUST BE MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THEY ARE NOT ONLY 100% COMPLETE, BUT ALSO THAT 100% OF THE DRAINAGE AREA TO EACH FACILITY IS PERMANENTLY STABILIZED. SEED AND MULCH DOES NOT CONSTITUTE STABILIZATION IN TERMS OF THE CONTRACTOR MAINTENANCE OF THE STORM DRAIN, STORMWATER MANAGEMENT, AND WATER QUALITY FACILITIES. ALL STORM DRAIN, STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES SHALL BE TURNED OVER TO THE OWNER COMPLETELY CLEAN AND FREE FROM ANY CONSTRUCTION RELATED SEDIMENT OR DEBRIS.
- THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL ADA ACCESSIBLE SIDEWALKS MAINTAIN SLOPES NOT TO EXCEED 5% LONGITUDINALLY AND 2% CROSS SLOPES. SLOPES AT ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL BE A MAXIMUM OF 2%, AND THE MANEUVERING CLEARANCE AT EXTERIOR ENTRANCES SHALL HAVE A MAXIMUM SLOPE OF 2%.
- DURING CONSTRUCTION, NO TEMPORARY CONNECTIONS TO FIRE HYDRANTS MAY BE MADE WITHOUT THE EXPRESS AUTHORIZATION OF THE UTILITY OWNER.

GENERAL NOTES

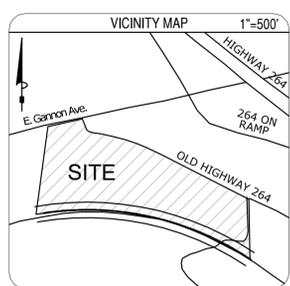
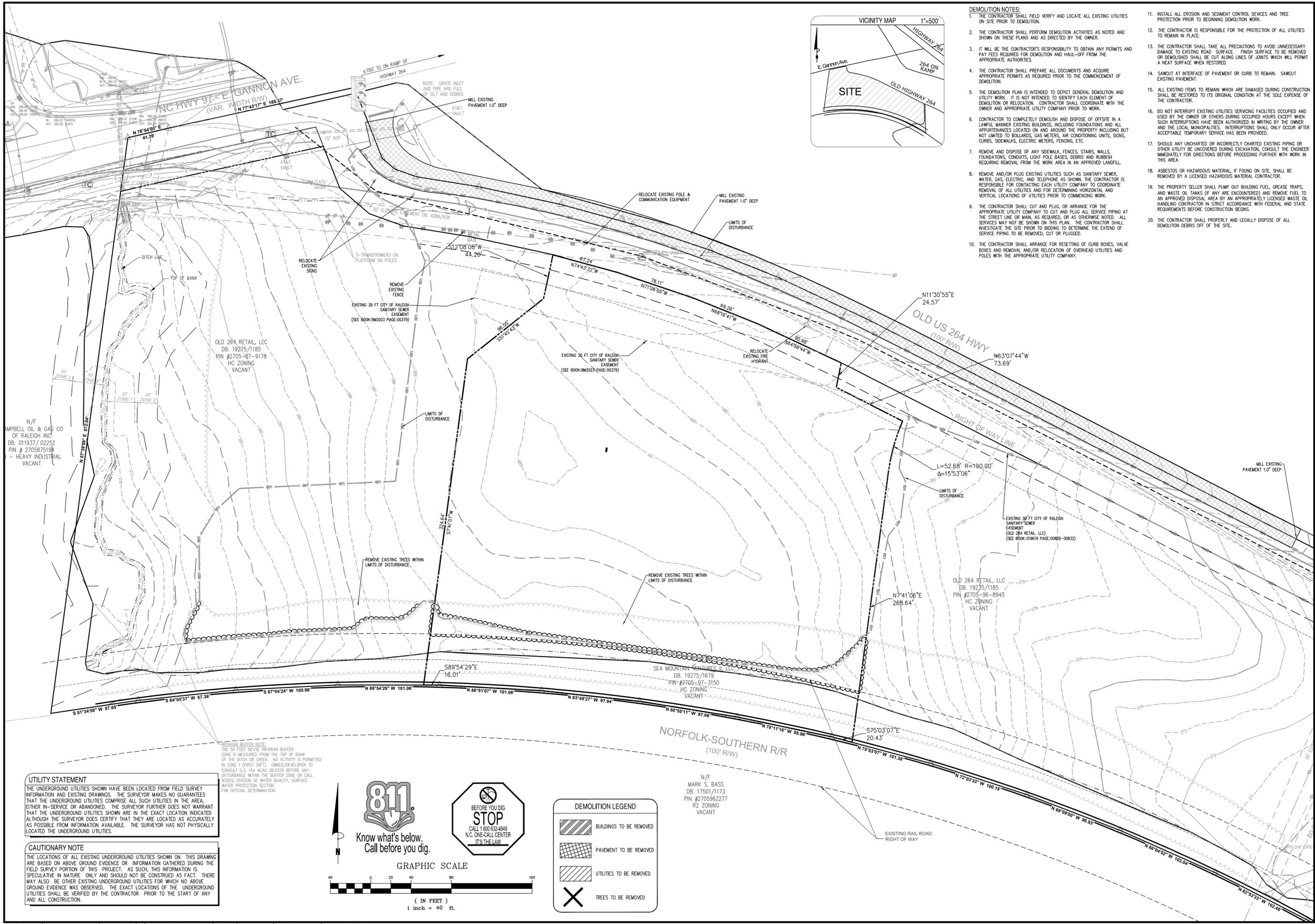
- UTILITY CONFLICTS: ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND FIELD OBSERVATION. BOWMAN NORTH CAROLINA LTD DOES NOT GUARANTEE THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION OF AND PROTECTING ALL EXISTING UTILITIES, INCLUDING THOSE NOT SHOWN OR SHOWN INCORRECTLY ON THE PLANS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED IN A TIMELY FASHION TO THE SATISFACTION OF THE APPROPRIATE GOVERNING AGENCY AND THE OWNER OF THE IMPACTED UTILITY AT THE CONTRACTOR'S EXPENSE.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS FOR THE APPROPRIATE GOVERNING AGENCY. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES THE APPROPRIATE GOVERNING AGENCY'S PUBLIC WORKS MANUAL, ALL APPROVED EASEMENT AGREEMENTS, AND ONE (1) SIGNED COPY OF THE PLANS AS APPROVED BY THE APPROPRIATE GOVERNING AGENCY. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY FOR ANY VARIANCE TO THE ABOVE DOCUMENTS.
- CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARDS, SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND MUST COMPLY WITH OSHA REGULATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER/DEVELOPER AND ENGINEER OF ANY PROBLEM CONFORMING TO THE APPROVED PLANS FOR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO ITS CONSTRUCTION.
- THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS/HER CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL MATERIALS WITHIN DEDICATED RIGHT-OF-WAY AND ALL MATERIALS AND WORKMANSHIP SHALL MEET THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS OF THE APPROPRIATE GOVERNING AGENCY.
- THE CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION. THE APPROPRIATE FIRE DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSURES AND IN THE EVENT THAT ANY FIRE HYDRANTS ARE TO BE TEMPORARILY REMOVED FROM SERVICE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING AT LEAST 48 HOURS ADVANCED NOTICE OF ANY NEED TO SHUT DOWN ANY PORTION OF THE EXISTING WATER SYSTEM AND FOR OBSERVATIONS AND/OR INSPECTIONS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAGMEN, LIGHTS OR OTHER DEVICES NECESSARY FOR SAFE TRAFFIC CONTROL IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AS MODIFIED BY THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE APPROPRIATE GOVERNING AGENCY PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT FOR WORK WITHIN THE RIGHT-OF-WAY.
- THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF NORTH CAROLINA AT 1-800-632-4949 AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ANY AFFECTED UTILITY COMPANY.
- THE CONTRACTOR SHALL OBTAIN COPIES OF THE "SOILS AND INVESTIGATION" REPORT FROM GEOTECHNICAL ENGINEER ALONG WITH THE "PAVEMENT THICKNESS DESIGN REPORT". THE CONTRACTOR MUST HAVE COPIES OF SAME ON THE SITE AT ALL TIMES.
- THE CONTRACTOR IS REQUIRED TO PROVIDE AS-CONSTRUCTED HORIZONTAL AND VERTICAL CONSTRUCTION INFORMATION, INCLUDING THE LOCATIONS OF ALL SANITARY LINES AND SERVICES, WATER LINES AND SERVICES, AND OTHER UTILITY LINES AND SERVICES TO THE ENGINEER FOR PREPARATION OF AS-BUILT DOCUMENTS.
- LIMITS OF CONSTRUCTION EASEMENTS AND RIGHTS-OF-WAY SHALL BE DELINEATED WITH TEMPORARY STAKING BY THE CONTRACTOR. SAFETY FENCING SHALL BE PER APPROPRIATE GOVERNING AGENCY.
- WHERE EXCAVATION IS REQUIRED UNDER EXISTING ASPHALT OR CONCRETE PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAW CUT IN A MANNER TO EFFECT A SMOOTH, STRAIGHT-CUT EDGE. ASPHALT PATCH SHALL BE PER APPROPRIATE GOVERNING AGENCY STANDARDS.
- REFER TO FINAL RECORDED PLAT FOR ACTUAL LOT, TRACT, PARCEL, AND EASEMENT LOCATIONS AND DESIGNATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL MATERIALS WITHIN DEDICATED RIGHT-OF-WAYS AND ALL MATERIALS AND WORKMANSHIP SHALL MEET THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS OF THE APPROPRIATE GOVERNING AGENCY.
- THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY TO THE PROJECT WORK SITE (SEE THE EROSION CONTROL PLAN). THE CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY (IF APPLICABLE) TO COMPLETE THE CONSTRUCTION AND SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- WATER WILL BE PROVIDED BY THE CONTRACTOR TO KEEP WIND EROSION IN CHECK. USE OF WATER AS A DUST PREVENTATIVE SHALL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE WORK.
- ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE PROPERTY LIMITS DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR.
- ANY CONSTRUCTION DEBRIS OR MUD TRACKING IN THE PUBLIC RIGHT-OF-WAY RESULTING FROM THIS DEVELOPMENT SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL IMMEDIATELY FIX ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY THE DEVELOPMENT AND SHALL PROPERLY BARRICADE THE SITE UNTIL CLEAN UP OR REPAIR IS COMPLETE.
- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO GRADE STREET CORES, RIGHT-OF-WAY TEMPLATES, AND LOTS ACCORDING TO GRADING INSTRUCTIONS SHOWN ON PLANS.
- STREET CONTOURS SHOWN AT PROPOSED STREET LOCATIONS REPRESENT FINISHED GRADE ELEVATION TO TOP OF ASPHALT.
- COMPACTION FILL MATERIAL SHALL BE COMPACTED ACCORDING TO THE APPROPRIATE GOVERNING AGENCY REGULATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- TOLERANCE ROUGH GRADING: TOLERANCE SHALL BE +/- 0.1 FEET.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ALL APPROPRIATE PERMITS FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY HAVE BEEN OBTAINED PRIOR TO GRADING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL TEMPORARY WATER DIVERSION/CONTROL DEVICES AND EROSION CONTROL DEVICES NECESSARY TO PROTECT ADJACENT PROPERTIES, WATERWAYS AND PUBLIC RIGHT-OF-WAY. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF SAID DEVICES THROUGHOUT CONSTRUCTION AND UNTIL THE PERMANENT PROTECTION NECESSARY HAS BEEN COMPLETED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE MOST CURRENT APPROVED ARCHITECTURAL/ MECHANICAL/ELECTRICAL/PLUMBING/STRUCTURAL PLANS AND COORDINATE SAME WITH THE SITE PLAN, PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.
- WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED, THE CONTRACTOR SHALL CEASE WORK IN THAT AREA AND IMMEDIATELY NOTIFY THE OWNER, APPROPRIATE GOVERNING AGENCY, AND/OR THE ARCHITECT/ENGINEER.
- THE EXISTING UNDERGROUND UTILITIES SHOW HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN IN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
- ALL STEPS WITH THREE OR MORE RISERS SHALL HAVE HAND RAILS, PER LOCAL CODE.
- A SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF EXISTING ROAD TO PROPOSED CURB AND GUTTER AND/OR PROPOSED EDGE OF PAVEMENT TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER IN THE ROADWAY. REMOVE AND RECONSTRUCT EXISTING PAVEMENT AND/OR CURB AS DICTATED BY FIELD CONDITIONS TO PROVIDE POSITIVE DRAINAGE AT TIE-IN-POINTS.
- OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1 1/2 INCH DEPTH; ANY COST ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE CONTRACTOR.
- ALL RIGHT-OF-WAY DEDICATED FOR PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
- AN AIR QUALITY PERMIT SHALL BE OBTAINED IF REQUIRED.
- ANY LIGHTING SHOWN HEREON IS AS SPECIFIED BY THE CLIENT AND IS INCLUDED FOR INFORMATION PURPOSES ONLY, AS DIRECTED BY THE OWNER AND/OR PUBLIC AGENCY REQUIREMENTS. BOWMAN CONSULTING GROUP, LTD. HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THIS PROJECT.
- THE CONTRACTOR WILL BE REQUIRED TO NOTIFY ALL RESIDENCES WITHIN VICINITY OF THE PROPERTY BOUNDARY TEN (10) DAYS PRIOR TO ANY BLASTING IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY REQUIREMENTS.
- NO BLASTING SHALL BE PERMITTED WITHIN 25' OF EXISTING UTILITY LINES OR STRUCTURES. BLASTING TO BE EXTENDED 25' BEYOND PROPOSED STRUCTURES IF CONDITIONS WARRANT FUTURE EXTENSIONS.
- ALL RETAINING WALLS 4' IN HEIGHT AND OVER (MEASURED FROM BOTTOM OF FOOTER TO TOP OF WALL) REQUIRE A SEPARATE BUILDING PERMIT.
- THE APPROVAL OF THIS PLAN DOES NOT CONSTITUTE THE APPROVAL OF FUTURE WORK.
- ALL HANDICAPPED SPACES SHALL HAVE AN ABOVE GRADE IDENTIFICATION SIGN MEETING APPROPRIATE GOVERNING AGENCY STANDARDS.
- WHERE A PROPOSED PIPE CROSSES OR PARALLELS A STREET OR DRIVE AISLE, THE ASPHALT SHALL BE NEATLY SAWCUT TO FULL DEPTH. AFTER INSTALLATION OF THE PIPE, THE ROADWAY SHALL BE PATCHED IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY STANDARDS.
- REFER TO THE TOWN OF ZEBULON STREET STANDARDS AND SPECIFICATIONS MANUAL FOR APPLICABLE CONSTRUCTION REQUIREMENTS WITHIN THE TOWN OF ZEBULON.

ABBREVIATIONS

A	AASHTO	AREA OF ARC	K	SIGHT DISTANCE COEFFICIENT OR R/C OF VERTICAL CURVATURE
AB	TRANS. OFFICIALS	AS-BUILT	Ke	RAILWAY ENTRANCE LOSS COEFFICIENT
AC	ACRE	AD	L	LENGTH
AD	ALGEBRAIC DIFFERENCE IN GRADE	AE	LAT	LATERAL
ADJ	ACCESS EASEMENT	AG	LCG	LIMITS CLEARING & GRADING
ADJ	ADJACENT	AGGR	LF	LINEAR FEET
AGGR	AGGREGATE	AHD	LP	LIP OF PAN
AHD	AHEAD	ANSI	LL	LOWER LEVEL
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	APT	LOS	LINE OF SIGHT
APT	ANGLE POINT	APPROX	LP	LOW POINT
APPROX	APPROXIMATE	ARCH	LS	LOADING SPACE
ARCH	ARCHITECTURAL	ASPH	LT	LEFT
ASPH	ASPHALT	ASTM	M	MONUMENT FOUND
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	AWWA	MAX	MAXIMUM
AWWA	AMERICAN WATER WORKS ASSOCIATION	B	ME	MATCH EXISTING
B	BREADTH	BOC	MECH	MECHANICAL
BOC	BACK OF CURB	BF	MI	MANHOLE
BF	BASEMENT FLOOR	BLDG	MIN	MILE
BLDG	BUILDING	BENCH	MISC	MINIMUM
BENCH	BENCHMARK	BMP	MSE	MISCELLANEOUS
BMP	BEST MANAGEMENT PRACTICES (WATER QUALITY)	BOV	MPH	MILES PER HOUR
BOV	BLOW OFF VALVE	BRL	MS	MEDIAN STRIP
BRL	BEARING	BVC	MSL	MEAN SEA LEVEL
BVC	BUILDING RESTRICTION LINE	BVCS	N	NORTHING/NORTH
BVCS	BEGINNING VERTICAL CURVE ELEVATION	BW	N/A	NOT APPLICABLE
BW	BEGINNING VERTICAL CURVE STATION	c.e	NBL	NORTH BOUND LANE
c.e	CENTER CORRECTION ON VERTICAL CURVE	C	N/O	NOT OR FORMERLY
C	CORRECTION COEFFICIENT	CATV	NFA	NET FLOOR AREA
CATV	CABLE TELEVISION	C&G	NO.	NUMBER
C&G	CURB AND GUTTER	CB	NTS	NOT TO SCALE
CB	CATCH BASIN	CBR	OC	ON CENTER
CBR	CALIFORNIA BEARING RATIO	CC	OJ	OBJECT
CC	CENTER TO CENTER	CCF	OD	OUTSIDE DIAMETER
CCF	CUBIC FEET	CFC	OH	OVERHANG
CFC	CUBIC FEET PER SECOND	CGR	O/H	OVERHEAD
CGR	CURB AND GUTTER (REVERSE SLOPE)	CHRG	OCB	OVERHEAD CABLE
CHRG	CHORD	OP	OHE	OVERHEAD ELECTRIC
OP	CHORD BEARING	C	OHT	OVERHEAD TELEPHONE
C	CENTERLINE	CLR	P	PERIMETER
CLR	CLEAR	CM	P	PROPERTY LINE
CM	CUBIC METERS	OMP	P&P	PLAN AND PROFILE
OMP	CORRUGATED METAL PIPE	OMS	PC	POINT OF CURVATURE
OMS	CUBIC METERS PER SECOND	CON	PCC	POINT OF COMPOUND CURVATURE
CON	CONTINUOUS	CONC	PCR	POINT OF CURB RETURN
CONC	CONCRETE	OPP	PCEP	POINT OF CURVE EDGE OF PAVEMENT
OPP	CORRUGATED PLASTIC PIPE	CS	PCTC	POINT OF CURVATURE TOP OF CURB
CS	CURB STOP	CT	PI	POINT OF INTERSECTION
CT	CURT	CTR	PQ	POINT OF GRADE LINE
CTR	CENTER	CTRL	PRC	POINT OF REVERSE CURVATURE
CTRL	CONTROL LINE	CTY	PREL	PRELIMINARY
CTY	CUBIC YARD	D	PROP	PROPOSED
D	DEPTH	DA	PT	POINT OF TANGENCY
DA	DRAINAGE AREA	DB	PUE	PUBLIC UTILITY EASEMENT
DB	DEED BOOK	DC	PCD	POINT CHORD OR PIPE OR POINT OF VERTICAL CURVATURE
DC	DIVERSION DIKE	DET	PVI	POINT OF VERTICAL INTERSECTION
DET	DETAIL	DIA	PVT	POINT OF VERTICAL TANGENCY
DIA	DIAMETER	DIP	PVRC	POINT OF VERTICAL REVERSE CURVE
DIP	DUCTILE IRON PIPE	DIST	Q (cfs)	AMOUNT OF RUNOFF (FLOW RATE)
DIST	DROP INLET	DL	R	RADIUS
DL	DOMESTIC LINE	DM	ROP	REINFORCED CONCRETE PIPE
DM	DROP MANHOLE	DR	RDCR	REDUCER
DR	DRIVE DRAIN	DRN	RD	ROAD OR ROOF DRAIN
DRN	DRAINAGE	DRNG	REQD	REQUIRED
DRNG	DRAINAGE AREA	DS	RET	RETAINING
DS	DOWN SPOUT	DU	REV	REVISION
DU	DWELLING UNITS	DWG	RGP	ROAD GRADING PLAN
DWG	DRAWING	D/W	RMA	RESOURCE MANAGEMENT AREA
D/W	DRIVEWAY	E	ROM	REMOTE OUTSIDE MONITOR
E	EASTING/EAST	EA	RPA	RESOURCE PROTECTION AREA
EA	EACH	EBL	RR	RAILROAD
EBL	EAST BOUND LANE	EC	RT	ROUTE
EC	EROSION CONTROL	ECB	R/W & ROW	RIGHT OF WAY
ECB	EROSION CONTROL BLANKET	EG	S	SPEED OR SLOPE
EG	EDGE OF GUTTER	EOL	SAN	SANITARY SEWER
EOL	ENERGY GRADIENT LINE	ELEV	SANMH	SANITARY SEWER MANHOLE
ELEV	ELEVATION	ELEC	SBL	SOUTH BOUND LANE
ELEC	ELECTRIC	ELEV	SCH	SCHEDULE
ELEV	ELEVATION	ENGR	SD	SIGHT DISTANCE
ENGR	ENGINEER	ENT	SEC	SECTION
ENT	ENTRANCE	EOA	SEW	SEWER
EOA	EDGE OF ASPHALT	EOP	SF	SQUARE FEET
EOP	EDGE OF CONCRETE	EOP	SH	SHOULDER
EOP	EDGE OF PAVEMENT	EQUIP	SP	SPACE OR SITE PLAN
EQUIP	EQUIPMENT	ESMT	SPEC	SPECIFICATIONS
ESMT	EASEMENT	ETD	STA	STATION
ETD	EXISTING TO BE DEMOLISHED	ETL	STD	STANDARD
ETL	EXISTING TO BE RELOCATED	ETRL	STK	STACK
ETRL	EXISTING TO BE REPLACED	ETRP	STM	STORM SEWER
ETRP	ENDING VERTICAL CURVE ELEVATION	EVCE	STMH	STORM SEWER MANHOLE
EVCE	ENDING VERTICAL CURVE STATION	EVCS	STR	STRUCTURE
EVCS	END WALL	EW	SVC	SERVICE
EW	EXISTING	EX	S/W	SIDEWALK
EX	EXISTING	EX	STM	STORM WATER MANAGEMENT
EQC	ENVIRONMENTAL QUALITY CORRIDOR	F	SV	CROSS SLOPE
F	FIRE LINE	FAR	SY	SQUARE YARD
FAR	FLOOR AREA RATIO	FD	T	TANGENT
FD	FLOOR DRAIN	FES	TB	TOP OF BANK OR TEST BORING
FES	FLARED END SECTION	FF	TBR	TO BE REMOVED
FF	FIRST FLOOR OR FINISH FLOOR	FG	TOC	TOP OF CURB
FG	FINISH GRADE	FH	TC	TIME OF CONCENTRATION
FH	FIRE HYDRANT	FL	TEL	TELEPHONE
FL	FLOW LINE	FND	TEMP	TEMPORARY
FND	FOUNDATION	FOY	TH	TEST HOLE
FOY	FOYER	FPS	TF	TOP OF FOUNDATION
FPS	FLOOD PLAN	FS	TP	TOP OF PIPE
FS	FEET PER SECOND	FT	TP	TEST PIT OR TREE PROTECTION
FT	FOOT OR FEET	G	TW	TOP OF WALL OR TAILWATER
G	GAS	GAR	TYP	TYPICAL
GAR	GARAGE	GB	UE	UTILITY EASEMENT
GB	GRADE BREAK	GFA	UG	UNDERGROUND
GFA	GROSS FLOOR AREA	GR	UGE	UNDERGROUND ELECTRIC
GR	GUARD RAIL OR GRATE INLET	GV	UGT	UNDERGROUND TELEPHONE
GV	GATE VALVE	H	UGC	UNDERGROUND CABLE
H	HEAD	HC	UD	UNDERDRAIN
HC	HANDICAP	HCB	UL	UPPER LEVEL
HCB	HORIZONTAL BEND	HBP	UP	UTILITY POLE
HBP	HOT BITUMINOUS PAVEMENT	HCL	USCS	US GEOLOGICAL SURVEY
HCL	HYDRAULIC GRADE LINE	HORZ	UTIL	UTILITY
HORZ	HORIZONTAL	HR	V OR VOL	VOLUME
HR	HAND RAIL	HT	V OR VEL	VELOCITY
HT	HEIGHT	HW	VAN	HANDICAPPED VAN PARKING SPACE
HW	HEADWATER	I	VB	VERTICAL BEND
I	RAINFALL INTENSITY	ID	VC	VERTICAL CURVE
ID	INSIDE DIAMETER OR IDENTIFICATION	IE	VF	VERTICAL FOOT
IE	INVERT ELEVATION	IN	W	WEIGHT OR WIDTH
IN	INCH	INV	WBL	WEST BOUND LANE
INV	INVERT	IP	WL	WATER LINE
IP	IRON PIPE	IPF	WM	WATER METER
IPF	IRON PIPE FOUND	IRS	W/M OR WM	WATER MAIN
IRS	IRON PIPE SET	IRR	W/TB	WITH THRUST BLOCK
IRR	IRRIGATION	J	WSEL	WATER SURFACE ELEVATION
J	JUNCTION BOX	JNT	WV	WATER VALVE
JNT	JOINT	XING	XF	CROSSING TRANSFORMER
XF		YI	YR	YARD INLET YEAR

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE	
	ADJACENT PROPERTY LINE	
	LOT LINE	
	RIGHT OF WAY	
	CENTERLINE	
	FLOOD PLAN	
	LIMITS OF CONSTRUCTION	
	LIMITS OF DISTURBANCE	
	SWALE / STREAM FLOWLINE	
	OVERFLOW RELIEF PATH	
	FENCE LINE	
	EASEMENT	
	EDGE OF PAVEMENT	
	VERTICAL CURB AND GUTTER	
	MOUNTAIN CURB AND GUTTER	
	CONCRETE SIDEWALK	
	ASPHALT SIDEWALK	
	HANDICAP PARKING	
	SIGHT TRIANGLE	
	SIGN(S)	
	PARKING COUNT INDICATOR	
	VEHICLES PER DAY INDICATOR	
	TEST PIT	



DEMOLITION NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL EXISTING UTILITIES ON SITE PRIOR TO DEMOLITION.
2. THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES AS NOTED AND SHOWN ON THESE PLANS AND AS DIRECTED BY THE OWNER.
3. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS AND PAY FEES REQUIRED FOR DEMOLITION AND HAUL-OFF FROM THE APPROPRIATE AUTHORITIES.
4. THE CONTRACTOR SHALL PREPARE ALL DOCUMENTS AND ACQUIRE APPROPRIATE PERMITS AS REQUIRED PRIOR TO THE COMMENCEMENT OF DEMOLITION.
5. THE DEMOLITION PLAN IS INTENDED TO DEPICT GENERAL DEMOLITION AND UTILITY WORK. IT IS NOT INTENDED TO IDENTIFY EACH ELEMENT OF DEMOLITION OR RELOCATION. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND APPROPRIATE UTILITY COMPANY PRIOR TO WORK.
6. CONTRACTOR TO COMPLETELY DEMOLISH AND DISPOSE OF OFFSITE IN A LAWFUL MANNER EXISTING BUILDINGS, INCLUDING FOUNDATIONS AND ALL APPURTENANCES LOCATED ON AND AROUND THE PROPERTY INCLUDING BUT NOT LIMITED TO BOLLARDS, GAS METERS, AIR CONDITIONING UNITS, SIGNS, CURBS, SIDEWALKS, ELECTRIC METERS, FENCING, ETC.
7. REMOVE AND DISPOSE OF ANY SIDEWALK, FENCES, STAIRS, WALLS, FOUNDATIONS, CONDUITS, LIGHT POLE BASSIS, DEBRIS AND RUBBISH REQUIRING REMOVAL FROM THE WORK AREA IN AN APPROVED LANDFILL.
8. REMOVE AND/OR PLUG EXISTING UTILITIES SUCH AS SANITARY SEWER, WATER, GAS, ELECTRIC, AND TELEPHONE AS SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING EACH UTILITY COMPANY TO COORDINATE REMOVAL OF ALL UTILITIES AND FOR DETERMINING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO COMMENCING WORK.
9. THE CONTRACTOR SHALL CUT AND PLUG, OR ARRANGE FOR THE APPROPRIATE UTILITY COMPANY TO CUT AND PLUG ALL SERVICE PIPING AT THE STREET LINE OR MAN, AS REQUIRED, OR AS OTHERWISE NOTED. ALL SERVICES MAY NOT BE SHOWN ON THIS PLAN. THE CONTRACTOR SHALL INVESTIGATE THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF SERVICE PIPING TO BE REMOVED, CUT OR PLUGGED.
10. THE CONTRACTOR SHALL ARRANGE FOR RESETTING OF CURB BOXES, VALVE BOXES AND REMOVAL AND/OR RELOCATION OF OVERHEAD UTILITIES AND POLES WITH THE APPROPRIATE UTILITY COMPANY.
11. INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND TREE PROTECTION PRIOR TO BEGINNING DEMOLITION WORK.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING ROAD SURFACE. FINISH SURFACE TO BE REMOVED OR DEMOLISHED SHALL BE CUT ALONG LINES OF JOINTS WHICH WILL PERMIT A NEAT SURFACE WHEN RESTORED.
14. SAWCUT AT INTERFACE OF PAVEMENT OR CURB TO REMAIN. SAWCUT EXISTING PAVEMENT.
15. ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE SOLE EXPENSE OF THE CONTRACTOR.
16. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
17. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
18. ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIAL CONTRACTOR.
19. THE PROPERTY SELLER SHALL PUMP OUT BUILDING FUEL, GREASE TRAPS, AND WASTE OIL TANKS (IF ANY ARE ENCOUNTERED) AND REMOVE FUEL TO AN APPROVED DISPOSAL AREA BY AN APPROPRIATELY LICENSED WASTE OIL HANDLING CONTRACTOR IN STRICT ACCORDANCE WITH FEDERAL AND STATE REQUIREMENTS BEFORE CONSTRUCTION BEGINS.
20. THE CONTRACTOR SHALL PROPERLY AND LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS OFF OF THE SITE.

Bowman

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RALEIGH, NC 27609
Phone: (919)553-6570
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Bowman North Carolina Ltd.



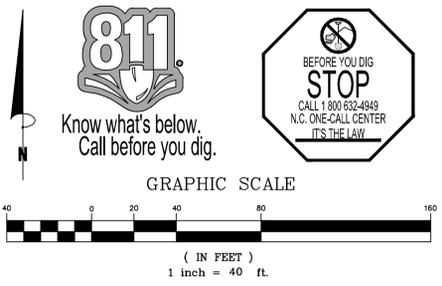
DEMOLITION PLAN
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



UTILITY STATEMENT
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

CAUTIONARY NOTE
THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE BASED ON ABOVE GROUND EVIDENCE OR INFORMATION GATHERED DURING THE FIELD SURVEY PORTION OF THIS PROJECT. AS SUCH, THIS INFORMATION IS SPECULATIVE IN NATURE ONLY AND SHOULD NOT BE CONSTRUED AS FACT. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF THE UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY AND ALL CONSTRUCTION.

RIPARIAN BUFFER NOTE:
THE 50 FOOT NESTLE RIPARIAN BUFFER ZONE IS MEASURED FROM THE TOP OF BANK OF THE DITCH OR CREEK. NO ACTIVITY IS PERMITTED IN ZONE 1 (FIRST 30FT). OWNER/DEVELOPER TO CONSULT G.S. 15A NCAC 2B.0259 BEFORE ANY DISTURBANCE WITHIN THE BUFFER ZONE OR CALL NCEM DIVISION OF WATER QUALITY, SURFACE WATER PROTECTION SECTION FOR OFFICIAL DETERMINATION



N/F
MARK S. BASS
DB. 17501/1173
PIN #2705962277
R2 ZONING
VACANT

PLAN STATUS	
11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
3/26/24	PER NCDOT REVIEW
5/28/24	PER CITY OF RALEIGH REVIEW
MEL DESIGN	MEL DRAWN
XXX	CHKD
SCALE: H: 1" = 40'	
V: 1" = XXX'	
JOB No. 220127-01-001	
DATE May 28, 2024	
FILE No. 220127-D-CP-001	
SHEET C2.0	

NOTE TO CONTRACTOR:
 THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE EROSION CONTROL INSPECTOR OF THE LOCATION OF ANY OFF-SITE BORROW SOURCE OR OFF-SITE WASTE MATERIAL DISPOSAL SITE. OFF-SITE DISTURBANCES COUNT TOWARDS THE OVERALL PROJECT DISTURBED AREA AND MUST BE COVERED BY THE PERMIT FOR THIS PROJECT AND/OR THE PERMIT FROM ANOTHER ACTIVE WAKE COUNTY OR NCEQ PERMITTED SITE THAT IS APPROPRIATE FOR THE INTENDED USE (I.E. APPLICABLE MINING REQUIREMENTS). NO OFF-SITE ACTIVITIES SHALL OCCUR UNTIL THE PERMIT FOR THIS PROJECT HAS BEEN MODIFIED TO INCLUDE THE AFFECTED AREAS OR IT HAS BEEN VERIFIED WITH THE EROSION CONTROL INSPECTOR THAT THE OFF-SITE AREAS ARE COVERED UNDER ACTIVE APPLICABLE WAKE COUNTY OR NCEQ PERMITS.

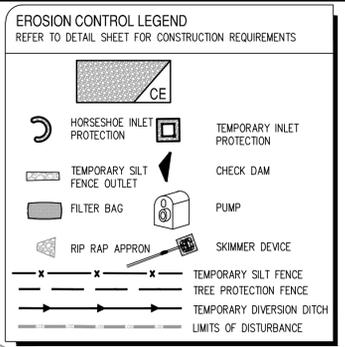
CONSTRUCTION NOTE
 ALL MATERIALS AND CONSTRUCTION METHODS PER THE LATEST EDITION OF WAKE COUNTY SPECIFICATIONS AND STANDARD DETAILS.

STOCKPILE DESIGN CRITERIA:

- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
- STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
- STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
- STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
- APPROVED BMP'S SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
- STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
- OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

EROSION CONTROL NOTES

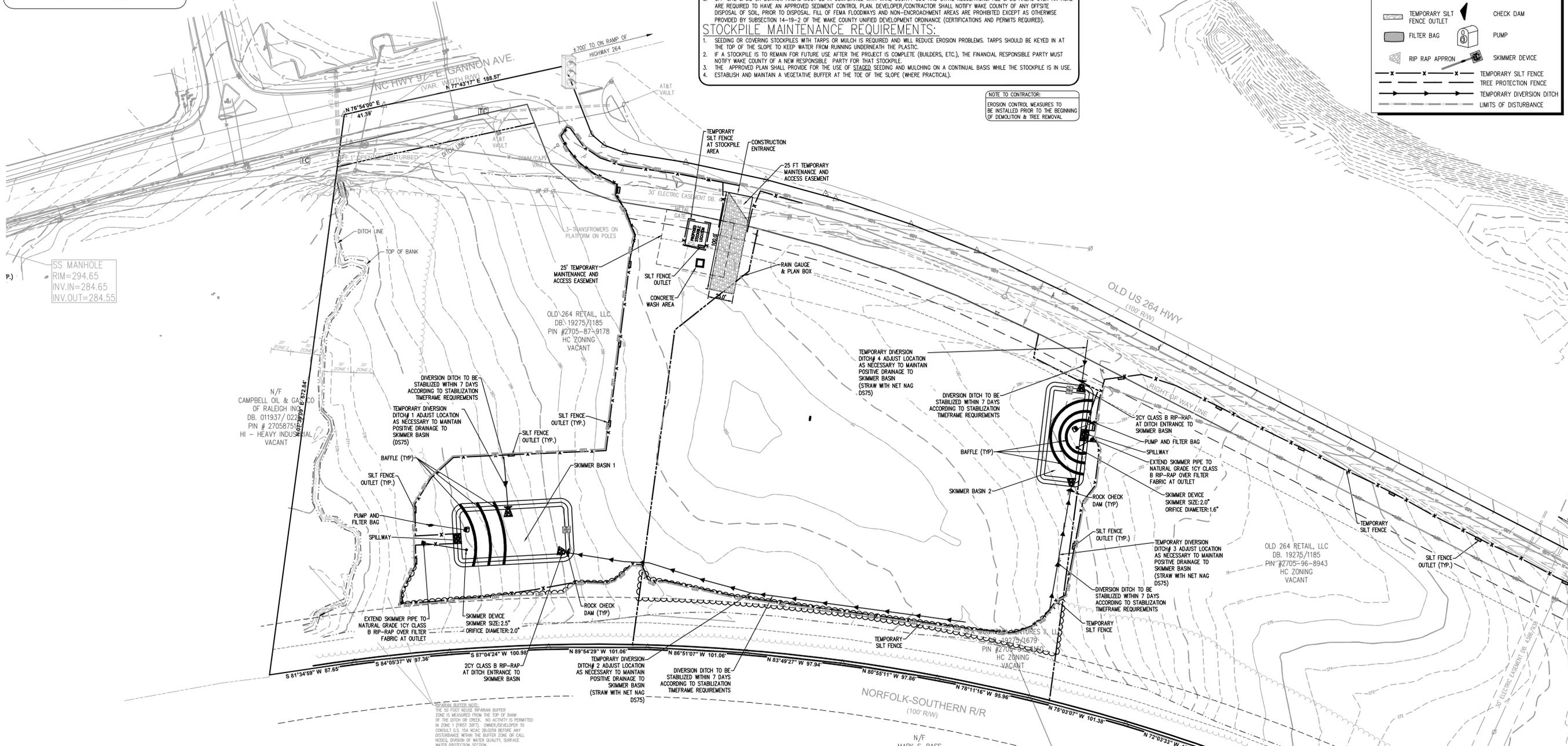
- REFER TO GENERAL NOTES SHEET FOR ADDITIONAL EROSION CONTROL REQUIREMENTS.
- MEASURES TO BE USED IN THE DEVELOPMENT OF THIS SITE.
- REFER TO DETAIL SHEETS FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER FOR THE DEVELOPMENT.



STOCKPILE MAINTENANCE REQUIREMENTS:

- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYS IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
- IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
- THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
- ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

NOTE TO CONTRACTOR:
 EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL.



SS MANHOLE
 RIM=294.65
 INV.IN=284.65
 INV.OUT=284.55

WAKE COUNTY CONSTRUCTION SEQUENCE:

- SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769**. OBTAIN A LAND-DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SKIMMER BASINS, WAKE COUNTY SKIMMER BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- CALL **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769** FOR AN ONSITE INSPECTION BY THE WATERSHED MANAGER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
- INSTALL STORM SEWER, IF SHOWN, AND PROTECT CATCH BASIN CURB INLETS WITH BLOCK AND GRAVEL INLET CONTROLS. PROTECT AREA DRAIN/YARD INLETS WITH STANDARD INLET PROTECTION, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. PREPARE A SEEDBED, FERTILIZE, LIME, SEED, MULCH AND ASPHALT TACK ALL DENuded AREAS WITHIN NPDES STABILIZATION TIMEFRAME OF COMPLETION OF ANY PHASE OF CONSTRUCTION OR STOPPAGE OF WORK ON ANY PHASE OF CONSTRUCTION.
- CONTRACTOR TO CONTACT PROJECT ENGINEER BETWEEN SEDIMENT AND EROSION CONTROL PHASES OF DEVELOPMENT AND FOR THE REMOVAL OR CONVERSION OF SEDIMENT AND EROSION CONTROL MEASURES.
- WAKE COUNTY OR JURISDICTIONAL MUNICIPALITY MUST GRANT PERMISSION TO CONVERT THE SEDIMENT BASIN OVER TO STORMWATER USE PRIOR TO COMPLETING ANY RELATED WORK.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769** FOR AN INSPECTION BY THE WATERSHED MANAGER.
- 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.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769**. OBTAIN A CERTIFICATE OF COMPLETION.

STABILIZATION TIMEFRAME

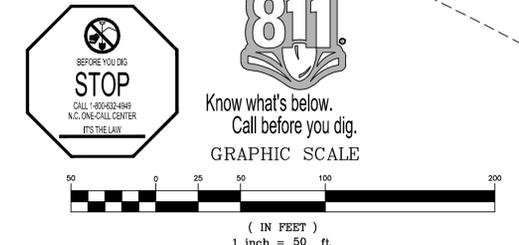
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
BASIN & TEMPORARY DIVERSION DITCHES	IMMEDIATELY	NONE
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50FT IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES

GROUND COVER REQUIREMENTS:
 THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, ACCORDING TO THE FOLLOWING CHART, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

BASIN REMOVAL SEQUENCE:

- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
- REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF CULVERT PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
- PERFORM SEEDBED PREPARATION, SEED, MULCH AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.
- INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
- WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER/CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.



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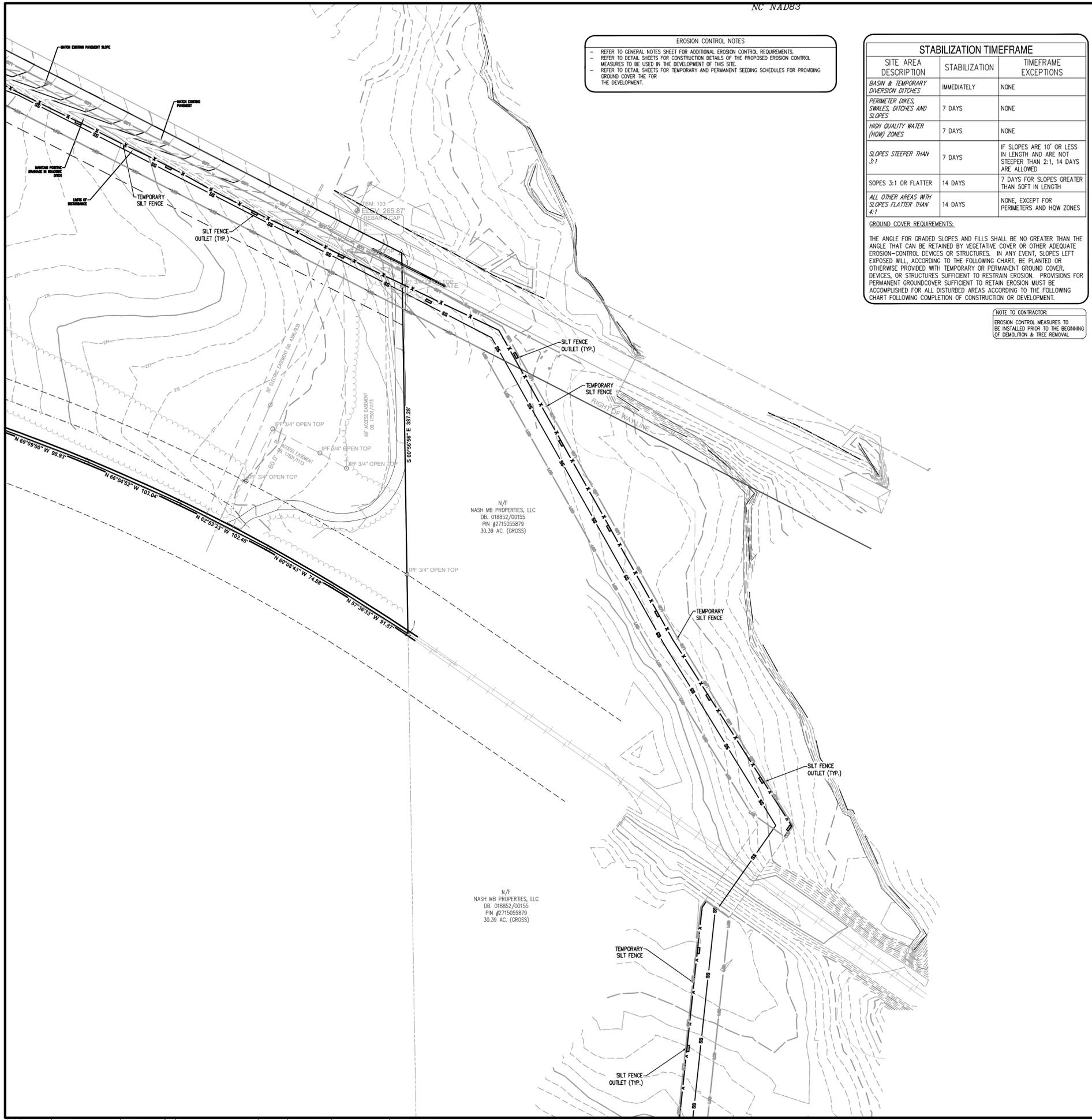
EROSION CONTROL PLAN
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



PLAN STATUS

11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
5/28/24	PER CITY OF RALEIGH REVIEW	
MEL DESIGN	MEL DRAWN	XXX CHKD
SCALE	H: 1" = 40'	V: 1" = 40'
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	

SHEET **C2.1**



EROSION CONTROL NOTES

- REFER TO GENERAL NOTES SHEET FOR ADDITIONAL EROSION CONTROL REQUIREMENTS.
- REFER TO DETAIL SHEETS FOR CONSTRUCTION DETAILS OF THE PROPOSED EROSION CONTROL MEASURES TO BE USED IN THE DEVELOPMENT OF THIS SITE.
- REFER TO DETAIL SHEETS FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER FOR THE DEVELOPMENT.

STABILIZATION TIMEFRAME

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
BASIN & TEMPORARY DIVERSION DITCHES	IMMEDIATELY	NONE
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50FT IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES

GROUND COVER REQUIREMENTS:

THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, ACCORDING TO THE FOLLOWING CHART, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUNDCOVER SUFFICIENT TO RETAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

NOTE TO CONTRACTOR:
 EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL

NOTE TO CONTRACTOR:
 THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE EROSION CONTROL INSPECTOR OF THE LOCATION OF ANY OFF-SITE BORROW SOURCE OR OFF-SITE WASTE MATERIAL DISPOSAL SITE. OFF-SITE DISTURBANCES COUNT TOWARDS THE OVERALL PROJECT DISTURBED AREA AND MUST BE COVERED BY THE PERMIT FOR THIS PROJECT AND/OR THE PERMIT FROM ANOTHER ACTIVE WAKE COUNTY OR NCDOT PERMITTED SITE THAT IS APPROPRIATE FOR THE INTENDED USE (I.E. APPLICABLE MINING REQUIREMENTS). NO OFF-SITE ACTIVITIES SHALL OCCUR UNTIL THE PERMIT FOR THIS PROJECT HAS BEEN MODIFIED TO INCLUDE THE AFFECTED AREAS OR IT HAS BEEN VERIFIED WITH THE EROSION CONTROL INSPECTOR THAT THE OFF-SITE AREAS ARE COVERED UNDER ACTIVE APPLICABLE WAKE COUNTY OR NCDOT PERMITS.

STOCKPILE DESIGN CRITERIA:

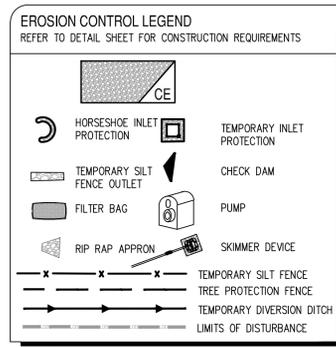
1. A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
2. STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
3. STOCKPILE HEIGHT SHALL NOT EXCEED 35- FEET.
4. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
5. APPROVED BMP'S SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
6. STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
7. ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
8. OFF-SITE SPILL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDD AND STATE REGULATIONS. ALL SPILL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

STOCKPILE MAINTENANCE REQUIREMENTS:

1. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
2. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
3. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
4. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

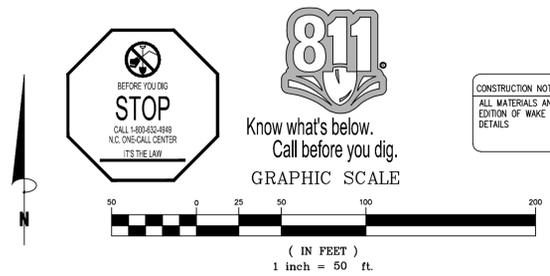
WAKE COUNTY CONSTRUCTION SEQUENCE:

1. SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, **KARYN PAGEAU WITH WAKE COUNTY AT 919-796-8769**. OBTAIN A LAND-DISTURBING PERMIT.
2. INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SKIMMER BASINS, WAKE COUNTY SKIMMER BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
3. CALL **KARYN PAGEAU WITH WAKE COUNTY AT 919-796-8769** FOR AN ONSITE INSPECTION BY THE WATERSHED MANAGER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
4. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
5. INSTALL STORM SEWER, IF SHOWN, AND PROTECT CATCH BASIN CURB INLETS WITH BLOCK AND GRAVEL INLET CONTROLS. PROTECT AREA DRAIN/YARD INLETS WITH STANDARD INLET PROTECTION, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
6. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAINTING, DITCH LININGS, ETC. PREPARE A SEEDBED, FERTILIZE, LIME, SEED, MULCH AND ASPHALT TACK ALL DENuded AREAS WITHIN NPDES STABILIZATION TIMEFRAME OF COMPLETION OF ANY PHASE OF CONSTRUCTION OR STOPPAGE OF WORK ON ANY PHASE OF CONSTRUCTION.
7. CONTRACTOR TO CONTACT PROJECT ENGINEER BETWEEN SEDIMENT AND EROSION CONTROL PHASES OF DEVELOPMENT AND FOR THE REMOVAL OR CONVERSION OF SEDIMENT AND EROSION CONTROL MEASURES.
8. WAKE COUNTY OR JURISDICTIONAL MUNICIPALITY MUST GRANT PERMISSION TO CONVERT THE SEDIMENT BASIN OVER TO STORMWATER USE PRIOR TO COMPLETING ANY RELATED WORK.
9. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL **KARYN PAGEAU WITH WAKE COUNTY AT 919-796-8769** FOR AN INSPECTION BY THE WATERSHED MANAGER.
10. 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.
11. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, **KARYN PAGEAU WITH WAKE COUNTY AT 919-796-8769**. OBTAIN A CERTIFICATE OF COMPLETION.



BASIN REMOVAL SEQUENCE:

1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
2. REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES, IF CULVERT PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
3. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.
4. INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
5. WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER/CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION. NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.



CONSTRUCTION NOTE
 ALL MATERIALS AND CONSTRUCTION METHODS PER THE LATEST EDITION OF WAKE COUNTY SPECIFICATIONS AND STANDARD DETAILS

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EROSION CONTROL PLAN
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



PLAN STATUS	
11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
3/26/24	PER NCDOT REVIEW
5/28/24	PER CITY OF RALEIGH REVIEW
MEL DESIGN	MEL DRAWN
XXX	CHKD
SCALE	H: 1" = 40' V: 1" = 40'
JOB No.	220127-01-001
DATE	May 28, 2024
FILE No.	220127-D-CP-001
SHEET	C2.2

EROSION CONTROL NOTES

- REFER TO GENERAL NOTES SHEET FOR ADDITIONAL EROSION CONTROL REQUIREMENTS.
- REFER TO DETAIL SHEETS FOR CONSTRUCTION DETAILS OF THE PROPOSED EROSION CONTROL MEASURES TO BE USED IN THE DEVELOPMENT OF THIS SITE.
- REFER TO DETAIL SHEETS FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER FOR THE DEVELOPMENT.

STABILIZATION TIMEFRAME		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
BASIN & TEMPORARY DIVERSION DITCHES	IMMEDIATELY	NONE
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN SOFT IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES

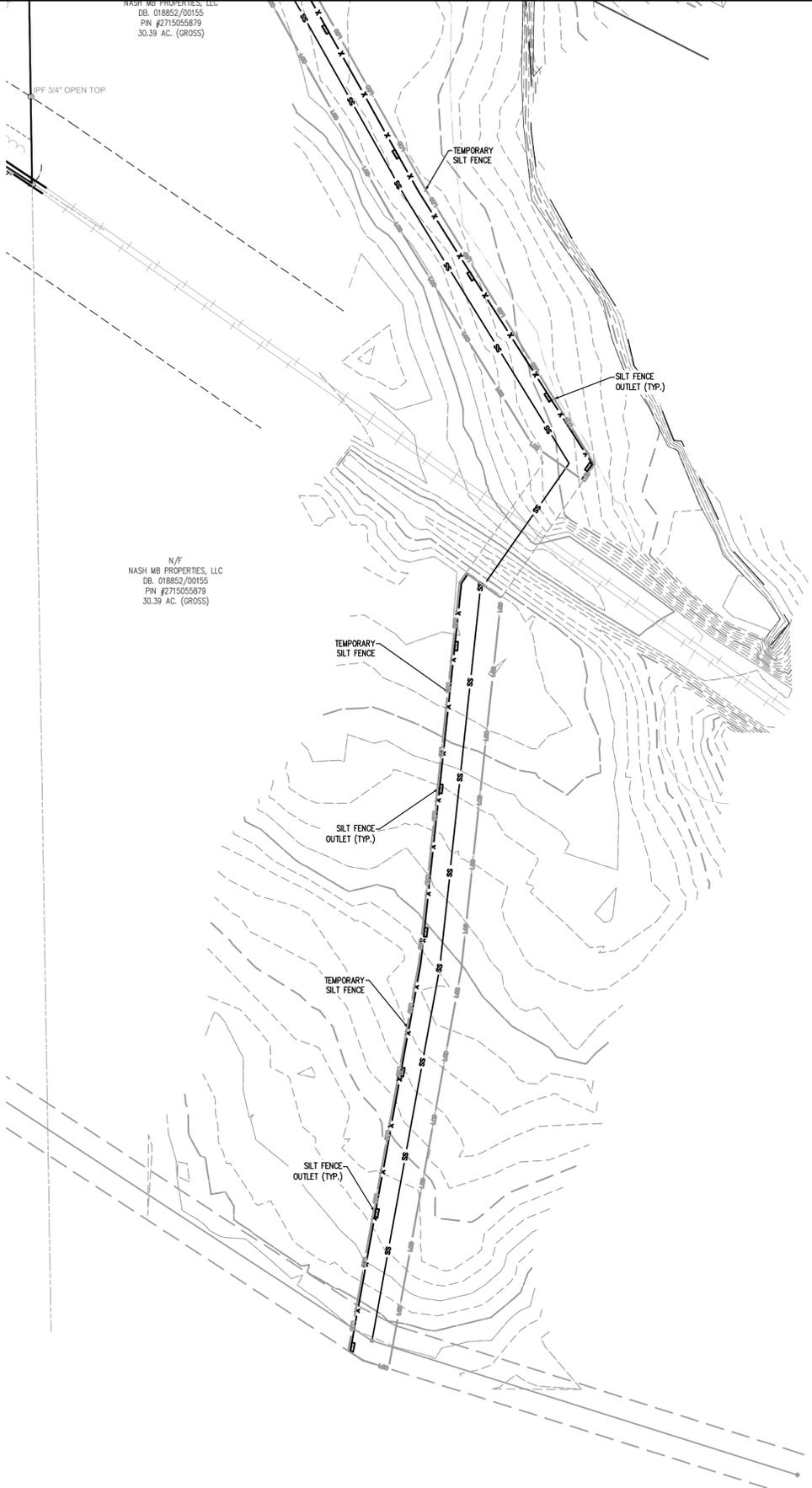
GROUND COVER REQUIREMENTS:

THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, ACCORDING TO THE FOLLOWING CHART, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

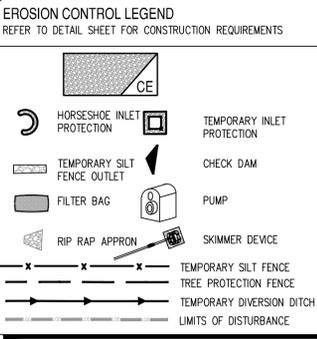
NOTE TO CONTRACTOR:
EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL.

- WAKE COUNTY CONSTRUCTION SEQUENCE:**
- SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, **KARIN PAGEAU WITH WAKE COUNTY AT 919-706-8789**. OBTAIN A LAND-DISTURBING PERMIT.
 - INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SKIMMER BASINS, WAKE COUNTY SKIMMER BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
 - CALL **KARIN PAGEAU WITH WAKE COUNTY AT 919-706-8789** FOR AN ON-SITE INSPECTION BY THE WATERSHED MANAGER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
 - BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
 - INSTALL STORM SEWER, IF SHOWN, AND PROTECT CATCH BASIN CURB INLETS WITH BLOCK AND GRAVEL INLET CONTROLS. PROTECT AREA DRAIN/YARD INLETS WITH STANDARD INLET PROTECTION, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
 - STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. PREPARE A SEEDBED, FERTILIZE, LIME, SEED, MULCH AND ASPHALT TACK ALL DENuded AREAS WITHIN NEEDED STABILIZATION TIMEFRAME OF COMPLETION OF ANY PHASE OF CONSTRUCTION OR STORAGE OF WORK ON ANY PHASE OF CONSTRUCTION.
 - CONTRACTOR TO CONTACT PROJECT ENGINEER BETWEEN SEDIMENT AND EROSION CONTROL PHASES OF DEVELOPMENT AND FOR THE REMOVAL OR CONVERSION OF SEDIMENT AND EROSION CONTROL MEASURES.
 - WAKE COUNTY OR JURISDICTIONAL MUNICIPALITY MUST GRANT PERMISSION TO CONVERT THE SEDIMENT BASIN OVER TO STORMWATER USE PRIOR TO COMPLETING ANY RELATED WORK.
 - WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL **KARIN PAGEAU WITH WAKE COUNTY AT 919-706-8789** FOR AN INSPECTION BY THE WATERSHED MANAGER.
 - 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.
 - WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, **KARIN PAGEAU WITH WAKE COUNTY AT 919-706-8789**. OBTAIN A CERTIFICATE OF COMPLETION.

NOTE TO CONTRACTOR:
THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE EROSION CONTROL INSPECTOR OF THE LOCATION OF ANY OFF-SITE BORROW SOURCE OR OFF-SITE WASTE MATERIAL DISPOSAL SITE. OFF-SITE DISTURBANCES COUNT TOWARDS THE OVERALL PROJECT DISTURBED AREA AND MUST BE COVERED BY THE PERMIT FOR THIS PROJECT AND/OR THE PERMIT FROM ANOTHER ACTIVE WAKE COUNTY OR NCDOT PERMITTED SITE THAT IS APPROPRIATE FOR THE INTENDED USE (I.E. APPLICABLE MINING REQUIREMENTS). NO OFF-SITE ACTIVITIES SHALL OCCUR UNTIL THE PERMIT FOR THIS PROJECT HAS BEEN MODIFIED TO INCLUDE THE AFFECTED AREAS OR IT HAS BEEN VERIFIED WITH THE EROSION CONTROL INSPECTOR THAT THE OFF-SITE AREAS ARE COVERED UNDER ACTIVE APPLICABLE WAKE COUNTY OR NCDOT PERMITS.

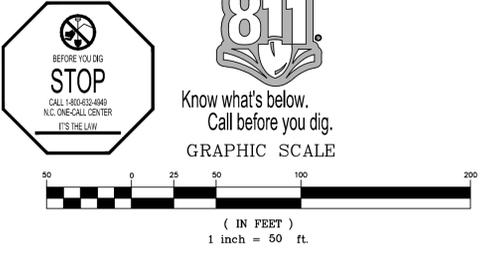


- STOCKPILE DESIGN CRITERIA:**
- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
 - STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
 - STOCKPILE HEIGHT SHALL NOT EXCEED 35-FEET.
 - STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
 - APPROVED BMP'S SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
 - STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
 - ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
 - OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).
- STOCKPILE MAINTENANCE REQUIREMENTS:**
- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
 - IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
 - THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF SEEDS SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
 - ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).



- BASIN REMOVAL SEQUENCE:**
- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
 - REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF CULVERT PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
 - PERFORM SEEDBED PREPARATION, SEED, MULCH AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.
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 - WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER/CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.
- NOTE:** A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.

CONSTRUCTION NOTE
ALL MATERIALS AND CONSTRUCTION METHODS PER THE LATEST EDITION OF WAKE COUNTY SPECIFICATIONS AND STANDARD DETAILS



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EROSION CONTROL PLAN
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS	
11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
3/26/24	PER NCDOT REVIEW
5/28/24	PER CITY OF RALEIGH REVIEW
MEL DESIGN	MEL DRAWN XXX CHKD
SCALE	H: 1" = 40' V: 1" = 40'
JOB No.	220127-01-001
DATE	May 28, 2024
FILE No.	220127-D-CP-001

SHEET **C2.3**

NOTE TO CONTRACTOR:
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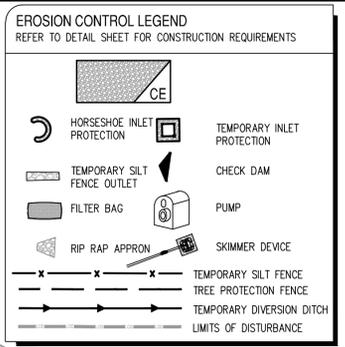
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 ALL MATERIALS AND CONSTRUCTION METHODS PER THE LATEST EDITION OF WAKE COUNTY SPECIFICATIONS AND STANDARD DETAILS.

STOCKPILE DESIGN CRITERIA:

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- APPROVED BMP'S SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
- STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
- OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

EROSION CONTROL NOTES

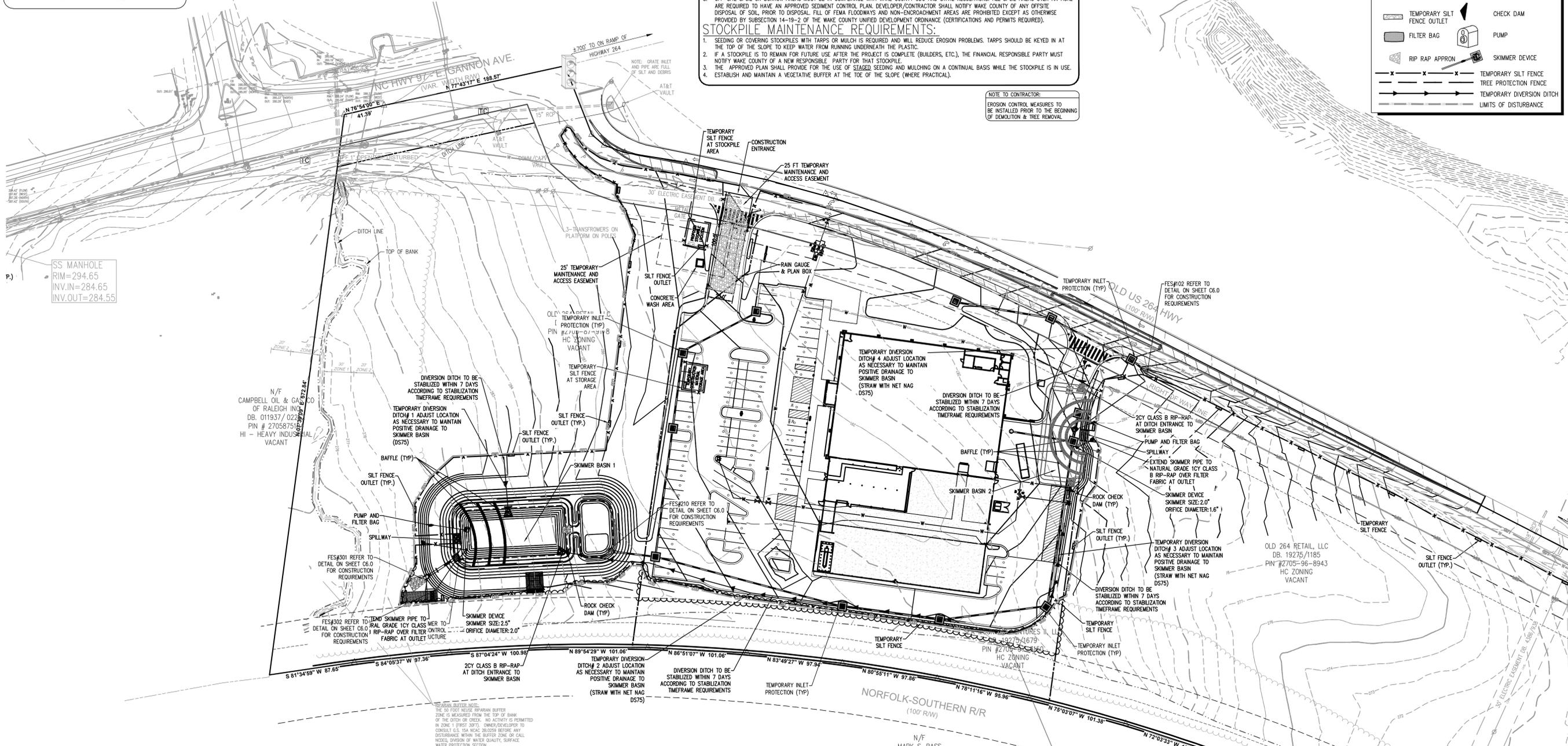
- REFER TO GENERAL NOTES SHEET FOR ADDITIONAL EROSION CONTROL REQUIREMENTS.
- MEASURES TO BE USED IN THE DEVELOPMENT OF THIS SITE.
- REFER TO DETAIL SHEETS FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER FOR THE DEVELOPMENT.



STOCKPILE MAINTENANCE REQUIREMENTS:

- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYS IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
- IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
- THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
- ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

NOTE TO CONTRACTOR:
 EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL



SS MANHOLE
 RIM=294.65
 INV.IN=284.65
 INV.OUT=284.55

WAKE COUNTY CONSTRUCTION SEQUENCE:

- SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769**. OBTAIN A LAND-DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SKIMMER BASINS, WAKE COUNTY SKIMMER BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- CALL **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769** FOR AN ONSITE INSPECTION BY THE WATERSHED MANAGER TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
- INSTALL STORM SEWER, IF SHOWN, AND PROTECT CATCH BASIN CURB INLETS WITH BLOCK AND GRAVEL INLET CONTROLS. PROTECT AREA DRAIN/YARD INLETS WITH STANDARD INLET PROTECTION, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. PREPARE A SEEDBED, FERTILIZE, LIME, SEED, MULCH AND ASPHALT TACK ALL DENuded AREAS WITHIN NPDES STABILIZATION TIMEFRAME OF COMPLETION OF ANY PHASE OF CONSTRUCTION OR STOPPAGE OF WORK ON ANY PHASE OF CONSTRUCTION.
- CONTRACTOR TO CONTACT PROJECT ENGINEER BETWEEN SEDIMENT AND EROSION CONTROL PHASES OF DEVELOPMENT AND FOR THE REMOVAL OR CONVERSION OF SEDIMENT AND EROSION CONTROL MEASURES.
- WAKE COUNTY OR JURISDICTIONAL MUNICIPALITY MUST GRANT PERMISSION TO CONVERT THE SEDIMENT BASIN OVER TO STORMWATER USE PRIOR TO COMPLETING ANY RELATED WORK.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769** FOR AN INSPECTION BY THE WATERSHED MANAGER.
- 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.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, **KARIN PAGEAU WITH WAKE COUNTY AT 919-796-8769**. OBTAIN A CERTIFICATE OF COMPLETION.

STABILIZATION TIMEFRAME

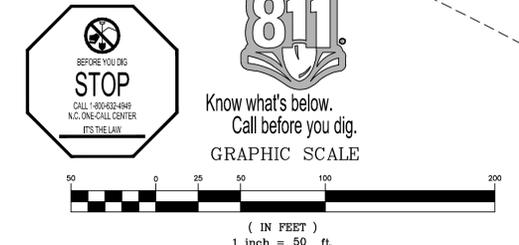
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
BASIN & TEMPORARY DIVERSION DITCHES	IMMEDIATELY	NONE
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW ZONES)	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50FT IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES

GROUND COVER REQUIREMENTS:
 THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION-CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, ACCORDING TO THE FOLLOWING CHART, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RETAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING CHART FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

BASIN REMOVAL SEQUENCE:

- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
- REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF CULVERT PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
- PERFORM SEEDBED PREPARATION, SEED, MULCH AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.
- INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
- WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER/CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL ENGINEER/CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.



Bowman

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 4006 BARRHETT DR
 Suite 104
 RALEIGH, NC 27609
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 bowman.com
 Bowman North Carolina Ltd.



EROSION CONTROL PLAN - FINAL
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



PLAN STATUS

11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
3/26/24	PER NCDOT REVIEW
5/28/24	PER CITY OF RALEIGH REVIEW

MEL DESIGN
 MEL DRAWN
 XXX CHKD

SCALE: H: 1" = 40'
 V: 1" = 40'

JOB No. 220127-01-001
 DATE May 28, 2024
 FILE No. 220127-D-CP-001

SHEET **C2.4**

EROSION CONTROL NOTES:

REFER TO DETAIL SHEETS FOR CONSTRUCTION DETAILS OF THE PROPOSED EROSION CONTROL MEASURES TO BE USED IN THE DEVELOPMENT OF THIS SITE.

REFER TO DETAIL SHEETS FOR TEMPORARY AND PERMANENT SEEDING SCHEDULES FOR PROVIDING GROUND COVER FOR THE DEVELOPMENT.

Basin Notes:

SKIMMER BASIN DESIGN BASED ON 3 DAYS TO DRAIN.

Basin and diversions shall be seeded, mulched and anchored/lined and pinned upon installation of measures.

NOTE TO CONTRACTOR:

EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO THE BEGINNING OF DEMOLITION & TREE REMOVAL.

NOTE TO CONTRACTOR:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE EROSION CONTROL INSPECTOR OF THE LOCATION OF ANY OFF-SITE BORROW SOURCE OR OFF-SITE WASTE MATERIAL DISPOSAL SITE. OFF-SITE DISTURBANCES COUNT TOWARDS THE OVERALL PROJECT DISTURBED AREA AND MUST BE COVERED BY THE PERMIT FOR THIS PROJECT AND/OR THE PERMIT FROM ANOTHER ACTIVE NCEQ PERMITTED SITE THAT IS APPROPRIATE FOR THE INTENDED USE (I.E. APPLICABLE MINING REQUIREMENTS). NO OFF-SITE ACTIVITIES SHALL OCCUR UNTIL THE PERMIT FOR THIS PROJECT HAS BEEN MODIFIED TO INCLUDE THE AFFECTED AREAS OR IT HAS BEEN VERIFIED WITH THE EROSION CONTROL INSPECTOR THAT THE OFF-SITE AREAS ARE COVERED UNDER ACTIVE APPLICABLE NCEQ PERMITS.

EROSION CONTROL NOTES:

- TOTAL AREA DISTURBED = 6.51 ACRES**
TOTAL SITE AREA = 3,766 ACRES
- SOIL TYPE = VANCE SANDY LOAM & HELENA SANDY LOAM**
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NCEQ EROSION AND SEDIMENT CONTROL HANDBOOK
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS IN ACCORDANCE WITH APPLICABLE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS.
- CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER GENERAL PERMIT.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCEQ EROSION CONTROL INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS. A REVISED PLAN SHOWING OFF-SITE IMPACTS SHOULD BE SUBMITTED AND APPROVED PRIOR TO ANY OFF-SITE GRADING. CONTACT PROJECT ENGINEER AND PROJECT EROSION CONTROL INSPECTOR TO ENSURE ADDITIONAL EROSION CONTROL MEASURES ARE INSTALLED PRIOR TO OFF-SITE GRADING.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS, STAGING OR STORAGE AREAS), THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO NCEQ FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE AMENDED PERMIT.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED AREAS SHALL BE CHECKED REGULARLY AND SHALL BE WATERED, FERTILIZED, RE-SEED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.
- STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDDED, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE NCEQ SEDIMENT CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
- WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.
- TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA. SIX INCHES OF STONE SHALL BE USED FOR THE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
- ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.
- SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS COMPLETED.
- DURING DE-WATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

EROSION CONTROL NARRATIVE:

TRACTOR SUPPLY CO., TOWN OF ZEBULON, WAKE COUNTY, NC

CONTRACTOR WILL FIRST INSTALL THE CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL THEN MOBILIZE ON SITE AND INSTALL THE TEMPORARY EROSION CONTROL DEVICES INCLUDING SILT FENCE, INLET PROTECTION, SKIMMER BASINS, AND OTHER DEVICES IN ACCORDANCE WITH THE PLANS (CLEARING ONLY AS NECESSARY TO INSTALL THESE ITEMS). BEGIN DEMOLITION, CLEARING AND SITE GRADING OPERATIONS. STABILIZATION OF EARTHEN STRUCTURES IS REQUIRED IMMEDIATELY AFTER INSTALLATION. THE ON-SITE STORM SEWER SYSTEM AND THE LEVEL-SPREADER FILTER STRIP CAN NOW BE INSTALLED. IMMEDIATELY AFTER AN INLET IS INSTALLED, INLET PROTECTION SHALL BE PROPERLY INSTALLED ON THE STRUCTURE. ONCE THE SITE IS READY TO BRING UP TO GRADE, REMOVE SKIMMER BASIN #2. THE ON-SITE SANITARY SEWER AND WATER SYSTEMS MAY ALSO BE INSTALLED ONCE THE SITE IS BROUGHT UP TO GRADE. THE SITE PAD WILL BE PREPARED FOR THE PROPOSED BUILDING. THE ROUGH GRADE WILL THEN BE ESTABLISHED FOR THE SITE. INSTALLATION OF CURB AND GUTTER WILL THEN BE PERFORMED. BASE STONE WILL THEN BE PLACED AND FINE GRADED. ALL DISTURBED AREAS WILL BE DRESSED AND SEEDDED. REMOVE ALL INLET PROTECTION FROM STORM STRUCTURES WHEN PAVING IS TO BEGIN. PAVING AND STRIPING WILL THEN BE COMPLETED. FINALIZE STORMWATER POND STRUCTURE AND DISCHARGE PIPES ONCE UPSTREAM AREAS HAVE BEEN STABILIZED (REMOVE ACCUMULATED SEDIMENT). ALL LANDSCAPING WILL BE COMPLETED. THE ON-SITE STORM SEWER SYSTEM SHALL BE CLEANED OF ANY ACCUMULATED SEDIMENT WHICH SHALL BE DISPOSED OF IN A LAWFUL MANNER. ALL ACCUMULATED SEDIMENT BEHIND SILT FENCE AND OTHER SEDIMENT DEVICES SHALL BE REMOVED AND DISPOSED OF IN A LAWFUL MANNER. ACCORDING TO THE GROUND STABILIZATION REQUIREMENTS ON THIS SHEET, REMOVE ALL REMAINING SEDIMENT CONTROL MEASURES FROM THE SITE. CONTRACTOR SHALL MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL LAND DISTURBANCE AND FINAL VEGETATION STABILIZATION OF THE SITE.

THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES ARE INTENDED TO TRAP ANY STORMWATER RUNOFF FROM THE CONSTRUCTION SITE AND DETAIN IT LONG ENOUGH FOR SEDIMENT AND POLLUTANTS TO SETTLE OUT OF THE STORMWATER BEFORE DISCHARGE. VARIOUS EROSION CONTROL MEASURES ARE USED TO PREVENT POLLUTANT-LADEN STORMWATER RUNOFF FROM FLOWING ONTO ADJACENT PROPERTIES.

GENERAL NOTES:

- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC. THAT MAY BE REQUIRED.
- THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED FOR A COMPLETE AND WORKING SYSTEM.
- THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- CONTRACTOR SHALL MAINTAIN AN "AS BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
- IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
- THE CONTRACTOR MUST, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY HIM, HIS EMPLOYEES OR HIS WORK. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.

SEDIMENT & EROSION CONTROL NOTES:

- THE EROSION AND SEDIMENTATION CONTROL MEASURES (BMPs) WERE DESIGNED USING THE NORTH CAROLINA NCEQ REQUIREMENTS AND SHALL BE INSTALLED ACCORDINGLY. CONTRACTOR SHALL PERFORM ALL ACTIVITIES IN STRICT COMPLIANCE WITH THE NORTH CAROLINA NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (GENERAL PERMIT).
- REFER TO THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS FOR EROSION CONTROL DETAILS AND DESIGN TABLES FOR SEDIMENT BASINS, DIVERSION DITCHES, AND CULVERTS, SLOPE DRAINS, RIP-RAP APRONS AND OTHER EROSION CONTROL MEASURES.
- EXISTING BOUNDARIES, TOPOGRAPHY, 100-YR FLOODPLAIN, UTILITY AND ROAD INFORMATION TAKEN FROM AN EXISTING CONDITIONS SURVEY. ALL EXISTING INFORMATION IS TO BE FIELD VERIFIED BY THE CONTRACTOR.
- SEE THE LANDSCAPE PLAN FOR LOCATIONS OF PROPOSED PLANTINGS AND FINAL STABILIZATION.
- TEMPORARY DIVERSION DITCHES AND BERMS SHALL BE MAINTAINED AS THE SITE IS BROUGHT TO GRADE.
- DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION; THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTORS SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
- SEE THE GENERAL NOTES SHEET AND THE GRADING AND DRAINAGE PLAN FOR OTHER NOTES REGARDING GRADING ACTIVITIES.
- SEE SITE PLAN, GRADING AND DRAINAGE PLAN, UTILITY PLAN, PLANTING PLAN AND OTHER PLAN SHEETS FOR DETAILED DESIGN INFORMATION OF PERMANENT SITE APPURTENANCES SHOWN ON THIS SHEET.
- WHERE THE LIMITS OF DISTURBANCE AND TEMPORARY FENCE (SF, SF-PF, OR PF) LIMITS ARE ADJACENT, THE TEMPORARY FENCE LINE IS THE LIMITS OF DISTURBANCE. THE LINE TYPES ARE SHOWN SEPARATED FOR ILLUSTRATIVE PURPOSES ONLY.
- CONTRACTOR SHALL NOT DISTURB ANY EXISTING VEGETATIVE GROUND COVER OR TREES OUTSIDE OF THE LIMITS OF DISTURBANCE OR WITHIN ANY REQUIRED BUFFER LIMITS UNLESS OTHERWISE NOTED OR ILLUSTRATED.
- PROVIDE CONTROLS OF POLLUTANTS, INCLUDING, BUT NOT LIMITED TO DUST CONTROL, DE-WATERING, SOLID WASTE DISPOSAL, AND HAZARDOUS MATERIALS.
- CLEAR ONLY AS REQUIRED TO INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES. MASS CLEARING AND GRUBBING CAN BEGIN ONLY AFTER ALL DOWNSTREAM MEASURES HAVE BEEN INSTALLED.
- USE ROCK OR WASHED STONE TO BRING CONSTRUCTION EXIT TO GRADE. IMPLEMENT WHEEL WASHES AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION.
- DIVERT STORM WATER RUNOFF OFF THE FACE OF THE SEDIMENT BASIN SLOPES USING DIVERSION DITCHES AND SLOPE DRAINS. CONTRACTOR SHALL MAINTAIN AND RELOCATE DIVERSION DITCHES AND SLOPES DRAINS TO ENSURE STORM WATER RUNOFF DOES NOT ERODE THE FACE OF FINAL SLOPES.
- MAINTAIN POSITIVE FLOW TO THE SEDIMENT BASINS THROUGHOUT ALL PHASES OF CONSTRUCTION. PLACE EXCAVATED SOILS ALONG DOWNSTREAM EDGE OF THE DIVERSION DITCHES TO PROVIDE ADDITIONAL CAPACITY.
- REFER TO THE GRADING AND DRAINAGE PLAN FOR FINAL SITE AND PAVEMENT GRADES AND ELEVATIONS OF THE PROPOSED STORM SEWER SYSTEMS.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED EROSION AND SEDIMENT CONTROL DRAWINGS DURING CONSTRUCTION OPERATIONS.
- GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- ALL WORK SHALL BE CONFINED TO PERMIT LIMITS SHOWN ON PLANS. UNLESS OTHERWISE NOTED, THE SITE PLAN PROPERTY LIMITS SHALL BE CONSIDERED THE PERMIT LIMITS.
- SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE.
- ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.
- FOR ALL CONSTRUCTION ALONG AND/OR ACROSS WATERWAYS, BANK PROTECTION AND STABILIZATION SHALL BE REQUIRED AS PER LOCAL JURISDICTIONAL EROSION CONTROL LAWS.
- ALL TREE PROTECTION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND GROUND COVER IS ESTABLISHED. CONSTRUCTION ENTRANCE PADS SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.
- ALL EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR TO ACCEPTANCE.
- CONSTRUCTION LIMITS SHALL NOT BE EXCEEDED WITHOUT THE APPROVAL OF NCEQ INSPECTOR.

NORTH CAROLINA CONSTRUCTION GENERAL PERMIT NOTE:

As of April 1, 2019, all new construction activities are required to complete and submit an electronic Notice of Intent (NOI) form requesting a Certificate of Coverage (COC) under the NCG010000 Construction Stormwater General Permit. This form MUST be submitted prior to the commencement of any land disturbing activity on the above named project. The NOI form may be accessed at deq.nc.gov/NGC01. Please direct questions about the NOI form to Paul Clark at Paul.Clark@ncdenr.gov.

After you submit a complete and correct NOI Form, a COC will be emailed to you within three business days. Initially, DEMLR will not charge a fee for coverage under the NCG01 permit. However, on or after May 1, 2019, a \$100 fee will be charged annually. This fee is to be sent to the DEMLR Stormwater Central Office staff in Raleigh.

- Title 15A NCAC 4B .0118(a) and the NCG01 permit require that the following documentation be kept on file at the job site:
- The approved E&S plan as well as any approved deviation.
 - The NCG01 permit and the COC, once it is received.
 - Records of inspections made during the previous 30 days.
 - The Certificate of Approval**

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM:

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.

TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, DWO AND DEMLR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESSED AT: [HTTP://PORTAL.NCDENR.ORG/WEB/LR/EROSION](http://PORTAL.NCDENR.ORG/WEB/LR/EROSION)

IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CALL THE APPLICABLE NCDENR REGIONAL OFFICE: (RALEIGH: 919-791-4200) (FAYETTEVILLE: 910-433-3300) (WILMINGTON: 910-796-7215) (WASHINGTON: 252-946-6481) (WINSTON-SALEM: 336-771-5000) (MOORESVILLE: 704-663-1699) (ASHEVILLE: 828-296-4500).

TREE PROTECTION NOTES:

- THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES, IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUESTED TO SAVE ALL OTHER EXISTING TREES AND SHRUBS WHERE POSSIBLE.
- WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER AND IMMEDIATELY COVER ALL ROOT CUT SURFACES LARGER THAN TWO INCHES IN DIAMETER WITH TREE WOUND DRESSING. USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK.
- NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.
- NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS.
- TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING, GRADING OR CONSTRUCTION BEGINS AND IS NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION.
- TREE PROTECTION FENCE IS TO BE LOCATED 1 FOOT PER TREE DIAMETER INCH AWAY FROM THE TREE.

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TRACTOR SUPPLY COMPANY

EROSION CONTROL NOTES

Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
5/28/24	PER CITY OF RALEIGH REVIEW	
MEL	MEL	XXX
DESIGN	DRAWN	CHKD
SCALE	H: N/A	
	V: N/A	
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	

SHEET C2.5

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 vary depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Timeframe	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	None
(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 Roller eraser 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 Stubs 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 Roller eraser control products with grass seed

POLYMER/CLAYES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DMR 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 DMR 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 wastebins 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.

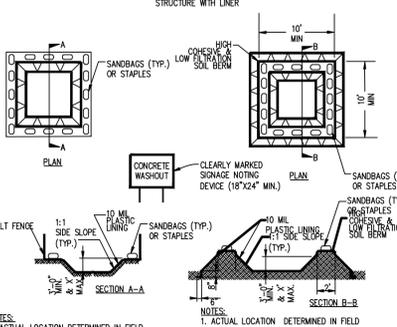
PORTABLE TOILETS

- 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 protection of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide stacking 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 that no other alternatives are reasonably available.
- Protect stockpile with silt fence installed down toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable 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.

ON-SITE CONCRETE WASHOUT STRUCTURE WITH LINER



- NOTES:**
- ACTUAL LOCATION DETERMINED IN FIELD
 - THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
 - CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEPTH.
 - THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 - CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEPTH.

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 standards details are not available, use one of the two types of temporary concrete washout structures provided on this sheet.
- 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 of 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.
- Provide stable access point when feasible.
- 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 disturbances 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.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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

Inspect	Frequency (define normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts, if no daily rain gauge observations are made during weekend or holiday periods, and an individual-day rainfall measurement is available, record the consecutive rain measurements for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero". The permittee may use another rain-measuring device approved by the Division.
(2) EASC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outlets (SDCO)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outlets inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Stormwater discharge outlet (SDCO)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Stormwater discharge outlet (SDCO)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. If silt sedimentation is found outside site limits, then a record of the following shall be made: a. Description of the sedimentation, b. Date and time of the inspection, c. Name of the person performing the inspection, d. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, e. Indication of visible sediment leaving the site, f. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (disturbance of primary EASC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover), 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

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

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

2. Additional Documentation to be Kept on Site
In addition to the EASC 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:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years
All data used to complete the EASC 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, SECTION C, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

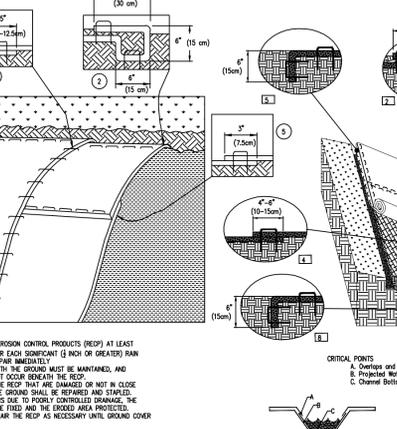
Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw 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:

- The EASC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the EASC plan authority has approved these items.
- 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.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sized, designed and maintained dewatering tanks, wet tanks, and filtration systems.
- 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.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of (c) above.
- 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.

SLOPE PROTECTION - RECP INSTALLATION NOTES

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING GEL-OR-SEED MUST BE INSTALLED WITH MOWER SIDE SWEEP.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAPLES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACK FILL AND COMPACT THE TRENCH AFTER STAPLING. REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED THE SOIL. SECURE BLANKET OVER SOIL WITH A ROW OF STAPLES/STAPLES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS DOWN ACROSS THE SLOPE. BLANKETS SHOULD BE UNROLLED WITH THE APPROXIMATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SURFACE BY PLACING STAPLES/STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL GEL SYSTEM, STAPLES/STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" x 5" (5cm x 12.5cm) OVERLAP SPACING ON BLANKET FEE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET BLANKET BEING INSTALLED ON TOP EXACTLY WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPACED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE) WITH AN APPROXIMATE 2" (5cm) OVERLAP. OVERLAP THROUGH OVERLAPPED AREAS APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.
- EROSION CONTROL BLANKETS SHALL BE INSTALLED FOLLOWING MANUFACTURER'S SPECIFICATIONS.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES ON STAPLE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.



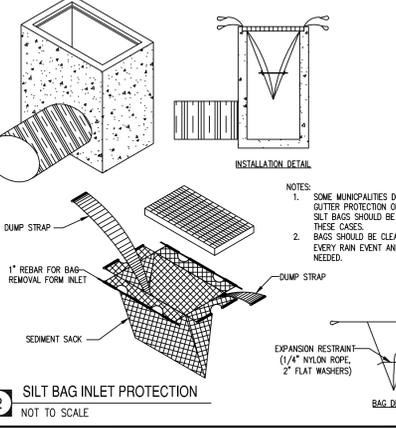
CHAMBER - RECP INSTALLATION NOTES

- Prepare soil before installing rolled erosion control products (RECP), including any necessary application of lime, fertilizer, and seed. Note: when using gel-or-seed must be installed with mower side sweep.
- Begin at the top of the slope by anchoring the RECP in a 6" (15cm) wide trench with approximately 12" (30cm) of RECP extended beyond the up-slope portion of the trench. Anchor the RECP with a row of staples/staples as needed. Anchor the RECP in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the remaining 12" (30cm) portion of RECP look over the seed and compact soil. Secure RECPs over compacted soil with a row of staples/staples spaced approximately 12" apart across the width of the RECP.
- Full center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. RECPs must be securely fastened to soil surface by placing staples/staples in appropriate locations as shown in the staple pattern guide. Place consecutive RECPs end-to-end (single strip) with a 4" x 4" overlap. Use interlocking RECPs if available. Anchor RECPs with a row of staples/staples spaced approximately 12" (30cm) apart in the bottom of the channel. Backfill and compact the trench after stapling.
- Adjacent RECPs must be overlapped approximately 2" x 5" (5cm x 12.5cm) (depending on RECP type) and stapled. Full length edge of RECPs at top of slope must be secured with a row of staples/staples spaced approximately 12" (30cm) apart in a 6" (15cm) wide trench. Backfill and compact the trench after stapling.
- Adjacent RECPs must be overlapped approximately 2" x 5" (5cm x 12.5cm) (depending on RECP type) and stapled. Full length edge of RECPs at top of slope must be secured with a row of staples/staples spaced approximately 12" (30cm) apart in a 6" (15cm) wide trench. Backfill and compact the trench after stapling.

ROLLED EROSION CONTROL PRODUCTS (RECP)

1. NOT TO SCALE

SILT BAG INLET PROTECTION



2. NOT TO SCALE



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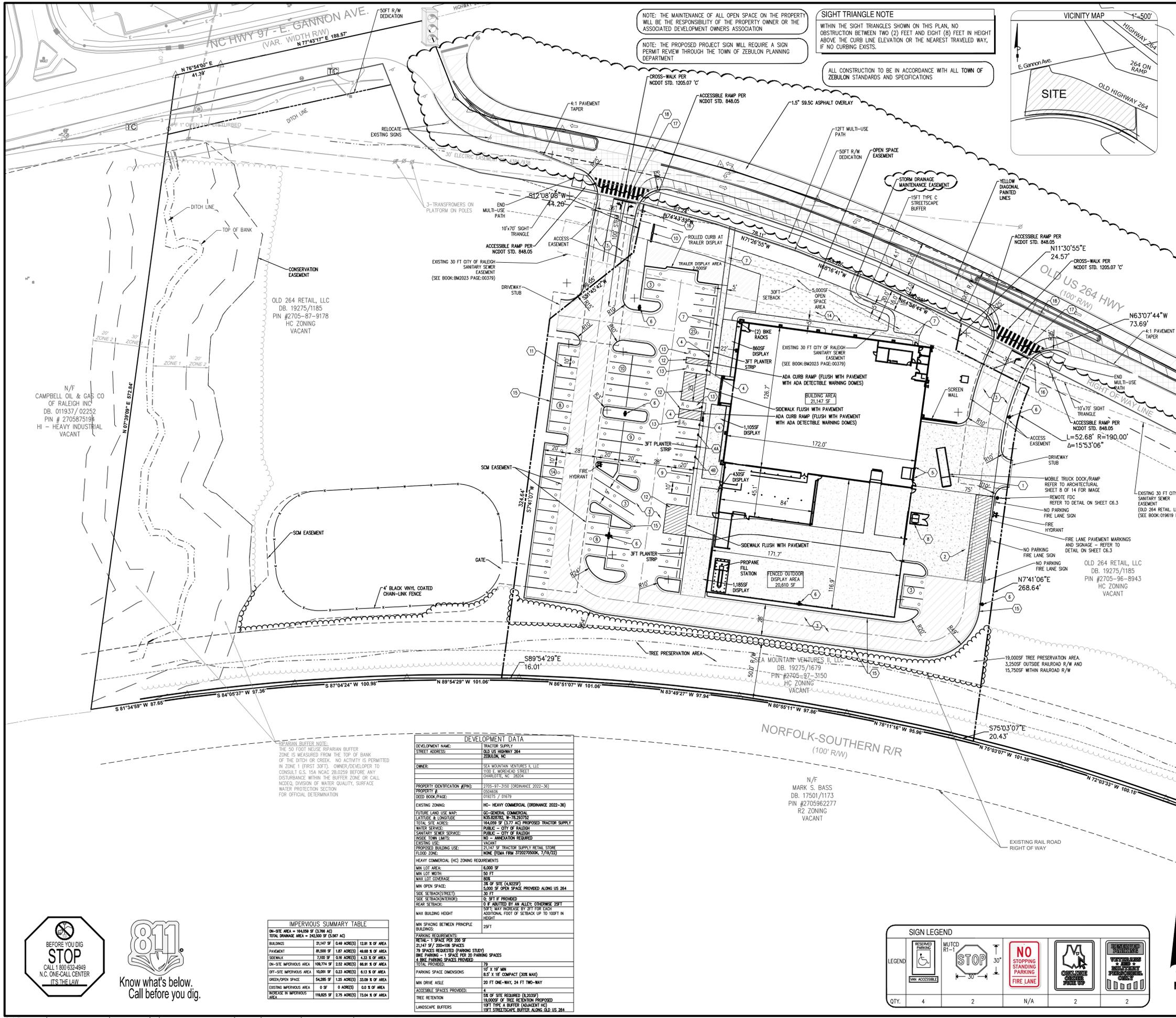


TRACTOR SUPPLY COMPANY

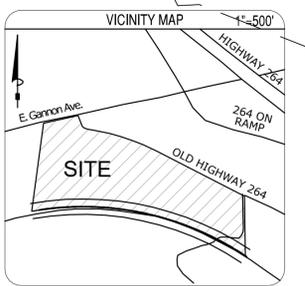
NC CONSTRUCTION GENERAL PERMIT (NCG01) NOTES
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS	DATE	REVISION
SEWER CROSSING AT RAILROAD	11/30/23	
PER WAKE CO REVIEW	1/10/24	
PER NCDOT REVIEW	3/26/24	
PER CITY OF RALEIGH REVIEW	5/28/24	
MEL DESIGN	MEL DRAWN	XXX CHKD
SCALE	H: N/A	V: N/A
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	



- GENERAL NOTES:**
1. THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, FLASHING LIGHTS, FLAGMEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY TOWN OF ZEBULON AND THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, FOR DETAILS OF TRAFFIC CONTROL STANDARDS AND DEVICES.
 2. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
 3. APPROVAL OF THESE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
 4. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH INSPECTOR.
 5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD DETAILS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE TOWN OF ZEBULON CODES AND ORDINANCES. THE CONTRACTOR SHALL MAINTAIN A CURRENT EDITION OF THE STATE AND LOCAL CODES, ORDINANCES, STANDARD SPECIFICATION AND STANDARD DETAILS ON THE PROJECT SITE FOR REFERENCE DURING CONSTRUCTION OF THE PROJECT.
 6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS THE OWNER OR OWNER'S REPRESENTATIVE IMMEDIATELY. CONTRACTOR SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING WITH WORK.
 7. THE CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS FROM PROPOSED FEATURES TO EXISTING FEATURES AS NECESSARY.
 8. THE CONTRACTOR SHALL SEAL THE EDGE OF EXISTING ASPHALT PAVEMENT WITH TACK COAT IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS WHERE NEW PAVEMENT JOINS EXISTING PAVEMENT.
 9. THE CONTRACTOR SHALL REPAIR, RESURFACE, RECONSTRUCT OR REFURBISH ANY AREAS DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, HIS SUBCONTRACTORS OR SUPPLIERS AT NO ADDITIONAL COST TO THE OWNER.
 10. ALL PAVEMENT JOINTS SHALL BE SAW-CUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
 11. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF TRUCK DOORS, EXIT DOORS, SIDEWALKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
 12. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" OR AS OTHERWISE SPECIFIED. ALL REFERENCED SIGN STANDARDS ARE TAKEN FROM THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". ALL NEW SIGNS SHALL BE MOUNTED ON GALVANIZED POSTS AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
 13. CONTRACTOR SHALL INSTALL ACCESSIBLE RAMP PER LOCAL MUNICIPALITY AND ADA STANDARDS AT ALL DRIVE AND BUILDING LOCATIONS AS REQUIRED.
 14. 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 CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENTS FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.
 15. ACCESSIBLE RAMPS TO BE PROVIDED IN ACCORDANCE WITH NCDOT AND TOWN OF ZEBULON STANDARDS.
 16. ALL PLANTING ISLANDS WITH A SHADE TREE SHALL BE A MINIMUM OF 350 SQUARE FEET.
 17. ALL SIDEWALKS MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. PEDESTRIAN EXISTING ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)



NOTE: THE MAINTENANCE OF ALL OPEN SPACE ON THIS PLAN, NO OBSTRUCTION BETWEEN TWO (2) FEET AND EIGHT (8) FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY, IF NO CURBING EXISTS.

SIGHT TRIANGLE NOTE
WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN TWO (2) FEET AND EIGHT (8) FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY, IF NO CURBING EXISTS.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS

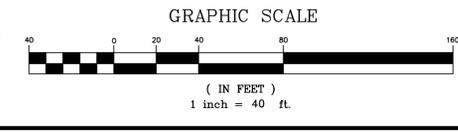
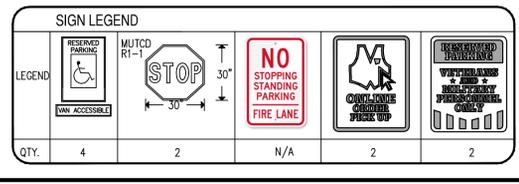
- KEYNOTES**
- 1 STEEL DOCK/RAMP - REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL
 - 2 CONCRETE PAVEMENT DESIGN AS PER GEOTECHNICAL REPORT SPECIFICATIONS - SEE DETAIL SHEET C1.4 EXPANSION AND CONTROL JOINTS - SEE DETAILS SHEET
 - 3 ASPHALT PAVEMENT DESIGN AS PER GEOTECHNICAL REPORT SPECIFICATIONS - SEE DETAIL SHEET
 - 4 HANDICAP PARKING SIGN - SEE DETAIL SHEET
 - 4A VETERANS PARKING SIGN - SEE DETAIL SHEET
 - 4B ON-LINE PARKING SIGN - SEE DETAIL SHEET
 - 5 BOLLARD - SEE DETAIL SHEET
 - 6 CONCRETE LIGHT POLE BASE
 - 7 CONCRETE SIDEWALK - SEE DETAIL SHEET FOR SIDEWALKS AROUND BUILDING.
 - 8 DUMPSTER ENCLOSURE - REFER TO SHEET
 - 9 6'-0" LONG CONCRETE WHEEL STOP, PINNED TO PAVEMENT - SEE DETAIL SHEET. LOCATE 2'-6" FROM FACE OF CURB OR SIDEWALK.
 - 10 SIGN (UNDER SEPARATE PERMIT)
 - 11 4' WIDE PARKING STRIPE PAINTED WHITE (TYP)
 - 12 4' WIDE PARKING DIAGONAL STRIPES
 - 13 ACCESSIBLE PARKING AREA - (PER A.D.A. REQUIREMENTS)
 - 14 NEW GRASS/LANDSCAPE AREA
 - 15 CONCRETE CURB AND GUTTER - SEE DETAIL SHEET
 - 16 STOP SIGN - SEE DETAIL SHEET
 - 17 PAVEMENT MARKINGS
 - 18 NEW CURB CUT, MATCH EXISTING EOP & APPROACH PER LOCAL CODES & SPECS.
 - 19 CONCRETE FLUME - REFER TO DETAIL ON SHEET (NOT USED)
 - 20 PROPOSED PARKING COUNT

DEVELOPMENT DATA

DEVELOPMENT NAME:	TRACTOR SUPPLY
STREET ADDRESS:	OLD US HIGHWAY 264 ZEBULON, NC
OWNER:	SEA MOUNTAIN VENTURES II, LLC 1100 E. WOODHEAD STREET CHARLOTTE, NC 28204
PROPERTY IDENTIFICATION #/PID:	2105-97-3150 (ORDINANCE 2022-36)
PROPERTY #:	055866
DEED BOOK/PAGE:	019275 / 01679
EXISTING ZONING:	HC - HEAVY COMMERCIAL (ORDINANCE 2022-36)
FUTURE LAND USE MAP:	CC - GENERAL COMMERCIAL
LATITUDE & LONGITUDE:	N 78°52'16" W 95.96'
TOTAL SITE ACRES:	184,059 SF (3.77 AC) PROPOSED TRACTOR SUPPLY
WATER SERVICE:	PUBLIC - CITY OF RALEIGH
SANITARY SEWER SERVICE:	PUBLIC - CITY OF RALEIGH
HOUSE TOWN LIMITS:	NO - ANNEXATION REQUIRED
EXISTING USE:	VACANT
PROPOSED BUILDING USE:	21,147 SF TRACTOR SUPPLY RETAIL STORE
FLOOD ZONE:	NONE (FEMA FIRM 372027000K, 7/19/22)
HEAVY COMMERCIAL (HC) ZONING REQUIREMENTS:	
MIN LOT AREA:	6,000 SF
MIN LOT WIDTH:	50 FT
MAX LOT COVERAGE:	50%
MIN OPEN SPACE:	2% OF SITE (4,922SF)
SIDE SETBACK (STREET):	5,000 SF OPEN SPACE PROVIDED ALONG US 264
SIDE SETBACK (INTERIOR):	0 SF IF PROVIDED
REAR SETBACK:	0 SF ABUTTED BY AN ALLEY, OTHERWISE 25FT
MAX BUILDING HEIGHT:	ADDITIONAL FOOT OF SETBACK UP TO 100FT IN HEIGHT
MIN SPACING BETWEEN PRINCIPLE BUILDINGS:	25FT
PARKING REQUIREMENTS:	
RETAIL - 1 SPACE PER 200 SF	
21,147 SF 200-HR SPACES	
79 SPACES REQUESTED (PARKING STUDY)	
BIKE PARKING - 1 SPACE PER 30 PARKING SPACES	
4 BIKE PARKING SPACES PROVIDED:	
TOTAL PROVIDED:	79
PARKING SPACE DIMENSIONS:	10' X 19' MIN
MIN DRIVE AISLE:	8.5' X 18' COMPACT (SIDE WALK)
MIN DRIVE AISLE:	20 FT ONE-WAY, 24 FT TWO-WAY
ACCESSIBLE SPACES PROVIDED:	4
TREE RETENTION:	18,000SF OF TREE RETENTION PROPOSED
LANDSCAPE BUFFERS:	10FT TYPE A BUFFER (ADJACENT HC) 15FT STREETSIDE BUFFER ALONG OLD US 264

IMPERVIOUS SUMMARY TABLE

ON-SITE AREA = 184,059 SF (3.76 AC)	TOTAL DRAINAGE AREA = 242,500 SF (5.56 AC)	
BUILDINGS:	21,147 SF (0.44 AC)	12.01 % OF AREA
PAVEMENT:	85,500 SF (1.87 AC)	46.46 % OF AREA
SIDEWALK:	7,500 SF (0.16 AC)	4.08 % OF AREA
ON-SITE IMPERVIOUS AREA:	114,147 SF (2.52 AC)	62.01 % OF AREA
OFF-SITE IMPERVIOUS AREA:	10,000 SF (0.23 AC)	5.43 % OF AREA
DRAINAGE OPEN SPACE:	54,280 SF (1.20 AC)	29.56 % OF AREA
EXISTING IMPERVIOUS AREA:	0 SF (0 AC)	0.00 % OF AREA
PROPOSED IMPERVIOUS AREA:	114,147 SF (2.52 AC)	62.01 % OF AREA



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4006 BARRIETT DR
Suite 104
RALEIGH, NC 27609
Phone: (919)555-6570
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SITE PLAN

Tractor Supply
Old US Highway 264
Zebulon, NC Wake County

PLAN STATUS

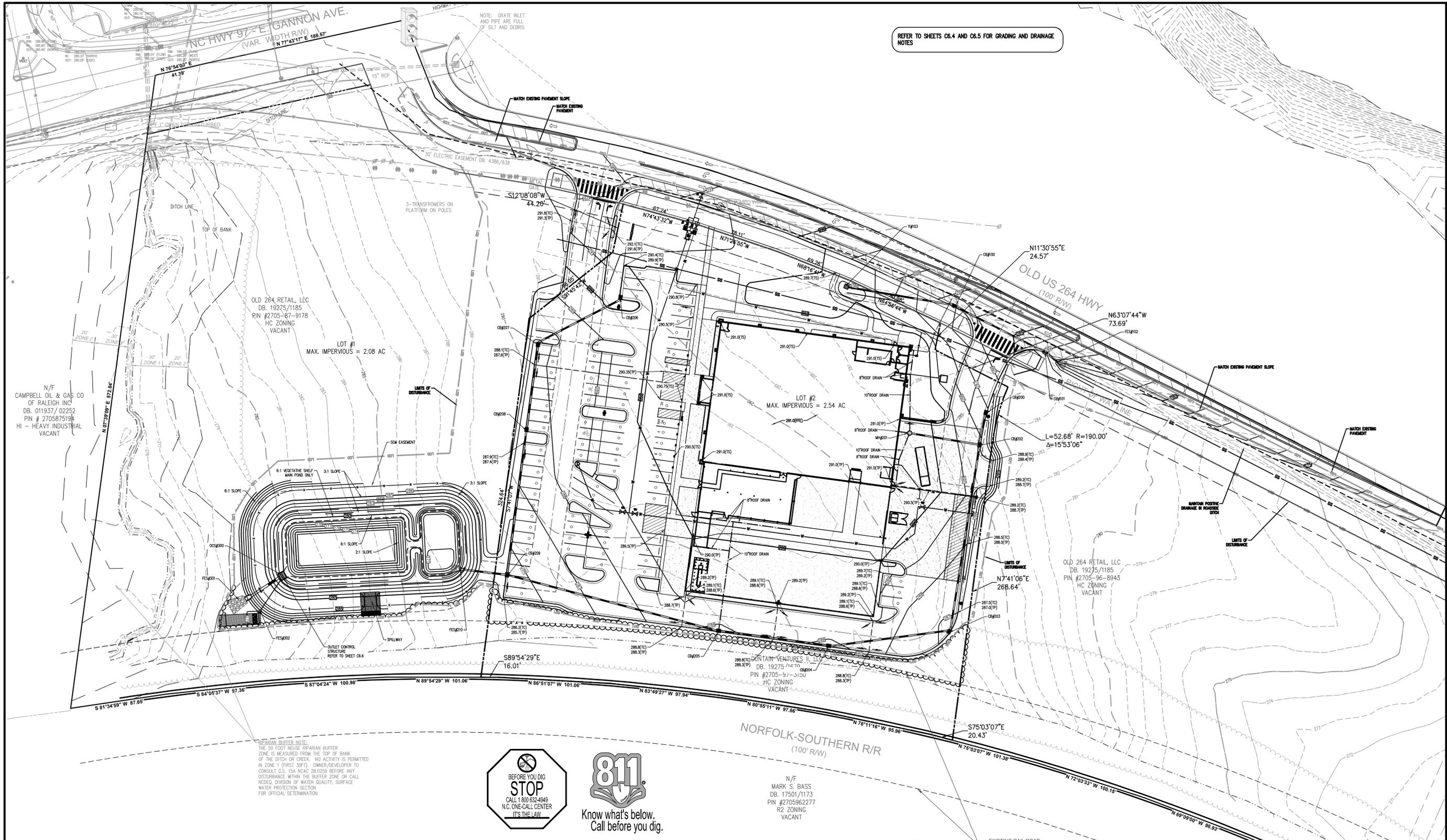
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1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
5/28/24	PER CITY OF RALEIGH REVIEW	
MEL DESIGN	MEL DRAWN	XXX CHKD
SCALE	H: 1" = 40'	V: 1" = XXX'
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	



SHEET **C3.0**



PLAN STATUS		
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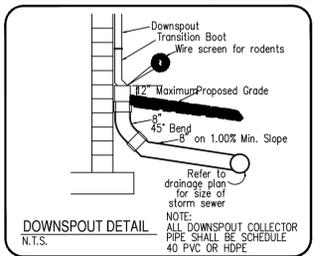
REFER TO SHEETS C6.4 AND C6.5 FOR GRADING AND DRAINAGE NOTES



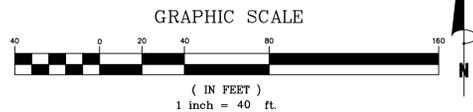
Category	Area (SF)	Area (Acres)	% of Total
ON-SITE AREA	164,059 SF	3.766 AC	
TOTAL DRAINAGE AREA	242,500 SF	5.567 AC	
BUILDINGS	21,147 SF	0.49 AC	12.91 %
PAVEMENT	81,500 SF	1.87 AC	49.68 %
SIDEWALK	7,100 SF	0.16 AC	4.33 %
ON-SITE IMPERVIOUS AREA	109,774 SF	2.52 AC	66.91 %
OFF-SITE IMPERVIOUS AREA	10,051 SF	0.23 AC	6.13 %
GREEN/OPEN SPACE	54,285 SF	1.25 AC	33.09 %
EXISTING IMPERVIOUS AREA	0 SF	0 AC	0.0 %
INCREASE IN IMPERVIOUS AREA	119,825 SF	2.75 AC	73.04 %

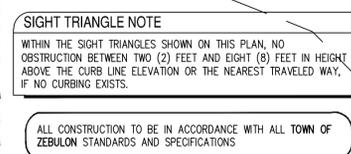
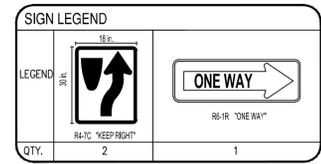
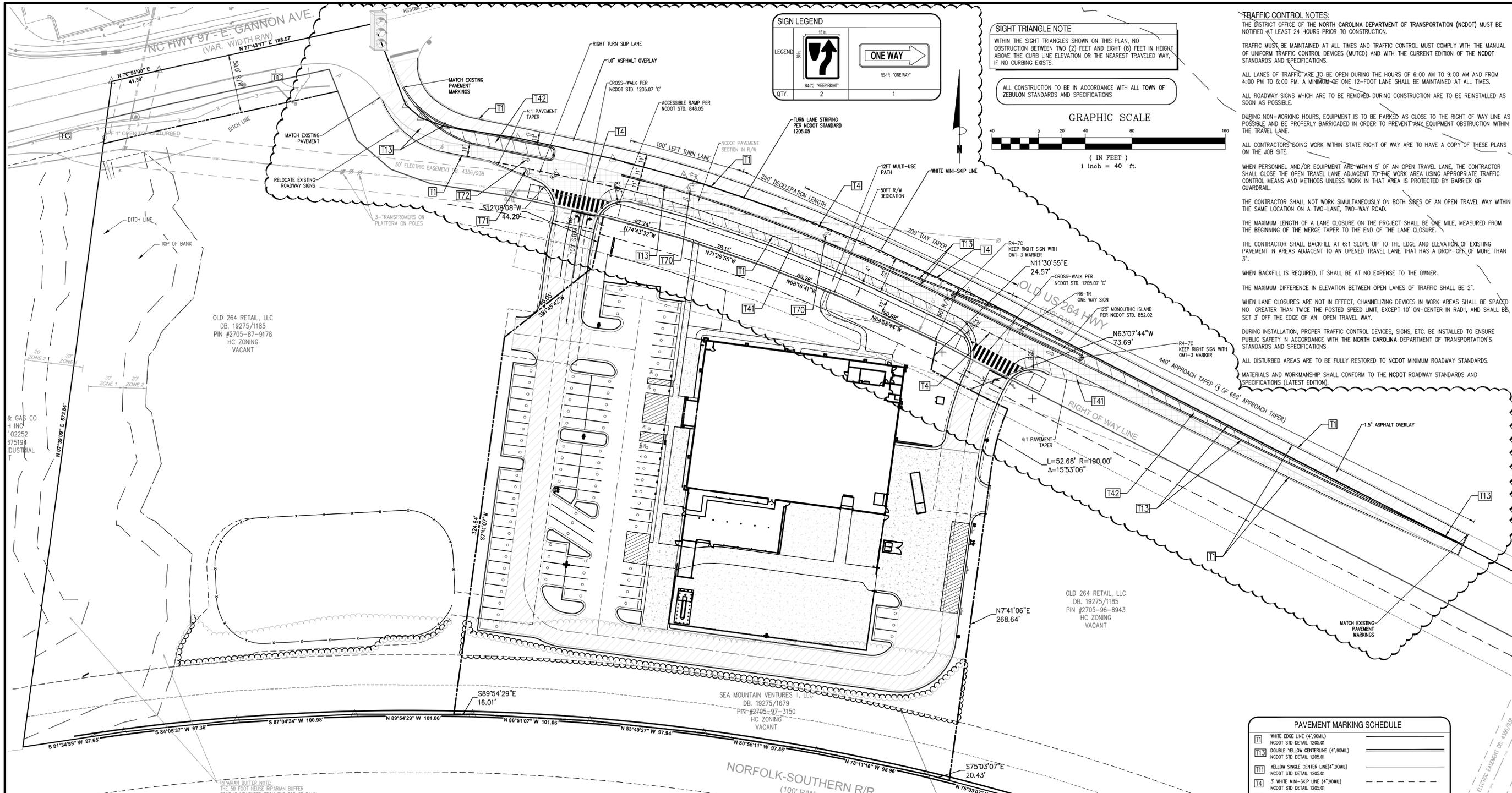
STRUCTURE			PIPE			STRUCTURE			NOTES		
FROM	TO	LENGTH (FT)	SLOPE (%)	SIZE & MATERIAL	FROM (FT)	TO (FT)	GRND/RIM ELEV (FT)	WATER-TIGHT (TYP)			
Y#103	CB#100	97	1.55	15" RCP, CLASS III	285.5	284.0	288.0	STD. 840.18 2GI TYPE-B			
CB#100	CB#101	90	2.89	15" RCP, CLASS III	284.0	281.4	286.5	STD. 840.02 GRATE TYPE F			
CB#101	FES#102	14	1.43	15" RCP, CLASS III	281.4	281.2	283.9	STD. 840.02 GRATE TYPE F			
CB#200	CB#202	27	0.74	15" HDPE	284.7	284.5	287.2	STD. 840.02 GRATE TYPE G			
M#201	CB#202	62	4.19	15" HDPE	288.3	285.7	290.8	STD. 840.52 4" DIA.			
CB#202	CB#203	167	0.54	18" HDPE	284.5	283.6	288.2	STD. 840.02 GRATE TYPE E			
CB#203	CB#204	108	0.46	18" HDPE	283.5	283.0	286.7	STD. 840.02 GRATE TYPE E			
CB#204	CB#205	98	0.51	18" HDPE	283.0	282.5	287.8	STD. 840.02 GRATE TYPE E			
CB#205	CB#209	195	0.87	18" HDPE	282.5	280.8	287.8	STD. 840.02 GRATE TYPE E			
CB#206	CB#207	85	2.59	15" HDPE	287.1	284.9	289.6	STD. 840.02 GRATE TYPE E			
CB#207	CB#208	75	0.53	15" HDPE	284.9	284.5	287.4	STD. 840.02 GRATE TYPE E			
CB#208	CB#209	129	1.78	15" HDPE	284.5	282.2	287.0	STD. 840.02 GRATE TYPE E			
CB#209	FES#210	39	1.03	24" HDPE	280.4	280.0	285.5	STD. 840.02 GRATE TYPE E			
OCS#300	FES#301	32	1.56	24" HDPE	280.0	279.5	-	OUTLET CONTROL STRUCTURE#1 SEE C6.8			
OCS#300	FES#302	33	3.03	6" HDPE	280.0	279.0	-	OUTLET CONTROL STRUCTURE#2 SEE C6.8			

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS



TOS.....	TOP OF SIDEWALK
TOC.....	TOP OF CURB
FL.....	GUTTER FLOW LINE
TOP.....	TOP OF PAVEMENT
TW.....	TOP OF WALL
BW.....	BOTTOM OF WALL
CB.....	CATCH BASIN
GI.....	GRATE INLET
FES.....	FLARED END SECTION
Y.....	YARD INLET
GRD.....	GROUND
.....	FLOW DIRECTION ARROW





TRAFFIC CONTROL NOTES:
 THE DISTRICT OFFICE OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO CONSTRUCTION.

TRAFFIC MUST BE MAINTAINED AT ALL TIMES AND TRAFFIC CONTROL MUST COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WITH THE CURRENT EDITION OF THE NCDOT STANDARDS AND SPECIFICATIONS.

ALL LANES OF TRAFFIC ARE TO BE OPEN DURING THE HOURS OF 6:00 AM TO 9:00 AM AND FROM 4:00 PM TO 6:00 PM. A MINIMUM OF ONE 12-FOOT LANE SHALL BE MAINTAINED AT ALL TIMES.

ALL ROADWAY SIGNS WHICH ARE TO BE REMOVED DURING CONSTRUCTION ARE TO BE REINSTALLED AS SOON AS POSSIBLE.

DURING NON-WORKING HOURS, EQUIPMENT IS TO BE PARKED AS CLOSE TO THE RIGHT OF WAY LINE AS POSSIBLE AND BE PROPERLY BARRICADED IN ORDER TO PREVENT ANY EQUIPMENT OBSTRUCTION WITHIN THE TRAVEL LANE.

ALL CONTRACTORS DOING WORK WITHIN STATE RIGHT OF WAY ARE TO HAVE A COPY OF THESE PLANS ON THE JOB SITE.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WITHIN 5' OF AN OPEN TRAVEL LANE, THE CONTRACTOR SHALL CLOSE THE OPEN TRAVEL LANE ADJACENT TO THE WORK AREA USING APPROPRIATE TRAFFIC CONTROL MEANS AND METHODS UNLESS WORK IN THAT AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

THE CONTRACTOR SHALL NOT WORK SIMULTANEOUSLY ON BOTH SIDES OF AN OPEN TRAVEL WAY WITHIN THE SAME LOCATION ON A TWO-LANE, TWO-WAY ROAD.

THE MAXIMUM LENGTH OF A LANE CLOSURE ON THE PROJECT SHALL BE ONE MILE, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE MERGE TAPER.

THE CONTRACTOR SHALL BACKFILL AT 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS A DROP-OFF OF MORE THAN 3".

WHEN BACKFILL IS REQUIRED, IT SHALL BE AT NO EXPENSE TO THE OWNER.

THE MAXIMUM DIFFERENCE IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC SHALL BE 2".

WHEN LANE CLOSURES ARE NOT IN EFFECT, CHANNELIZING DEVICES IN WORK AREAS SHALL BE SPACED NO GREATER THAN TWICE THE POSTED SPEED LIMIT, EXCEPT 10' ON-CENTER IN RADIUS, AND SHALL BE SET 3' OFF THE EDGE OF AN OPEN TRAVEL WAY.

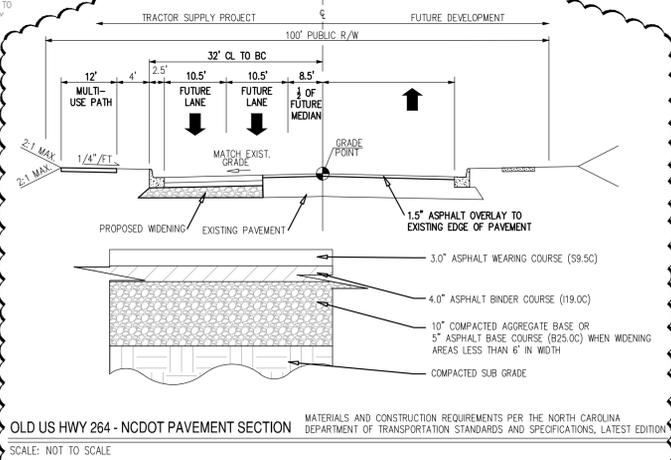
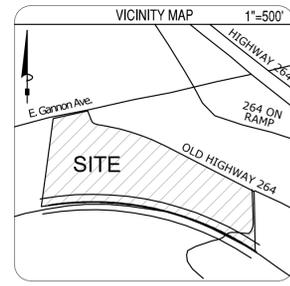
DURING INSTALLATION, PROPER TRAFFIC CONTROL DEVICES, SIGNS, ETC. BE INSTALLED TO ENSURE PUBLIC SAFETY IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S STANDARDS AND SPECIFICATIONS.

ALL DISTURBED AREAS ARE TO BE FULLY RESTORED TO NCDOT MINIMUM ROADWAY STANDARDS. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE NCDOT ROADWAY STANDARDS AND SPECIFICATIONS (LATEST EDITION).

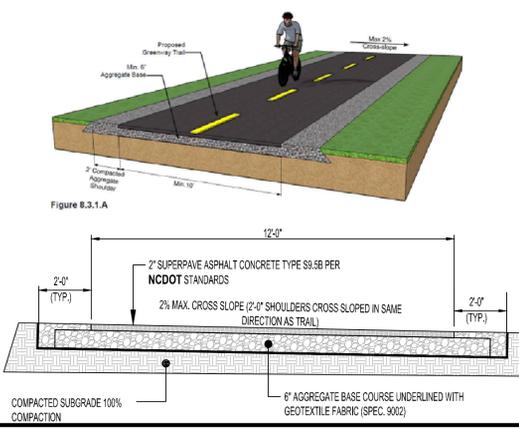
OLD 264 RETAIL, LLC
 DB. 19275/1185
 PIN #2705-87-9178
 HC ZONING
 VACANT

OLD 264 RETAIL, LLC
 DB. 19275/1185
 PIN #2705-96-8943
 HC ZONING
 VACANT

SEA MOUNTAIN VENTURES II, LLC
 DB. 19275/1679
 PIN #2705-97-3150
 HC ZONING
 VACANT



- NCDOT ROADWAY STANDARD DRAWINGS TO REFERENCE**
- 200.02 METHOD OF CLEARING - METHOD II
 - 225.02 GUIDE FOR GRADING SUBGRADE - SECONDARY & LOCAL
 - 300.01 METHOD OF PIPE INSTALLATION - METHOD "A"
 - 840.71 CONCRETE AND BRICK PIPE PLUG
 - 846.01 CONCRETE CURB, GUTTER AND CURB & GUTTER
 - 848.01 CONCRETE SIDEWALK
 - 848.05 WHEELCHAIR RAMP - CURB CUT
 - 852.01 CONCRETE ISLANDS
 - 876.02 GUIDE FOR RIP RAP AT PIPE OUTLETS
 - 1101.01 WORK ZONE ADVANCE WARNING SIGNS
 - 1101.02 TEMPORARY LANE CLOSURES
 - 1101.04 TEMPORARY SHOULDER CLOSURES
 - 1101.05 WORK ZONE VEHICLE ACCESSES
 - 1101.11 TRAFFIC CONTROL DESIGN TABLES
 - 1110.02 PORTABLE WORK ZONE SIGNS - MOUNTING HEIGHT & LATERAL CLEARANCE
 - 1115.01 FLASHING ARROW PANELS
 - 1130.01 DRUMS
 - 1135.01 CONES
 - 1145.01 BARRICADES - TYPES I, II, III AND PERMANENT
 - 1150.01 FLAGGERS
 - 1205.01 PAVEMENT MARKINGS - LINE TYPES & OFFSETS
 - 1205.02 PAVEMENT MARKINGS - DIVIDED & UNDIVIDED ROADWAYS
 - 1205.04 PAVEMENT MARKINGS - INTERSECTIONS
 - 1205.05 PAVEMENT MARKINGS TURN LANES
 - 1205.07 PAVEMENT MARKINGS PEDESTRIAN CROSSWALKS



PAVEMENT MARKING SCHEDULE	
T1	WHITE EDGE LINE (4\"/>
T13	DOUBLE YELLOW CENTERLINE (4\"/>
T11	YELLOW SINGLE CENTER LINE (4\"/>
T4	3\"/>
T14	10\"/>
T3	WHITE SOLID LANE LINE (4\"/>
T70	LEFT TURN LANE ARROW (90ML) NCDOT STD DETAIL 1205.08
T71	RIGHT TURN LANE ARROW (90ML) NCDOT STD DETAIL 1205.08
T72	STRAIGHT ARROW (90ML) NCDOT STD DETAIL 1205.08
T73	COMBO LEFT/STRAIGHT TURN LANE ARROW (90ML) NCDOT STD DETAIL 1205.08
T74	COMBO RIGHT/STRAIGHT TURN LANE ARROW (90ML) NCDOT STD DETAIL 1205.08
T42	YELLOW DIAGONAL LINES (8\"/>
T41	WHITE DIAGONAL LINES (8\"/>
T14	3\"/>
T12	YELLOW SKIP CENTER LINES (4\"/>
T6	STOP BAR (24\"/>
T102	12\"/>

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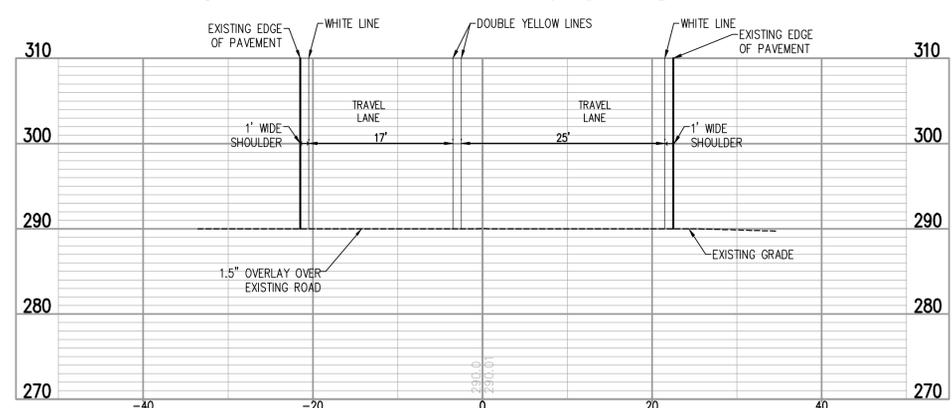
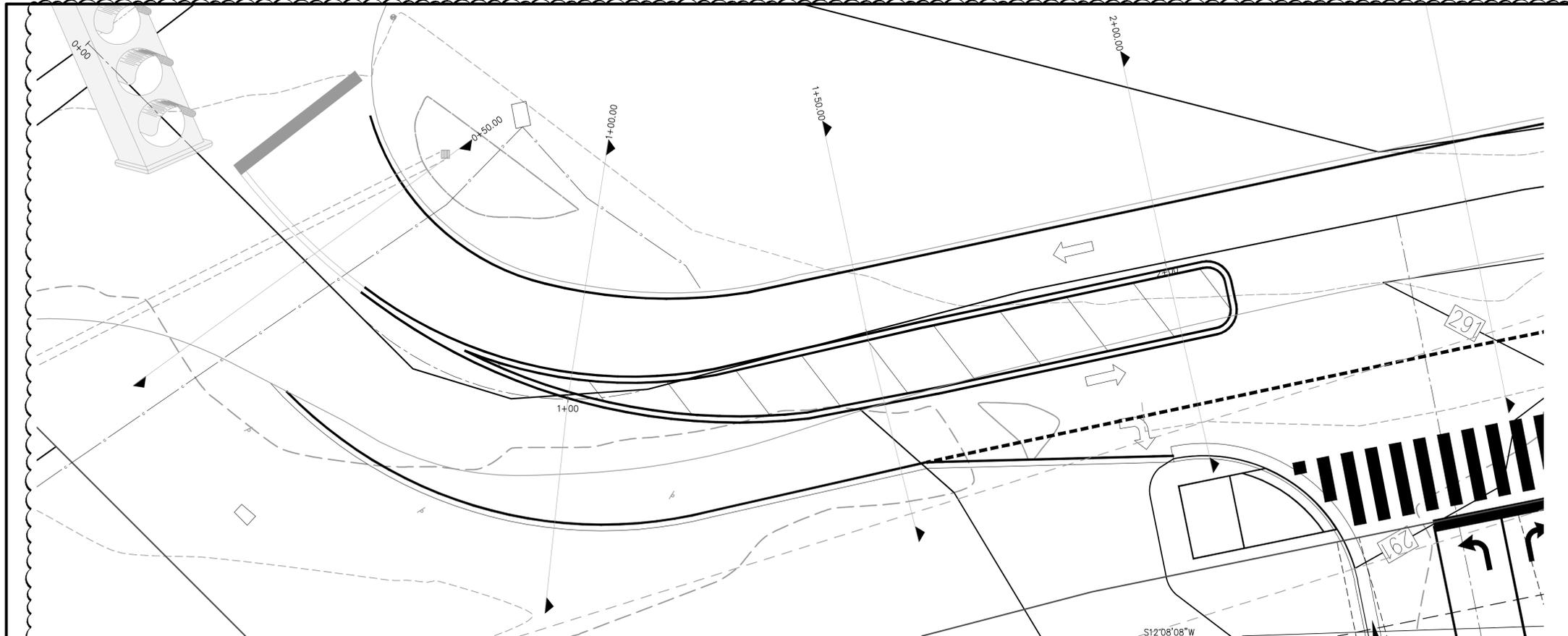
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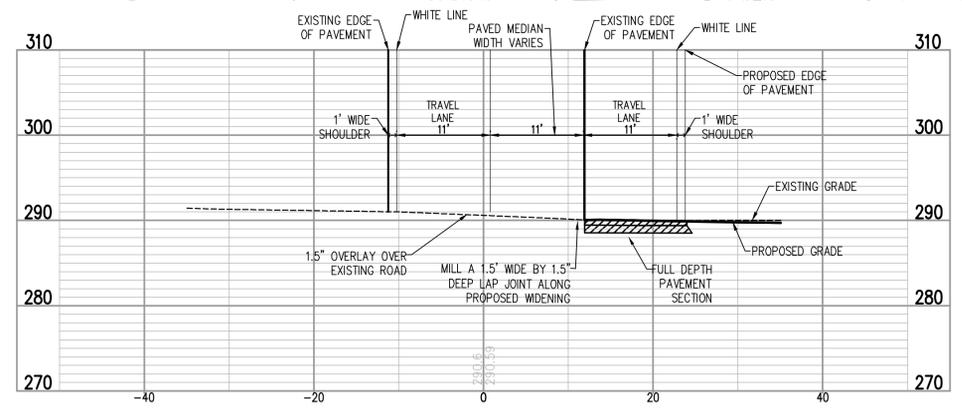
ROADWAY PLAN
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



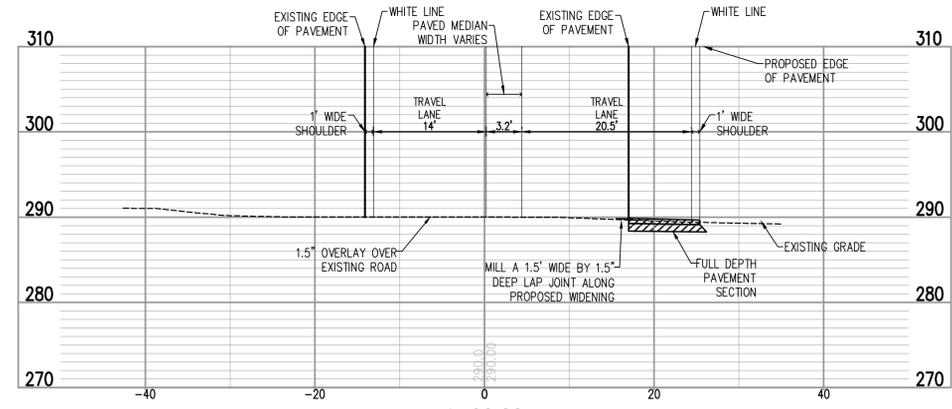
PLAN STATUS	
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5/28/24	PER CITY OF RALEIGH REVIEW
MEL DESIGN	MEL DRAWN
SCALE	XXX CHKD
V: 1" = 40'	
V: 1" = XXX'	
JOB No.	220127-01-001
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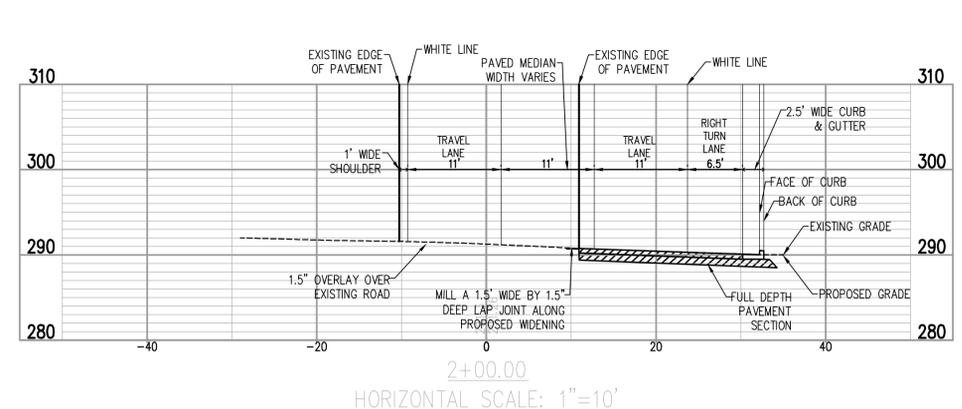
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 VERTICAL SCALE: 1"=10'



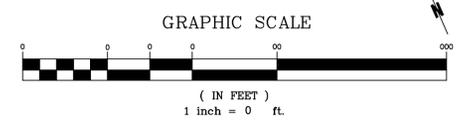
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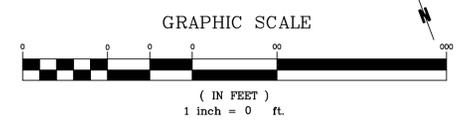
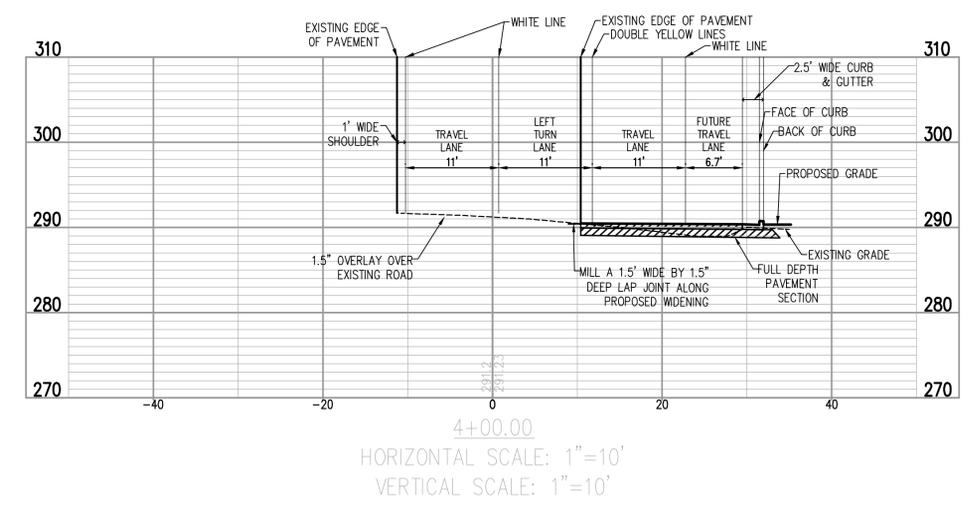
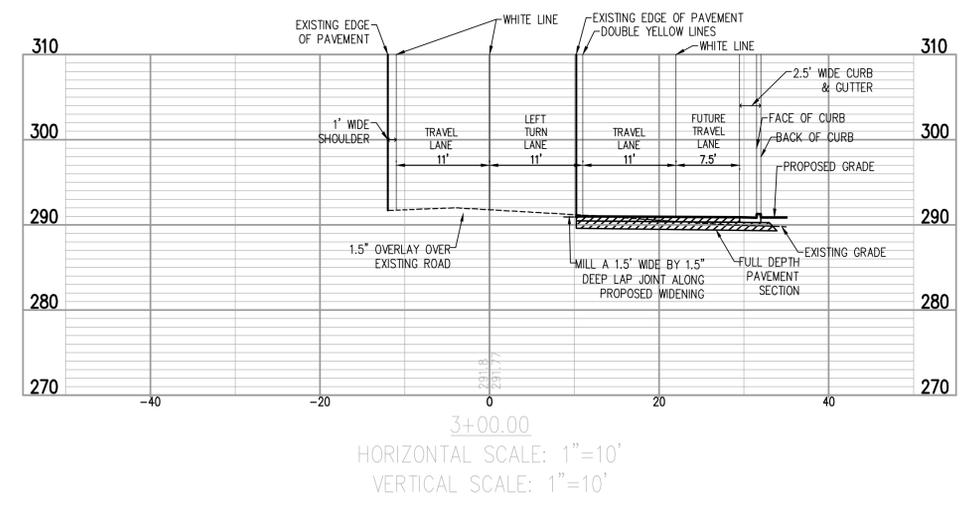
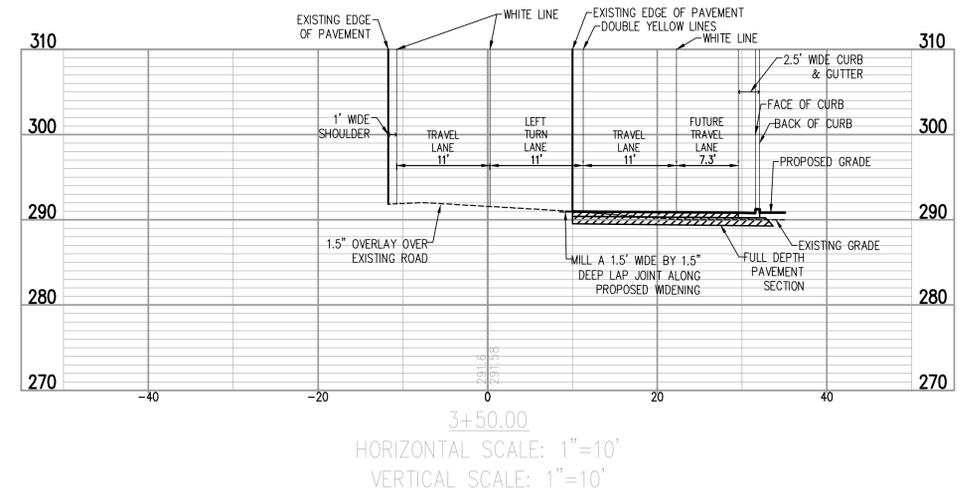
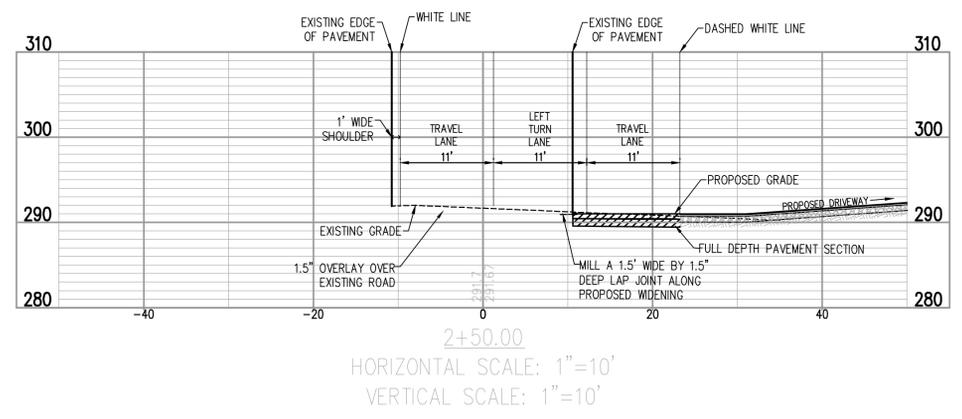
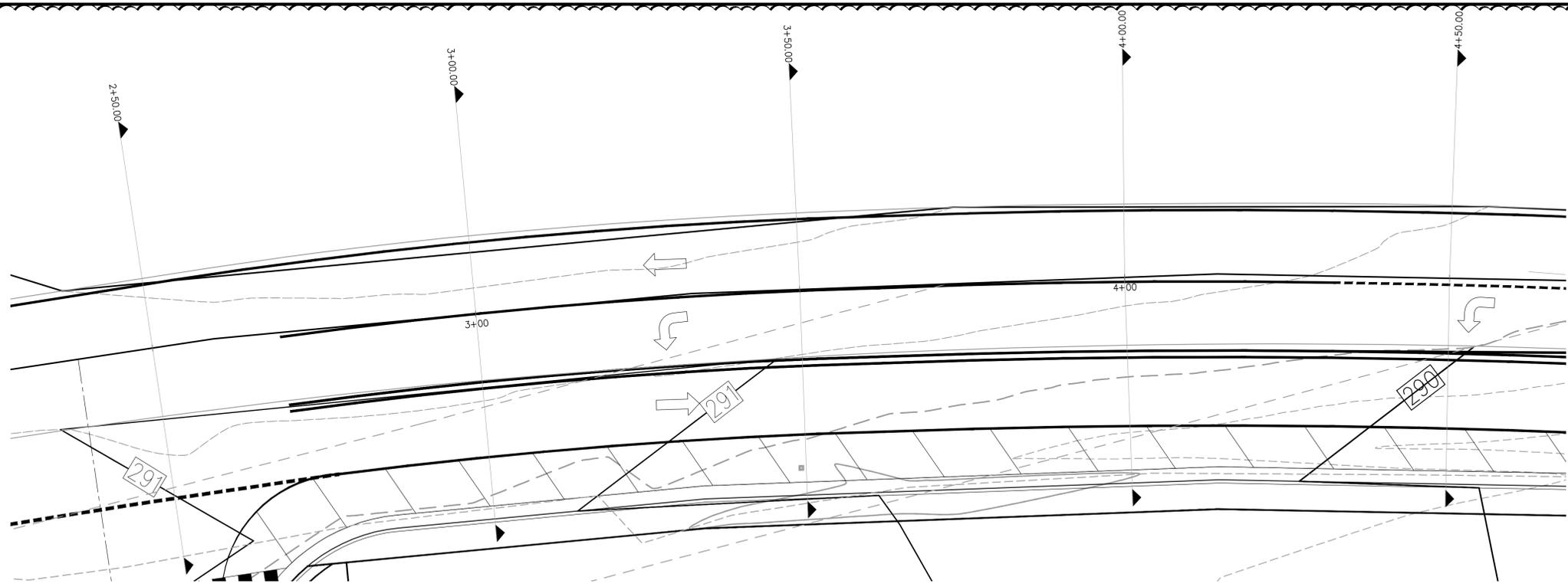
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 VERTICAL SCALE: 1"=10'



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 HORIZONTAL SCALE: 1"=10'
 VERTICAL SCALE: 1"=10'



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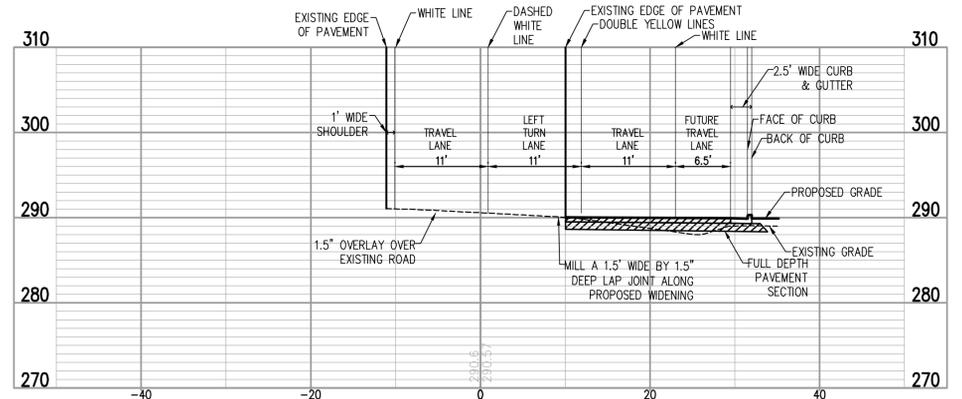
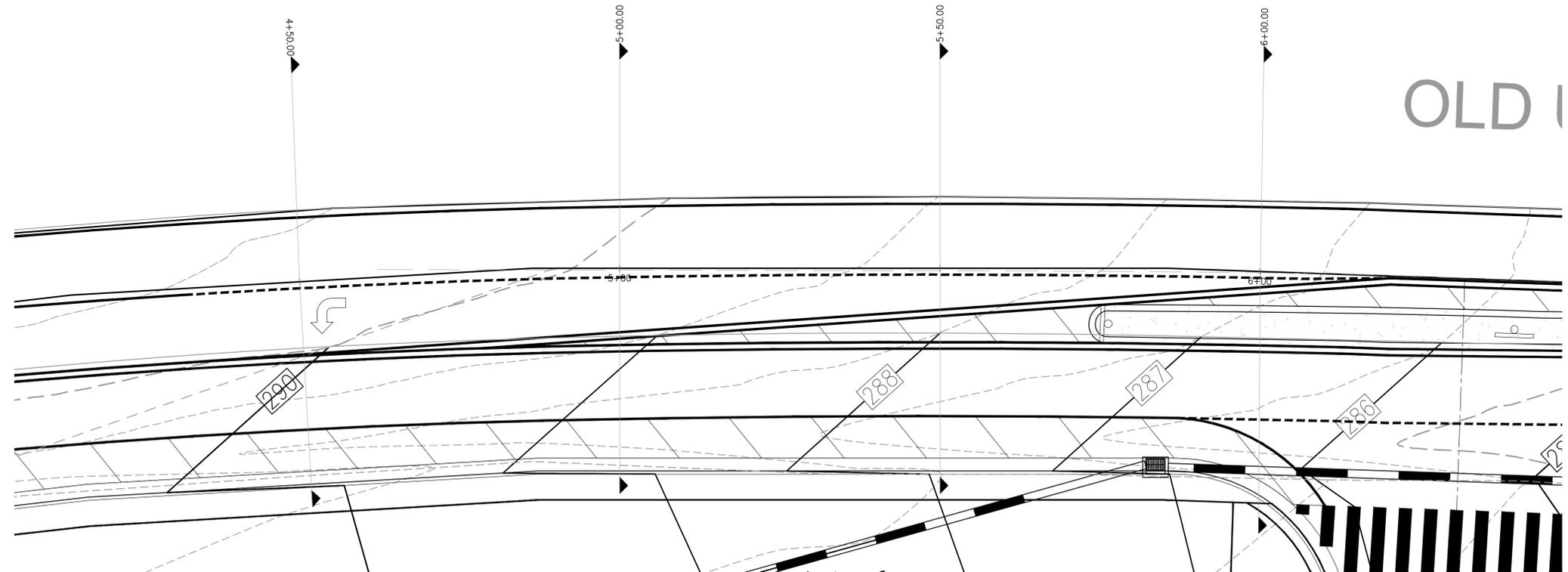
ROADWAY CROSS SECTIONS
TRACTOR SUPPLY COMPANY
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



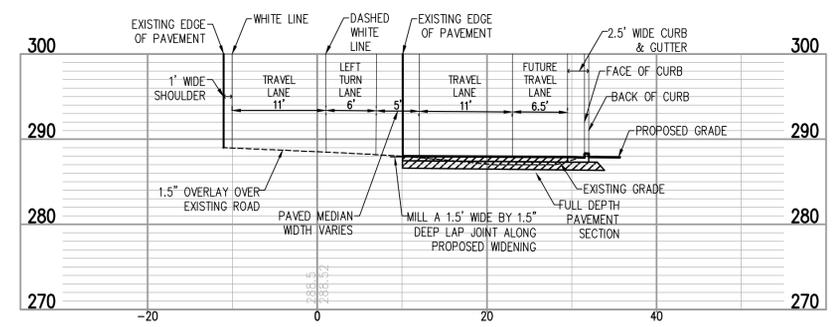
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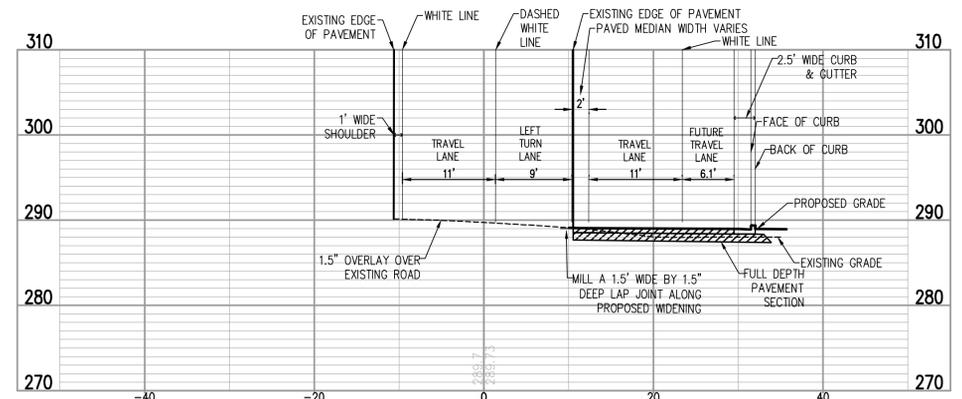
PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
5/28/24	PER CITY OF RALEIGH REVIEW	
MEL	MEL	XXX
DESIGN	DRAWN	CHKD
SCALE	H: 1" = XXX'	V: 1" = XXX'
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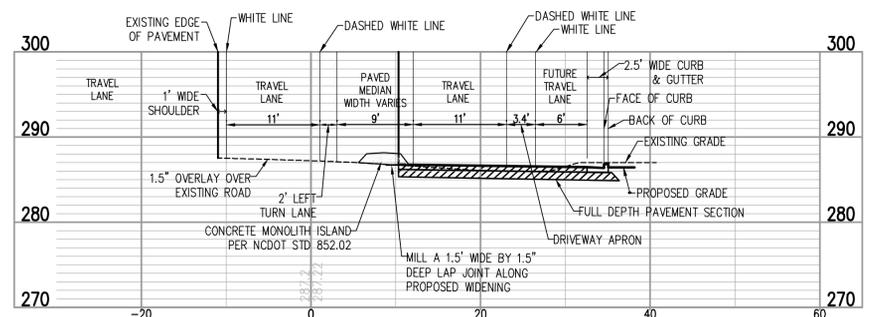
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HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



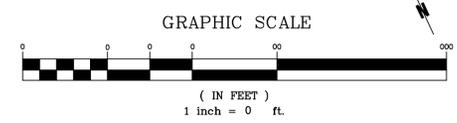
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VERTICAL SCALE: 1"=10'



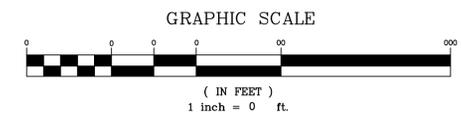
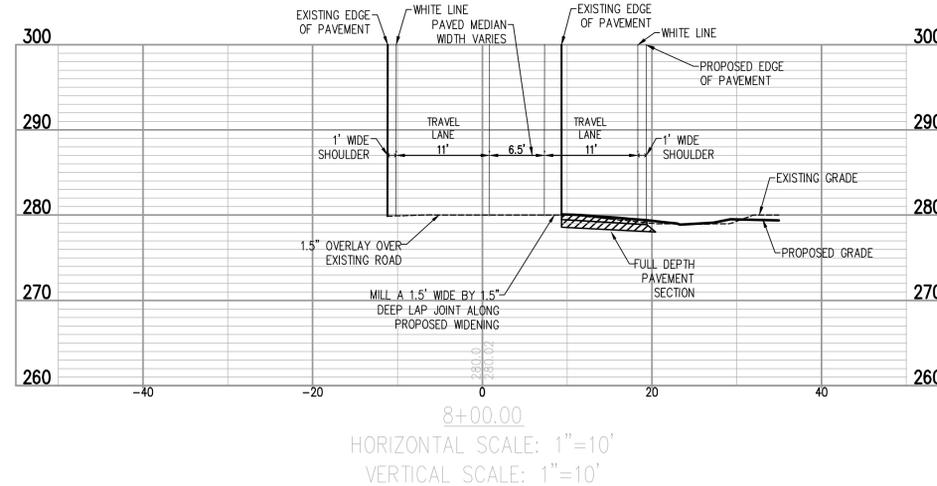
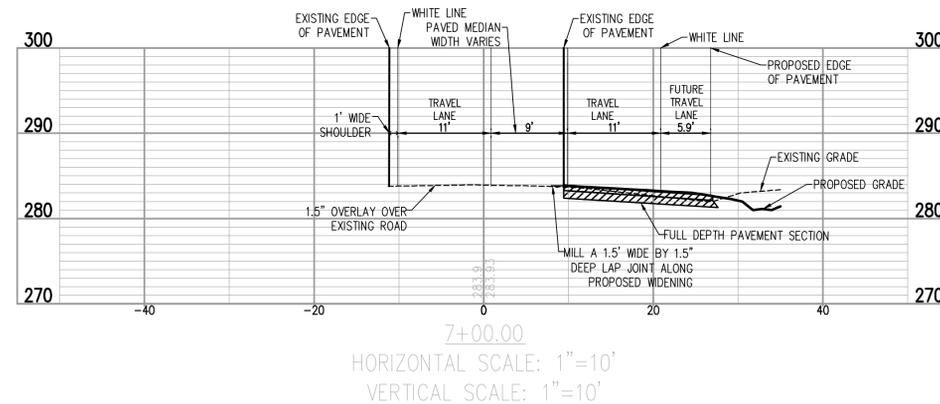
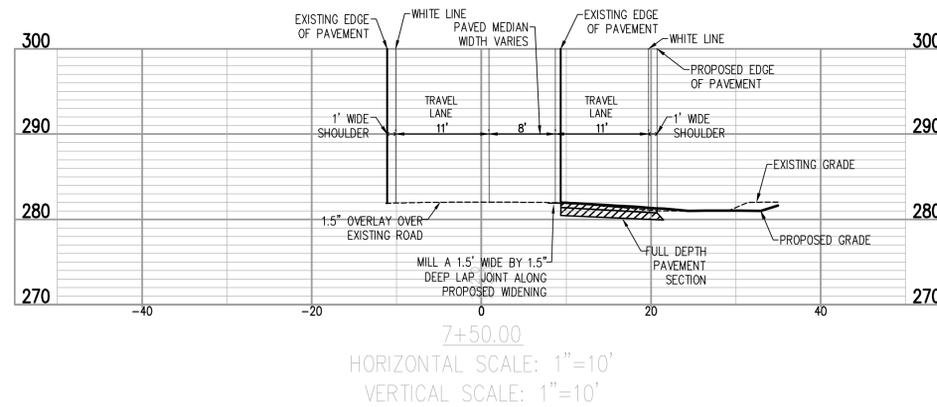
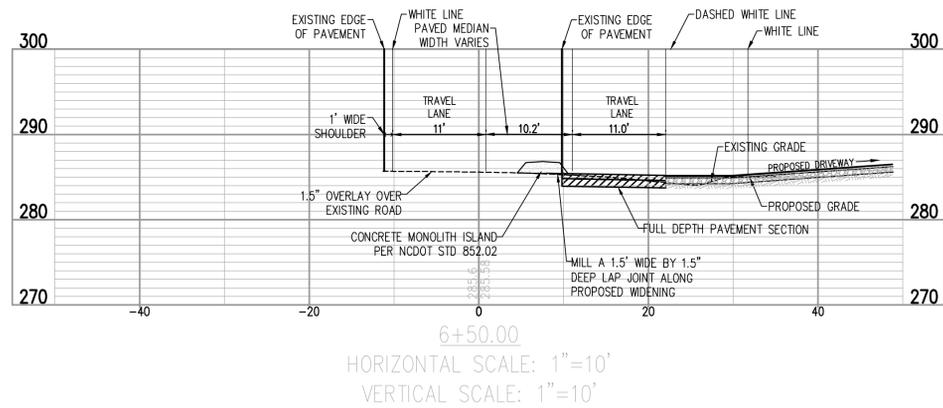
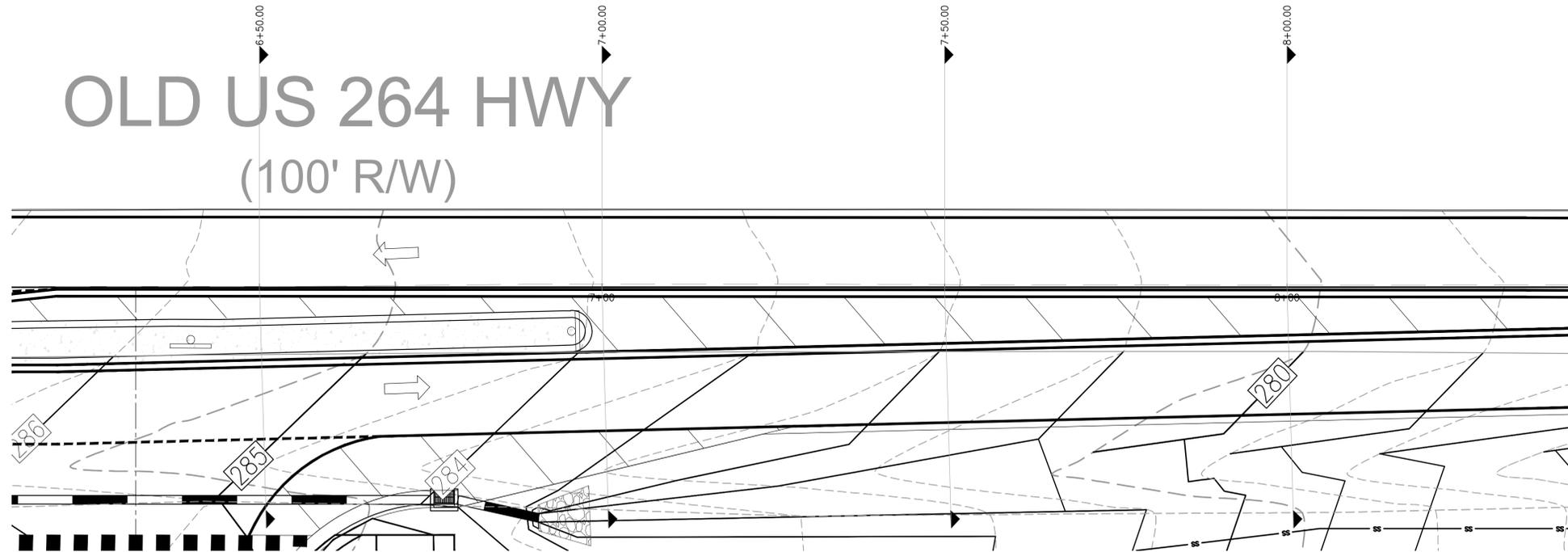
5+00.00
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



6+00.00
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



OLD US 264 HWY (100' R/W)



Bowman

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4006 BARRETT DR
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RALEIGH, NC 27609
Phone: (919)553-6570
bowman.com
Bowman North Carolina Ltd.



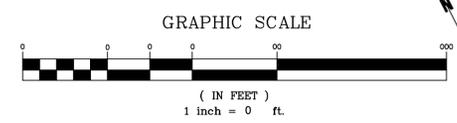
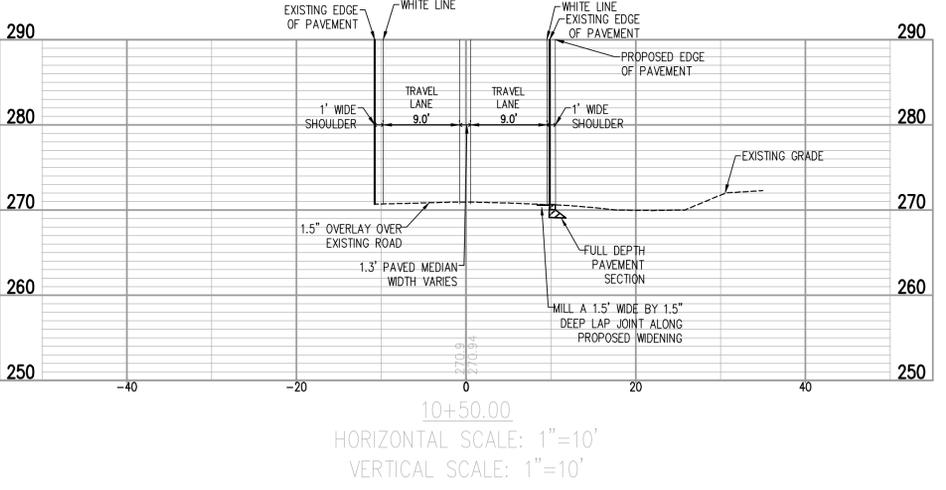
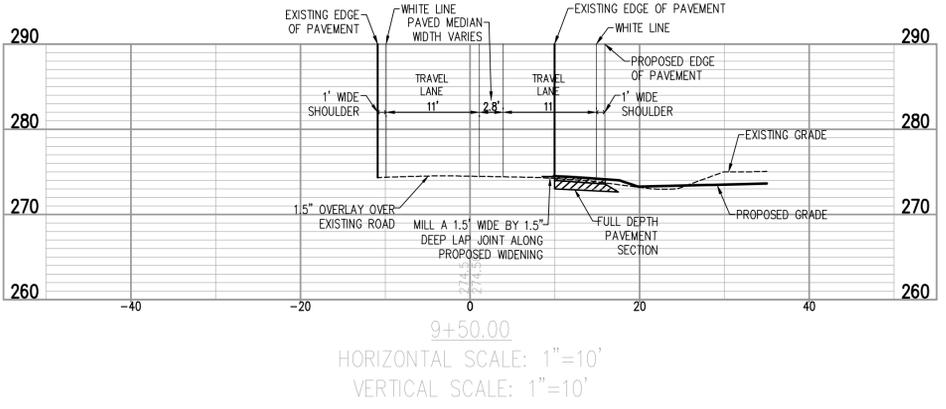
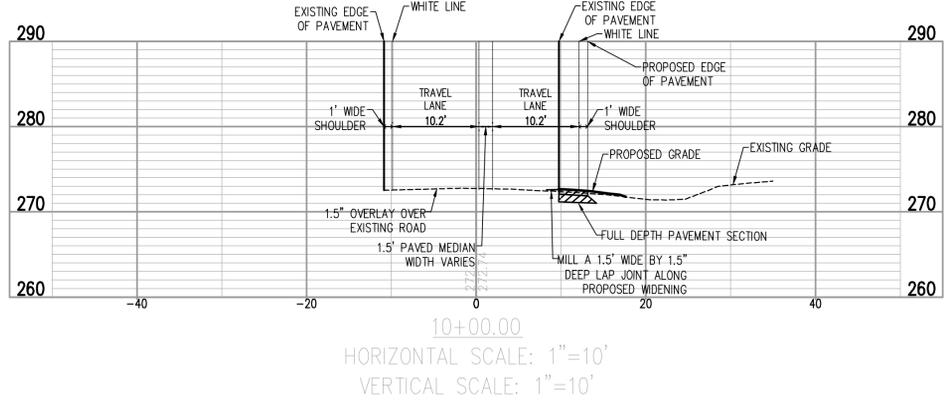
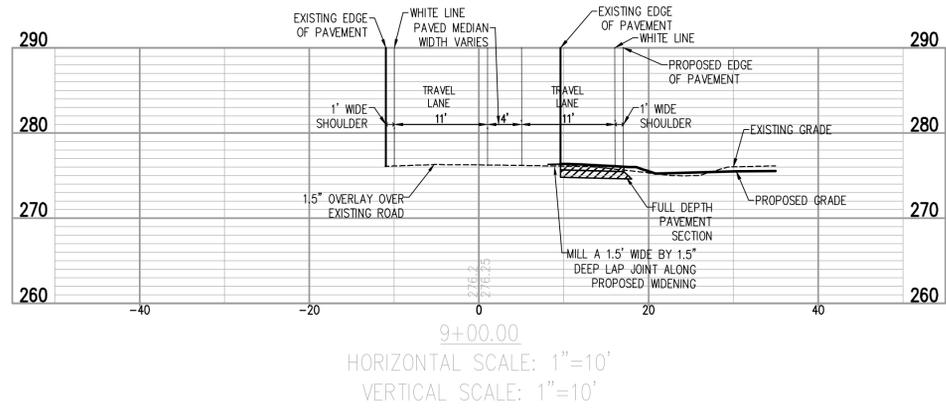
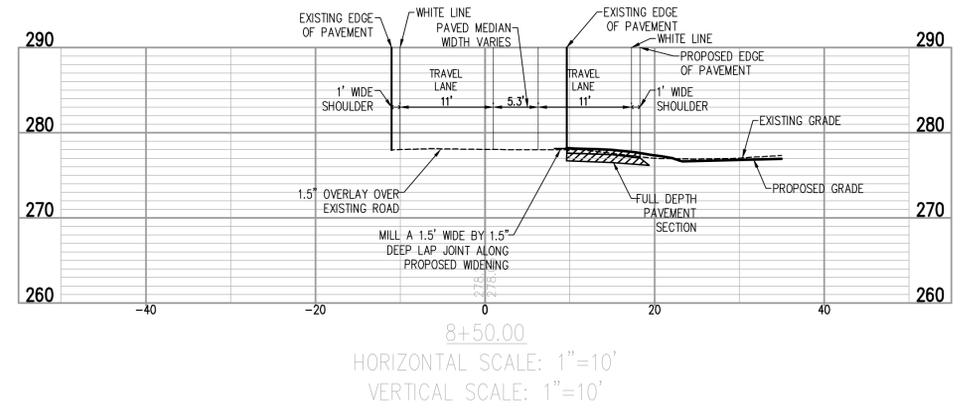
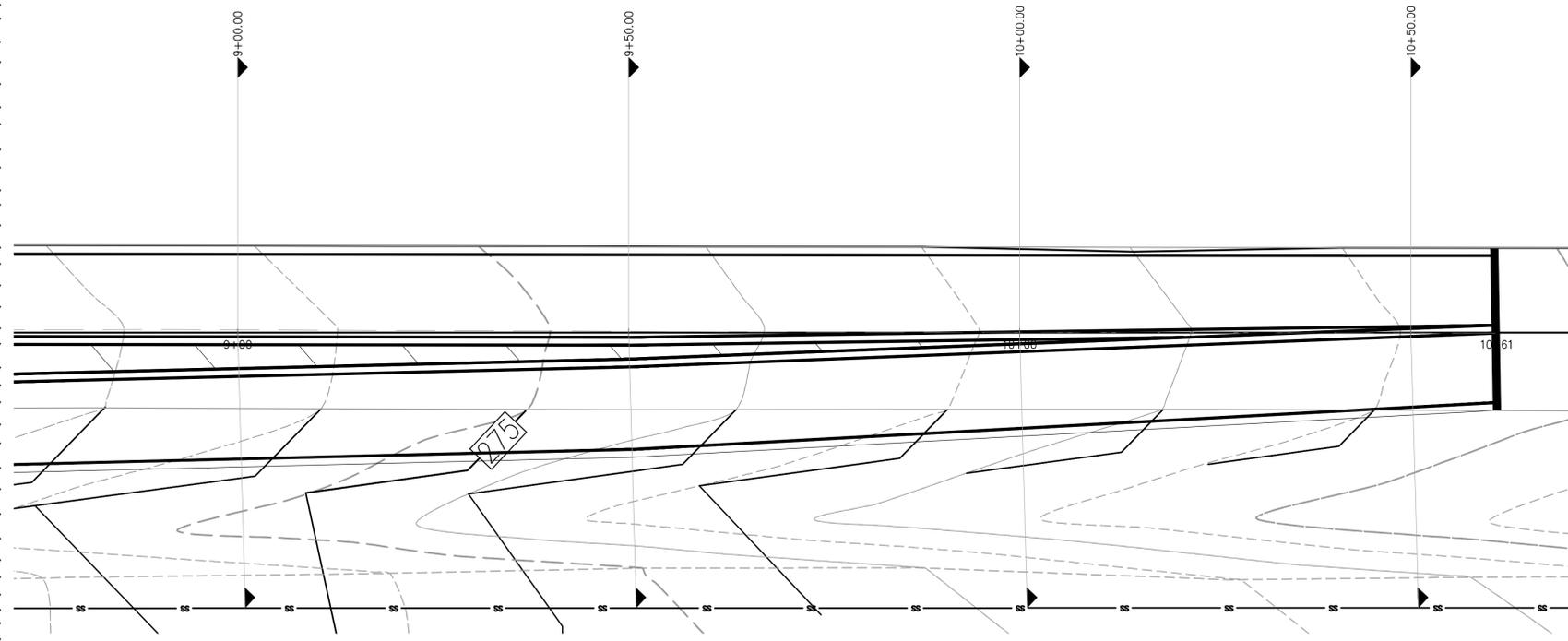
TRACTOR SUPPLY COMPANY

ROADWAY CROSS SECTIONS
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
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SHEET C4.5



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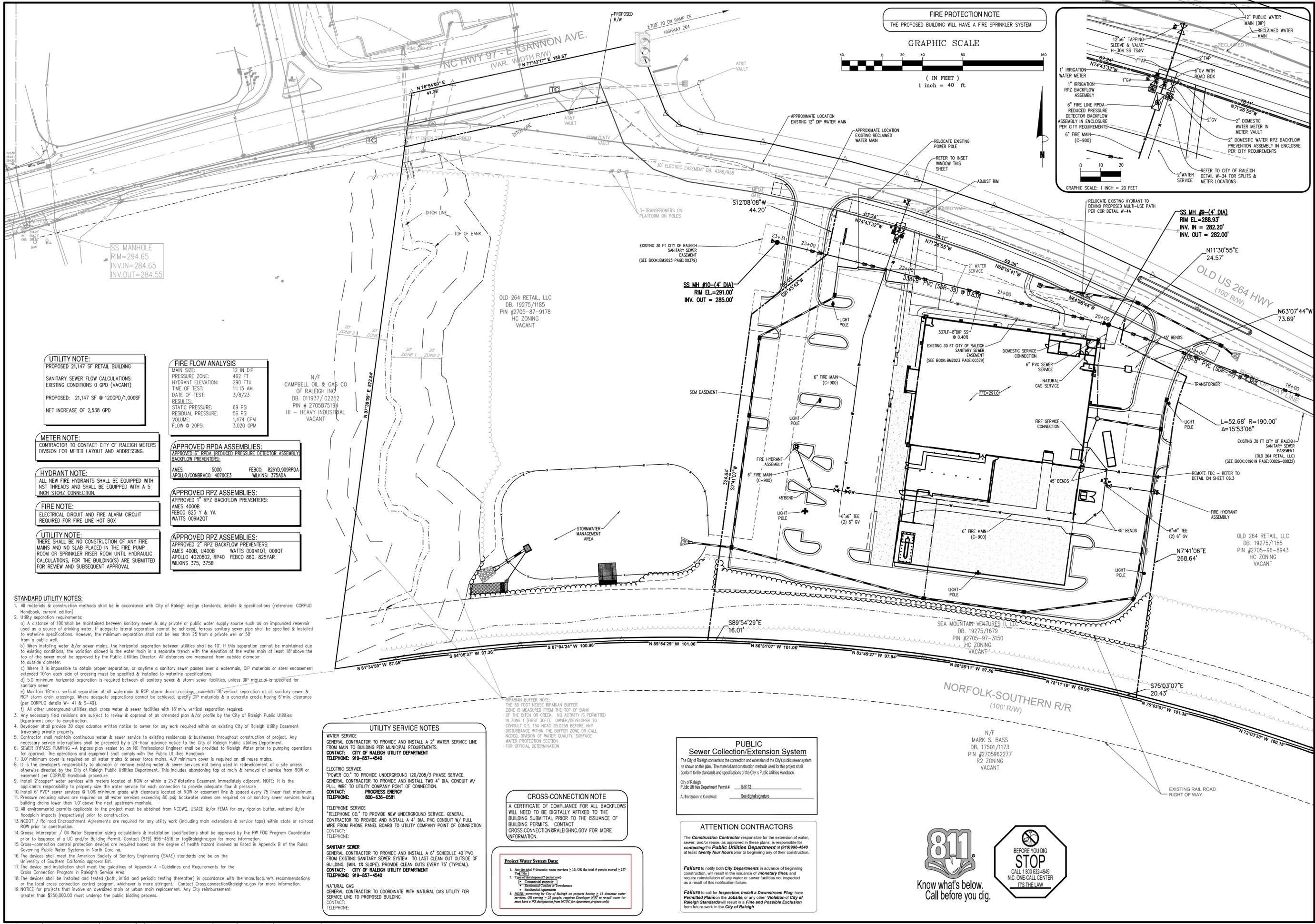


ROADWAY CROSS SECTIONS
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County

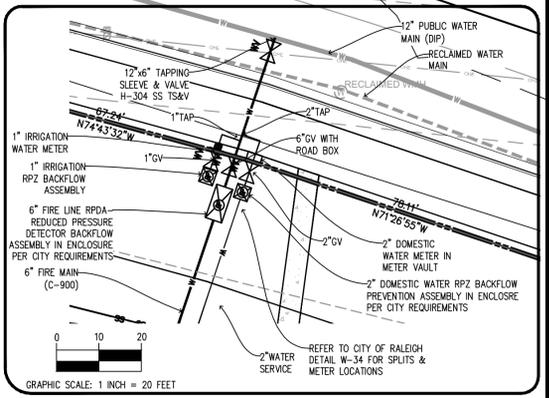
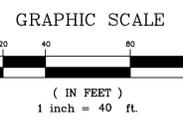


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SHEET C4.6



FIRE PROTECTION NOTE
THE PROPOSED BUILDING WILL HAVE A FIRE SPRINKLER SYSTEM



UTILITY NOTE:
PROPOSED 21,147 SF RETAIL BUILDING
SANITARY SEWER FLOW CALCULATIONS:
EXISTING CONDITIONS 0 GPD (VACANT)
PROPOSED: 21,147 SF @ 120GPD/1,000SF
NET INCREASE OF 2,538 GPD

FIRE FLOW ANALYSIS
MAIN SIZE: 12 IN DIP
PRESSURE ZONE: 462 FT
HYDRANT ELEVATION: 290 FT±
TIME OF TEST: 11:15 AM
DATE OF TEST: 3/8/23
RESULTS:
STATIC PRESSURE: 69 PSI
RESIDUAL PRESSURE: 56 PSI
VOLUME: 1,474 GPM
FLOW @ 20PSI: 3,020 GPM

METER NOTE:
CONTRACTOR TO CONTACT CITY OF RALEIGH METERS DIVISION FOR METER LAYOUT AND ADDRESSING.

HYDRANT NOTE:
ALL NEW FIRE HYDRANTS SHALL BE EQUIPPED WITH NST THREADS AND SHALL BE EQUIPPED WITH A 5 INCH STORZ CONNECTION.

FIRE NOTE:
ELECTRICAL CIRCUIT AND FIRE ALARM CIRCUIT REQUIRED FOR FIRE LINE HOT BOX.

UTILITY NOTE:
THERE SHALL BE NO CONSTRUCTION OF ANY FIRE MAINS AND NO SLAB PLACED IN THE FIRE PUMP ROOM OR SPRINKLER RISER ROOM UNTIL HYDRAULIC CALCULATIONS FOR THE BUILDING(S) ARE SUBMITTED FOR REVIEW AND SUBSEQUENT APPROVAL.

APPROVED RPDA ASSEMBLIES:
APPROVED 6" RPDA REDUCED PRESSURE DETECTOR ASSEMBLY BACKFLOW PREVENTERS:
AMES: 5000 FERC0: 826YD,909RPDA
APOLLO/CONRACO: 4070CE3 WILKINS: 375ADA

APPROVED RPZ ASSEMBLIES:
APPROVED 1" RPZ BACKFLOW PREVENTERS:
AMES 4000B FERC0 825 Y & YA WATTS 009M2QT

APPROVED RPZ ASSEMBLIES:
APPROVED 2" RPZ BACKFLOW PREVENTERS:
AMES 400B U400B WATTS 009M1QT, 009QT APOLLO 4020802, RP40 FERC0 860, 825YAR WILKINS 375, 375B

N/F CAMPBELL OIL & GAS CO OF RALEIGH INC DB. 191937/02252 PIN # 2705875194 HI - HEAVY INDUSTRIAL VACANT

OLD 264 RETAIL, LLC DB. 19275/1185 PIN # 2705-87-9178 HC ZONING VACANT

SEA MOUNTAIN VENTURES II, LLC DB. 19275/1679 PIN # 2705-97-3150 HC ZONING VACANT

OLD 264 RETAIL, LLC DB. 19275/1185 PIN # 2705-96-8943 HC ZONING VACANT

- STANDARD UTILITY NOTES:**
- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition)
 - Utility separation requirements:
 - A distance of 100" shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to waterline specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
 - When installing water &/or sewer mains, the horizontal separation between utilities shall be 10" if this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
 - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10" on each side of crossing must be specified & installed to waterline specifications.
 - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
 - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings, maintain 18" vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete grade having 6" min. clearance (per CORPUD details W- 41 & S-49).
 - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required.
 - Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction
 - Developer shall provide 30 days advance written notice to owner for any work required within an existing City of Raleigh Utility Easement traversing private property.
 - Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24-hour advance notice to the City of Raleigh Public Utilities Department.
 - SEWER BYPASS PUMPING - A bypass plan sealed by an NC Professional Engineer shall be provided to Raleigh Water prior to pumping operations for approval. The operations and equipment shall comply with the Public Utilities Handbook.
 - 3.0' minimum cover is required on all water mains & sewer force mains. 4.0' minimum cover is required on all reuse mains.
 - It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal of service from ROW or easement per CORPUD Handbook procedure.
 - Install 2" copper* water services with meters located at ROW or within a 2x2' Waterline Easement immediately adjacent. NOTE: It is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure
 - Install 6" PVC sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum.
 - Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0' above the next upstream manhole.
 - All environmental permits applicable to the project must be obtained from NCOWD, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
 - NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction.
 - Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the RW FOG Program Coordinator prior to issuance of a UC and/or Building Permit. Contact (919) 996-4516 or fog@raleighnc.gov for more information.
 - Cross-connection control protection devices are required based on the degree of health hazard involved as listed in Appendix B of the Rules Governing Public Water Systems in North Carolina.
 - The devices shall meet the American Society of Sanitary Engineering (ASSE) standards and be on the University of Southern California approval list.
 - The device and installation shall meet the guidelines of Appendix A - Guidelines and Requirements for the Cross Connection Program in Raleigh's Service Area.
 - The devices shall be installed and tested (both, initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross connection control program, whichever is more stringent. Contact Cross.connection@raleighnc.gov for more information.
 - NOTICE for projects that involve an oversized main or urban main replacement. Any city reimbursement greater than \$250,000.00 must undergo the public bidding process.

UTILITY SERVICE NOTES

WATER SERVICE
GENERAL CONTRACTOR TO PROVIDE AND INSTALL A 2" WATER SERVICE LINE FROM MAIN TO BUILDING PER MUNICIPAL REQUIREMENTS.
CONTACT: CITY OF RALEIGH UTILITY DEPARTMENT
TELEPHONE: 919-857-4540

ELECTRIC SERVICE
"POWER CO." TO PROVIDE UNDERGROUND 120/208/3 PHASE SERVICE. GENERAL CONTRACTOR TO PROVIDE AND INSTALL A 4" DIA. PVC CONDUIT W/ PULL WIRE TO UTILITY COMPANY POINT OF CONNECTION.
CONTACT: PROGRESS ENERGY
TELEPHONE: 800-336-0581

SANITARY SEWER
GENERAL CONTRACTOR TO PROVIDE AND INSTALL A 6" SCHEDULE 40 PVC FROM EXISTING SANITARY SEWER SYSTEM TO LAST CLEAN OUT OUTSIDE OF BUILDING. (MIN. 1% SLOPE). PROVIDE CLEAN OUTS EVERY 75' (TYPICAL).
CONTACT: CITY OF RALEIGH UTILITY DEPARTMENT
TELEPHONE: 919-857-4540

NATURAL GAS
GENERAL CONTRACTOR TO COORDINATE WITH NATURAL GAS UTILITY FOR SERVICE LINE TO PROPOSED BUILDING.
CONTACT:
TELEPHONE:

CROSS-CONNECTION NOTE
A CERTIFICATE OF COMPLIANCE FOR ALL BACKFLOWS WILL NEED TO BE DIGITALLY AFFIXED TO THE BUILDING SUBMITTAL PRIOR TO THE ISSUANCE OF BUILDING PERMITS. CONTACT CROSS.CONNECTION@RALEIGHNC.GOV FOR MORE INFORMATION.

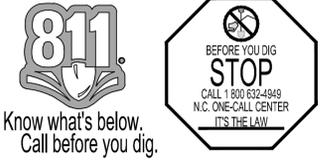
Project Water System Data:

- Any day head @ domestic water services > 15. OR the total # of people served > 25?
- TYPE OF DEVELOPMENT (select one)
 - Residential (single family)
 - Commercial property
 - Residential (multi-family)
 - Residential (apartment)
- ISDZ, as determined by City of Raleigh on projects having > 15 domestic water services, OR serving > 25 people, requires Developer 302 in retool water for most have a RW designation from DWRCP (for department projects only)

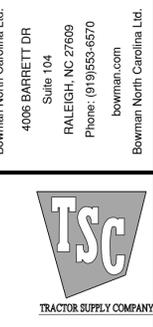
PUBLIC Sewer Collection/Extension System
The City of Raleigh consents to the correction and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh Public Utilities Department Permit # S-5172
Authorization to Construct See digital signature

ATTENTION CONTRACTORS
The Construction Contractor responsible for the extension of water, sewer, and/or gas, as approved in these plans, is responsible for contacting the Public Utilities Department at (919)996-4540 at least twenty four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines and require installation of any water or sewer facilities not inspected as a result of this notification failure.
Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the Jobsite or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.



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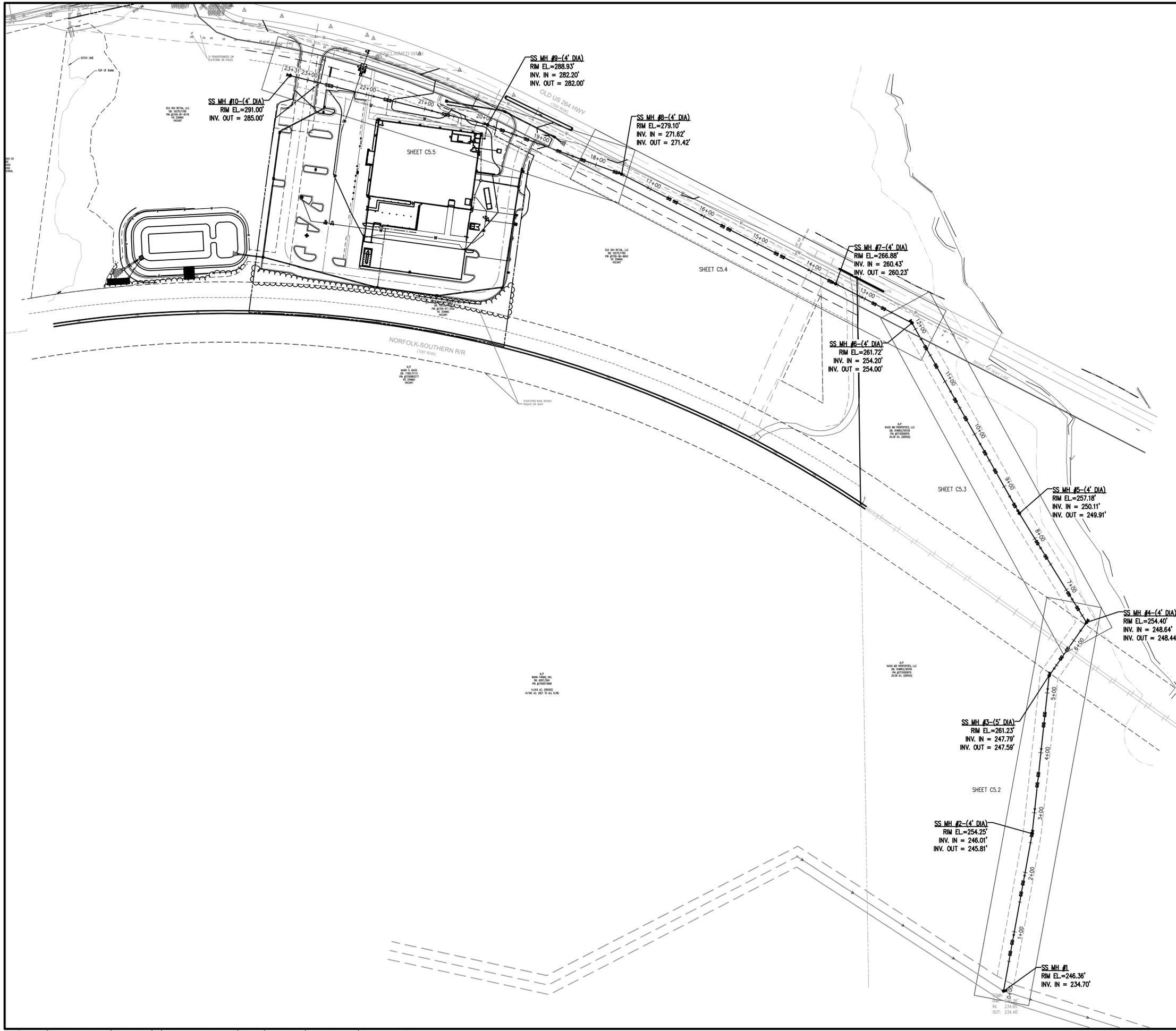


UTILITY PLAN
Tractor Supply Company
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
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MEL DESIGN	MEL DRAWN	XXX CHKD
SCALE	H: 1" = XXX'	V: 1" = XXX'
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SHEET C5.0



PUBLIC Sewer Collection/Extension System
 The City of Raleigh consents to the construction and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
 City of Raleigh
 Public Utilities Department Permit # S-3172
 Authorization to Construct: See digital signature

ATTENTION CONTRACTORS
 The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919)996-4540 at least twenty four hours prior to beginning any of their construction.
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811
 Know what's below.
 Call before you dig.

STOP
 BEFORE YOU DIG
 CALL 1 800 632-4949
 N.C. ONE-CALL CENTER
 IT'S THE LAW

GRAPHIC SCALE
 (IN FEET)
 1 inch = 75 ft.



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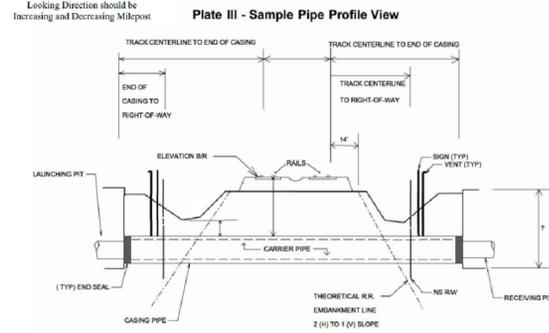
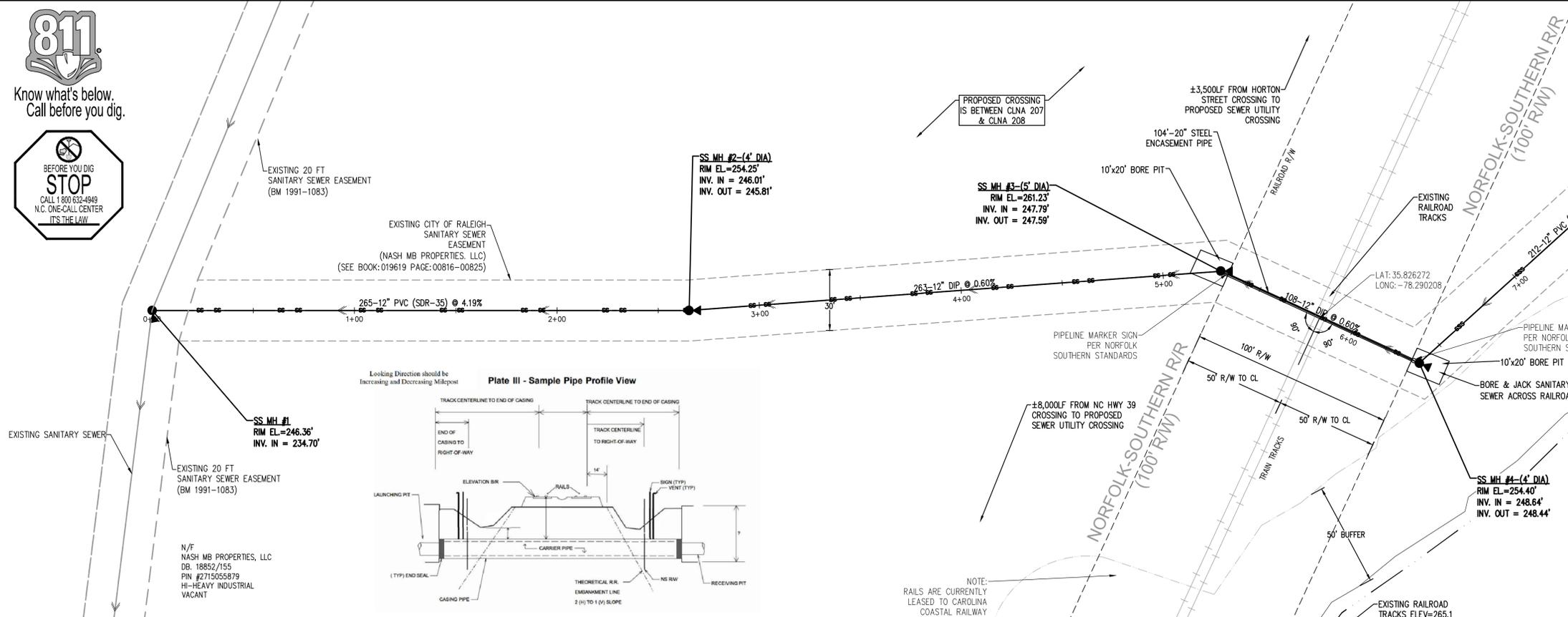
OVERALL SANITARY SEWER EXTENSION
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



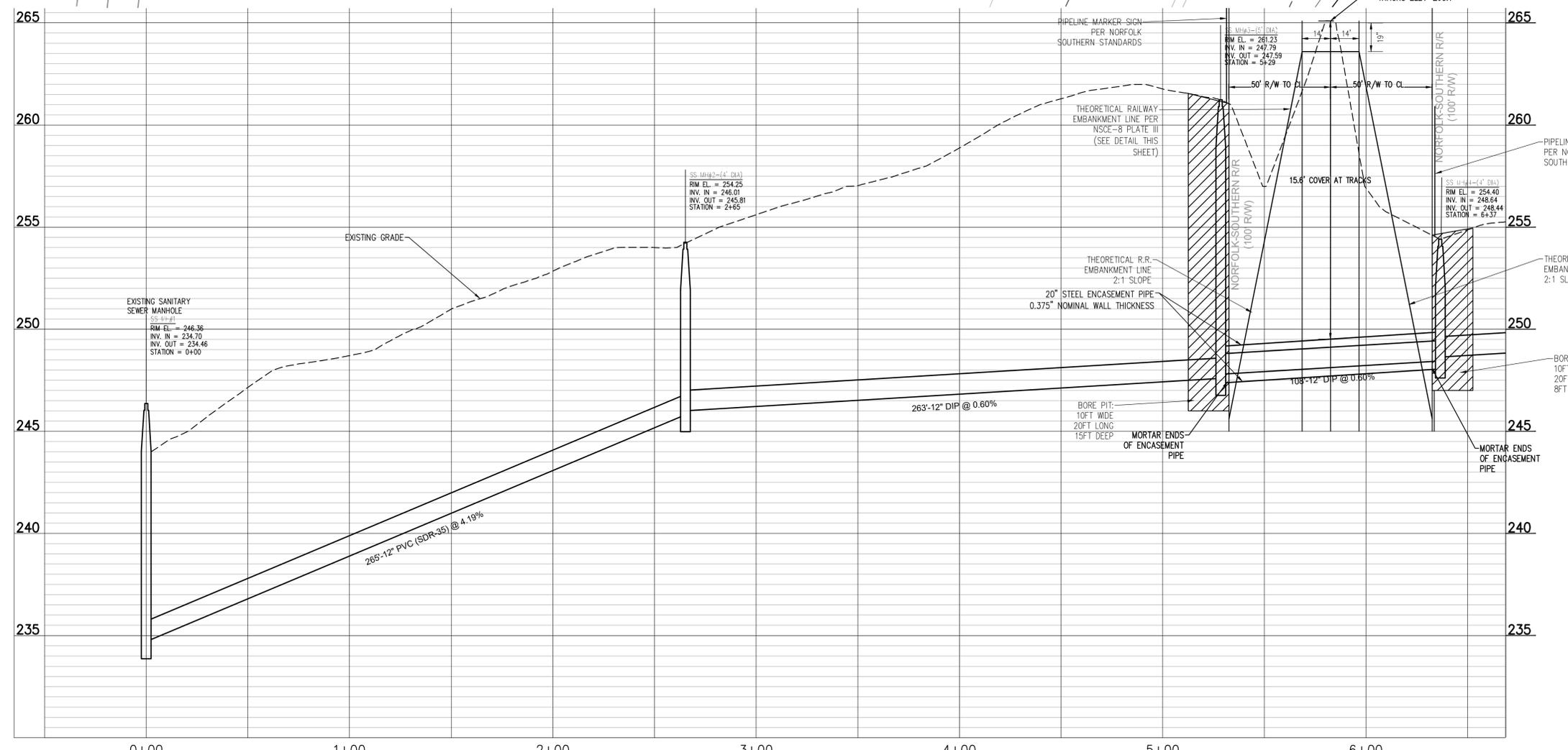
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SHEET	C5.1	



Know what's below. Call before you dig.



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 - It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal of service from ROW or easement per CORPUD Handbook procedure.
 - Install 2" copper water services with meters located at ROW or within a 2'x2' Waterline Easement immediately adjacent. NOTE: It is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure.
 - Install 6" PVC sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum.
 - Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0' above the next upstream manhole.
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 - NOTICE for projects that involve an oversized main or urban main replacement. Any City reimbursement greater than \$250,000.00 must undergo the public bidding process.



PUBLIC Sewer Collection/Extension System

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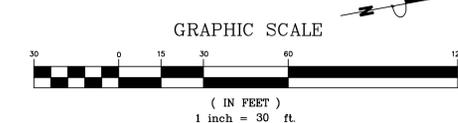
City of Raleigh
Public Utilities Department Permit # S-3172
Authorization to Construct See digital signature

ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919)996-4540 at least twenty four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstatement of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.



Bowman

Bowman North Carolina Ltd.
4006 BARRETT DR
Suite 104
RALEIGH, NC 27609
Phone: (919)555-6570
bowman.com

TSC

TRACTOR SUPPLY COMPANY

SANITARY SEWER PLAN & PROFILE

Tractor Supply
Old US Highway 264
Zebulon, NC Wake County

PLAN STATUS

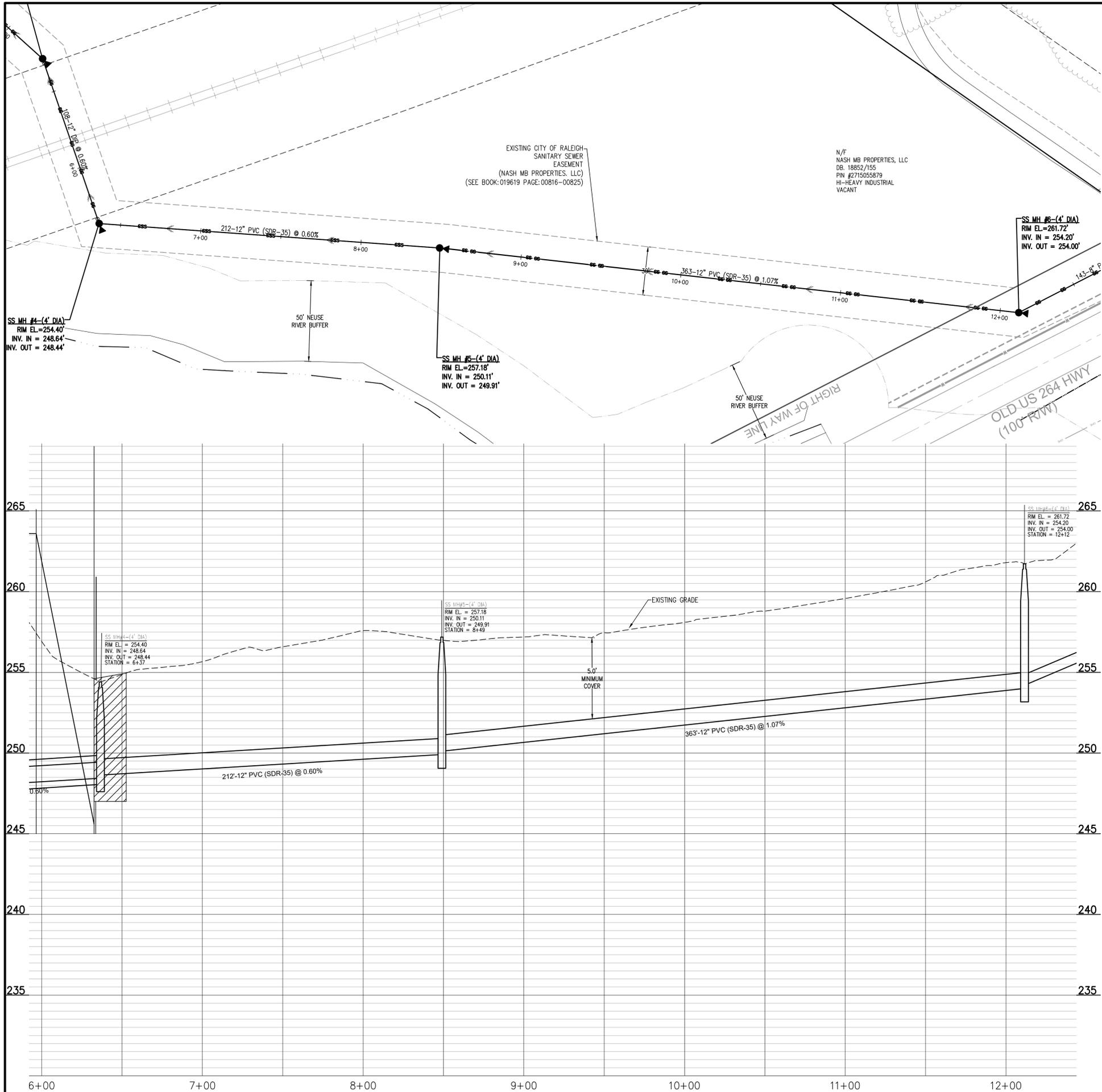
11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
3/26/24	PER NCDOT REVIEW
5/28/24	PER CITY OF RALEIGH REVIEW

MEL DESIGN	MEL DRAWN	XXX CHKD
SCALE	H: 1" = 30'	V: 1" = 30'
JOB No.	220127-01-001	
DATE	May 28, 2024	
FILE No.	220127-D-CP-001	

PROFESSIONAL SEAL

North Carolina Professional Engineer
MEL
2024
10/10/2024

SHEET **C5.2**



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 City of Raleigh
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 Authorization to Construct See digital signature

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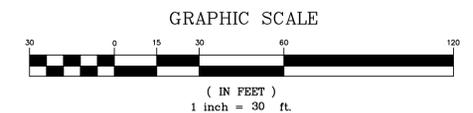
- STANDARD UTILITY NOTES:**
- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition).
 - Utility separation requirements:
 - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to watertight specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
 - When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
 - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to watertight specifications.
 - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer.
 - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 18" vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W-41 & S-49).
 - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required.
 - Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction.
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Bowman

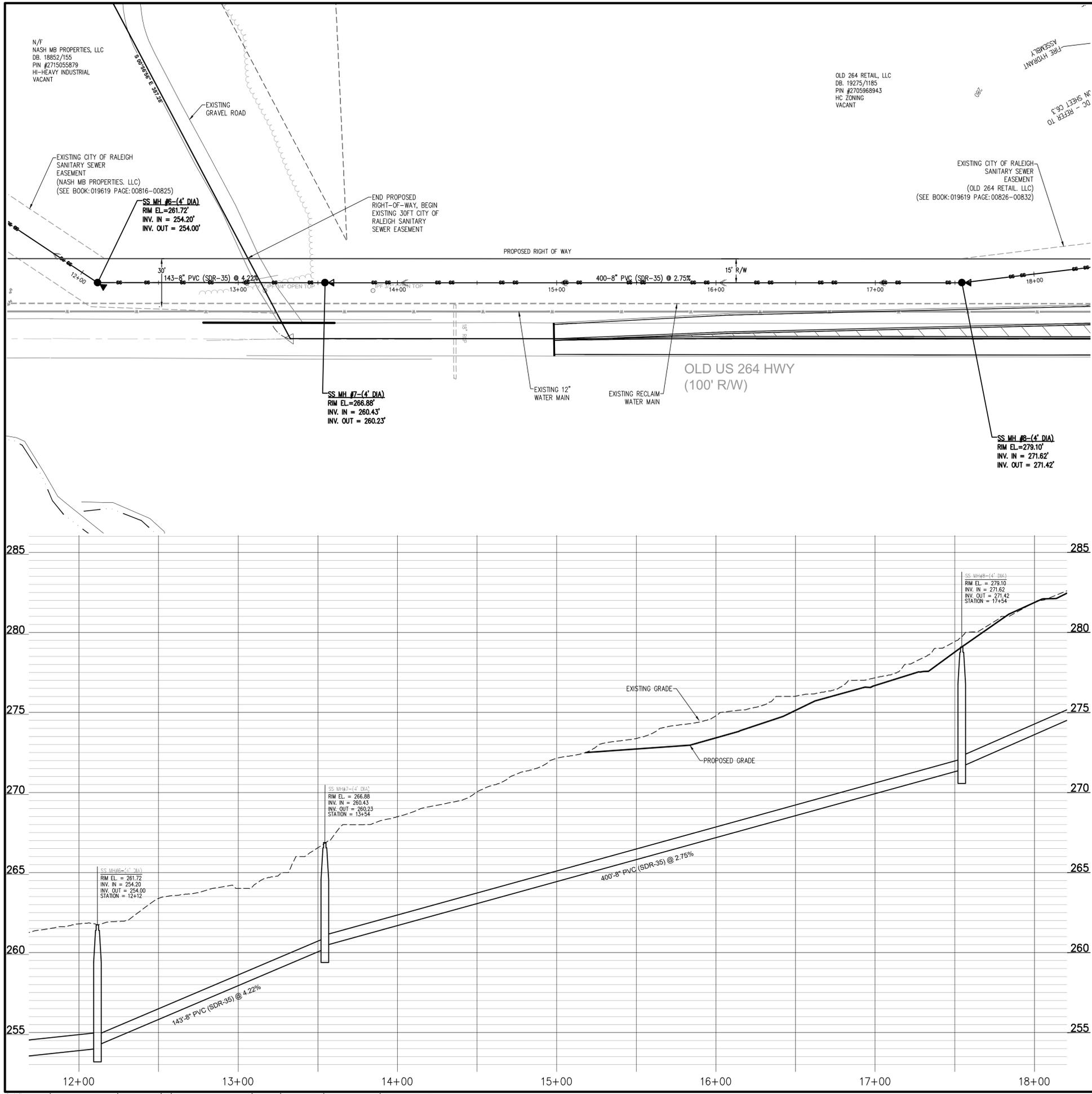
Bowman North Carolina Ltd.
 4006 BARRETT DR
 Suite 104
 RALEIGH, NC 27609
 Phone: (919)553-6570
 bowman.com
 Bowman North Carolina Ltd.



SANITARY SEWER PLAN & PROFILE
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



PLAN STATUS	
11/30/23	SEWER CROSSING AT RAILROAD
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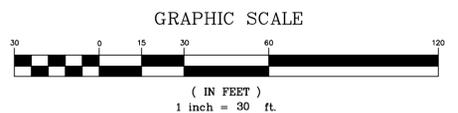
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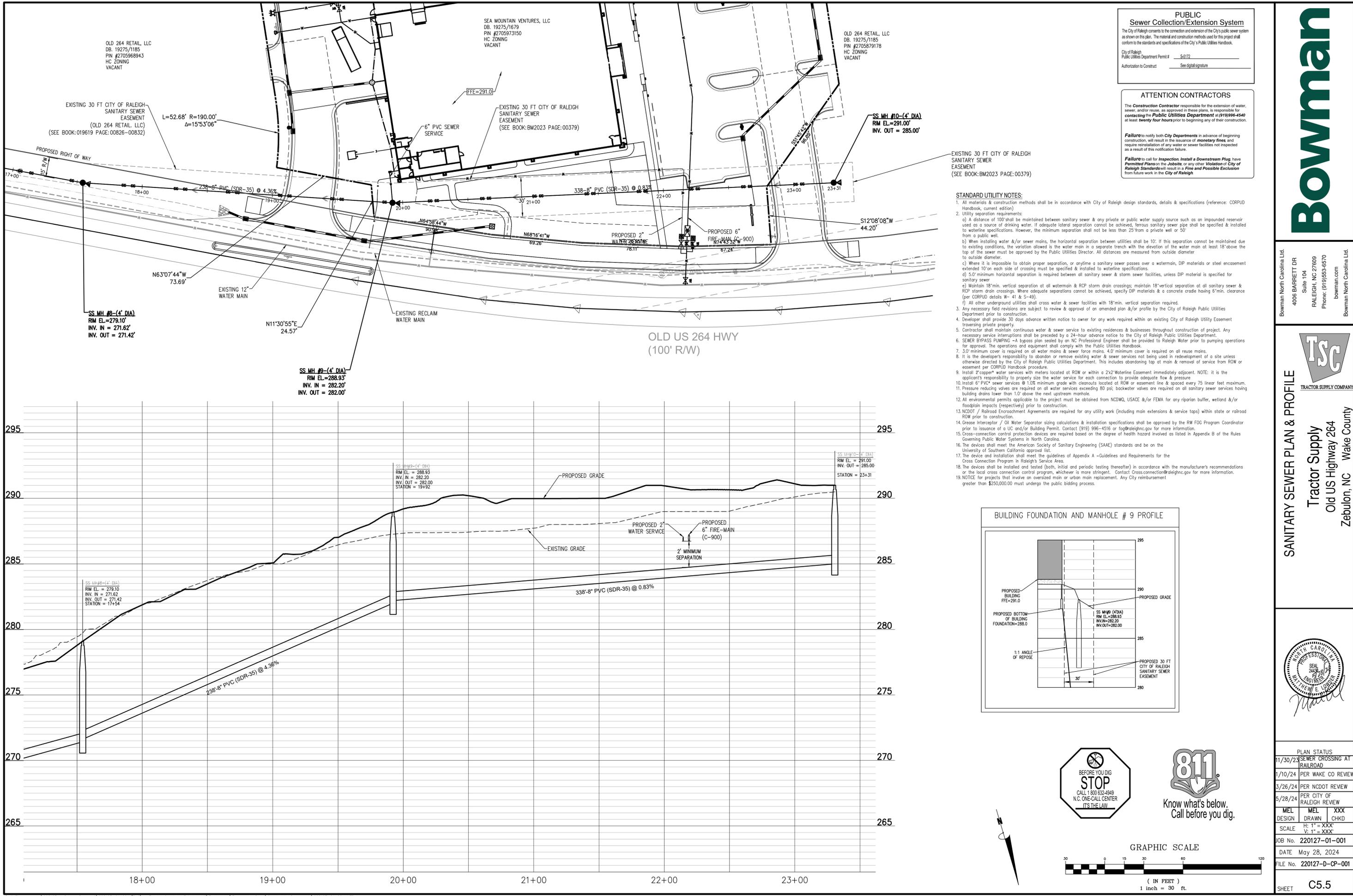
Bowman North Carolina Ltd.
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SANITARY SEWER PLAN & PROFILE
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



PLAN STATUS	
11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
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MEL DESIGN	MEL DRAWN XXX CHKD
SCALE	H: 1" = XXX' V: 1" = XXX'
JOB No.	220127-01-001
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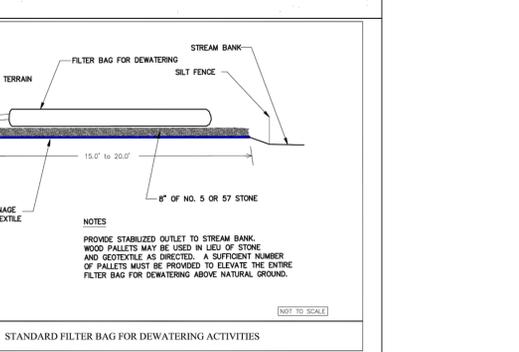
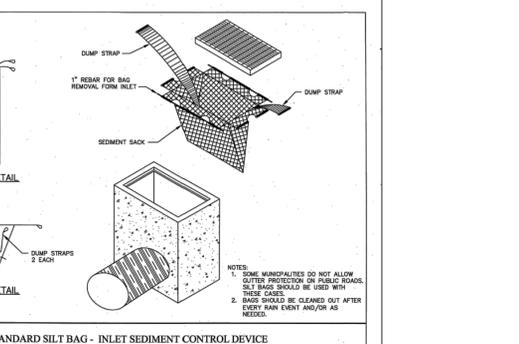
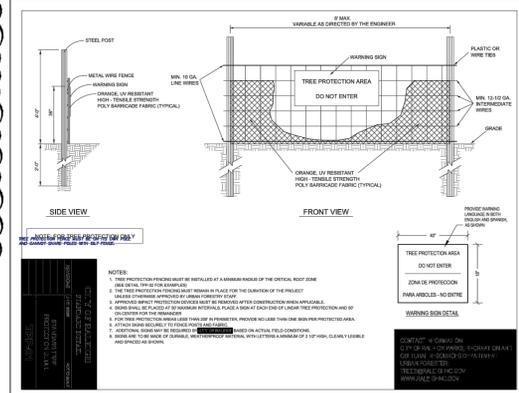
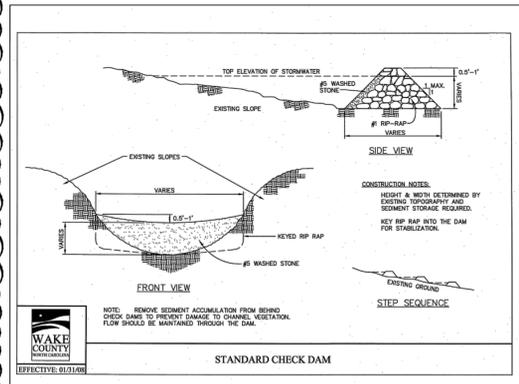
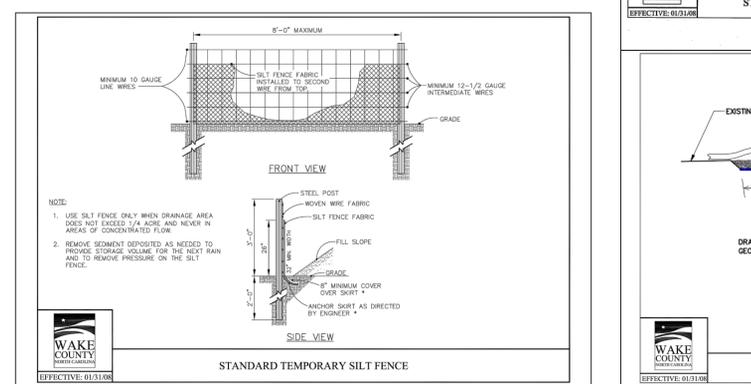
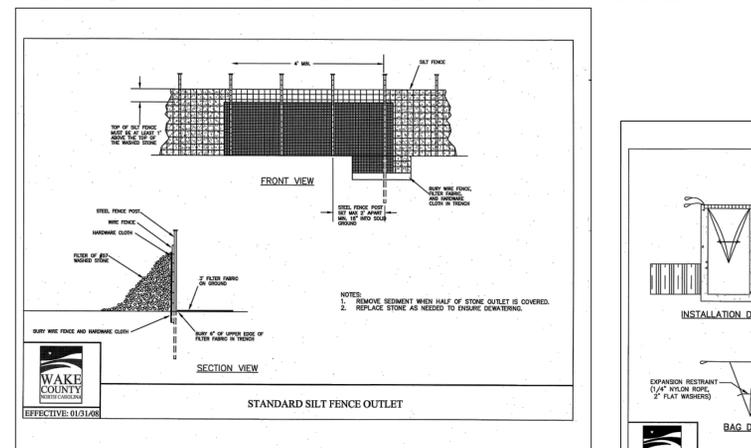
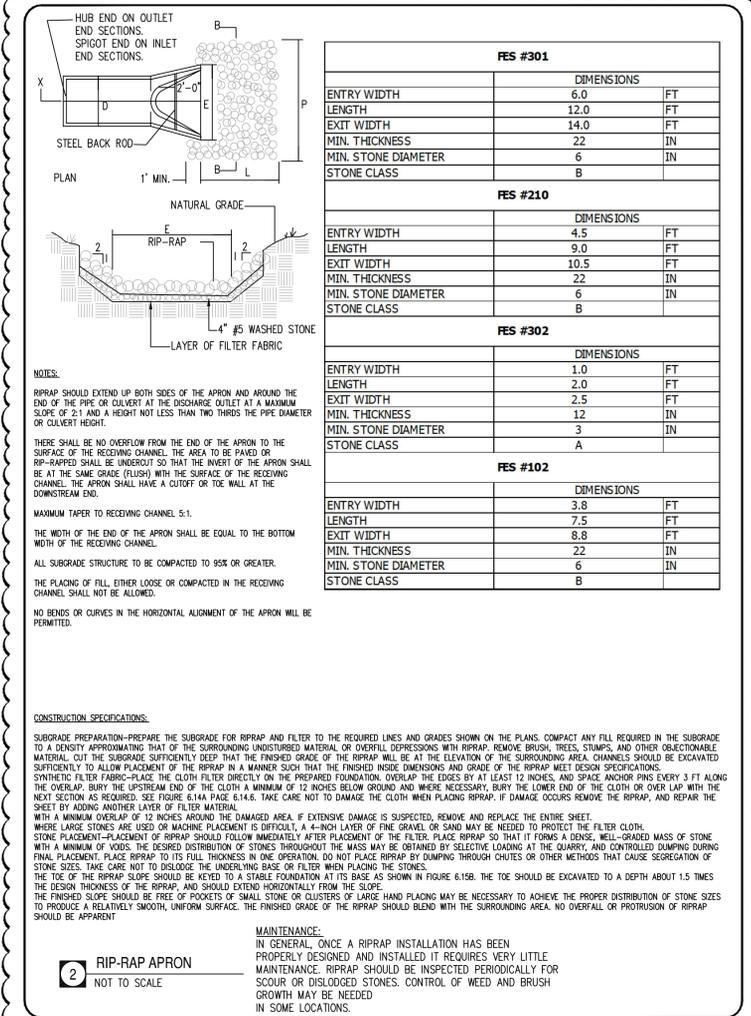
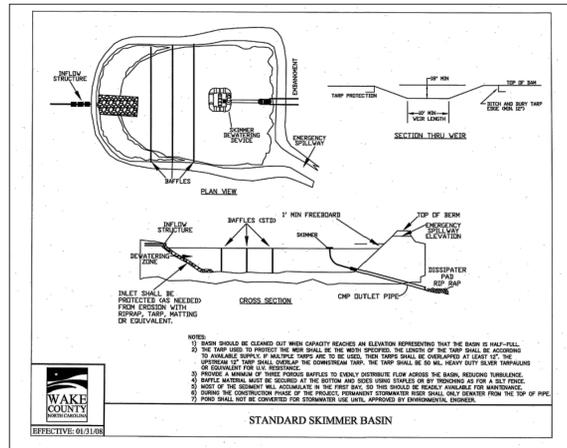
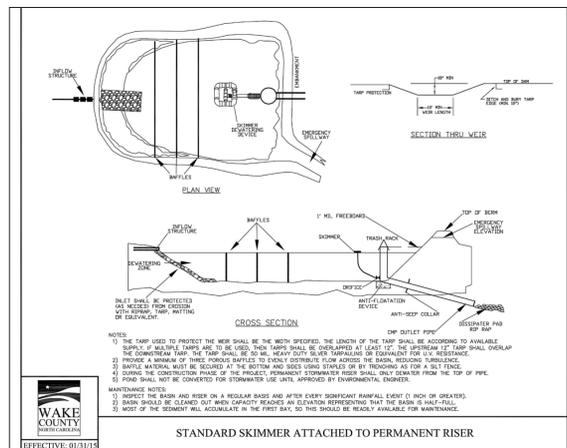
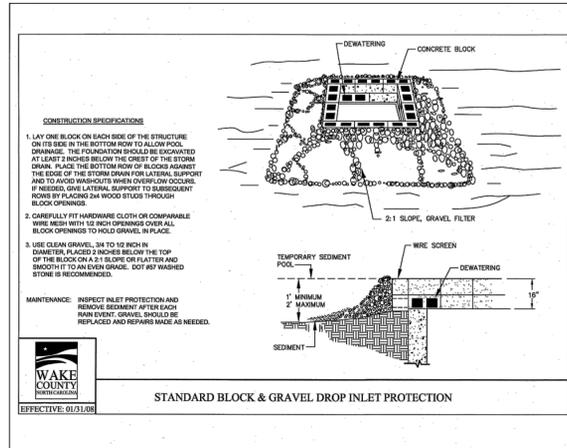
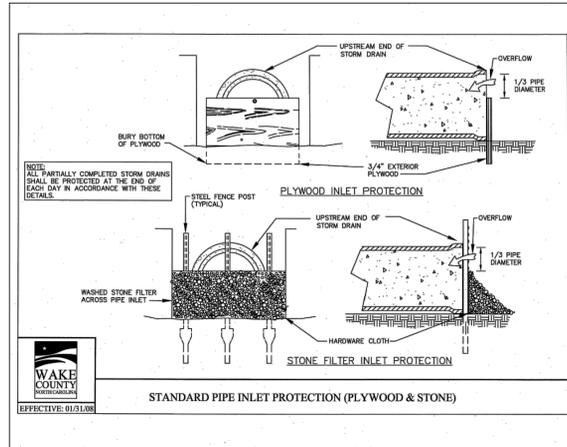
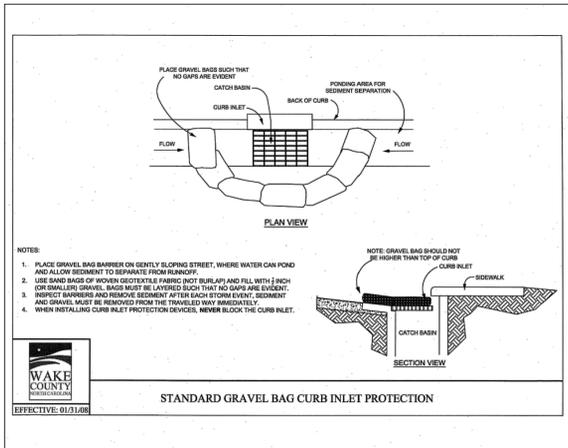
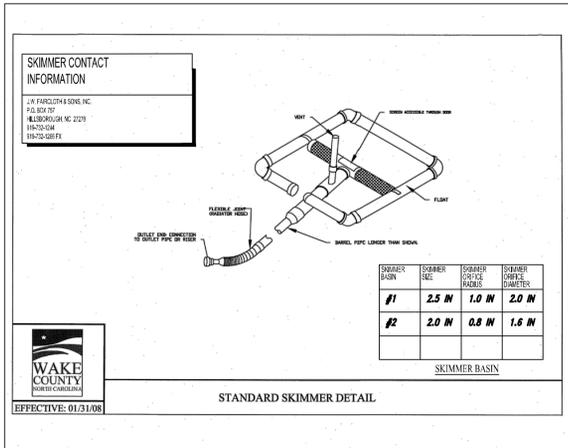
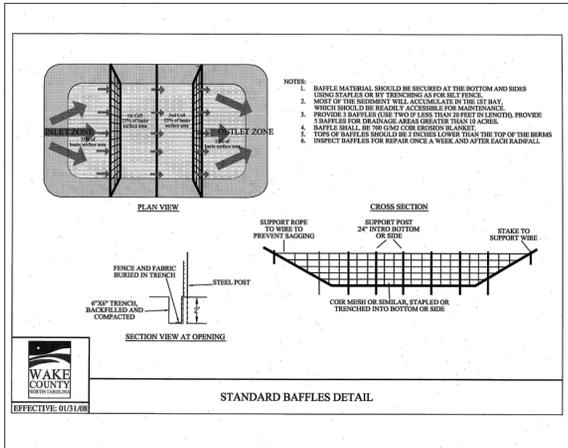
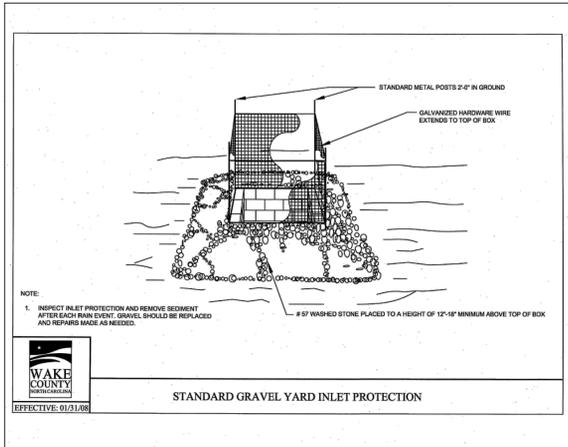
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SANITARY SEWER PLAN & PROFILE
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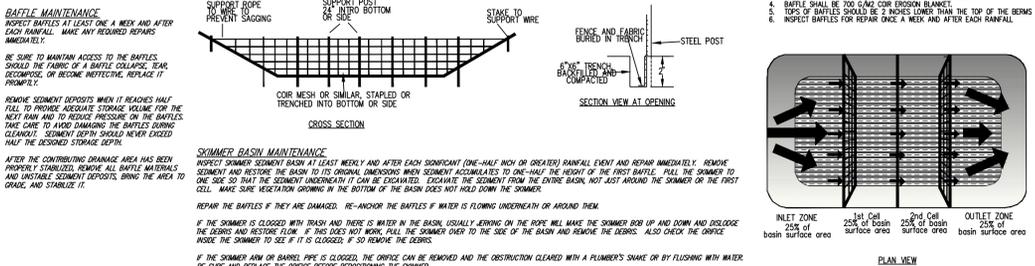
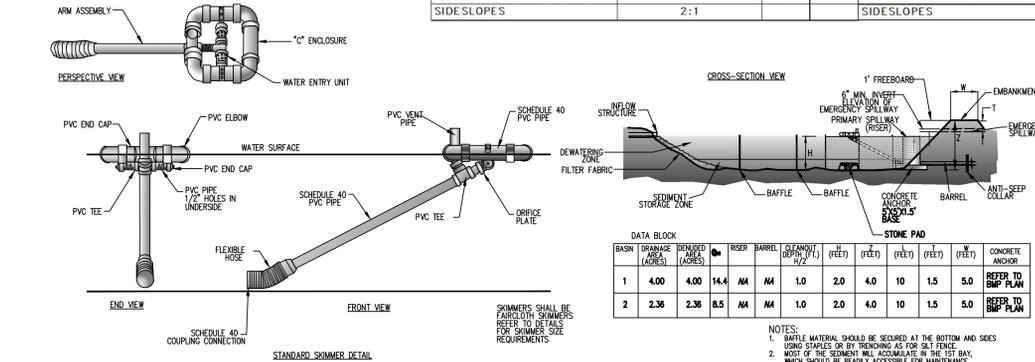
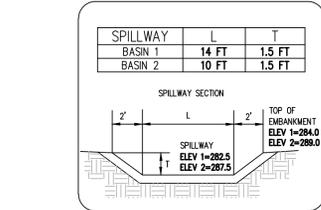
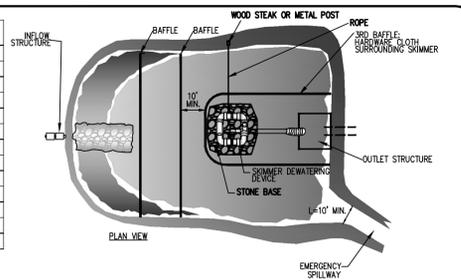
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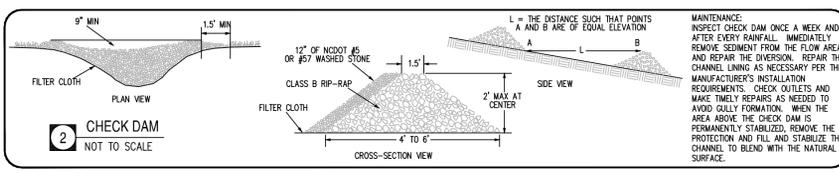
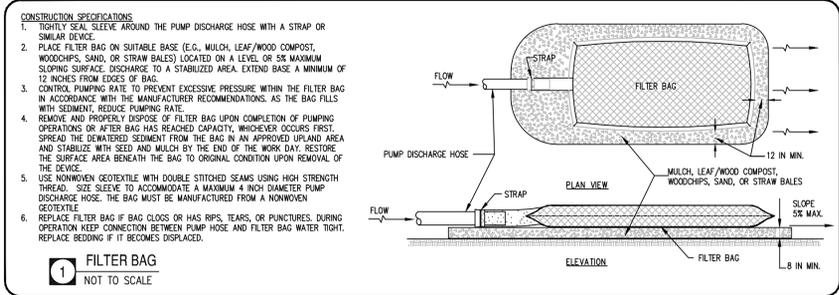
SEDIMENT BASIN REQUIREMENTS:
 SEDIMENT BASINS AND TRAPS SHALL MEET THE FOLLOWING REQUIREMENTS:
 A) OUTLET STRUCTURES SHALL BE UTILIZED THAT WITHDRAW WATER FROM THE SURFACE.
 B) FOR BASINS OR TRAPS THAT HAVE A DRAINAGE AREA OF LESS THAN 10 ACRES, DOWN-SLOPE DESIGNS SPECIFIED IN THE DIVISION OF LAND RESOURCES OR DELEGATED LOCAL PROGRAM REQUIREMENTS ARE ACCEPTABLE.
 C) CHEMICAL TREATMENT:
 1) ALL TREATMENT CHEMICALS MUST BE STORED IN LEAK-PROOF CONTAINERS THAT ARE KEPT UNDER SECONDARY RESISTANT COVER OR SURROUNDED BY SECONDARY CONTAINMENT STRUCTURES DESIGNED TO PROTECT ADJACENT SURFACE WATERS.
 2) ALL TREATMENT CHEMICALS MUST BE USED IN ACCORDANCE WITH DOSENG SPECIFICATIONS AND APPLICATION RATES PROVIDED BY THE MANUFACTURER, SUPPLIER AND AS SPECIFIED BY THE DIVISION OF WATER QUALITY.
 3) THE PERMITTEE MUST ONLY USE CHEMICALS THAT HAVE BEEN APPROVED BY THE NC DIVISION OF WATER QUALITY AND POSTED ON THEIR NORTH CAROLINA DIVISION OF WATER QUALITY APPROVED FAMS/FLOCCULANTS LIST FOUND ON THEIR WEB SITE AT: <http://www.water.nc.gov>
 4) THE PERMITTEE MUST ROUTE STORMWATER TREATED WITH POLYMERS, FLOCCULANTS, OR OTHER TREATMENT CHEMICALS THROUGH SEDIMENT TRAPPING, FILTERING, AND/OR SETTLING DEVICES TO ENSURE ACCURATE REMOVAL OF SEDIMENT FLOCCULANT PRIOR TO DISCHARGE TO SURFACE WATERS.
 D) DISCHARGE REQUIREMENTS - DISCHARGES MUST MEET THE STATUTORY REQUIREMENTS OF THE SEDIMENT POLLUTION CONTROL ACT AND UTILIZE THE PROVISIONS OF SECTION 8.14 OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL TO ASSURE THAT BUFFER AND VEGETATED AREAS WILL BE USED TO REDUCE THE POTENTIAL FOR VISIBLE SILTATION OUTSIDE OF THE 25% BUFFER ZONE NEAREST THE LAND-DISTURBING ACTIVITY.

Skimmer Basin #1					Skimmer Basin #2				
SURFACE AREA REQUIRED	6,281	SF	SURFACE AREA REQUIRED	3,706	SF				
SURFACE AREA PROVIDED	6,384	SF	SURFACE AREA PROVIDED	3,800	SF				
VOLUME REQUIRED	7,200	CF	VOLUME REQUIRED	4,248	CF				
VOLUME PROVIDED	11,472	CF	VOLUME PROVIDED	6,584	CF				
STORAGE DEPTH	2.0	FT	STORAGE DEPTH	2.0	FT				
STORAGE ELEVATION	114	x	56	FT	282.00				
TOP OF DAM	122	x	64	FT	284.00				
EMGY. SPILLWAY LENGTH	1.4	FT	EMGY. SPILLWAY LENGTH	10	FT				
BOTTOM OF BASIN	106	x	48	FT	280.00				
BOTTOM OF BASIN				87	x				
SKIMMER SIZE	2.5	IN	SKIMMER SIZE	2.0	IN				
SKIMMER ORIFICE DIAMETER	2.0	IN	SKIMMER ORIFICE DIAMETER	0.8	IN				
SKIMMER ORIFICE RADIUS	1.0	IN	SKIMMER ORIFICE RADIUS	1.6	IN				
SIDESLOPES	2:1		SIDESLOPES	2:1					



SKIMMER BASIN
 NOT TO SCALE

SKIMMER CONTACT INFORMATION
 J.W. FARCOLLO & SONS, INC.
 P.O. BOX 757
 HILLSBOROUGH, NC 27278
 919-732-1244
 919-732-1266 FX



TEMPORARY SEEDING SPECIFICATIONS/SCHEDULE

Date	Type	Planting Rate
March - Oct.	Browtop Millet	40 lbs/acre
Nov. - Feb.	Winter Rye	120 lbs/acre

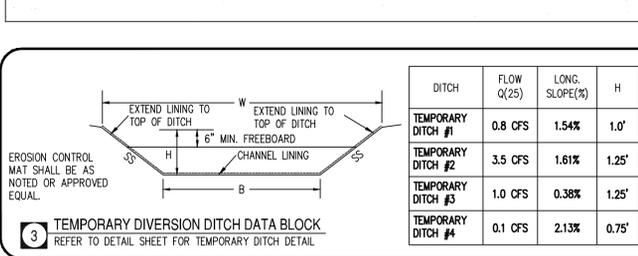
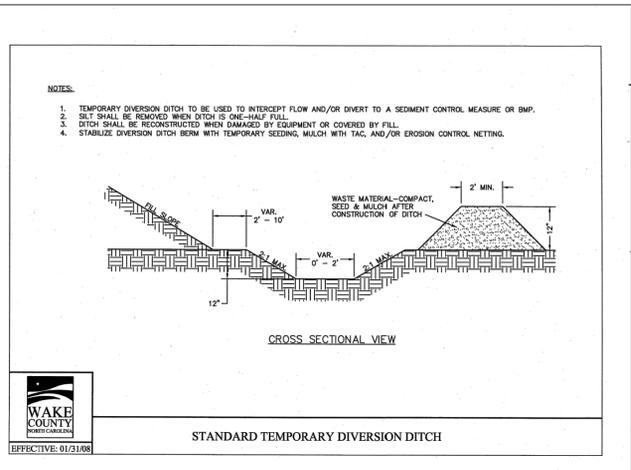
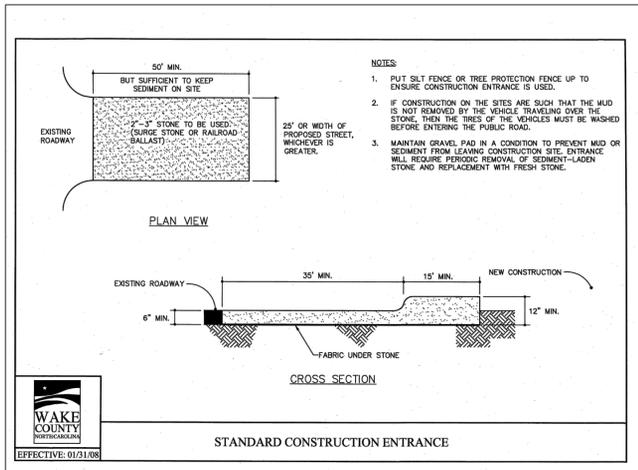
PERMANENT SEEDING SPECIFICATIONS/SCHEDULE

Date	Type	Planting Rate
Aug 15 - Nov 1	Deer Tongue	300 lbs/acre
Nov 1 - Mar 1	Deer Tongue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Deer Tongue	300 lbs/acre
Apr 15 - Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 1 - Aug 15	Deer Tongue & Browtop Millet or Sorghum-Sudan Hybrids	240 lbs/acre-Deer Tongue; 35 lbs/acre Browtop Millet

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 - 2:1)

Date	Type	Planting Rate
Mar 1 - Jun 1	Swillgrass & Add Deer Tongue	50 lbs/acre (Swillgrass)
Mar 1 - Apr 15	Swillgrass & Add Deer Tongue	25 lbs/acre
Apr 15 - Jun 1	Swillgrass & Add Deer Tongue	25 lbs/acre
Jun 1 - Sep 1	Deer Tongue & Browtop Millet or Sorghum-Sudan Hybrids	35 lbs/acre Deer Tongue; 30 lbs/acre Browtop Millet
Sep 1 - Mar 1	Swillgrass & Add Deer Tongue	70 lbs/acre Swillgrass; 240 lbs/acre Deer Tongue

SEEDING MIXTURE:
 AGRICULTURE LIMESTONE: 2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
 FERTILIZER: 1,000 LBS/ACRE - 10-10-10
 SUPERPHOSPHATE: 500 LBS/ACRE - 20% ANALYSIS
 MULCH: 2 TONS/ACRE - SMALL GRAIN STRAW
 ANCHOR: ASPHALT EMULSION AT 400 GALS/ACRE



DITCH	FLOW Q(25)	LONG. SLOPE(%)	H	B	W	SS	CHANNEL LINING
TEMPORARY DITCH #1	0.8 CFS	1.54%	1.0'	1.0'	5.0'	2:1	STRAW WITH NET NAG DS75
TEMPORARY DITCH #2	3.5 CFS	1.61%	1.25'	1.0'	6.0'	2:1	STRAW WITH NET NAG DS75
TEMPORARY DITCH #3	1.0 CFS	0.38%	1.25'	1.0'	6.0'	2:1	STRAW WITH NET NAG DS75
TEMPORARY DITCH #4	0.1 CFS	2.13%	0.75'	1.0'	4.0'	2:1	STRAW WITH NET NAG DS75

Seeding Specifications

NPDES Stormwater Discharge Permit for Construction Activities (NCG01 - 4/1/19)
 NCDQR/Division of Energy, Mineral and Land Resources

Mixture	Planting Rate
Agriculture Limestone	2 tons/acre (3 tons/acre in clay soils)
Fertilizer	1,000 lbs/acre - 10-10-10
Superphosphate	500 lbs/acre - 20% analysis
Mulch	2 tons/acre - small grain straw
Anchor	Asphalt emulsion at 400 gals/acre

Seeding Schedule
 For Shoulders, Side Ditches, Slopes (Max 3:1):

Date	Type	Planting Rate
Aug 15 - Nov 1	Tall Fescue	300 lbs/acre
Nov 1 - Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 1 - Aug 15	Tall Fescue AND Browtop Millet or Sorghum-Sudan Hybrids***	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browtop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)

Seeded Preparation:

- Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available.
- Rip the entire area to six inches deep.
- Remove all loose rock, roots and other obstructions, leaving surface reasonably smooth and uniform.
- Apply agricultural lime, fertilizer and superphosphate uniformly and mix with soil (see mixture below).
- Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared four to six inches deep.
- Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding.
- Mulch immediately after seeding and anchor mulch.



TEMPORARY DIVERSION DITCH DATA BLOCK
 REFER TO DETAIL SHEET FOR TEMPORARY DITCH DETAIL

Bowman

Bowman North Carolina Ltd.
 4006 BARRHETT DR
 Suite 104
 RALEIGH, NC 27609
 Phone: (919)552-6570
 bowman.com



TRACTOR SUPPLY COMPANY
Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



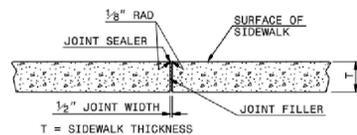
PLAN STATUS
11/30/23 SEWER CROSSING AT RAILROAD
1/10/24 PER WAKE CO REVIEW
3/26/24 PER NCDOT REVIEW
5/28/24 PER CITY OF RALEIGH REVIEW
MEL DESIGN DRAWN XXX
SCALE H: N/A F: N/A V: N/A
JOB No. 220127-01-001
DATE May 28, 2024
FILE No. 220127-D-CP-001
SHEET C6.1

NOTES:

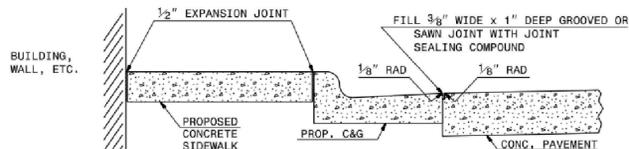
CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 4" THICK UNLESS OTHERWISE DENOTED ON PLANS.

PLACE A GROOVE JOINT 1" DEEP WITH 1/8" RADII IN THE CONCRETE SIDEWALK AT 5' INTERVALS, ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

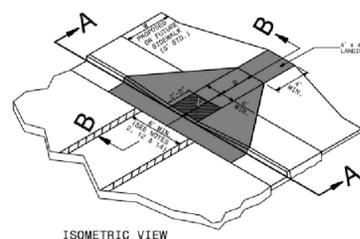
SEE STD. DWG. 848.05 FOR CURB RAMP LOCATION REQUIREMENTS AND CONSTRUCTION GUIDELINES.



TRANSVERSE EXPANSION JOINT IN SIDEWALK

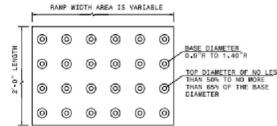


DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK



ISOMETRIC VIEW

NOTES:
1. DETECTABLE WARNING DOMES WILL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLARE AS SHOWN ON THE DETAILS.
2. DETECTABLE WARNING DOMES WILL CONTRAST VISIBLY WITH ADJACENT SURFACE, EITHER LIGHT-OR-DARK, OR DARK-OR-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



DETECTABLE WARNING DOMES

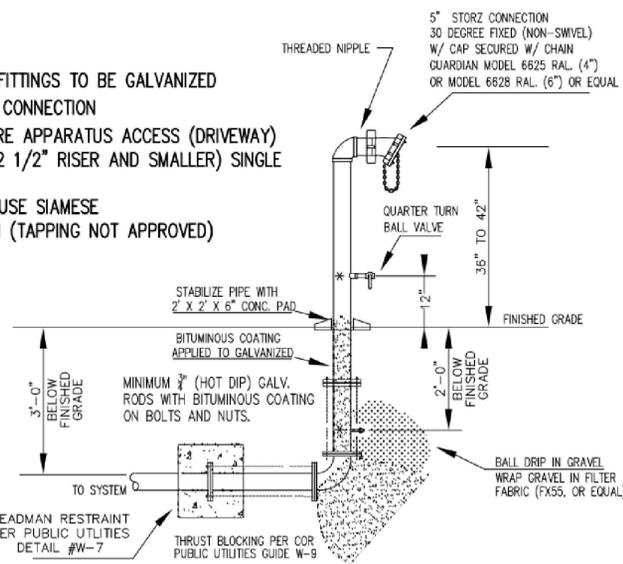
R	A	MINIMUM	S	MINIMUM
6"	10'-0"	5'-6"	8'-6"	5'-0"
8"	10'-0"	6'-6"	10'-0"	6'-0"
10"	10'-0"	7'-6"	12'-0"	7'-0"
12"	10'-0"	8'-6"	14'-0"	8'-0"
14"	10'-0"	9'-6"	16'-0"	9'-0"
16"	10'-0"	10'-6"	18'-0"	10'-0"
18"	10'-0"	11'-6"	20'-0"	11'-0"
20"	10'-0"	12'-6"	22'-0"	12'-0"
22"	10'-0"	13'-6"	24'-0"	13'-0"
24"	10'-0"	14'-6"	26'-0"	14'-0"
26"	10'-0"	15'-6"	28'-0"	15'-0"
28"	10'-0"	16'-6"	30'-0"	16'-0"
30"	10'-0"	17'-6"	32'-0"	17'-0"

R = 1/4" (1/8")
A = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 1/2" SLOPE
S = BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES
MINIMUM BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPES 0.5%

PLAN VIEW

TYPICAL NOTES:

- 1)-ALL EXPOSED PIPING AND FITTINGS TO BE GALVANIZED WITH EXCEPTION OF STORZ CONNECTION
- 2)-40' MAX. FROM FDC TO FIRE APPARATUS ACCESS (DRIVEWAY)
- 3)-FOR NFPA 13R SYSTEMS (2 1/2" RISER AND SMALLER) SINGLE FDC
- 4)-FOR HIGH RISE BUILDINGS USE SIAMESE
- 5)-AN APPROVED CONNECTION (TAPPING NOT APPROVED)



CITY OF RALEIGH FIRE DEPARTMENT
FIRE PROTECTION DIVISION
310 WEST MARTIN ST. RALEIGH, NC 27602

DESCRIPTION: YARD FDC DETAIL REQUIREMENTS

REVISIONS: 5-1-2017

DATE: 5/1/06
DRAWING NO. FP-15

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

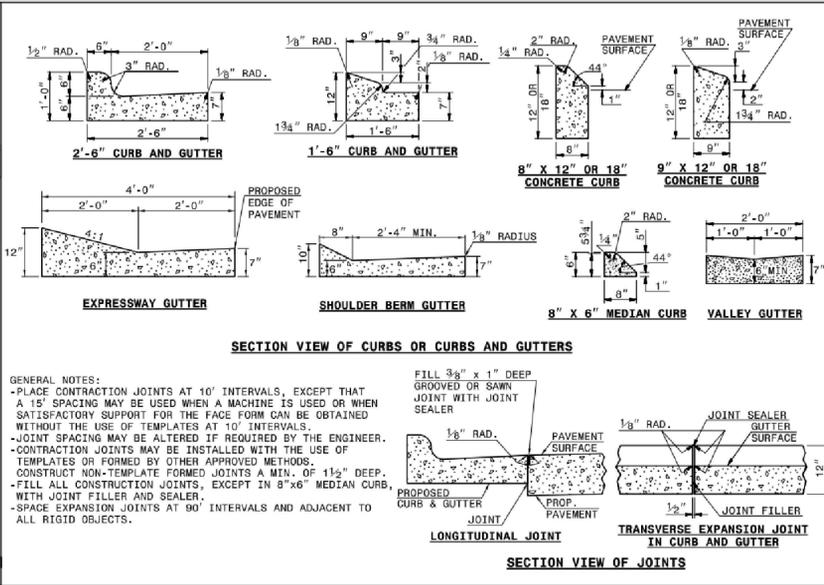
ROADWAY STANDARD DRAWING FOR
CONCRETE SIDEWALK
SHEET 1 OF 1
848.01

NOTES:

1. CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TYPE AS SHOWN IN THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.
2. LOCATE CURB RAMP AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLANS. WHEN FIELD ADJUSTMENTS REQUIRE MOVING CURB RAMP OR MARKINGS AS SHOWN, CONTACT THE SIGNING AND DELINEATION UNIT OR LOCATE AS DIRECTED BY THE ENGINEER.
3. COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
4. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
5. REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
6. TERMINATE PARKING A MINIMUM OF 20' BACK OF A PEDESTRIAN CROSSWALK.
7. CONSTRUCT CURB RAMP A MINIMUM OF 4' WIDE.
8. CONSTRUCT THE RUNNING SLOPE OF THE RAMP 0.33% MAXIMUM.
9. ALLOWABLE CROSS SLOPE ON SIDEWALKS AND CURB RAMP WILL BE 2% MAXIMUM.
10. CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
11. CONSTRUCT THE COUNTER SLOPE OF THE STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
12. CONSTRUCT LANDINGS FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT LANDINGS FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
13. TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGH THE ISLAND.
14. SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'x5' LANDING AT THE TOP OF A RAMP, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
15. CURB RAMP WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
16. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01
17. PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
18. CURB RAMP THROUGH MEDIAN ISLANDS, SINGLE RAMP AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR THE DETAILS OR FOR A SPECIAL DESIGN.

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

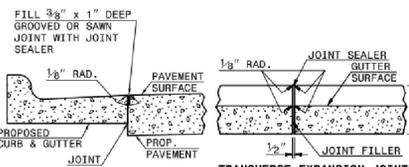
ROADWAY STANDARD DRAWING FOR
CURB RAMP
AND GUTTER
SHEET 1 OF 3
848.05



SECTION VIEW OF CURBS OR CURBS AND GUTTERS

SECTION VIEW OF JOINTS

GENERAL NOTES:
-PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
-JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
-CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.
-CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1 1/2" DEEP.
-FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
-SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



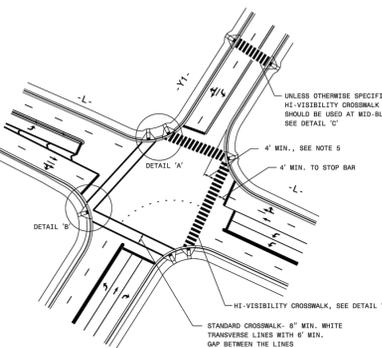
LONGITUDINAL JOINT

TRANSVERSE EXPANSION JOINT IN CURB AND GUTTER

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

ROADWAY STANDARD DRAWING FOR
CONCRETE CURB, GUTTER
AND CURB & GUTTER
SHEET 1 OF 3
846.01

CROSSWALK PLACEMENT GUIDANCE

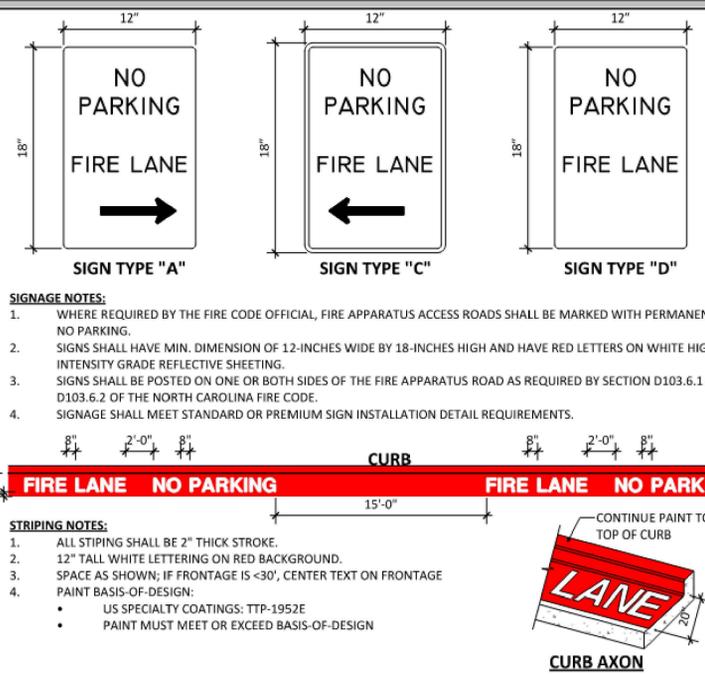


GENERAL NOTES:
1. USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
2. THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. LOCATE CROSSWALK MARKINGS AS SHOWN ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.
3. THE STANDARD CROSSWALK IS TWO WHITE 8" MIN. TRANSVERSE LINES WITH A 6" MIN. GAP BETWEEN THE LINES. THE HI-VISIBILITY CROSSWALK IS WHITE 24" MAX. WIDE LONGITUDINAL LINES WITH 24" MIN. GAPS BETWEEN LINES. SEE DETAIL 'C'. HI-VISIBILITY CROSSWALK SHOULD BE A MINIMUM OF 6' WIDE. CURB RAMP SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARES.
4. STOP BARS SHOULD BE PLACED A 4' MIN. IN ADVANCE OF NEAREST CROSSWALK LINE.

5. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN.
6. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' X 4' MIN. SHALL BE PROVIDED WITHIN THE MARKINGS.
7. SINGLE DIAGONAL CURB RAMP WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2' MIN. LONG LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
8. CURB RAMP SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS. CURB RAMP THROUGH MEDIAN ISLANDS, SINGLE RAMP AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR DETAILS OR A SPECIAL DESIGN.

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

ROADWAY STANDARD DRAWING FOR
FIRE LANE MARKINGS
TOWN OF ZEBULON
SHEET 1 OF 1
29



SIGNAGE NOTES:

1. WHERE REQUIRED BY THE FIRE CODE OFFICIAL, FIRE APPARATUS ACCESS ROADS SHALL BE MARKED WITH PERMANENT NO PARKING.
2. SIGNS SHALL HAVE MIN. DIMENSION OF 12-INCHES WIDE BY 18-INCHES HIGH AND HAVE RED LETTERS ON WHITE HIGH INTENSITY GRADE REFLECTIVE SHEETING.
3. SIGNS SHALL BE POSTED ON ONE OR BOTH SIDES OF THE FIRE APPARATUS ROAD AS REQUIRED BY SECTION D103.6.1 OR D103.6.2 OF THE NORTH CAROLINA FIRE CODE.
4. SIGNAGE SHALL MEET STANDARD OR PREMIUM SIGN INSTALLATION DETAIL REQUIREMENTS.

STRIPING NOTES:

1. ALL STRIPING SHALL BE 2" THICK STROKE.
2. 12" TALL WHITE LETTERING ON RED BACKGROUND.
3. SPACE AS SHOWN; IF FRONTAGE IS <30', CENTER TEXT ON FRONTAGE
4. PAINT BASIS-OF-DESIGN:
 - US SPECIALTY COATINGS: TTP-1952E
 - PAINT MUST MEET OR EXCEED BASIS-OF-DESIGN



CURB AXON

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

ROADWAY STANDARD DRAWING FOR
CURB RAMP
AND GUTTER
SHEET 2 OF 3
848.05

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

ROADWAY STANDARD DRAWING FOR
PAVEMENT MARKINGS
PEDESTRIAN CROSSWALKS
SHEET 1 OF 1
1205.07



Bowman North Carolina Ltd.
4006 BARRHETT DR
Suite 104
RALEIGH, NC 27609
Phone: (919)555-6570
bowman.com



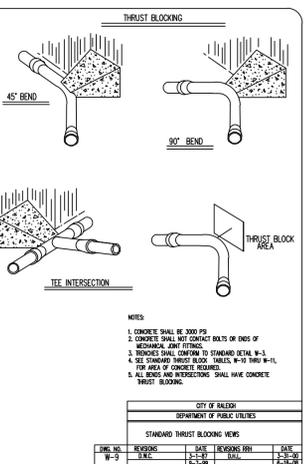
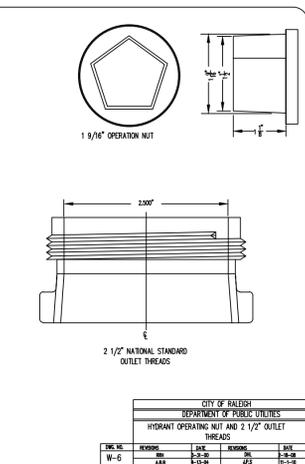
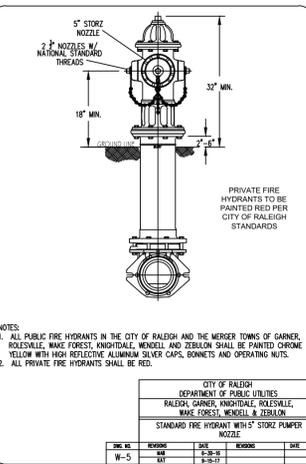
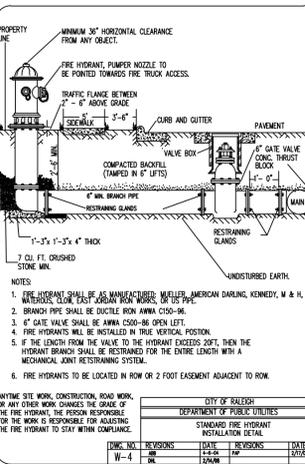
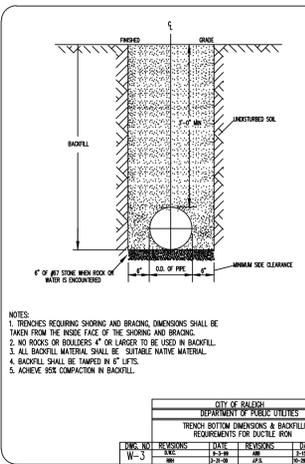
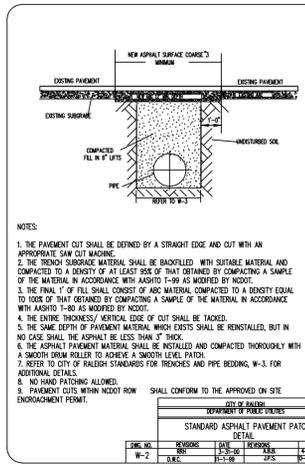
TRACTOR SUPPLY COMPANY

CONSTRUCTION DETAILS
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS	DATE	BY	CHKD
11/30/23 SEWER CROSSING AT RAILROAD			
1/10/24 PER WAKE CO REVIEW			
3/26/24 PER NCDOT REVIEW			
5/28/24 PER CITY OF RALEIGH REVIEW			
MEL DESIGN	MEL DRAWN	XXX	CHKD
SCALE	H: NA	V: NA	
JOB No.	220127-01-001		
DATE	May 28, 2024		
FILE No.	220127-D-CP-001		

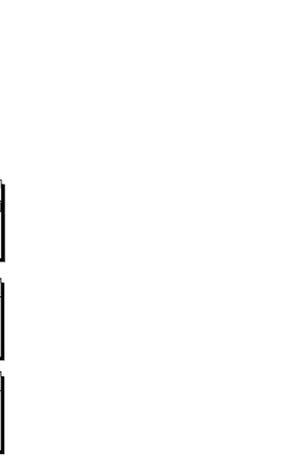
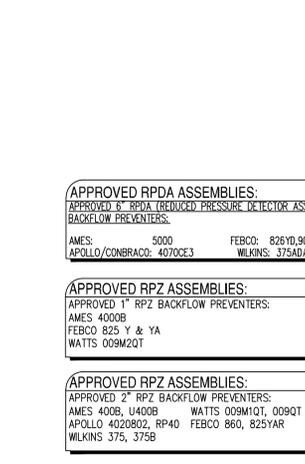
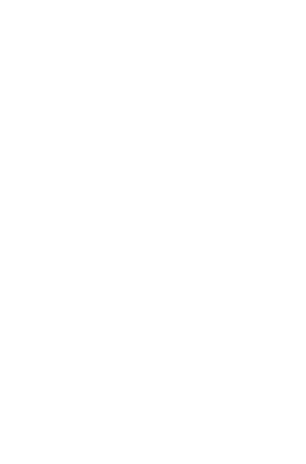
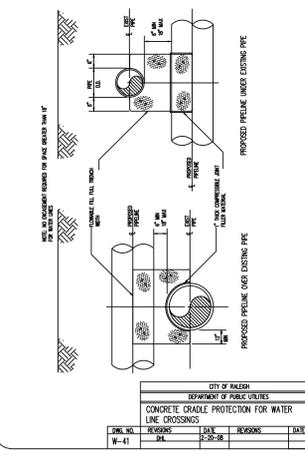
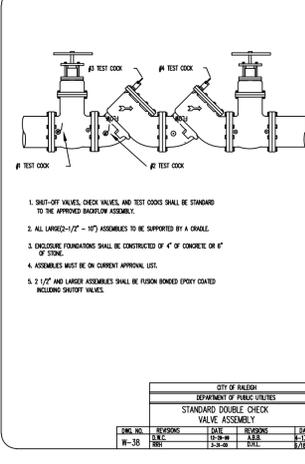
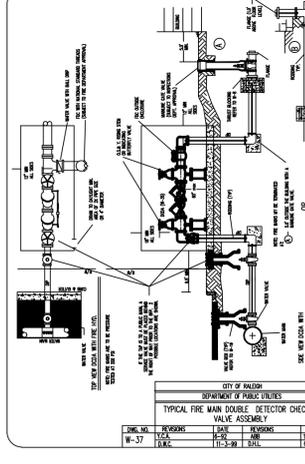
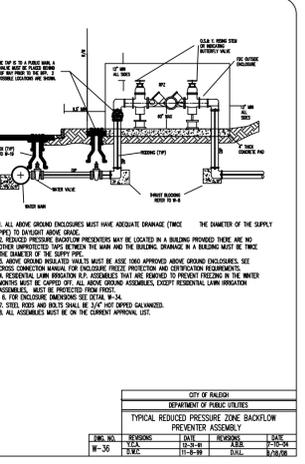
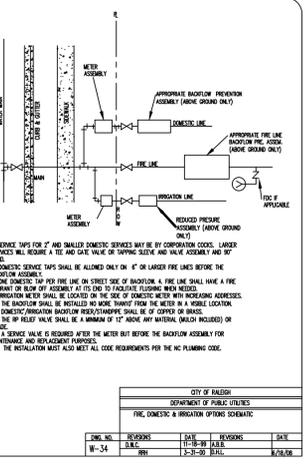
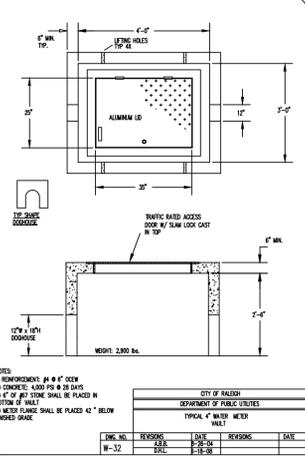
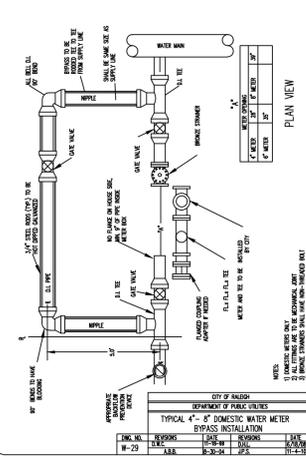
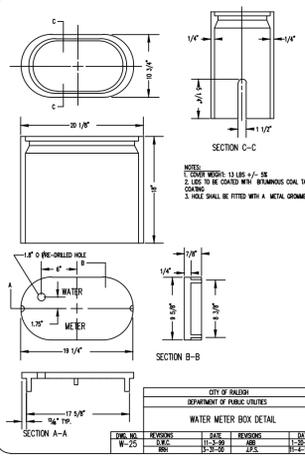
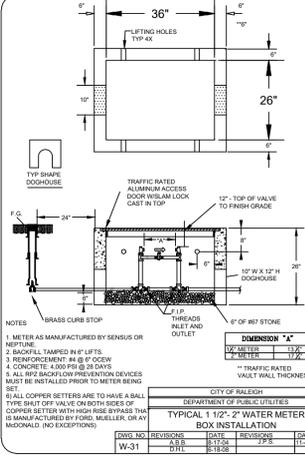
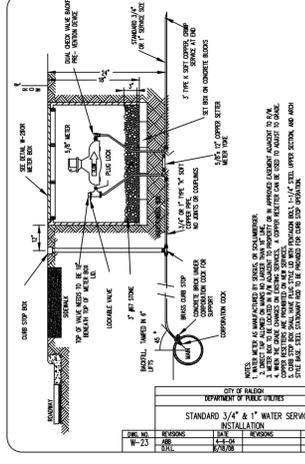
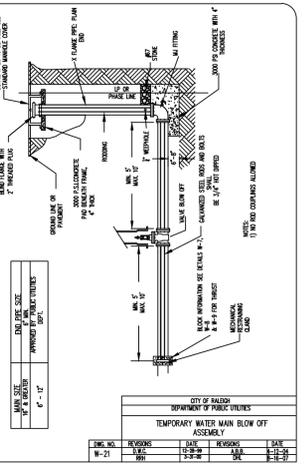
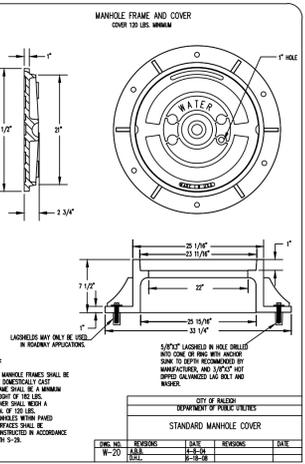
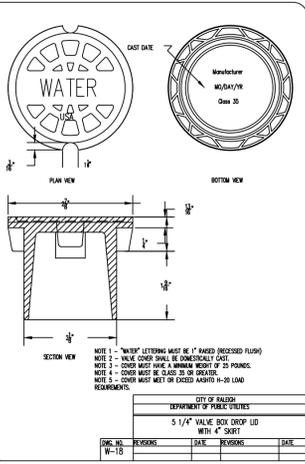
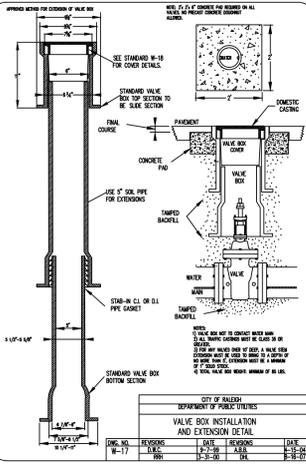
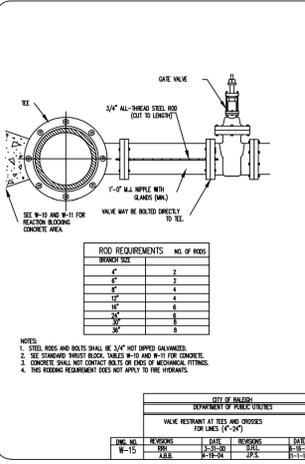
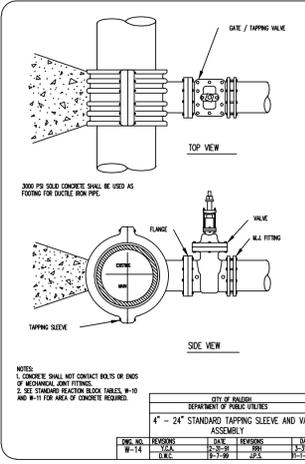
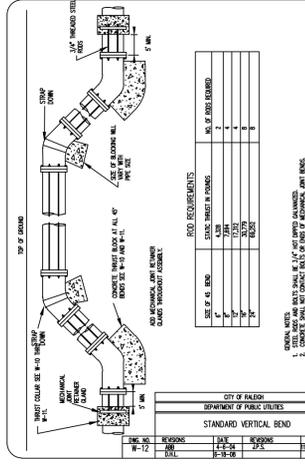
SHEET C6.3



REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS BASED ON TEST PRESSURE OF 200 PSI									
PIPE SIZE	PIPE WEIGHT	90° BEND	45° BEND	TEE	REDUCTION	FLANGE	WELDED	FLANGE	WELDED
12"	1.50	1	1	1	1	1	1	1	1
14"	2.00	1	1	1	1	1	1	1	1
16"	2.50	1	1	1	1	1	1	1	1
18"	3.00	1	1	1	1	1	1	1	1
20"	3.50	1	1	1	1	1	1	1	1
24"	4.50	1	1	1	1	1	1	1	1
30"	6.00	1	1	1	1	1	1	1	1
36"	7.50	1	1	1	1	1	1	1	1
42"	9.00	1	1	1	1	1	1	1	1
48"	10.50	1	1	1	1	1	1	1	1
54"	12.00	1	1	1	1	1	1	1	1
60"	13.50	1	1	1	1	1	1	1	1

UTILITY NOTES:

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH CITY OF RALEIGH STANDARD DRAWINGS AND SPECIFICATIONS.
2. IN THE EVENT THAT A UTILITY ITEM IS NOT COVERED BY THESE PLANS, THEN THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT HANDBOOK COVERING SUCH ITEMS SHALL APPLY.
3. WATER SERVICES 3/4-INCH TO 2-INCH SHALL BE TYPE "M" SOFT COPPER ALL OTHER WATER MAINS, SERVICES, AND FITTINGS SHALL BE EMENT-LINED DUCTILE IRON PIPE PER CITY OF RALEIGH STANDARDS AND SPECIFICATIONS.
4. GRAVITY SANITARY SEWER MAINS SHALL BE DUCTILE IRON PIPE OR PVC PIPE, AS SPECIFIED IN THESE PLANS AND CITY OF RALEIGH STANDARDS AND SPECIFICATIONS. SANITARY SEWER SERVICES SHALL BE SCHEDULE 40 PVC.
5. CLEAN-OUT SYMBOLS SHOWN ON THESE PLANS REPRESENT LOCATION OF SURFACE ACCESS POINT. CONTRACTOR SHALL LOCATE WYE APPROPRIATELY BASED ON PIPE DEPTH.
6. ALL MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS. MANHOLE DIAMETER SHALL VARY DEPENDING ON PIPE DIAMETER AND DEPTH, PER CITY OF RALEIGH STANDARDS.
7. LOCATIONS AND SIZES OF EXISTING UTILITIES SHOWN ON THESE PLANS WERE TAKEN FROM MAPS PREPARED BY OTHERS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE TO DO SO.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RECORD DRAWINGS TO THE ENGINEER SHOWING THE LOCATION OF WATER AND SEWER SERVICES AND ANY DEVIATIONS FROM PLANS MADE DURING CONSTRUCTION. THE ENGINEER WILL PROVIDE THESE RECORD DRAWINGS TO THE OWNER.
9. WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" BELOW PROPOSED GRADE.
10. ALL UNDERGROUND UTILITIES AND FIRE HYDRANTS MUST BE FUNCTIONALLY APPROVED PRIOR TO STRUCTURAL CONSTRUCTION.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
12. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
13. ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
14. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL ASH REGULATIONS. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
15. GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
16. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
17. CONTRACTOR SHALL NOTIFY THE WATER AUTHORITY INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
18. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 24" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
19. PRESSURE REDUCING VALVES WILL BE REQUIRED ON THE DOMESTIC WATER MAINS IF THE STATIC PRESSURE AT THE BUILDING EXCEEDS 80PSI.
20. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATERLINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 24" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
21. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
22. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF RALEIGH WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
23. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES OR UTILITIES BY OTHERS AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
24. ALL CONSTRUCTION METHODS & MATERIALS SHALL CONFORM WITH THE CURRENT SPECIFICATIONS AND STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA), THE AWWA CONSTRUCTION STANDARDS ARE SET FORTH IN THEIR CONSTRUCTION SPECIFICATIONS AND STANDARD FOR WATER AND SANITARY SEWER FACILITIES. A COPY OF WHICH MUST BE PURCHASED FROM THE AWWA BY THE CONTRACTOR AND KEPT AT THE JOB SITE AT ALL TIMES. REFERENCE TO NCDOT SHALL MEAN THE CURRENT STANDARDS AND/OR SPECIFICATIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.
25. THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE BELOW PLAN GRADE ANY MATERIALS WHICH ARE UNSUITABLE FOR FOUNDATIONS, SUB GRADES, PIPE TRENCH BOTTOMS OR OTHER PURPOSES AND BACKFILL THESE AREAS WITH AN APPROVED MATERIAL. THE EXTENT OF UNDERCUTTING AND BACKFILLING SHALL BE DETERMINED BY THE CITY OF RALEIGH AS TO AREAS WITHIN STREET RIGHT-OF-WAY AND THE ENGINEER IN OTHER AREAS. COMPENSATION SHALL BE AS SET FORTH IN THE CONTRACT DOCUMENTS.
26. A MINIMUM VERTICAL SEPARATION OF 24" SHALL BE MAINTAINED BETWEEN SANITARY SEWER & WATER LINES AND A FULL GULCH OF WATER LINE PIPE SHALL BE COVERED WHERE WATER LINE CROSSES OVER SANITARY SEWER. WHERE CLEARANCE IS LESS THAN 18" BUT GREATER THAN 12", SANITARY SEWER SHALL BE PRESSURE TESTED DUCTILE IRON PIPE 10' FROM WATER-MAIN. WHEN WATER LINE CROSSES UNDER SANITARY SEWER, 18" MINIMUM CLEARANCE MUST BE MAINTAINED, AND SANITARY SEWER SHALL BE PRESSURE TESTED DUCTILE IRON PIPE 10' FROM WATER-MAIN.
27. ALL WATERLINES SHALL HAVE BURIED WITH THE PIPE # 12 COATED ELECTRIC WIRE AND BROUGHT UP INTO THE METER BOXES.
28. THE CONTRACTOR SHALL PROVIDE A SURVEY AS-BUILT RECORD DRAWING OF THE SANITARY SEWER SYSTEM AND THE WATER DISTRIBUTION SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF RALEIGH UTILITY DEPARTMENT.



APPROVED RPDA ASSEMBLIES:
 APPROVED BY: RPDIA (REDUCED PRESSURE DETECTOR ASSEMBLY BACKFLOW PREVENTERS).
 AMES: 5000 FEBCO: 8026VJ, 909RPPDA APOLLO/CONBRACO: 4070C3 WILKINS: 375ADA

APPROVED RPZ ASSEMBLIES:
 APPROVED 1" RPZ BACKFLOW PREVENTERS:
 AMES 4000B FEBCO 825 Y & YA WATTS 009M20T

APPROVED RPZ ASSEMBLIES:
 APPROVED 2" RPZ BACKFLOW PREVENTERS:
 AMES 400B, U400B WATTS 009M01T, 009QT APOLLO 4020802, RP40 FEBCO 860, 825YAR WILKINS 375, 375B

PUBLIC Sewer Collection/Extension System
 The City of Raleigh consents to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
 City of Raleigh Public Utilities Department Permit # S-8172
 Authorization to Construct: _____ See digital signature

ATTENTION CONTRACTORS
 The Construction Contractor responsible for the extension of water, sewer, and/or gas, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least twenty four hours prior to beginning any of their construction.
 Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.
 Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

Bowman
 Bowman North Carolina Ltd.
 4006 BARRETT DR
 Suite 104
 RALEIGH, NC 27609
 Phone: (919) 555-6570
 bowman.com
 Bowman North Carolina Ltd.

TSC
 TRACTOR SUPPLY COMPANY

UTILITY DETAILS
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County

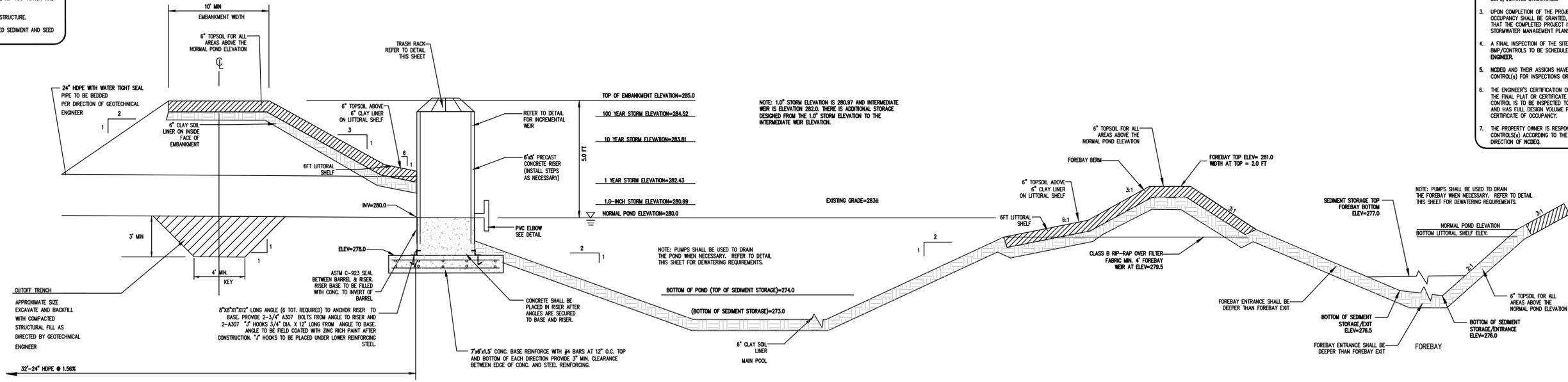
PLAN STATUS
 11/30/23 SEWER CROSSING AT RAILROAD
 1/20/24 PER WAKE CO REVIEW
 3/26/24 PER NCDOT REVIEW
 5/28/24 PER CITY OF RALEIGH REVIEW
 MEL DESIGN DRAWN XXX
 SCALE H: 1" = 30' V: 1" = 4' 0"
 JOB No. 220127-01-001
 DATE May 28, 2024
 FILE No. 220127-D-CP-001

SEAL
 NORTH CAROLINA
 STATE ENGINEER
 WATHEM E. DODD
 2448

SHEET C6.6A

CONSTRUCTION SEQUENCE FOR WET DETENTION POND:

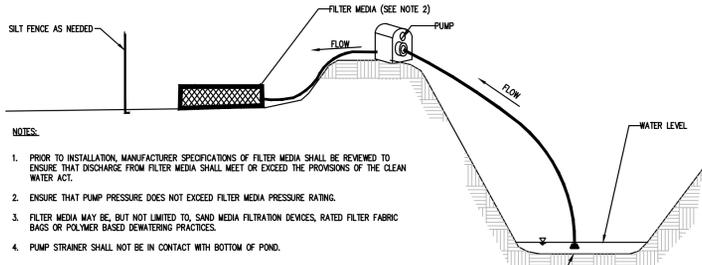
1. INSTALL EROSION CONTROLS.
2. CONSTRUCT DAM BASE AND AREAS BELOW THE NORMAL POOL. CONSTRUCTION TO BE PERFORMED UNDER THE INSPECTION OF THE GEOTECHNICAL ENGINEER. SEED UPON COMPLETION.
3. INSTALL OUTLET PIPE, RIP-RAP APRON AND STONE FILTER RING.
4. CONSTRUCT OUTLET STRUCTURE.
5. REMOVE ACCUMULATED SEDIMENT AND SEED UPON COMPLETION.



- STORMWATER MANAGEMENT NOTES:**
1. THE DEVELOPER OR HIS AGENT SHALL CONTACT THE DESIGN ENGINEER WHEN THE BEST MANAGEMENT PRACTICES ARE CONSTRUCTED AND ABOUT TO BECOME OPERATIONAL, SO A FINAL INSPECTION CAN BE PERFORMED TO DETERMINE COMPLIANCE WITH THE APPROVED PLAN CAN BE PERFORMED.
 2. ANNUAL MAINTENANCE INSPECTION AND REPORT REQUIRED - THE OWNER OF A PERMITTED STRUCTURAL STORMWATER BMP/CONTROL SHALL ANNUALLY SUBMIT A MAINTENANCE AND INSPECTION REPORT FOR EACH BMP TO THE STORMWATER ADMINISTRATOR. ANNUAL INSPECTIONS SHALL BEGIN WITHIN ONE YEAR OF THE RECORDATION OF ANY DEED(S) SHOWING STORMWATER BMP/CONTROL STRUCTURES.
 3. UPON COMPLETION OF THE PROJECT, AND BEFORE A CERTIFICATE OF OCCUPANCY SHALL BE GRANTED, THE ENGINEER OF RECORD SHALL CERTIFY THAT THE COMPLETED PROJECT IS IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLANS AND DESIGNS.
 4. A FINAL INSPECTION OF THE SITE AND STORMWATER MANAGEMENT BMP/CONTROLS TO BE SCHEDULED WITH AND COMPLETED BY THE PROJECT ENGINEER.
 5. NOISED AND THEIR ASSIGNS HAVE RIGHT TO ACCESS THE STORMWATER CONTROL(S) FOR INSPECTIONS OR MAINTENANCE AS NECESSARY.
 6. THE ENGINEER'S CERTIFICATION OF COMPLETION WILL BE REQUIRED PRIOR TO THE FINAL PLAT OR CERTIFICATE OF OCCUPANCY. THE STORMWATER CONTROL IS TO BE INSPECTED TO ENSURE IT IS FUNCTIONING AS DESIGNED AND HAS FULL DESIGN VOLUME PRIOR TO ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY.
 7. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING THE STORMWATER CONTROL(S) ACCORDING TO THE APPROVED MAINTENANCE PLAN AND DIRECTION OF NCEDEQ.

MAINTENANCE:

- Important operation and maintenance procedures:**
1. Immediately after the wet pond is established, the plants on the vegetated shelf and perimeter of the basin will be watered twice weekly if needed, until the plants become established (commonly six weeks).
 2. No portion of the wet pond will be fertilized after the first initial fertilization that is required to establish the plants on the vegetated shelf.
 3. Stable groundcover will be maintained in the drainage area to reduce the sediment load to the wet pond.
 4. If the pond must be drained for an emergency or to perform maintenance, the flushing of sediment through the emergency drain will be minimized as much as possible.
 5. Once a year, a dam safety expert should inspect the embankment.
 6. The measuring device used to determine the sediment elevation shall be such that it will give an accurate depth reading and not readily penetrate to accumulated sediments.
- After the wet pond is established, it should be inspected quarterly and within 24 hours after every storm event greater than 1.0 inches (or 1.5 inches if in a Coastal County). Records of operation and maintenance will be kept in a known set location and shall be available upon request.



- NOTES:**
1. PRIOR TO INSTALLATION, MANUFACTURER SPECIFICATIONS OF FILTER MEDIA SHALL BE REVIEWED TO ENSURE THAT DISCHARGE FROM FILTER MEDIA SHALL MEET OR EXCEED THE PROVISIONS OF THE CLEAN WATER ACT.
 2. ENSURE THAT PUMP PRESSURE DOES NOT EXCEED FILTER MEDIA PRESSURE RATING.
 3. FILTER MEDIA MAY BE, BUT NOT LIMITED TO, SAND MEDIA FILTRATION DEVICES, RATED FILTER FABRIC BAGS OR POLYMER BASED DEWATERING PRACTICES.
 4. PUMP STRAINER SHALL NOT BE IN CONTACT WITH BOTTOM OF POND.

STAGE/STORAGE TABLE

STAGE (FT)	ELEVATION (FT)	CONTOUR AREA (SQ FT)	INCREMENTAL STORAGE (CF)	TOTAL STORAGE (CF)
0.0	280.0	8385	0	0
0.5	280.5	9835	4505	4505
1.0	281.0	10365	5008	9513
1.7	281.7	11535	7678	17188 (WQV)
2.0	282.0	11940	3521	20709
3.0	283.0	13325	12833	33542
4.0	284.0	14765	14045	47587
5.0	285.0	16265	15515	63102

STORMWATER MANAGEMENT DESIGN WET DETENTION POND:

RIVER BASIN: NEUSE
 RECEIVING STREAM: LITTLE CREEK (WEST SIDE)
 STREAM INDEX: 27-86-2-4
 STREAM CLASS: C-NSW
 HUC: 03020203
 PROJECT COORDINATES: 35.828782N, -78.293752W

POUND DESIGN SUMMARY

DRAINAGE AREA TO POND:	5.74 ACRES
SITE IMPERVIOUS AREA TO POND:	2.53 ACRES
OFF-SITE DESIGN IMPERVIOUS AREA TO POND:	2.08 ACRES
TOTAL DESIGN IMPERVIOUS AREA TO POND:	4.62 ACRES

	PRE-DEVELOPED TO POND	POST-DEVELOPED THROUGH POND	POST-DEVELOPED BYPASS	POST-DEVELOPED TOTAL
DRAINAGE AREA:	3.71 AC	5.57 AC	0.40 AC	9.68 AC
CURVE NUMBER:	83.0	94.9	83.0	83.0
TIME OF CONCENTRATION:	14.0 MIN	5 MIN	10 MIN	

	1.0' STORM EVENT:	1-YEAR STORM EVENT:	10-YEAR STORM EVENT:	100-YEAR STORM EVENT:
PRE-DEVELOPED TO POND	6.225 CFS	19.97 CFS	15.39 CFS	27.21 CFS
POST-DEVELOPED THROUGH POND	2.599 CFS	37.96 CFS	12.59 CFS	60.08 CFS
POST-DEVELOPED BYPASS	0.098 CFS	1.561 CFS	1.936 CFS	43.50 CFS
POST-DEVELOPED TOTAL	0.800 CFS	54.53 CFS	3.389 CFS	111.58 CFS

SEEDBED PREPARATION:

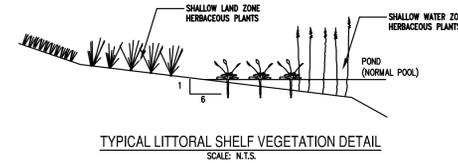
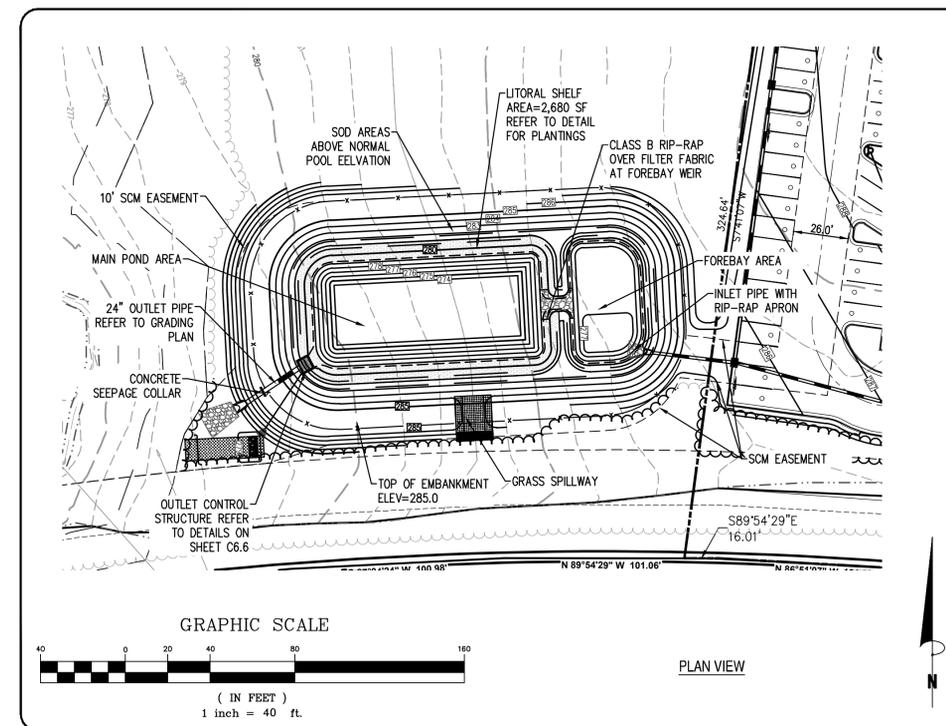
1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE SEEDING INSTRUCTIONS).
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRMLY, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RE-SEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT S&E ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

LANDSCAPING NOTES:

- ALL LANDSCAPING SHALL BE IN COMPLIANCE WITH THE NEEDED BMP REQUIREMENTS.
- LANDSCAPE CONTRACTOR SHALL PROVIDE A TWO-YEAR WARRANTY FOR BMP PLANTING SURVIVAL/REPLACEMENT. AT THE END OF THE FIRST YEAR AND AT THE END OF THE TWO-YEAR WARRANTY PERIOD, ALL PLANTS THAT DO NOT SURVIVE MUST BE REPLACED.
- ESTABLISHMENT PROCEDURES, SUCH AS CONTROL OF INVASIVE WEEDS, ANIMAL AND VANDAL DAMAGE, MULCHING, RE-STAKING, WATERING, AND GRESH OR TUBE PROTECTION REPLACEMENT, SHALL BE IMPLEMENTED TO THE EXTENT NEEDED TO ENSURE PLANT SURVIVAL. STAKING MUST BE REMOVED AFTER ESTABLISHMENT (APPROXIMATELY 12 MONTHS), TO PREVENT GIRDLING (STRANGLING) OF ALL WOODY PLANTS.
- SOD WITHIN BMP AND SURROUNDING AREAS TO BE BERBERIS OR CENTAURIA GRASS.
- GRASS OR MIDFLOWER SEED MUST BE APPLIED AT THE RATES SPECIFIED BY THE SUPPLIER. IF PLANT ESTABLISHMENT CANNOT BE ACHIEVED WITH SEEDING BY THE TIME OF SUBSTANTIAL COMPLETION OF THE STORMWATER FACILITY PORTION OF THE PROJECT, THEN THE CONTRACTOR SHALL PLANT THE AREA WITH MIDFLOWER SOD, PLUS, CONTAINER PLANTS, OR OTHER MEANS TO COMPLETE THE SPECIFIED PLANTING AND PROTECT AGAINST EROSION BEFORE WATER IS ALLOWED TO ENTER THE STORMWATER BMP FACILITY.
- ALL MATERIALS SHALL BE ACQUIRED FROM AN APPROVED NCEDEQ PLANT VENDOR. PLANT MATERIAL SHOULD BE PURCHASED FROM A LOCAL SOURCE TO ENSURE SURVIVABILITY. LOCAL VENDORS FOR THIS SITE INCLUDE:
- CULL DE NATIVE PLANT NURSERY 919-562-5566
 - CROWNING WILD NURSERY 919-559-5351
 - NC FOREST SERVICE 919-731-7988
 - PLANT DELIGHTS NURSERY 919-772-4794
 - TURNER NATIVE TREES 919-553-9927
- IMMEDIATELY AFTER THE WET DETENTION BASIN IS ESTABLISHED, THE PLANTS ON THE VEGETATED SHELF AND PERIMETER OF THE BASIN SHOULD BE WATERED TWICE WEEKLY IF NEEDED UNTIL THE PLANTS BECOME ESTABLISHED (COMMONLY SIX WEEKS).
- NO PORTION OF THE WET DETENTION POND SHOULD BE FERTILIZED AFTER THE FIRST INITIAL FERTILIZATION THAT IS REQUIRED TO ESTABLISH THE PLANTS ON THE VEGETATED SHELF.

LANDSCAPING NOTES:

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A HEALTHY STAND OF GRASS ON ALL SEEDED AREAS.
3. CONTRACTOR SHALL PROVIDE NATURAL TOPSOIL THAT IS FERTILE, FRAGILE, WITHOUT MIXTURE OF SUBSOIL MATERIALS, AND OBTAINED FROM A WELL-DRAINED, AVAILABLE SITE. IT SHALL NOT CONTAIN SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. TOPSOIL SHALL BE SCREENED AND FREE FROM CLAY, LUMPS, STONES, ROOTS, PLANTS, OR SIMILAR SUBSTANCES 1" OR MORE IN DIAMETER, DEBRIS, OR OTHER OBJECTS WHICH MIGHT BE A HINDERANCE TO PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN AT LEAST 4-5% ORGANIC MATTER BY WEIGHT AND HAVE A PH RANGE OF 5.5 TO 7.0.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE WATERING AND MAINTENANCE OF ALL LANDSCAPED AREAS UNTIL THE LATER OF: (a) THIRTY (30) DAYS FOLLOWING THE PLANTING OF THE GRASS AND SHRUBS, OR (b) THE DATE THAT STORE OPENS FOR BUSINESS TO THE PUBLIC. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE SURVIVAL OF THE BMP PLANTING MATERIALS DURING THE TWO-YEAR WARRANTY PERIOD AND SHALL REPLACE ALL PLANTS THAT DO NOT SURVIVE AT THE END OF THE FIRST YEAR AND AT THE END OF THE SECOND YEAR OF THE WARRANTY PERIOD.
5. CONTRACTOR TO VERIFY QUANTITIES PRIOR TO COMMENCING WORK.
6. ANY DISTURBED AREAS NOT SCHEDULED FOR HARDSCAPE, PLANTINGS, OR MULCH SHALL BE SEEDED LAWN. REFER TO SITE PLAN FOR LOCATION OF AREAS TO BE SOODED.
7. NO PLANT SUBSTITUTIONS ARE PERMITTED WITHOUT WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
8. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 18" NEW TOPSOIL, OR TILL AND AMEND THE TOP 18" OF EXISTING SOIL TO MEET TOPSOIL PLANTING MIX STANDARDS FOR TREES.
9. ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLANT 15' FROM ALL UNDERGROUND UTILITIES (SEWER AND STORM DRAINAGE, GAS, WATER, PHONE, AND ELECTRICAL LINES).



TYPICAL LITTORAL SHELF PLANTING SCHEDULE

SCIENTIFIC NAME	COMMON NAME	PLANTING ZONE	QUANTITY	NURSERY CONTAINER TYPE	SPACING	PLANTING SEASON
<i>Juncus effusus</i>	Soft Rush	SHALLOW WATER	112	PEAT POT	6' O.C.	SPRING/SUMMER
<i>Iris virginica</i>	Blue Flag Iris	SHALLOW WATER	112	PEAT POT	6' O.C.	SPRING/SUMMER
<i>Scheuchzeria palustris</i>	Soft Stem Bulrush	SHALLOW WATER	112	PEAT POT	6' O.C.	SPRING/SUMMER
<i>Eupatorium maculatum</i>	Spotted Trumpetweed	SHALLOW WATER	112	PEAT POT	6' O.C.	SPRING/SUMMER
<i>Eupatorium purpureum</i>	Joe-Pye Weed	SHALLOW WATER	112	PEAT POT	6' O.C.	SPRING/SUMMER
<i>Rhynchospora colorata</i>	Starburst Whitecap	SHALLOW WATER	112	PEAT POT	6' O.C.	SPRING/SUMMER

STORMWATER MANAGEMENT SYSTEM DETAILS

1 NOT TO SCALE



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 bowman.com
 Bowman North Carolina Ltd.



TRACTOR SUPPLY COMPANY

STORMWATER MANAGEMENT DETAILS
 Tractor Supply
 Old US Highway 264
 Zebulon, NC Wake County



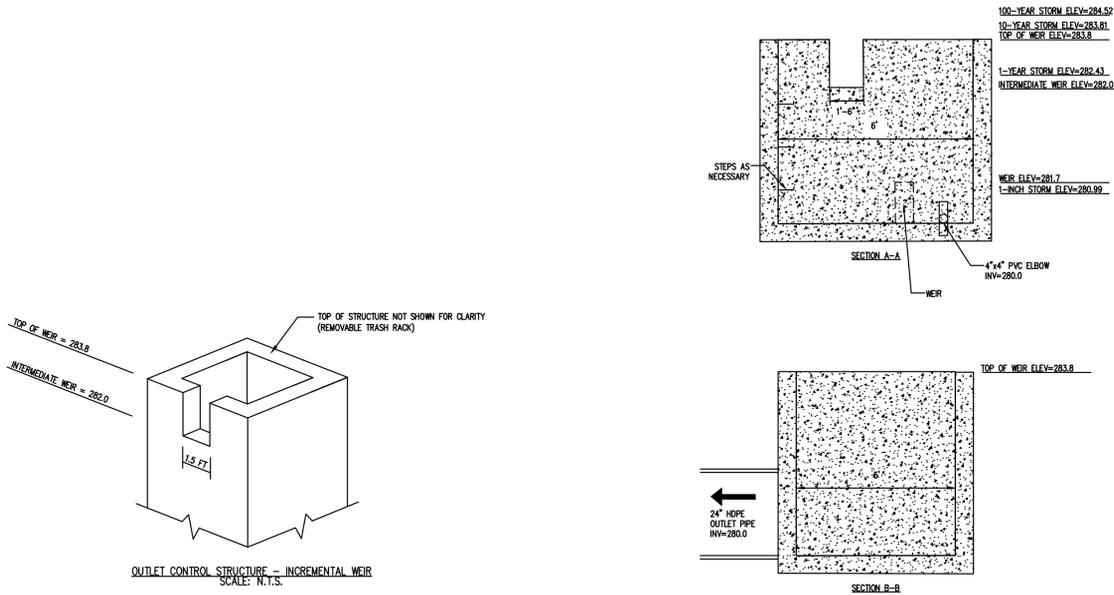
PLAN STATUS

11/30/23	SEWER CROSSING AT RAILROAD
1/10/24	PER WAKE CO REVIEW
3/26/24	PER CITY OF RALEIGH REVIEW
5/28/24	PER CITY OF RALEIGH REVIEW

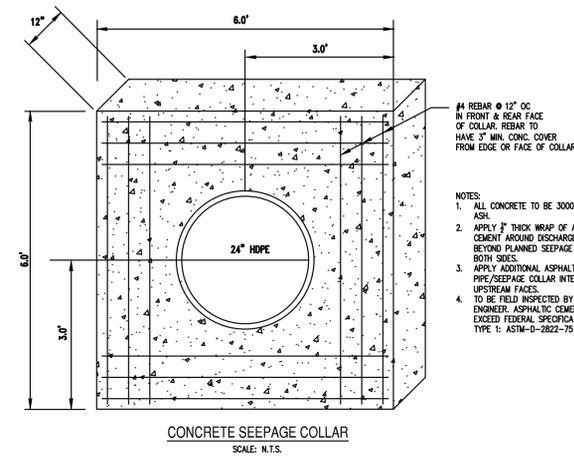
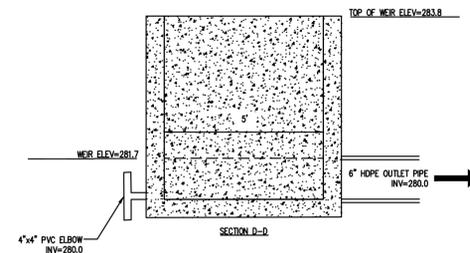
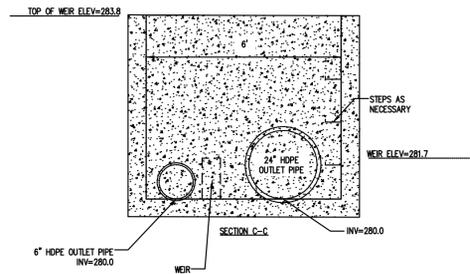
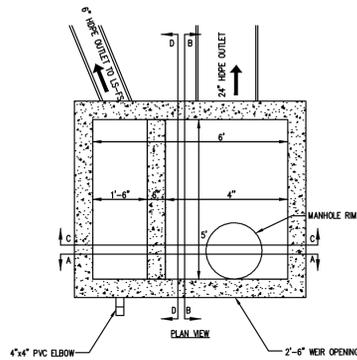
MEL DESIGN DRAWN MEL CHKD
 SCALE H: 1" = 100' V: 1" = 100'

JOB No. 220127-01-001
 DATE May 28, 2024
 FILE No. 220127-D-CP-001

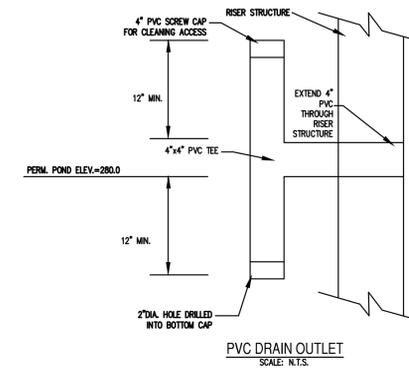
SHEET C6.7



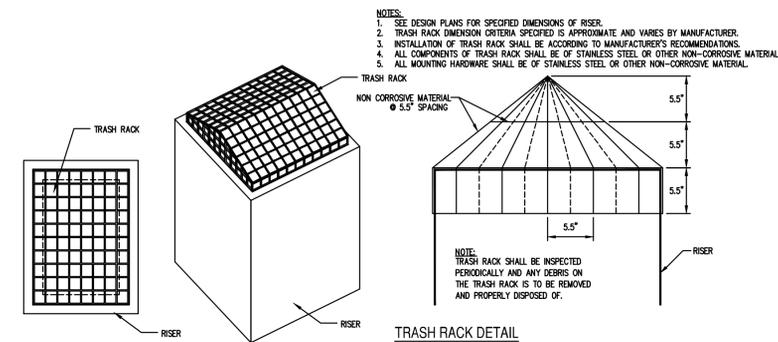
OUTLET CONTROL STRUCTURE - INCREMENTAL WEIR
SCALE: N.T.S.



CONCRETE SEEPAGE COLLAR
SCALE: N.T.S.

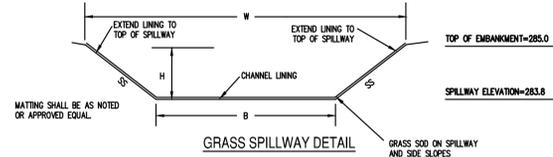


PVC DRAIN OUTLET
SCALE: N.T.S.

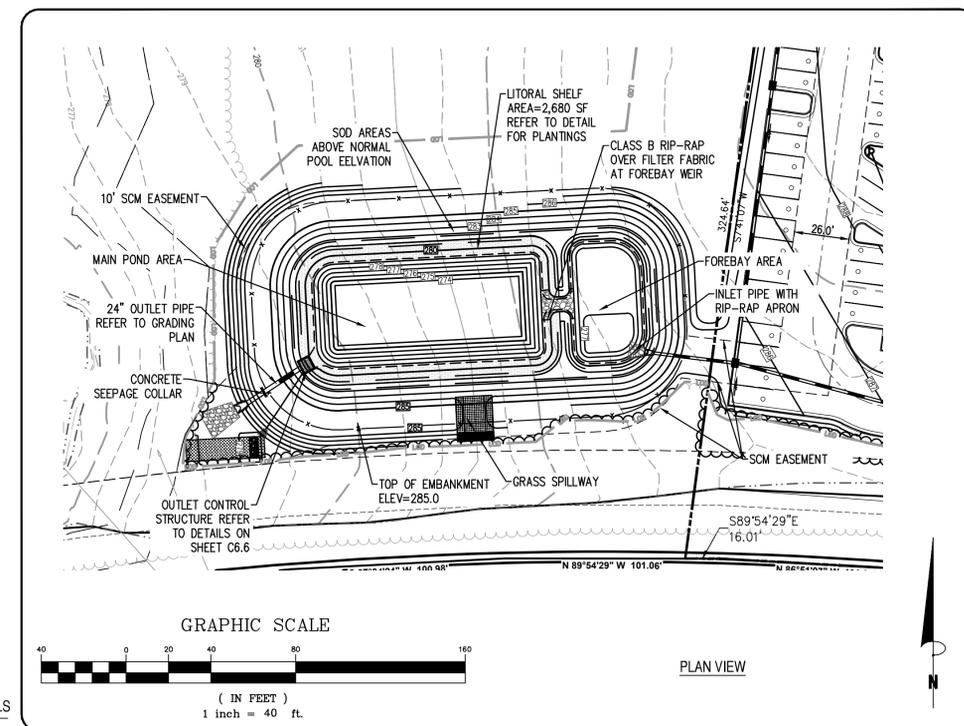


TRASH RACK DETAIL

SPILLWAY	FLOW Q(100)	LONG SLOPE(%)	H	B	W	SS	CHANNEL LINING	TOP OF EMBANKMENT ELEVATION	SPILLWAY ELEVATION
GRASS SPILLWAY	43.50 CFS	50.0%	1.2'	10.0'	17.2'	3:1	STRAW WITH NET NAG SHOREMAX W/ P550	285.0	283.8



GRASS SPILLWAY DETAIL



GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

PLAN VIEW

Bowman

Bowman North Carolina Ltd.
4006 BARRIETT DR
Suite 104
RALEIGH, NC 27609
Phone: (919)553-6570
bowman.com
Bowman North Carolina Ltd.



STORMWATER MANAGEMENT DETAILS

Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
5/28/24	PER CITY OF RALEIGH REVIEW	
MEL	MEL	XXX
DESIGN	DRAWN	CHKD
SCALE	H: 1" = XXX'	V: 1" = XXX'
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SHEET C6.8

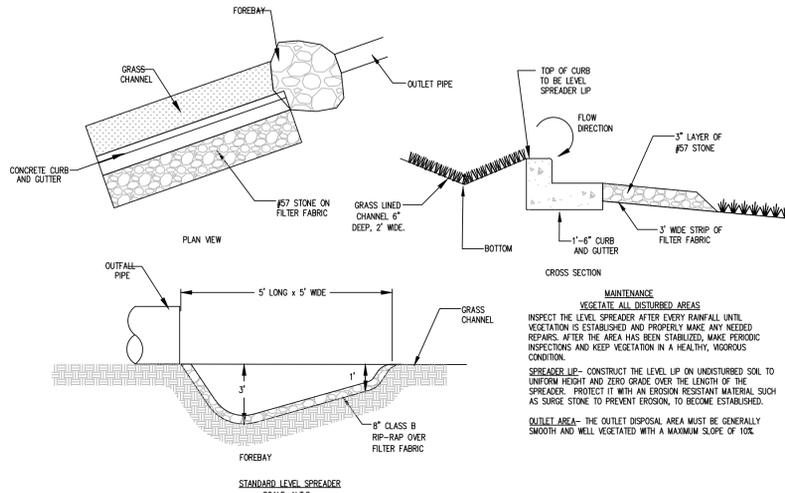
SCM element:	Potential problems:	How to remediate the problem:
The entire wetland	Trash/debris is present.	Remove the trash/debris.
The perimeter of wetland	Areas of bare soil and/or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, and then plant a ground cover and water until it is established. Provide lime and a one-time fertilizer application.
Inlet device	The inlet pipe is clogged (if applicable).	Unclog the pipe. Dispose of the sediment in a location where it will not cause impacts to streams or the SCM.
	The inlet pipe is cracked or otherwise damaged (if applicable).	Repair or replace the pipe.
Forebay	Erosion is occurring in the swale (if applicable).	Regrade the swale if necessary and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.
	Sediment has accumulated in the forebay to a depth of less than 15" or that inhibits the forebay from functioning well.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.
	Erosion has occurred.	Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems.
Deep pool, shallow water and shallow land areas	Weeds are present.	Remove the weeds, preferably by hand. If a pesticide is used, wipe it on the plants rather than spraying.
	Algal growth covers over 30% of the deep pool and shallow water areas.	Consult a professional to remove and control the algal growth.
	Cattails, phragmites or other invasive plants cover 30% of the deep pool and shallow water areas.	Remove the invasive plants by hand or by wiping them with pesticide (do not spray) - consult a professional.
	The temporary inundation zone remains flooded more than 5 days after a storm event.	Unclog the outlet device immediately.
Embankment	Plants are dead, diseased or dying.	Determine the source of the problem: soils, hydrology, disease, etc. Remedy the problem and replace plants. Provide a one-time fertilizer application to establish the ground cover if necessary.
	Sediment has accumulated and reduced the depth to 75% of the original design depth of the deep pools.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.
	A tree has started to grow on the embankment.	If tree is <6" in diameter, remove the tree. If the tree is >6" in diameter, consult a dam safety specialist to remove the tree.
Outlet Structure	An annual inspection by an appropriate professional shows that the embankment needs repair.	Make all needed repairs.
	Evidence of muskrat or beaver activity is present.	Consult a professional to remove muskrats or beavers and repair any holes or erosion.
Receiving water	Sediment has accumulated and reduced the depth to 75% of the original design depth.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.
Outlet Structure	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
	The outlet device is damaged.	Repair or replace the outlet device.
Receiving water	Erosion or other signs of damage have occurred at the outlet.	Repair the damage and improve the flow dissipation structure.
	Discharges from the wetland are causing erosion or sedimentation in the receiving water.	Contact the local NCDQ Regional Office.

MAINTENANCE:

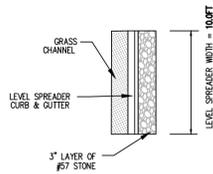
- Important operation and maintenance procedures:
- Immediately after the FS is established, grass will be watered twice weekly if needed until the plants become established (commonly six weeks).
 - Stable groundcover will be maintained in the drainage area to reduce the sediment to the LS-FS.
 - Every two weeks during the growing season, the FS will be mowed. Turf grass should not be cut shorter than 4-6 inches and may be allowed to grow as tall as 12 inches depending on aesthetic requirements (NPC, 1993).
 - Once a year, the soil will be aerated if necessary and the FS will be reseeded to maintain a dense growth of vegetation.
 - Once a year, soil pH will be tested and lime will be added if necessary.

For the first two years after the LS-FS is established, it will be inspected quarterly and within 24 hours after every storm event greater than 1.0 inch (or 1.5 inches if in a Coastal County). After two years of successful performance, the LS-FS will be inspected quarterly. Records of operation and maintenance will be kept in a known set location and will be available upon request.

If the soil in the FS becomes compacted, consider coring to alleviate this condition. Use a device that removes soil cores. Coring should be accomplished when the lawn is actively growing so that it can recover from any injury. Core cool-season grasses in fall or early spring. Core warm-season grasses in late spring or early summer. Some lawn care and landscape companies offer coring service if rental equipment is not available. Inspection and maintenance shall be performed as follows. Any problems that are found shall be repaired immediately.



- CONSTRUCTION SPECIFICATIONS**
- THE MATTING SHOULD BE A MINIMUM OF 4 FEET WIDE EXTENDING 6 INCHES OVER THE LIP AND BURIED 6 INCHES DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOIL AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12 INCHES LONG.
 - ENSURE THAT THE SPREADER IS LEVEL FOR UNIFORM SPREADING OF STORM RUNOFF.
 - CONSTRUCT THE LEVEL SPREADER ON UNDISTURBED SOIL (NOT ON FILL).
 - CONSTRUCT A 20 FOOT TRANSITION SECTION FROM THE DIVERSION CHANNEL TO BLEND SMOOTHLY WITH THE WIDTH AND DEPTH OF THE LEVEL SPREADER.
 - DISPERSE RUNOFF FROM THE SPREADER ACROSS A PROPERLY STABILIZED SLOPE. NOT TO EXCEED 10% MAKE SURE THAT THE SLOPE IS SUFFICIENTLY SMOOTH TO KEEP THE FLOW FROM CONCENTRATING.
 - IMMEDIATELY AFTER ITS CONSTRUCTION, APPROPRIATELY SEED AND MULCH THE ENTIRE DISTURBED AREA OF THE LEVEL SPREADER.



LEVEL SPREADER
SCALE: N.T.S.

GRASS NOTE:
GRASS SHALL BE EITHER HYBRID BERMUDA GRASS OR CENTIPEDE

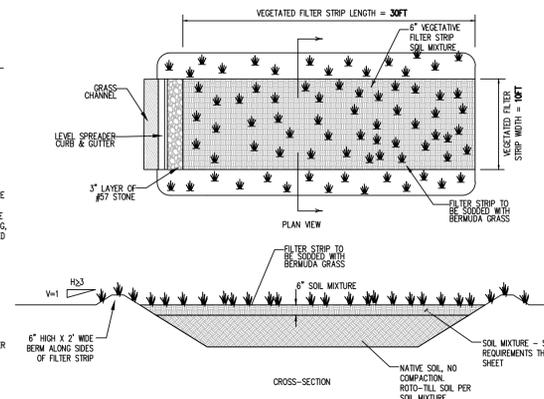
VEGETATIVE FILTER STRIP - SOIL MIXTURE

ITEM	PERCENT BY WEIGHT	MATERIAL
SAND	85-88%	CONSTRUCTION SAND
FINES	8%-12%	SILT
ORGANIC MATTER	3%-5%	COMPOST/PEAT MOSS

SOIL MIXTURE SHALL BE PLACED AND GRADED USING LOW GROUND-CONTACT PRESSURE EQUIPMENT OR BY EXCAVATORS AND/OR BACKHOES OPERATING ON THE GROUND ADJACENT TO THE VEGETATIVE FILTER STRIP FACILITY. NO HEAVY EQUIPMENT SHALL BE USED WITHIN THE PERIMETER OF THE VEGETATIVE FILTER STRIP FACILITY BEFORE, DURING, OR AFTER THE PLACEMENT OF THE SOIL MIXTURE. THE SOIL MIXTURE SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED 4 INCHES FOR THE ENTIRE AREA OF THE VEGETATIVE FILTER STRIP FACILITY. IF THE SOIL MIXTURE BECOMES CONTAMINATED DURING THE CONSTRUCTION OF THE VEGETATIVE FILTER STRIP FACILITY, THE CONTAMINATED MATERIAL SHALL BE REMOVED AND REPLACED WITH UNCONTAMINATED MATERIAL AT NO ADDITIONAL COST. FINAL SPRINKLING OF THE VEGETATIVE FILTER STRIP SHALL BE PERFORMED AFTER A 24-HOUR SETTLING PERIOD. FINAL ELEVATIONS SHALL BE WITHIN 2 INCHES OF ELEVATIONS SHOWN ON THE CONTRACT PLANS.

THE SOIL MIXTURE SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE VEGETATIVE FILTER STRIP AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVIDE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS.

PRIOR TO PLACING THE SOIL MIXTURE, THE BOTTOM OF THE EXCAVATION SHALL BE ROTO-TILLED TO A MINIMUM DEPTH OF 6 INCHES TO ALLEVIATE ANY COMPACTION OF THE FACILITY BOTTOM. ANY SUBSTITUTE METHOD FOR ROTO-TILLING MUST BE APPROVED BY THE ENGINEER PRIOR TO USE. ANY PONDING WATER SHALL BE REMOVED FROM THE BOTTOM OF THE FACILITY AND THE SOIL SHALL BE FRIBLE BEFORE ROTO-TILLING.

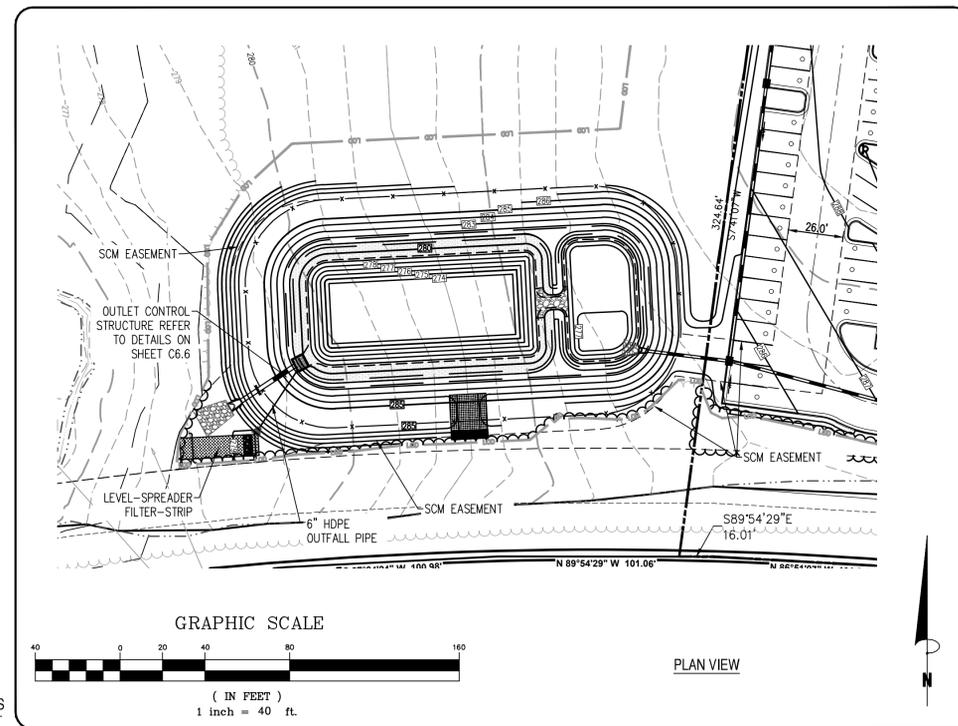


VEGETATIVE FILTER STRIP
SCALE: N.T.S.

OPERATION & MAINTENANCE

North Carolina storm water rules require annual inspections by the regulating agency of level spreader-filter strip areas as a minimum. More frequent inspections by the land owner or system operator are strongly encouraged to ensure the proper operation of level spreader-filter strip areas.

- Rainfall Event**
 - Inspect the SCM after every runoff-producing rainfall event.
- Monthly Inspection**
 - Inspect the SCM monthly.
 - Check the level spreader-filter strip area side slopes; remove trash and repair eroded areas before the next rainfall event.
 - Check the vegetative and rock filters for sediment accumulation, erosion and proper operation of the flow spreader mechanism and repair as necessary.
 - Visually inspect and repair soil erosion on a monthly basis.
 - Remove any void areas whenever necessary. Replacement of mulch layers may be necessary every two or three years. Mulch should be replaced in the spring. When the mulch layer is replaced, the previous layer should be removed first.
 - Remove and replace all dead and diseased vegetation considered beyond treatment. This should be done twice a year, once in the spring and once in the fall. Treat all diseased trees and shrubs that are not beyond treatment as needed.
- Quarterly Inspection**
 - Inspect the collection system (i.e. catch basin, pipes and grass swales) for proper functioning. Clear accumulated trash from basin groves and basin bottoms. Check piping for obstructions.
 - Check SCM inlet pipes for undercutting, replace rip-rap and repair broken pipes.
 - Reseed grassed swales, including the vegetated filter if applicable, twice a year as necessary. Repair eroded areas immediately.
- Six Month Inspection**
 - Remove accumulated sediment from the bottom of the outlet structure or other areas where accumulated sediment is noted.
 - Inspect the embankment taking note of any wet areas where water may be seeping through the soil.
- General Inspection**
 - Maximum grass height is to be 6in.
 - No woody vegetation shall be allowed to grow in the bio-retention area.
 - Debris shall be removed from blocking the inlet and outlet structures and from areas of potential clogging.
 - Periodic removal of dead vegetation shall be accomplished.
 - All components of the level spreader-filter strip system must be kept in good working order.



STORMWATER MANAGEMENT SYSTEM DETAILS
NOT TO SCALE

Bowman

Bowman North Carolina Ltd.
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Suite 104
RALEIGH, NC 27609
Phone: (919)553-6570
bowman.com



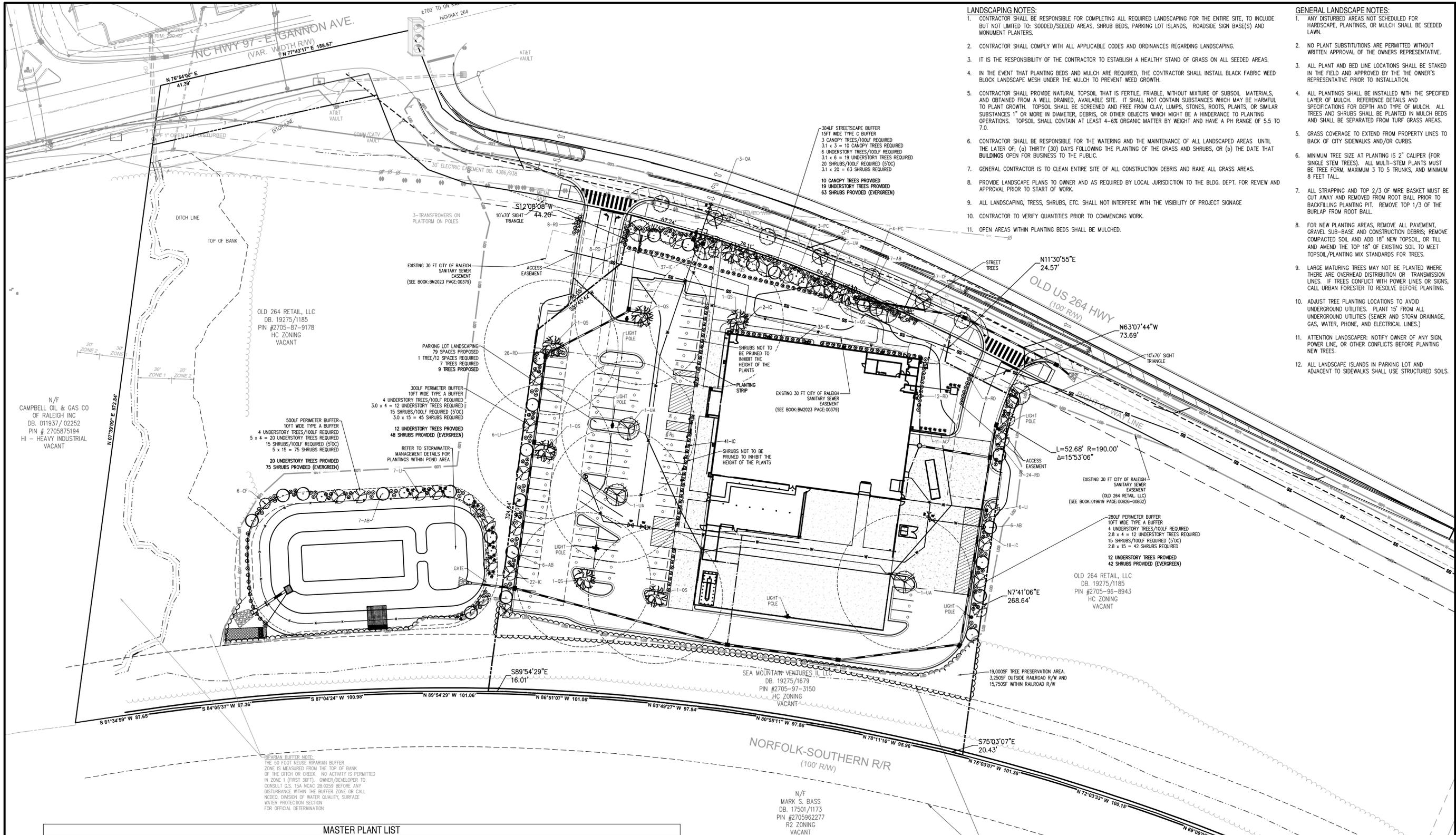
STORMWATER MANAGEMENT DETAILS

Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



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SHEET **C6.9**



- LANDSCAPING NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING ALL REQUIRED LANDSCAPING FOR THE ENTIRE SITE, TO INCLUDE BUT NOT LIMITED TO: SODDED/SEEDED AREAS, SHRUB BEDS, PARKING LOT ISLANDS, ROADSIDE SIGN BASE(S) AND MONUMENT PLANTERS.
 - CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A HEALTHY STAND OF GRASS ON ALL SEEDED AREAS.
 - IN THE EVENT THAT PLANTING BEDS AND MULCH ARE REQUIRED, THE CONTRACTOR SHALL INSTALL BLACK FABRIC WEED BLOCK LANDSCAPE MESH UNDER THE MULCH TO PREVENT WEED GROWTH.
 - CONTRACTOR SHALL PROVIDE NATURAL TOPSOIL THAT IS FERTILE, FRIABLE, WITHOUT MIXTURE OF SUBSOIL MATERIALS, AND OBTAINED FROM A WELL DRAINABLE, AVAILABLE SITE. IT SHALL NOT CONTAIN SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. TOPSOIL SHALL BE SCREENED AND FREE FROM CLAY, LUMPS, STONES, ROOTS, PLANTS, OR SIMILAR SUBSTANCES 1" OR MORE IN DIAMETER, DEBRIS, OR OTHER OBJECTS WHICH MIGHT BE A HINDERANCE TO PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN AT LEAST 4-6% ORGANIC MATTER BY WEIGHT AND HAVE A PH RANGE OF 5.5 TO 7.0.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE WATERING AND THE MAINTENANCE OF ALL LANDSCAPED AREAS UNTIL THE LATER OF: (a) THIRTY (30) DAYS FOLLOWING THE PLANTING OF THE GRASS AND SHRUBS, OR (b) THE DATE THAT BUILDINGS OPEN FOR BUSINESS TO THE PUBLIC.
 - GENERAL CONTRACTOR IS TO CLEAN ENTIRE SITE OF ALL CONSTRUCTION DEBRIS AND RAKE ALL GRASS AREAS.
 - PROVIDE LANDSCAPE PLANS TO OWNER AND AS REQUIRED BY LOCAL JURISDICTION TO THE BLDG. DEPT. FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
 - ALL LANDSCAPING, TREES, SHRUBS, ETC. SHALL NOT INTERFERE WITH THE VISIBILITY OF PROJECT SIGNAGE.
 - CONTRACTOR TO VERIFY QUANTITIES PRIOR TO COMMENCING WORK.
 - OPEN AREAS WITHIN PLANTING BEDS SHALL BE MULCHED.

- GENERAL LANDSCAPE NOTES:**
- ANY DISTURBED AREAS NOT SCHEDULED FOR HARDSCAPE, PLANTINGS, OR MULCH SHALL BE SEEDED LAWN.
 - NO PLANT SUBSTITUTIONS ARE PERMITTED WITHOUT WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
 - ALL PLANT AND BED LINE LOCATIONS SHALL BE STAKED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
 - ALL PLANTINGS SHALL BE INSTALLED WITH THE SPECIFIED LAYER OF MULCH. REFERENCE DETAILS AND SPECIFICATIONS FOR DEPTH AND TYPE OF MULCH. ALL TREES AND SHRUBS SHALL BE PLANTED IN MULCH BEDS AND SHALL BE SEPARATED FROM TURF GRASS AREAS.
 - GRASS COVERAGE TO EXTEND FROM PROPERTY LINES TO BACK OF CITY SIDEWALKS AND/OR CURBS.
 - MINIMUM TREE SIZE AT PLANTING IS 2" CALIPER (FOR SINGLE STEM TREES). ALL MULTI-STEM PLANTS MUST BE TREE FORM, MAXIMUM 3 TO 5 TRUNKS, AND MINIMUM 8 FEET TALL.
 - ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF THE BURLAP FROM ROOT BALL.
 - FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS, REMOVE COMPACTED SOIL AND ADD 18" NEW TOPSOIL, OR TILL AND AMEND THE TOP 18" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS FOR TREES.
 - LARGE MATURING TREES MAY NOT BE PLANTED WHERE THERE ARE OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CALL URBAN FORESTER TO RESOLVE BEFORE PLANTING.
 - ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLANT 15' FROM ALL UNDERGROUND UTILITIES (SEWER AND STORM DRAINAGE, GAS, WATER, PHONE, AND ELECTRICAL LINES.)
 - ATTENTION LANDSCAPER: NOTIFY OWNER OF ANY SIGN, POWER LINE, OR OTHER CONFLICTS BEFORE PLANTING NEW TREES.
 - ALL LANDSCAPE ISLANDS IN PARKING LOT AND ADJACENT TO SIDEWALKS SHALL USE STRUCTURED SOILS.

OLD 264 RETAIL, LLC
DB. 19275/1185
PIN #2705-87-9178
HC ZONING
VACANT

N/F
CAMPBELL OIL & GAS CO
OF RALEIGH INC
DB. 011937/02252
PIN # 2705875194
HI - HEAVY INDUSTRIAL
VACANT

50'LF PERIMETER BUFFER
10FT WIDE TYPE A BUFFER
4 UNDERSTORY TREES/100LF REQUIRED
15 SHRUBS/100LF REQUIRED (5'OC)
5 x 15 = 75 SHRUBS REQUIRED
20 UNDERSTORY TREES PROVIDED
75 SHRUBS PROVIDED (EVERGREEN)

300LF PERIMETER BUFFER
10FT WIDE TYPE A BUFFER
4 UNDERSTORY TREES/100LF REQUIRED
15 SHRUBS/100LF REQUIRED (5'OC)
3.0 x 4 = 12 UNDERSTORY TREES REQUIRED
3.0 x 15 = 45 SHRUBS REQUIRED
12 UNDERSTORY TREES PROVIDED
48 SHRUBS PROVIDED (EVERGREEN)

30'LF STREETSCAPE BUFFER
15FT WIDE TYPE C BUFFER
3 CANOPY TREES/100LF REQUIRED
3.1 x 3 = 10 CANOPY TREES REQUIRED
6 UNDERSTORY TREES/100LF REQUIRED
3.1 x 6 = 19 UNDERSTORY TREES REQUIRED
20 SHRUBS/100LF REQUIRED (5'OC)
3.1 x 20 = 63 SHRUBS REQUIRED
10 CANOPY TREES PROVIDED
19 UNDERSTORY TREES PROVIDED
63 SHRUBS PROVIDED (EVERGREEN)

OLD 264 RETAIL, LLC
DB. 19275/1185
PIN #2705-96-8943
HC ZONING
VACANT

SEA MOUNTAIN VENTURES II, LLC
DB. 19275/1679
PIN #2705-97-3150
HC ZONING
VACANT

N/F
MARK S. BASS
DB. 17501/1173
PIN #2705962277
R2 ZONING
VACANT

REPAIR BUFFER NOTE:
THE 50 FOOT NEUSE RIPARIAN BUFFER ZONE IS MEASURED FROM THE TOP OF BANK OF THE DITCH OR CREEK. NO ACTIVITY IS PERMITTED IN ZONE 1 (FIRST 30FT). OWNER/DEVELOPER TO CONSULT G.S. 15A NCAC 2B.0259 BEFORE ANY DISTURBANCE WITHIN THE BUFFER ZONE OR CALL NCEM, DIVISION OF WATER QUALITY, SURFACE WATER PROTECTION SECTION FOR OFFICIAL DETERMINATION

MASTER PLANT LIST											
TYPE	SYM/KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SYMBOL	CALIPER	HEIGHT	SPREAD	ROOT	SPACING	OTHER
LARGE TREES	OS	—	<i>Quercus phellos</i>	Willow Oak		2.5"	8' MIN		B&BB	AS SHOWN	
	UA	—	<i>Liriodendron tulipifera</i>	Tulip Poplar		2.5"	8' MIN		B&B	AS SHOWN	
	PC	—	<i>Pistacia chinensis</i>	Chinese Pistachio		2.5"	8' MIN		B&B	AS SHOWN	
UNDERSTORY TREES	OA	—	<i>Oxydendrum arboreum</i>	Sourwood		1.5"	4' MIN		B&B	AS SHOWN	
	AB	—	<i>Acer buergerianum</i>	Trident Maple		1.5"	4' MIN		B&B	AS SHOWN	
	LI	—	<i>Amelanchier arborea</i>	Downy Serviceberry		—	4' MIN		B&B	AS SHOWN	
	CF	—	<i>Camus florida</i>	Flowering Dogwood		1.5"	4' MIN		B&B	AS SHOWN	
SHRUBS	RD	—	<i>Chamaecyparis pisifera 'Golden Mop'</i>	Gold Mop Cypress		—	18" MIN		3 GAL	AS SHOWN	
	AG	—	<i>Abelia grandiflora</i>	Glossy Abelia		—	18" MIN		3 GAL	AS SHOWN	
	IC	—	<i>Ilex cornuta 'Dwarf Burford'</i>	Dwarf Burford Holly		—	18" MIN		3 GAL	AS SHOWN	

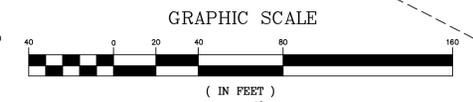
LANDSCAPING NOTES:
HYDROMULCH ALL DISTURBED AREAS OUTSIDE OF PROPERTY LIMITS (UNLESS SHOWN AS SOD).

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, RESEEDING AREAS WHICH HAVE NOT GERMINATED WELL, TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.

SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER.



IRRIGATION NOTE:
IRRIGATION SYSTEM TO BE A DESIGN-BUILD SYSTEM PROVIDED BY THE CONTRACTOR. IRRIGATION HEADS TO BE A MINIMUM OF 3" FROM EDGE OF CURB LINE. ALL LANDSCAPE BEDS TO HAVE CUT EDGE OR COMMERCIAL EDGING MATERIAL INSTALLED FULLY SEPARATING THE MULCH BED FROM ADJACENT LAWN AREA. ANY TREES OVER 2" CALIPER MUST BE STAKED AND TIED.



Bowman

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LANDSCAPE PLAN
Tractor Supply
Old US Highway 264
Zebulon, NC Wake County



PLAN STATUS		
11/30/23	SEWER CROSSING AT RAILROAD	
1/10/24	PER WAKE CO REVIEW	
3/26/24	PER NCDOT REVIEW	
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DATE May 28, 2024		
FILE No. 220127-D-CP-001		
SHEET		C7.0

Conceptual Elevation
Zebulon, NC

October 14, 2022



Front Elevation



Split Face CMU Wall
Painted Urban Putty
SW7532

Split Face CMU Pilaster
Painted Sanderling
SW7513

Smooth Face CMU Band
(Under Awning) Painted
Safety Red SW4081

29'-6" +/-

Red Gooseneck
Light Fixtures

Galvanized
Standing Seam
Metal Roof Panel

Fiber Cement Lap
Siding Painted
Alpaca SW7022

Two Course Corbelled
Cornice Cap

Top Course To Be Smooth
Face CMU Painted Safety Red
With Red Coping To Match

Clear Anodized Alum
Storefront with 1"
Insulated Vision Glass

Galvanized Standing
Seam Awning

Clear Anodized
Alum Storefront

Split Face CMU Base
Painted Sanderling -
SW7513

Clear Anodized Alum
Storefront with Dark Gray
Spandrel Panel



Zebulon, NC.

Front Elevation

UDO Analysis

Section 5.3.4.a.i - Primary Wall contains (2) types of building articulation.
 b.ii - Vertical Modulation
 b.vi - Primary Building Entrance

Primary Building Entrance
 b.i - Change in material & color
 b.iii - Feature that extends above roof height
 b.iv - projection greater than 5ft.

Vertical Modulation
 24" projected pilaster regularly spaced across the full facade.

Section 5.3.7.a.i - Primary Wall Fenestration
 a.i - 40% window/doors - **Request 10% Reduction**
 a.i - Visually transparent - **Request Use of Partial Spandrel Glass**

Facade is 2,530 SF. to roof line at 19'-8"
 40% area equals 1,012 SF. (-10%) = 910.80 SF

Windows above awnings:
 4'-8"x3'-4" x 12 windows = 186.60 SF

Windows below awnings:
 4'-8"x8'-4" x 12 windows = 466.56 SF.

Storefront entrance:
 27'-7" x 10'-0" = 275.16 SF

Fenestration as shown = **928.32 SF** > 910.80 SF

Section 5.3.6.b Parapet cornice.
 Top (2) courses corbel 1 1/2" each.

Windows above the awnings and storefront entrance are clear vision glass

Windows below awnings are shown as opaque spandrel glass, due to racking and fixtures inside the building.



Front-Right Elevation



PRIMAX

TSC TRACTOR SUPPLY CO.

Greenhouse Connection

Split Face CMU Pilaster
Painted Sanderling
SW7513

Two Course Corbelled
Cornice Cap

Smooth Face CMU Wall
Painted Urban Putty
SW7532

Clear polycarbonate
panel @ gabled ends

Clear poly sheet covering
pre-fab greenhouse

8' high black chainlink
fence and gate



Zebulon, NC.

Greenhouse Connection

UDO Analysis

Section 5.3.4.a.i - Tertiary Wall contains no building articulation.

Material change turns the corner 3'-4" to satisfy Section 5.3.1.F.5.

Vertical modulation of material is flush with adjacent wall. As a tertiary wall it does not need to project.

Due to the greenhouse connection/fabrication to the side masonry wall, this wall is to be constructed with smooth face CMU, painted to match the front of the building.



PRIMAX

TSC TRACTOR SUPPLY CO.

Zebulon, NC.

Section 5.3.4.a.i - Tertiary Wall contains no building articulation.

Rear Elevation Right Side

UDO Analysis

8' high black chain link fence and sliding gate



Zebulon, NC.

Loading Area

UDO Analysis

Section 5.3.4.a.i - Tertiary Wall contains no building articulation.

Material change occurs at screen wall, required to screen loading area per Section 5.10.5

Painted smooth face CMU to match primary building face, from logical point behind the masonry screen wall to wrapping the corner and terminate at front of greenhouse

Smooth face CMU painted Sanderling SW7513

Metal panel dumpster enclosure gates painted black

Section 5.3.1.H - Dumpster Enclosure Design
1. Constructed of same block as primary building
2. Gates metal panels painted black



Zebulon, NC.

Rear Elevation Left Side



Zebulon, NC.

Rear Elevation Left Side

UDO Analysis

Section 5.3.4.a.i - Tertiary Wall contains no building articulation.

Material change occurs behind screen wall, for reasons explained on other elevations

Screen wall, required to screen Loading Area per Section 5.10.5

Section 5.3.4.a.i - Secondary Wall contains (1) type of building articulation.

b.ii - Vertical Modulation

Vertical Modulation
24" projected pilaster regularly spaced across 50% of the secondary facade.

Section 5.3.7.a.i - Secondary Wall Fenestration

b.i - 30% window/doors - **Request 10% Reduction**
b.iii - Articulated wall forms to mimic openings that also include awnings

Facade is 1,029 SF. to roof line at 16'-0"
30% area equals 308.7 SF. (-10%) = 278.1 SF

Accents above red band:
4'-0"x2'-8" x 8 accents = 85.33 SF.

Shutters below awnings:
4'-0"x6'-8" x 8 shutters = 213.33 SF

Mock Fenestration = **298.66 SF** > 278.1 SF

Painted split face CMU accents to mimic clerestory windows above awning

Decorative shutters below accent band to mimic spandrel glass windows with awnings



Zebulon, NC.

Left Elevation



Zebulon, NC.

Left Elevation

UDO Analysis

Section 5.3.4.a.i - Primary Wall contains (2) types of building articulation.

b.ii - Vertical Modulation
b.v - Roof Modulation

Roof Modulation

Parapet illustrates differing planes.
Center parapet simulates a pitched roof with distinct material difference

Vertical Modulation

24" projected pilaster regularly spaced across the full facade.

Section 5.3.7.a.i - Primary Wall Fenestration

a.i - 40% window/doors - **Request 10% Reduction**
a.i - Visually transparent - **Request Use of Partial Spandrel Glass**

Windows below awnings are shown as opaque spandrel glass, due to racking and fixtures inside the building.

Facade is 3,126 SF. to roof line from at 19'-8" in front to 16'-0" in the back.

40% area equals 1,250 SF. (-10%) = 1125 SF

Windows above awnings = 175.05

Windows below awnings = 311.10

Storefront below awning = 640.00

Fenestration as shown = **1,126.15 SF > 1,125 SF**

Windows above the awnings are clear vision glass



Bay "A"

Windows above accent band:
3'-8"x2'-8" x 4 windows = 39.08 SF

Storefront below accent band:
10'-0"x10'-0" x 2 = 200.00 SF.

Fenestration for Bay "A" = **239.08 SF**

Bay "B"

Windows above awning:
4'-8"x2'-0" x 4 windows = 37.33 SF

Windows below awning:
4'-8"x8'-4" x 4 windows = 155.55 SF.

Fenestration for Bay "B" = **192.88 SF**

Bay "C"

Storefront below accent band:
24'-0"x10'-0" = 240.00 SF.

Fenestration for Bay "C" = **240 SF**

Total Area

239.08 + 192.88 + 240 + 205.31
+248.88 = **1,126.15 SF**

Bay "D"

Windows above awning:
4'-8"x2'-8" x 4 windows = 49.76 SF

Windows below awning:
4'-8"x8'-4" x 4 windows = 155.55 SF.

Fenestration for Bay "D" = **205.31 SF**

Bay "E"

Windows above accent band:
3'-8"x3'-4" x 4 windows = 48.88 SF

Storefront below accent band:
10'-0"x10'-0" x 2 = 200.00 SF.

Fenestration for Bay "E" = **248.88 SF**



Zebulon, NC.

Front-Left Elevation



Zebulon, NC.

Front-Left Elevation

Trees removed for clarity



Symbol	Label	Quantity	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
	P	2	RSX1-LED-P3-50K-R3-MVOLT-SPA	Single Head Lithonia RSX1 Series LED Area Unit w/Type R3 Distribution (22ft. Pole Height w/3ft. Base) FULL CUTOFF DESIGN	LED/5000K (FULL CUTOFF DESIGN)	14022	0.95	109.44
	R	2	RSX1-LED-P3-50K-R3-MVOLT-SPA	Double Head Lithonia RSX1 Series LED Area Unit w/Type R3 Distribution (22ft. Pole Height w/3ft. Base) FULL CUTOFF DESIGN	LED/5000K (FULL CUTOFF DESIGN)	14022	0.95	218.88
	S	1	RSX1-LED-P3-50K-R3-MVOLT-SPA	Triple Head Lithonia RSX1 Series LED Area Unit w/Type R3 Distribution (22ft. Pole Height w/2ft. Base) FULL CUTOFF DESIGN	LED/5000K (FULL CUTOFF DESIGN)	14022	0.95	328.32
	T	1	RSX1-LED-P3-50K-R3-MVOLT-SPA	Quad Head Lithonia RSX1 Series LED Area Unit w/Type R3 Distribution (22ft. Pole Height w/2ft. Base) FULL CUTOFF DESIGN	LED/5000K (FULL CUTOFF DESIGN)	14022	0.95	437.76
	K	12	DSXW1-LED-10C-1000-50K-T3M-MVOLT-DDBXD	Lithonia DSXW1 Series Wall Mount LED Unit w/Type T3M Distribution (18ft. and 14ft. Fixture Mounting Heights) FULL CUTOFF DESIGN	LED/5000K (FULL CUTOFF DESIGN)	3898	0.95	38.8
	K1	3	H-15118-97/HL-AHD-27*97/21/LED2/40/D/BCM-M	Hi-Lite H15118 Series LED Goosneck Unit (21.5ft. Mounting Height) Red Finish (FULL CUTOFF DESIGN)	LED/4000K (FULL CUTOFF DESIGN)	1170	0.95	21

Statistics							
Description	Symbol	Avg	Max	Min	Max/Avg	Max/Min	Avg/Min
Parking Lot Light Levels	+	1.9 fc	11.7 fc	0.1 fc	6.16	117.0:1	19.0:1
Property Line Light Levels	+	0.3 fc	1.6 fc	0.0 fc	5.33	N/A	N/A

