SHEET INDEX **COVER SHEET PROJECT NOTES EXISTING CONDITIONS PLAN** OVERALL EROSION CONTROL PLAN **EROSION CONTROL GROUND GENERAL NOTES** NCGOI GROUND STABILIZATION NCGOI SELF INSPECTION **EROSION CONTROL PLAN INITIAL PHASE 1 TO 5** C-4D - C-4H EROSION CONTROL PLAN INTERMEDIATE PHASE 1 TO 5 C-4 I - C-4 M **EROSION CONTROL PLAN RIPRAP EROSION CONTROL PLAN FINAL** C-4 O **EROSION CONTROL PLAN** C-5 - C-12G **OVERALL SITE PLAN** C-13 SITE PLAN C-14 - C-21 **OVERALL UTILITY PLAN** C-22 UTILITY PLAN C-23 - C-30 **OVERALL GRADING & DRAINAGE PLAN** STORM DRAINAGE RESPONSIBILITY STORM DRAINAGE PIPE SCHEDULE STORM DRAINAGE STRUCTURE DATA C-31C **GRADING & DRAINAGE PLAN** C-32 - C-39 PLAN & PROFILE PP-1 - PP-23 PONY RD. IMPROVEMENTS PP-24 - PP-25C **GREENWAY TRAIL** PP-26 - PP-29 STORM PROFILES P-1 - P-6 **OVERALL LANDSCAPE PLAN** LANDSCAPE PLAN L-2 - L-9 **EC-DETAILS** D-1 - D-4 SITE DETAILS D-5 - D-8A SANITARY SEWER DETAILS D-9 - D-10 WATER SERVICE DETAILS D-11 - D-12 **SCM PLAN & DETAILS** D-14 - D-18 LANDSCAPE DETAILS & NOTES D-19 SITE LIGHTING PLANS LP-1 - LP-2

WATER AND SEWER PERMITS

The City of Raleigh consents to the connection and extension of the City's Publi 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

The City of Raleigh consents to the connection and extension of the City's Public Water 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

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations. Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval City of Raleigh Review Officer

Public Street Name	6" DIP LENGTH	8" DIP LENGTH	Phase
Southland		1395	1
Rosebush Dr		1710	1
Rosebush Dr		899	1
Whitespire Way		550	1
Landen Creek Road		422	1
Chandler Stone Dr		<u>595</u>	1
Total Phase 1		5571	
Rosebush Dr		90	2
Southland		2165	2
Azalea Dr		720	2
Rosewood Bluff north	275	0	2
Rosewood Bluff north		895	2
Arnette Rose Dr		<u>434</u>	2
Total Phase 2	275	4304	
Rosebush Dr		2210	3
Azalea Dr		390	3
Rosewood Bluff South	262		3
Rosewood Bluff South		726	3
Woodland Walk Way		154	3
Arnette Rose Dr		<u>450</u>	3
Total Phase 3	262	3930	
Rosebush Dr		1070	4
Hunters Passage Dr		<u>594</u>	4
Total Phase 4		1664	0
		0	0
Azalea Dr		<u>730</u>	5

CONNECTIONS:

SINGLE FAMILY HOMES - 248

TOWNHOMES

WATERLINE / SANITARY SEWER Azalea

8" PVC SDR 26 DIP MH

10535 2964 1827 89

PHASE 4 1660 0 0 11

PHASE 5 <u>855</u> <u>0</u> <u>116</u> <u>8</u>

Total Phase 5

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 WORKS DEPARTMENT AT (919) 996-2409, AND 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 REQUIRED REINSTALLATION OF ANY WATER OR SEWER FACILITIES NOT

FAILURE TO CALL OF 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.

SOLID WASTE COLLECTION NOTES:

- 1. SOLID WASTE DESIGN MANUAL HAS BEEN REVIEWED AND ALL ITEMS SHOWN ARE IN COMPLIANCE.
- 2. CITY OF RALEIGH SOLID WASTE SERVICES (SWS) TO HANDLE TRASH NEEDS.
- 3. EACH TOWNHOME UNIT WILL STORE THE ROLL OUT TRASH & RECYCLE RECEPTACLES IN THE GARAGE. ON COLLECTION DAY, THE ROLL OUT BINS WILL BE PLACED CURBSIDE IN FRONT OF EACH UNIT.



Call before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

CONSTRUCTION DRAWINGS

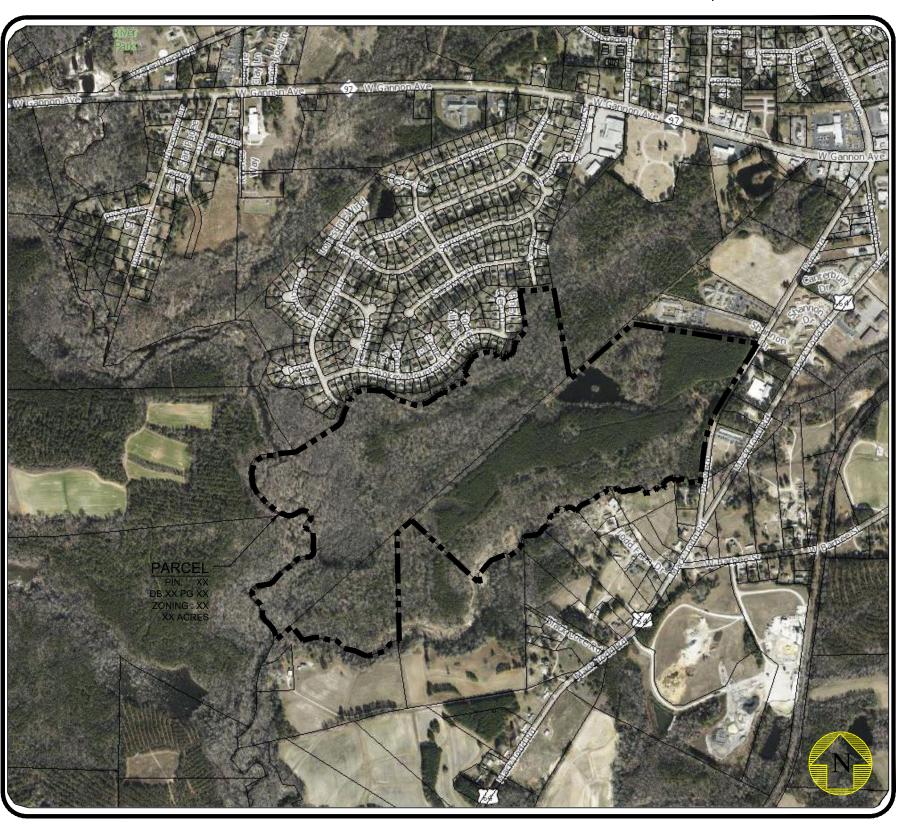
FOR

CADENCE MEADOWS

(PONY ROAD REZONING # 4961187)

(IDT PROJECT # 635059 705 PONY ROAD ZEBULON, NC

FINAL SET DATE: SEPTEMBER 1, 2022

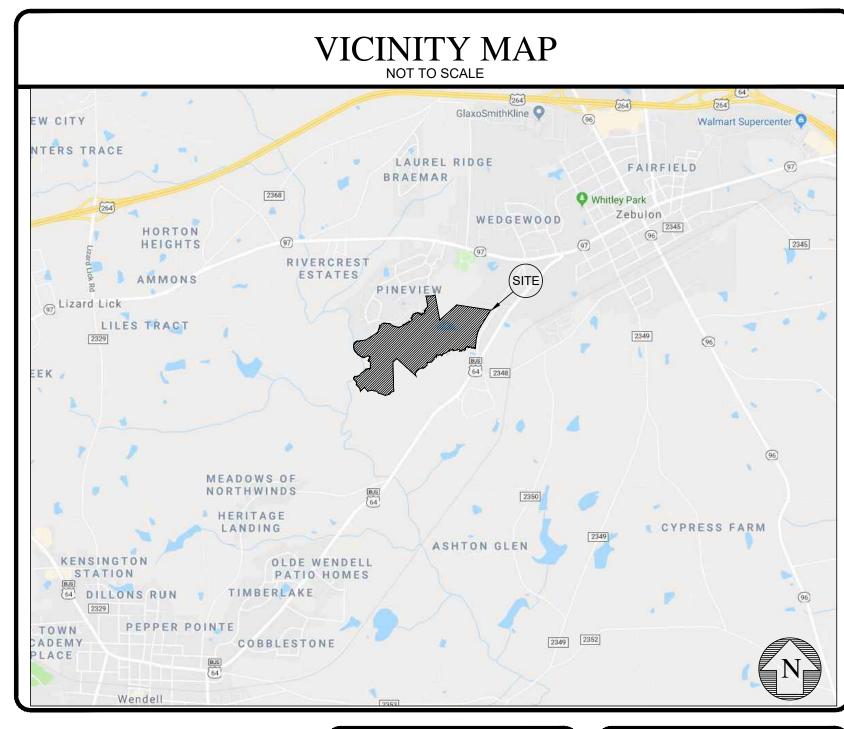


SITE LOCATION MAP

	Type of	Start		Lineai	Sidewalk	ROW	Back of	Street Light:	5	Private Arrey	Stree	Station	Station	rootage	Width	Curb	Pilase
c Street Name	Street	Station	End Station	Footage	(LF)	Width	Curb	TOZ/HOA	Phase	6	Alley	1000	1113	113	16	12	1
nland	Collector	3165	4560	1395	2790	60	35		1	7	Alley	1000	1360	360	16	12	1
oush Dr	Local	1000	1025	25	50	50	26		1	12	Alley	1000	1375	375	28	24	1
oush Dr	Local	3300	5010	1710	3420	50	26		1	13	Alley	1000	1356	356	28	24	1
oush Dr	Local	6080	6979	899	1798	50	26		1	14	Alley	1000	1223	223	28	24	1
espire Way	Local	1000	1550	550	1100	50	26		1	15	Alley	1000	1228	228	28	24	1
en Creek Road	Local	1000	1422	422	844	50	26		1	Total Phase 1				1655			
dler Stone Dr	Local	1000	1595	<u>595</u>	<u>1190</u>	60	37		1								
Phase 1				5596	11192			43/8		1	Alley	1000	2164	1164	16	12	4
										2	Alley	1000	2565	1565	16	12	4
nland	Collector	1000	3165	2165	4330	60	35		2	3	Alley	1000	1113	113	16	12	4
a Dr	Local	1390	2110	720	1440	50	26		2	4	Alley	1000	1144	144	16	12	4
wood Bluff north	Local	1000	2140	1140	2280	50	26		2	5	Alley	1000	1113	113	16	12	4
te Rose Dr	Local	1450	1884	<u>434</u>	<u>868</u>	50	26		2	8	Alley	1000	1282	282	28	24	4
Phase 2				4459	8918			32		9	Alley	1000	1469	469	28	24	4
										10	Alley	1000	1159	159	28	24	4
oush Dr	Local	1025	3300	2275	4550	50	26		3	11	Alley	1000	1322	322	28	24	4
a Dr	Local	1000	1390	390	780	50	26		3	Total Phase 4				4331			
wood Bluff South	Local	1000	1891	891	1782	50	26		3								
lland Walk Way	Local	1000	1154	154	308	50	26		3		(GREENWAY	ROΔR	Ο.ΜΔΙΚ		S	IDEWALK
te Rose Dr	Local	1000	1450	<u>450</u>	<u>900</u>	50	26		3					DVVALI			
Phase 3				4160	8320			30		TOZ	(LF)	(LF)		HOA	(LF)
										PHASE 1		1272	2	45	PHASE	1	2604
oush Dr	Local	5010	6080	1070	2140	50	26		4	PHASE 2		2750			PHASE		145
ers Passage Dr	Local	1000	1594	<u>594</u>	<u>1188</u>	50	26		4	PHASE Z							
Phase 4				1664	3328			13/3				4022	2	45	PHASE	3	620
															PHASE	4	80
a Dr	Local	2110	2840	<u>730</u>	<u>1460</u>	50	26	_	5	НОА							3449
Phase 5				730	1460			6		IIUA							3443
							TOTAL	123/11									
						-	1	1	1	 -1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			27-12-27-7			1	1

	Total Phase 5				730	1460		6		IIOA					34	+3
							TOTAL	123/11								
	PHASE 1			PHASE 2			PHASE 3			PHASE 4			PHASE 5			GRAND
PIPE SIZE	HOA	TOZ	TOTAL	HOA	TOZ	TOTAL	HOA	TOZ	TOTAL	HOA	TOZ	TOTAL	HOA	TOZ	TOTAL	TOTAL
15"	931	1428	2361	732	1540	2272	324	773	1097	1263	560	1823		96	96	7648
15" CL IV																
PIPE P-91		25	25													
18"	87	1225	1312	858	490	1348	111	807	918	547	473	1020				4598
24"	0	1423	1423	159	755	913	180	81	261	88	61	149				2746
30"	0	752	752	34	319	353	127	558	685	0	63	63				1853
36"	0	462	462	0	509	509				749	0	749				1720
42"				0	293	293				129	203	332				625
48"				0	184	184										184
72"		·		0	340*	340*								61	61	401
ALL STORM	DIDE TO DE DOE		LINII ECC NOTED	OTHERWICE												

ALL STORM PIPE TO BE RCP CLASS III UNLESS NOTED OTHERWISE * - FOR CULVERT 1, DUAL 72" RCP OR 72" H X 112" WIDE BOX CULVERT SEE C-12A - MINIMUM COVER OF 2'



STREAM AND WETLAND SOIL & ENVIRONMENTAL CONSULTANTS 8412 FALLS OF NEUSE ROAD SUITE 104 RALFIGH NC 27615 919) 846-9500 (PHONE SBALL@SANDÈC.COM

Plan Set Approved



Town of Zebulon Planning Department

SITE INFORMATION

CURRENT OWNER:

APPLICANT:

PARCEL ID:

SITE ADDRESS:

URISDICTION:

RIVER BASIN:

WATERSHED:

EXISTING USE:

EXISTING ZONING:

PROPOSED USE:

TOTAL GROSS AREA:

ON-SITE LAND DISTURBANCE AREA:

MAXIMUM NUMBER OF LOTS

TOTAL NET AREA:

PROPOSED LOTS

TOTAL LOTS:

BUILDING SETBACKS:

REAR SETBACK:

SIDE SETBACK:

CORNER SIDE:

REAR SETBACK:

SIDE SETBACK:

CORNER SIDE:

SINGLE FAMILY DETACHED: FRONT STREET SETBACK:

SINGLE FAMILY ATTACHED:

FRONT STREET SETBACK:

OPEN SPACE:

WATERSHED PROTECTION:

Michael J. Clark Date: 2021.01.25 09:53:42-05'00' 12/20/2022

PNC OF NORTH CAROLINA, LLC

RALEIGH, NC 27617-6815

RALEIGH, NC 27624-9104

PO BOX 99104

1794-49-6945

ZEBULON

VACANT

GOVIND & MADHU CHANDAK

RHH LAND INVESTORS, LLC

FAYETTEVILLE, NC 28303

1795-61-6501, 1795-51-1607,

0060530, 0173608, 0361946

0 MACK TODD ROAD

LITTLE RIVER (LTRVR)

PLANNED DEVELOPMENT (PD)

90.2 ACRES (54%) - MIN. 50% REQ'D.

RESIDENTIAL SUBDIVISION

166.85 ACRES

166.25 ACRES

87 ACRES

SINGLE FAMILY HOMES

22' X 50' (TYP.): 158 TH

(39,580 SF ACTIVE OPEN SPACE)

TOTAL IMPERVIOUS 40.04 ACRES (24%)

50' X 120' : 101 SFH

406 - (2.36 DU/AC

1,600 SF PER TOWN HOME

PROPOSED IMPERVIOUS: 3,000 SF PER SINGLE FAMILY LOT

GREENWAY TRAIL PUBLIC: 4,213 LF (84,260 SF ACTIVE OPEN SPACE)

PRIVATE GREENWAY TRAIL 5,550 LF (213,040 SF ACTIVE OPEN SPACE)

TOTAL ACTIVE OPEN SPACE: 336,880 SF (7.73 ACRES) - 4.17 ACRE REQD

PARKING: DETACHED DWELLING 2 PLUS 0.25 SPACES PER DWELLING

PROVIDED 4 SPACES PER DWELLING (SEE C-16)

PROVIDED 2 SPACES AT UNIT (SEE C-21)

ATTACHED DWELLING 2 PLUS 0.25 SPACES PER DWELLING

158 TH X 0.25 = 40 SPACES REQ'D, 43 SPACES PROVIDED

20 FEET

5 FEET

5 FEET

5 FEET

10 FEET

5 FEET

5 FEET

2919 BREEZEWOOD AVE., STE. 100

705 PONT ROAD, 0 HARMONICA DRIVE,

7930 SKYLAND RIDGE PKWY STE. 200

CURRENT OWNER SOVIND & MADHU CHANDAK RHH LAND DEVELOPERS, LLC 2919 BREEZEWOOD AVE. SUITE 100 RALEIGH, NC 27624-9104 FAYETTEVILLE, NC (910) 486-4864 (PHONE) PNC OF NORTH CAROLINA. LLC 7930 SKYLAND RIDGE PKWY, STE. 200 RALEIGH, NC 27617-6815

SURVEY CONTACT SUMMIT DESIGN & ENGINEERING SERVICE THOMAS TELLUP 320 EXECUTIVE COURT HILLSBOROUGH, NC 27278 (919) 732-6676 (FAX) BILL.MCCARTHY@SUMMITDE.NET

ENGINEER CONTACT SUMMIT DESIGN & ENGINEERING SERVICE 1110 NAVAHO DR.STE. 600 RALEIGH, NC 27609 (919) 732-6676 (FAX)



CITY OF RALEIGH PO BOX 590 RALEIGH, NC 27602 (919) 996-4540 TOWN OF ZEBULON

CHRIS PERRY, CHIEF 113 EAST VANCE STREET ZEBULON, NC 27597 DUKE ENERGY PROGRESS TREVOR WELBORN

TELEPHONE: (800) 288-2020 PSNC ENERGY MATTHEW KOEHL 3516 SPRING FOREST ROAD

(919) 269-6487

(919) 269-2549 (O) (919) 630-2502 (C)

RALEIGH, N.C. 27616

919-501-7685 (FAX)

919-501-7668

MKOEHL@SCANA.COM

CABLE: TIME WARNER CABLE (877) 479-8688

STATE ROADWAYS: NCDOT - DIVISION 5, DISTRICT 1 4009 DISTRICT DRIVE RALEIGH, NC 27607 (919) 733-3213

ELECTRIC:

PUBLIC WORKS: TOWN OF ZEBULON CHRIS RAY 450 E. HORTON STREET ZEBULON, NC 27597 (919) 269-823-1852

PLANNING: TOWN OF ZEBUI ON AARON CHALKER 1003 N. ARENDELL AVENUE ZEBULON, NC 27597 (919) 823-1816

ROGER SILVERS 919 625-3362

S&E PERMIT NUMBER SEC-069323-2021 SWF-069318-2021 & SWF-069319-2021

JASON BROWN 919 795-5640

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT **APPROVED** EROSION CONTROL S-STORMWATER MGMT. S-FLOOD STUDY S-

DRAWING NAME:

19-0103 19-0103 cs.dwg

AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED CROSSINGS WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR

- COMMENCEMENT OF CONSTRUCTION.
- CONSTRUCTION/DEMOLITION: ALL CONSTRUCTION AND DEMOLITION CONDUCTED SHALL BE IN COMPLIANCE OF THE CURRENT EDITION OF CHAPTER 14 OF THE NC FPC.
- PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR FINAL ACCEPTANCE, APPLICANT SHALL REPLACE ANY TREES SHOWN AS PRESERVED-PROTECTED ON THE LANDSCAPE PROTECTION PLAN THAT HAVE DIED OR ARE IN POOR HEALTH AS A RESULT OF LAND DISTURBING ACTIVITIES.
- ALL DIMENSIONS SHALL BE TO FACE OF CURB UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL MAINTAIN ANY ACCESSES TO ADJACENT RESIDENCES, BUSINESSES, AND PROPERTIES AT
- ALL TIMES AND NOTIFY THEM OF ANY DISRUPTIONS OF SERVICE OR ACCESS WITH A 24-HOUR NOTICE. CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE AND THE MOST CURRENT
- ANY SUBSTITUTIONS, CHANGES, OR MODIFICATIONS SHALL BE APPROVED BY THE PROJECT ENGINEER, PLANNING DEPARTMENT STAFF, AND DEVELOPER PRIOR TO INSTALLATION/CONSTRUCTION OF CORRESPONDING ITEMS. THE CONTRACTOR SHALL WAIVE ANY ADDITIONAL COSTS CLAIMS FOR SUBSTITUTING OR MODIFYING FROM WHAT HAS BEN APPROVED.

TOWN, COUNTY, STATE, DOT AND UTILITY PROVIDER STANDARDS, SPECIFICATIONS, AND BUILDING CODES.

DEMOLITION NOTES

- ALL DEMOLITION, TRANSPORT, AND DISPOSAL OF WASTE MATERIALS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE TOWN, COUNTY, STATE AND FEDERAL REGULATIONS.
- REGULATED MATERIALS SUCH AS ASBESTOS, LEAD, ETC. MAY EXIST ON SITE AND SHALL BE IDENTIFIED AND A PLAN FOR DEMOLITION AND DISPOSAL SHALL BE PRESENTED TO, AND APPROVED BY, THE TOWN/COUNTY AND OWNERS PRIOR TO COMMENCING DEMOLITION ON CORRESPONDING STRUCTURES.
- THE LOCATIONS OF ALL EXISTING FEATURES SHOWN ON THIS PLAN SET WERE PROVIDED AS PART OF THE SURVEY REFERENCED WITHIN THIS PLAN SET. OTHER UNIDENTIFIED UTILITIES OR SITE FEATURES MAY EXIST AND SPECIAL CARE SHALL BE EXERCISED DURING ANY SUBGRADE WORK OR DEMOLITION TO PREVENT UNINTENDED LOSS OF SERVICE TO SURROUNDING PROPERTIES.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS FOR WORK IN THE DOT RIGHTS-OF-WAY. ANY DAMAGED INFRASTRUCTURE IN THE RIGHTS-OF-WAY CAUSED BY CONSTRUCTION ACTIVITIES MUST BE REPAIRED TO DOT STANDARDS. THIS INCLUDES, BUT IS NOT LIMITED TO UTILITIES, CURB & GUTTER, PAVEMENT, SIGNS AND ROADSIDE SWALES.
- CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN, IF REQUIRED BY ENCROACHMENT PERMIT TO DOT FOR APPROVAL, PRIOR TO ANY WORK WITHIN THE DOT RIGHTS-OF-WAY.

6. ALL UTILITIES SHOWN TO BE REMOVED. DISPOSED OF, AND/OR ABANDONED SHALL BE DONE PER THE CORRESPONDING SERVICE PROVIDERS GUIDELINES.

CITY OF RALEIGH UTILITIES 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.
- UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER. MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN.
- 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).

d. 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES,

- 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.
- 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.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 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 1/2" 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 4" 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
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, 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.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA.THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. 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 JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION

WATER AND SEWER SEPARATION NOTES:

I HORIZONTAL AND VERTICAL SEPARATION:

- 1.1. SANITARY SEWERS SHALL BE LAID AT LEAST 10-FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10-FOOT SEPARATION, THE PUBLIC WORKS SUPPLY MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION ON MAY ALLOW THE INSTALLATION OF THE SANITARY SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SANITARY SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18-INCHES ABOVE THE TOP OF THE SEWER.
- I.2. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE OR ANYTIME THE SANITARY SEWER IS OVER THE WATER MAIN, BOTH THE WATER MAIN AND SANITARY SEWER MUST BE CONSTRUCTED OF FERROUS PIPE COMPLYING WITH THE PUBLIC WATER SUPPLY DESIGN STANDARDS AND BE PRESSURE TESTED TO 150PSI TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING. I.3. A 24-INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR FERROUS PIPE SPECIFIED. A 12-INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND WATER MAIN
- 1.3.1. IF A 12-INCH VERTICAL SEPARATION IS NOT MAINTAINED AT A CROSSING BETWEEN STORM SEWER AND WATER MAINS (OR PRESSURE SEWERS). THE WATER MAIN SHALL BE CONSTRUCTED OF FERROUS PIPE AND A CONCRETE COLLAR SHALL BE POURED AROUND WATER MAINS AND STORM SEWER TO IMMOBILIZE THE CROSSING

- 2.1. SANITARY SEWER CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18-INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SANITARY SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.
- 2.2. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED: 2.2.1. THE SANITARY SEWER SHALL BE DESIGNED AND CONSTRUCTED OF FERROUS PIPE AND SHALL BE
- PRESSURE TESTED AT 150-PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING. OR 2.2.2. EITHER THE WATER MAIN OR THE SANITARY SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE, WHICH EXTENDS 10-FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE PUBLIC WATER SUPPLY FOR USE IN WATER MAIN CONSTRUCTION.

TOWN OF ZEBULON NOTES

TOWN OF ZEBULON STANDARD NOTES:

- 1. PLEASE INCLUDE THE FOLLOWING GENERAL TOWN OF ZEBULON CONSTRUCTION NOTES TO THE PLAN: • ALL ROADWAY AND GREENWAY INFRASTRUCTURE CONSTRUCTION SHALL CONFORM TO THE TOWN OF
- ZEBULON STANDARDS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN TO THE TOWN OF ZEBULON CONSTRUCTION INSPECTOR FOR APPROVAL. THE GOAL IS NOT TO RESTRICT TRAFFIC DURING PEAK
- BUSINESS HOURS OF 6:00 AM AND UNTIL 8:00 AM AND 4:30 TO 6:30 PM MONDAY THROUGH FRIDAY. • ALL TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. • ALL FLAGGING OPERATIONS WITHIN THE TOZ ROW REQUIRE QUALIFIED AND TRAINED WORK ZONE
- FLAGGERS. THE CONTRACTOR SHALL PROVIDE ALL BARRICADES, SIGNS, ETC., TO PROTECT AND SECURE THE CONSTRUCTION AREA. EQUIPMENT, AND MATERIALS FROM THE PUBLIC ALL EXISTING ROADWAYS, DRIVEWAYS, CURB AND GUTTER, SIDEWALK, SIGNAGE OR DRAINAGE STRUCTURES THAT ARE DAMAGED DURING THE CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION. THE
- CONTRACTOR SHALL KEEP THE ROADWAY CLEAN OF DIRT AND DEBRIS AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. EXCAVATION MATERIAL SHALL NOT BE PLACED ON THE ROADWAY AT ANY TIME. EXCAVATIONS SHALL NOT BE LEFT OPEN OR UNSAFE DURING OVERNIGHT HOURS. • AT THE END OF EACH WORKING DAY, EQUIPMENT SHALL BE PARKED A MINIMUM OF 15' FROM THE BACK OF
- THE CURB TO ENSURE SAFETY OF THE VEHICLE TRAFFIC. • IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF OTHER UTILITIES WITHIN THE PROJECT SCOPE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING OTHER UTILITIES
- OWNERS AND PROVIDE PROTECTION AND SAFEGUARDS TO PREVENT DAMAGE OF INTERRUPTION TO EXISTING FACILITIES AND TO MAINTAIN ACCESSIBILITY TO EXISTING UTILITIES • CONTRACTOR SHALL CONTRACT JASON BROWN AT 919-795-5640 WITH THE TOWN OF ZEBULON TO SCHEDULE
- A PRE-CONSTRUCTION MEETING PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS OF NOTICE TO THE TOWN PRIOR TO BEGINNING CONSTRUCTION. ALL ROADWAY, GREENWAY, SIDEWALK AND STORM DRAINAGE IMPROVEMENTS IN ROW OR DEDICATED
- PUBLIC EASEMENTS WILL BE REQUIRED TO BE DEDICATED TO THE TOWN OF ZEBULON AT COMPLETION OF • AS-BUILT SITE PLANS FOR ROADWAY, GREENWAY AND UTILITY WORK MUST BE SUBMITTED AND APPROVED PRIOR TO FINAL ACCEPTANCE. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING REDUINE LINE DRAWINGS
- DEVELOPER/OWNER IS RESPONSIBLE FOR CONTRACTING WITH THIRD PARTY NCDOT CERTIFIED TESTING FIRM. TOWN OF ZEBULON MUST APPROVE THE FIRM IN ADVANCE. MATERIAL TESTING IS REQUIRED FOR ALL ROADWAY AND GREENWAY TRAIL WORK. FINAL REPORTING AND SEALED CERTIFICATION IS REQUIRED AT COMPLETION OF THE PROJECT BY THE GEO-TECHNICAL ENGINEER. TESTING IS REQUIRED FOR SUBGRADE, ROADWAY/GREENWAY STONE, AND ASPHALT, CURB, AND GUTTER PER TOWN OF ZEBULON SPECS. • AT THE COMPLETION OF THE PROJECT, THE DEVELOPER SHALL PROVIDE THE TOWN A ONE-YEAR WARRANTY
- ON ALL IMPROVEMENTS DEDICATED TO THE TOWN OF ZEBULON. 2. PLEASE ADD THE FOLLOWING TOWN OF ZEBULON CONSTRUCTION NOTES REGARDING CONCRETE: ALL CURB AND GUTTER REQUIRES CONCRETE TESTING FOR THE FOLLOWING REQUIREMENTS - SECTION 2.1.1
- 4" CONCRETE SLUMP TEMPERATURE - 50 AND 90 DEGREES
- AIR MIXTURE RANGE 3.5% TO 6.5%
- STRUCTURAL STRENGTH BREAK TEST 7,14,28 DAYS @ 3000 PSI @ 28 DAYS SAMPLES EVERY 1000 LF OF CURB AND GUTTER TO ENSURE QUALITY
- MAX WATER -CEMENT RATIO BY WEIGHT: 0.594 MINIMUM CEMENT CONTENT (LBS/CY): 602
- CONCRETE SIDEWALK TESTING IS NOT REQUIRED, UNLESS CONSTRUCTION INSPECTOR DETERMINES THAT THE QUALITY IS INFERIOR AND DOES NOT MEET INDUSTRY STANDARDS. CONTRACTOR MUST MAINTAIN A 4-INCH SLUMP FOR ALL SIDEWALK WORK. AIR TEMPERATURES AT PLACEMENT MUST BE 40 DEGREES AND RISING. SURFACE TEMPERATURES SHALL BE 50 DEGREES OR GREATER. (SECTION 2.2.2 E)
- 3. PLEASE ADD THE FOLLOWING NOTES REGARDING ROADWAY/GREENWAY SUB-GRADE, ROADWAY ABC AND
- ROADWAY/GREENWAY SUB-GRADE: THE BASE SOIL ELEVATION DETERMINED BY APPROVED ENGINEERED DRAWINGS PRIOR TO PLACEMENT OF ROADWAY ABC AND ASPHALT.
- ROADWAY/GREENWAY STONE GRADE: THE APPROVED COMPACTED ROADWAY SUB-GRADE PLUS THE COMPACTED STONE GRADE PRIOR TO PLACEMENT OF ASPHALT • IN ALL CASES, THE ROADWAY/GREENWAY SUB-GRADE MUST PAST A PROOF-ROLL TEST BEFORE PLACEMENT
- OF STONE. THE DEVELOPER/OWNER/CONTRACTOR SHOULD PROVIDE THIRD PARTY NCDOT CERTIFIED GEOTECHNICAL FIRM TO PERFORM DENSITY TESTING OF SUB-GRADE EVERY 300 FEET AND ROADWAY/GREENWAY ABC EVERY 150 FEET VIA A NUCLEAR GAUGE. THE TOWN OF ZEBULON CONSTRUCTION INSPECTOR WILL SELECT VARIOUS LOCATIONS OF THE DENSITY TESTING. IT IS
- RECOMMENDED THAT TESTING BE PERFORMED AT FILL LOCATIONS OR UTILITY CUTS. A TOWN OF ZEBULON CONSTRUCTION INSPECTOR MUST BE PRESENT DURING ALL TESTING. ALL TEST RESULTS SHALL BE SUBMITTED TO AND APPROVED BY THE TOWN OF ZEBULON PUBLIC WORKS DIRECTOR BEFORE ROADWAY
- PROOF ROLL STANDARD- A FULLY LOADED DUMP TRUCK/MOTOR GRADER THAT HAS A MINIMUM GROSS WEIGHT OF AT LEAST 40 000 POLINDS (20 TONS) LINDER THE OBSERVATION OF THE TOWN OF ZEBUL ON REPRESENTATIVE, NO OTHER METHOD WILL BE ACCEPTED, ALL AREAS OF THE ROADWAY/GREENWAY
- SUB-GRADE OR ROADWAY STONE SHALL BE COVERED BY THE WHEELS OF THE PROOF-ROLLER OPERATING AT WALKING SPEED (TWO TO THREE MILES PER HOUR) OR 225 TO 300 FEET PER MINUTE. IT IS THE CONTRACTOR RESPONSIBILITY TO PROTECT ALL STRUCTURAL FACILITIES ON THE PROJECT SUCH
- AS BRIDGES, BOX CULVERTS, PIPE CULVERTS, AND UTILITIES FROM DAMAGE FROM PROOF ROLLING EQUIPMENT
- PROOF ROLLS ARE REQUIRED AT THE ROADWAY/GREENWAY SUB-GRADE CONSTRUCTION PHASE AND ROADWAY/GREENWAY STONE CONSTRUCTION PHASE • ANY AND ALL AREAS, WHICH RUT OR PUMP EXCESSIVELY UNDER THE WHEELS OF THE PROOF-ROLLER SHALL BE REPAIRED BY THE DEVELOPER/CONTRACTOR BEFORE ROADWAY STONE OR ASPHALT IS INSTALLED • PROOF ROLL AREAS AGAIN FOLLOWING THE COMPLETION OF THE NECESSARY CORRECTIONS. ALL COST
- ASSOCIATED WITH THE PROOF ROLLING PROCESS IS THE RESPONSIBILITY OF DEVELOPER/OWNER OR • THE TOWN SHALL NOT BE RESPONSIBLE FOR ENSURING PROPER GRADES AND ALIGNMENT OF ROADWAY/GREENWAY AND CURB AND GUTTER. IF THE ALIGNMENT AND GRADES ARE INCORRECT; IT WILL BE
- THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER/OWNER TO MAKE CORRECTIVE REPAIRS AT THEIR • REQUIREMENTS: 98% STANDARD PROCTOR ON ALL SOILS EVERY 300'. ALL LOCATIONS TESTED SHALL MEET THE 98% TESTING REQUIREMENTS. AVERAGING OF DENSITY SCORES TO MEET STANDARD IS NOT ALLOWED.
- SUCCESSFUL PROOF-ROLLS REQUIRED FOR ALL SUB-GRADE SOILS. ALL ROADWAY SUB-GRADE MUST PASS A PROOF-ROLL TEST (NO EXCEPTIONS) • ROADWAY/GREENWAY SUB GRADE THAT DOES NOT PASS THE PROOF ROLL TEST OR DENSITY TEST WILL REQUIRE REMEDIAL REPAIRS. REPAIR RECOMMENDATIONS FROM GEO-TECHNICAL FIRM CAN BE MADE BY USING SEVERAL METHODS INCLUDING THE USE OF GEO-GRID/STABILIZATION FABRIC AND ADDITIONAL ABC
- STONE. CEMENT STABILIZATION. LIME STABILIZATION OR REPLACEMENT OF UNSUITABLE SOILS WITH DRIER/MORE SUITABLE SOILS. REGARDLESS OF THE METHOD CHOSEN BY THE CONTRACTOR. GEOTECHNICAL FIRM, DEVELOPER OR OWNER FOR REMEDIAL REPAIRS; A SUCCESSFUL PROOF-ROLL MUST BE OBTAINED PRIOR TO PLACEMENT OF ABC STONE CAN BEGIN. • IF REPAIRS WERE MADE TO THE ROADWAY/GREENWAY SUB GRADE INVOLVE USING GEO-GRID/STABILIZATION FABRIC AND ADDITIONAL STONE; NO DENSITY ADDITIONAL TESTING IS REQUIRED. IF REPAIRS TO THE
- ROADWAY SUB GRADE INVOLVE UNDERCUTTING UNSUITABLE SOILS AND REPLACEMENT WITH OTHER SOILS THAT ARE MORE SUITABLE THEN DENSITY TESTING IS REQUIRED TO VERIFY COMPLIANCE OF 98% COMPACTION REQUIREMENT. THE CONTRACTOR/GEO-TECHNICAL FIRM MUST PROVIDE THE TOWN OF ZEBULON INSPECTOR WITH DENSITY TEST RESULTS PRIOR TO PLACEMENT OF ABC STONE WERE REQUIRED. ALL COST OF DENSITY TESTING SHALL BE BY THE DEVELOPER OR OWNER.
- NOTE: IF THE ROADWAY/GREENWAY SUB-GRADE IS EXPOSED TO PRECIPITATION (RAIN, SNOW, ICE, ETC.) GREATER THAN A 1/10 OF INCH BEFORE IT IS COVERED WITH ABC STONE, THE EXPOSED SUB-GRADE MUST PASS AN ADDITIONAL PROOF-ROLL. ADDITIONAL DENSITY TESTING IS NOT REQUIRED UNDER THESE CONDITIONS. • REQUIREMENTS: 98% STANDARD PROCTOR ON ALL ROADWAY/GREENWAY ABC EVERY 150'. ALL LOCATIONS
- TESTED SHALL MEET THE 98% TESTING REQUIREMENTS. AVERAGING OF DENSITY SCORES TO MEET STANDARD IS NOT ALLOWED. SUCCESSFUL PROOF-ROLLS REQUIRED FOR ALL ROADWAY/GREENWAY ABC • ROADWAY/GREENWAY ABC STONE MUST BE INSTALLED PER TOWN OF ZEBULON MINIMUM REQUIREMENTS AND/OR APPROVED ENGINEERING ROADWAY DRAWINGS. ROADWAY ABC STONE SHALL BE INSTALLED IN
- COMPACTED LIFTS PER MANUFACTURE EQUIPMENT RECOMMENDATIONS. A MINIMUM OF SIX INCHES OF COMPACTED ABC STONE SHALL BE INSTALLED UNDER CURB AND GUTTER. ALL ROADWAYS WILL HAVE A MINIMUM OF EIGHT INCHES OF COMPACTED ABC STONE. THE PLACEMENT OF ROADWAY ABC STONE IS REQUIRED TO PASS A PROOF-ROLL AND PASS DENSITY TESTING OF 98% MINIMUM EVERY 150' FEET. THE ZEBULON CONSTRUCTION INSPECTOR MUST HAVE DENSITY TESTING RESULTS PRIOR TO START OF PAVING. THE ROADWAY STONE CROSS-SLOPE, FROM CROWN TO CURB, SHALL BE CHECKED WITH A STRING LINE PRIOR TO THE PLACEMENT OF ASPHALT.
- THE ROADWAY/GREENWAY STONE SHALL BE PROOF ROLLED JUST PRIOR TO THE PLACEMENT OF ASPHALT IF A SECTION OF ROADWAY FAILS PRIOR TO PLACEMENT OF ASPHALT AFTER ALL OTHER SUCCESSFUL TESTS; ADDITIONAL ASPHALT AT THE DIRECTION OF THE CONSTRUCTION INSPECTOR MAY BE ALLOWED. ONE INCH OF ASPHALT MAY BE SUBSTITUTED FOR EVERY TWO INCHES OF STONE. NOTE: IF THE ROADWAY/GREENWAY ABC IS EXPOSED TO PRECIPITATION (RAIN, SNOW, ICE, ETC.) GREATER

THAN 1/10 INCH BEFORE IT IS COVERED WITH ABC STONE, THE EXPOSED SUB-GRADE MUST PASS AN ADDITIONAL

BOTH OVERLAYS TO INSURE COMPLIANCE WITH ENGINEERING DRAWINGS FOR THICKNESS AND DENSITY.

PROOF-ROLL. ADDITIONAL DENSITY TESTING IS NOT REQUIRED UNDER THESE CONDITIONS. • ASPHALT PLACEMENT SHOULD BE IN ACCORDANCE WITH ENGINEERING DRAWINGS, SIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. THE CONTRACTOR SHALL INSTALL ASPHALT IN MULTIPLE LAYERS/LIFTS. THE FINAL 1" OR 1.5" OVERLAY WILL BE AT THE 80% BUILDING PERMIT LEVEL FOR EACH PHASE OR AT THE DIRECTION OF THE PUBLIC WORKS DIRECTOR. ASPHALT CORES WILL BE TAKEN AT

TOWN OF ZEBULON NOTES (CONTINUED)

- PAVING SCHEDULE:50 ROW LOCAL STREETS 26' B-B SHALL BE: ❖ 2 INCH LAYER OF SF9.5C (FIRST LAYER) ❖ 1 INCH SF9.5B @ 80% BUILDOUT (SECOND LAYER)
- ❖ 8" CABC STONE NOTE: THESE DEPTHS ARE MINIMUM DEPTHS REQUIREMENTS
- 60 ROW RESIDENTIAL COLLECTOR 35' B-B SHALL BE ❖ 2.5" INCH LAYER OF I19+.0C(1ST LAYER) ❖ 1.5 INCH LAYER OF SF9.5C @ 80% BUILD OUT (SECOND LAYER) ❖ 8" CABC STONE NOTE: THESE DEPTHS ARE MINIMUM DEPTHS REQUIREMENTS
- ASPHALT MIXTURES SHALL NOT BE PLACED DURING RAINY WEATHER, WHEN SUBGRADE OR COURSE IS FROZEN, OR WHEN THE MOISTURE ON THE SURFACE TO BE PAVED WOULD PREVENT A PROPER BOND. ASPHALT MATERIAL MUST NOT BE PLACED WHEN THE AIR TEMPERATURE MEASURED IN THE SHADE AWAY FROM ARTIFICIAL HEAT AT THE LOCATION OF THE PAVING OPERATION AND THE ROAD SURFACE TEMPERATURE IN THE SHADE AT THE PAVING SITE IS BELOW 40 DEGREES AIR
- TEMPERATURE AND 50 DEGREES MINIMUM SURFACE TEMPERATURE A TACK COAT OF LIQUID ASPHALT IS REQUIRED FOR EXISTING LAYERS OF ASPHALT OR CONCRETE SURFACES TO PROMOTE A BOND BETWEEN OLD PAVEMENT SURFACES AND THE NEW ASPHALT LAYER. PRIOR TO PLACING ASPHALT TACK THE FOLLOWING CONDITIONS MUST BE MET:
- EXISTING PAVEMENT SURFACE MUST BE CLEAN. RATE OF APPLICATION MUST COMPLY WITH NCDOT STANDARDS
- UNFORMED COVERAGE OVER THE ENTIRE AREAS TO BE PAVED. ALLOW TACK TO THOROUGHLY CURE BEFORE PLACING THE NEW ASPHALT. • ASPHALT CORE SAMPLES SHOULD BE SELECTED EVERY 300' FEET OR MINIMUM OF TWO CORES PER ROADWAY AND GREENWAY FOR ANALYSIS OF THICKNESS AND DENSITY.
- THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING/CREATING A CHART/MAP IF THE CORED LOCATIONS FOR SUBMITTAL WITH THE TESTING. CORES WILL BE RANDOMLY TAKEN ALONG THE LONGITUDINAL DIRECTIONS ACROSS THE ROADWAY BUT NOT WITHIN ONE FOOT OF THE EDGE OF PAVEMENT. THE RESULTS OF SAMPLES GREATER THAN 10 FEET APART WILL NOT BE AVERAGE AND USED TO VERIFY COMPLIANCE WITH THE TOWN OF ZEBULON SPECIFICATIONS. (SECTION 2.6.H)
- 1. PLEASE ADD THE FOLLOWING NOTES REGARDING STORM DRAINAGE INFRASTRUCTURE: • ALL PIPE INSTALLED IN TOWN OF ZEBULON ROW OR PUBLIC DEDICATED DRAINAGE EASEMENTS SHALL BE NCDOT CLASS 3 RCP PIPE.
- THE TOWN OF ZEBULON WILL BE RESPONSIBLE FOR ALL STREET DRAINAGE WITHIN THE ROW AND DEDICATED PUBLIC EASEMENTS UNTIL THE STILLING BASIN. DRAINAGE BEYOND THE STILLING BASINS/DISSIPATER PAD WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION • ALL STORMWATER SYSTEM DRAINAGE BEHIND LOTS IN SHOWN DRAINAGE EASEMENTS WILL BE OWNED AND MAINTAINED BY THE HOA FOR THE DEVELOPMENT. ALL LEVEL SPREADERS, DETENTION PIPES, BMP, SCM (WET OR DRY) WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS
- PIPE SYSTEMS, BMP, DRAINAGE CHANNELS, OPEN SPACE, MAIL KIOSKS, RETAINING WALLS PLAYGROUND AMENITIES AND CENTERS WITH ASSOCIATED PARKING LOCATED IN COMMON SPACES ARE THE RESPONSIBILITY OF THE HOA FOR MAINTENANCE AND REPLACEMENT.

GENERAL CONSTRUCTION AND GRADING NOTES:

- ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES AND OSHA STANDARDS ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER
- THE CONTRACTOR SHALL BE REQUIRED TO REVIEW AND ABIDE BY SPECIFICATIONS OF THE PLAN AND ALL SUPPORTING DOCUMENTS, PERMITS, AND REPORTS FOR THIS SITE. INCLUDING NOT BUT NOT LIMITED TO: EROSION AND SEDIMENTATION CONTROL PLAN AND STORMWATER MANAGEMENT PLAN
- THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS THEY DISCOVER IN COMPARING THE PLANS TO ACTUAL
- 4. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE AND WITHOUT COMPENSATION.
- UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES. IF CONFLICTS ARE FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH
- ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER AND APPLICANT IN WRITING.
- TRAFFIC CONTROL METHODS, SUCH AS BARRICADES, SUFFICIENT LIGHTS, SIGNS, ETC., MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION IN ACCORDANCE WITH CURRENT MUTCD STANDARDS.
- CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES, FENCING AND OTHER APPROPRIATE SAFETY ITEMS/MEASURES NECESSARY TO PROTECT THE PUBLIC FROM THE WORK AREA CONSTRUCTION ACTIVITIES.
- HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC.
- THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS NEAR CONSTRUCTION. IN TIME OF RAIN OR MUD, ROADS SHALL BE ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CRUSHED STONE BASE, ETC. WITH A MINIMUM WIDTH OF 20 FEET. ACCESS TO BUILDINGS THAT HAVE SPRINKLER OR STANDPIPE SYSTEMS SHALL BE WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTOR. (NFPA 1141 3-1)
- BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX (6) INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE GOVERNING MUNICIPALITY INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR WILL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, A) REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED, OR B) REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT
- THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 15. SOIL TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. A GEOTECHNICAL ENGINEER IS REQUIRED TO INSPECT, TEST AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS. THE GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND TO THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR, SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
- 16. ALL PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- ALL PAVEMENT MARKINGS, REGULATORY SIGNS, AND STREET NAME SIGNS SHALL CONFORM TO CURRENT MUTCD STANDARDS.
- 18. ALL DAMAGE TO PUBLIC OR PRIVATE MAINTAINED STREETS DUE TO PROJECT CONSTRUCTION WILL BE REPAIRED AT NO COST TO THE OWNER PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.

GEN. CONSTRUCTION/ GRADING NOTES (CONT'D)

- 19. A PRE-CONSTRUCTION MEETING WITH THE GOVERNING MUNICIPALITY, ENGINEER, OWNER OR OWNER'S REPRESENTATIVE, CONTRACTOR, AND SUB-CONTRACTORS IS REQUIRED PRIOR TO START OF PROJECT.
- 20. PRIOR TO ANY WORK IN THE STREET OR RIGHT-OF-WAYS AND PRIOR TO ANY PUBLIC ROAD LANE CLOSURE, THE CONTRACTOR IS REQUIRED TO CONTACT THE GOVERNING MUNICIPALITY (3) DAYS IN ADVANCE.
- 21. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ANY SPILL CURB REQUIRED TO PROVIDE POSITIVE DRAINAGE TO STORM STRUCTURES AND PREVENT
- ANY LOW SPOTS OR "BIRD BATHS" WITHIN THE CURB & GUTTER OR PAVED SECTIONS. 22. NO VISUAL OBSTRUCTIONS SHALL BE WITHIN ANY SIGHT DISTANCE TRIANGLES BETWEEN 2 AND 8 FEET IN HEIGHT ABOVE FINISHED GRADE.
- 23. ANY VERTICAL DROPS MORE THAN 30" FROM A RETAINING WALL WILL REQUIRE A 42" HIGH SAFETY FENCE ALONG THE TOP OF WALL.
- THE CONTRACTOR SHALL NOTE THAT EVERY OFFSET, FITTING, TIE-IN POINT, ETC. MAY NOT BE SHOWN ON THE PLANS. CONTRACTOR SHALL USE STANDARD CONSTRUCTION PROCEDURES TO FOLLOW THE PLANS AS CLOSELY AS POSSIBLE AND NOTIFY THE ENGINEER IF DISCREPANCIES ARE FOUND.
- 25. POSITIVE DRAINAGE SHALL BE PROVIDED AWAY FROM ALL BUILDINGS.
- 26. THE EARTHWORK ON THIS PLAN DOES NOT NECESSARILY BALANCE; OFFSITE BORROW OR WASTE MAY BE REQUIRED
- 27. ALL CONCRETE PIPE SHALL BE REINFORCED CLASS III, UNLESS NOTED OTHERWISE.
- 28. ALL PIPE TO BE INSTALLED ON-SITE AND IN THE RIGHTS OF WAY SHALL MEET OR EXCEED THE DOT ASTM AND AASHTO SPECIFICATION REQUIREMENTS FOR SUCH PIPE MATERIAL. CONTRACTOR SHALL VERIFY APPROVAL WITH DOT FOR ALL PIPE MATERIALS TO BE USED IN THE RIGHT OF WAY.
- 29. ROOF DRAIN CONNECTIONS AND INLINE CATCH BASINS IN NON-TRAFFIC BEARING LOCATIONS MAY BE HDPE SYSTEMS SUCH AS "NYLOPLAST" BY ADS OR APPROVED EQUAL (SEE DETAILS FOR USE AS STORM DRAINAGE SYSTEM).
- 30. ALL ON-SITE PIPE SHALL BE INSTALLED MEETING COVER, BACKFILL AND BEDDING REQUIREMENTS PER DOT OR THE MANUFACTURER'S RECOMMENDATIONS, WHICHEVER
- 31. DOT PRE-CAST DRAINAGE STRUCTURES / MANHOLES CAN BE USED IN LIEU OF DOT STANDARD BRICK OR CONCRETE CATCH BASINS. ANY DEVIATION FROM THE SPECIFIED STRUCTURES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION AND SHALL MAINTAIN COMPLIANCE WITH ALL CORRESPONDING DOT MATERIAL, DRAWING & DETAILED SPECIFICATIONS. NO "KNOCK-OUT" OR WAFFLE BOXES SHALL BE USED WITHOUT PERMISSION FROM THE ENGINEER.
- ADDITIONAL SPECIFICATIONS AND REQUIREMENTS FOR FOOTER AND BUILDING PAD PREPARATION AND COMPACTION MAY EXIST IN ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SHALL BE EXECUTED/IMPLEMENTED AS REQUIRED.

GENERAL UTILITY NOTES:

- ALL EXISTING UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER. ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE AND REGULATIONS BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START TO THE FOLLOWING: OF WORK AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS: HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR EXACT LOCATION AND PROTECTION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR. CONTRACTOR MUST APPLY FOR ALL UTILITY CONNECTION APPLICATIONS/PERMITS.
- CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONNECTION FEES FOR CONSTRUCTION. 6. CONTRACTOR MUST OBTAIN ANY REQUIRED UTILITY DETAILS FOR RECONNECTION OF
- EXISTING SERVICES OR NEW SERVICE AND IS RESPONSIBLE FOR THE CONSTRUCTION OF EACH NEW SERVICE PER THE APPROPRIATE UTILITY COMPANY'S SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUNDS.
- COMPACTED SUB-GRADE. 8. IF CONFLICTS ARE FOUND. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND

UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE TO CURBING, PAVING, AND

9. ALL PIPE LENGTHS AND DISTANCES BETWEEN STRUCTURES ARE MEASURED FROM CENTER 6. OF STRUCTURE TO CENTER OF STRUCTURE ALONG A HORIZONTAL PLANE.

10. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES

ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.

NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. 11. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL

PROMPTLY NOTIFY THE OWNER. HIS REPRESENTATIVE AND THE CONTRACTOR SHOULD

12. CONTRACTOR SHALL EXCAVATE ONLY ENOUGH TRENCH FOR WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY. ALL OSHA STANDARDS FOR TRENCH EXCAVATIONS SHALL BE OBSERVED BY ALL PARTIES INVOLVED WITH UTILITY

WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.

- 13. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE
- 14. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY 9. OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM VEGETATION, ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS, AND SHALL BE NON-PLASTIC IN NATURE. OR HAVE A TENDENCY TO SHIFT OR FLOW UNCHARACTERISTICALLY WHEN TAMPED. BACKFILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL
- WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. 15. RUNOFF FROM IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE SANITARY SEWER OR ONTO ADJACENT PROPERTIES.
- ALL JOINTS ON THE STORM WATER CONVEYANCE SYSTEM SHALL BE WATERTIGHT. 17. ALL CONSTRUCTION ASSOCIATED WITH WATER AND SANITARY SEWER SHALL BE IN
- ACCORDANCE WITH GOVERNING MUNICIPALITY STANDARDS AND SPECIFICATIONS. 18. ALL ELECTRICAL SERVICE LINES TO OR AROUND THE PROPOSED STRUCTURE SHALL BE

19. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS AND DISTURBANCES WITH

- EXISTING USERS AND LOCAL MUNICIPALITY SO THAT ANY SERVICE INTERRUPTIONS ARE 20. CONTRACTOR SHALL KEEP A RECORD PLAN SET SHOWING UTILITY CONSTRUCTION, LOCATIONS, CLEARANCES, ETC, AND PROVIDE A COPY TO THE ENGINEER TO ASSIST WITH PREPARATION OF AS-BUILT DRAWINGS. CONTACT ENGINEER IF EXPLANATION OF WHAT
- 21. PAVEMENT CUTS FOR UTILITY INSTALLATIONS SHALL BE SAWCUT FOR STRAIGHT, CLEAN EDGES. PATCHES SHALL BE IN ACCORDANCE WITH GOVERNING MUNICIPALITY.

ITEMS ARE REQUIRED IF UNSURE, PRIOR TO BEGINNING CONSTRUCTION.

- 22. CONTRACTOR SHALL COORDINATE INSTALLATIONS OR CONDUITS ON SITE PRIOR TO PREPARING ROADWAY, DRIVE OR PARKING AREA SUBGRADES.
- 23. WATER SHALL NOT BE ALLOWED TO RISE WITHIN UNFILLED UTILITY TRENCHES AFTER PIPE HAS BEEN INSTALLED. BACKFILL IMMEDIATELY AFTER PIPE INSTALLATION. 24. PIPES IN STORM DRAINAGE STRUCTURES SHALL BE CUT FLUSH TO INSIDE WALLS. INVERTS

SHALL BE POURED IN DRY CONDITIONS WITH STRUCTURES BEING PUMPED OUT PRIOR TO

25. ALL CASTINGS AND FERROUS MATERIAL PIPING ASSOCIATED WITH WATER, SEWER, AND STORM DRAINAGE SHALL BE DOMESTICALLY CAST.

CONSTRUCTION WASTE NOTES:

- ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT TO ENSURE COMPLIANCE WITH THE GOVERNING MUNICIPALITIES' REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DECONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS.
- PURSUANT TO THE GOVERNING MUNICIPALITIES' RRMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION
 - WASTE MUST BE RECYCLED. PURSUANT TO THE GOVERNING MUNICIPALITIES' RRMO, ALL HAULERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE. WHICH INCLUDES ANY REGULATED

RECYCLABLE MATERIALS, SHALL BE LICENSED BY THE GOVERNING MUNICIPALITIES.

- 4. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH
- 5. THE PRESENCE IF ANY ASBESTOS CONTAINING MATERIALS (ACM) AND/OR OTHER HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.

INSPECTION NOTES:

- ADDRESS NUMBERS MUST BE A MINIMUM OF 4 INCHES HIGH AND OF CONTRASTING COLOR TO THEIR BACKGROUND, REFLECTIVE NUMBERS ARE PREFERRED, WHEN THE DISTANCE FROM THE STREET OR FIRE DEPARTMENT ACCESS LANE TO THE FRONT OR ADDRESS SIDE OF THE BUILDING EXCEEDS 25 FEET, LARGER NUMBERS ARE REQUIRED. 26 FEET TO 50 FEET SHALL HAVE 8 INCH NUMBERS, 51-75 FEET SHALL HAVE 12 INCH NUMBERS AND OVER 75 FEET SHALL HAVE 18 INCH NUMBERS. WHERE ACCESS IS BY PRIVATE MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE.
- KEY BOXES SHALL BE REQUIRED ON ANY BUILDING THAT HAS A FIRE ALARM SYSTEM. A FIRE SPRINKLER SYSTEM, AN ELEVATOR, OR SPECIAL LOCKING ARRANGEMENTS. THE KEY BOX SHALL BE OF AN APPROVED TYPE AS REQUIRED FROM THE CHAPEL HILL FIRE DEPARTMENT. THE SIZE OF THE KEY BOX WILL BE DETERMINED BY THE NUMBER OF KEYS NECESSARY TO MITIGATE ANY EMERGENCY SITUATION BASED ON THE BUILDING AND ITS OCCUPANCY. AN APPROVED LOCK SHALL BE INSTALLED ON GATES OR SIMILAR BARRIERS WHEN REQUIRED BY THE FIRE CODE OFFICIAL. KEYS SHALL BE CHANGED OUT IMMEDIATELY IF THE LOCKS ARE CHANGED OR RE-KEYED.
- A LEAD-FREE RPZ WITH BYPASS FOR THE BACKFLOW PROTECTION IS REQUIRED. ENSURE AT LEAST 18 INCHES OF WORKING CLEARANCE IS PROVIDED AROUND OR MORE IF MANUFACTURER'S INSTRUCTIONS REQUIRE MORE.
- 4. DEMOLITION OF THE EXISTING STRUCTURES WILL REQUIRE AN ASBESTOS TEST PRIOR TO DEMOLITION AND A SECOND ASBESTOS TEST OF THE SOIL AFTER THEY HAVE BEEN REMOVED.
- IIF REQUIRED, THE PROPOSED BUILDINGS SHALL BE PROTECTED BY NFPA 13 SPRINKLER SYSTEM

ADA INSTRUCTIONS TO CONTRACTOR:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS. AS CONSTRUCTED. MUST COMPLY WITH THE CURRENT ADA STANDARDS UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE(S), PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS. INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED

PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

CURB RAMPS - SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET. LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE

DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 48-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%) ADA RAMP REGULATIONS MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND

1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. DOORWAYS - MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOO THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAI 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND

RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN

OTHER REFERENCED INCORPORATED BY COD.) WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN WRITING OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED

THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

THE SITE SHALL BE FULLY COMPLIANT WITH THE NORTH CAROLINA ACCESSIBILITY CODES

(ANSI 117.1 -2009 AND CHAPTER 11 OF THE NCBC) UNLESS AND EXCEPT IN AREAS WHERE

AN APPROVED STATEMENT FROM A SITE ENGINEER, SURVEYOR OR ARCHITECT VERIFIES

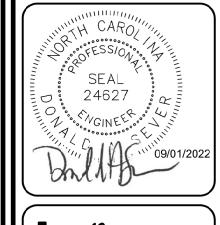
THAT SITE CONDITIONS EXIST WHERE THE TOPOGRAPHY OF THE SITE IS EXTREME AND

BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.

ONLY ALTERNATE METHODS OF COMPLIANCE ARE POSSIBLE. ACCESSIBILITY REQUIREMENTS: THAT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE APPLICANT SHALL PROVIDE THE MINIMUM REQUIRED ACCESSIBLE PARKING SPACES AND DESIGN ALL ACCESSIBLE PARKING SPACES, RAMPS, AND CROSSWALKS, AND ASSOCIATED INFRASTRUCTURE ACCORDING TO AMERICANS WITH DISABILITIES ACT STANDARDS, NORTH CAROLINA BUILDING CODE, AMERICAN NATIONAL STANDARDS INSTITUTE ANSI CODE. AND TOWN STANDARD.1. PARKING - NUMBER OF SPACES TO COMPLY WITH NCBC 2012 SECTION 1106.1. 1 PER 6 COMPLIANT SPACES OR PORTION THEREOF MUST BE VAN ACCESSIBLE, NO SLOPE TO EXCEED 2 PERCENT IN ANY DIRECTION. SIGNAGE PER NC REQUIREMENTS, MUT-CD AND ICC A 117.1.2. CURB CUTS AND ACCESSIBLE ROUTES PER ICC A117.1 2009 ED. CROSS SLOPE LIMITED TO 2 PERCEN

CALL FOR INSPECTION BEFORE PLACEMENT OF CONCRETE. A SLOPE GREATER THAN 5

PERCENT REQUIRES CONSTRUCTION AS A RAMP. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

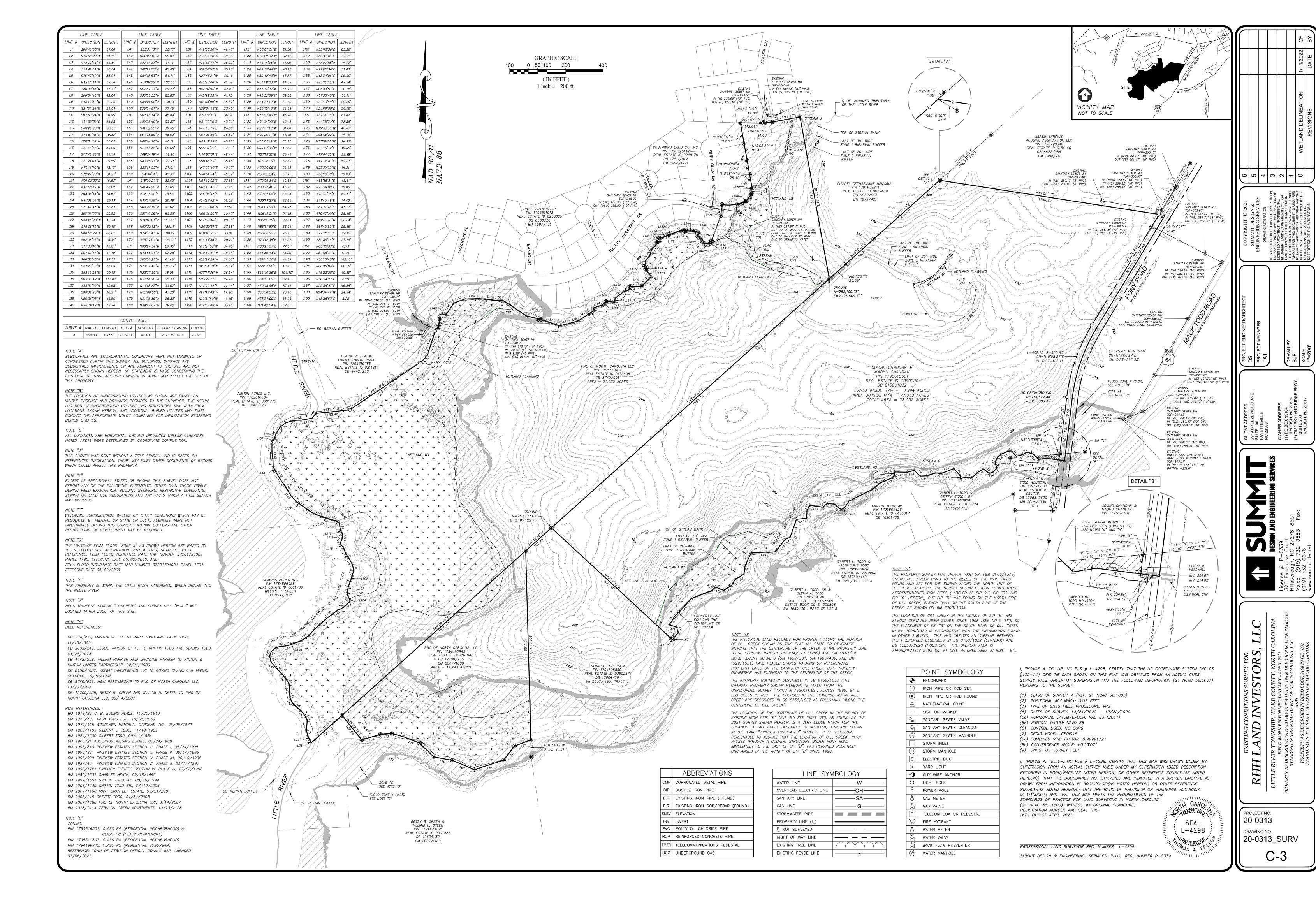


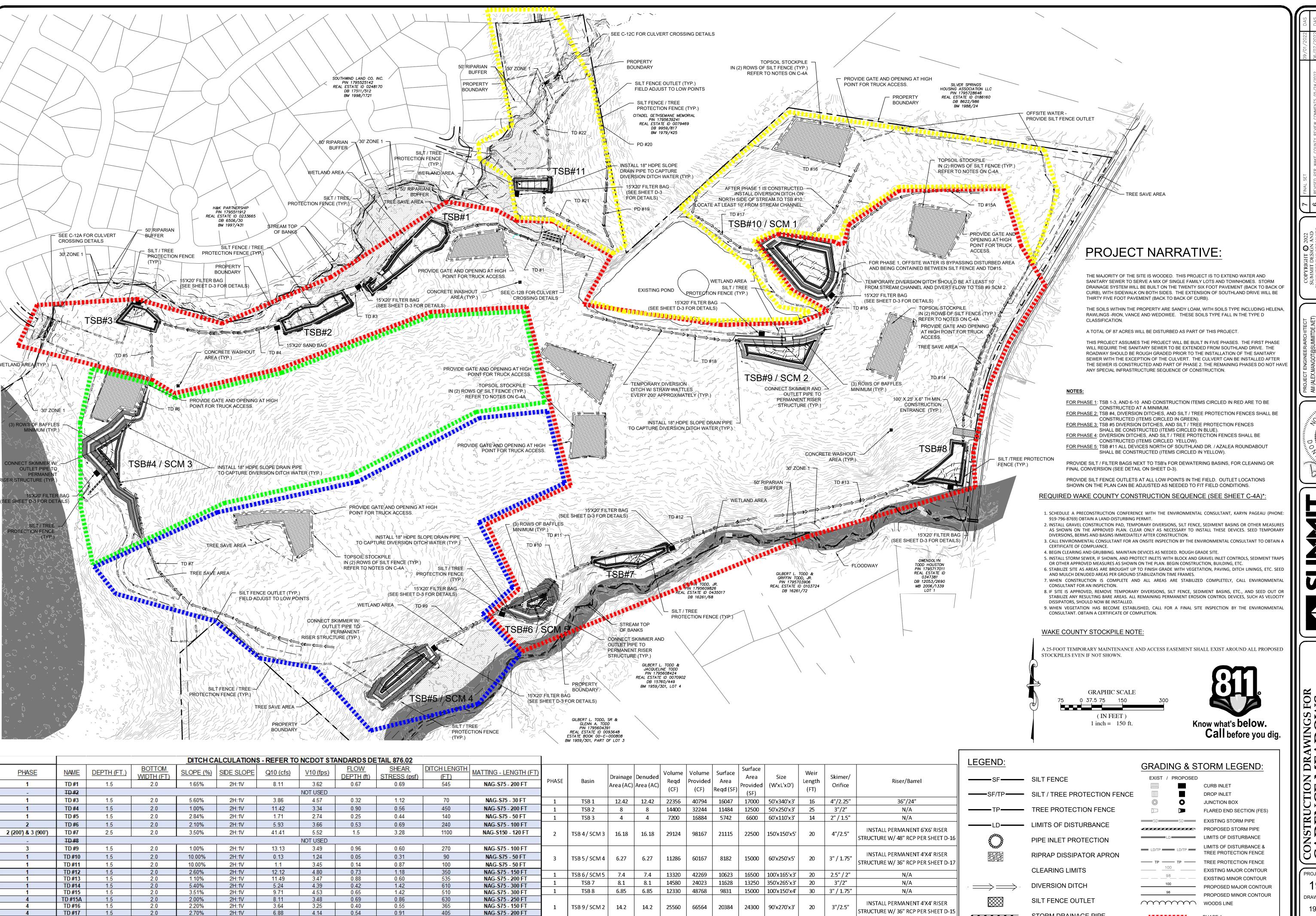
PROJECT NO.

19-0103_notes.dwg

DRAWING NAME

SHEET NO.





NAG-S75 - 300 FT

NAG-P300 - 370 FT

NAG-S75 - 150 FT

NAG-S75 - 200 FT

NAG-P300 - 220 FT

TSB 10 / SCM 1 | 27.82 |

10.92 | 50076 | 124321 | 23708 | 26055 | 145'x265'x5' | 28

TSB 11 | 2.4 | 2.4 | 4320 | 12181 | 3445 | 4200 | 35'x120'x4' | 20 | 1.5" / 1.25" |

TD #18

PD #19

TD #21

TD #22

PD #20

1.00%

4.80%

2H-1V

157% | 2H-1V | 4.80 | 3.12 | 0.51 |

1.45% 2H:1V

CONTROL

EROSION

PROJECT NO. 19-0103 DRAWING NAME:

19-0103_ec.dwg

SHEET NO.

PHASE 2

PHASE 3

PHASE 4 AND 5

STORM DRAINAGE PIPE

INSTALL PERMANENT 4'X4' RISER

STRUCTURE W/ 18" RCP PER SHEET D-14

4"/3.5"

WAKE COUNTY CONSTRUCTION SEQUENCE:

1. SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL CONSULTANT - KARYN PAGEAU - 919 796-8769. OBTAIN A LAND-DISTURBING PERMIT.

a) OBTAIN APPROVED SET OF CONSTRUCTION DRAWINGS. A LAND DISTURBANCE PERMIT WILL BE REQUIRED BEFORE THE ONSET OF ANY GRADING ACTIVITY. KEEP A COPY OF BOTH ITEMS ONSITE THROUGHOUT CONSTRUCTION.

b) IF AN OFFSITE SOIL SPOIL OR BORROW SITE IS UTILIZED, THEN THE DISTURBED AREA FOR THE SPOIL/BORROW SITE MUST BE INCLUDED IN THE LAND-DISTURBANCE PLAN AND PERMIT UNLESS THE SPOIL/BORROW SITE ALREADY HAS A LAND DISTURBANCE PERMIT.

c) ATTAIN CERTIFICATE OF COVERAGE FOR THE NCG010000 CONSTRUCTION STORMWATER PERMIT AND POST ON-SITE PRIOR TO LAND-DISTURBING ACTIVITY.

2. INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.

a) INSTALL TEMPORARY CONSTRUCTION ENTRANCE / EXIT AND MAINTAIN PER THE NOTES ON THE EROSION CONTROL SHEETS AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL GUIDELINES. ALL CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE PROPERTY AT THIS LOCATION.

b) INSTALL TREE PROTECTION FENCING ALONG THE ENTIRE LENGTH OF THE CLEARING / DISTURBANCE LIMITS WHERE THE LIMITS ARE ADJACENT TO EXISTING VEGETATION. USE TREE

c) CLEAR ONLY AS NECESSARY TO INSTALL THE EROSION CONTROL DEVICES AS SHOWN ON THIS PLAN. INSTALL SILT FENCING AND ALL SILT FENCE OUTLETS AS SHOWN, AND PROVIDE

d) CONSTRUCT SKIMMER SEDIMENT BASINS AS SHOWN ON THE PLANS.

PROTECTION/ SILT FENCE COMBINATION FENCE PER DETAIL WHERE INDICATED ON PLANS.

e) INSTALL TEMPORARY DIVERSION DITCHES AS SHOWN TO ROUTE SEDIMENT LADEN SOILS DOWN SLOPE FROM CONSTRUCTION ACTIVITIES THAT DISTURB SITE SOILS. DIRECT AS NEEDED TO PROMOTE POSITIVE DRAINAGE TO THE APPROPRIATE SKIMMER BASIN AS SHOWN ON THE PLANS.

f) TEMPORARILY SEED, MULCH, ANCHOR AND STABILIZE ALL EROSION CONTROL DEVICES IMMEDIATELY AFTER CONSTRUCTION. ENSURE THAT DIVERSION TRANSITION AREAS INTO SEDIMENT BASINS ARE LINED AND STABILIZED AND THAT DIVERSIONS AND LINING EXTEND INTO BASINS.

3. CALL ENVIRONMENTAL CONSULTANT FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.

SUPPLEMENTAL OUTLETS AS NEEDED IN LOCATIONS WHERE FIELD CONDITIONS INDICATE AREAS WHERE SITE RUNOFF WILL POND.

4. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.

a) BEGIN CLEARING AND GRUBBING OF THE VEGETATION AS SHOWN. DISPOSE OF ALL WASTE MATERIALS IN ACCORDANCE WITH THE APPROVED SOLID WASTE MANAGEMENT PLAN OR LOCAL LANDFILL ORDINANCE.

b) BEGIN GRADING ACTIVITIES TO PRODUCE FINAL ROADWAY GRADES SHOWN ON GRADING PLAN AND PLAN / PROFILE SHEETS.

6) SHIFT AND/OR REROUTE TEMPORARY DIVERSION DITCHES AROUND CONSTRUCTION ACTIVITIES AS NEEDED TO MAINTAIN THE DRAINAGE AREAS AS SHOWN ON THE PLANS AND TO

d)BEGIN STREAM CROSSING BY INSTALLING PUMPS AS NEEDED TO MANAGE BASE FLOW CONDITIONS AND DEWATERING THE WORK AREA AS SHOWN ON CULVERT CROSSING SHEETS C-12A, C-12B AND C12C.

e) CONSTRUCT HEAD/ END WALLS AND PIPE PER PLAN. UTILIZE ON SITE CUT TO BACK FILL THE PIPE TO THE GREATEST EXTENT PRACTICAL. CONTRACTOR SHALL EXERCISE EXTREME CAUTION AND CARE WITH RESPECT TO STABILIZING AND MAINTAINING THE FILL SLOPES ADJACENT TO THE STREAM AND BUFFER.

5. INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION BUILDING FTC

a) CONTINUE MAINTENANCE AND INSPECTION OF EROSION CONTROL DEVICES AFTER RUNOFF PRODUCING STORM EVENTS. NO DISTURBED AREA IS TO BE LEFT WITHOUT PROTECTIVE COVER (MULCH OR STRAW / TACK) AFTER COMPLETION OF CONSTRUCTION OR DEVELOPMENT ACTIVITIES PER THE TIME FRAMES ESTABLISHED IN THE STABILIZATION CHART ON THIS SHEET. DURING CONSTRUCTION OR DEVELOPMENT ACTIVITIES, ANY DISTURBED AREAS SHALL BE PROTECTED AND STABILIZED ACCORDING TO THE STABILIZATION TIMEFRAME CHART SHOWN. DISTURBED AREAS FOR ANY PORTION OF THE SITE SHALL BE STABILIZED WITHIN 7 DAYS UPON COMPLETION OF CONSTRUCTION OR DEVELOPMENT ACTIVITIES IN THAT AREA.

b) INSTALL UTILITIES AND STORM DRAIN PIPING AS GRADING ACTIVITIES PERMIT.

c) INSTALL TEMPORARY INLET PROTECTION AT THE END OF EACH WORKING DAY FOR ALL PARTIALLY INSTALLED STORM DRAINS. (SEE DETAIL SHEET)

d) DE-WATERING OF STRUCTURES WITH SEDIMENT-LADEN WATER DIRECTLY TO STREAMS IS PROHIBITED.

6. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME

a) INSTALL BLANKET MATTING ON ALL SLOPES 3:1 OR GREATER.

b) FOR ANY AREA OF LAND-DISTURBING ACTIVITY WHERE GRADING ACTIVITIES HAVE BEEN COMPLETED, TEMPORARY OR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION SHALL BE PROVIDED AS SOON AS PRACTICABLE, BUT IN NO CASE LATER THAN SEVEN DAYS AFTER COMPLETION.

7. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ENVIRONMENTAL CONSULTANT FOR AN INSPECTION.

8. 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.

a) SEE REQUIRED WAKE COUNTY BASIN REMOVAL SEQUENCE FOR FURTHER INFORMATION.

b) TSB 4, 5, 6, 9 AND 10 ARE TO BE CONVERTED TO A SCM DEVICE. COORDINATE WITH THE TOWN OF ZEBULON AND WAKE COUNTY AS TO WHEN THE SCM DEVICE CAN BE CONVERTED. AREAS DOWNSTREAM OF BASINS AND DIVERSIONS SHALL BE STABILIZED UPON CONSTRUCTION.

9. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

a) NOTICE OF TERMINATION (NOT) WILL NEED BE FILED FOLLOWING CLOSEOUT OF THE EROSION CONTROL PLAN TO END STORMWATER COVERAGE.

TOPSOIL STOCKPILE NOTES:

a. A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL EXIST AROUND ALL PROPOSED STOCKPILES. b. STOCKPILE SHALL BE LOCATED AT A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.

c. STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.

d. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.

e. 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).

MAINTENANCE REQUIREMENTS: f. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE

g. 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

h. PROVIDE <u>STAGED</u> SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE. i. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

REQUIRED WAKE COUNTY BASIN REMOVAL SEQUENCE:

1. Schedule a site meeting with the Environmental 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. Contact NCDEQ - Raleigh Regional Office (919) 791-4200 to determine the Division of Energy, Mineral and Land Resources contact person to receive dewatering notifications. At least 10 days prior to beginning dewatering activity, send Email to NCDEQ-DEMLR contact person and copy Environmental Consultant that met you onsite. The email should include: E&SC Jurisdiction: Wake County, Wake County Project: Name, Number, and Location

(city/town), Environmental Consultant Name, and address the following: a)Reason for conversion, b)Basin #, c)Dewatering method, and d) all other necessary info from Part II, Section G, Item 4 of the NCG01. (Keep email for your

NPDES monitoring documentation. 3. After receiving positive confirmation from NCDEQ-DEMLR that you may remove the basin OR on > Day 11, whichever is sooner. Remove Basin(s) and associated temporary diversion ditches. If pipes need to be extended,

perform this operation at this time. Fine grade area in preparation for seeding. 4. Perform seedbed preparation, seed, mulch and anchor any resulting bare areas immediately.

5. Install velocity dissipators and/or level spreaders as required on the Erosion Control Plan.

6. When site is fully stabilized, call Environmental 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 Consultant to determine when a basin may be converted for stormwater use. Some municipalities may also require this.





ROUND

DRAWING NAME:

19-0103 D EC

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

SECTION E: GROUND STABILIZATION

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

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

GROUND STABILIZATION SPECIFICATION

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

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

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

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

EQUIPMENT AND VEHICLE MAINTENANCE

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

LITTER. BUILDING MATERIAL AND LAND CLEARING WASTE

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

PAINT AND OTHER LIQUID WASTE

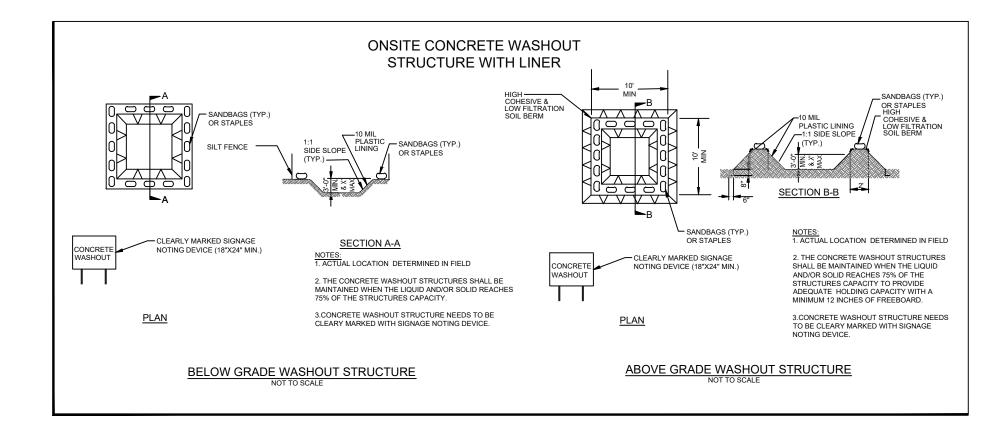
- 1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- 2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- 3. Contain liquid wastes in a controlled area.
- . Containment must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

PORTABLE TOILETS

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

EARTHEN STOCKPILE MANAGEMENT

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



CONCRETE WASHOUTS

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

HERBICIDES, PESTICIDES AND RODENTICIDES

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

HAZARDOUS AND TOXIC WASTE

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

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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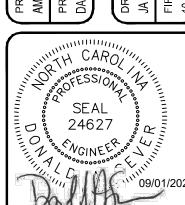
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SUMMIT DESIGN AND ENGINEERING SERVICES

DRAWING ALTERATION

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF LICENSED ARCHITECT, PROFESSIONAL ENGINEER, LANDSCAPE ARCHITECT, OR LAND SURVYOR TO ALTER ANY ITEM ON THIS DOCUMENT IN ANY WAY. ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAMY TO ARFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND SPECIFIC



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State License #: 320 Executive Co

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GROUND STABILIZATION

PROJECT NO.

19-0103
DRAWING NAME:
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C-4B

PART III

SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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

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

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

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

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

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

2. Additional Documentation to be Kept on Site

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

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

3. Documentation to be Retained for Three Years

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

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

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

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

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- (c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (d) Anticipated bypasses and unanticipated bypasses.
- (e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

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

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

Missing or invalid reference
File: S:\WATERSHED MANAGEMENT\Blackburn\NCG01 Compliance Detail\deq.nc.gov.pdf

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

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 PER WAKE COUNTY REVIEW COMMENTS 05/24/2022
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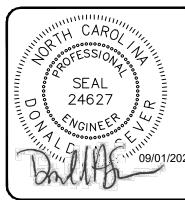
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ENGINEEKING SERVICES

DRAWING ALTERATION

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS ACTING UNDER THE DIRECTION OF
LICENSED ARCHITECT, PROFESSIONAL
ENGINEER, LANDSCAPE ARCHITECT, OR
THIS DOCUMENT IN ANY WAY, ANY LICENSEE
WHO ALTERS THIS DOCUMENT IS REQUIRED
BY LAW TO AFFIX HIS OR HER SEAL AND THE
NOTATION "ALTERED BY" FOLLOWED BY HIS
OR HER SIGNATURE AND SPECIFIC
DESCRIPTION OF THE ALTERATIONS.

DAS(DON.SEVER@SUMMITDE.NET)
DRAWN BY
JA (JIMMY.ASHLEY@SUMMITDE.NET)
FIRST ISSUE DATE
10-01-2021



AND ENGINEERING SERVICES

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Usborough, NC 27278

State License

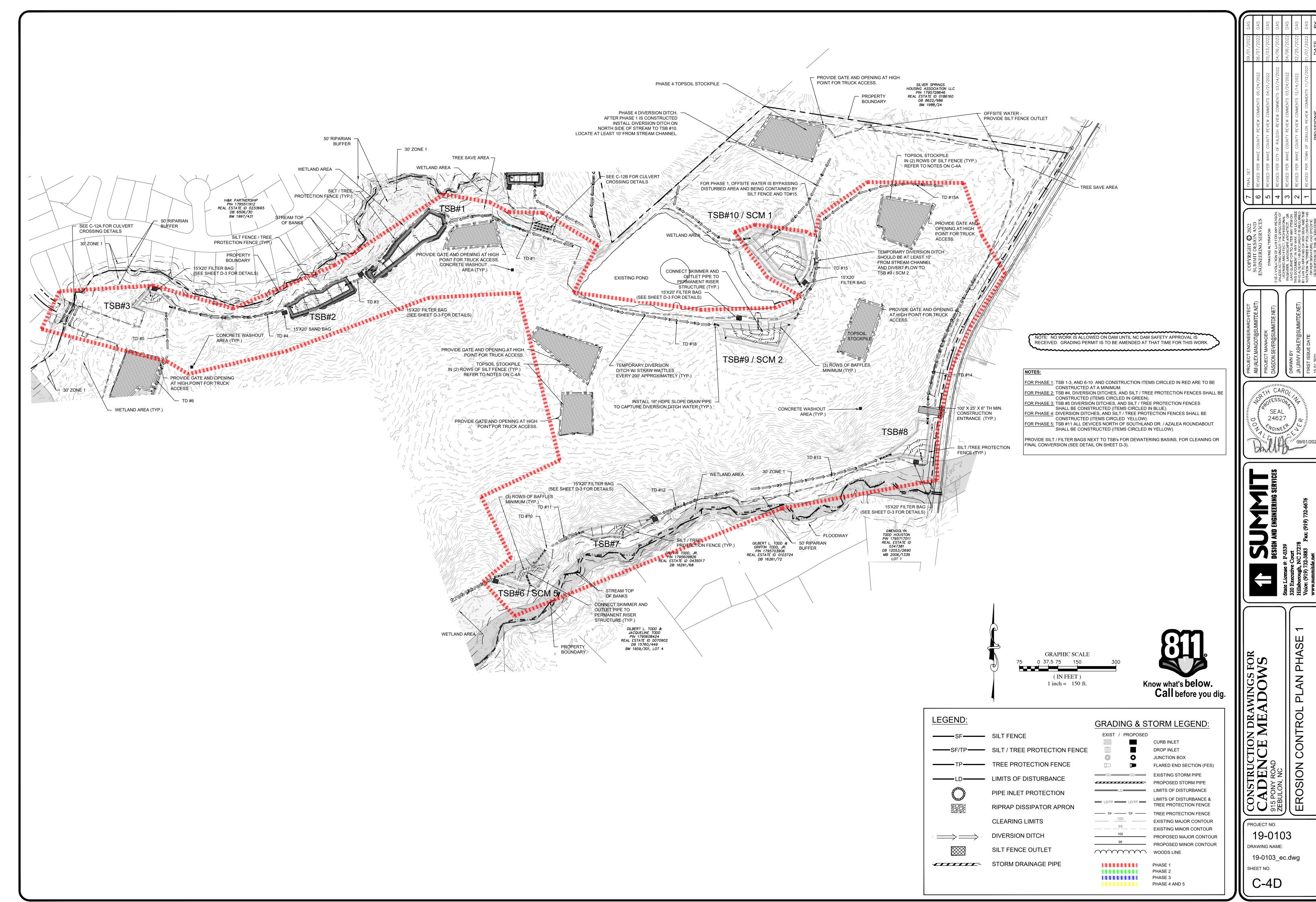
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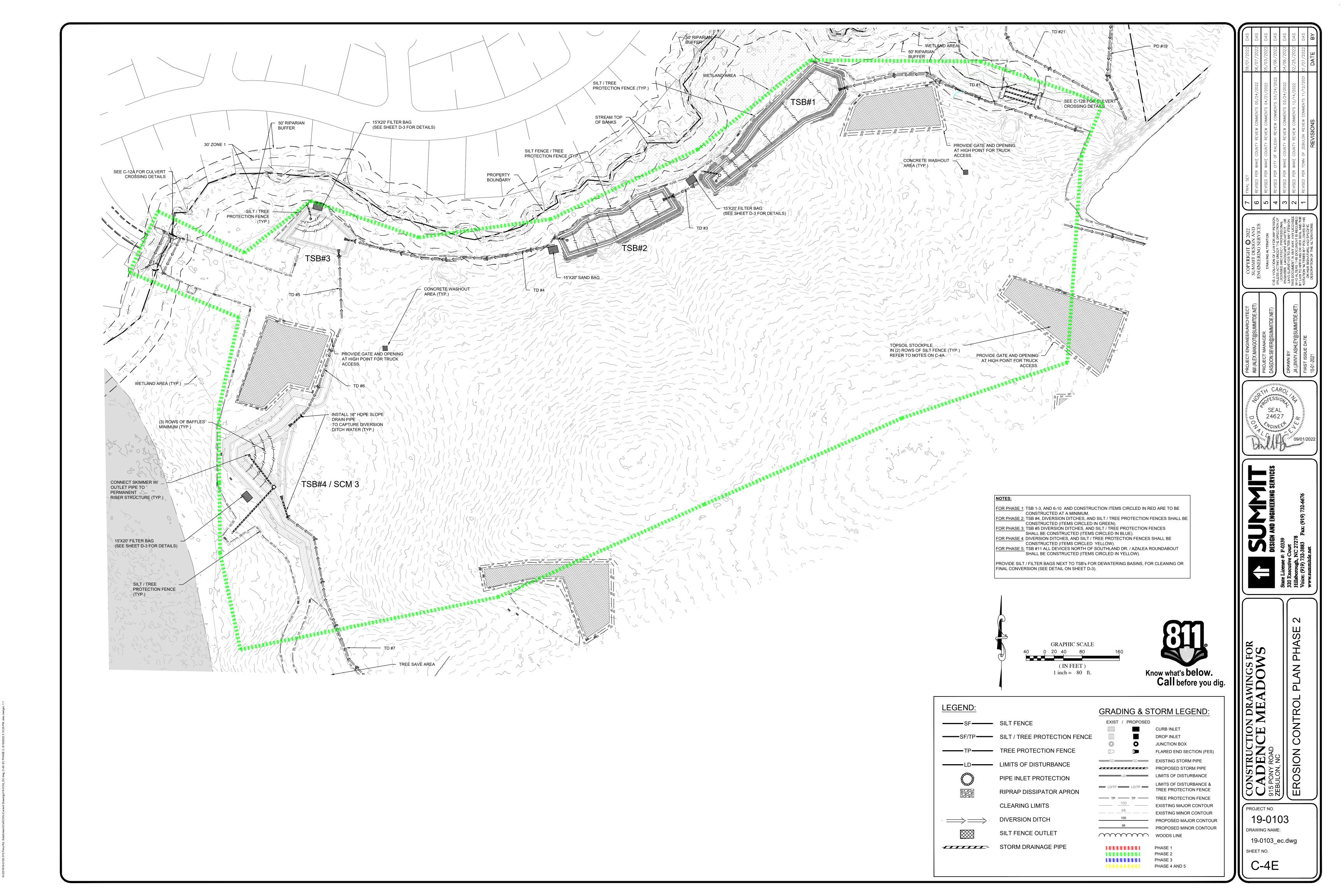
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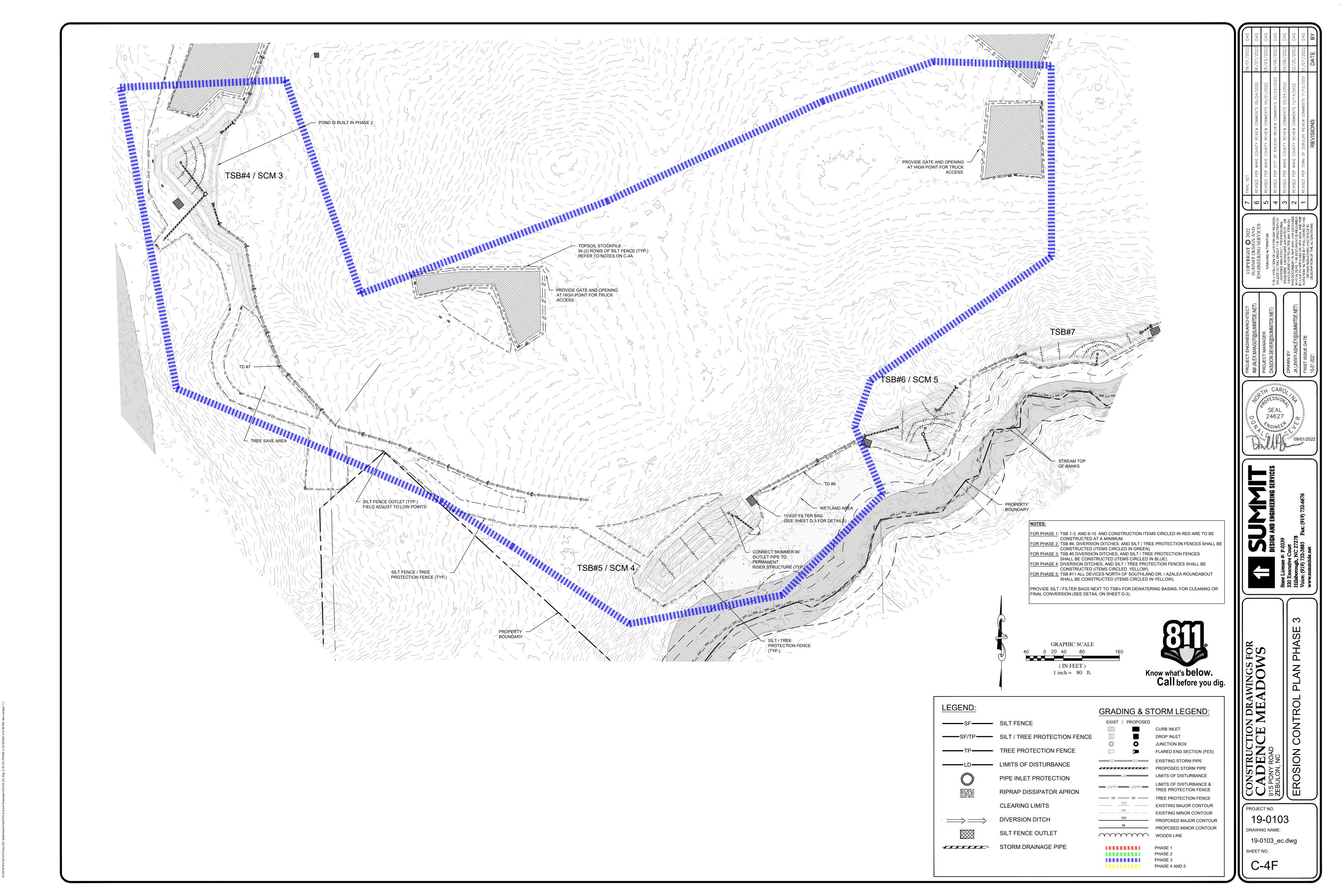
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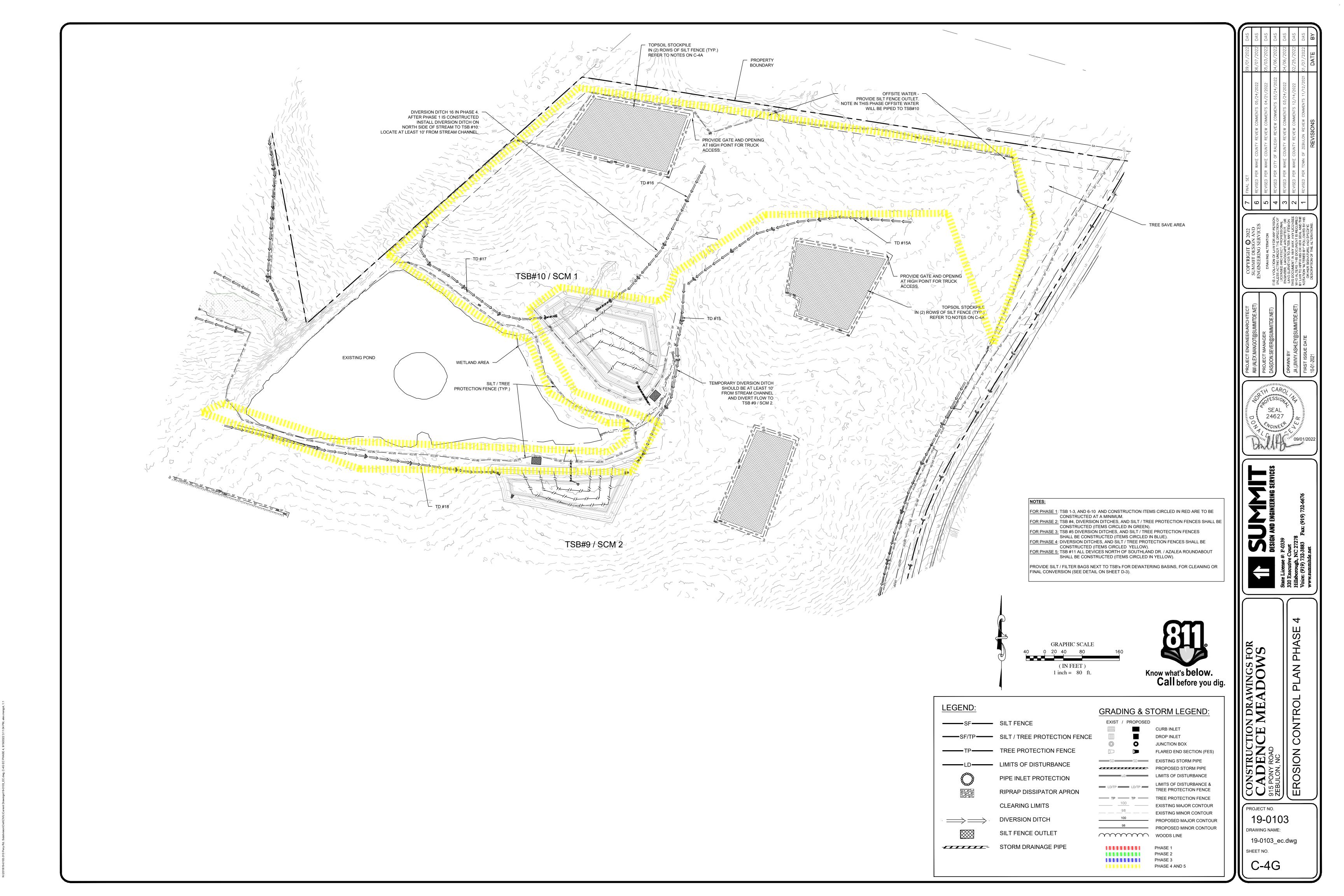
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FOR PHASE 1: TSB 1-3, AND 6-10 AND CONSTRUCTION ITEMS CIRCLED IN RED ARE TO BE CONSTRUCTED AT A MINIMUM. FOR PHASE 2: TSB #4, DIVERSION DITCHES, AND SILT / TREE PROTECTION FENCES SHALL B CONSTRUCTED (ITEMS CIRCLED IN GREEN).

FOR PHASE 3: TSB #5 DIVERSION DITCHES, AND SILT / TREE PROTECTION FENCES SHALL BE CONSTRUCTED (ITEMS CIRCLED IN BLUE).

FOR PHASE 4: DIVERSION DITCHES, AND SILT / TREE PROTECTION FENCES SHALL BE CONSTRUCTED (ITEMS CIRCLED YELLOW).

FOR PHASE 5: TSB #11 ALL DEVICES NORTH OF SOUTHLAND DR. / AZALEA ROUNDABOUT

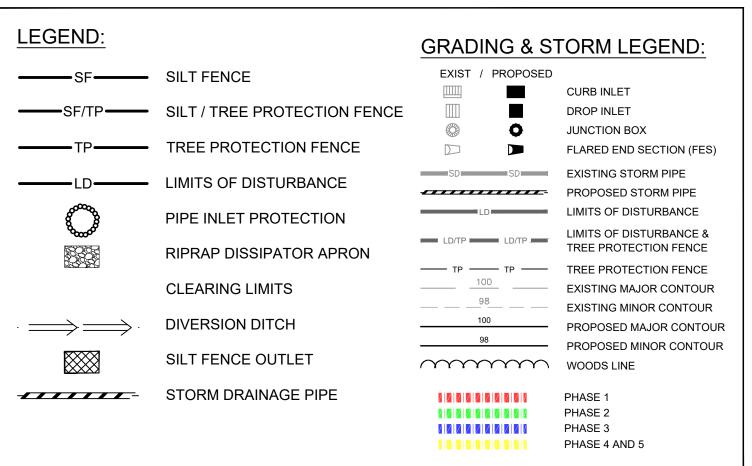
SHALL BE CONSTRUCTED (ITEMS CIRCLED IN YELLOW).

PROVIDE SILT / FILTER BAGS NEXT TO TSB's FOR DEWATERING BASINS, FOR CLEANING OR FINAL CONVERSION (SEE DETAIL ON SHEET D-3).





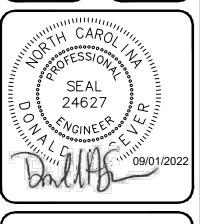
Know what's **below. Call** before you dig.



GRAPHIC SCALE

(IN FEET)

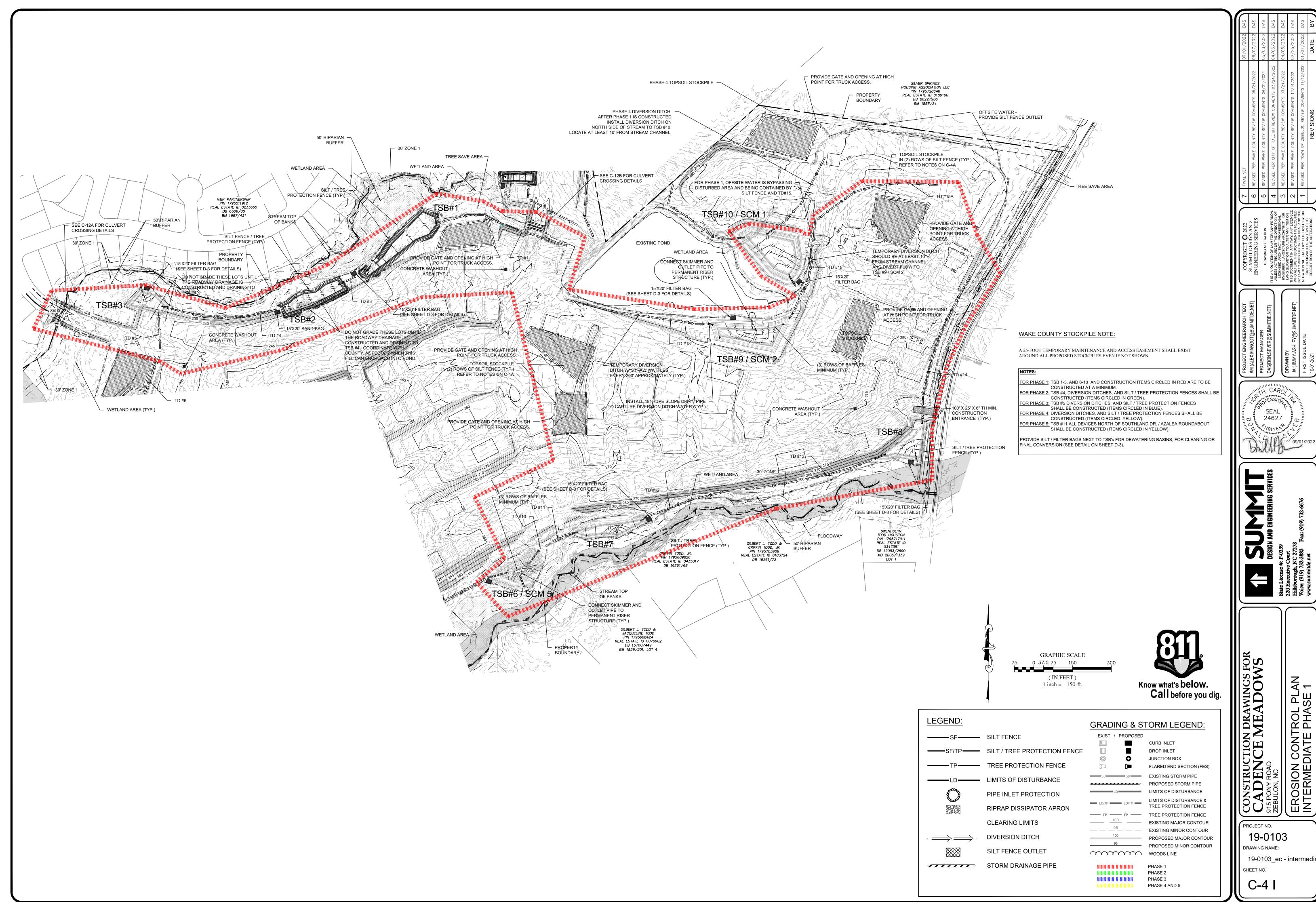
1 inch = 80 ft.

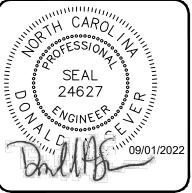


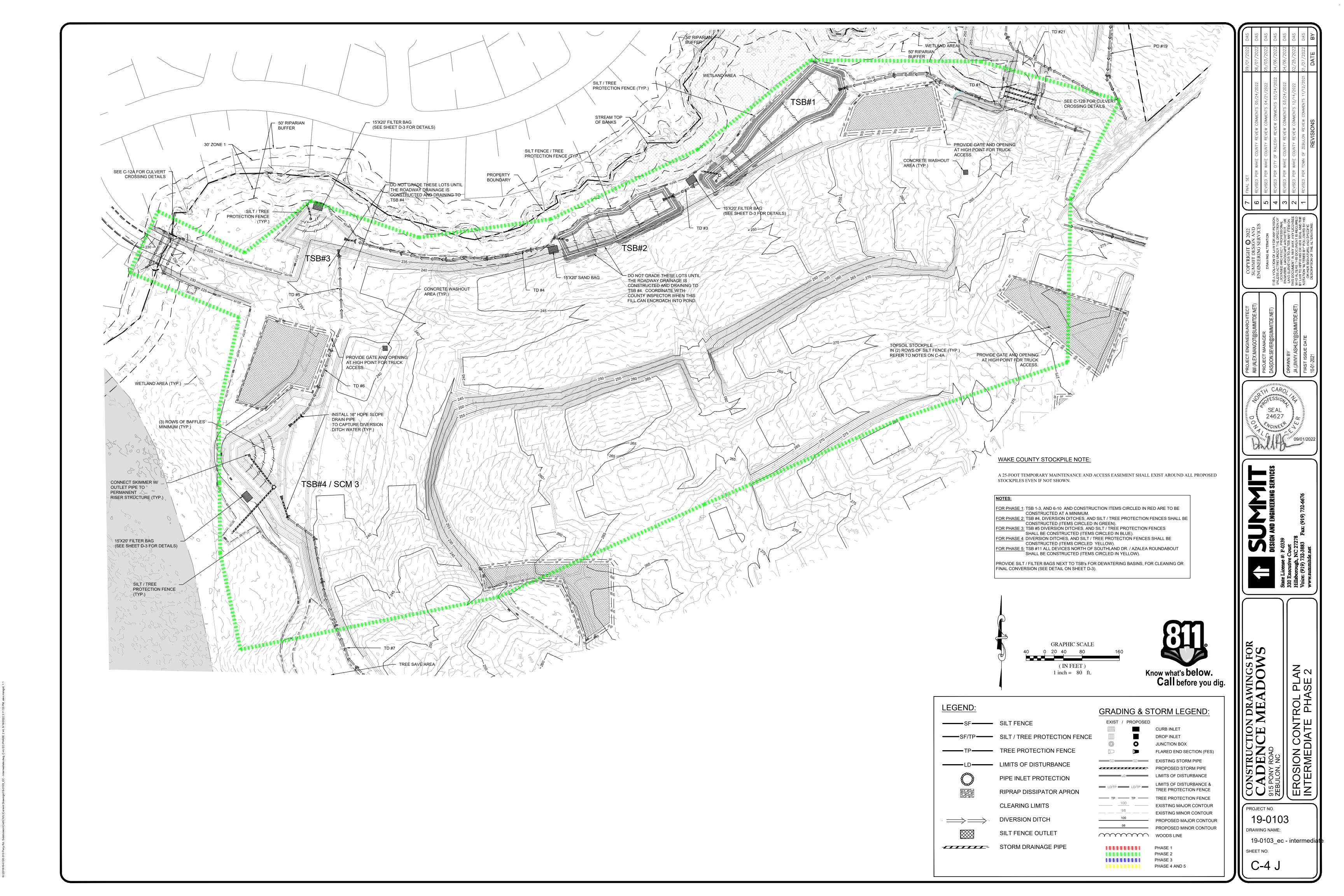
PLAN PHASE CONTROL

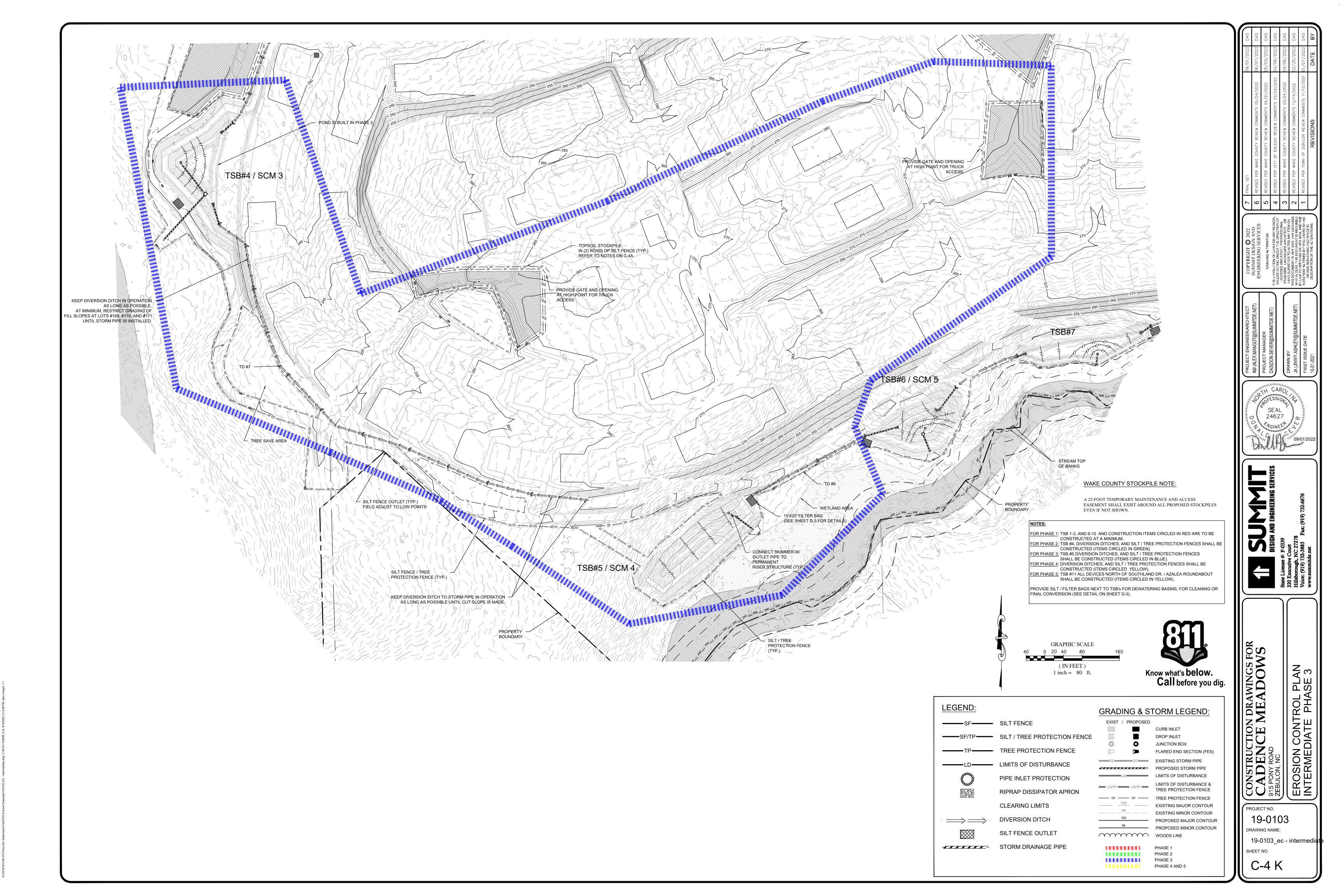
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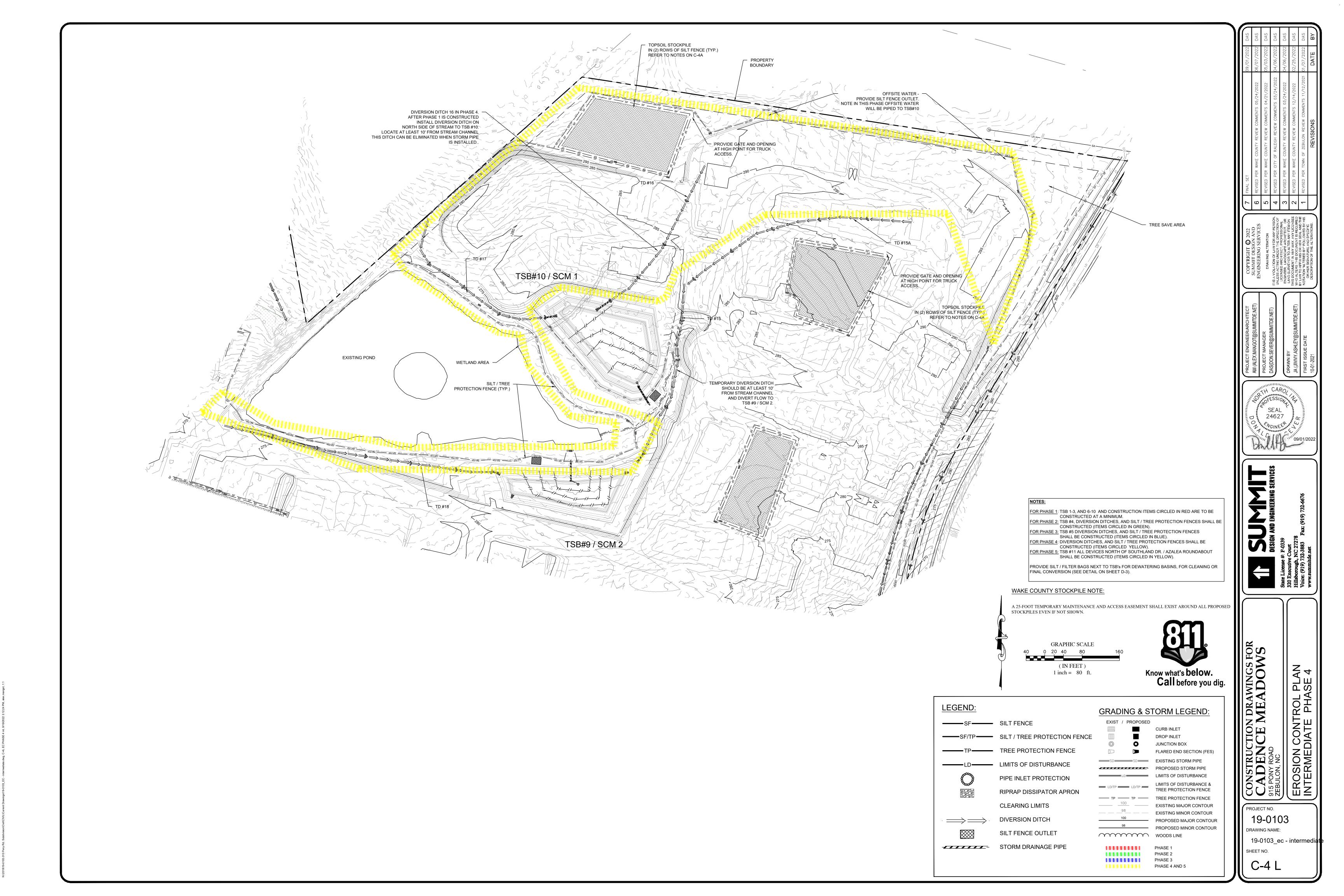
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FOR PHASE 1: TSB 1-3, AND 6-10 AND CONSTRUCTION ITEMS CIRCLED IN RED ARE TO BE CONSTRUCTED AT A MINIMUM. FOR PHASE 2: TSB #4, DIVERSION DITCHES, AND SILT / TREE PROTECTION FENCES SHALL BE CONSTRUCTED (ITEMS CIRCLED IN GREEN).

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SHALL BE CONSTRUCTED (ITEMS CIRCLED IN BLUE).
FOR PHASE 4: DIVERSION DITCHES, AND SILT / TREE PROTECTION FENCES SHALL BE

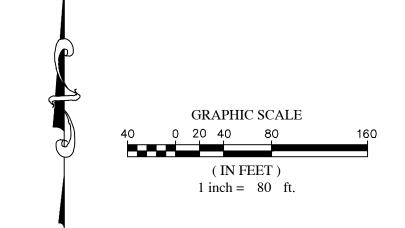
CONSTRUCTED (ITEMS CIRCLED YELLOW).

FOR PHASE 5: TSB #11 ALL DEVICES NORTH OF SOUTHLAND DR. / AZALEA ROUNDABOUT SHALL BE CONSTRUCTED (ITEMS CIRCLED IN YELLOW).

PROVIDE SILT / FILTER BAGS NEXT TO TSB's FOR DEWATERING BASINS, FOR CLEANING OR FINAL CONVERSION (SEE DETAIL ON SHEET D-3).

WAKE COUNTY STOCKPILE NOTE:

A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL EXIST AROUND ALL PROPOSED STOCKPILES EVEN IF NOT SHOWN.





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

LEGEND:		GRADING & S	TORM LEGEND:
——SF——	SILT FENCE	EXIST / PROPOSED	CURB INLET
SF/TP——	SILT / TREE PROTECTION FENCE		DROP INLET JUNCTION BOX
——TP——	TREE PROTECTION FENCE		FLARED END SECTION (FES)
——LD——	LIMITS OF DISTURBANCE	SD SD	EXISTING STORM PIPE PROPOSED STORM PIPE
	PIPE INLET PROTECTION	LD	LIMITS OF DISTURBANCE
	RIPRAP DISSIPATOR APRON	LD/TP LD/TP	LIMITS OF DISTURBANCE & TREE PROTECTION FENCE
SCC-U-18(12)	CLEARING LIMITS	TP TP 	TREE PROTECTION FENCE EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR
$\longrightarrow \longrightarrow \longrightarrow$	DIVERSION DITCH	100	PROPOSED MAJOR CONTOUR
	SILT FENCE OUTLET	98	PROPOSED MINOR CONTOUR WOODS LINE
-	STORM DRAINAGE PIPE		PHASE 1 PHASE 2 PHASE 3 PHASE 4 AND 5

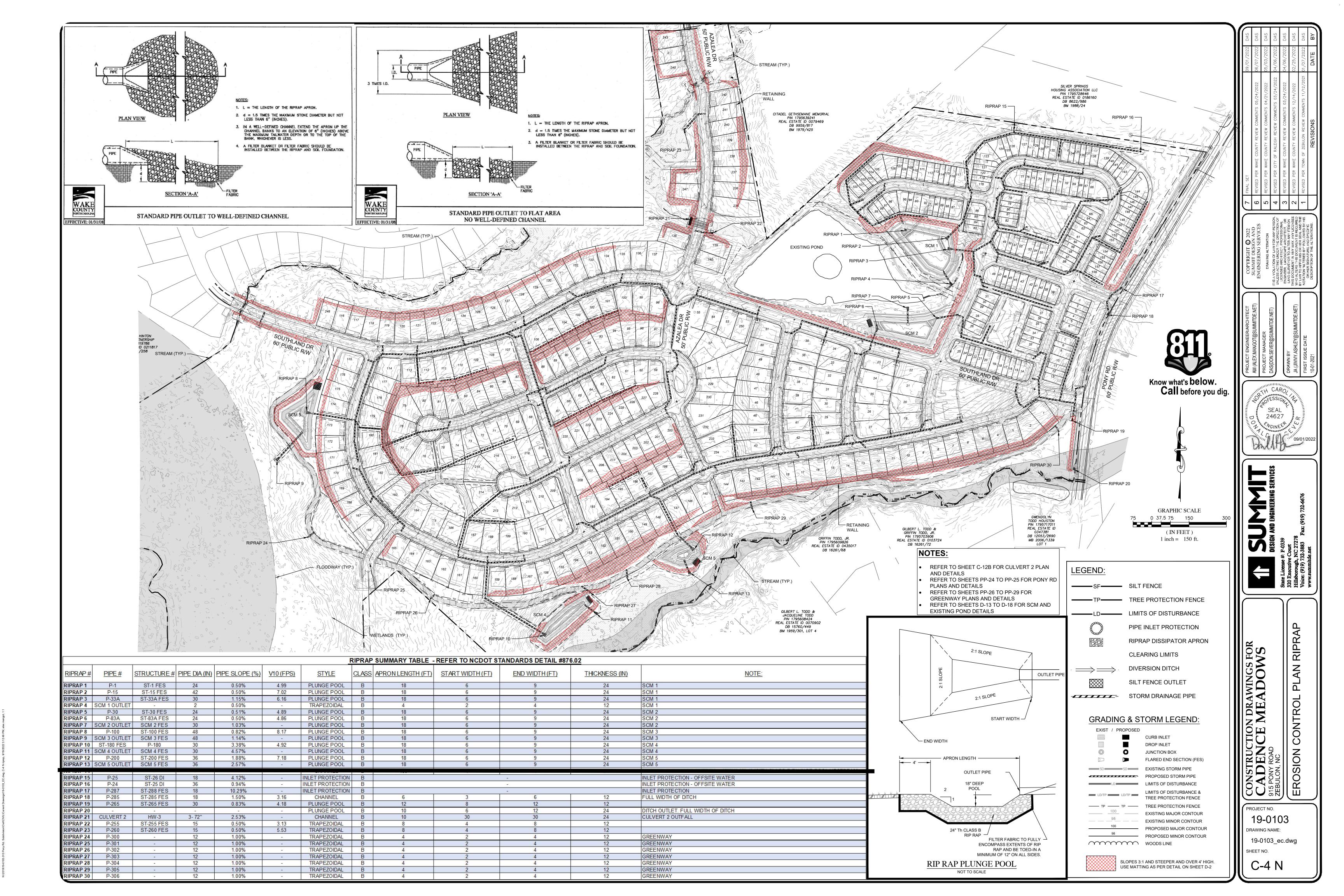
	7	FINAL SET	09/01/2022	DAS
	9	REVISED PER WAKE COUNTY REVIEW COMMENTS 05/24/2022	06/07/2022	DAS
	2	REVISED PER WAKE COUNTY REVIEW COMMENTS 04/21/2022	05/03/2022	DAS
SON,	4	REVISED PER CITY OF RALEIGH REVIEW COMMENTS 03/24/2022 04/06/2022	04/06/2022	DAS
-1 R 2	3	REVISED PER WAKE COUNTY REVIEW COMMENTS 03/24/2022	04/06/2022	DAS
SEE CE	2	REVISED PER WAKE COUNTY REVIEW COMMENTS 12/14/2022	02/25/2022	DAS
뿔	_	REVISED PER TOWN OF ZEBULON REVIEW COMMENTS 11/12/2021 01/07/2022	01/07/2022	DAS
		REVISIONS	DATE	ВҮ
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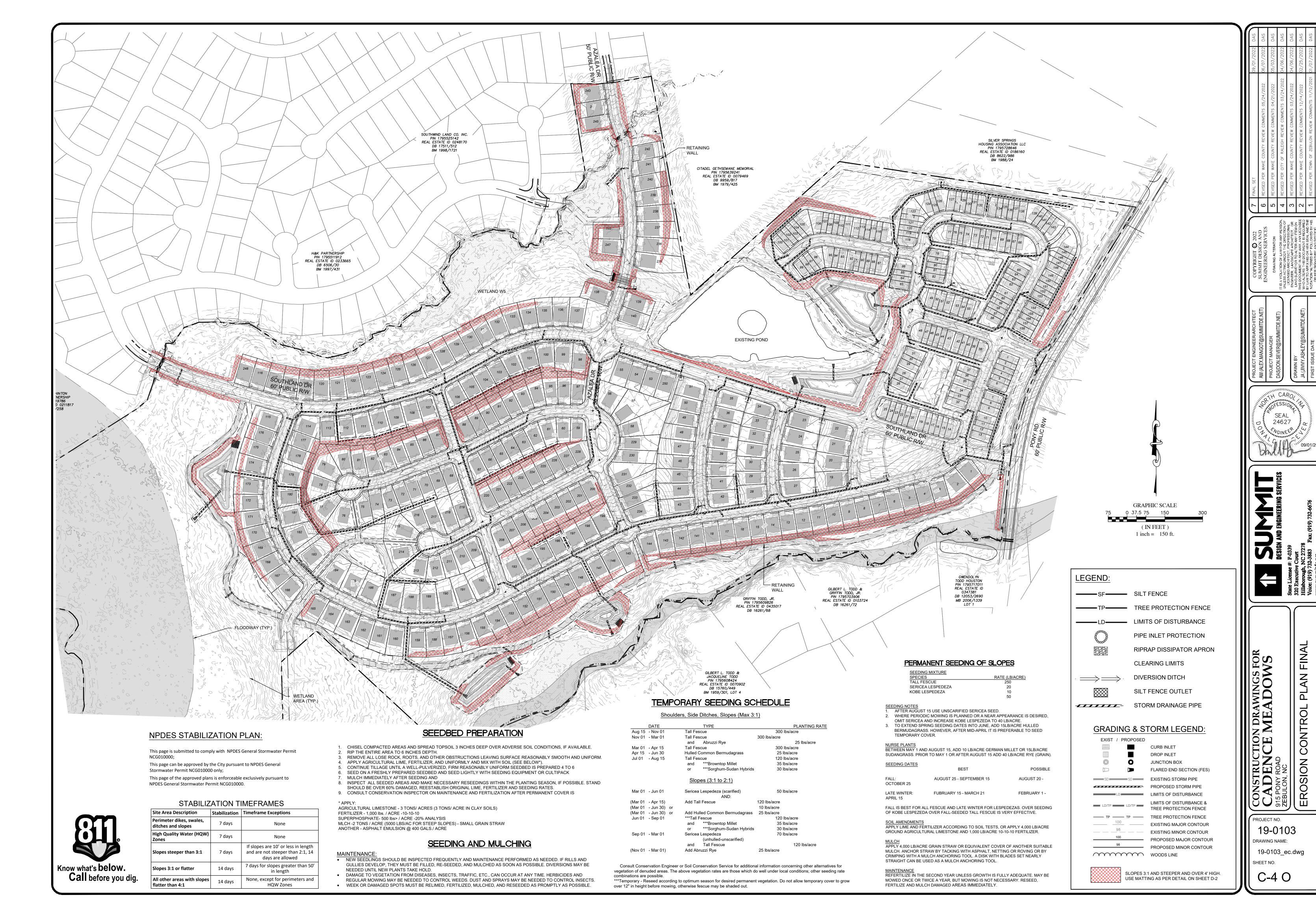


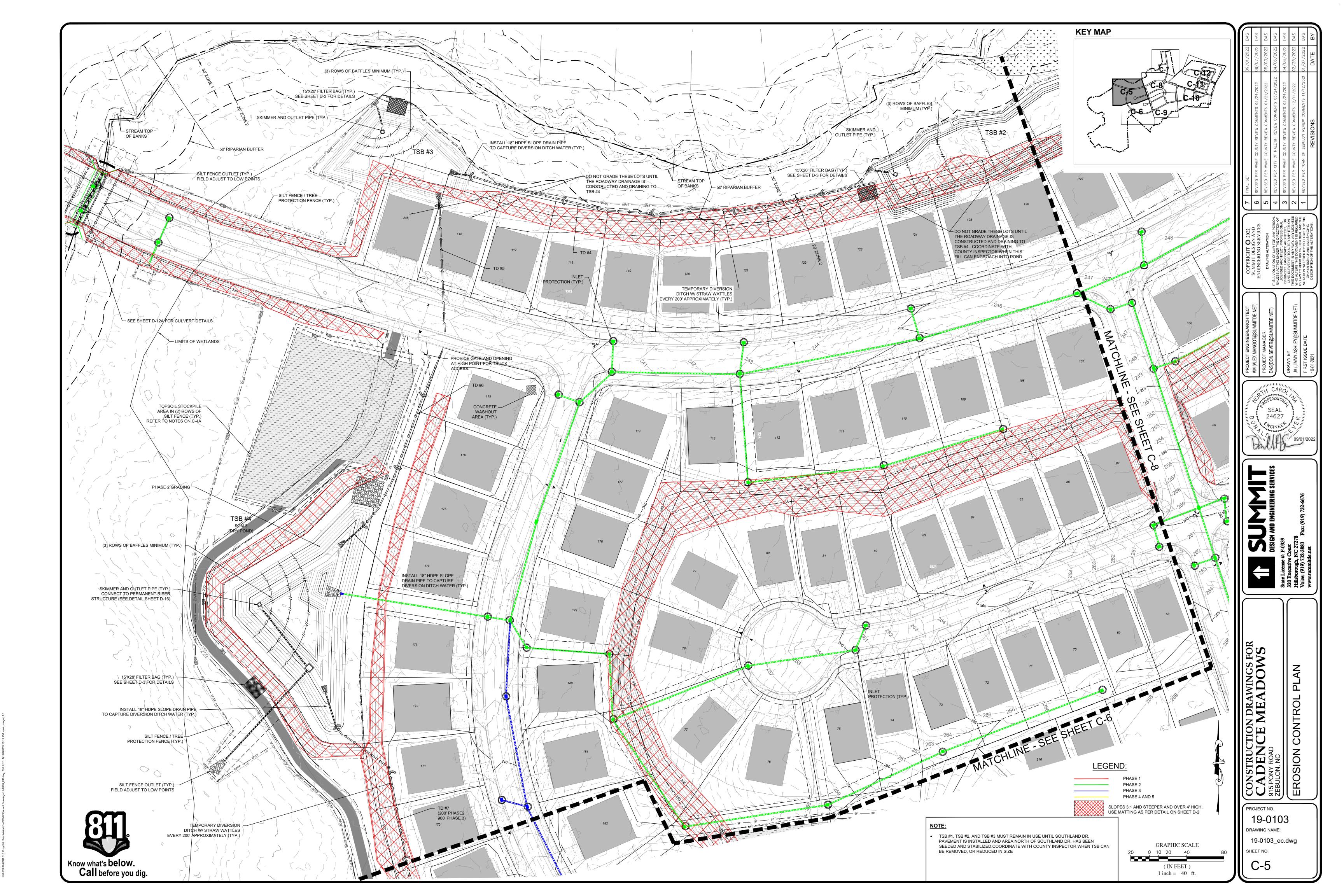
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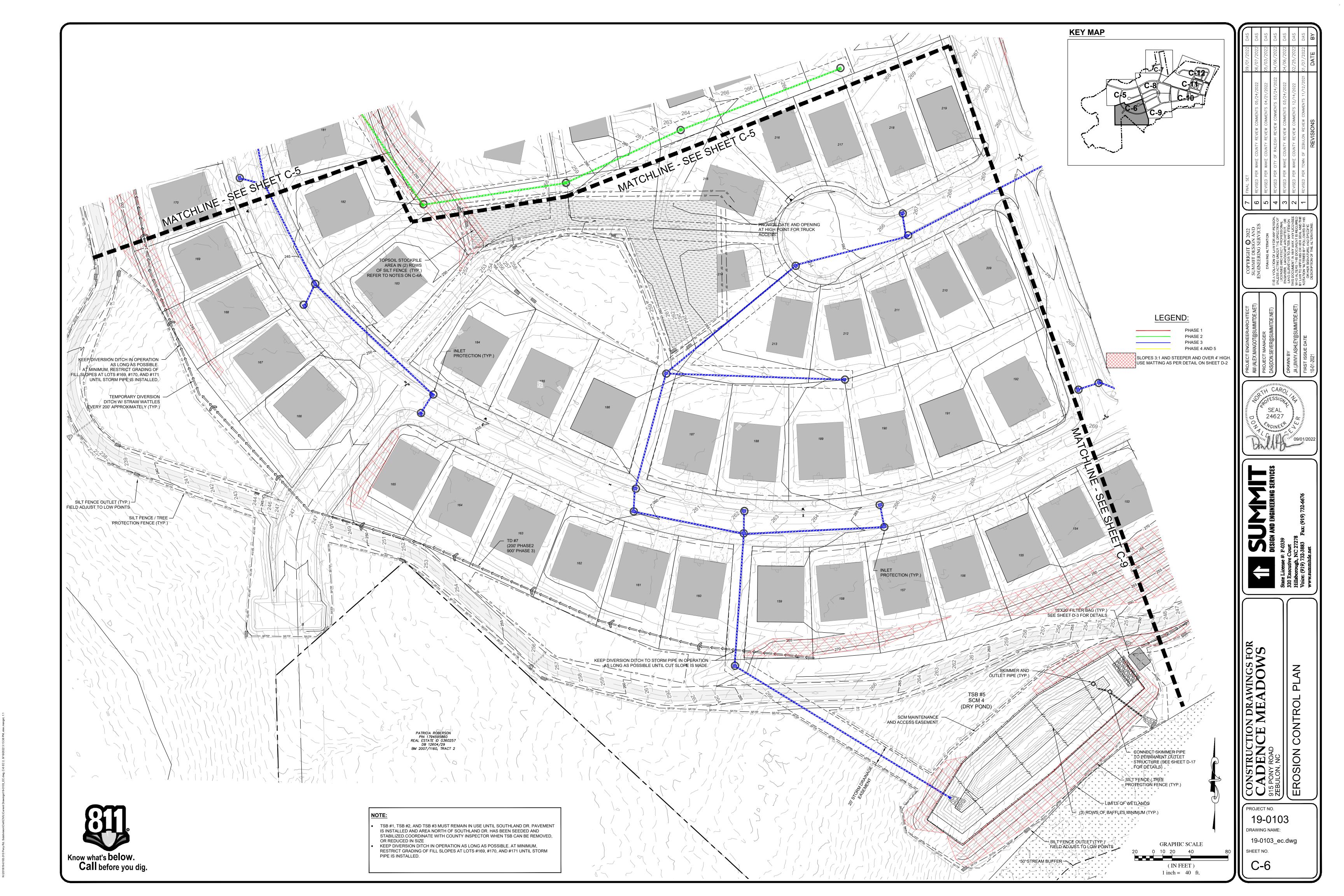
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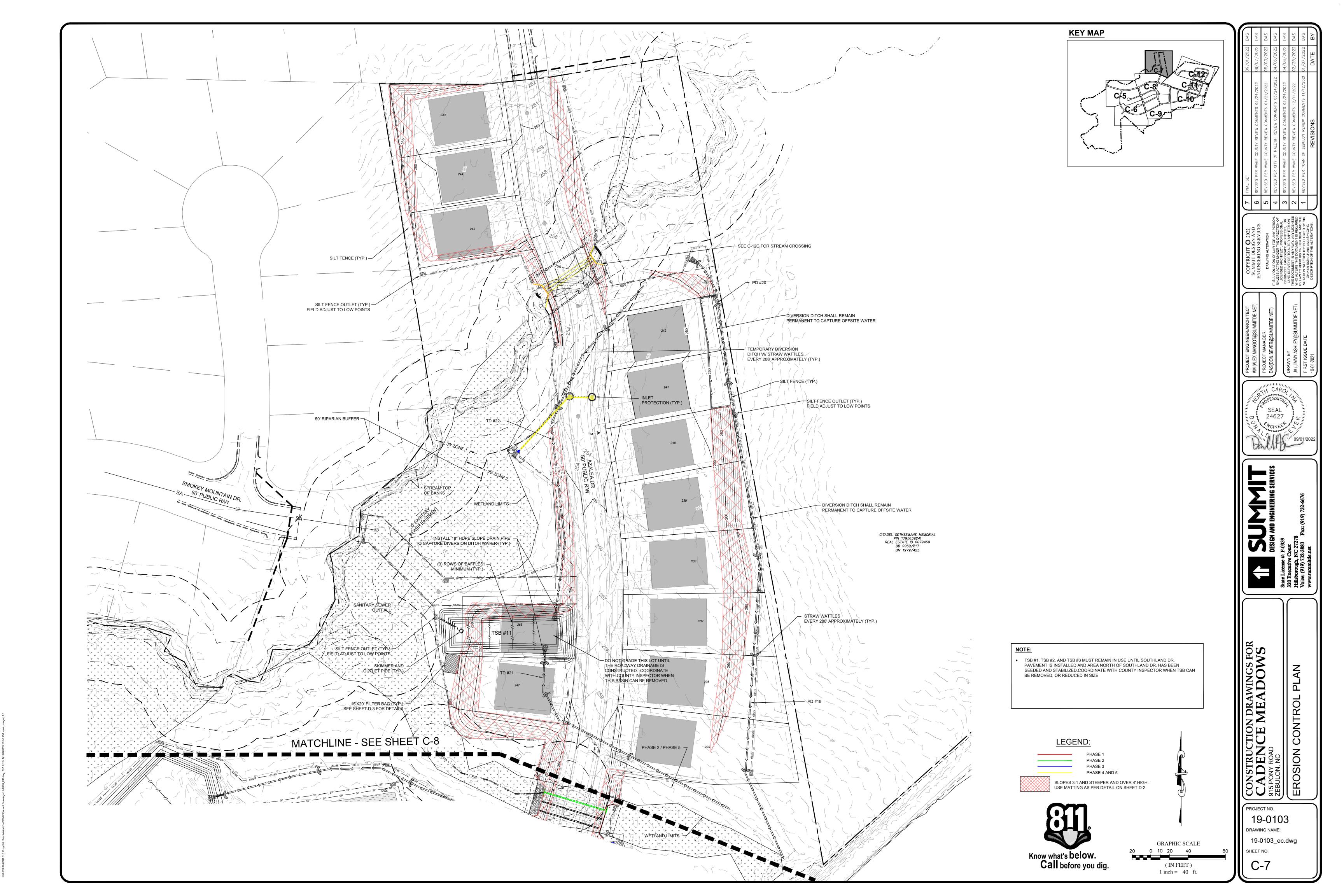
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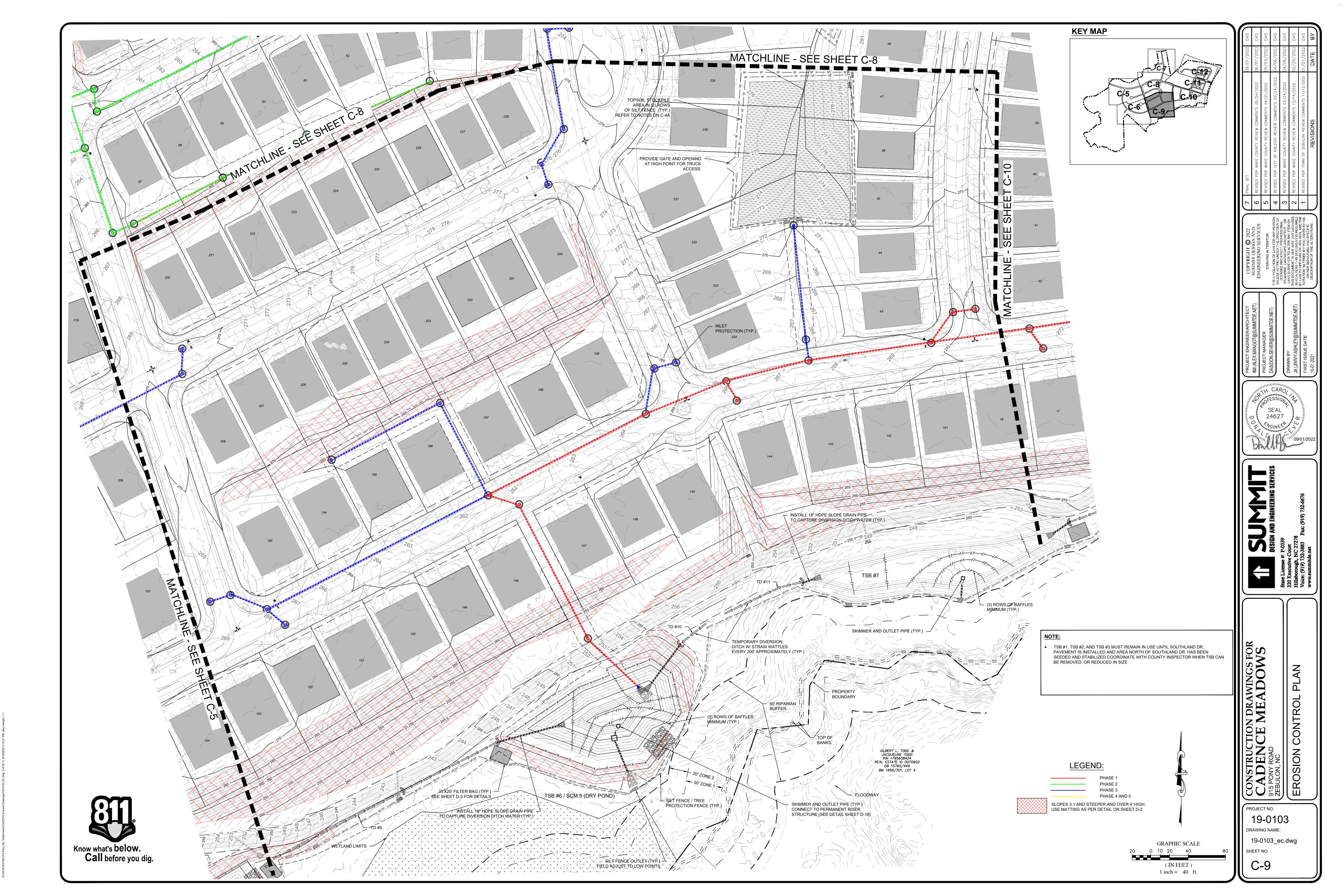


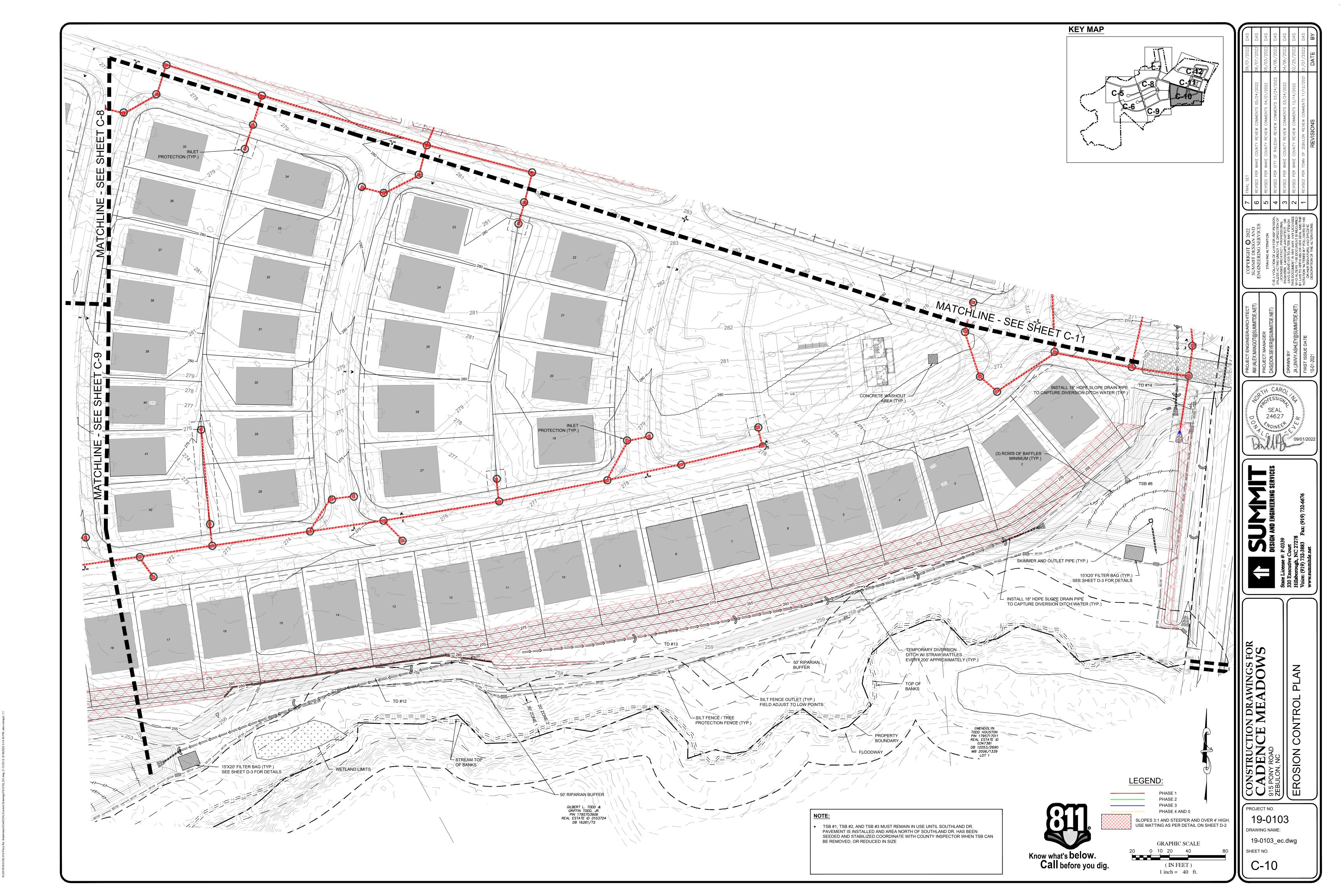


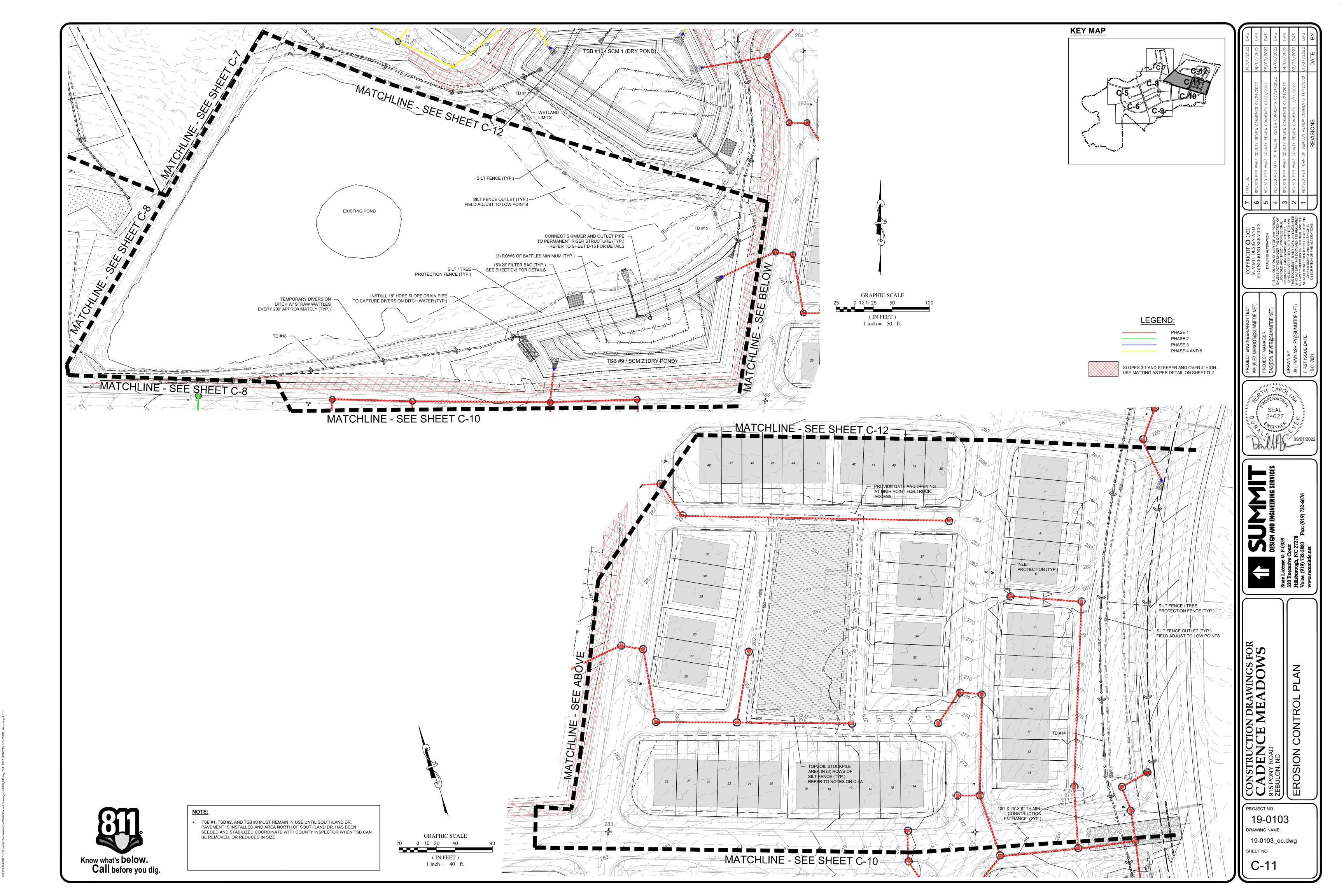


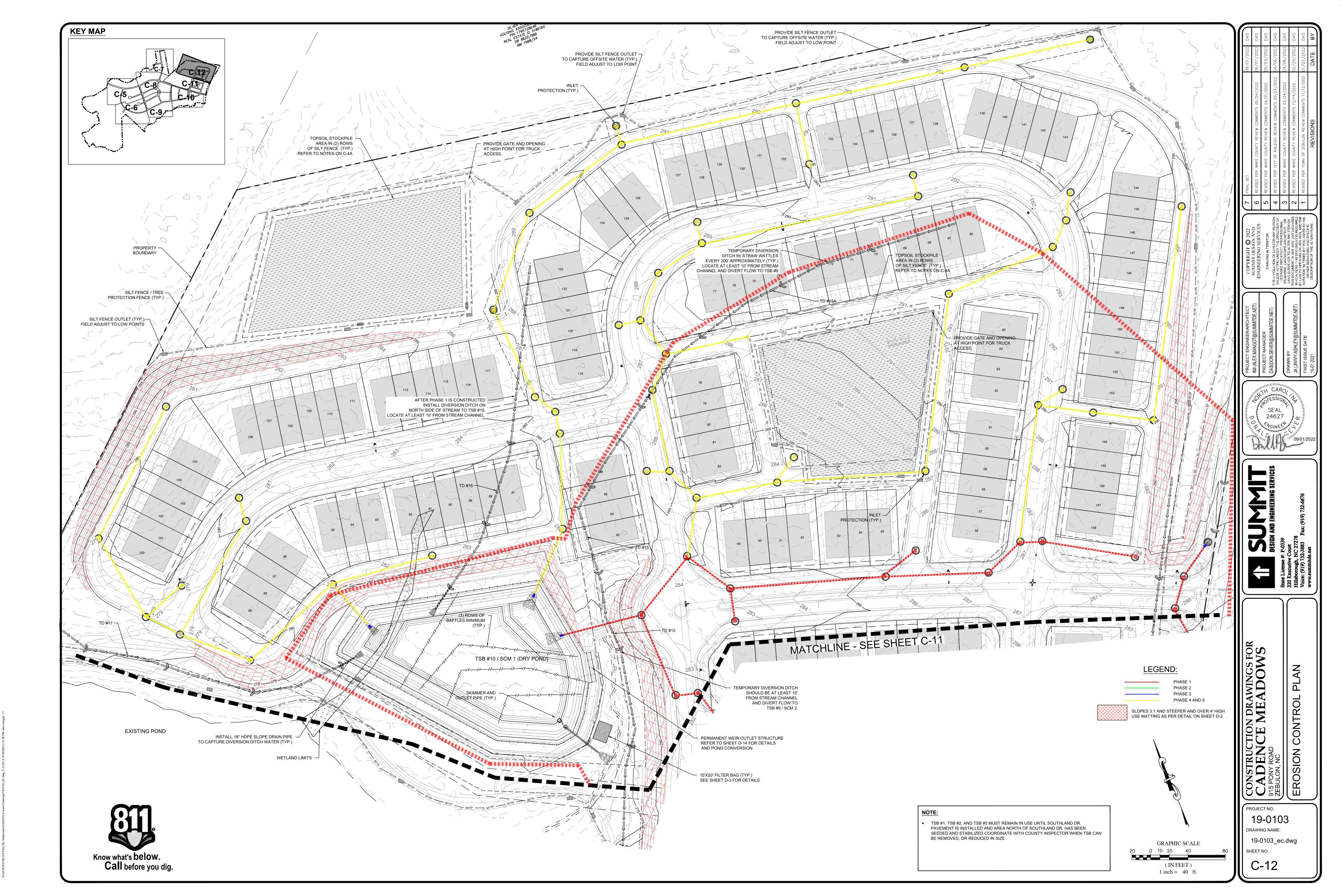


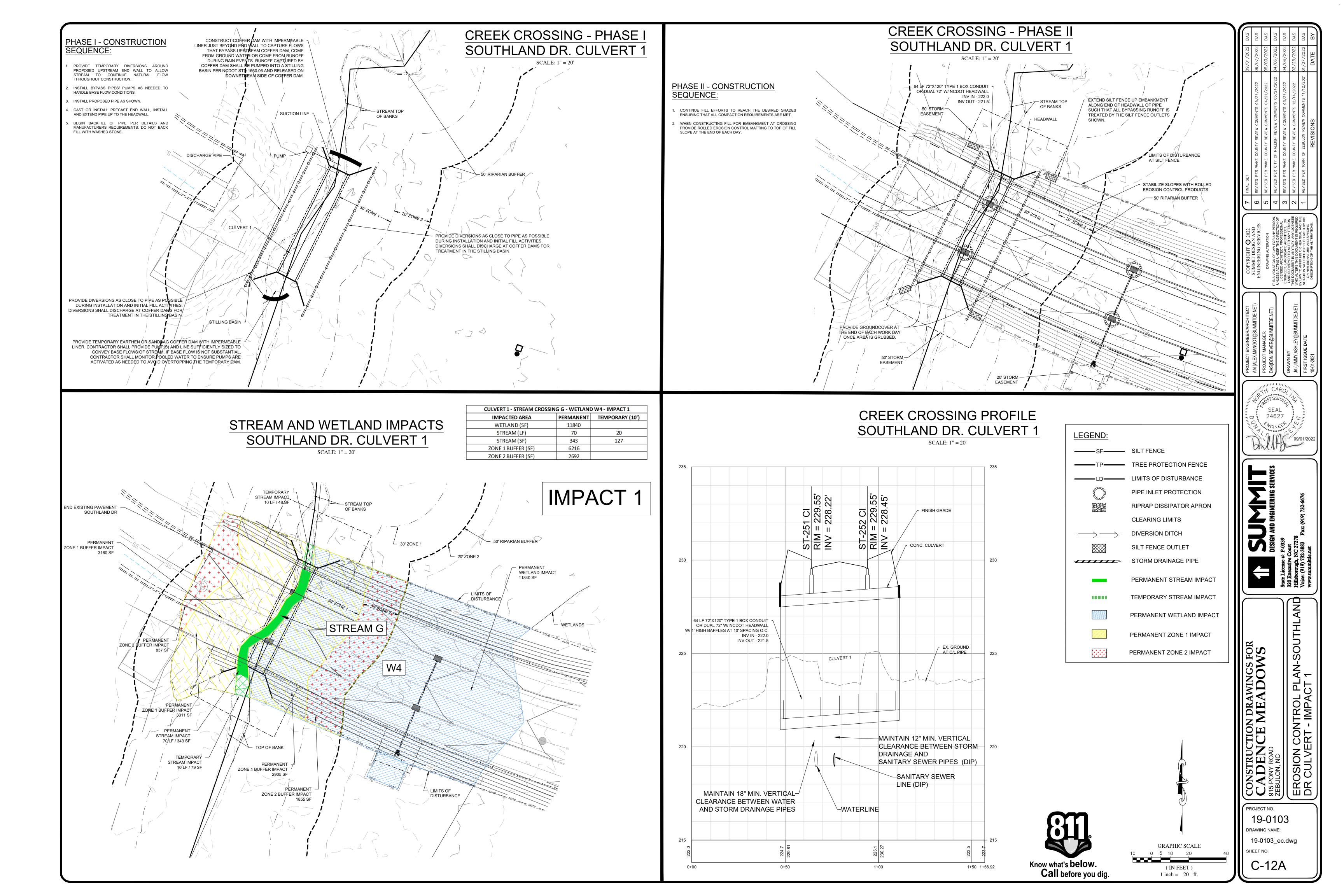


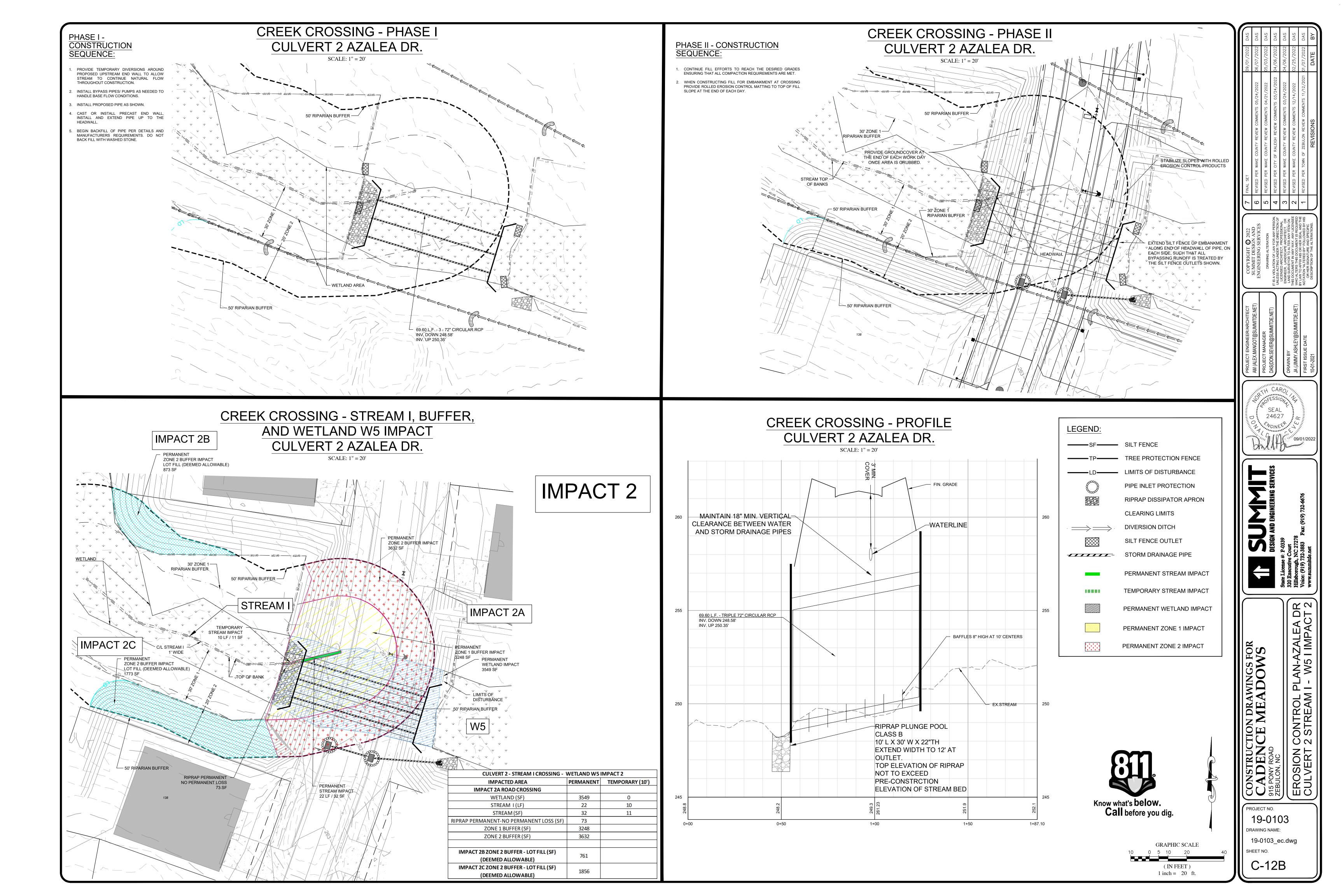


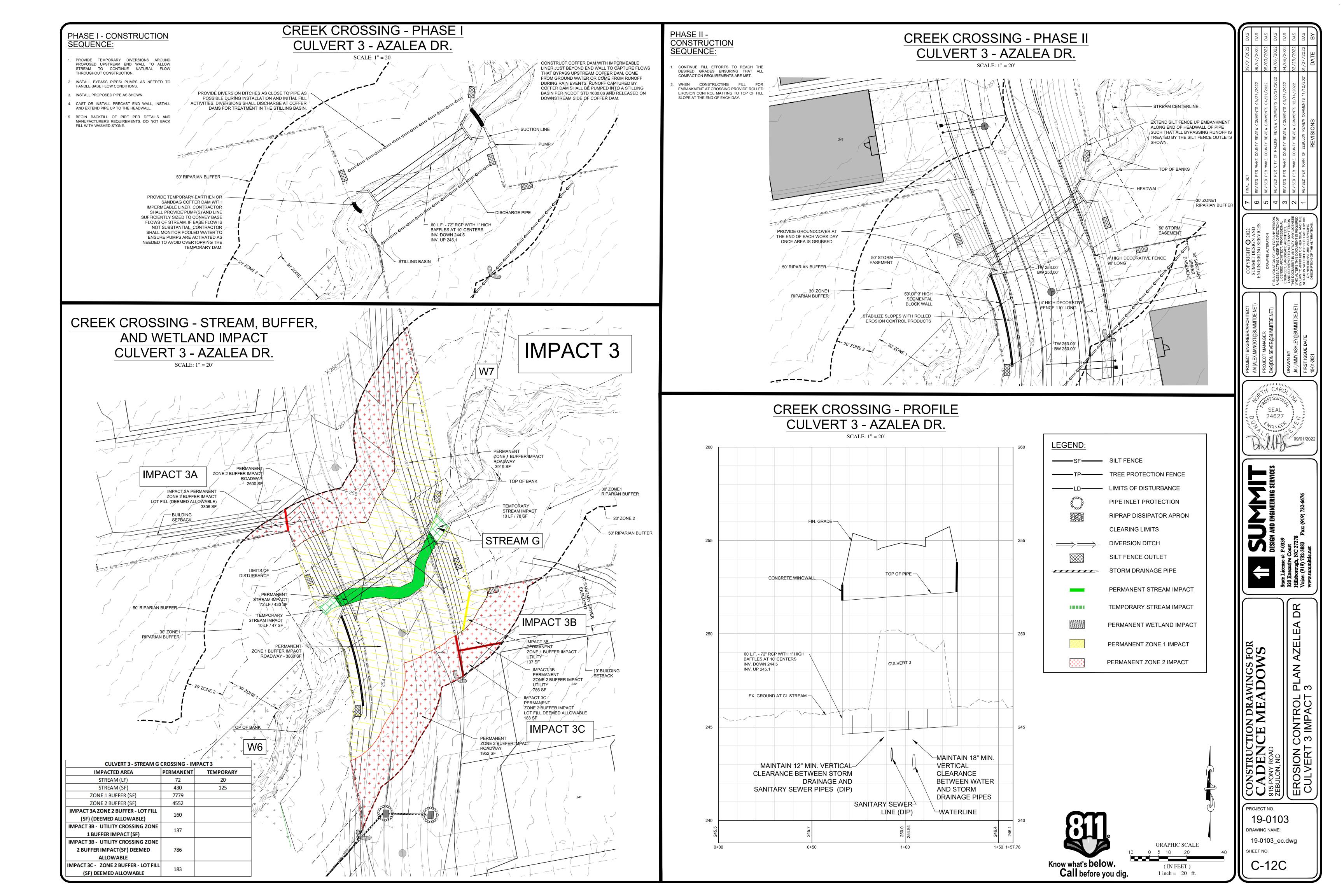


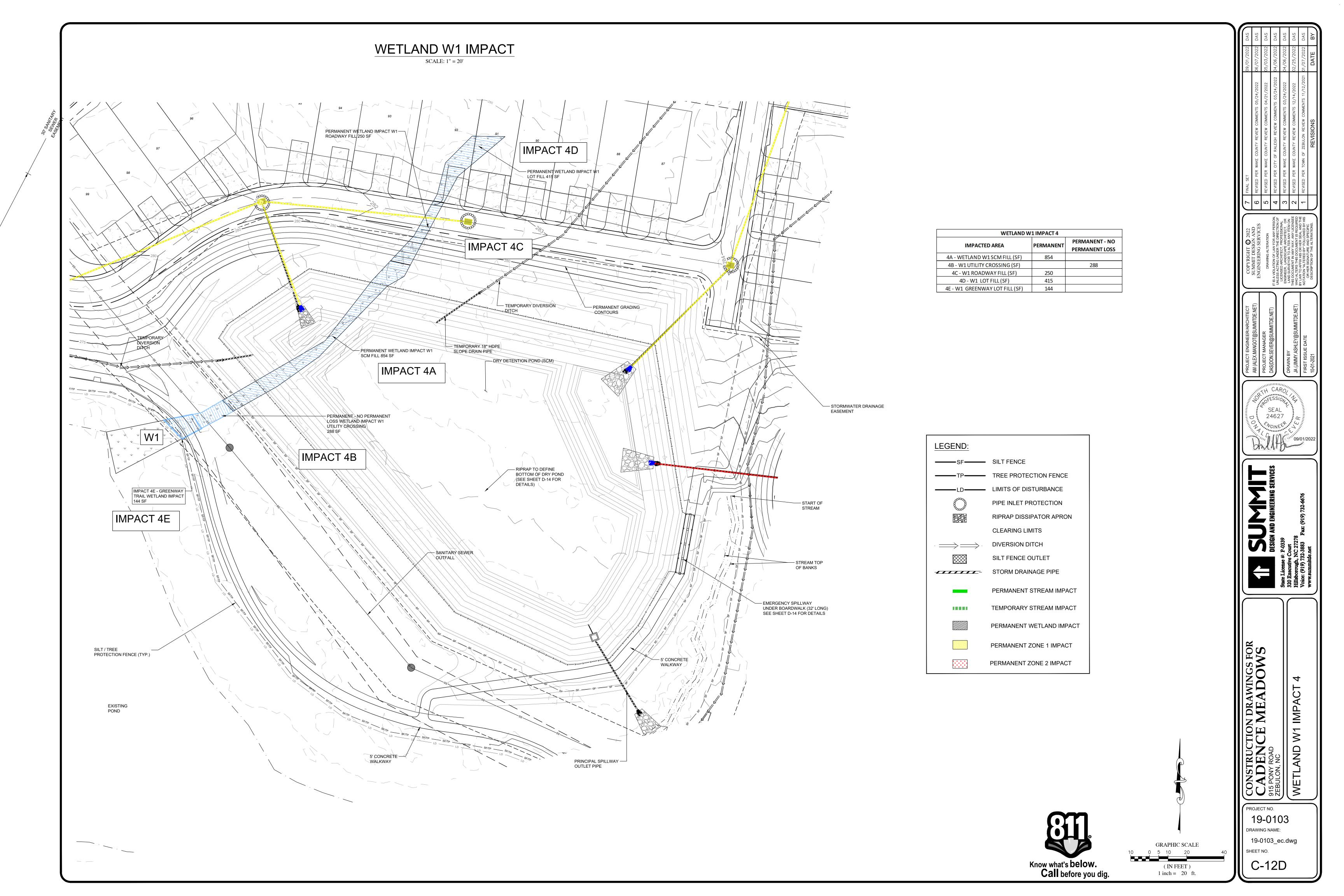


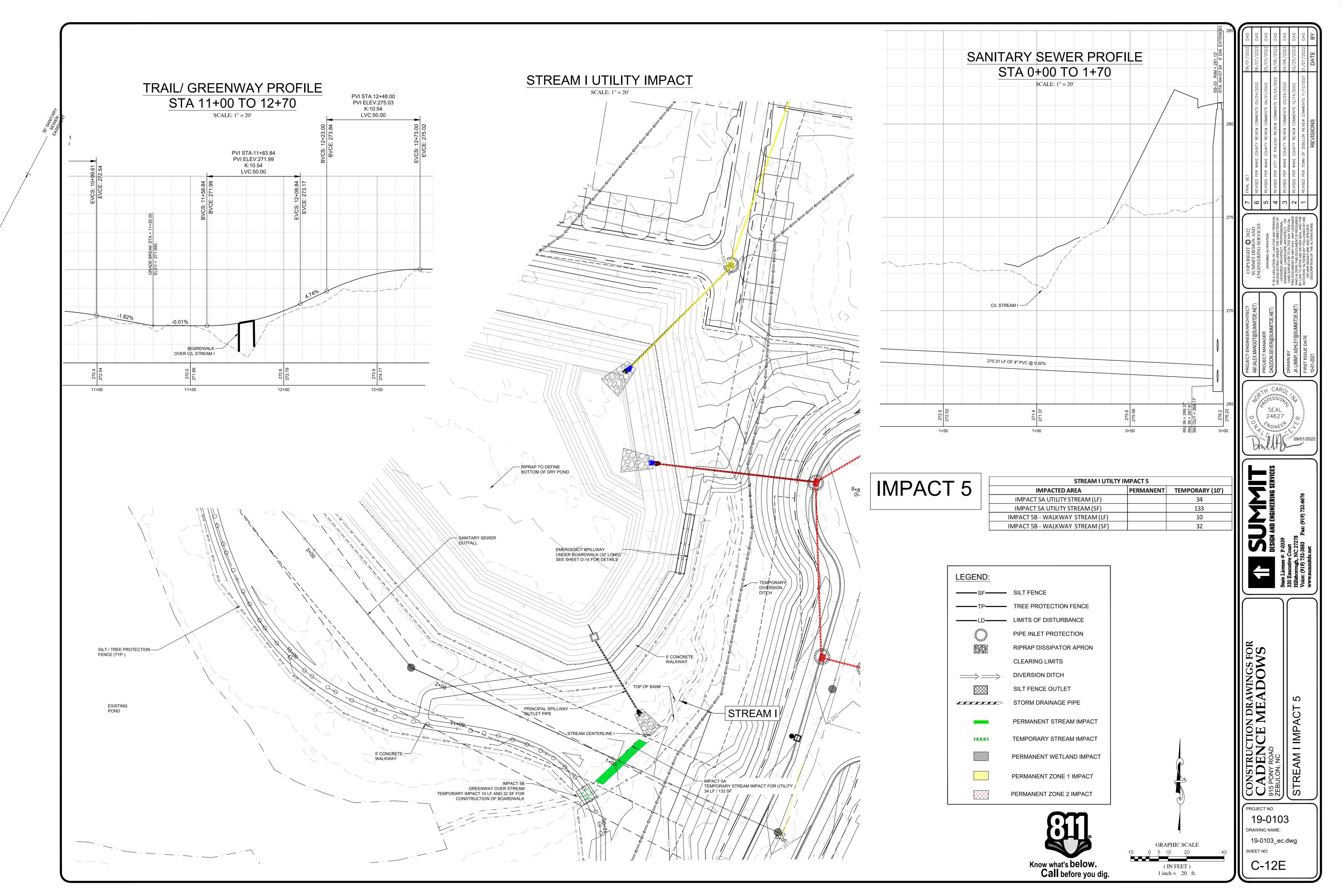


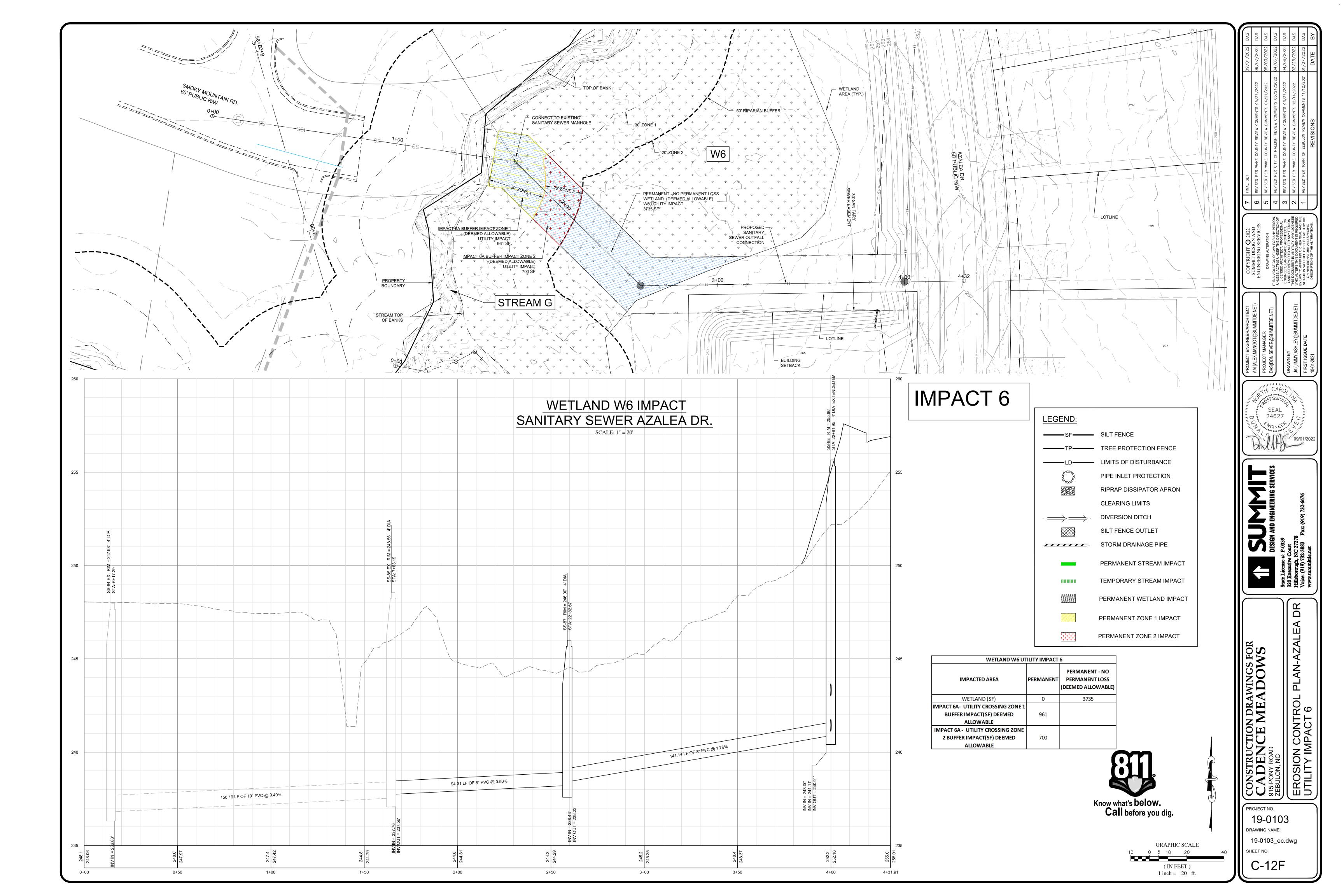


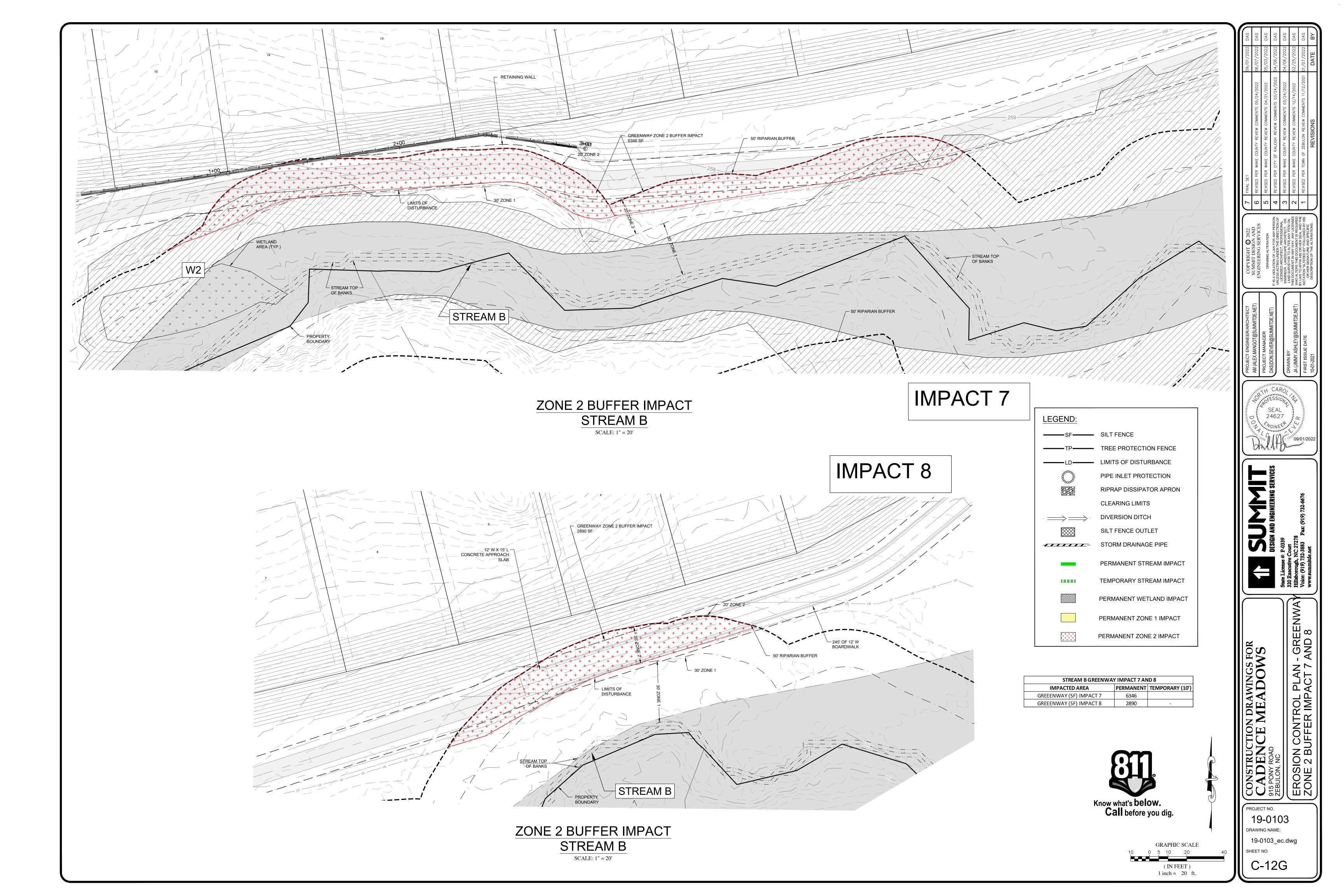


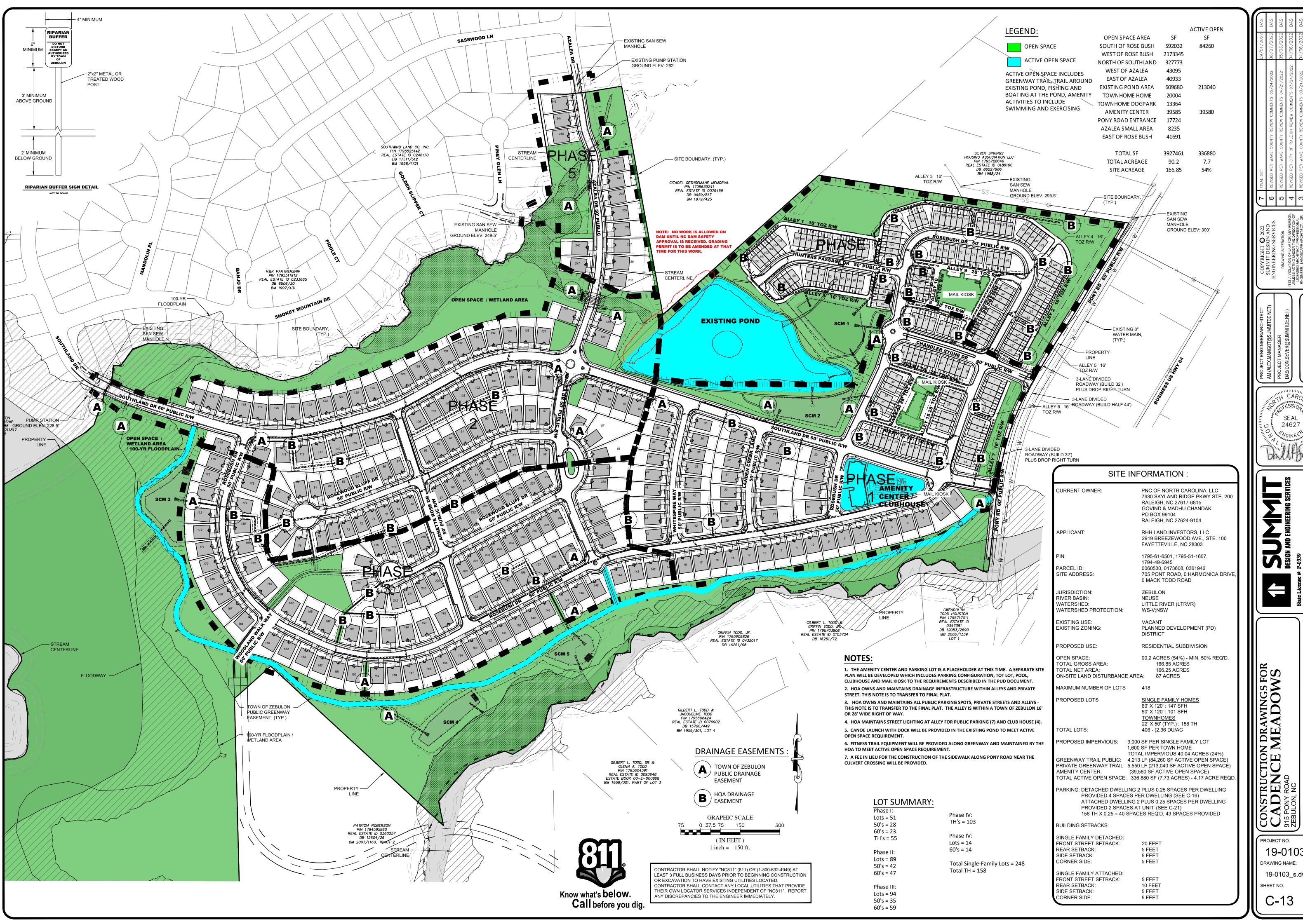






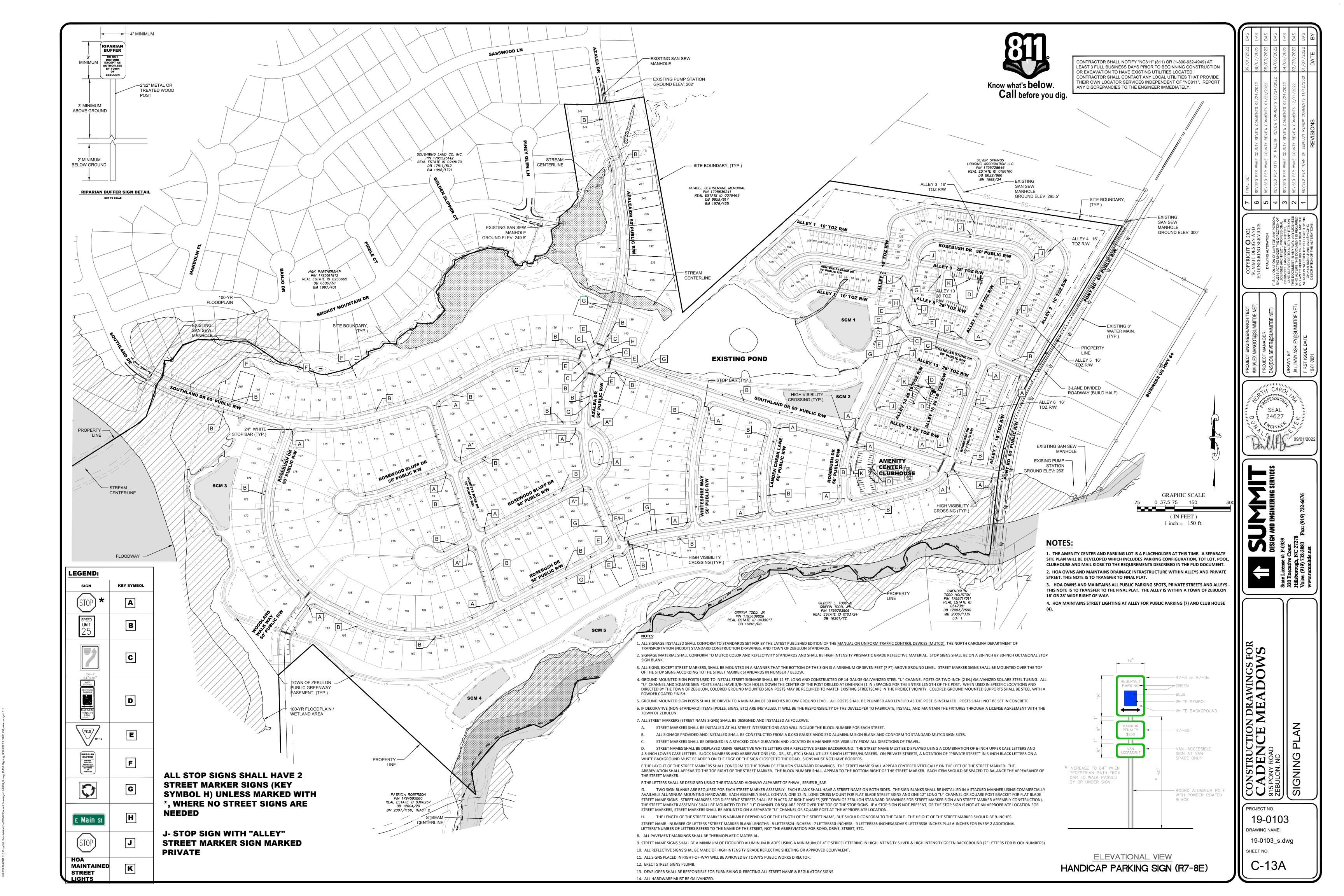


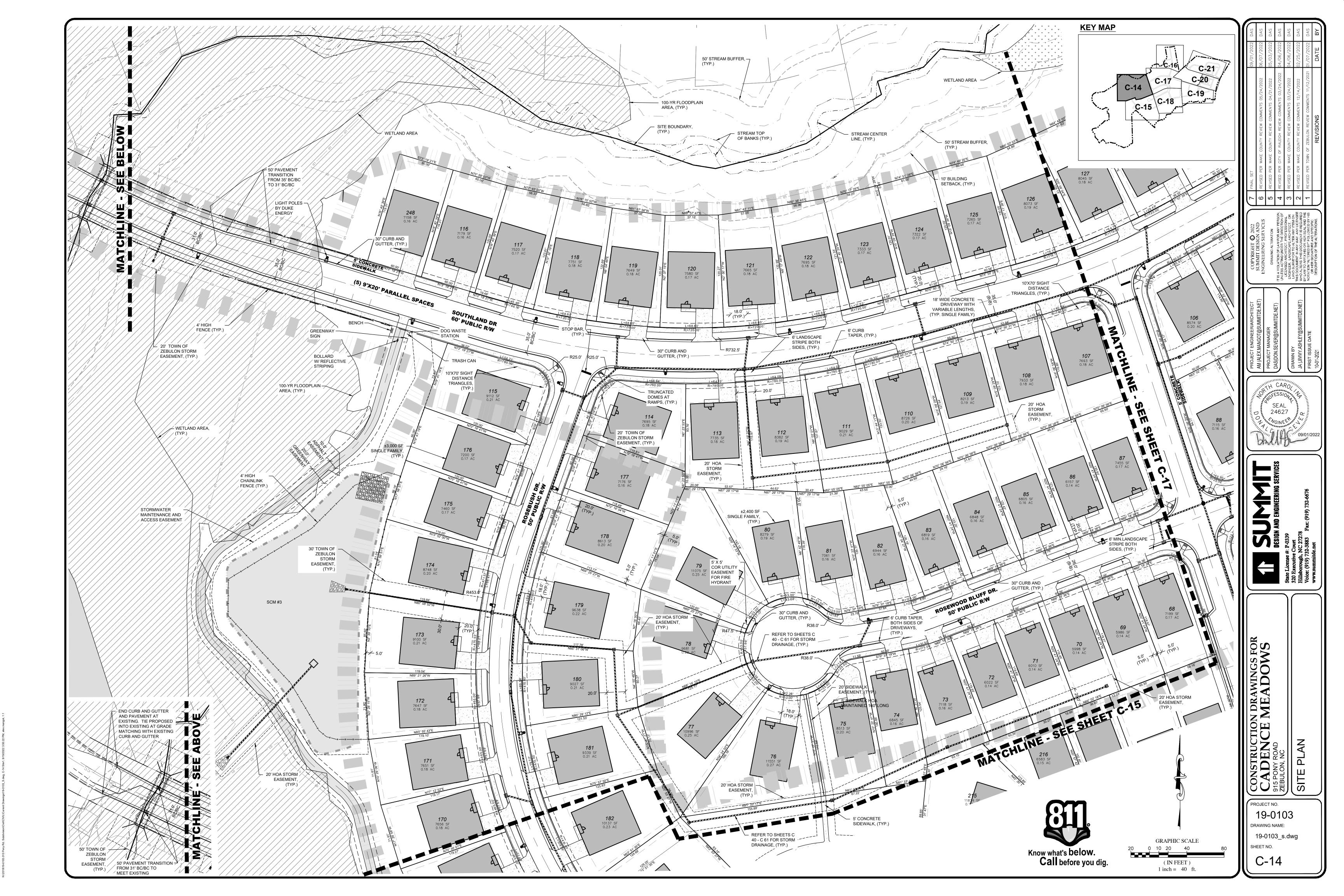


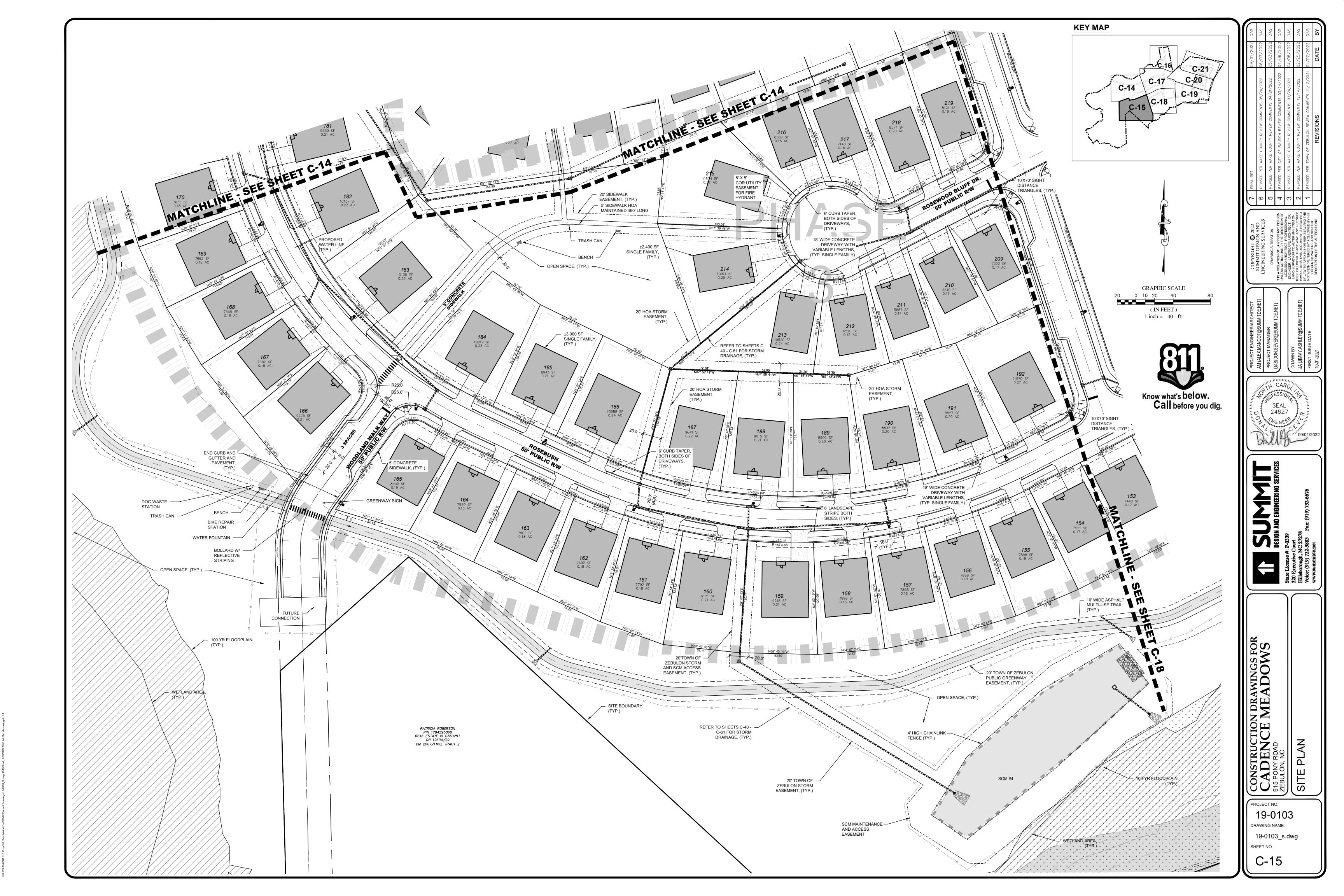


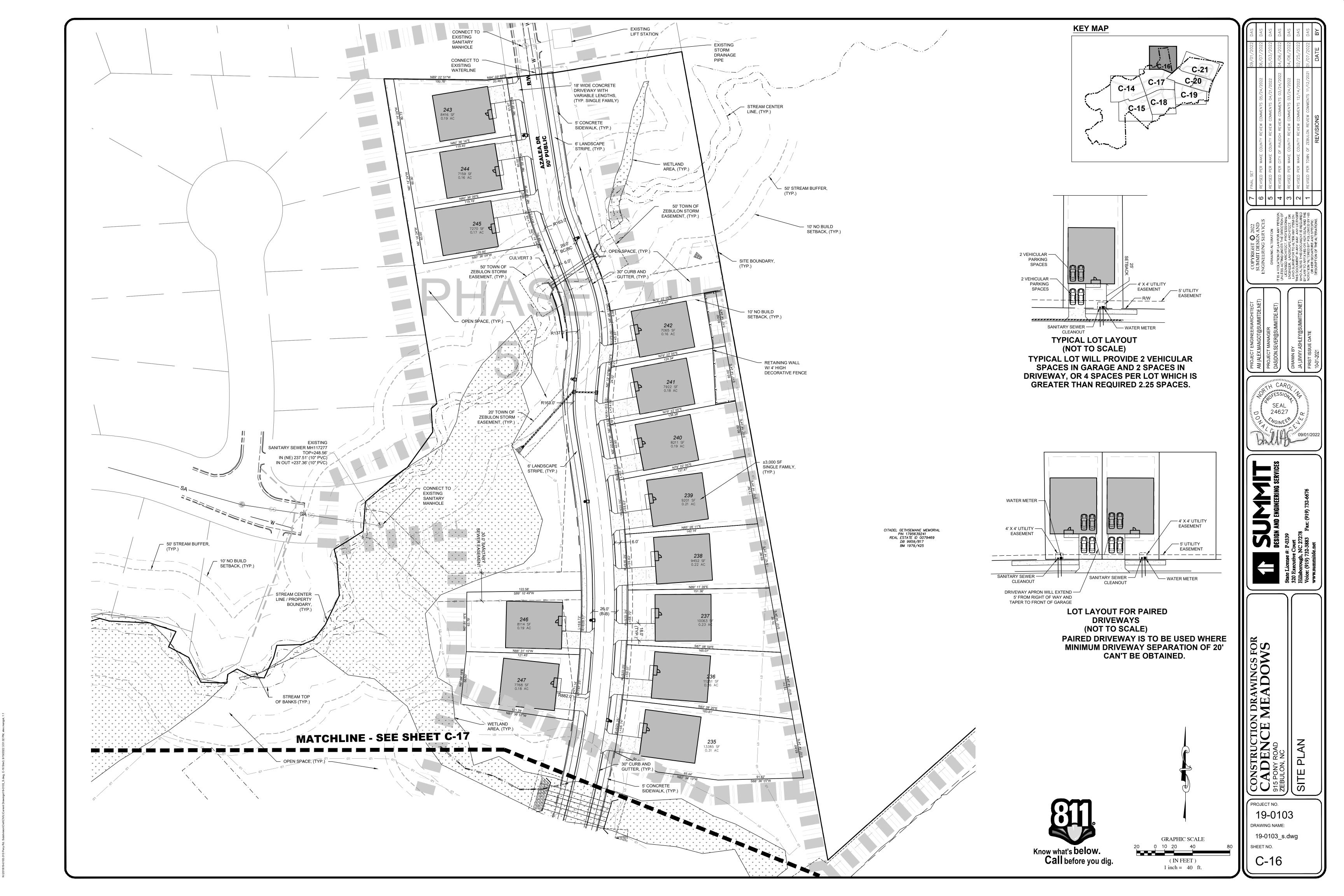
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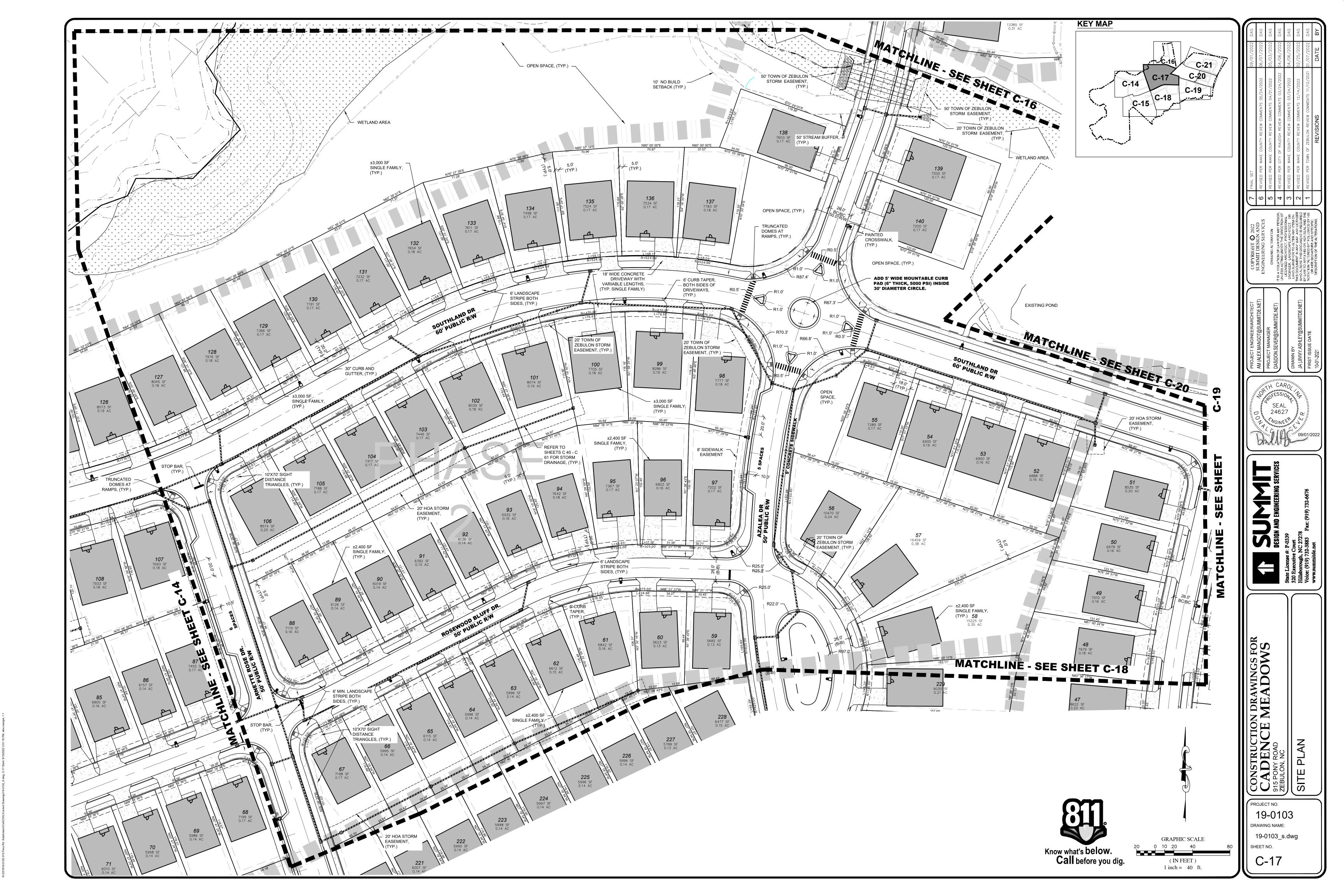
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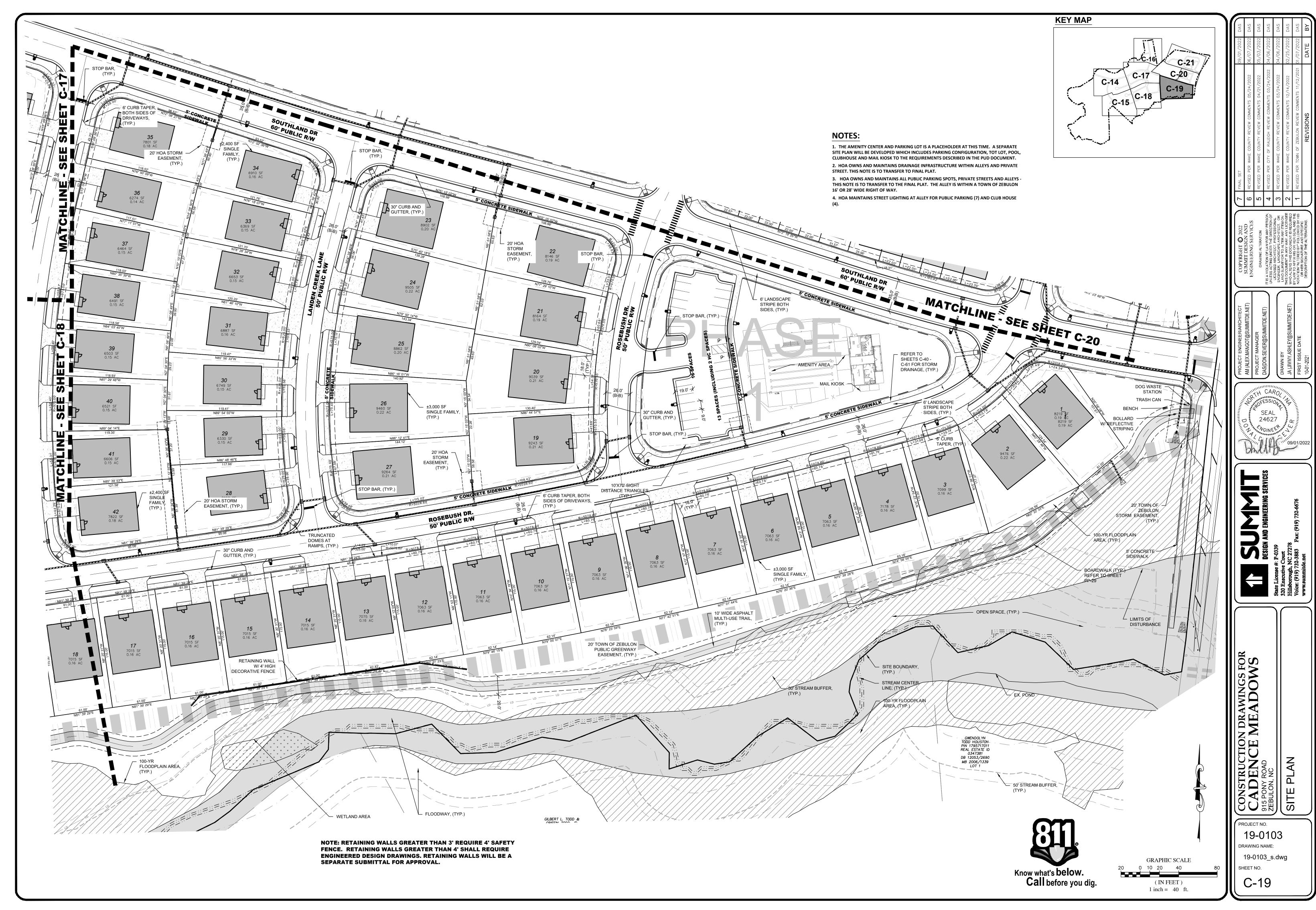


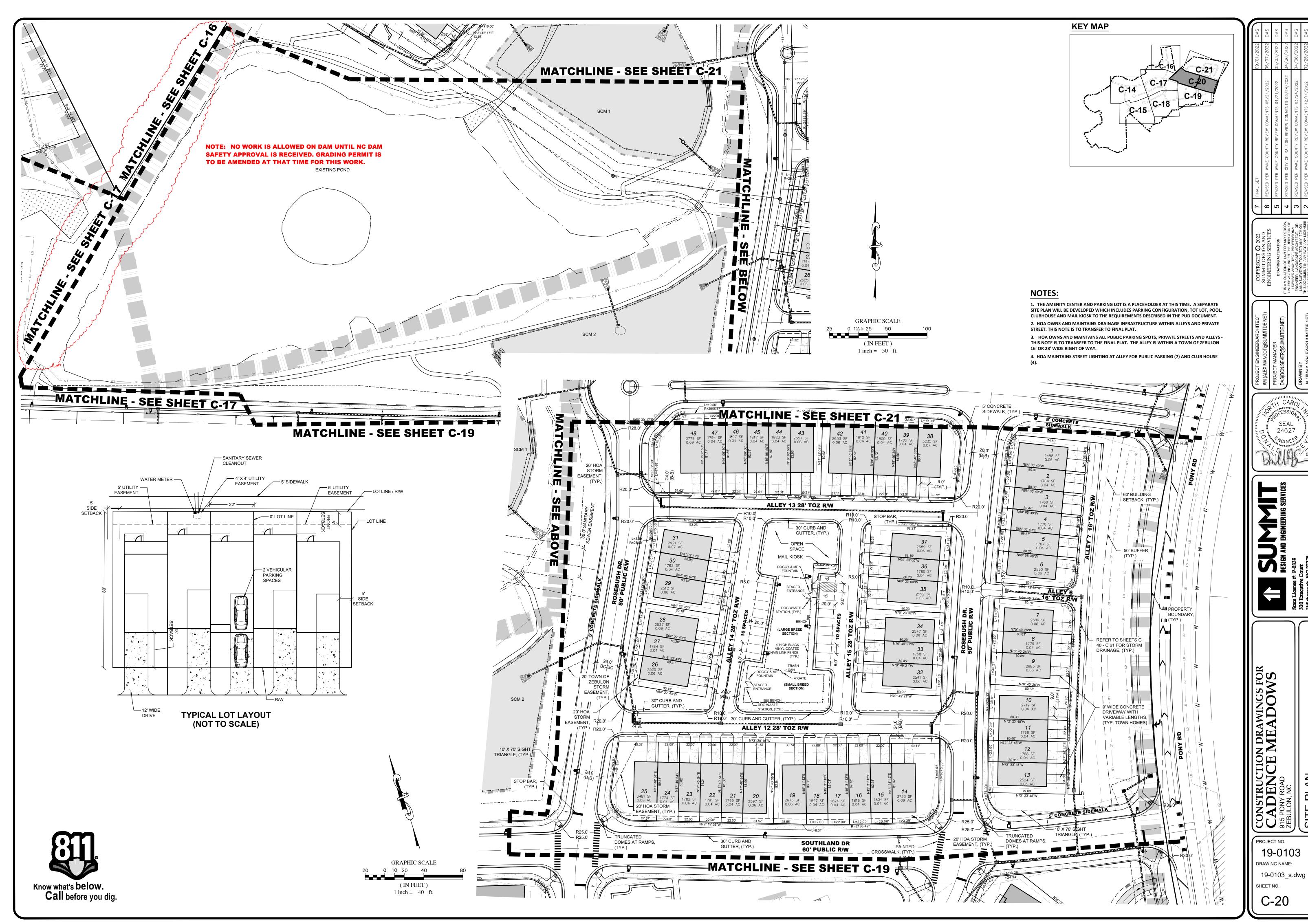


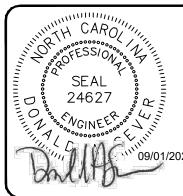


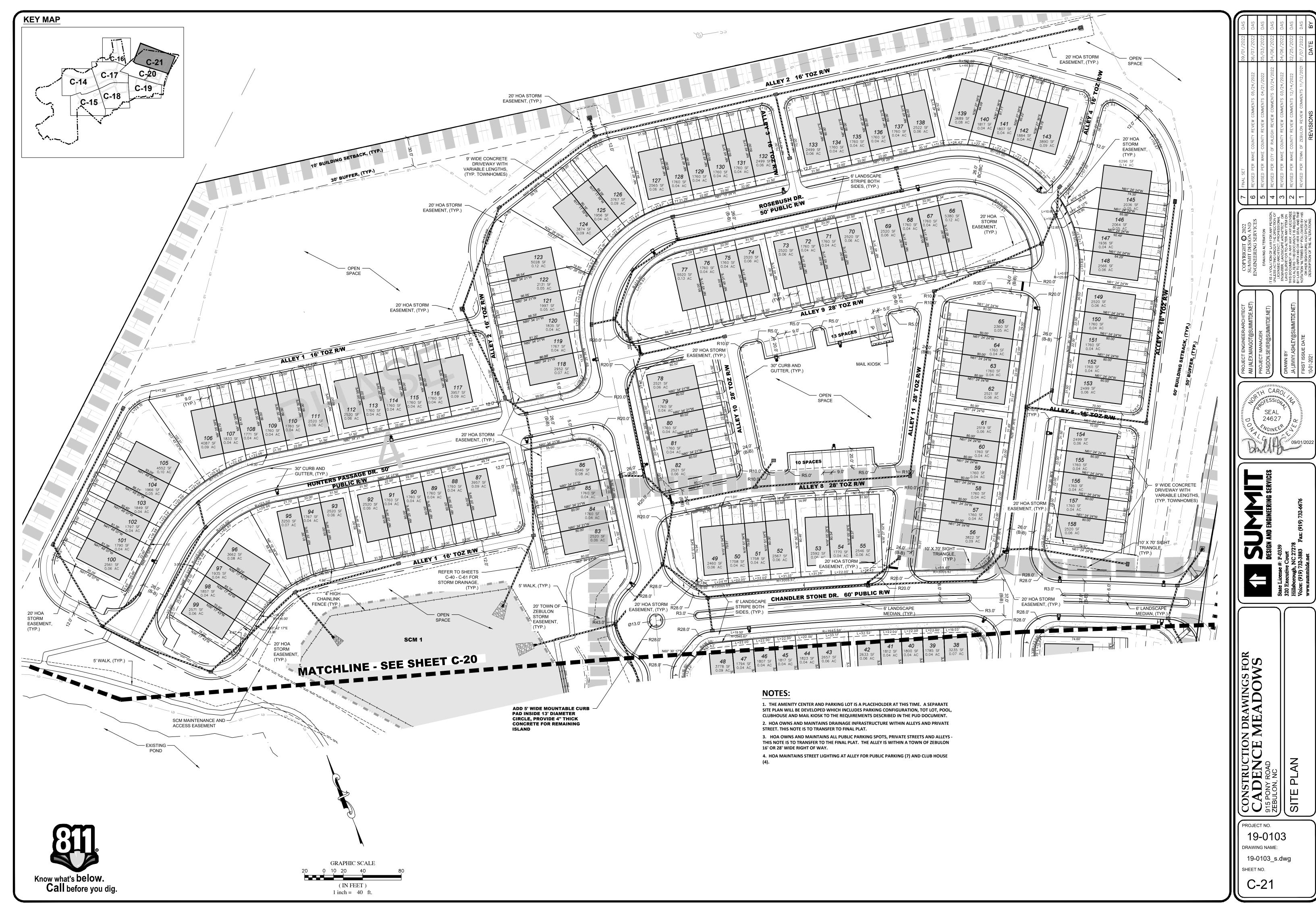


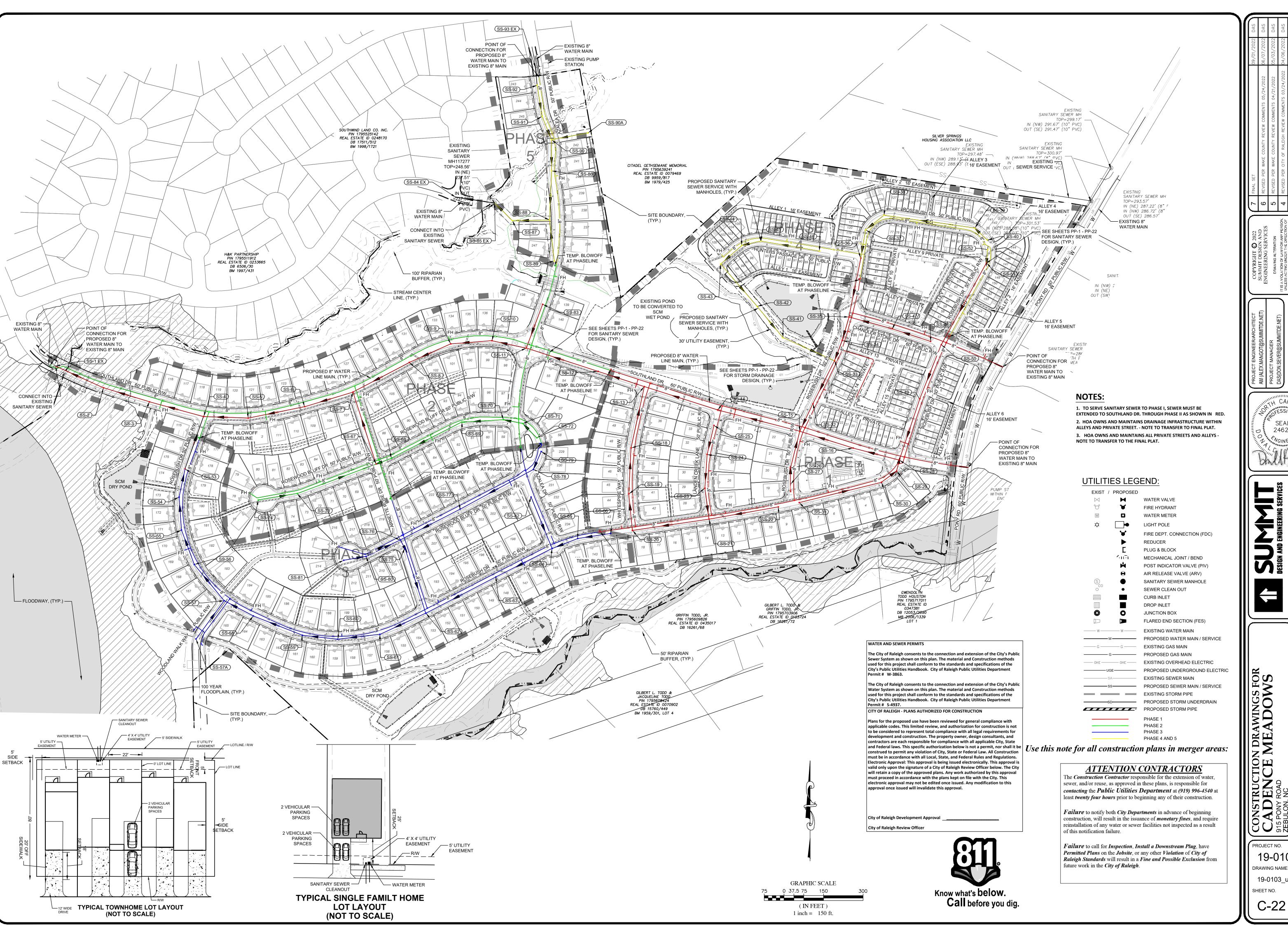












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UTILITY

PROJECT NO. 19-0103

DRAWING NAME: 19-0103_u.dwg

SHEET NO.