

WALLBROOK ROADWAY IMPROVEMENTS

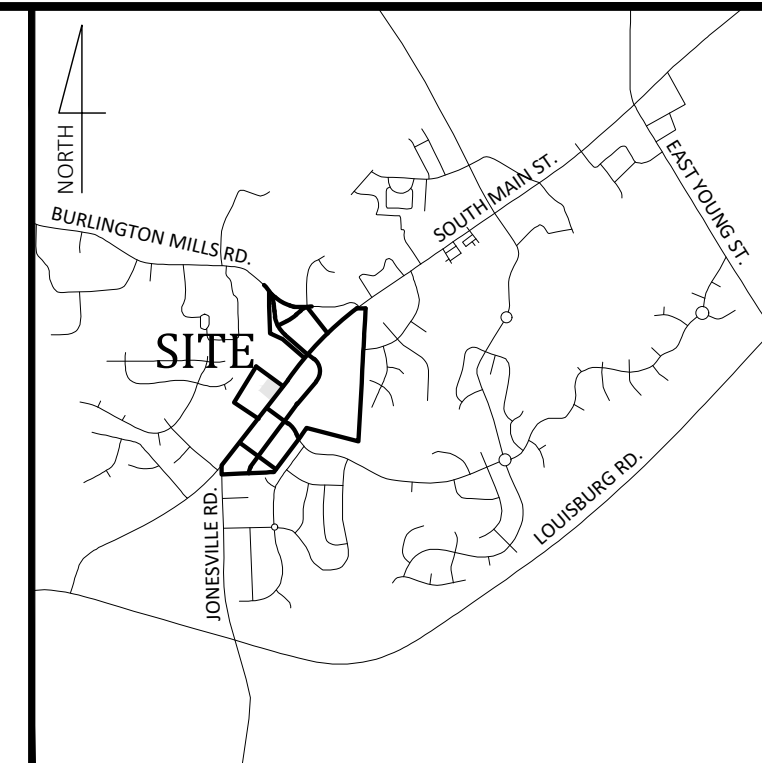
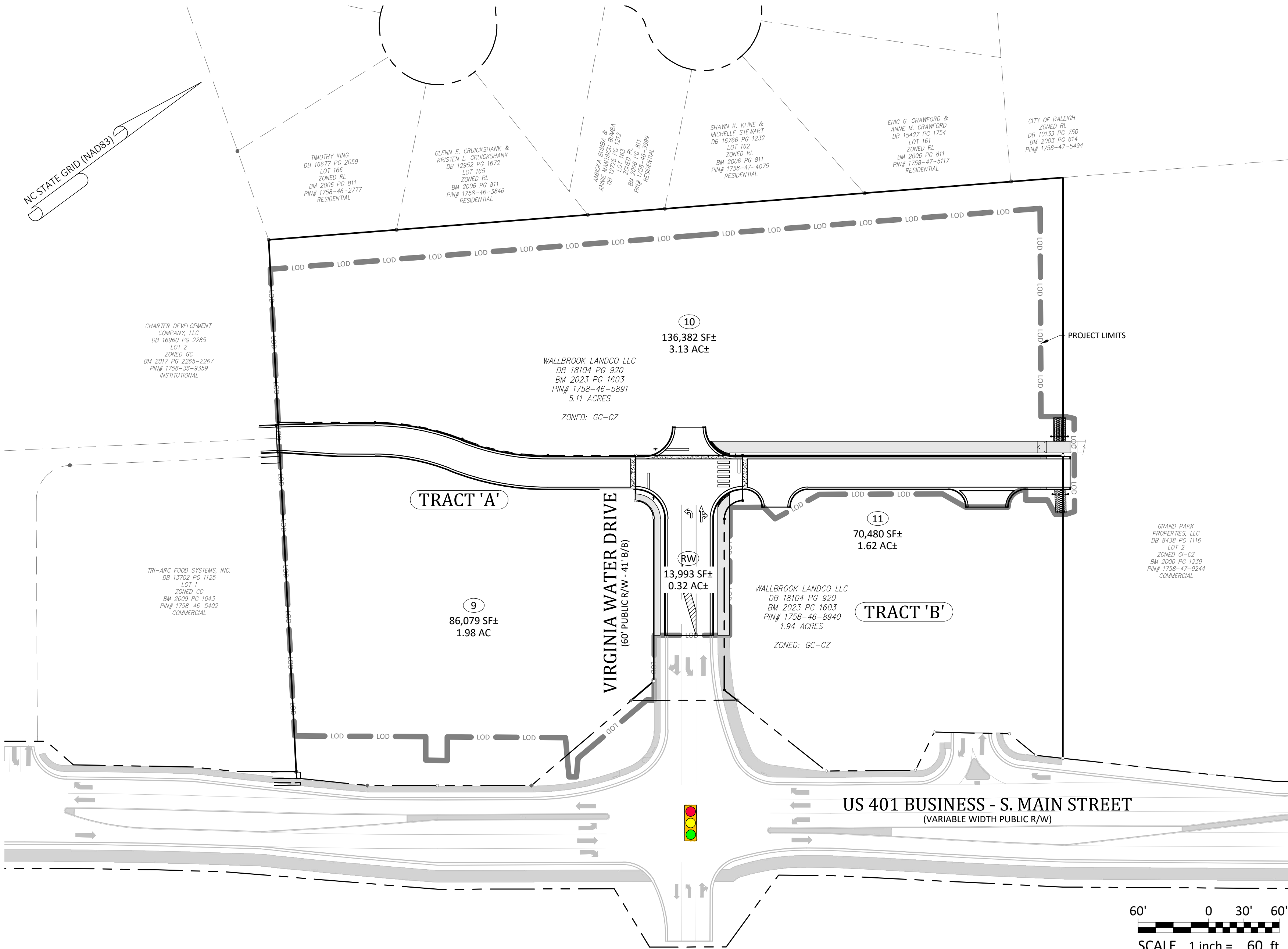
VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)

CONSTRUCTION INFRASTRUCTURE DRAWING - CID 23-04

US-401 Business / S. Main Street ~ Town of Rolesville ~ Wake County ~ North Carolina

Legend

EXISTING	PROPOSED
	= FOUND MONUMENT AS NOTED
	= SET IRON PIN
	= NCSS MONUMENT
	= DIMENSION POINT (NOTHING SET)
	= PROPERTY LINE
	= RIGHT OF WAY
	= CURB AND GUTTER
	= CABLE TV PEDESTAL
	= DROP INLET
	= ELECTRIC BOX
	= ELECTRIC METER
	= FIBER OPTIC
	= FIRE HYDRANT
	= GAS VALVE
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	= REINFORCED CONCRETE PIPE
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	= TREELINE
	= MAJOR CONTOUR (5')
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	= TREE PROTECTION FENCE
	= SILT FENCE
	= CONCRETE SIDEWALK
	= ACCESS AND UTILITY EASEMENT
	= TREE PRESERVATION AREA
	= OPEN SPACE AREA
	= TDD DRAINAGE AREA
	= SKIMMER BASIN DRAINAGE AREA



Vicinity Map
NOT TO SCALE

Site Data

WAKE COUNTY PIN:	1758-46-5891
REAL ESTATE ID:	224130
CURRENT ZONING:	GC-CZ
TOTAL ACREAGE IN SITE:	5.42 AC
ACREAGE IN PROJECT LIMITS:	5.04 AC
ACREAGE IN PUBLIC R/W:	0.32 AC
TOTAL DISTURBED ACREAGE:	5.05 AC
LINEAR FEET IN PUBLIC STREETS:	138 LF
WATERSHED:	Lower Neuse
RIVER BASIN:	Neuse
CURRENT USE:	VACANT / WOODED
PROPOSED USE:	NON-RESIDENTIAL
BUILDING LOT COVERAGE:	0% EXIST., 0% PROPOSED
TOTAL SQ. FEET OF EXIST. IMPERVIOUS AREA:	0 SF
TOTAL SQ. FEET OF PROP. IMPERVIOUS AREA:	9583 SF (R/W), 8276 SF (LOT 9), 3920 SF (LOT 10)
DEVELOPMENT STANDARDS:	LDO
REFERENCES:	DB 18104, PG 920 BM 2023, PG 1603-1604 BM 1996, PG 187

Sheet Index

#	Title	
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REF	SURVEY - JOHNSON, MIRMIRAN & THOMPSON (1 SHEET)	
REF	PR 21-04 REVISED - TREE PRESERVATION PLAN (1 SHEET)	

Engineer: Ark Consulting Group, PLLC
2755 Charles Blvd - Suite B
Greenville, NC 27858
(252) 558-0888
Contact: Bryan Fagundus, PE
bryan@arkconsultinggroup.com

Owner/Developer: Wallbrook Landco, LLC
3 Keel St, Ste 2
Wrightsville Beach, NC 28480
(704) 621-6430
Contact: Austin Williams
awilliams@csere.com

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT

APPROVED

EROSION CONTROL S-EC-119903-2024

STORMWATER MGMT. S-WF-119904-2024

FLOOD STUDY S-

DATE _____

ENVIRONMENTAL CONSULTANT SIGNATURE

ATTENTION CONTRACTORS

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

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

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

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the extension and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-_____

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 Permit # W-_____

The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-_____

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 _____

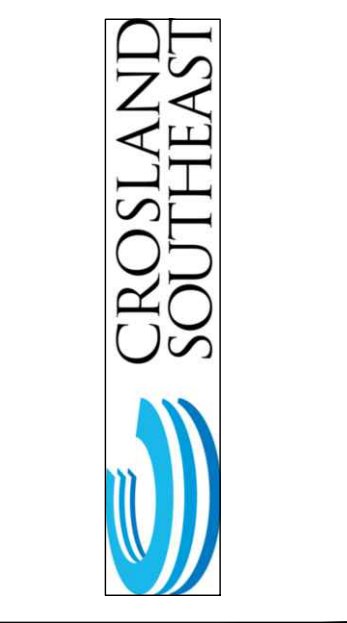
- #### General Notes:
- CONTACT NORTH CAROLINA ONE-CALL CENTER, INC. (NC ONE-CALL) AT 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
 - ALL REQUIRED IMPROVEMENTS SHALL CONFORM TO THE TOWN OF ROLESVILLE LAND DEVELOPMENT ORDINANCE AND THE TOWN OF ROLESVILLE DEVELOPMENT STANDARDS.
 - CONTRACTOR SHALL NOTIFY NCDOT AND TOWN OF ROLESVILLE PUBLIC WORKS, STREET MAINTENANCE DIVISION 48 HOURS PRIOR TO MAKING CONNECTIONS TO EXISTING STORM DRAINS LOCATED WITHIN PUBLIC STORM DRAINAGE EASEMENTS OR RIGHT-OF-WAY.
 - THIS PROPERTY IS LOCATED WITHIN ZONE 'X', AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM RATE MAP (FIRM) 3720175800K, EFFECTIVE DATE JULY 19, 2022.
 - EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND MAY NOT INCLUDE ALL MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
 - ELECTRIC AND TELEPHONE UTILITIES SHALL BE INSTALLED UNDERGROUND.
 - REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
 - REFER TO M.E.P. PLANS FOR COORDINATION OF BUILDING UTILITY SERVICES.
 - THIS PROJECT DISTURBS MORE THAN 1 ACRE FOR PURPOSES OF A COMMERCIAL DEVELOPMENT. PROJECT IS SUBJECT TO THE TOWN OF ROLESVILLE STORMWATER MANAGEMENT ORDINANCE. STORMWATER MANAGEMENT PLAN APPROVAL BY THE TOWN OF ROLESVILLE IS REQUIRED.
 - THIS PROJECT DISTURBS MORE THAN 1 ACRE. EROSION & SEDIMENTATION CONTROL PLAN APPROVAL IS REQUIRED.
 - NCDOT DRIVEWAY PERMIT APPROVAL IS COMPLETED FOR THIS PROJECT. REFERENCE NCDOT PERMIT NUMBER D051-092-22-00049.
 - REFUSE COLLECTION SHALL BE PROVIDED BY PRIVATE SERVICE FOR COMMERCIAL DEVELOPMENT.
 - ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
 - SITE SHALL MEET ALL RELATED ACCESSIBILITY CODE REQUIREMENTS.
 - BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN HEREON WAS PREPARED BY JOHNSON, MIRMIRAN & THOMPSON. REFERENCE IS MADE TO THE SURVEY ENTITLED ALTA/NSPS LAND TITLE SURVEY PREPARED FOR WALLBROOK LANDCO, LLC DATED 3/28/2020, AND ATTACHED TO THIS DRAWING SET FOR REFERENCE.
 - UNDERGROUND UTILITIES PLOTTED IN PART FROM ACTUAL FIELD LOCATION OF ABOVE GROUND FEATURES AND IN PART FROM MAPS ON RECORD. ACTUAL LOCATIONS MAY VARY. SURVEYOR AND ENGINEER CANNOT PROVIDE ACCURACY OF INFORMATION TAKEN FROM RECORD DATA. OTHER UTILITIES MAY EXIST. CONTRACTOR SHOULD CONTACT NORTH CAROLINA ONE-CALL CENTER (NC ONE-CALL) BY DIALING 811 TO HAVE UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
 - THE ENGINEER MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE ENGINEER DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES.

Town of Rolesville Development Applications

ANX 23-03	ANNEXATION
MA 21-09	REZONING
PR 21-04 REV	PRELIMINARY SUBDIVISION PLAT (REVISED)
FSP 23-10	INTERMEDIATE SUBDIVISION PLAT
CID 23-04	CONSTRUCTION INFRASTRUCTURE DRAWINGS (CURRENT APPLICATION)

- Final Drawing - Issued for Permit Review Purposes Only

REVISIONS:	DATE	DESCRIPTION
4.12.2024		REVISED PER REVIEWER & OWNER COMMENTS
3.11.2024		REVISED PER TOR REVIEWER & OWNER COMMENTS
2.11.2024		REVISED PER TOR REVIEWER COMMENTS
1.11.2024		ISSUED FOR PERMIT REVIEW



COVER - OVERALL PLAN

WALLBROOK ROADWAY IMPROVEMENTS

VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)

Town of Rolesville Project No. CID 23-04
US 401 Business / S. Main Street & Virginia Water Drive
Wake Forest Township, Town of Rolesville, Wake County, North Carolina

NC License # PI 139

ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS

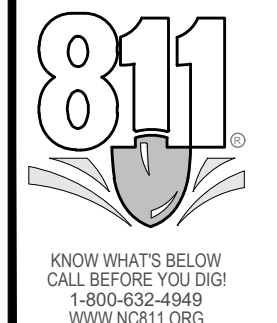
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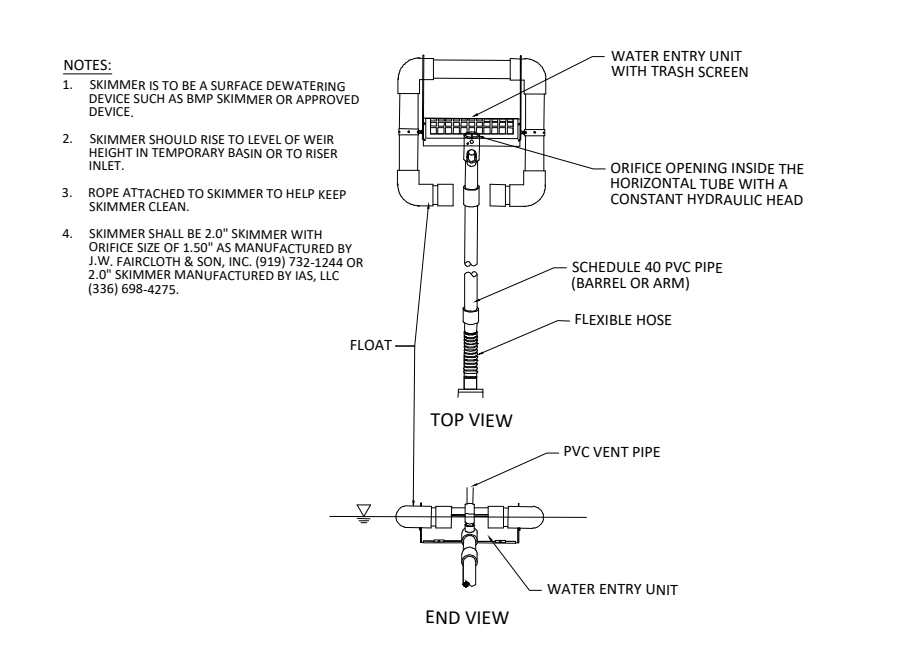
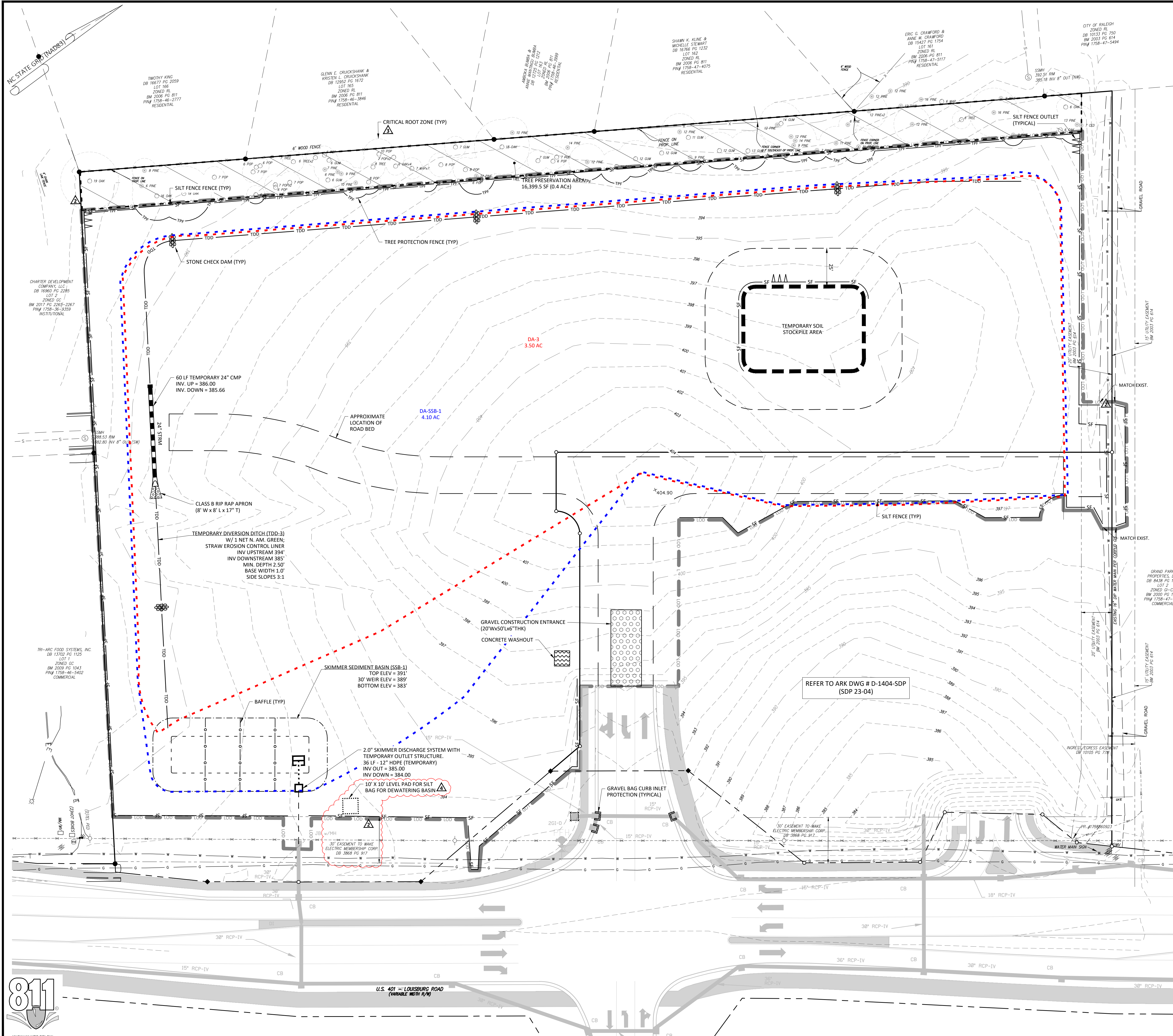
01/11/2024

Project Manager:	BCF
Drawn By:	DLCTGN
Checked By:	TGN
Project Number:	22049
Drawing Number:	D-1404-CID

C0.1

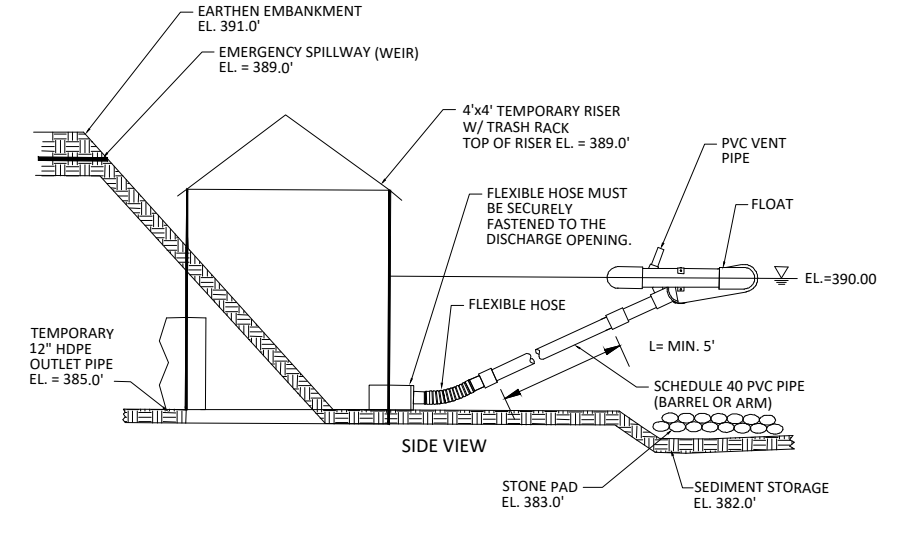
Date: May 1, 2023



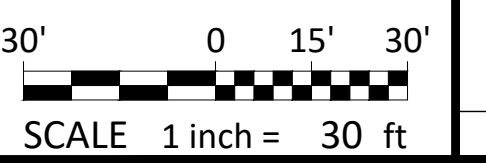
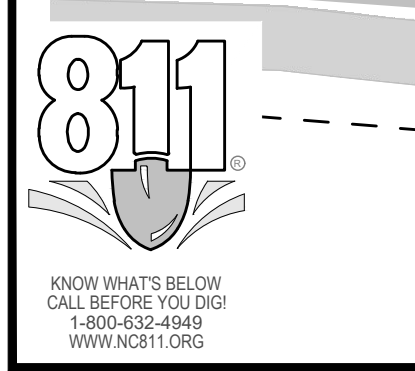


SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR SSB-1
NOT TO SCALE

EXISTING		PROPOSED	
○	FOUND MONUMENT AS NOTED	○	SET IRON PIN
△	NGCS MONUMENT	△	DIMENSION POINT (NOTHING SET)
●	PROPERTY LINE	●	PROPERTY LINE
R/W	RIGHT OF WAY		
C&G	CURB AND GUTTER		
CB	CABLE TV PEDESTAL		
DI	DROP INLET		
EB	ELECTRIC BOX		
EM	ELECTRIC METER		
F/O	FIBER OPTIC		
FH	FIRE HYDRANT		
GV	GAS VALVE		
HB	HAND BOX		
LP	LIGHT POLE		
PP	POWER POLE		
GW	GUY WIRE		
RCP	REINFORCED CONCRETE PIPE		
S.F.	SQUARE FEET (AREA)		
SP	TRAFFIC SIGNAL POLE		
SSM	SANITARY SEWER MANHOLE		
SSMVF	SANITARY SEWER FORCE MAIN VALVE		
SDM	STORM DRAIN MANHOLE		
SDMCB	STORM DRAIN CATCH BASIN		
TEL	TELEPHONE PEDESTAL		
WB	WATER BOX		
WM	WATER METER		
WMH	WATER MANHOLE		
WV	WATER VALVE		
W	WELL		
P	PEDESTRIAN X-WALK POLE		
E	ELECTRIC LINE		
SS	SANITARY SEWER FORCE MAIN		
FO	FIBER OPTIC LINE		
G	GAS LINE		
OE	OVERHEAD ELECTRIC LINE		
SL	SANITARY SEWER LINE		
TL	TELEPHONE LINE		
CL	CABLE TV LINE		
FL	FIRE LINE		
8"W	8" WATER LINE		
12"W	12" WATER LINE		
SC	SPILL CURB		
FB	FENCE		
RB	RIPARIAN BUFFER		
T	TREELINE		
M5	MAJOR CONTOUR (5')		
M1	MINOR CONTOUR (1')		
TFP	TREE PROTECTION FENCE		
SF	SILT FENCE		
CS	CONCRETE SIDEWALK		
AE	ACCESS AND UTILITY EASEMENT		
TPA	TREE PRESERVATION AREA		
OSA	OPEN SPACE AREA		
TDA	TDD DRAINAGE AREA		
SDBA	SKIMMER BASIN DRAINAGE AREA		



Legend



- Final Drawing -
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Review Purposes Only



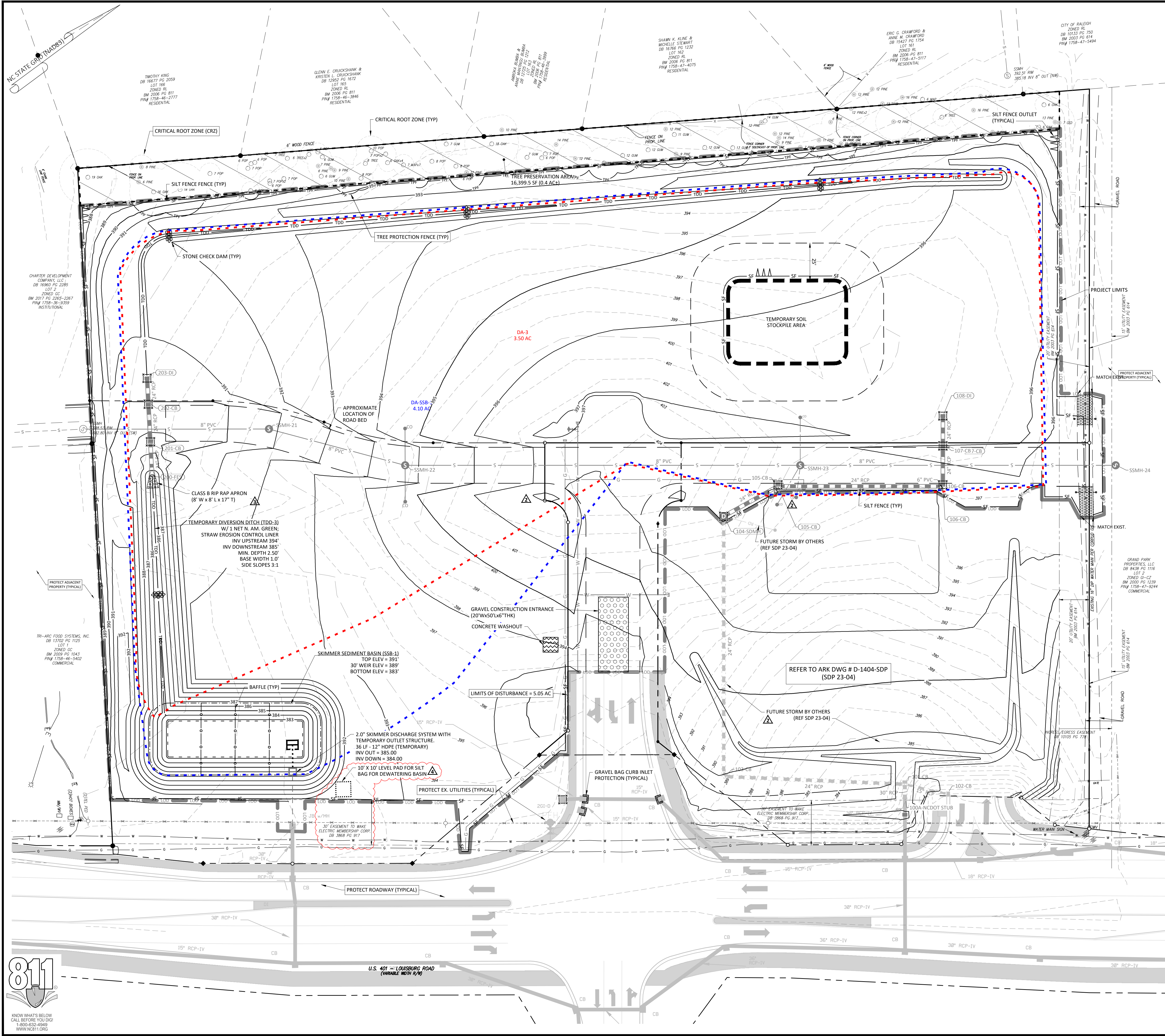
EROSION CONTROL - PH. 1
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811
North Carolina
Call Before You Dig
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www.nc811.org
5/1/2024

Project Manager:	BCF
Drawn By:	DLC/TGN
Checked By:	TGN
Project Number:	22049
Drawing Number:	D-1404-CID

C1.1
Date: May 1, 2023



STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
100-DI	390.70			Drop Inlet
100A-NCODT STUB	385.95	383.00 (101-CB)		U-6241 Project Tie-In
101-CB	394.11	383.27 (103-CB) 390.32 (102-CB)	383.07 (100A-NCODT STUB)	Catch Basin
102-CB	393.73		390.90 (101-CB)	Catch Basin
103-CB	395.26	384.93 (104-SDMH)	384.73 (101-CB)	Catch Basin
104-SDMH	397.42	387.21 (105-CB) 389.57 (104A-CO)	387.01 (103-CB)	48 in MH
105-CB	397.54	387.90 (106-CB)	387.70 (104-SDMH)	Catch Basin
106-CB	397.03	389.43 (107-CB) 392.75 (106A-CO)	389.23 (105-CB)	Catch Basin
106A-CO	397.17		392.83 (106-CB)	CO
107-CB	397.03	389.96 (108-DI)	389.76 (106-CB)	Catch Basin
108-DI	396.74		390.19 (107-CB)	Drop Inlet
200-FES	387.99	385.66 (201-CB)		Flared End Section
201-CB	389.58	385.77 (202-CB)	385.77 (200-FES)	Catch Basin
202-CB	390.00	385.90 (203-DI)	385.90 (201-CB)	Catch Basin
203-DI	390.17		385.99 (202-CB)	Drop Inlet

Rip Rap Aprons						
Outlet	Size (in)	Pad (ft)	Pad (ft)	Pad (ft)	Pad (ft)	Stone Class
200-FES	24	4	8	8	17	B

- Legend**
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 - FH FIRE HYDRANT
 - GV GAS VALVE
 - HB HAND BOX
 - LP LIGHT POLE
 - PP POWER POLE
 - GUY GUY WIRE
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- Final Drawing -
Issued for Permit
Reviewed for Review & Owner Comments

EROSION CONTROL PLAN - PH. 2

WALLBROOK ROADWAY IMPROVEMENTS
VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)

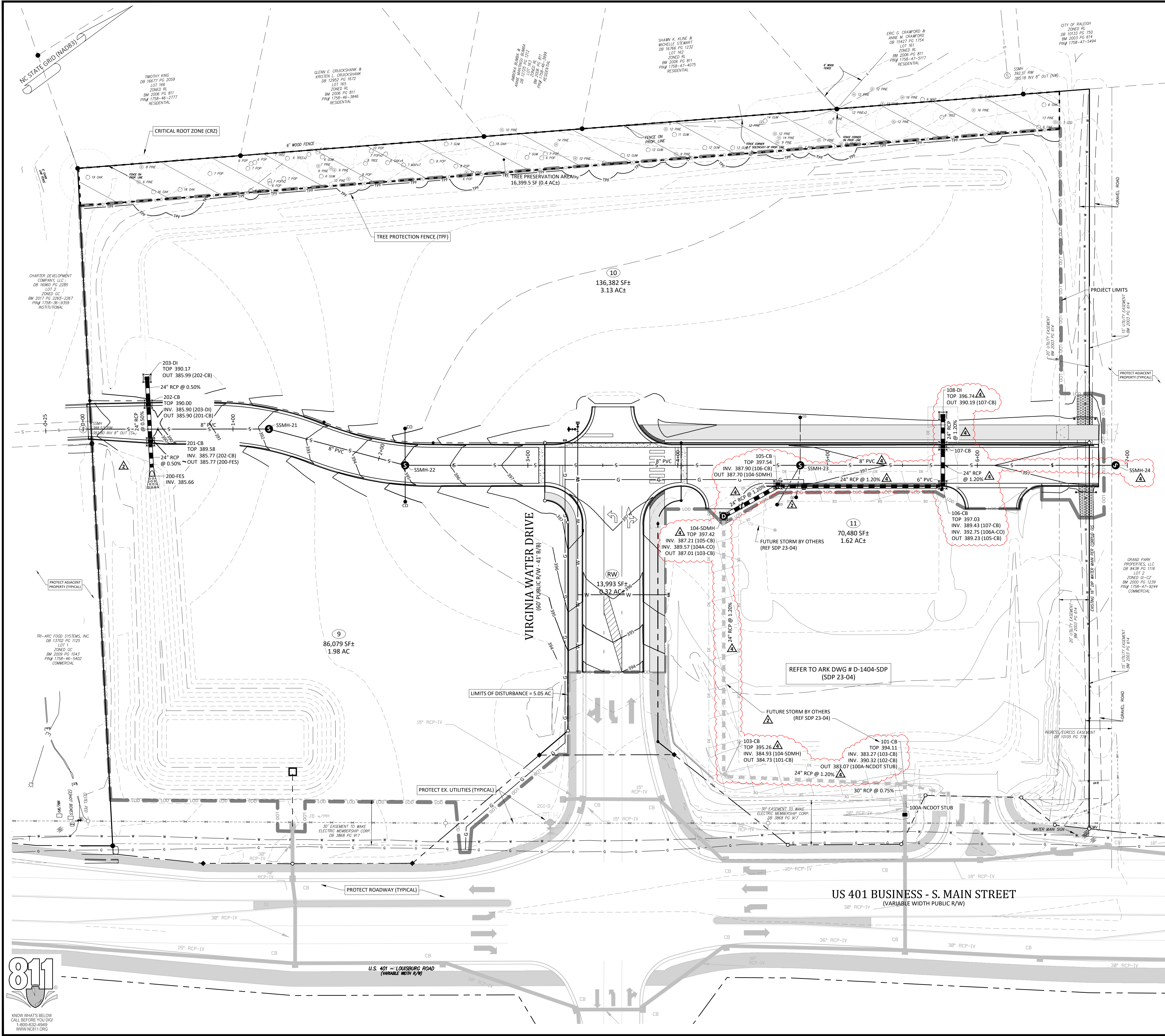
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Project Manager: BCF
Drawn By: DLC/TGN
Checked By: TGN
Project Number: 22049
Drawing Number: D-1404-CID

C1.2

Date: May 1, 2023



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EROSION CONTROL - PH. 3

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 Town of Roanoke Project No. CID 23-04
 US 401 Business / S. Main Street & Virginia Water Drive
 Wake Forest Township, Town of Roanoke, Wake County, North Carolina

NC License: PA 1398

ARK CONSULTING GROUP PLLC
 ENGINEERS & PLANNERS

2755-B Charles Blvd
 Raleigh, NC 27608
 (919) 877-8888
 www.arkconsultinggroup.com

Project Manager: BCF
 Drawn By: DLC/TGN
 Checked By: TGN
 Project Number: 22049
 Drawing Number: D-1404-CID

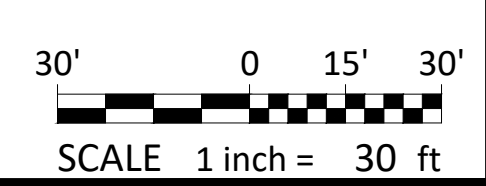
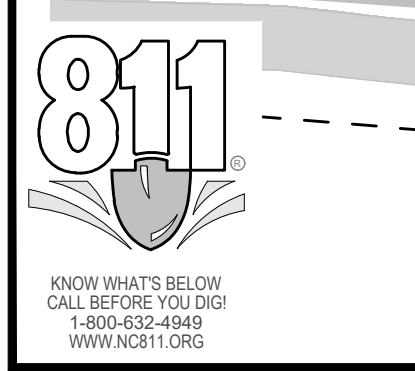
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Date: May 1, 2023

Final Drawing -
Issued for Permit
Review Purposes Only

REVISIONS:

#	DATE	DESCRIPTION
1	11/04/23	REVISED PER REVIEW & OWNER COMMENTS
2	11/04/23	REVISED PER REVIEW & OWNER COMMENTS
3	11/04/23	REVISED PER REVIEW & OWNER COMMENTS
4	11/04/23	REVISED PER REVIEW & OWNER COMMENTS



GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Table with 3 columns: Site Area Description, Stabilize within this many calendar days after ceasing land disturbance, Timeframe variations.

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...

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

Table with 2 columns: Temporary Stabilization, Permanent Stabilization.

- POLYACRYLAMIDES (PAMS) AND FLOCCULANTS
1. Select flocculants that are appropriate for the soils being exposed during construction...

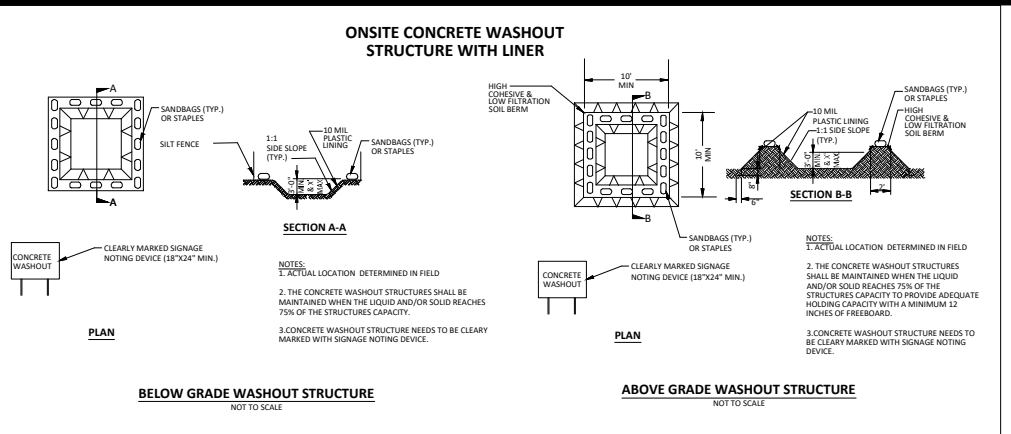
- EQUIPMENT AND VEHICLE MAINTENANCE
1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.

- 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.

- 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.

- PORTABLE TOILETS
1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available.

- 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.



- 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.

- 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.

- HAZARDOUS AND TOXIC WASTE
1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

Table with 3 columns: Inspect, Frequency (during normal business hours), Inspection records must include.

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

Table with 2 columns: Item to Document, Documentation Requirements.

NOTE: This general permit as well as the certificate of coverage, after it is received.

Table with 2 columns: Occurrence, Reporting Timeframes (After Discovery) and Other Requirements.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19

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 NCEQ - RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS.

Erosion Control Provisions:

- 1. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING WAKE COUNTY WATERSHED MANAGEMENT OF THE DATE THAT THE LAND DISTURBING ACTIVITY WILL BEGIN.
2. LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MAY NOT PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED AND APPROVED BY THE ENGINEER.

Construction Sequence:

- 1. EROSION AND SEDIMENT CONTROL (E&S) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR.
2. CALL WAKE COUNTY WATERSHED MANAGER JEEVAN NEUPANE AT (919) 819-8907 A MINIMUM OF 48 HOURS IN ADVANCE TO SCHEDULE A PRE-CONSTRUCTION MEETING AND FOR NOTIFICATION OF PROJECT START UP.

Table with 3 columns: Site Area Description, Seeding Rate, Seeding Method.

- Seedbed Preparation:
1. Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available.
2. Rip the entire area to six inches deep.

Table with 2 columns: Seeding Schedule, For Shoulders, Side Ditches, Slopes (Max 3:1).

Table with 3 columns: Date, Type, Planting Rate.

Table with 3 columns: Date, Type, Planting Rate.

Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those that do not under local conditions; other seeding rate combinations are possible.

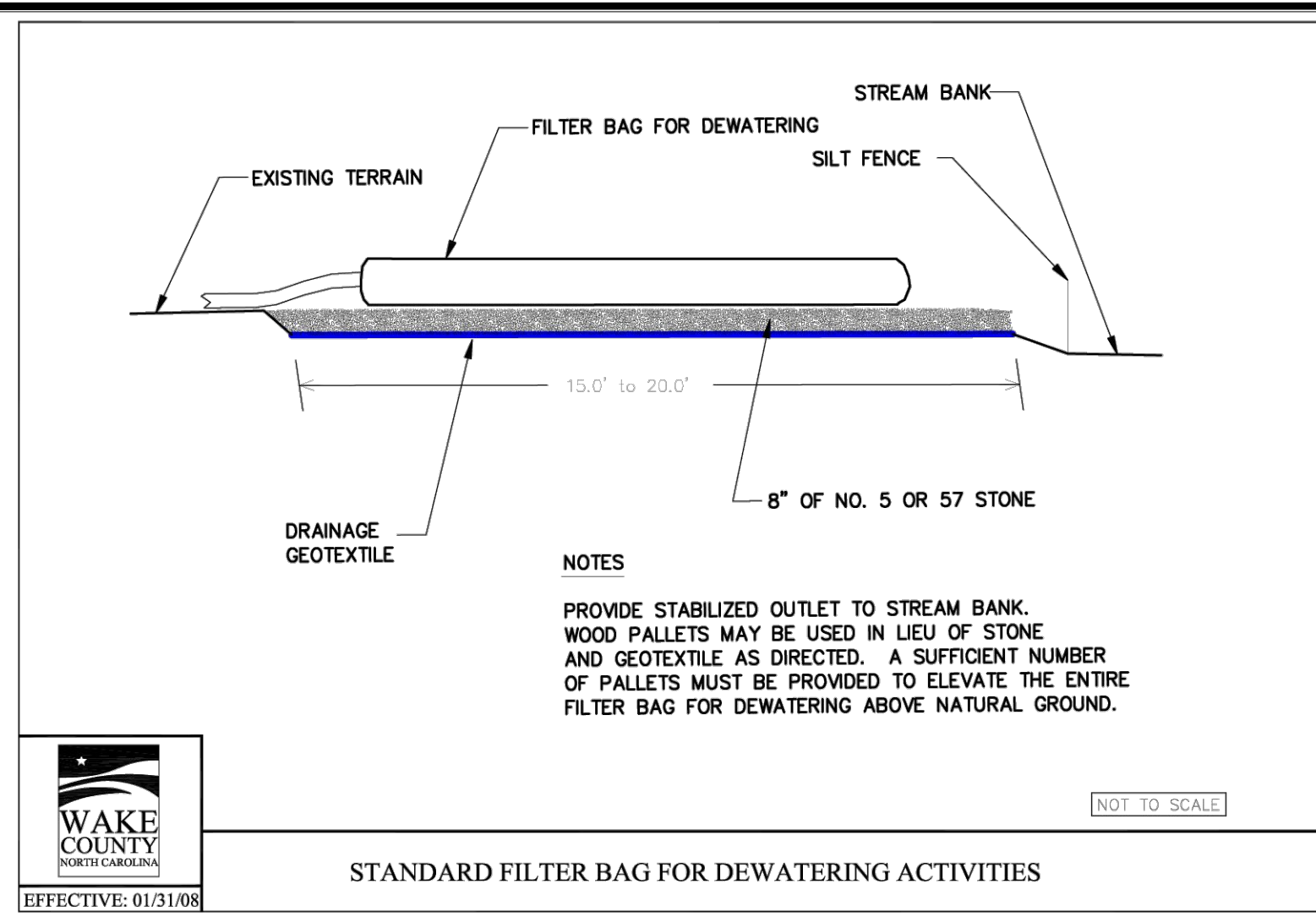
Table with 2 columns: Project Manager, Checked By, Project Number, Drawing Number.

- Final Drawing - Issued for Permit Review Purposes Only. CROSLAND SOUTHEAST logo.

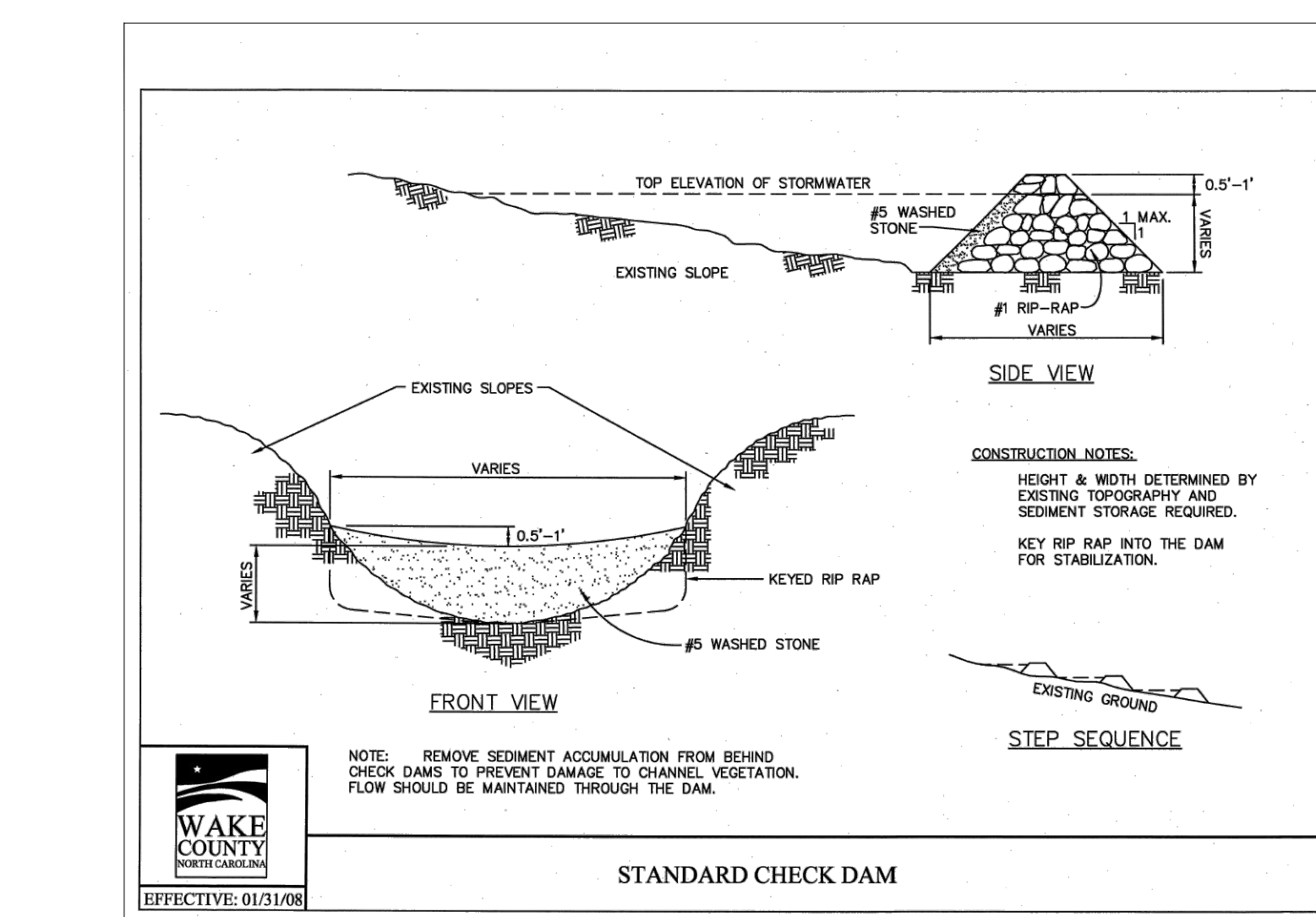
EROSION CONTROL NOTES. WALLBROOK ROADWAY IMPROVEMENTS VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11) Town of Roanoke Project No. CID 23-04

ARK CONSULTING GROUP PLLC logo. PROJECT NO. 22049. DRAWING NO. D-1404-CID. Date: May 1, 2023.

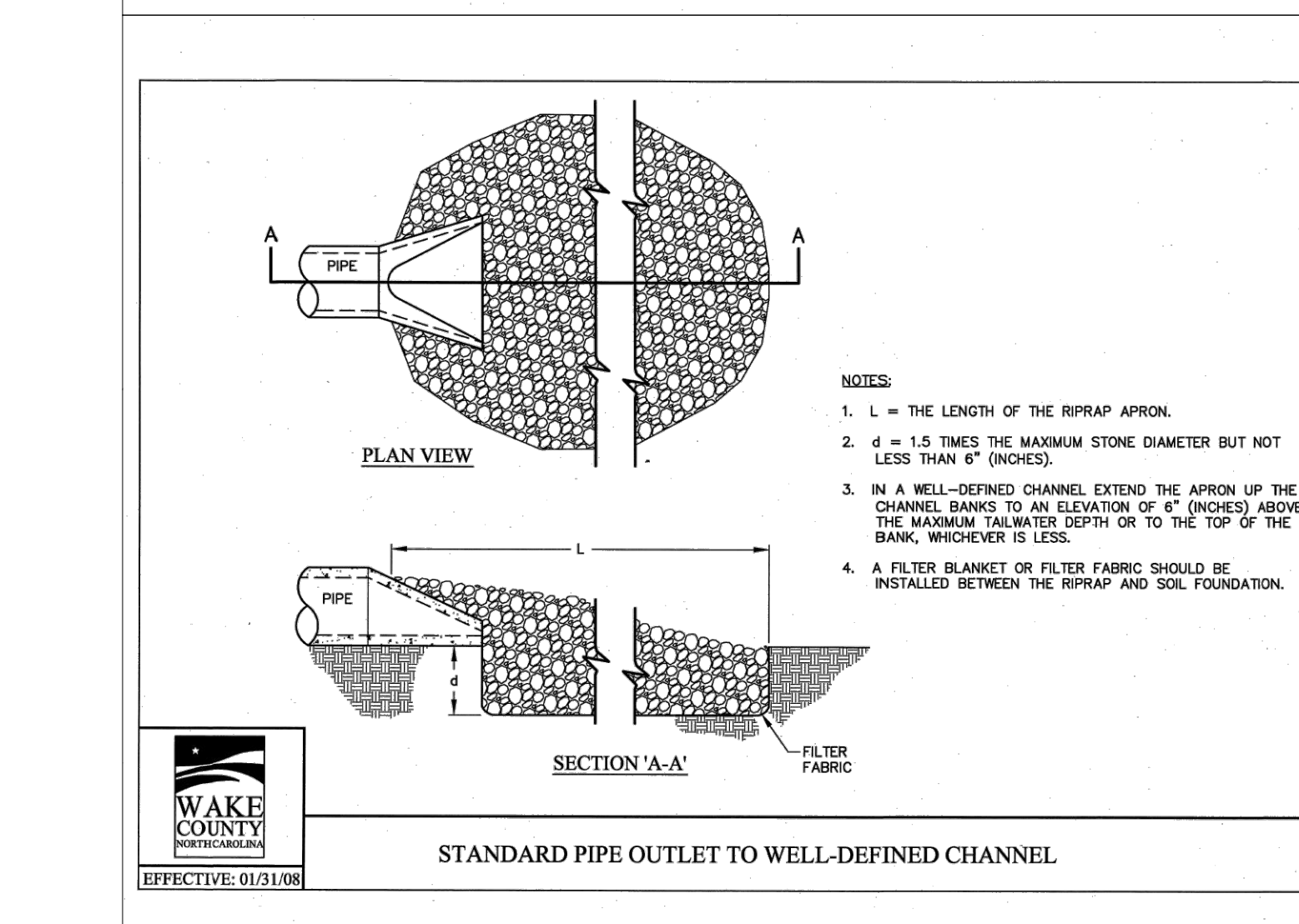
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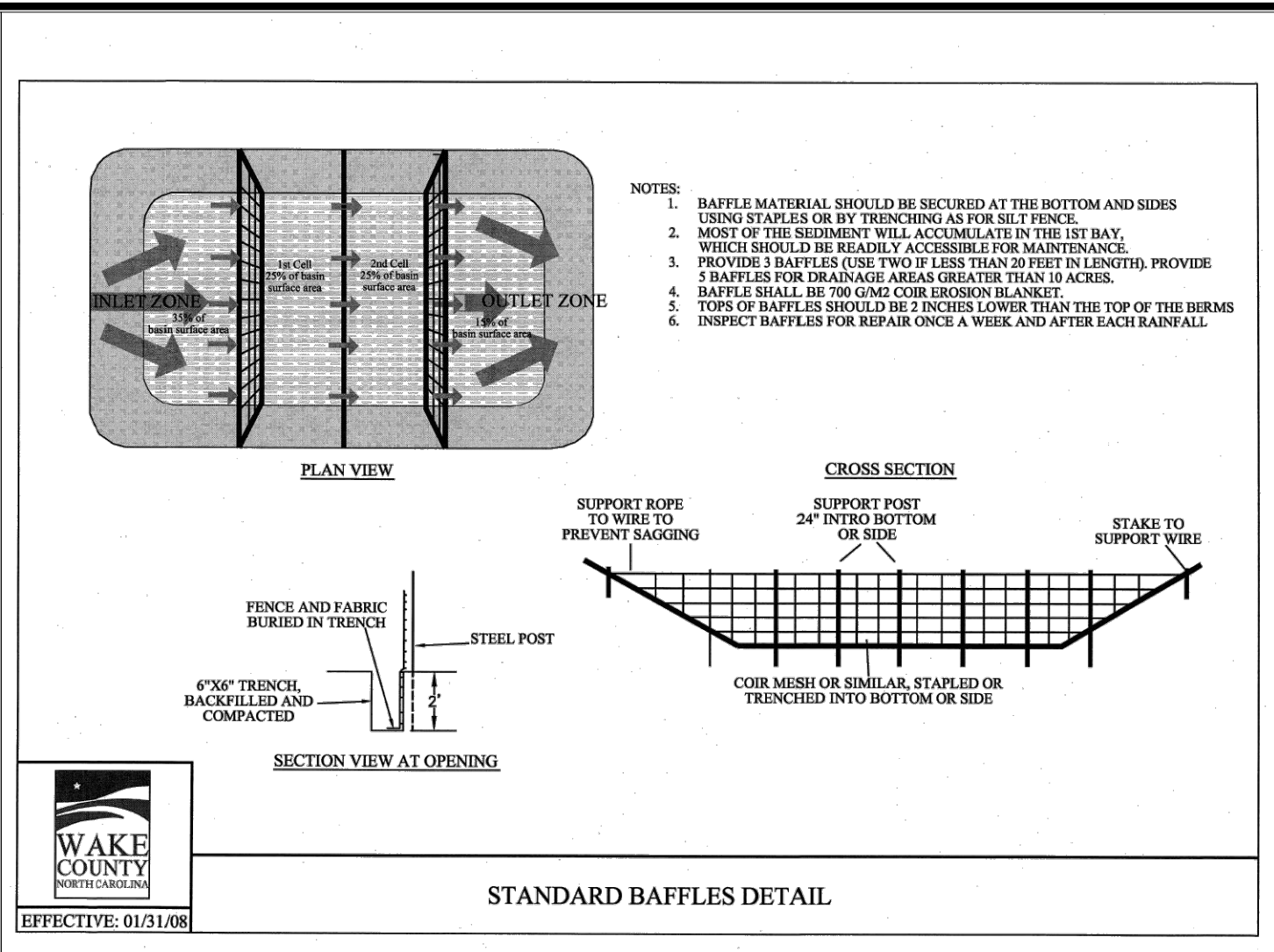
STANDARD FILTER BAG FOR DEWATERING ACTIVITIES



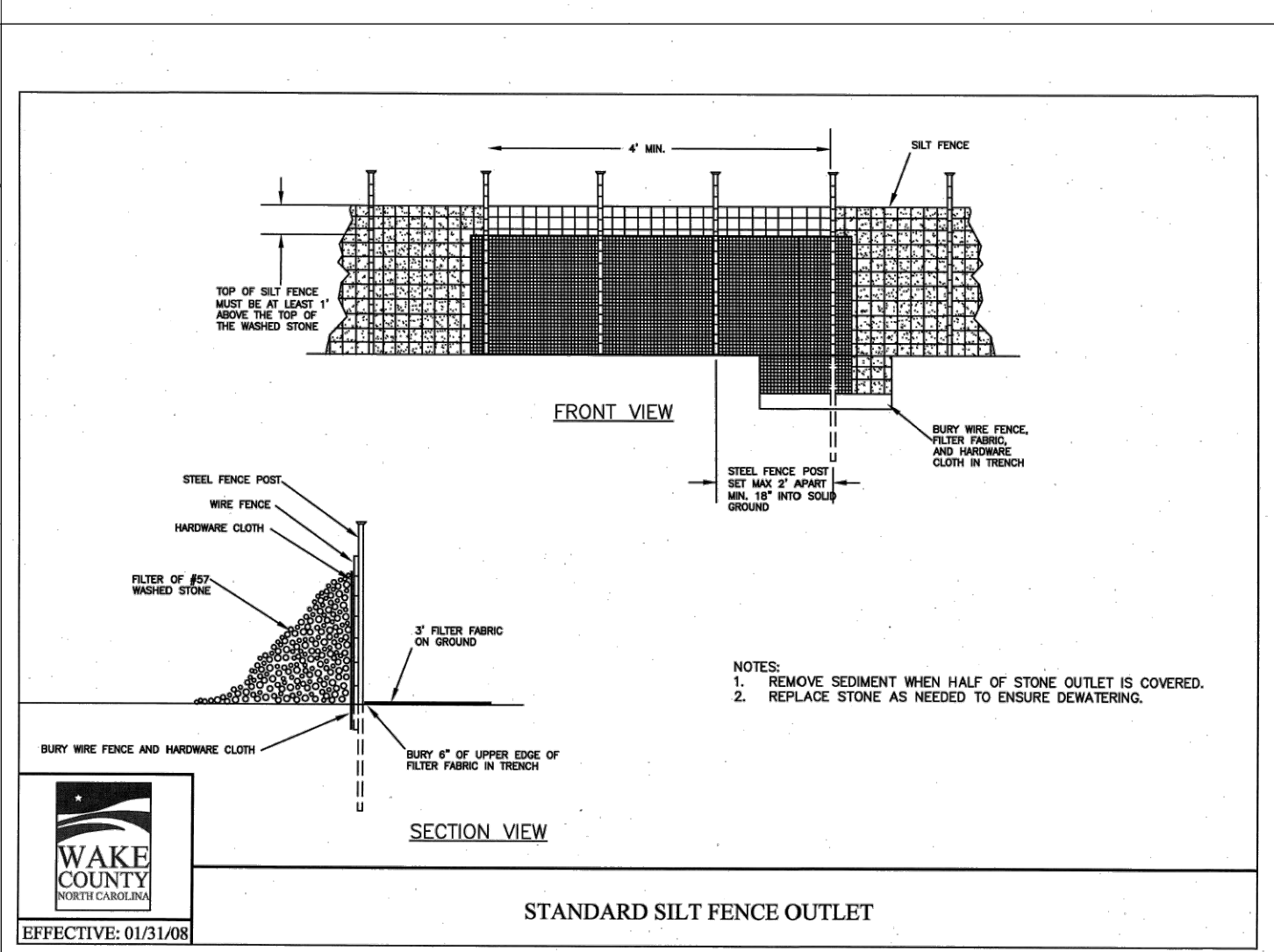
STANDARD CHECK DAM



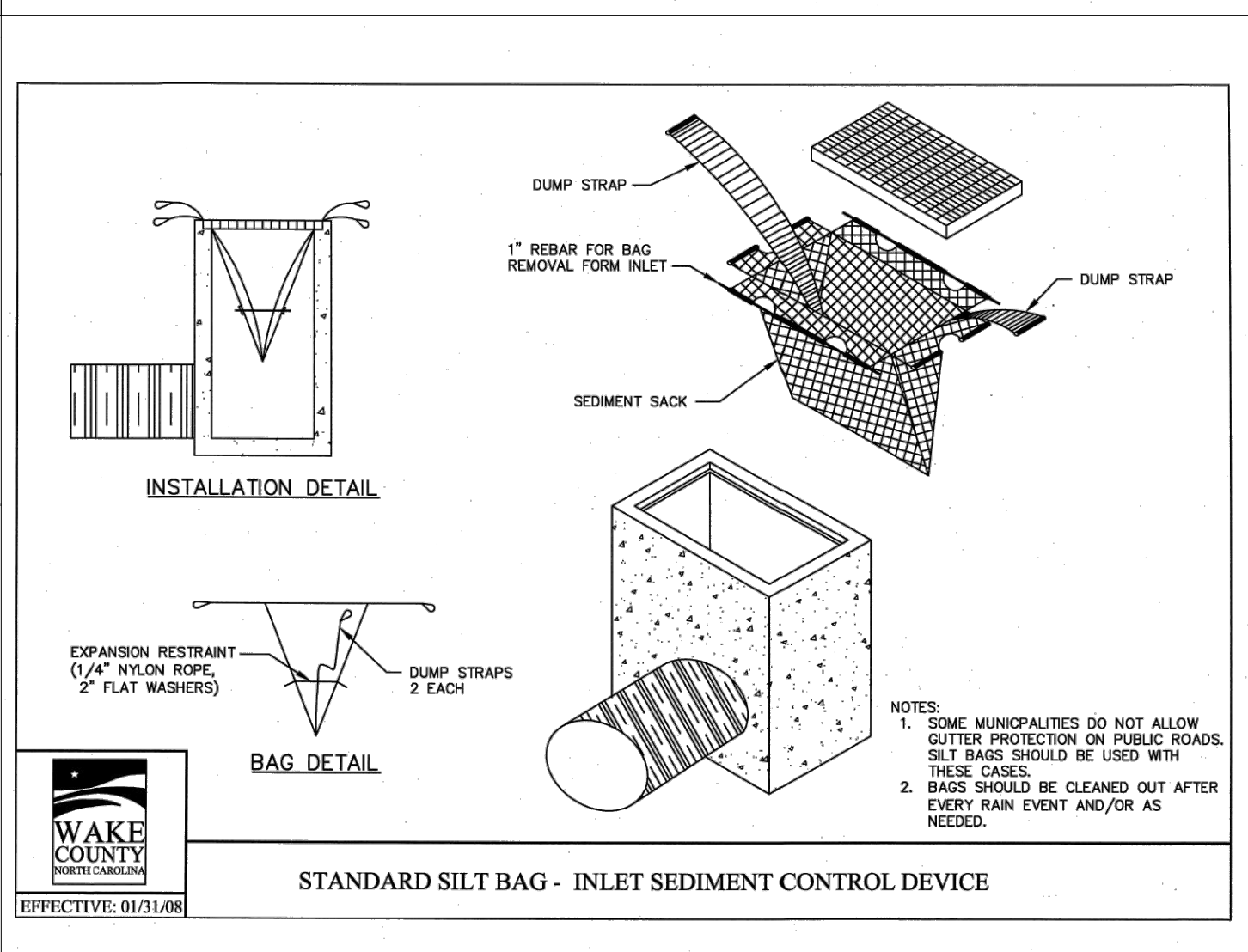
STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL



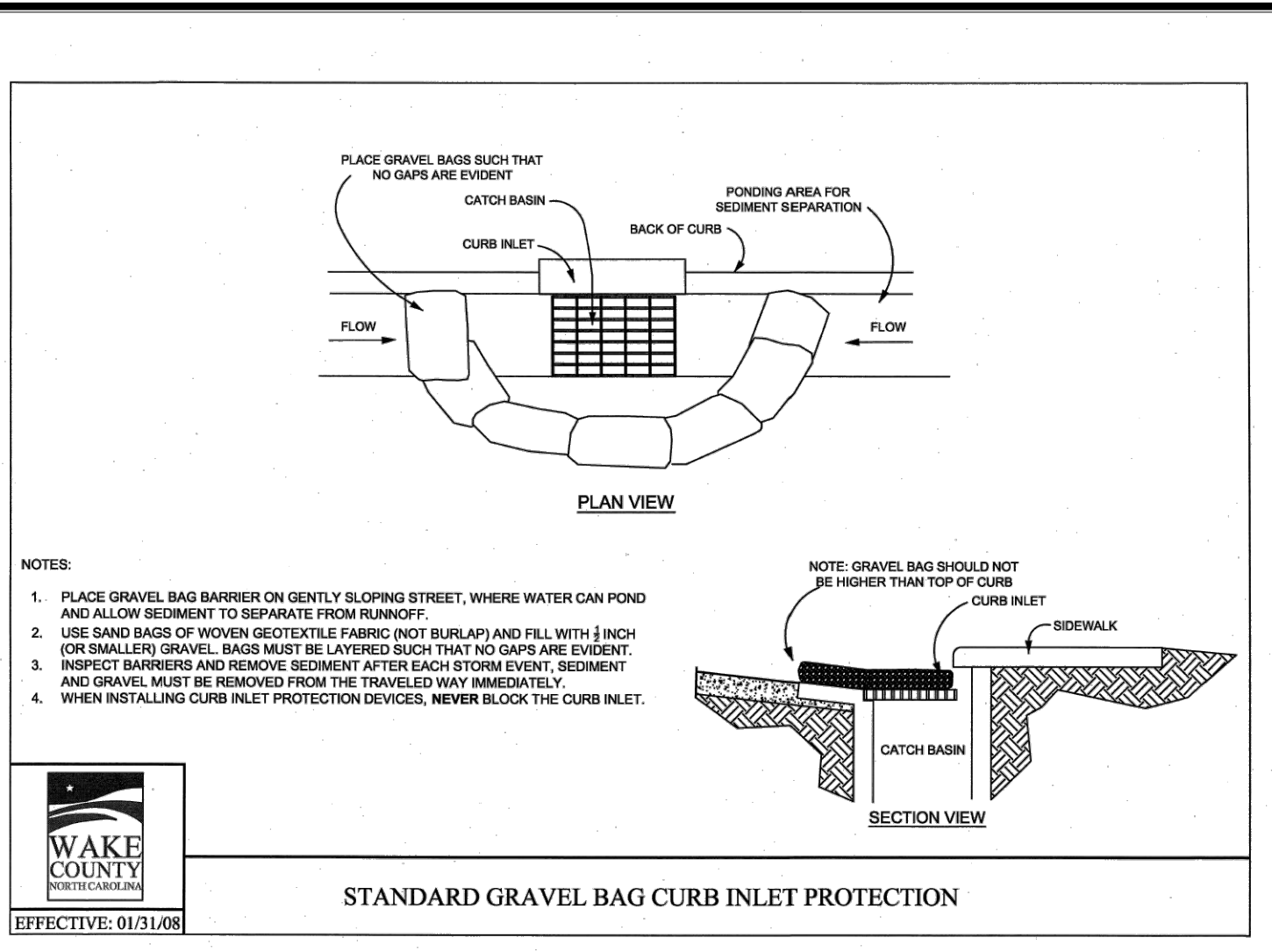
STANDARD BAFFLES DETAIL



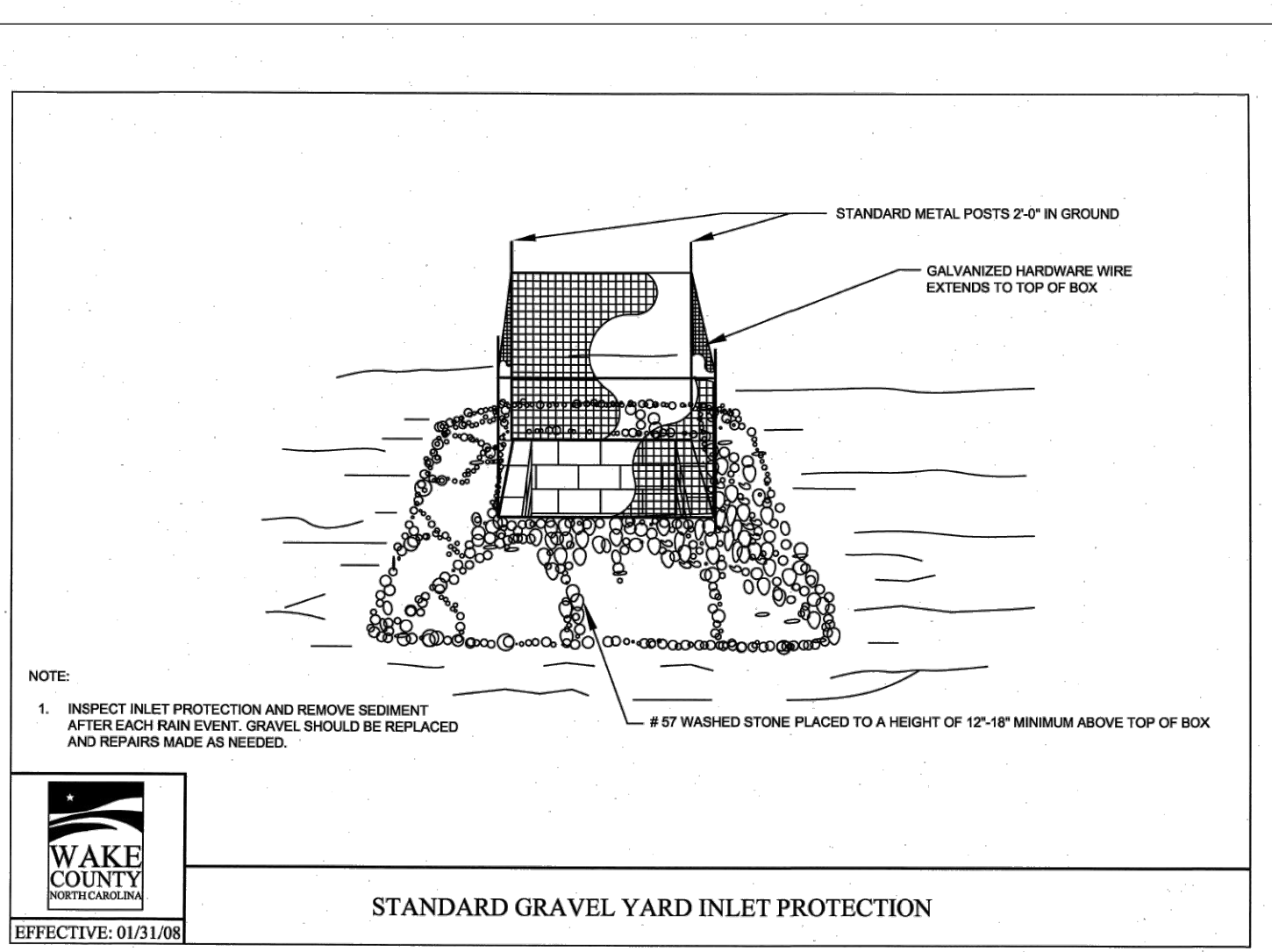
STANDARD SILT FENCE OUTLET



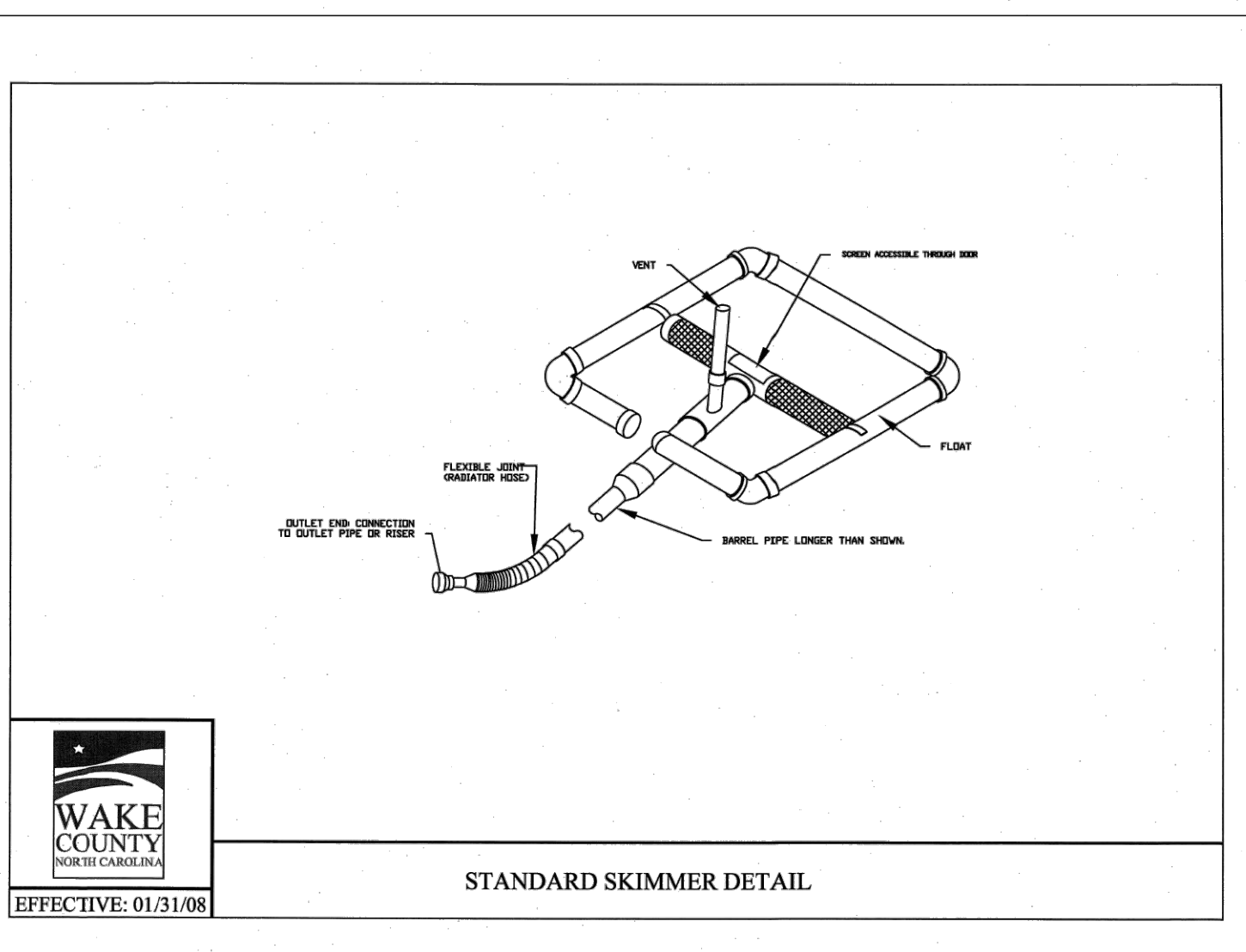
STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE



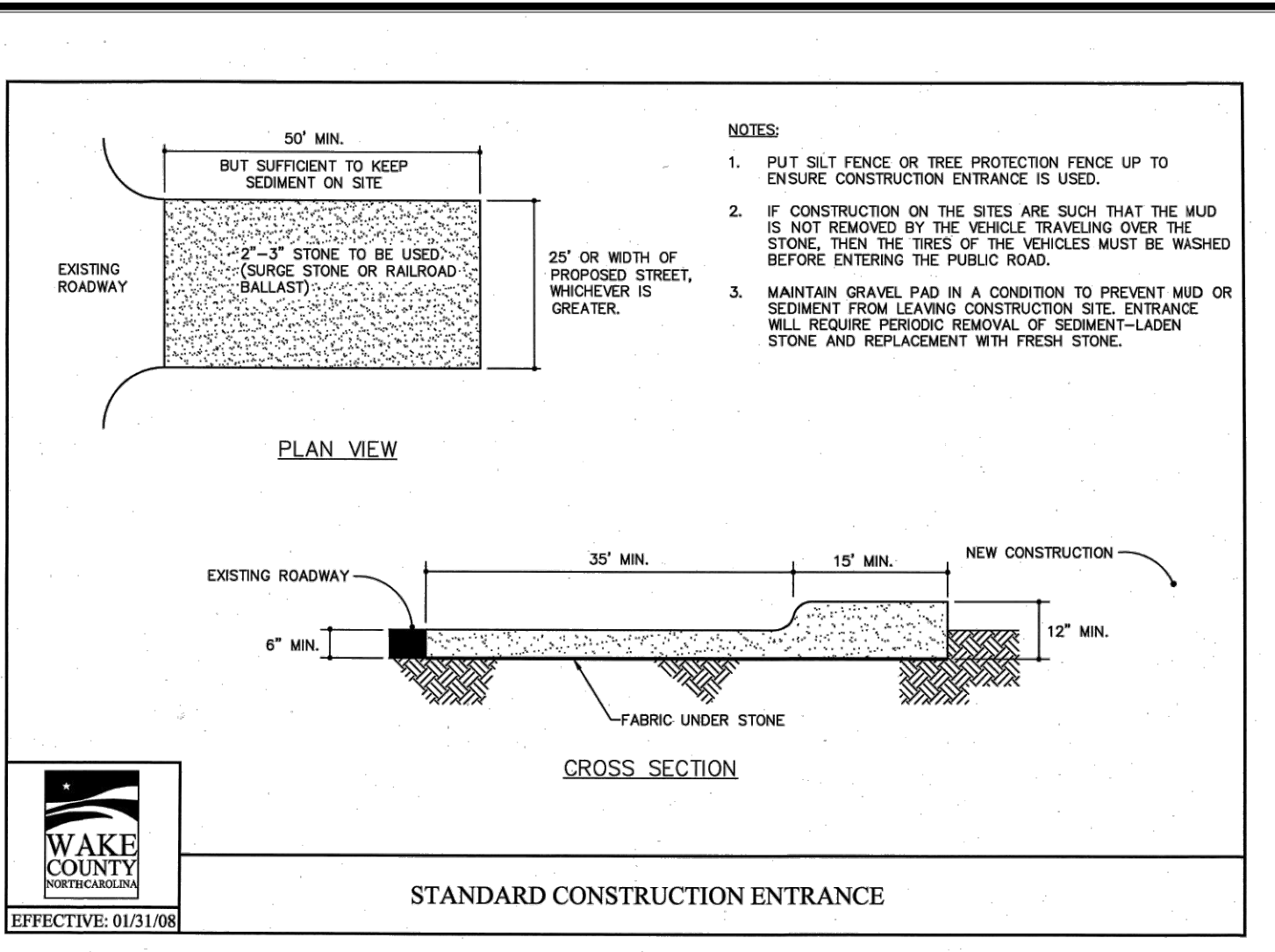
STANDARD GRAVEL BAG CURB INLET PROTECTION



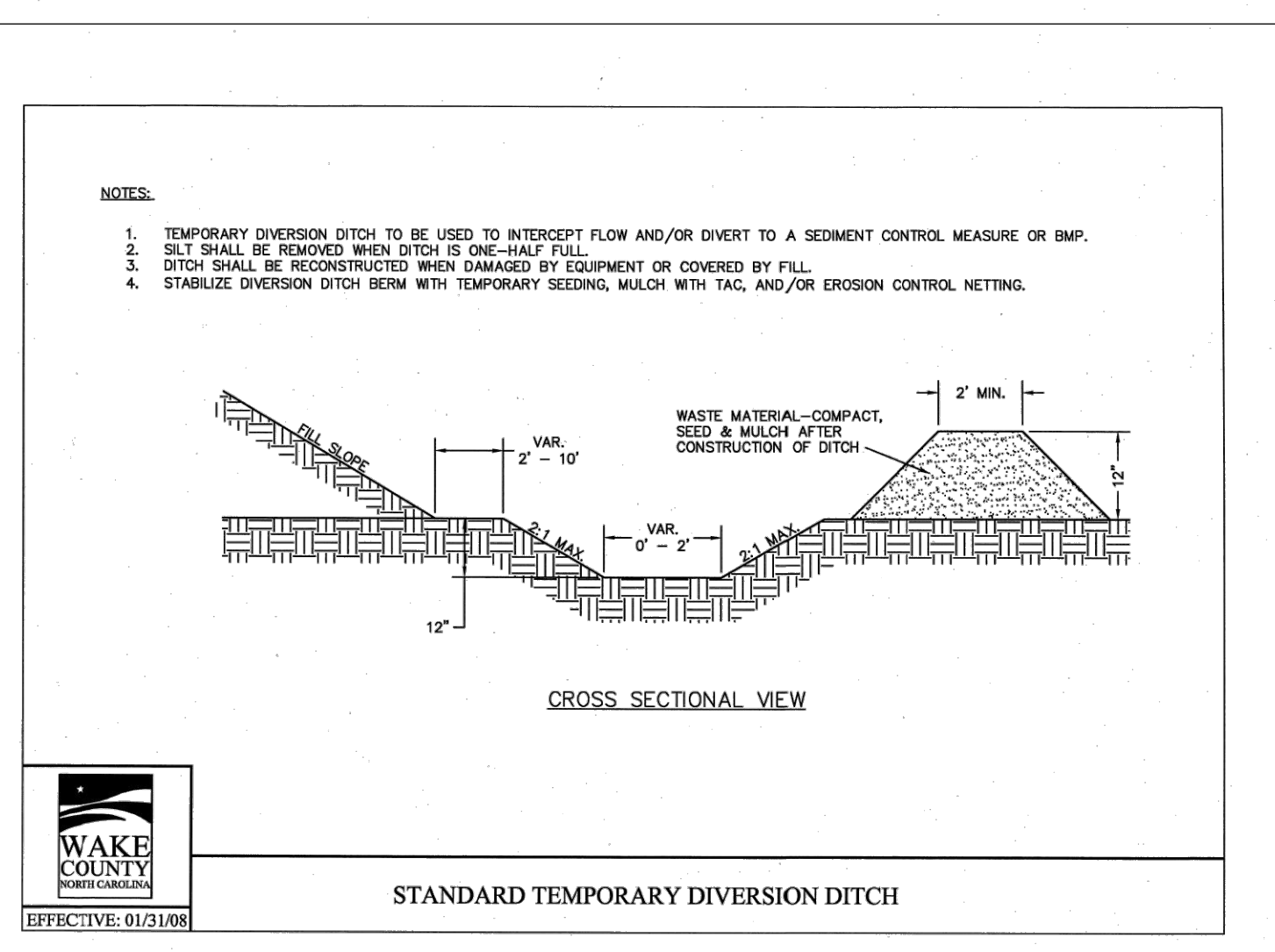
STANDARD GRAVEL YARD INLET PROTECTION



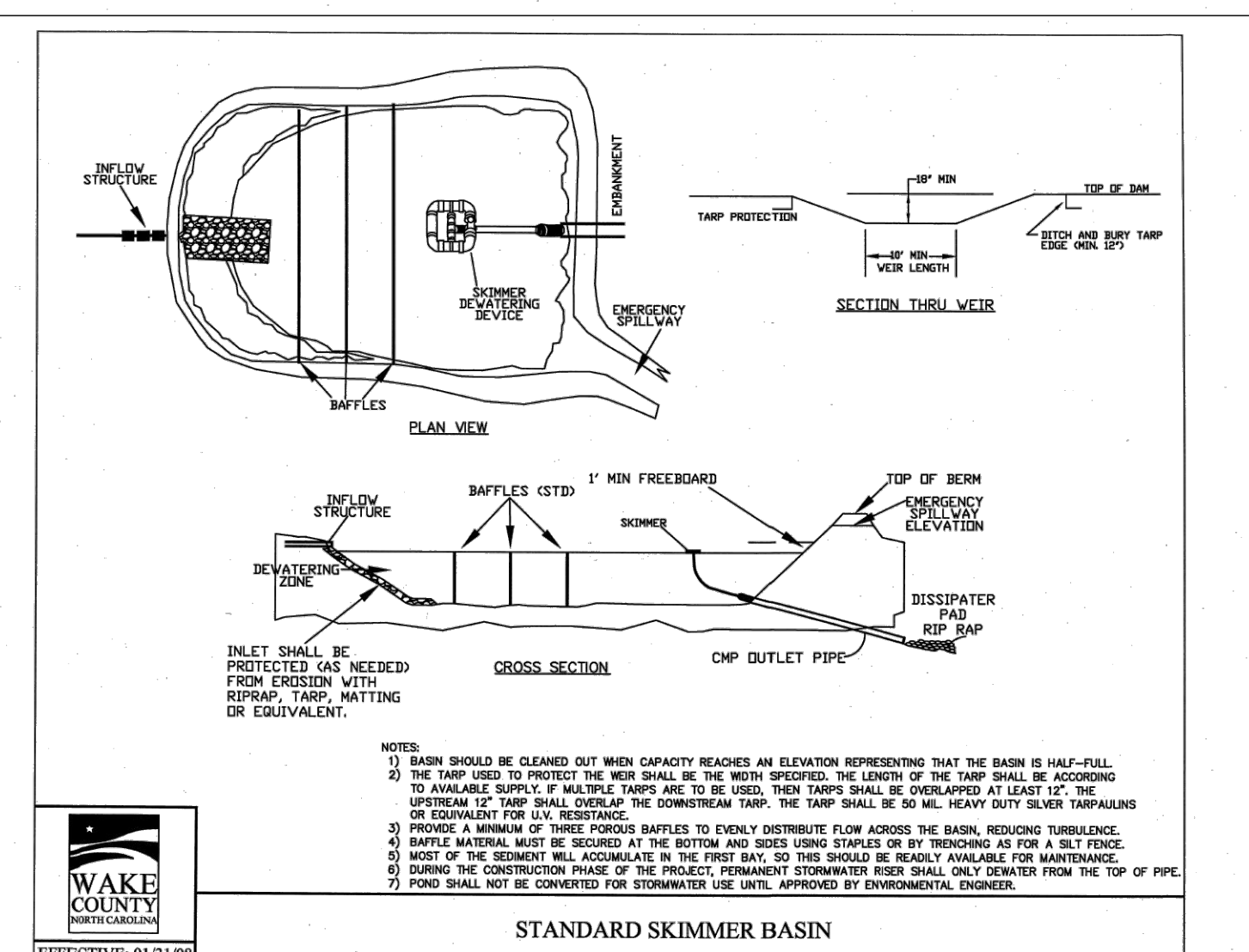
STANDARD SKIMMER DETAIL



STANDARD CONSTRUCTION ENTRANCE



STANDARD TEMPORARY DIVERSION DITCH



STANDARD SKIMMER BASIN

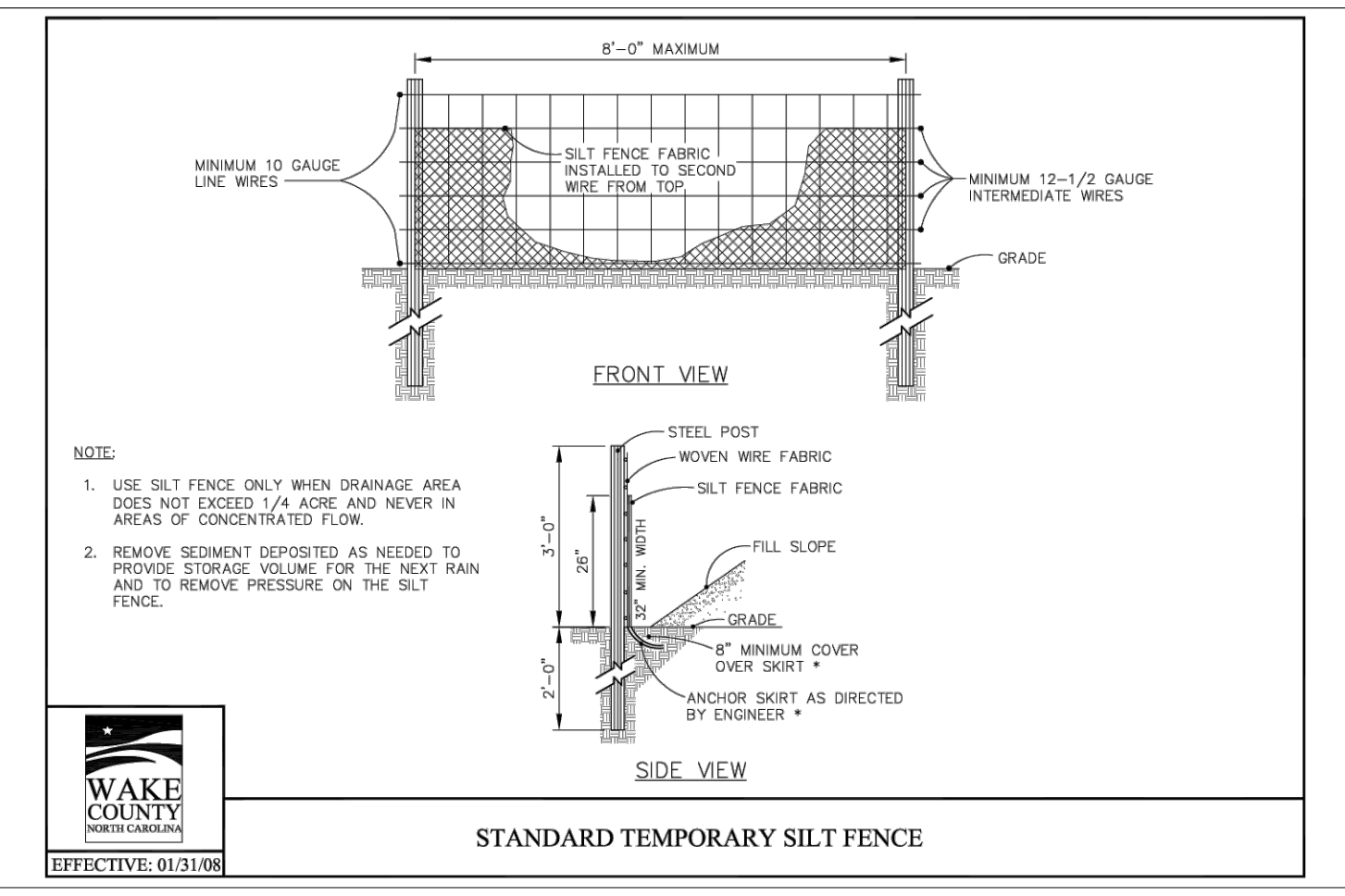
Temporary Sediment Traps, Skimmer Sediment Basins, and Temporary Sediment Basins

Device	Type	Weir Flow		Depth to Weir (ft)	Depth Below Weir (ft)	Side Slope (x:1)	Top Length (ft)	Top Width (ft)	Skimmer Orifice Size (in)	Skimmer Orifice (in)
		(ft)	(ft)							
SSB-1	Skimmer Sediment Basin	30	0.3	1.5	2.0	3.0	131	49	2.00	1.50

Vegetated Swale Design
 Project: Wallbrook
 Location: Rolesville, Wake County, NC

Device ID	Device Type	Add'l Flow (cfs)	Disturbed Area (AC)	Tc (min)	Intensity (in/hr)*	Creq c	Up Invert	Down Invert	Length (ft)	Base Width (ft)	Left Slope (x:1)	Right Slope (x:1)	Flow Depth (ft)	Slope Manning's n	Slope (ft/ft)	Wetted Area (sf)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Velocity (ft/s)	Qa (cfs)	Qa>Qreq?	τ (lbs/ft ²)	Liner Type	Allowable Shear Stress, τ (lbs/ft ²)	
																									Qa=Qreq?
TDD-3	Temporary Diversion	0	3.50	5	7.18	0.5	12.57	394	385	915	1	3	3	2.41	0.020	0.00984	19.81	8.69	2.28	0.63	12.57	Yes	1.478104695	N. Am. Green; Straw; 1 nets	1.55

*NOAA Atlas 14, NEUSE 2 NE Station, 10-yr 5-min duration intensity



STANDARD TEMPORARY SILT FENCE

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EROSION CONTROL DETAILS

WALLBROOK ROADWAY IMPROVEMENTS
 VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)
 Town of Rolesville Project No. CID 23-04
 US 401 Business / S. Main Street & Virginia Water Drive
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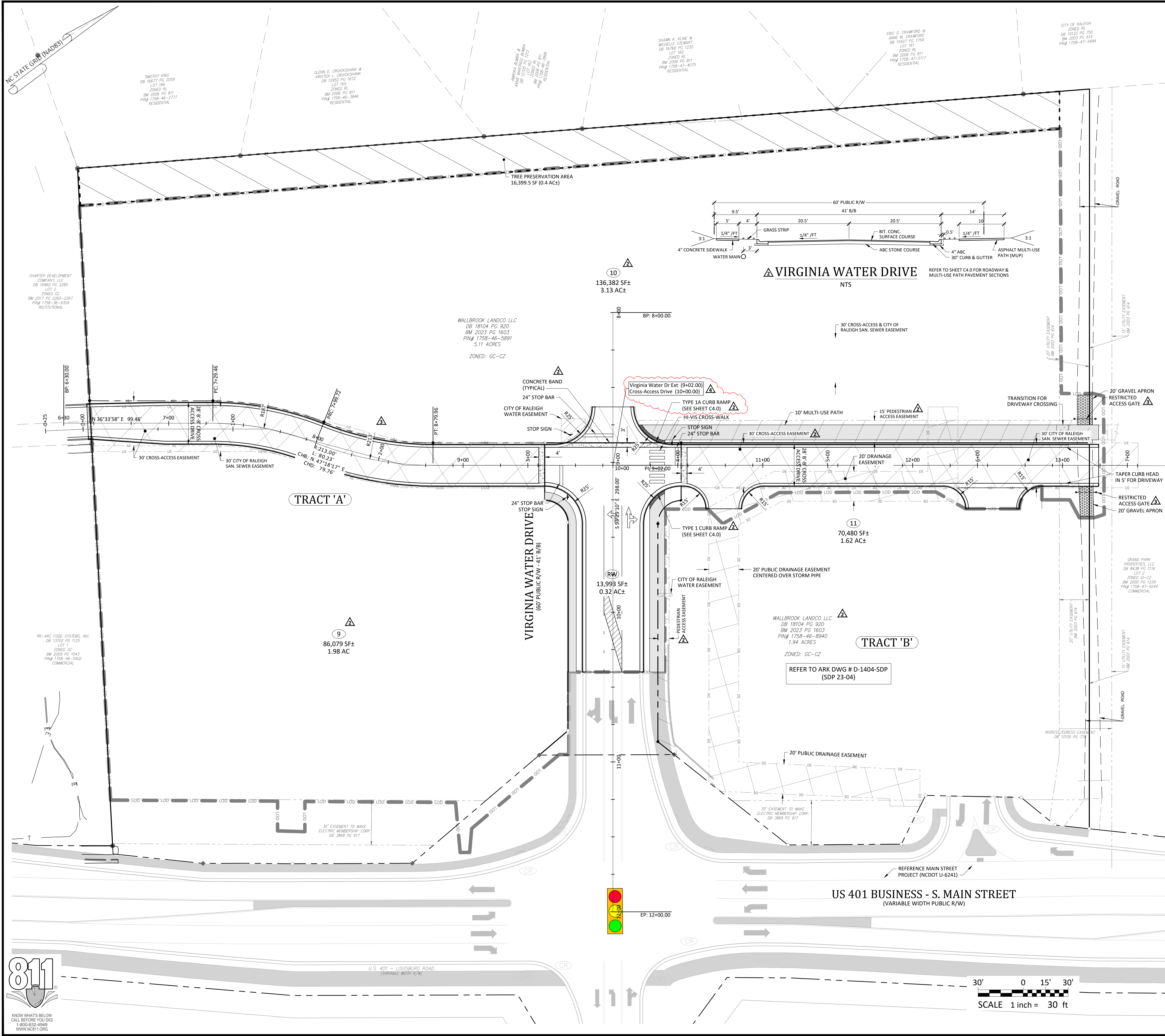
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Final Drawing
 01/2024

Project Manager: BCF
 Drawn By: DLC/TGN
 Checked By: TGN
 Project Number: 22049
 Drawing Number: D-1404-CID

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Date: May 1, 2023

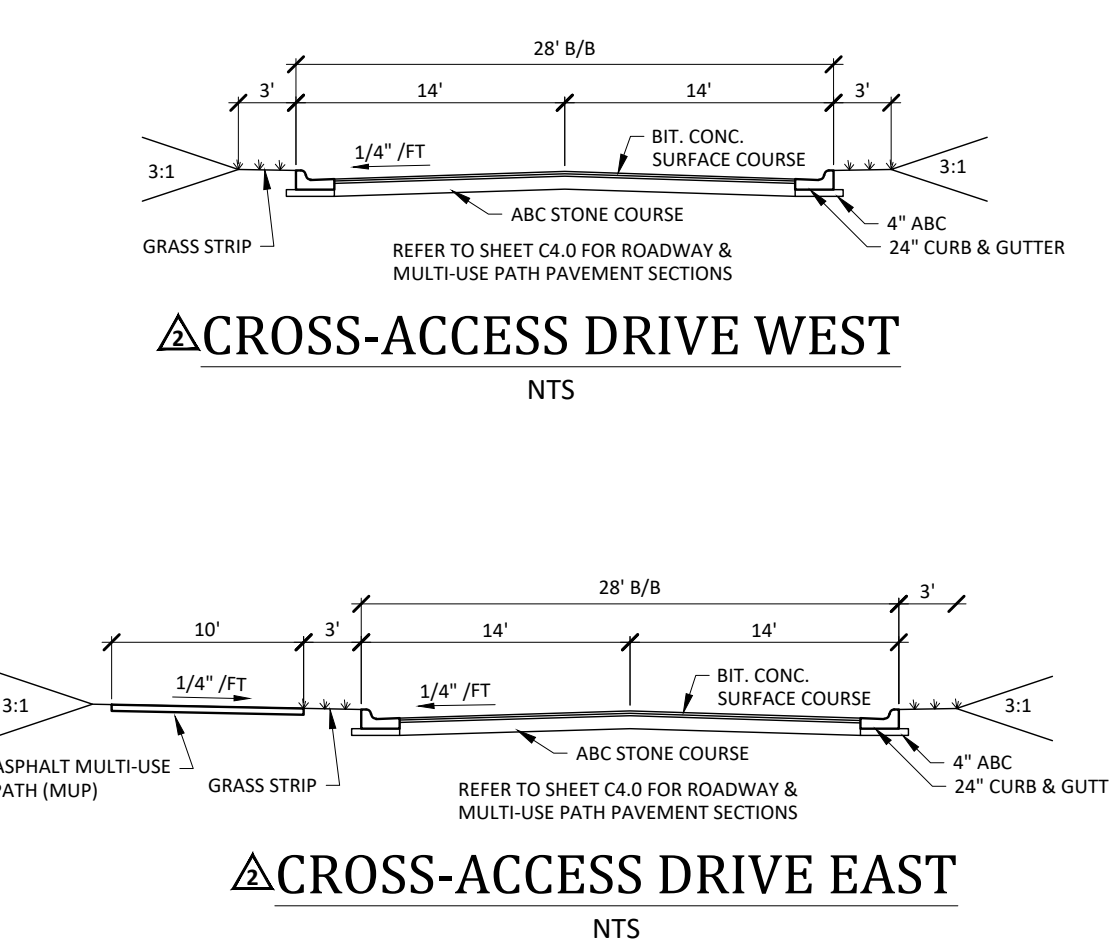


- General Notes:**
- THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
 - ALTA/NSPS LAND TITLE SURVEY, PREPARED BY JOHNSON, MIRMIRAN & THOMPSON FOR WALLBROOK LANDCO, LLC, DATED REVISED MARCH 28, 2020
 - "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION - 7 ELEVEN AT WALLBROOK" PREPARED BY NVS ENGINEERS AND CONSULTANTS, INC., DATED JULY 11, 2022
 - "REVISED WALLBROOK DEVELOPMENT TRAFFIC IMPACT ANALYSIS" PREPARED BY STANTEC CONSULTING SERVICES, INC., DATED AUGUST 11, 2020
 - ALL ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE OR THE REQUIREMENTS OF THE JURISDICTION WHERE THIS PROJECT IS TO BE CONSTRUCTED.
 - THIS PROPERTY IS LOCATED IN FLOOD ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM) 3720175800K, EFFECTIVE DATE: JULY 19, 2022.
 - PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
 - THE OWNER / CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
 - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THIS PROJECT.
 - THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE PART OF THE REQUIRED CONSTRUCTION DOCUMENTS, AND, IN CASE OF CONFLICT, SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
 - THESE PLANS ARE BASED ON INFORMATION PROVIDED TO ARK CONSULTING GROUP, PLLC BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARK CONSULTING GROUP, PLLC IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER ON-SITE FEATURES.
 - ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS AND GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO THE GIVING OF SUCH NOTIFICATION AND THE ENGINEER'S WRITTEN AUTHORIZATION OF SUCH ADDITIONAL WORK.
 - CONTRACTOR SHALL REFER TO THE ARCHITECTURAL / BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY / EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
 - PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER OF ANY DISCREPANCIES.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB & GUTTER. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY SHALL RESTORE SUCH CONNECTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
 - THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, NOR IS THE ENGINEER RESPONSIBLE FOR ANY CONFLICTS OR SCOPE REVISIONS WHICH RESULT FROM THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

Impervious Area Calculations

SITE LIMITED TO 85% IMPERVIOUS AREA AS ACCOUNTED FOR IN THE WALLBROOK STORMWATER MASTER PLAN

PROPOSED TRANSPORTATION IMPERVIOUS AREA:	9,583 SF
PROPOSED TOTAL IMPERVIOUS AREA:	9,583 SF
TOTAL SITE AREA:	13,993 SF
ALLOWABLE IMPERVIOUS AREA (85%):	11,894 SF
PROPOSED IMPERVIOUS PERCENTAGE:	68.48 %



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CROSLAND SOUTHEAST

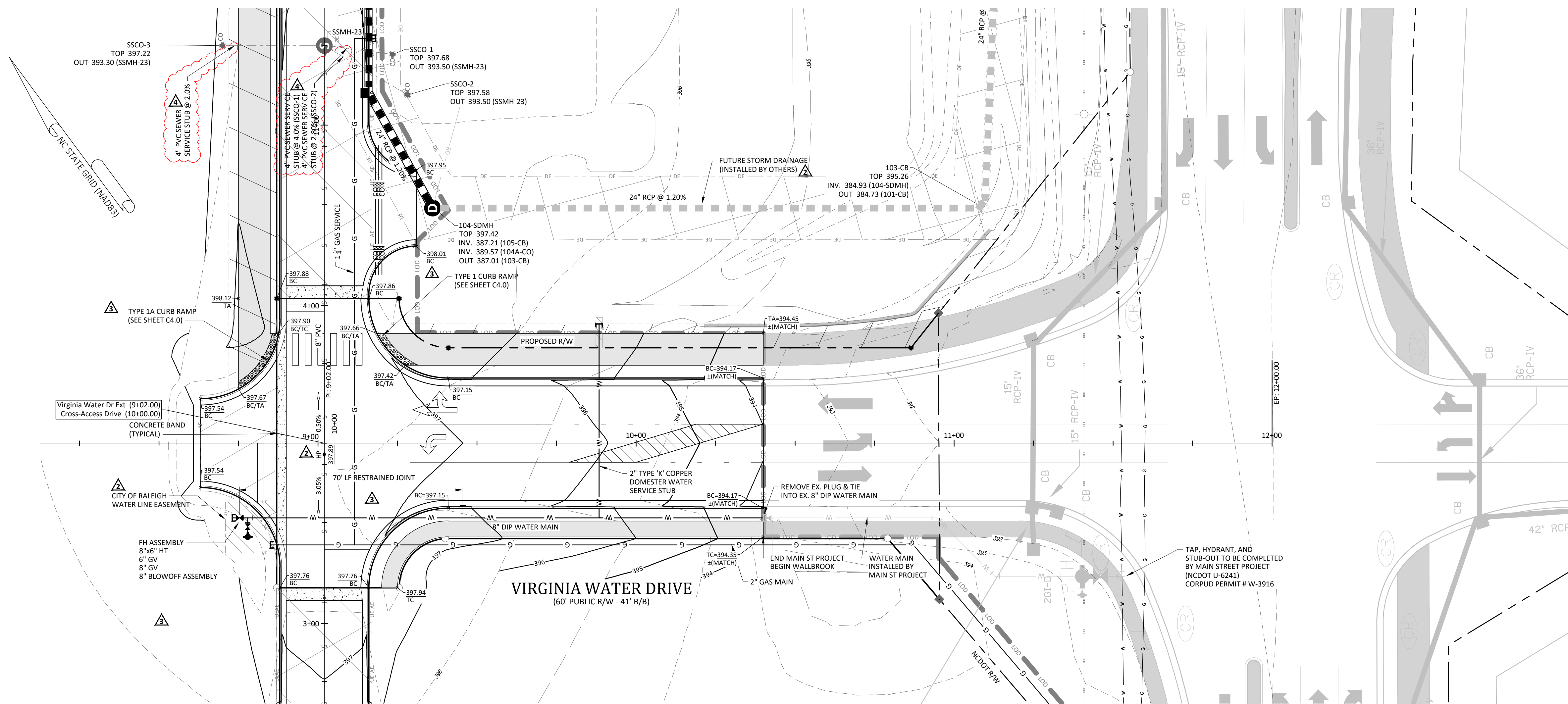
LAYOUT & SIGNAGE-STRIPING PLAN
WALLBROOK ROADWAY IMPROVEMENTS
VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)
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C2.0

Date: May 1, 2023



Grading Notes:

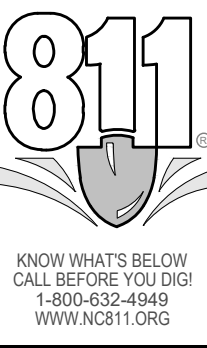
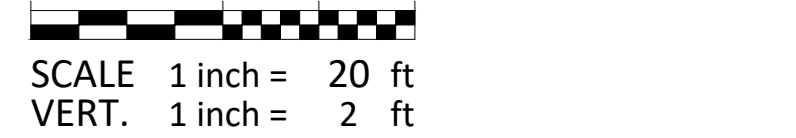
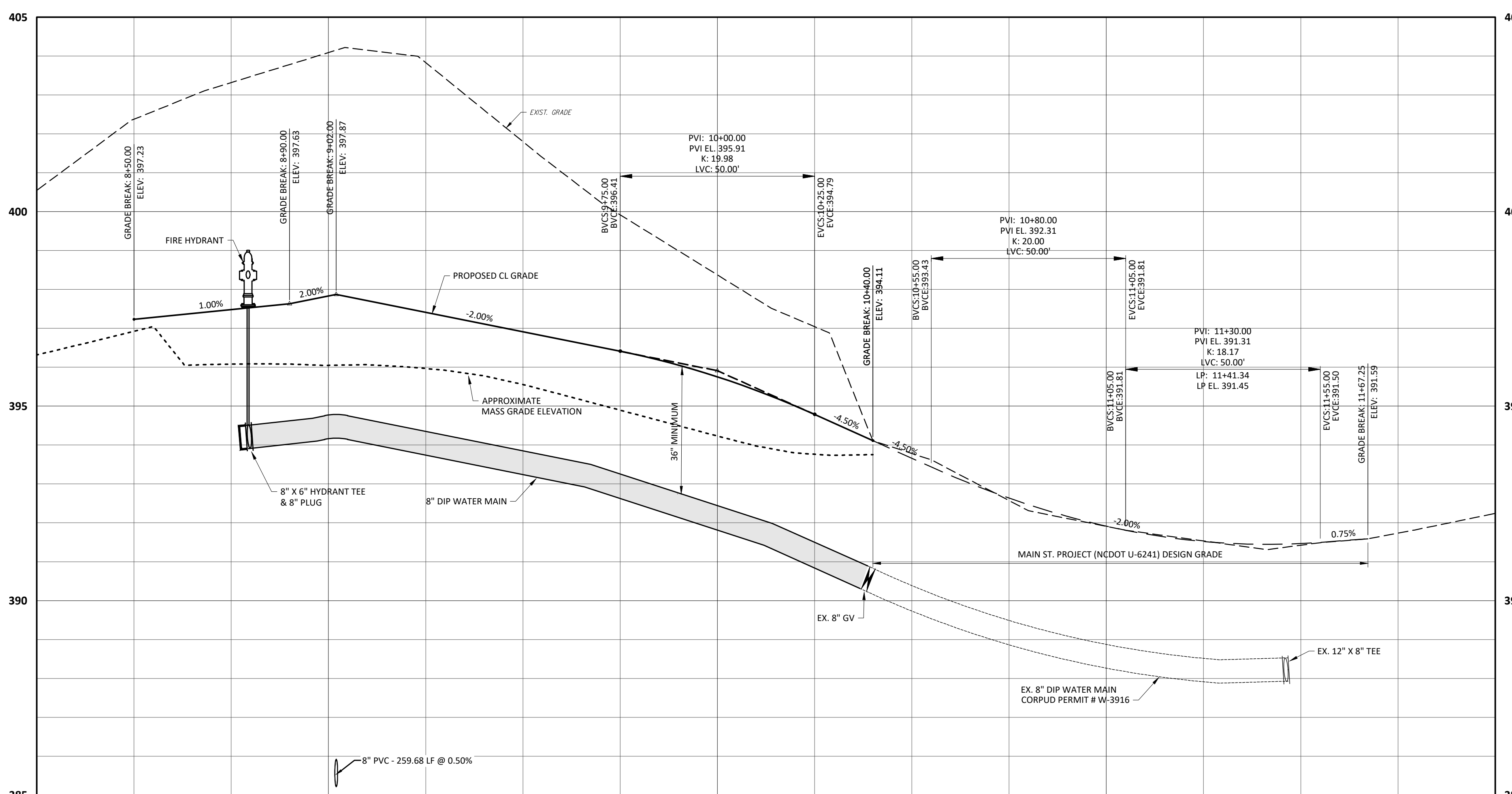
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET.
- SITE CONTRACTOR TO GRADE ALL AREAS WITHIN THE LIMITS OF DISTURBANCE FROM BUILDING TO PROPERTY LINES AND TO EDGE OF PAVEMENT ON STREET SIDES, INCLUDING ROW.
- TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED.
- TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES DURING CONSTRUCTION.
- TILL TOP SOIL TO A DEPTH OF 4" MINIMUM AND REMOVE ALL ROCKS LARGER THAN 1" MEASURED IN LARGEST DIRECTION.
- GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
- ALL GRADED AREAS TO RECEIVE SEED OR SOIL, STRAW AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- INSTALL TEMPORARY TURF REINFORCEMENT MATTING ON ALL SLOPES STEEPER THAN 3:1. MATTING SHALL BE CONTECH LANDLOK C2 OR EQUAL.
- REFER TO CIVIL DETAILS FOR PAVEMENT IN PARKING AND DRIVE AREAS.
- ALL SIDEWALKS SHALL BE CONSTRUCTED OF 3,500 PSI CONCRETE AND SHALL HAVE TOOLED CONTROL JOINTS PER THE JOINT SPACING REFERENCED ON THE PLAN.
- MATERIALS SELECTED FOR USE AS STRUCTURAL FILL SHALL BE FREE OF VEGETABLE MATTER, WASTE CONSTRUCTION DEBRIS, AND OTHER DELETERIOUS MATERIALS. THE MATERIAL SHALL NOT CONTAIN ROCKS HAVING A DIAMETER OVER 3 INCHES.
- SOILS REPRESENTED BY THEIR USCS GROUP SYMBOLS WILL TYPICALLY BE SUITABLE FOR USE AS STRUCTURAL FILL (ML), (CL), (SM), AND (SC).
- THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3' OF LOW PERMEABILITY SOILS CAN BE USED AS COVER: (SW), (SP), (SP-SM), AND (SP-SC).
- THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3' OF NON-EXPANSIVE SOILS CAN BE USED AS COVER: (MH) AND (CH).
- THE FOLLOWING SOIL TYPES ARE CONSIDERED UNSUITABLE: (OL), (OH), AND (Pt).
- ALL STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). ADDITIONALLY, THE IN-PLACE MAXIMUM DRY DENSITY OF STRUCTURAL FILL SHOULD BE NO LESS THAN 90 PCF.
- THE UPPER 12" OF BUILDING FLOOR SLAB SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698).
- FILL PLACEMENT IN PAVEMENT AREAS SHALL BE PERFORMED IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS.
- SUITABLE FILL MATERIAL SHALL BE PLACED IN 8" LIFTS AND COMPACTED BY MECHANICAL MEANS. PROOFROLLING WITH RUBBER TIRE, HEAVILY LOADED VEHICLES MAY BE DESIRABLE AT INTERVALS OF APPROXIMATELY 2 VERTICAL FEET TO BIND THE LIFTS TOGETHER AND TO SEAL THE SURFACE OF EACH COMPACTED AREA.
- ALL BUILDING, SIDEWALK, AND PAVEMENT SUB-GRADE COMPACTIONS SHALL BE INTERMEDIATELY TESTED THROUGHOUT FILL PLACEMENT OPERATIONS AND APPROVED BY THE GEOTECHNICAL ENGINEER. ALL SUB-GRADES SHALL BE THOROUGHLY PROOF-ROLLED TO IDENTIFY SMALL LOCALIZED AREAS OF UNSUITABLE SOILS. ALL UNSUITABLE SOILS SHALL BE UNDERCUT, REPLACED WITH STRUCTURAL FILL, AND COMPACTED AS DESCRIBED ABOVE.
- THE UPPER 12" OF BUILDING FLOOR SLAB SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698).
- STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, CLEANOUTS, ETC. SHALL BE ADJUSTED, AS REQUIRED, TO MATCH PROPOSED GRADES.
- SITE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE MATERIAL SOURCES OR DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER PRIOR TO INITIATING WORK.
- UNLESS INDICATED OTHERWISE, ALL STORM DRAINAGE PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SOIL TIGHT JOINTS.
- SITE CONTRACTOR SHALL INSTALL BUILDING ROOF DRAINS TO WITHIN 2' OF THE BUILDING EXTERIOR WALL, CAP AND PROVIDE ABOVE GROUND MARKER FOR LOCATION PURPOSES. GENERAL CONTRACTOR IS RESPONSIBLE FOR TIE-INS OF BUILDING DOWNSPOUTS TO SITE ROOF DRAINAGE PIPING.

CORPUD Standard Utility Notes:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK)
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPROVED RESERVOIR OR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATER 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.
 - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATER MAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - 5' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES. UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATER MAIN & 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 & 5-49).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY CORPUD 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 CORPUD.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY CORPUD. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVIC FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL PVC WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' X 2' WATERLINE EASEMENT IMMEDIATELY ADJACENT.
- INSTALL PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWR, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS PRIOR TO CONSTRUCTION.
- NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
- 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 NC. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY 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.

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

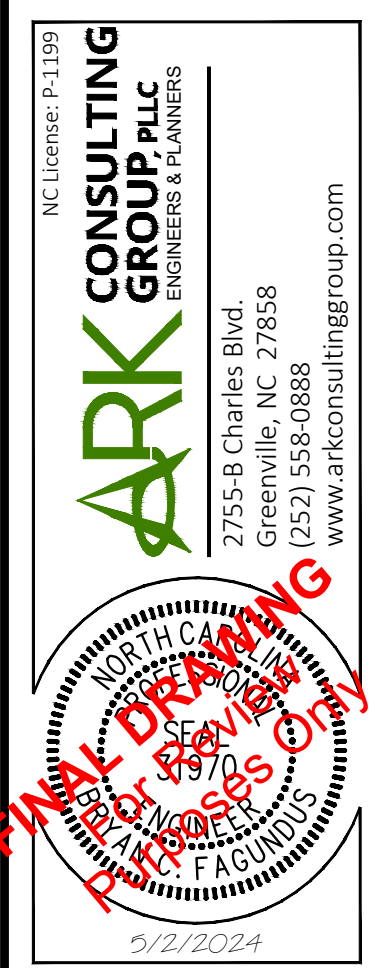
SITE PERMITTING APPROVAL
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 City of Raleigh Development Approval: _____
 City of Raleigh Review Officer: _____



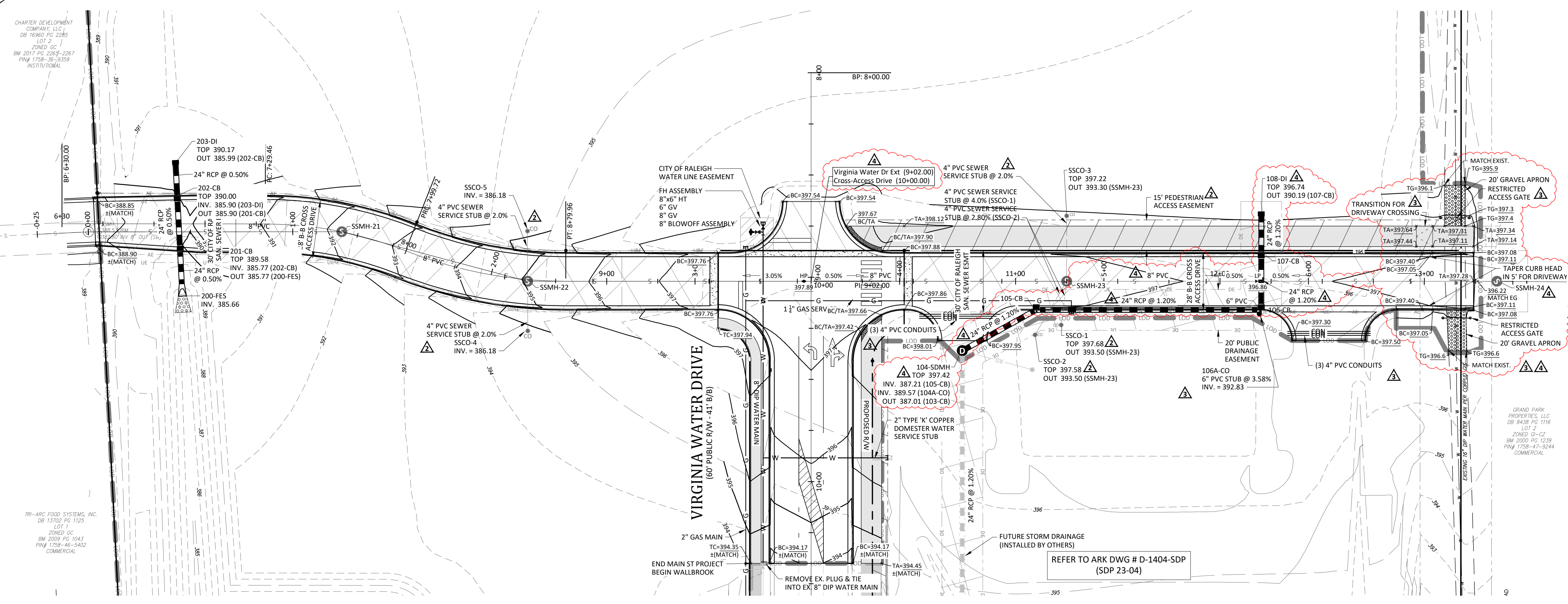
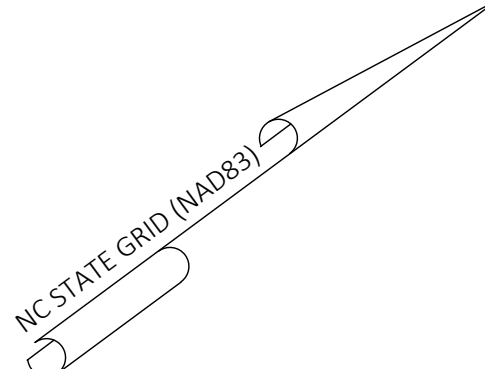
- Final Drawing -
 Issued for Permit Review Purposes Only



VIRGINIA WATER DRIVE EXT - PLAN PROFILE
WALLBROOK ROADWAY IMPROVEMENTS
 VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)
 Town of Rolesville Project No. CID 23-04
 US 401 Rolesville / S. Main Street & Virginia Water Drive
 Wake Forest Township, Wake County, North Carolina



Project Manager: BCF
 Drawn By: DLCTGN
 Checked By: TGN
 Project Number: 22049
 Drawing Number: D-1404-CID
C3.0
 Date: May 1, 2023



STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
100-DI	390.70			Drop Inlet
100A-NC DOT STUB	385.95	383.00 (101-CB)		U-6241 Project Tie-In
101-CB	394.11	385.27 (103-CB) 390.32 (102-CB)	383.07 (100A-NC DOT STUB)	Catch Basin
102-CB	393.73		390.90 (101-CB)	Catch Basin
103-CB	395.26	384.93 (104-SDMH)	384.73 (101-CB)	Catch Basin
104-SDMH	397.42	387.21 (105-CB) 389.57 (104A-CO)	387.01 (103-CB)	48 in MH
105-CB	397.54	387.90 (106-CB)	387.70 (104-SDMH)	Catch Basin
106-CB	397.03	389.43 (107-CB) 392.75 (106A-CO)	389.23 (105-CB)	Catch Basin
106A-CO	397.17		392.83 (106-CB)	CO
107-CB	397.03	389.96 (108-DI)	389.76 (106-CB)	Catch Basin
108-DI	396.74		390.19 (107-CB)	Drop Inlet
200-FES	387.99	385.66 (201-CB)		Flared End Section
201-CB	389.58	385.77 (202-CB)	385.77 (200-FES)	Catch Basin
202-CB	390.00	385.90 (203-DI)	385.90 (201-CB)	Catch Basin
203-DI	390.17		385.99 (202-CB)	Drop Inlet

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

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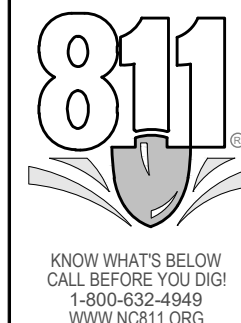
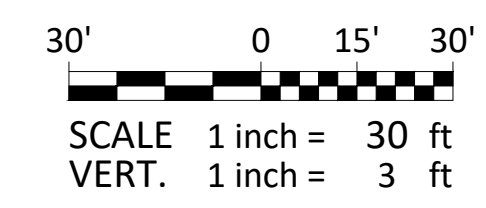
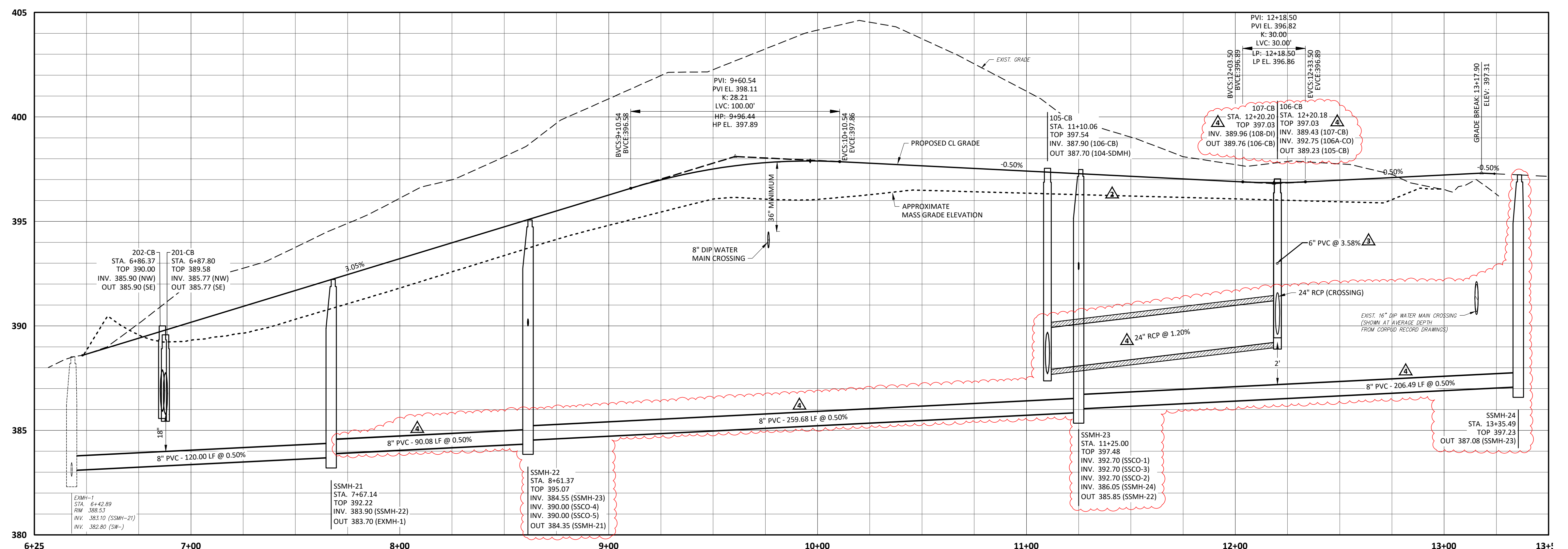
City of Raleigh Development Approval: _____
City of Raleigh Review Officer: _____

ATTENTION CONTRACTORS

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

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



- Final Drawing -
Issued for Permit Review Purposes Only

NO.	DATE	REVISION	DESCRIPTION
1	11/05/23	ISSUED FOR PERMIT REVIEW	
2	11/05/23	REVISED PER TOR REVIEW COMMENTS	
3	11/05/23	REVISED PER TOR REVIEW COMMENTS	
4	12/04/24	REVISED PER REVIEW & OWNER COMMENTS	



ACCESS DRIVE - PLAN-PROFILE

WALLBROOK ROADWAY IMPROVEMENTS
VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)

Town of Rolesville Project No. CID 23-04
US 401 Business / S. Main Street & Virginia Water Drive
Wake Forest Township, Town of Rolesville, Wake County, North Carolina

NC License # P1129

ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS

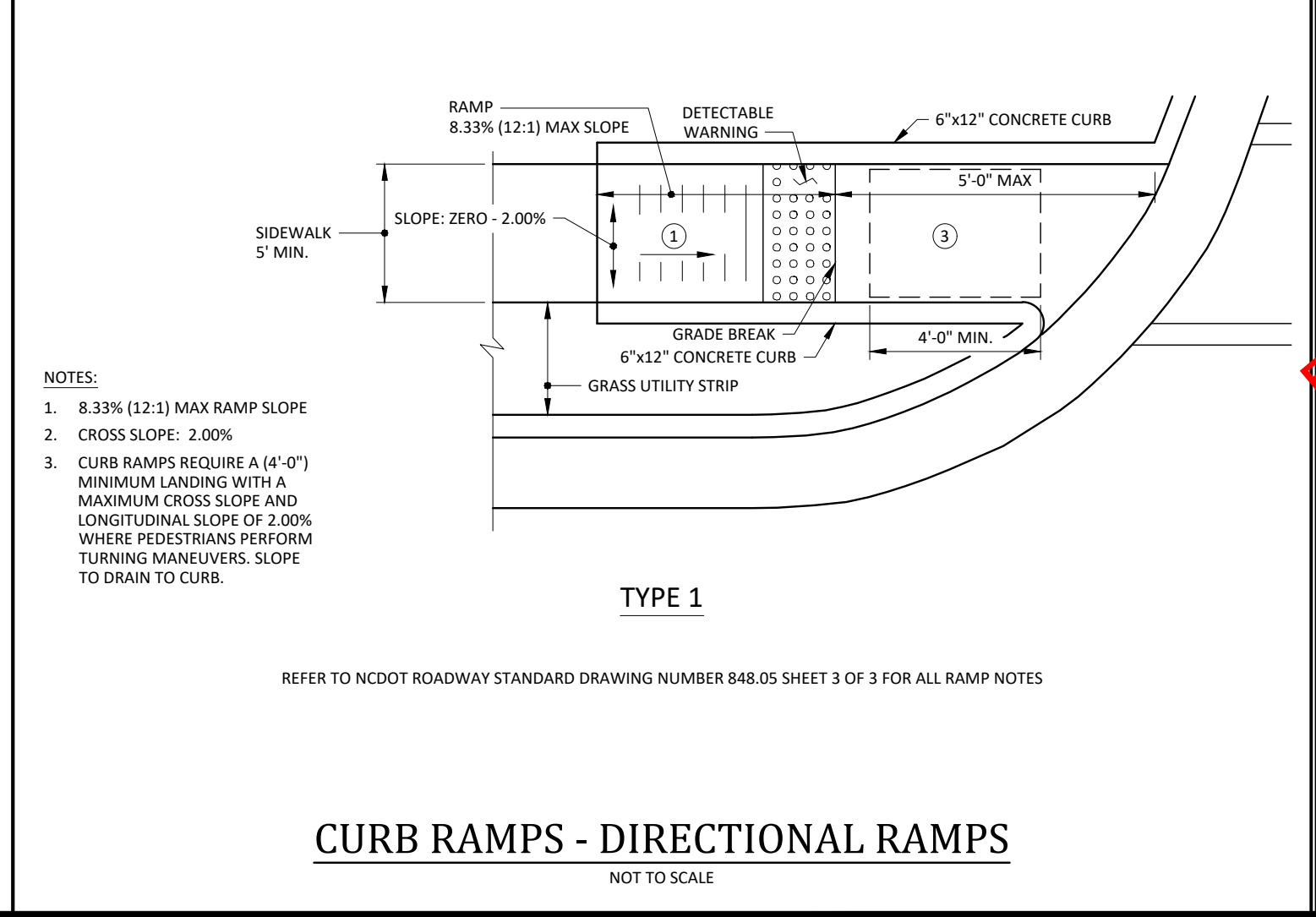
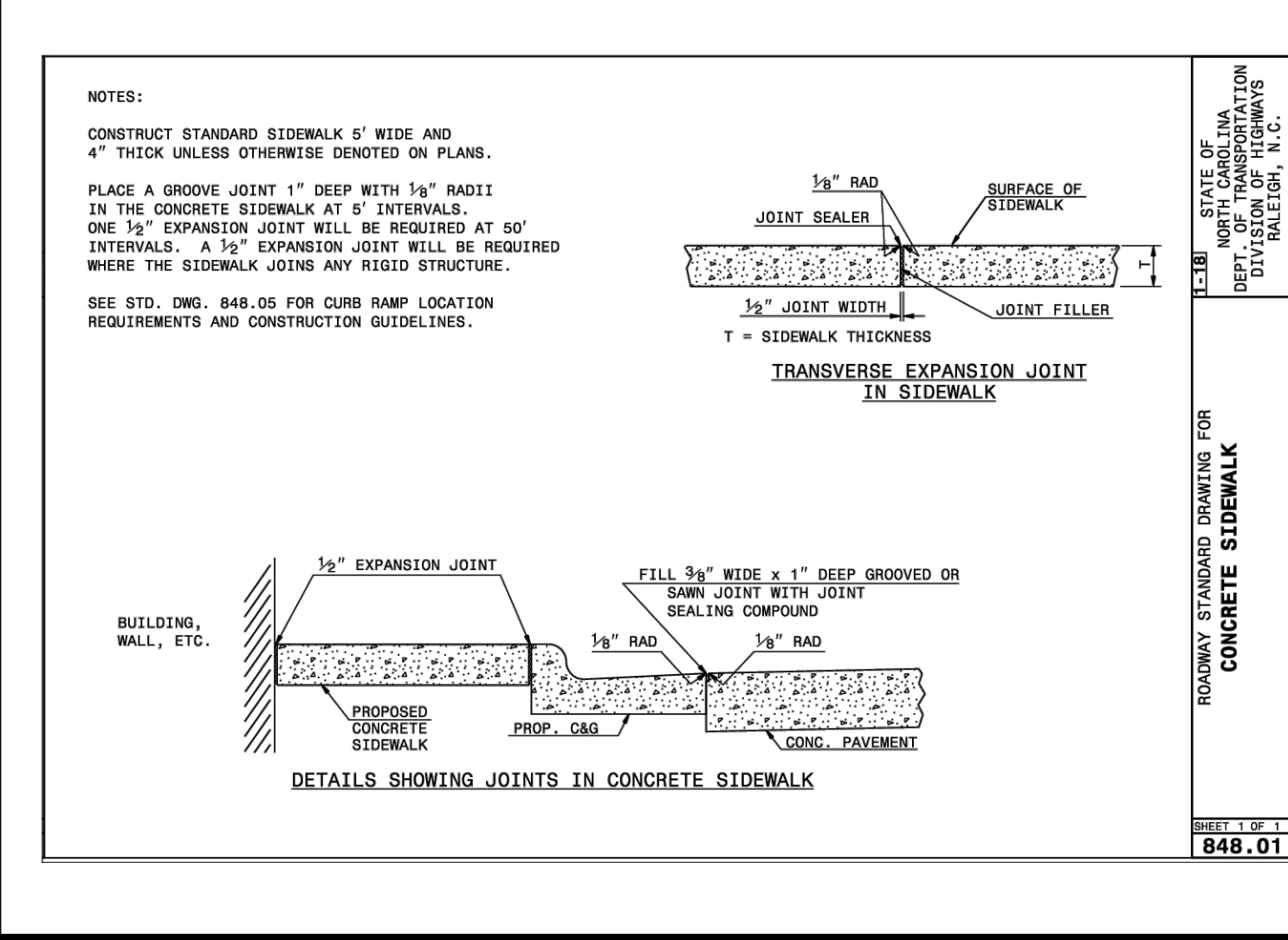
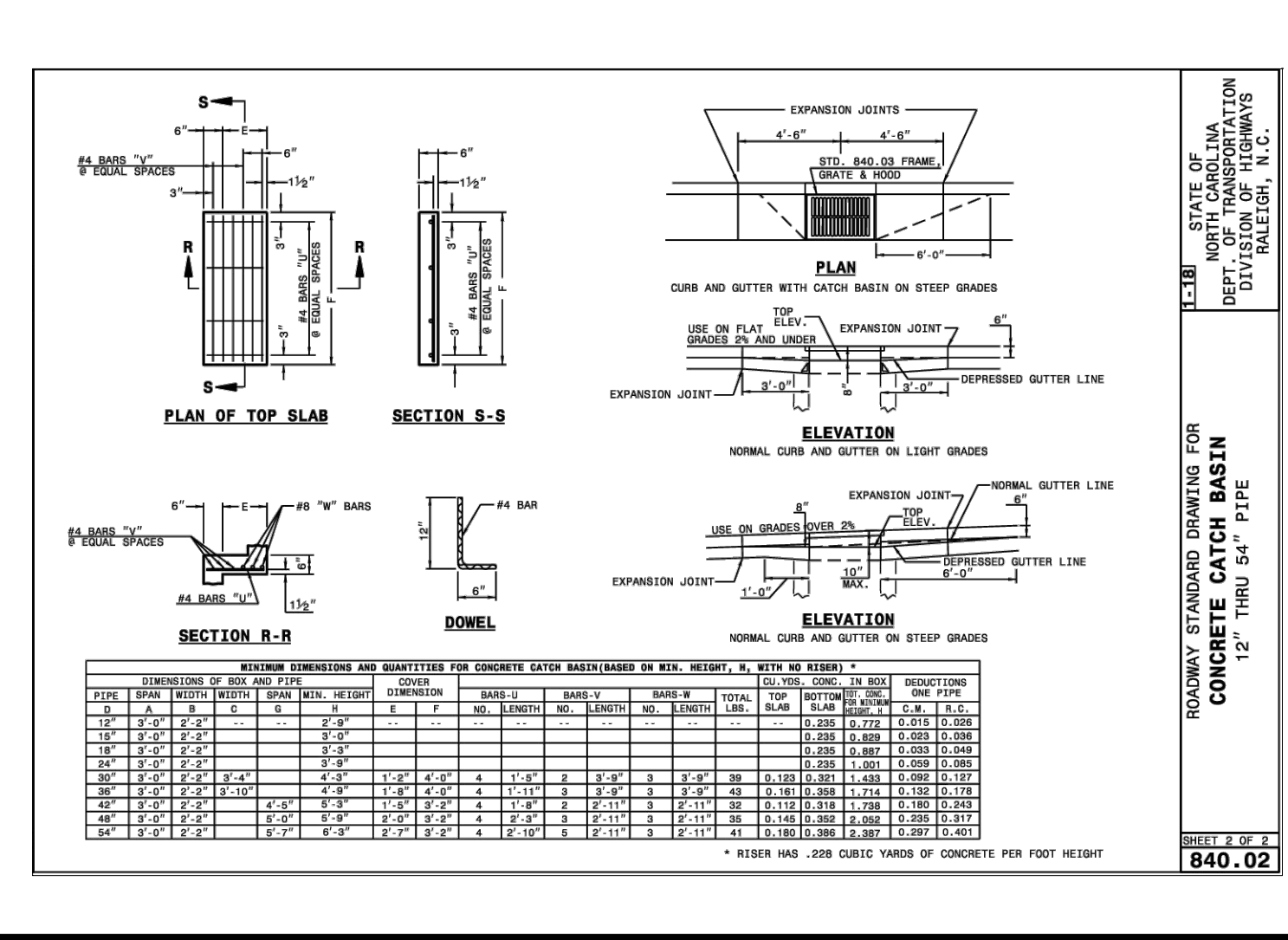
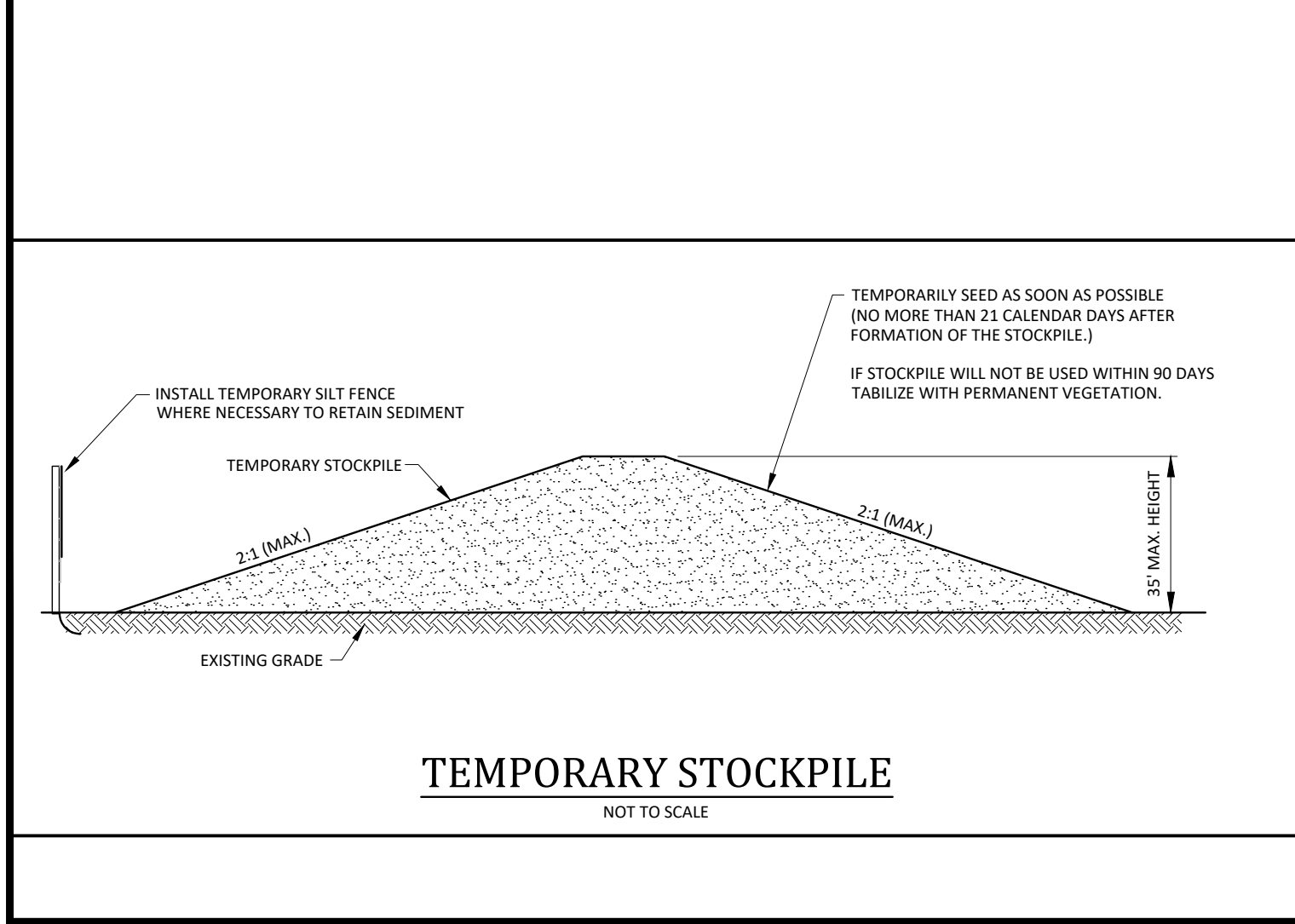
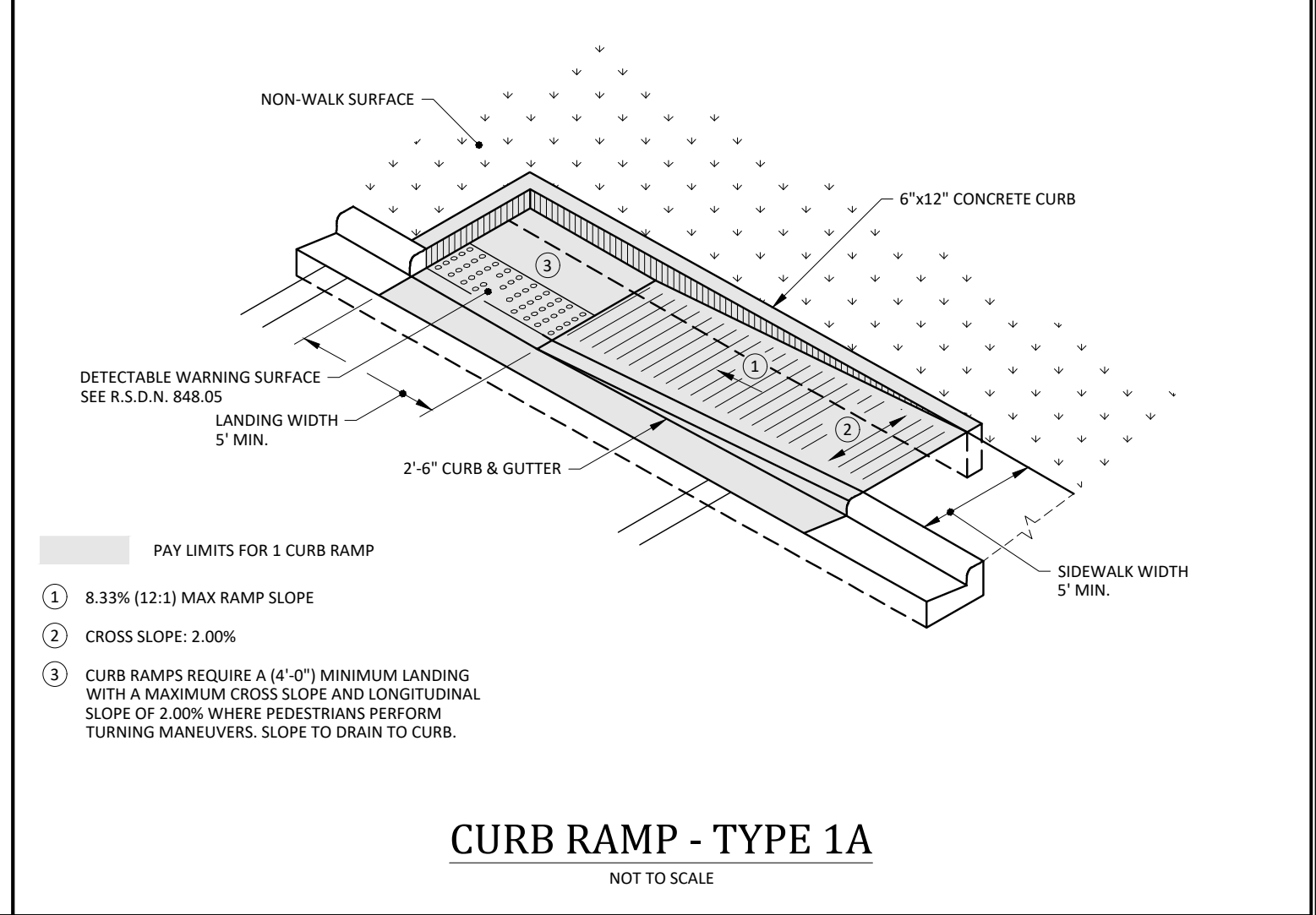
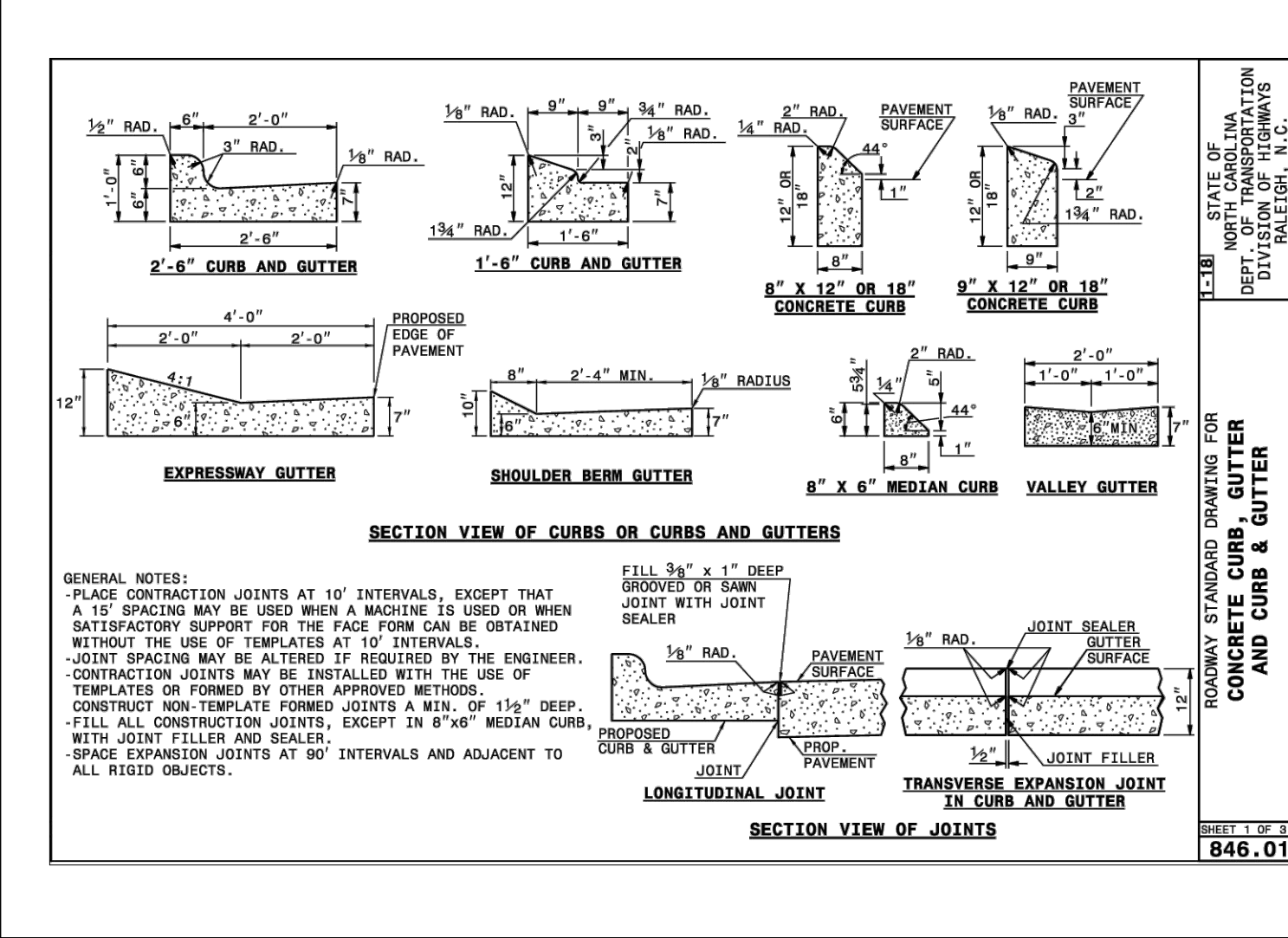
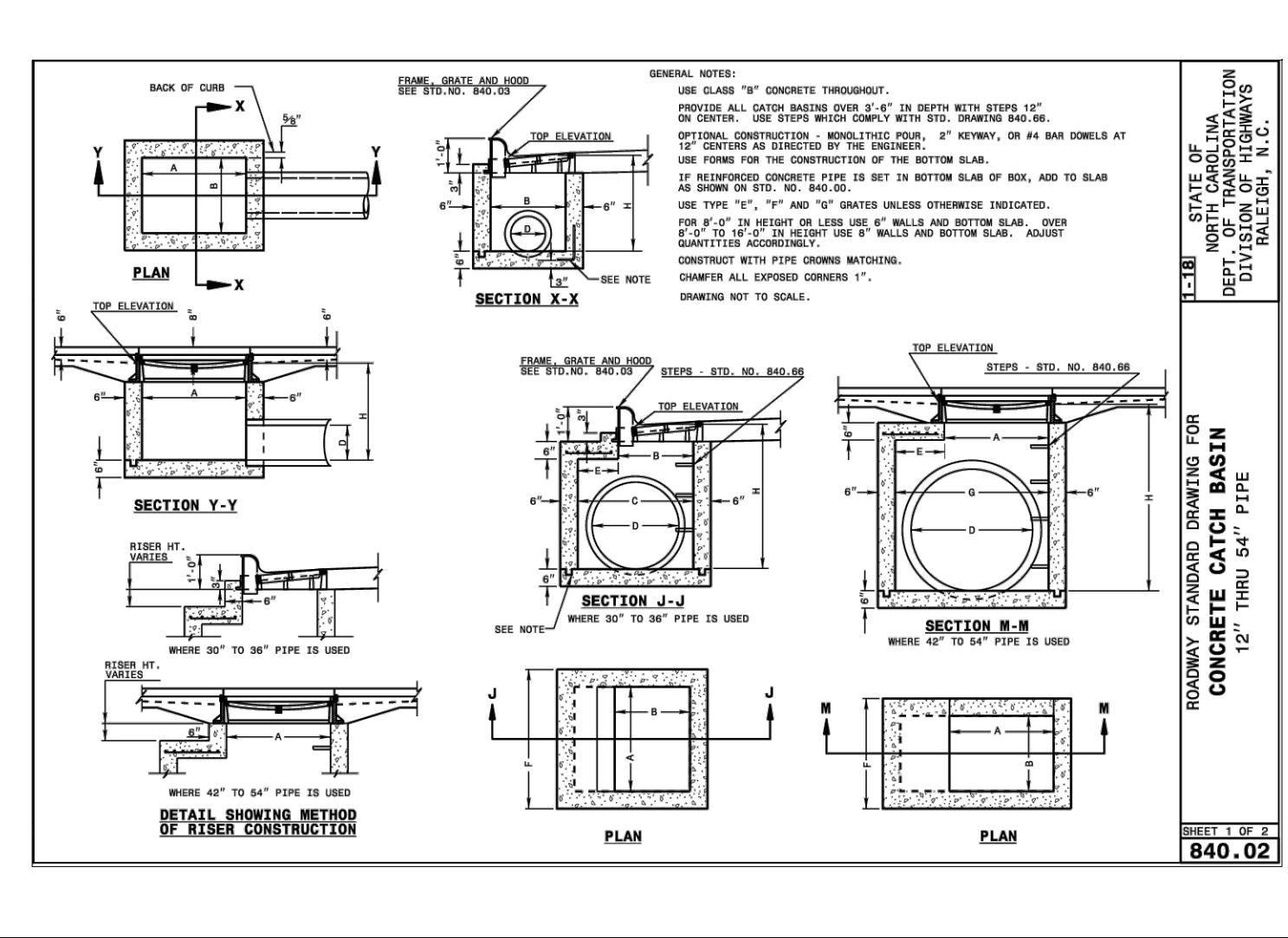
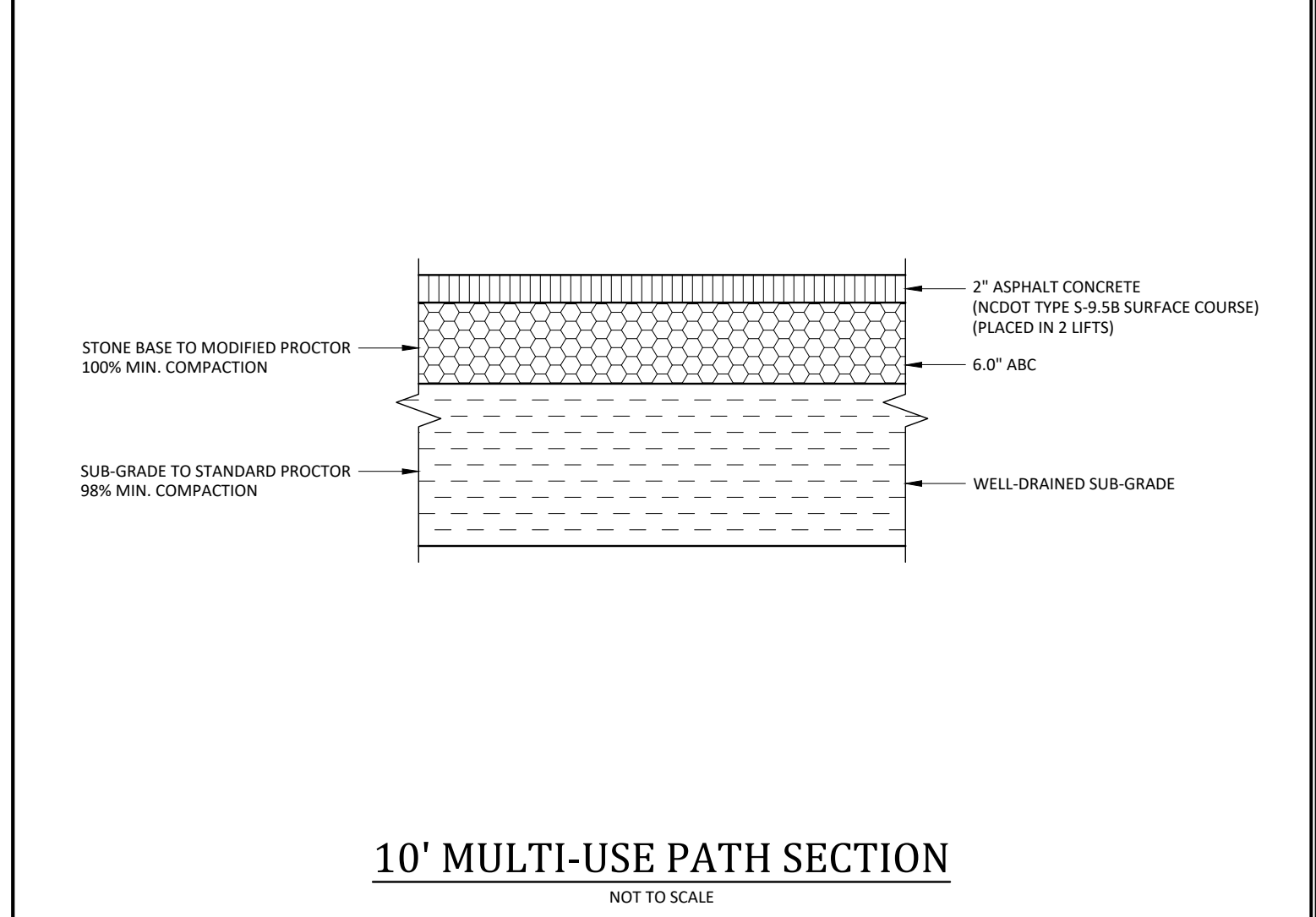
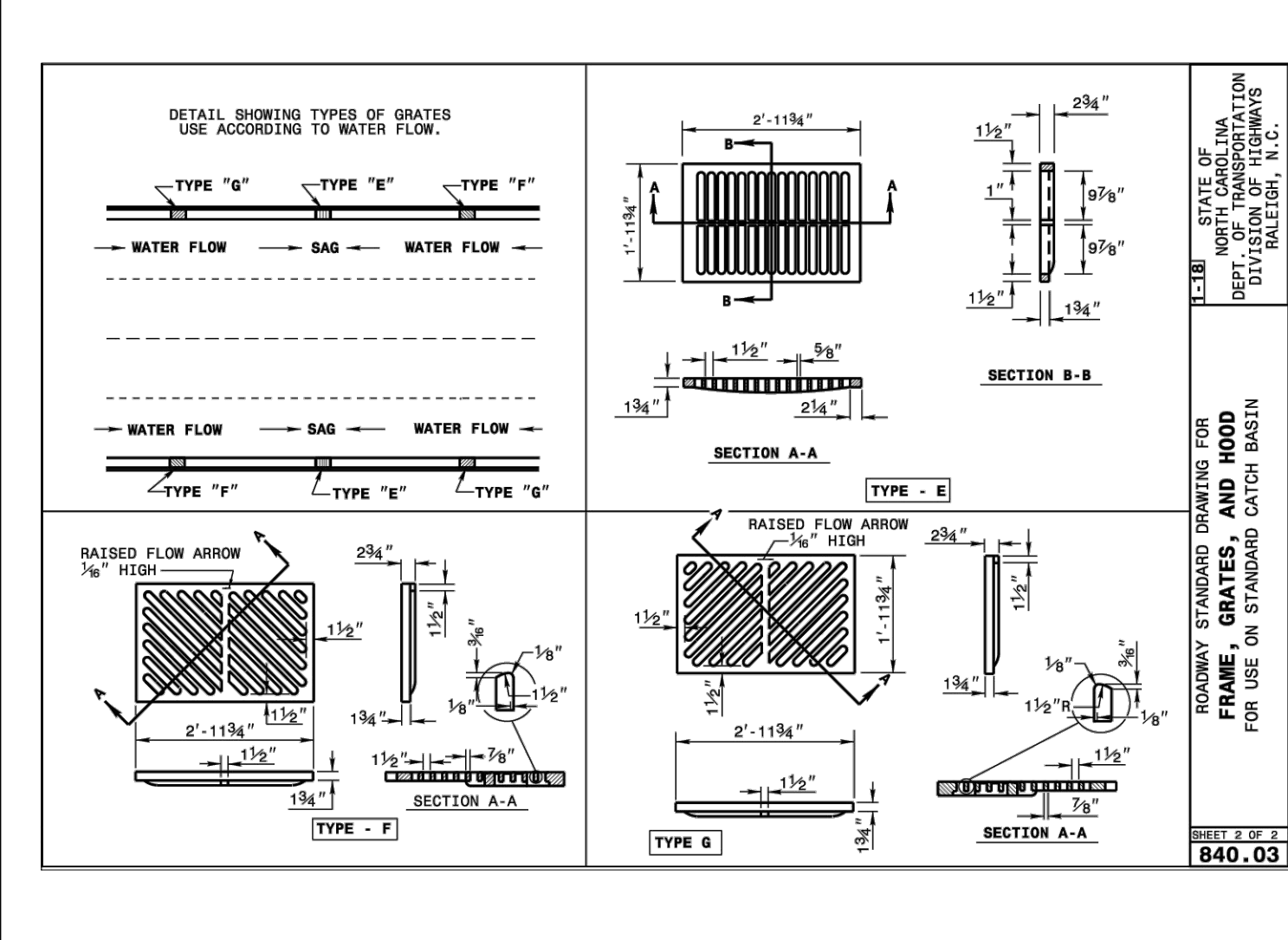
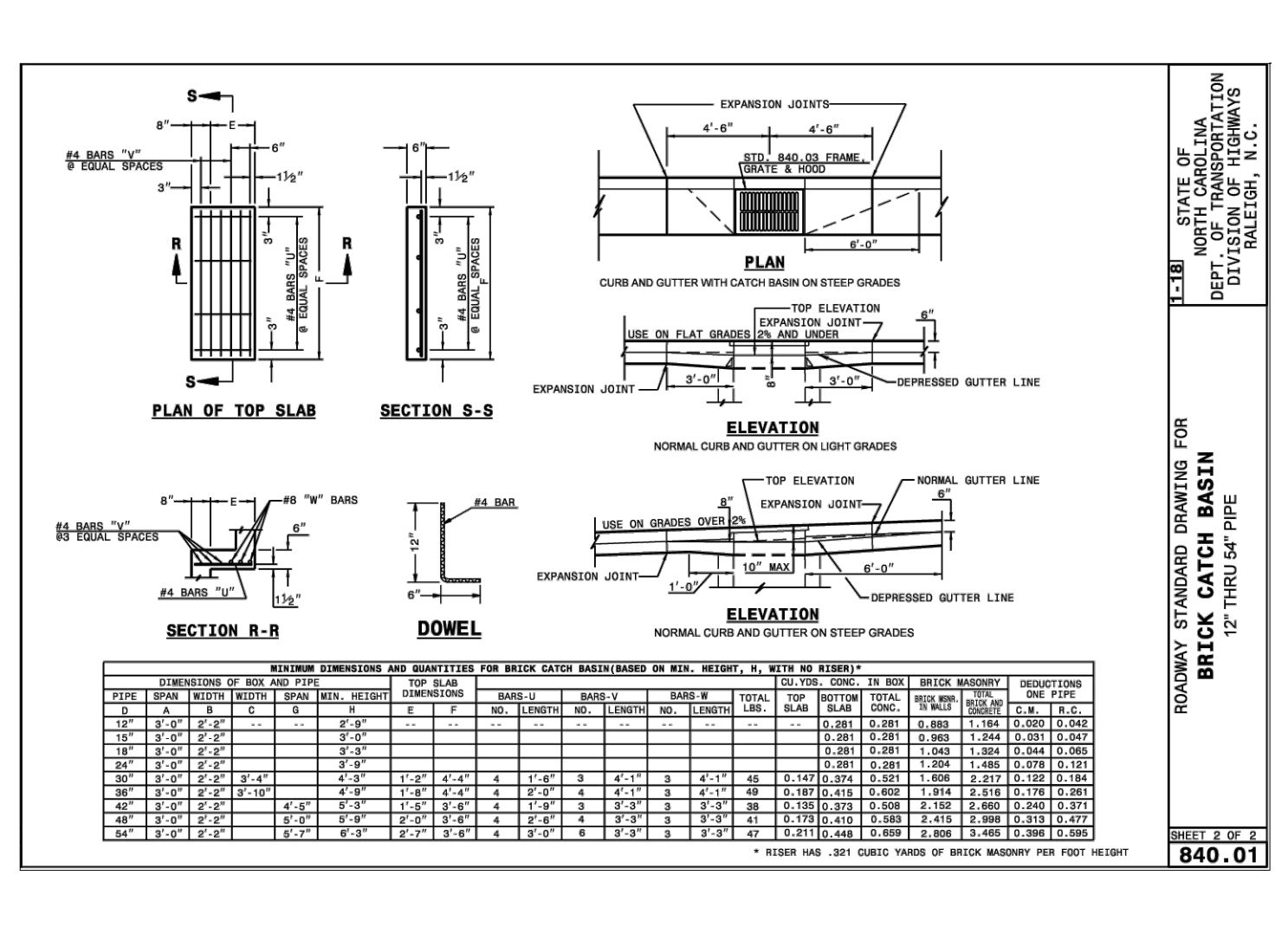
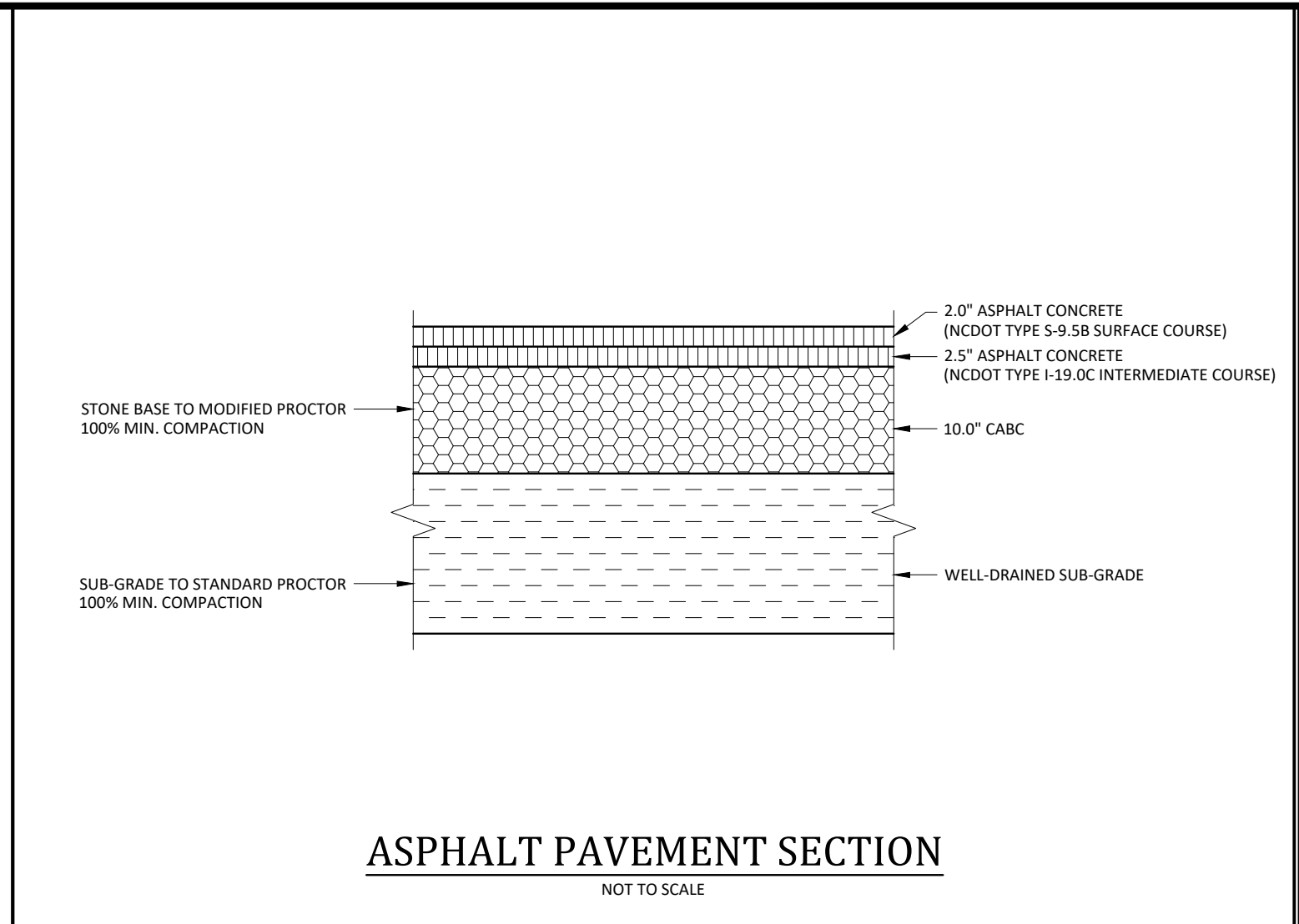
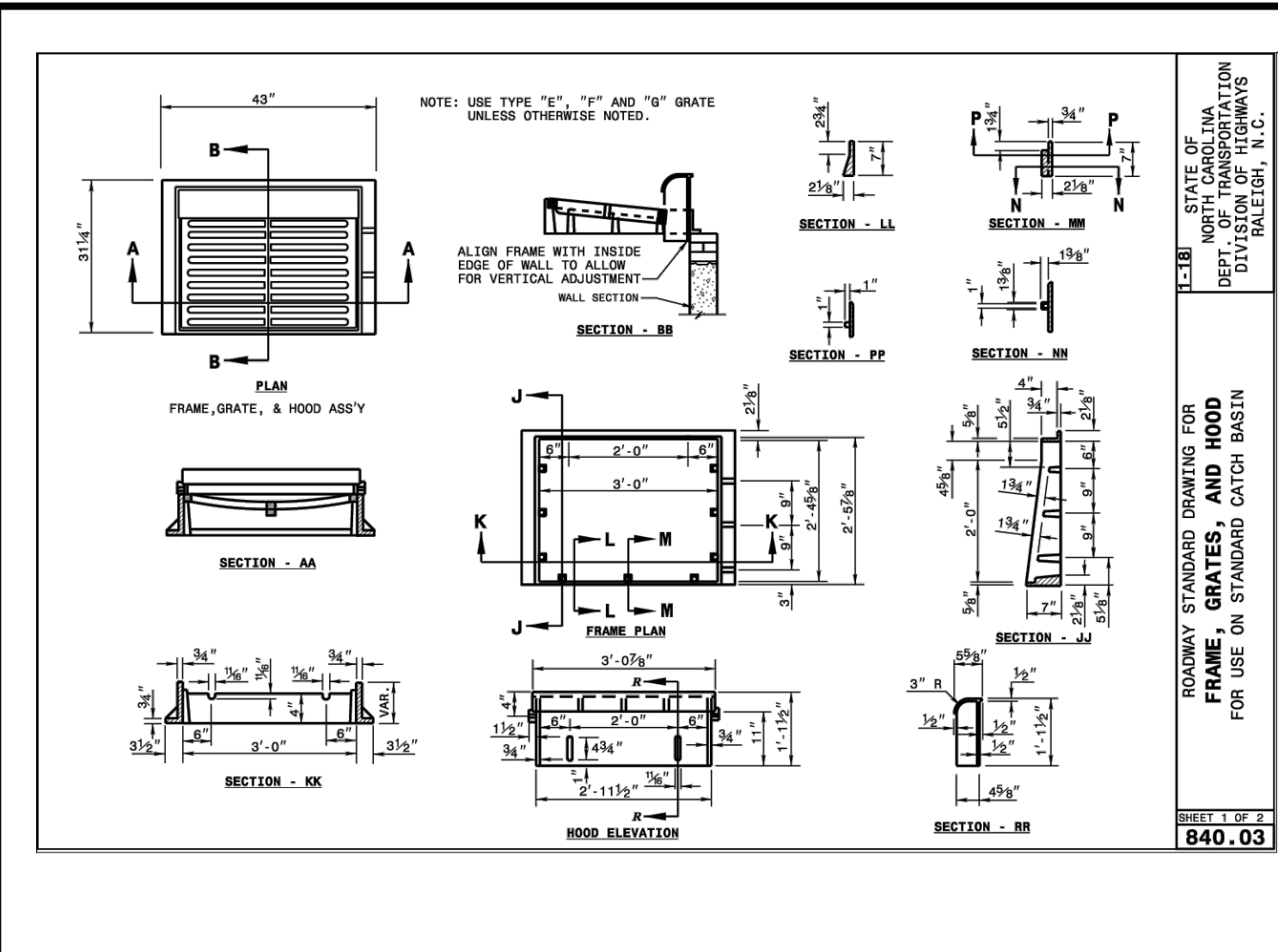
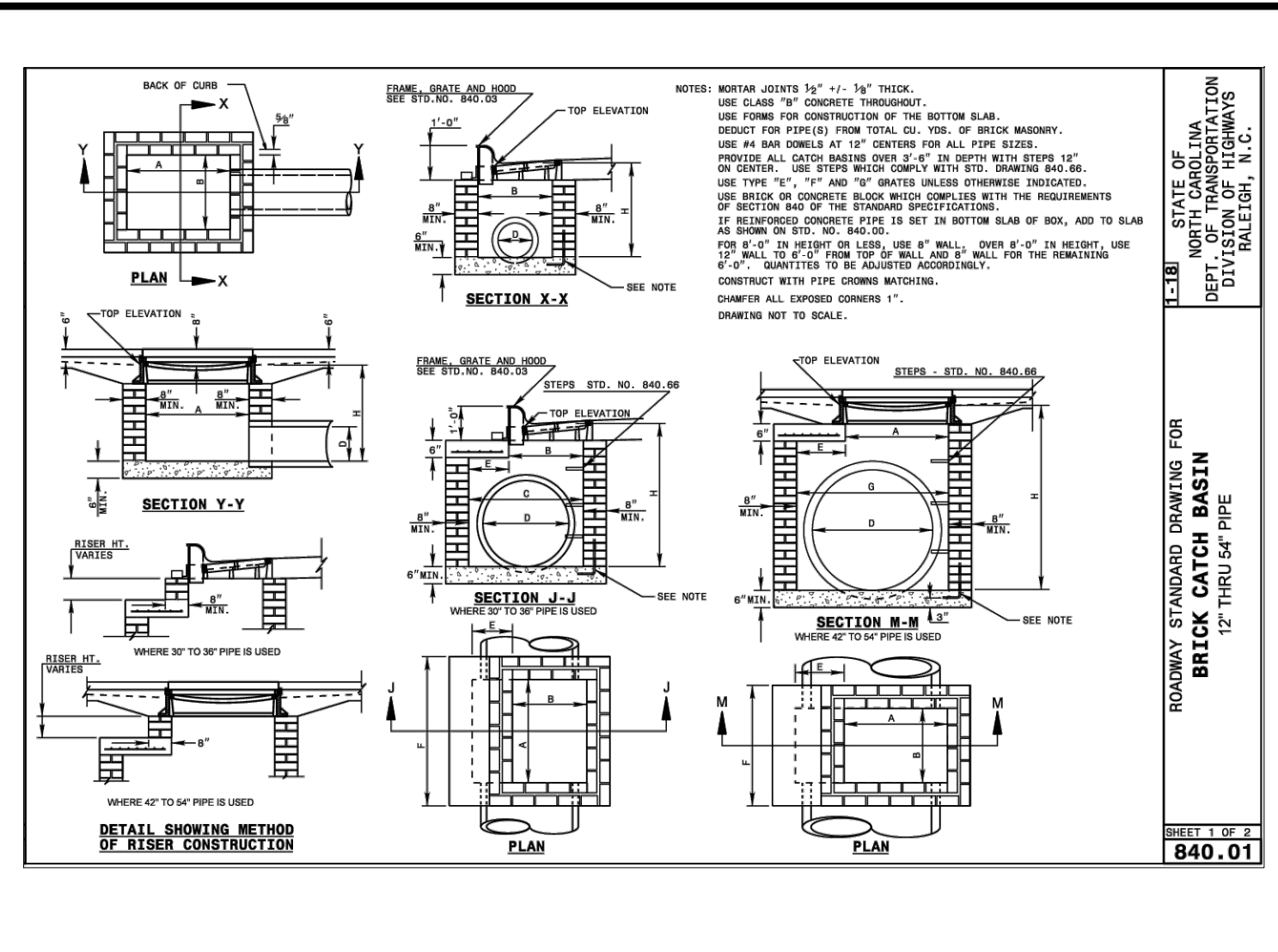
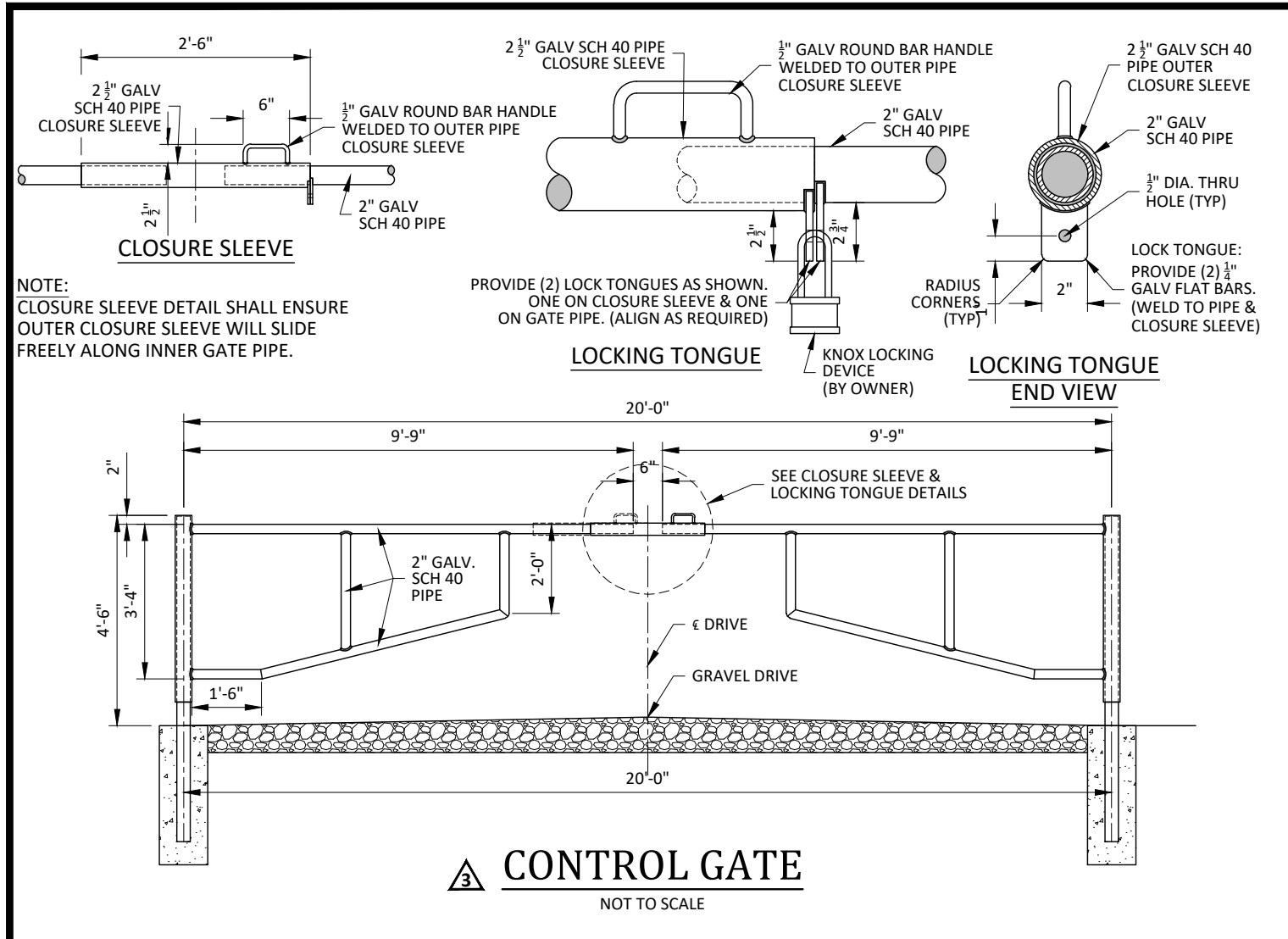
2755-B Charles Blvd
Raleigh, NC 27608
(757) 558-0888
www.arkconsultinggroup.com

Final Drawing
11/05/23

Project Manager:	BCF
Drawn By:	DLC/TGN
Checked By:	TGN
Project Number:	22049
Drawing Number:	D-1404-CID

C3.1

Date: May 1, 2023



Final Drawing - Issued for Permit Review Purposes Only

REVISIONS:

#	DATE	DESCRIPTION
1	11/04/24	ISSUED FOR PERMIT REVIEW
2	11/04/24	REVISED PER REVIEWER COMMENTS
3	11/04/24	REVISED PER REVIEWER COMMENTS
4	11/04/24	REVISED PER REVIEWER COMMENTS

CROSLAND SOUTHEAST

WALLBROOK ROADWAY IMPROVEMENTS
VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)
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US 401 Business / S. Main Street & Virginia Water Drive
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DETAILS

ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS
7755-B Chatham Blvd.
Clemens, NC 27528
(252) 558-0888
www.arkconsultinggroup.com

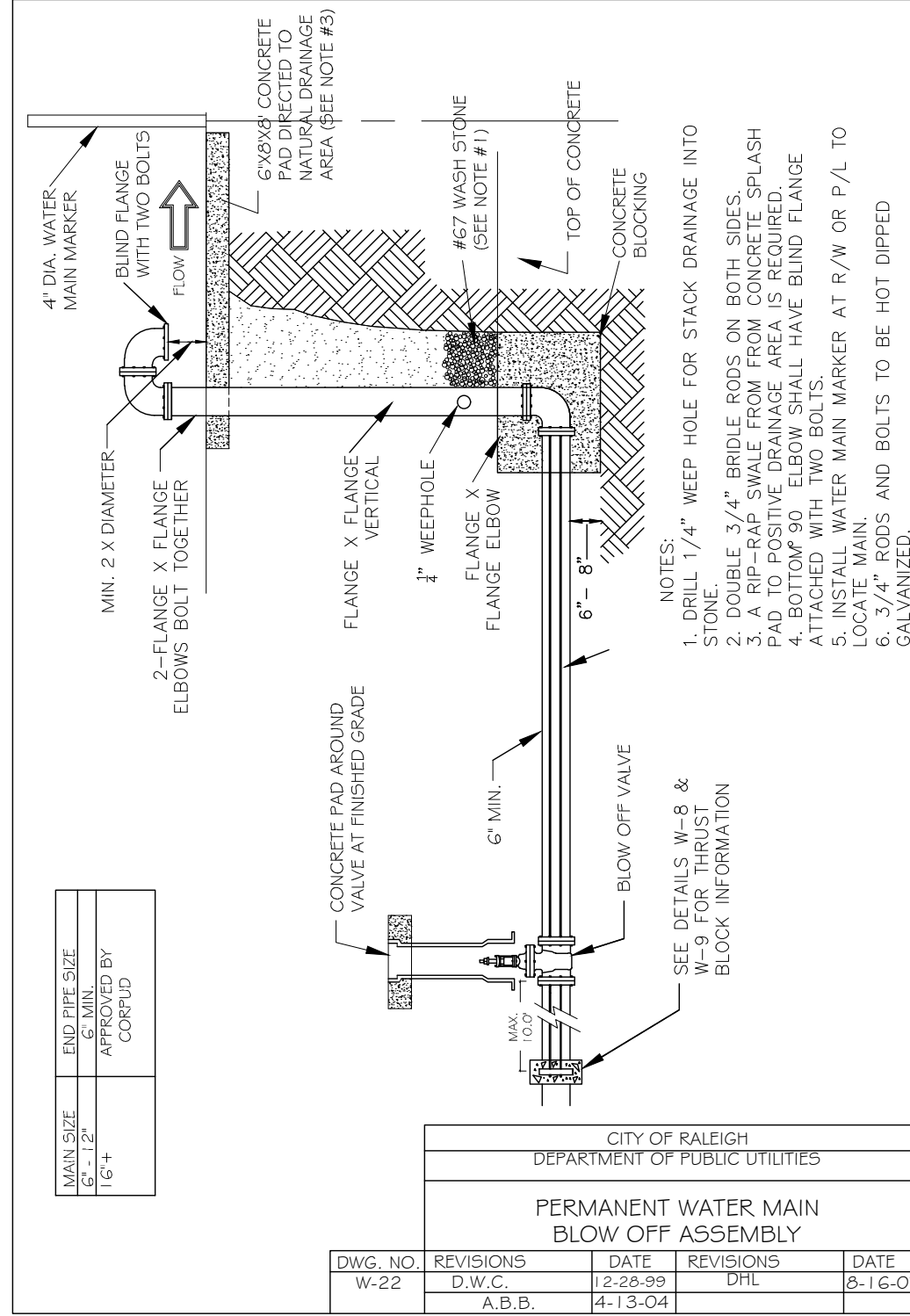
NC License: P-1129

Project Manager: BCF
Drawn By: DLCTGN
Checked By: TGN
Project Number: 22049
Drawing Number: D-1404-CID

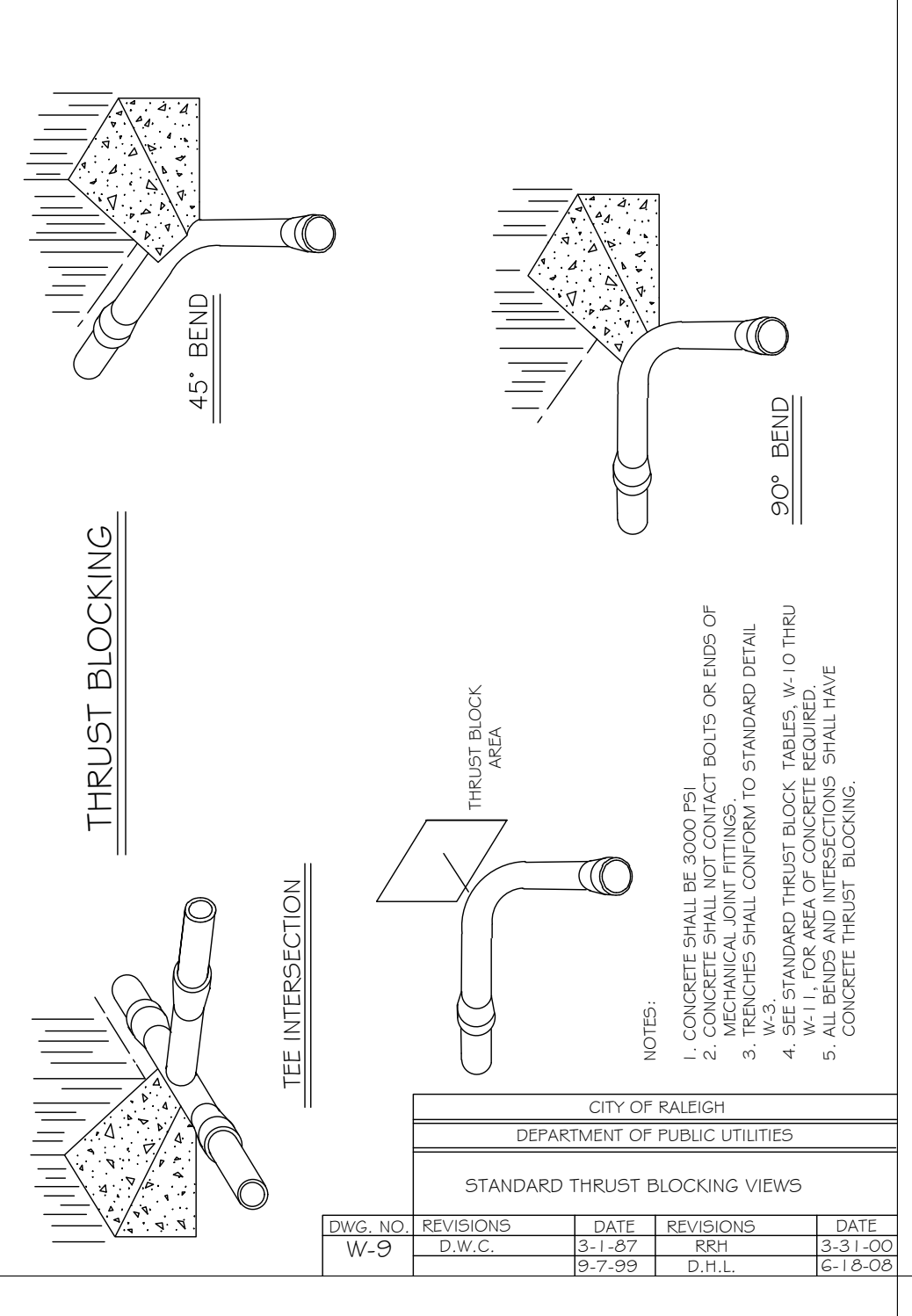
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Date: May 1, 2023

SITE PERMITTING APPROVAL

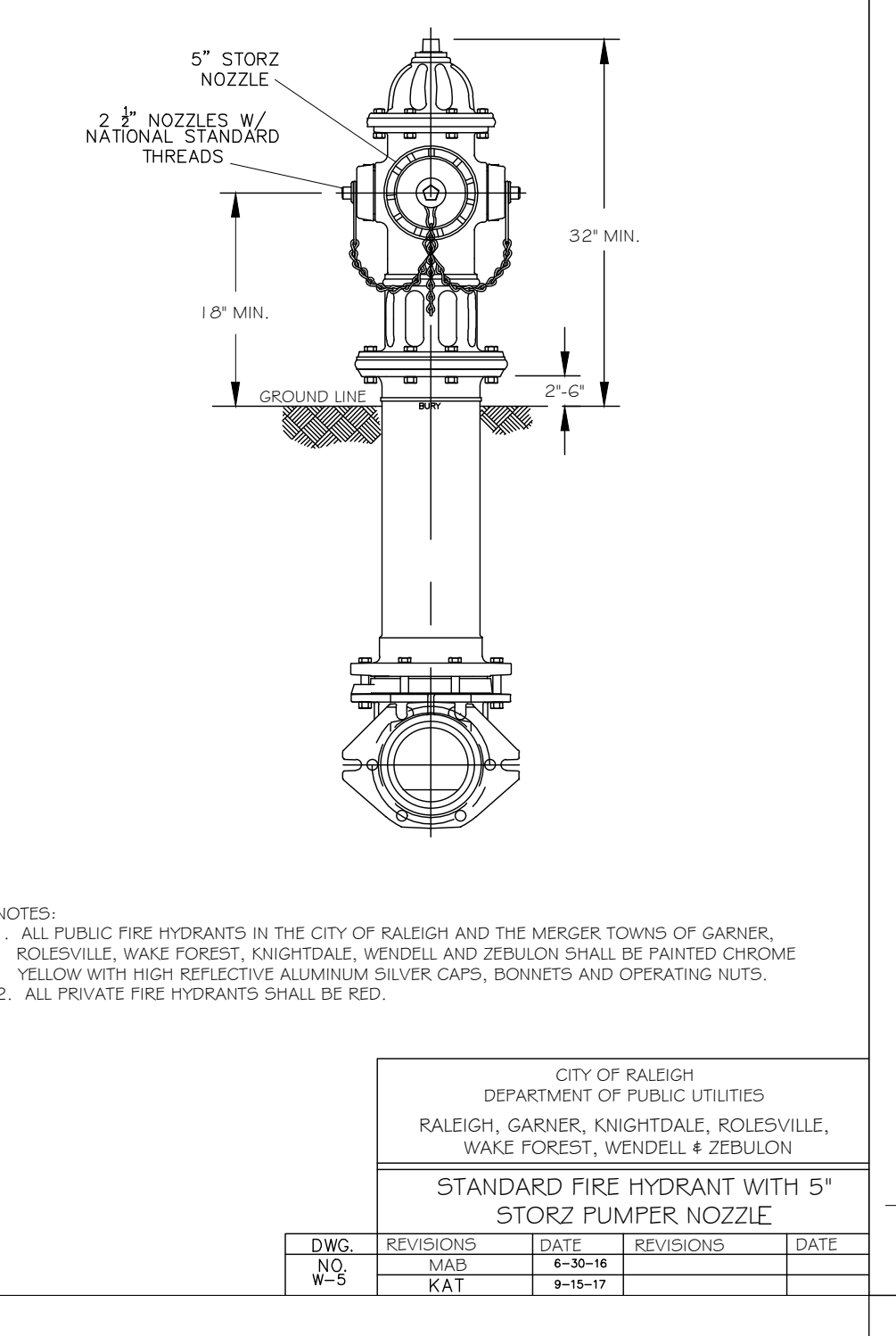
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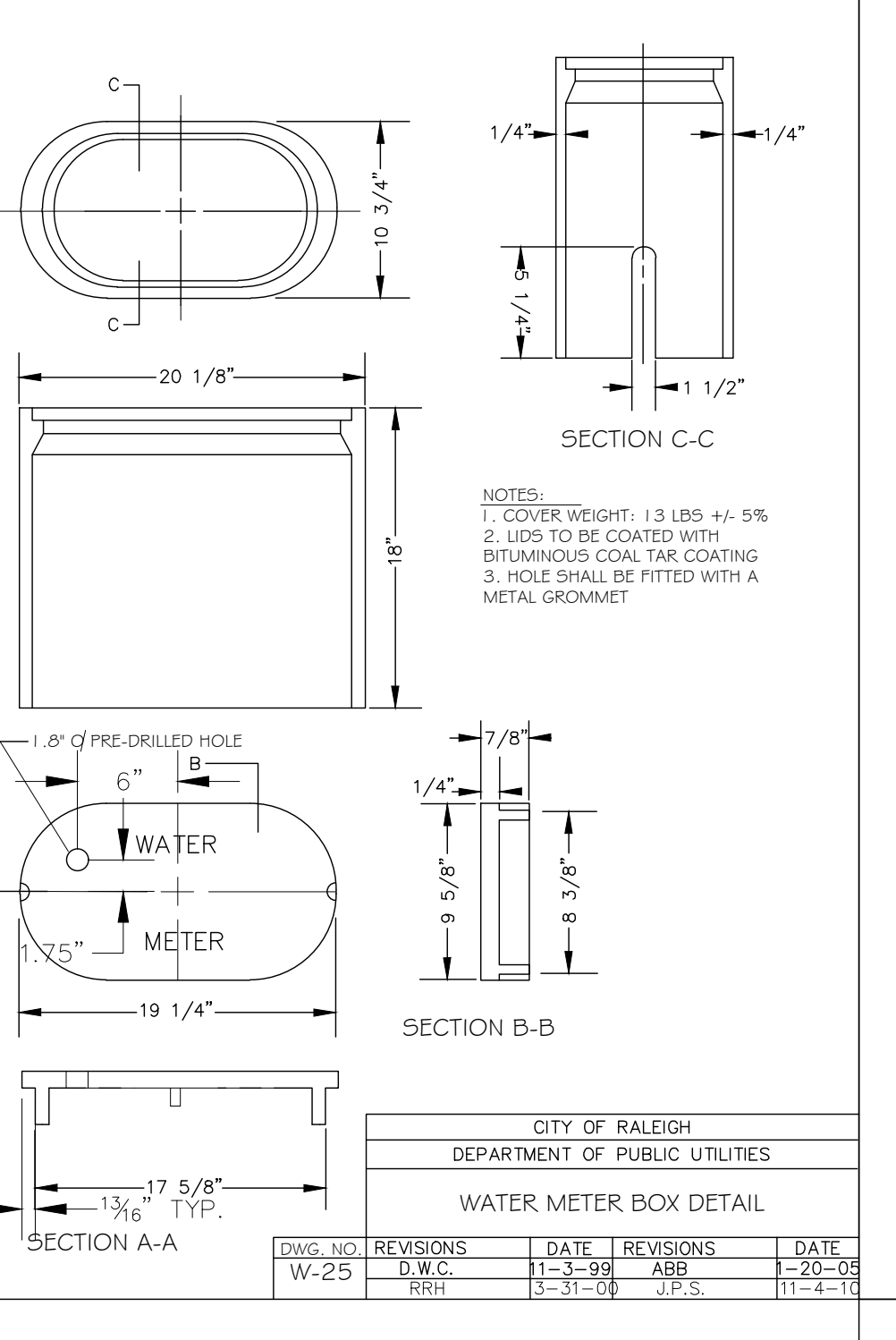
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W-22	D.W.C.	2-28-99	DHL	8-16-07
	A.B.B.	4-13-04		



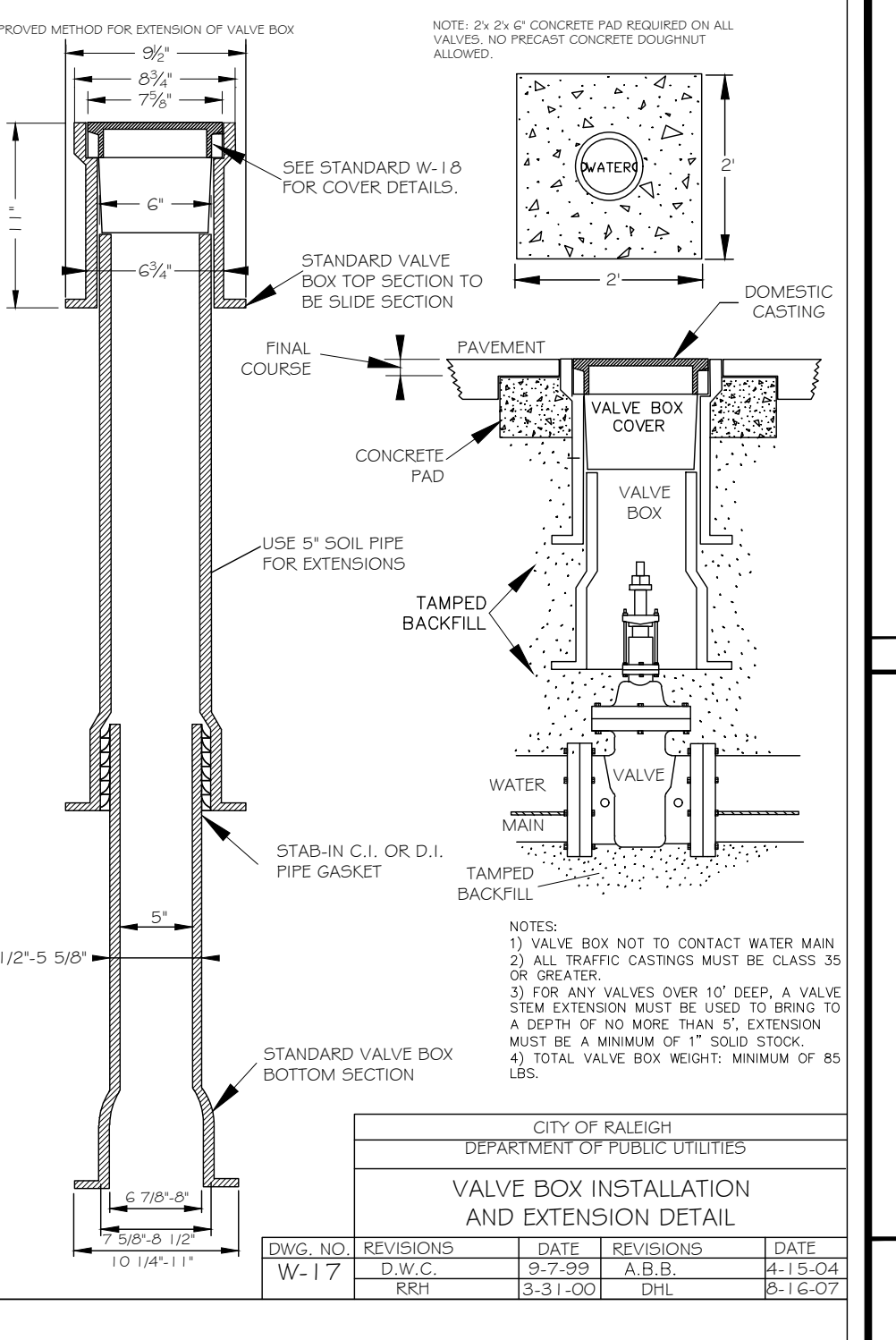
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	D.W.C.	9-7-99	D.H.L.	6-18-08



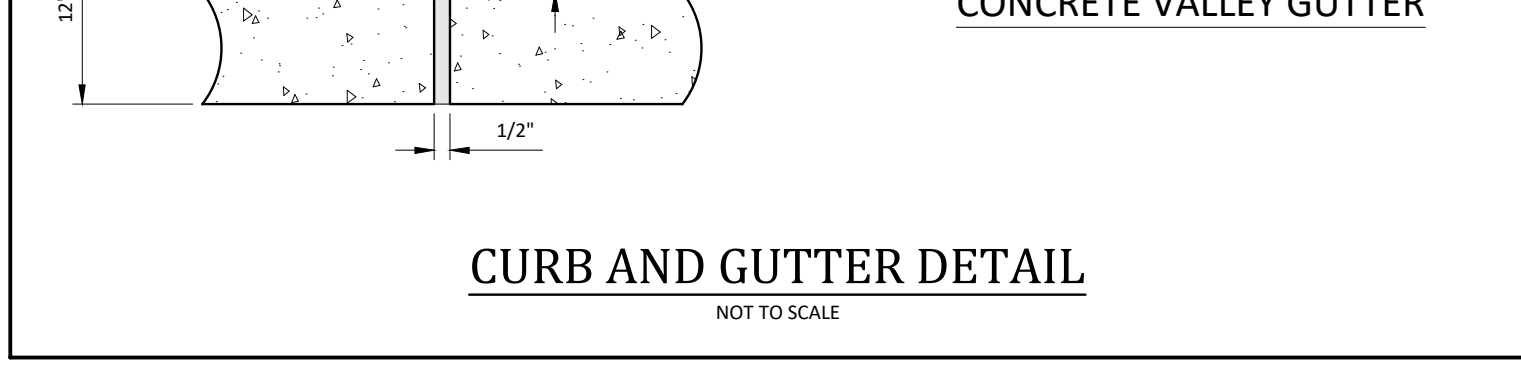
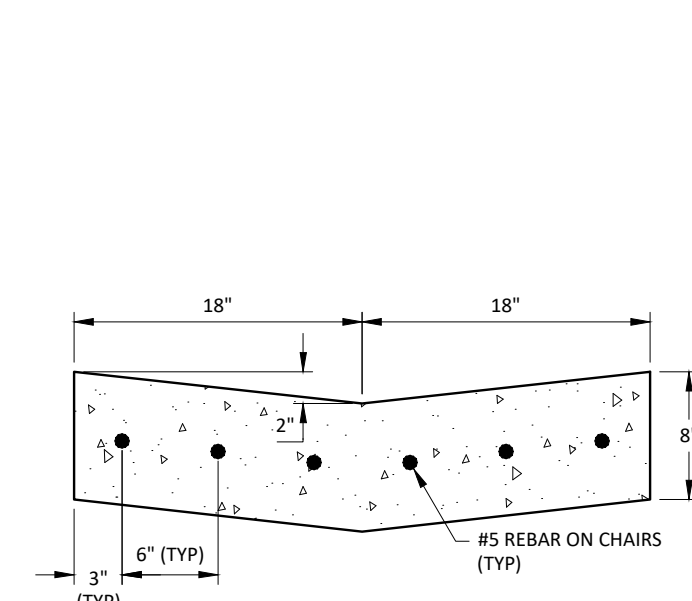
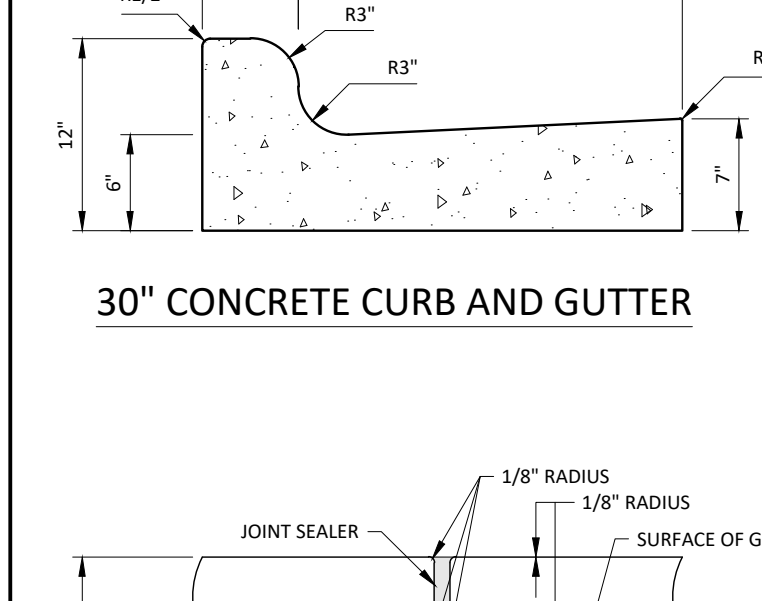
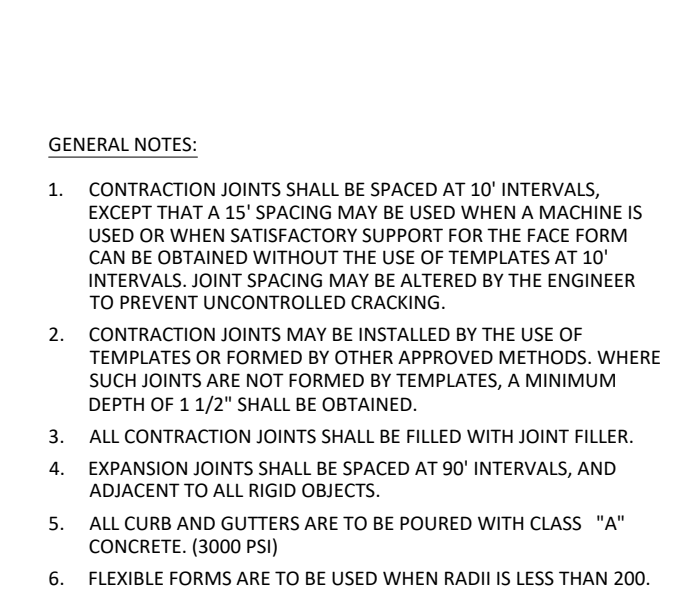
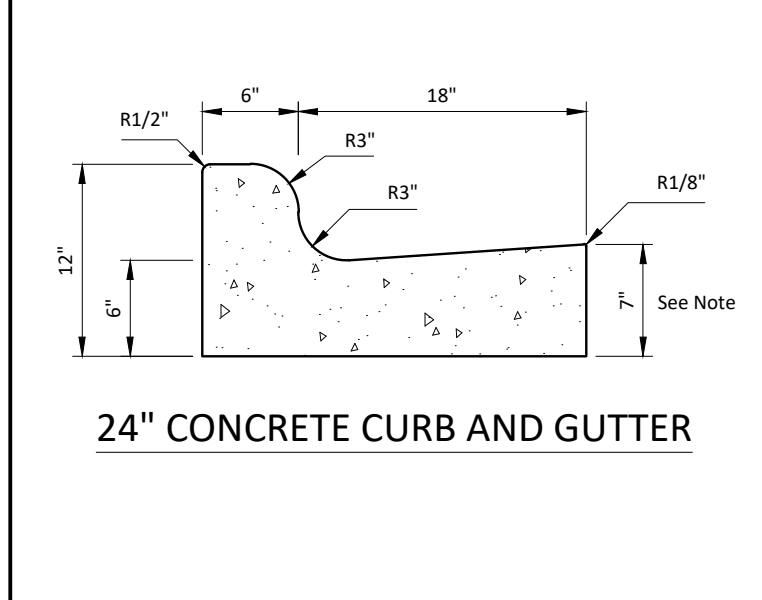
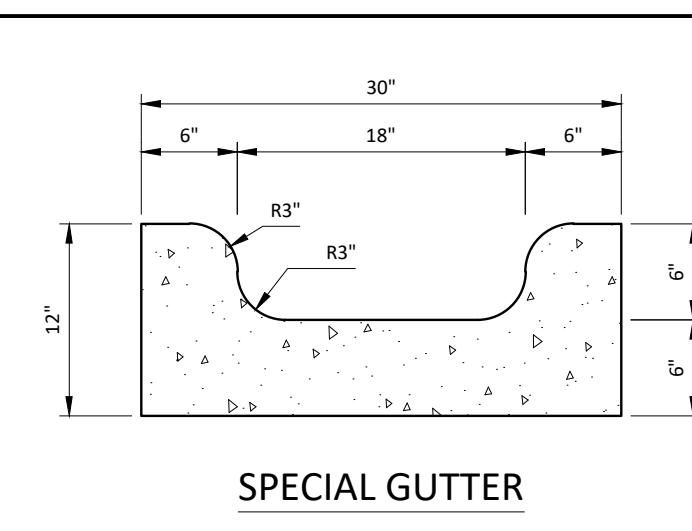
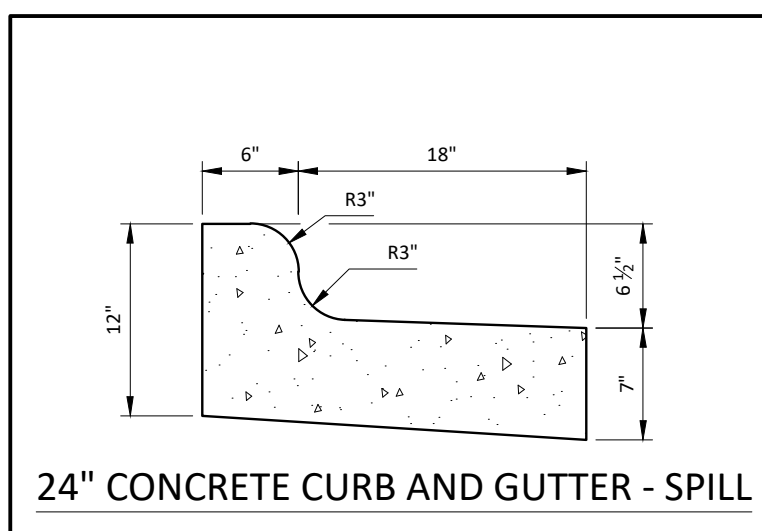
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	K.A.T.	9-18-17		



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-25	D.W.C.	1-3-99	ABB	1-20-05
	RRH	3-31-00	J.P.S.	11-4-10



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-17	D.W.C.	9-7-99	A.B.B.	4-15-04
	RRH	3-31-00	DHL	8-16-07

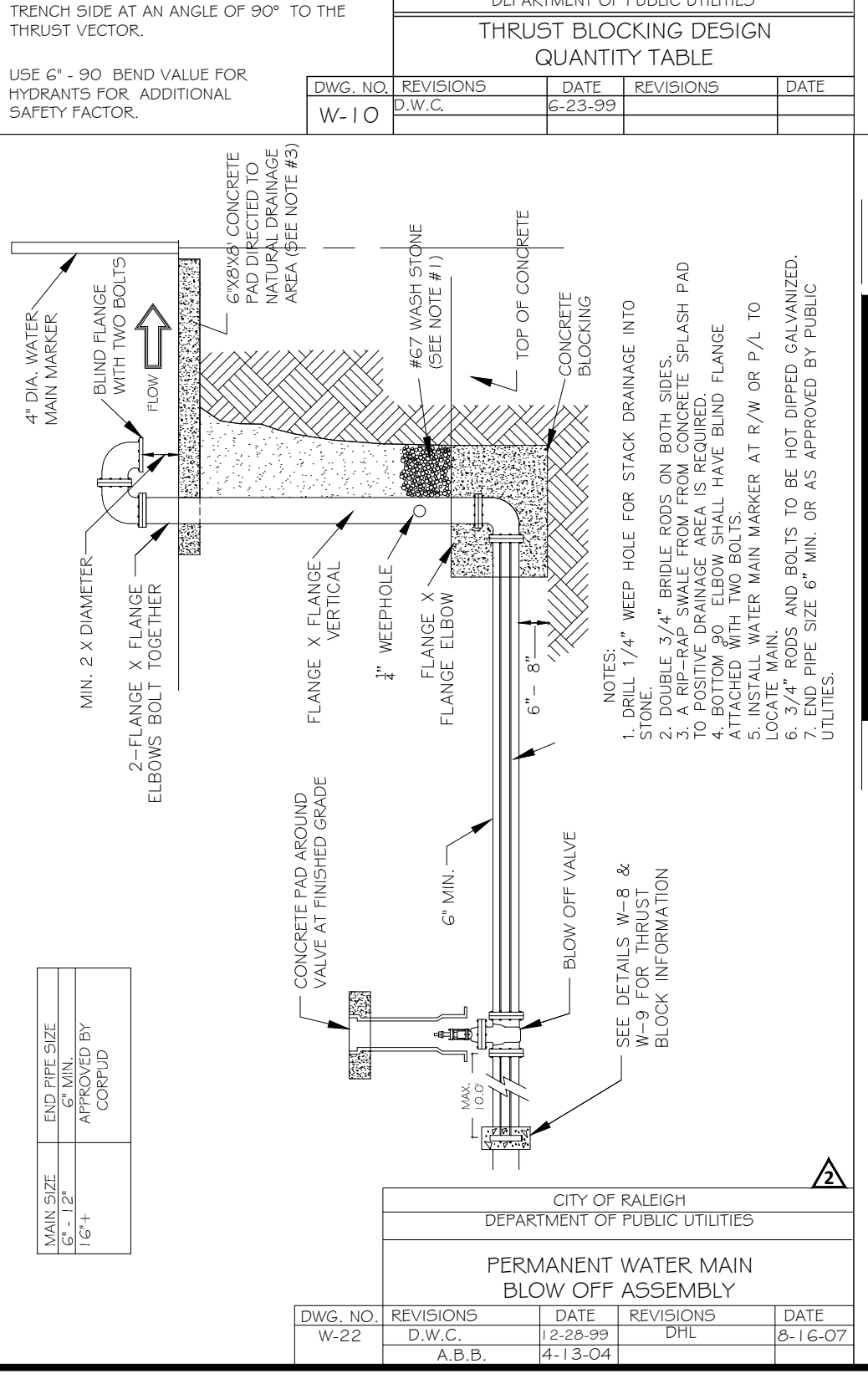


DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
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	A.B.B.	4-13-04		

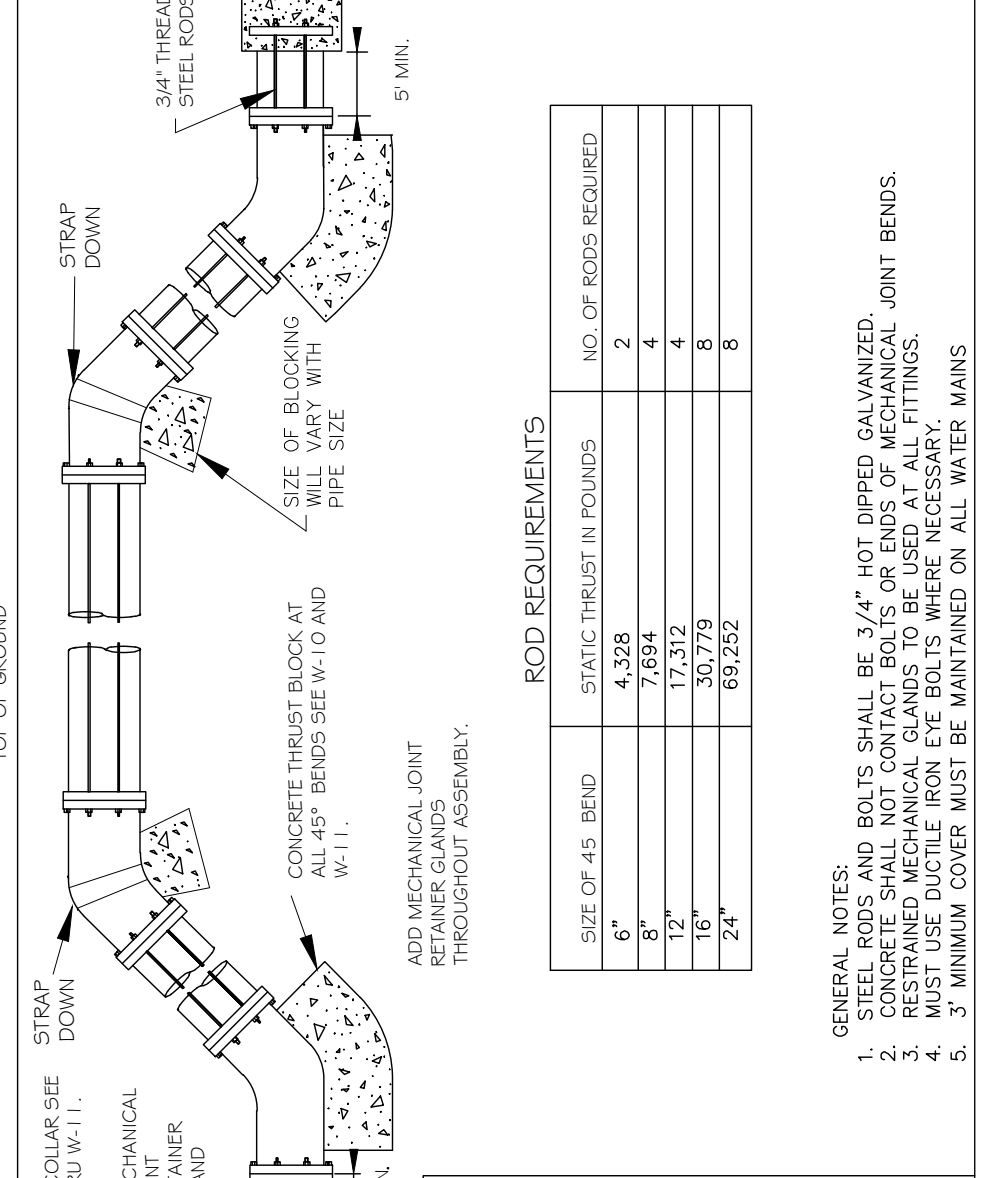
REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS
 BASED ON TEST PRESSURE OF 200 P.S.I.

ALL MEASUREMENTS IN SQUARE FEET

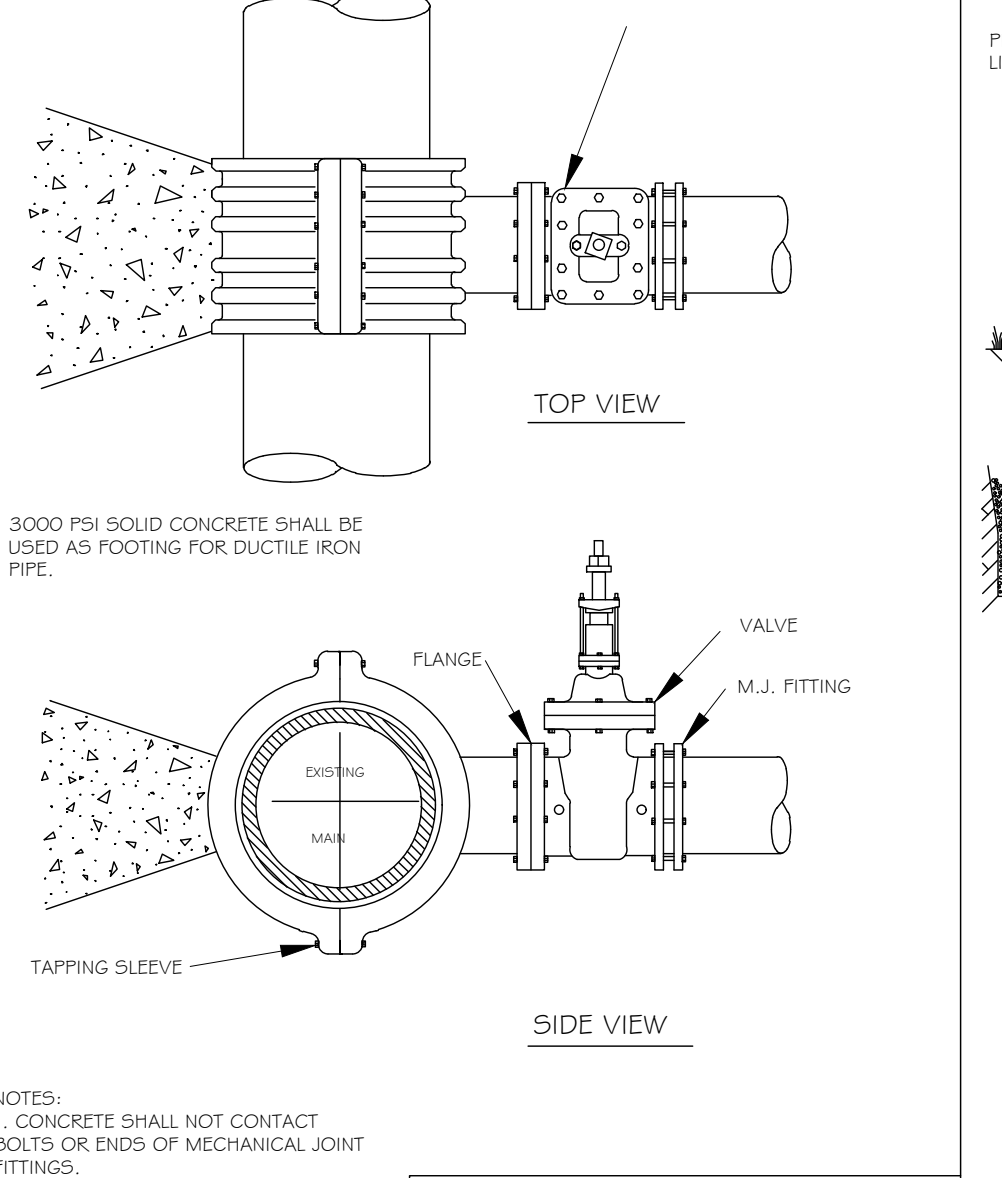
SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	NO. OF RODS REQUIRED
6"		
11 1/4"	1,108	1
22 1/2"	2,207	2
45"	4,328	4
90"	7,996	8
PLUG	5,655	8
18"		
11 1/4"	1,970	1
22 1/2"	3,922	2
45"	7,694	4
90"	14,215	8
PLUG	10,053	8
12"		
11 1/4"	4,433	3
22 1/2"	8,826	6
45"	17,312	12
90"	31,983	24
PLUG	22,619	24
16"		
11 1/4"	7,881	2
22 1/2"	15,691	4
45"	30,779	8
90"	56,861	15
PLUG	40,213	15



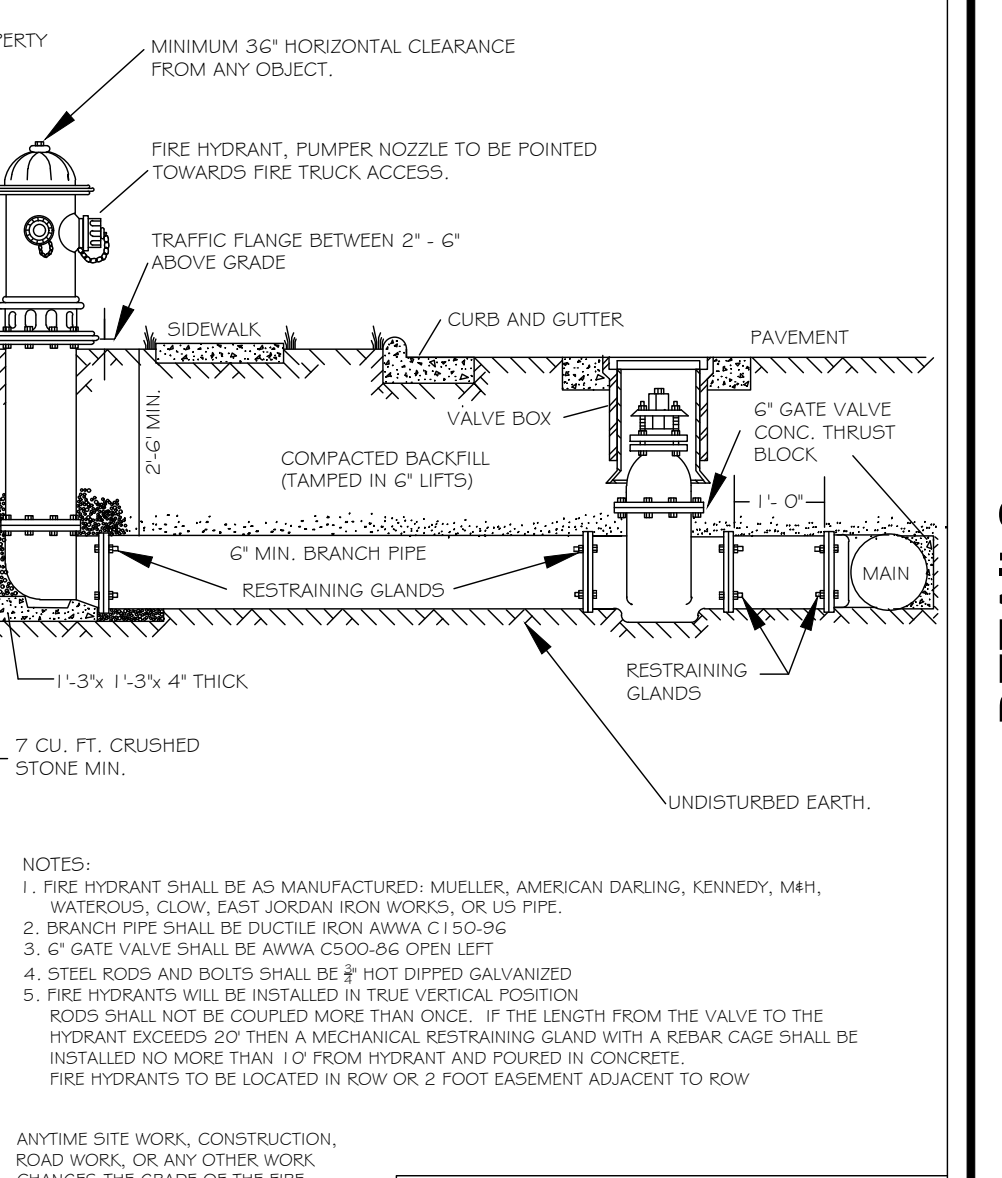
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-22	D.W.C.	2-28-99	DHL	8-16-07
	A.B.B.	4-13-04		



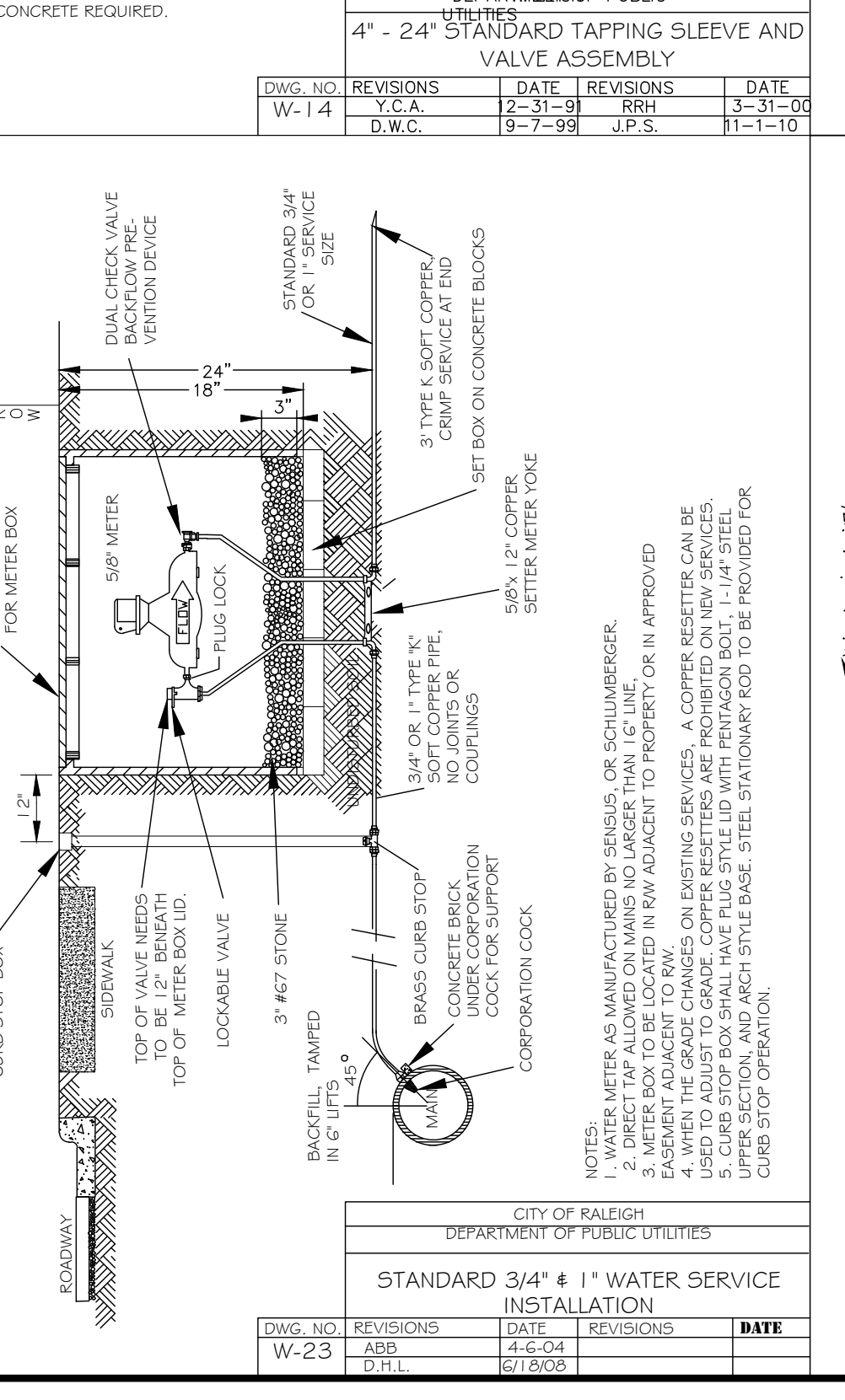
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-12	D.H.L.	4-6-04	J.P.S.	11-1-10



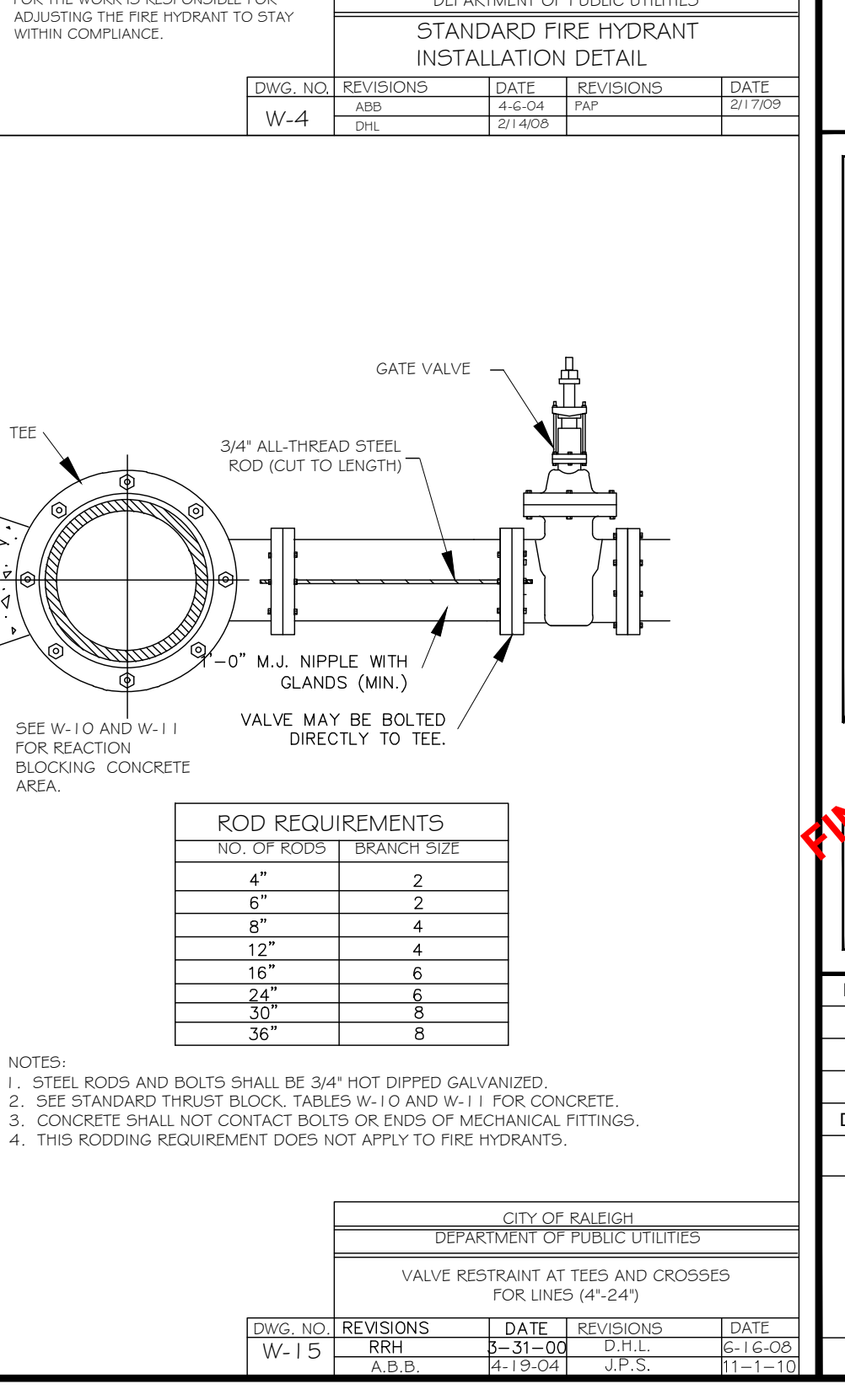
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-14	Y.C.A.	2-31-99	RRH	3-31-00
	D.W.C.	9-7-99	J.P.S.	11-1-10



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-4	DHL	4-6-04	P.F.P.	2/7/09
		11-4-08		



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-23	ABB	4-6-04		
	D.H.L.	6/1/05		



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-15	RRH	8-31-00	D.H.L.	8-16-05
	A.B.B.	4-13-04	J.P.S.	11-1-10

- Final Drawing -
 Issued for Permit Review Purposes Only

CROSLAND SOUTHEAST

REVISIONS:

#	DATE	DESCRIPTION
1	11/24/23	ISSUED FOR PERMIT REVIEW
2	11/24/23	REVISED FOR REVIEW COMMENTS
3	11/24/23	REVISED FOR REVIEW COMMENTS
4	11/24/23	REVISED FOR REVIEW COMMENTS

WALLBROOK ROADWAY IMPROVEMENTS
 VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)

Town of Rolesville Project No. CID 23-04
 US 401 Rolesville / S. Main Street & Virginia Water Drive
 Wake Forest Township, Town of Rolesville, Wake County, North Carolina

DETAILS

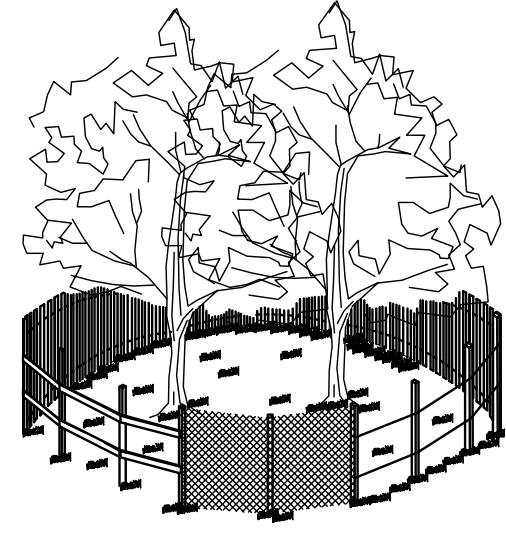
ARK CONSULTING GROUP PLLC
 ENGINEERS & PLANNERS

7555-B Chatham Blvd
 Raleigh, NC 27617
 (919) 876-8888
 www.arkconsultinggroup.com

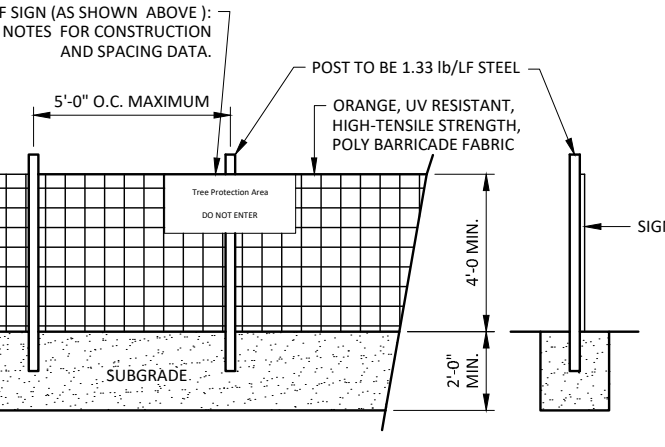
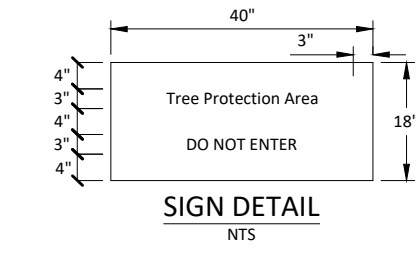
Project Manager: BCF
 Drawn By: DLCTGN
 Checked By: TGN
 Project Number: 22049
 Drawing Number: D-1404-CID

C4.1

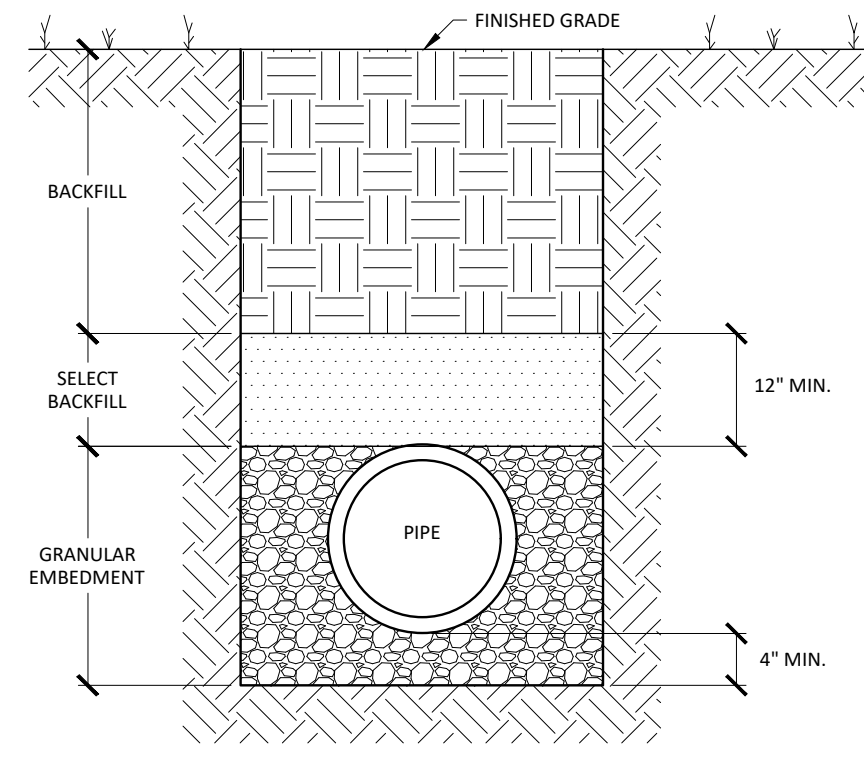
Date: May 1, 2023



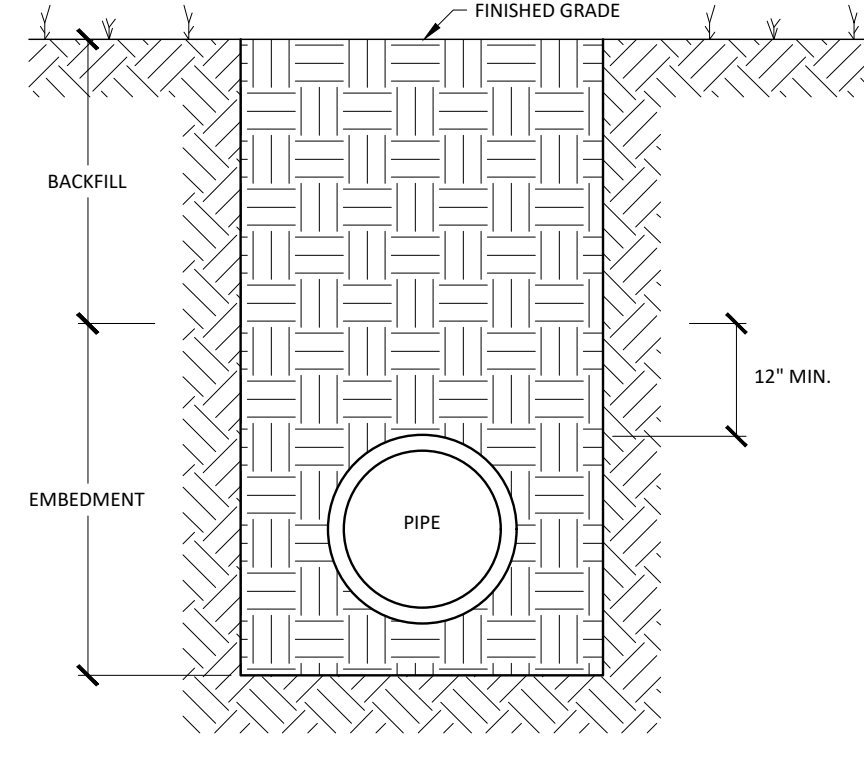
- NOTES:**
1. SIGNS ARE TO BE PLACED NO GREATER THAN 200' ON CENTER, PLACE SIGN AT EACH END OF LINEAR TREE PROTECTION AREA AND 200' ON CENTER THEREAFTER.
 2. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
 3. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
 4. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
 5. LETTERS ARE TO BE 3" HIGH MINIMUM, CLEAN LEGIBLE, AND SPACED AS DETAILED.
 6. INSTALL TREE PROTECTION FENCE & SIGNAGE PRIOR TO CALLING FOR THE INITIAL ON-SITE INSPECTION BY A LICENSED INSPECTOR. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT. ADDITIONAL SIGNS MAY BE REQUIRED BY NOTICES BASED ON ACTUAL FIELD CONDITIONS.



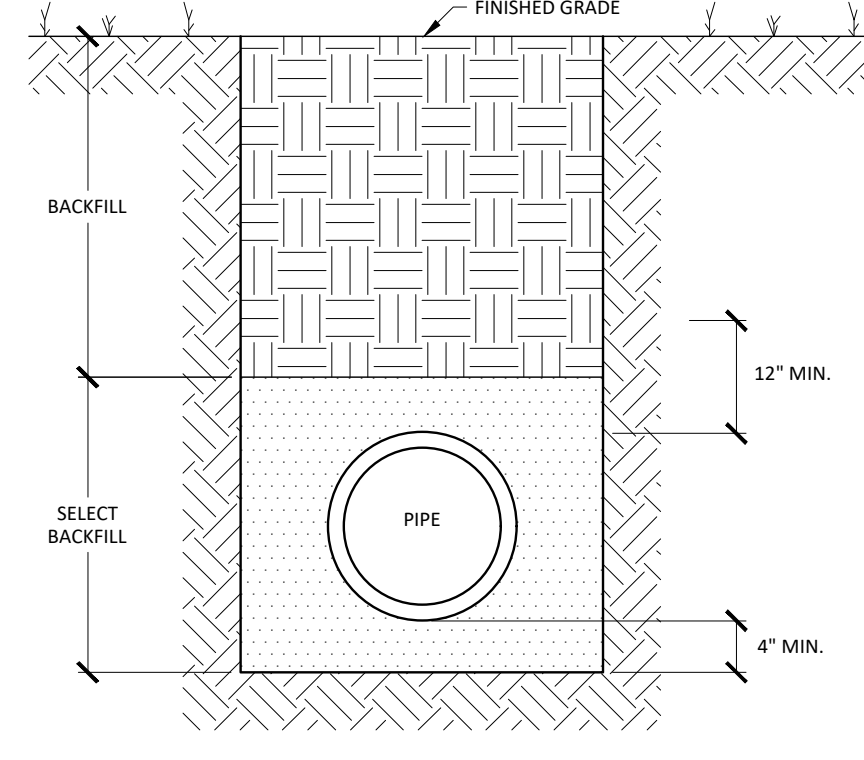
TREE PROTECTION FENCE
NOT TO SCALE



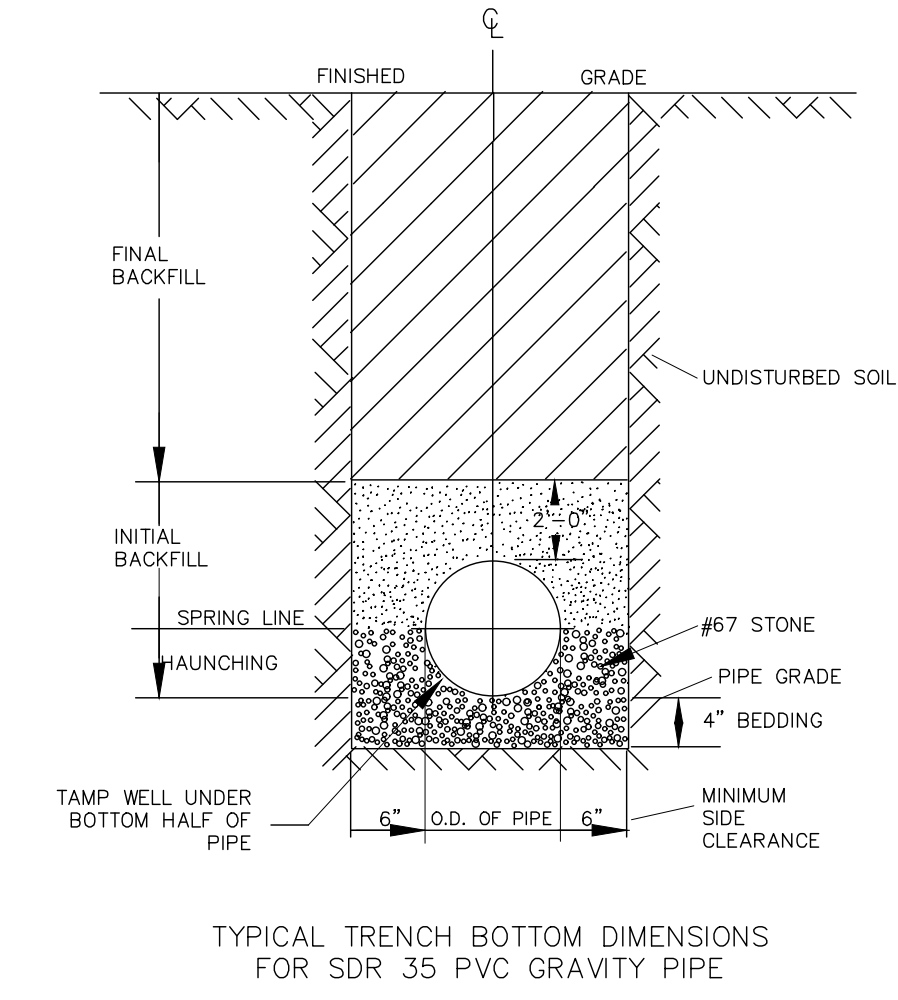
TRENCH SECTION DETAIL FOR THE INSTALLATION OF PVC GRAVITY STORM DRAIN & SANITARY SEWER PIPING
CLASS 'D'
NOT TO SCALE



TRENCH SECTION FOR THE INSTALLATION OF REINFORCED CONCRETE PIPE
CLASS 'F'
NOT TO SCALE

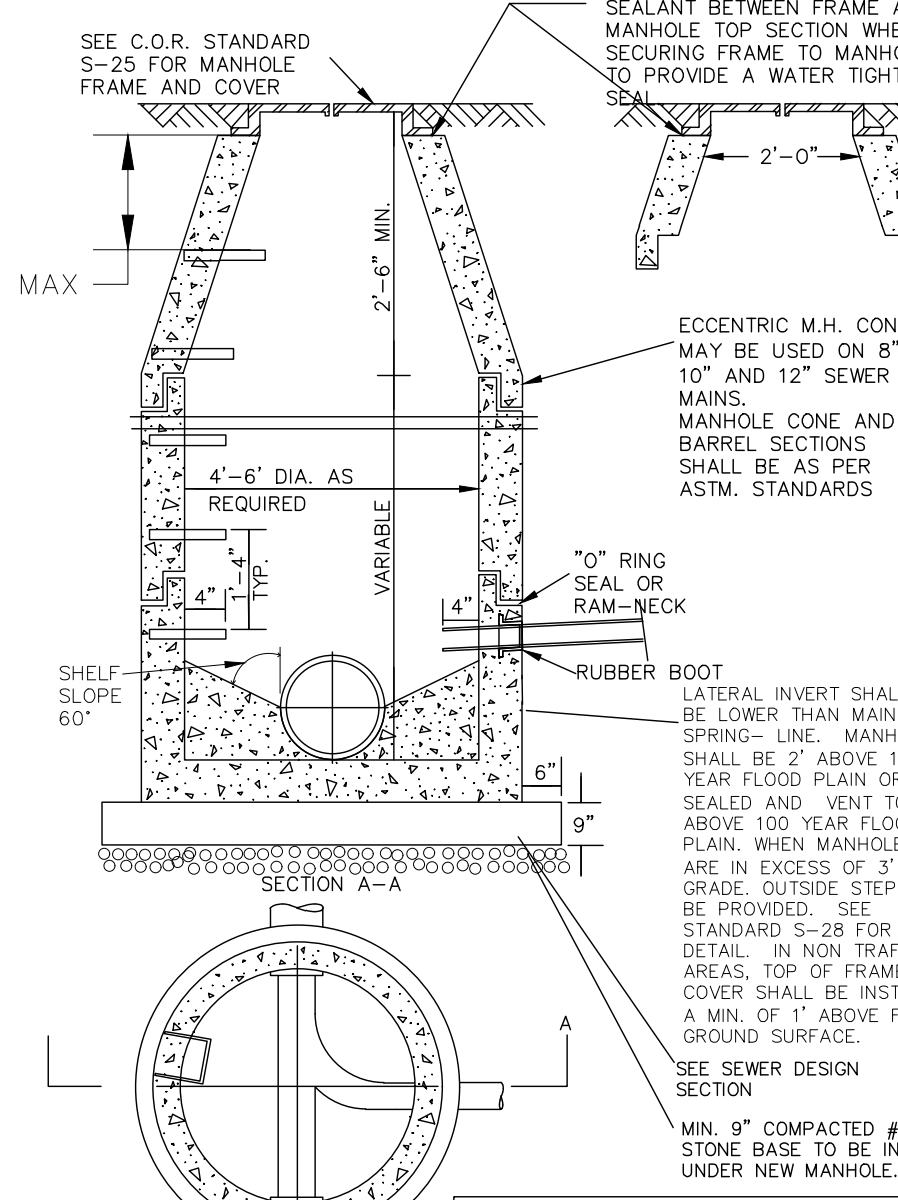


TRENCH SECTION DETAIL FOR THE INSTALLATION OF PVC PRESSURE PIPE
CLASS 'E'
NOT TO SCALE

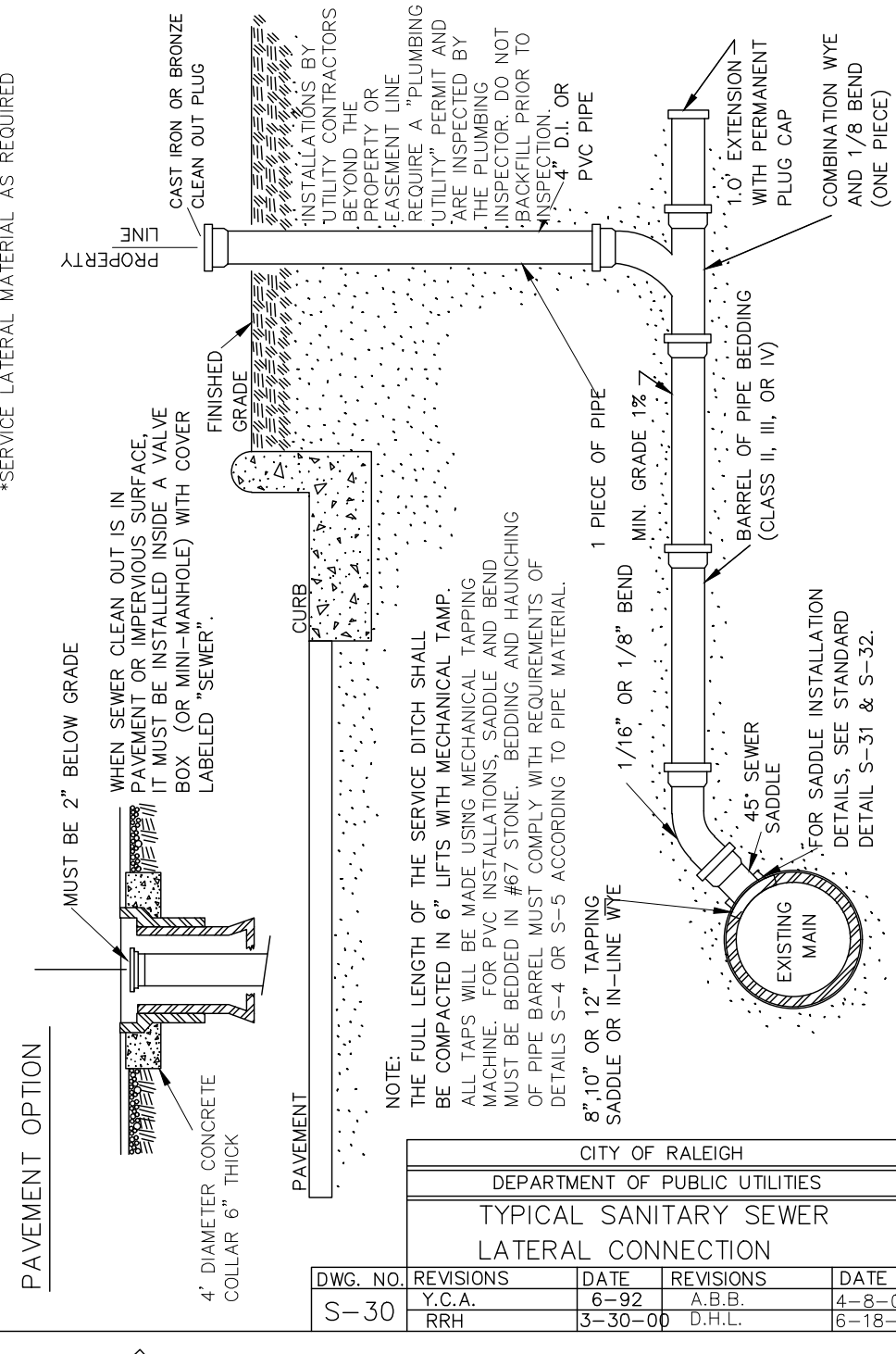


TYPICAL TRENCH BOTTOM DIMENSIONS FOR SDR 35 PVC GRAVITY PIPE

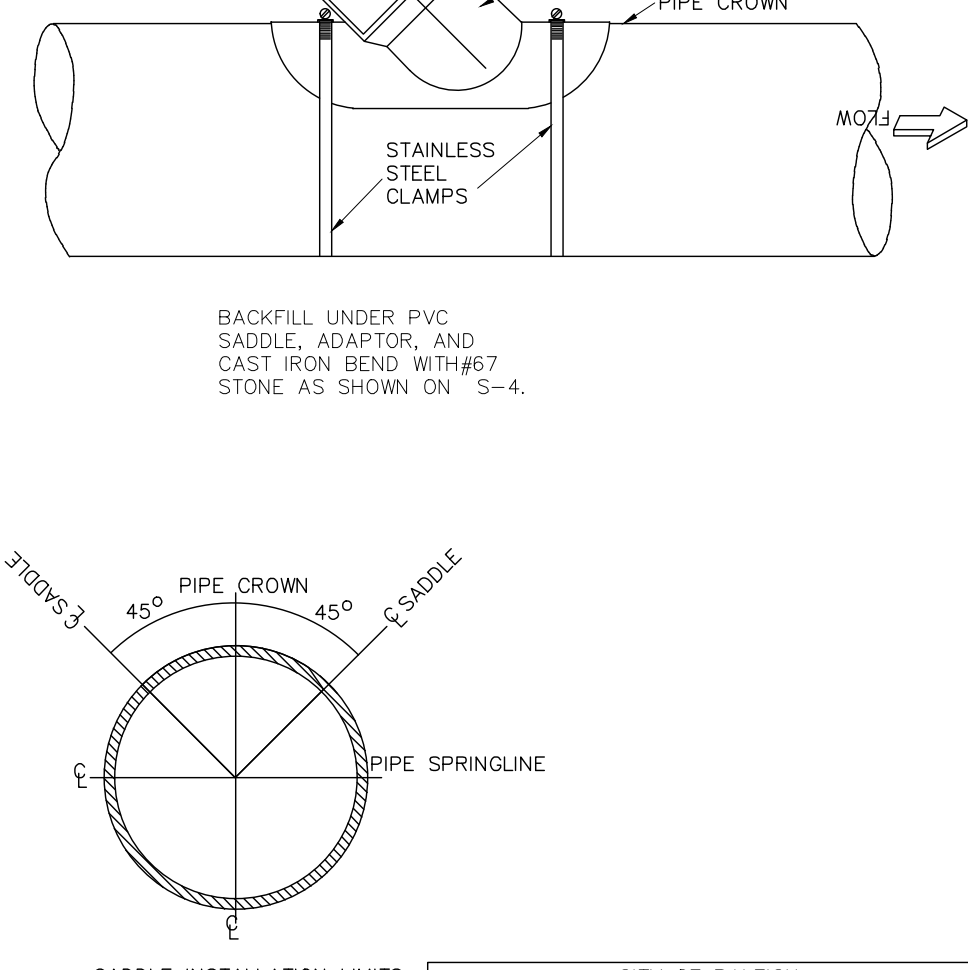
CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
TRENCH BOTTOM DIMENSIONS AND BACKFILLING REQUIREMENTS FOR PVC GRAVITY SEWER MAIN					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-5	TO NOTES	3-1-87	D.W.C.	9-3-99	
		7-2-82	RRH	3-30-00	



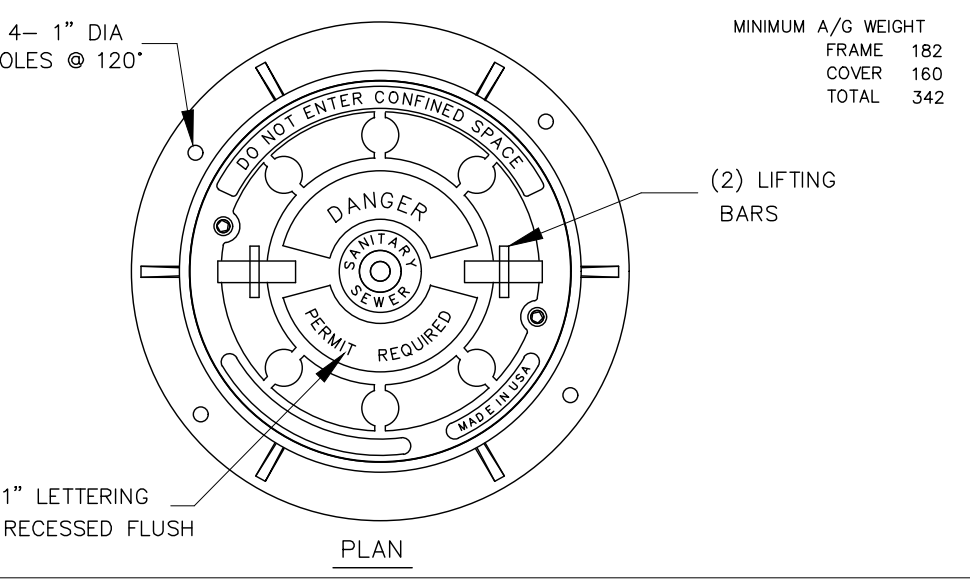
CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
STANDARD PRECAST SANITARY SEWER MANHOLE					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-20	Y.C.A.	12-31-92	A.B.B.	2-21-95	
	RRH	3-30-00	D.H.L.	6-18-08	



CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
TYPICAL SANITARY SEWER LATERAL CONNECTION					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-30	Y.C.A.	6-92	A.B.B.	4-8-04	
	RRH	3-30-00	D.H.L.	6-18-08	

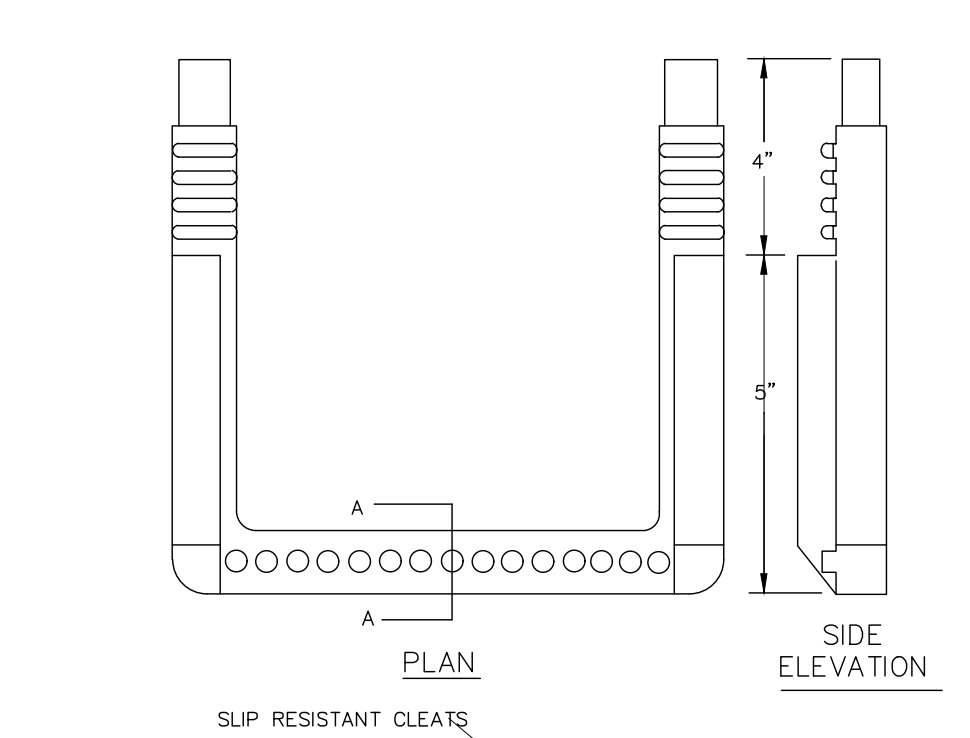


CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
LATERAL SADDLE INSTALLATION DETAIL FOR PVC PIPE					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-31	RRH	3-1-87			
		3-30-00			



MANHOLE FRAME AND WATERTIGHT COVER

CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
MANHOLE FRAME AND WATERTIGHT COVER					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-26	3-1-87	3-1-87	A.B.B.	8-29-03	
	RRH	3-30-00	D.H.L.	6/18/08	



STANDARD SLIP RESISTANT MANHOLE STEP DETAIL

CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
STANDARD SLIP RESISTANT MANHOLE STEP DETAIL					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-28	RRH	3-30-00			

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-_____

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 Permit # W-_____

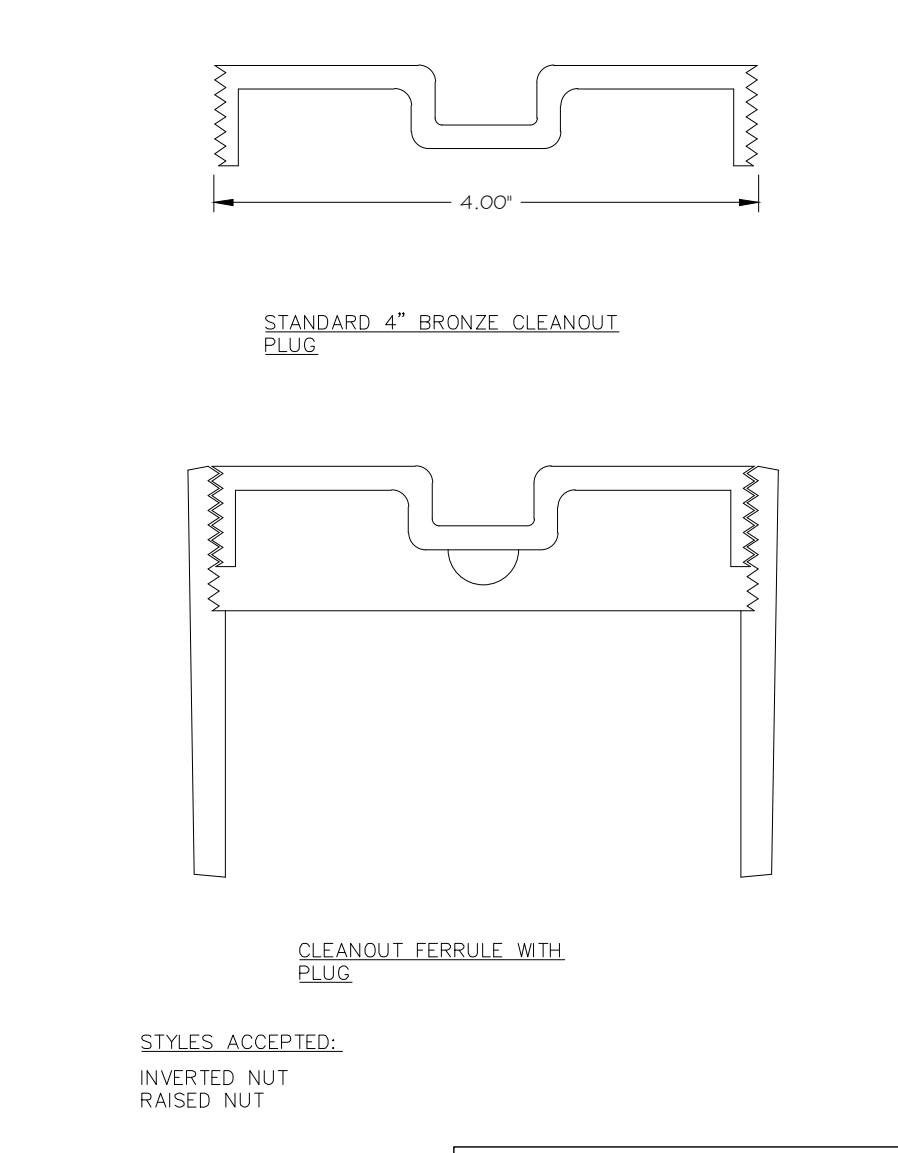
The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-_____

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

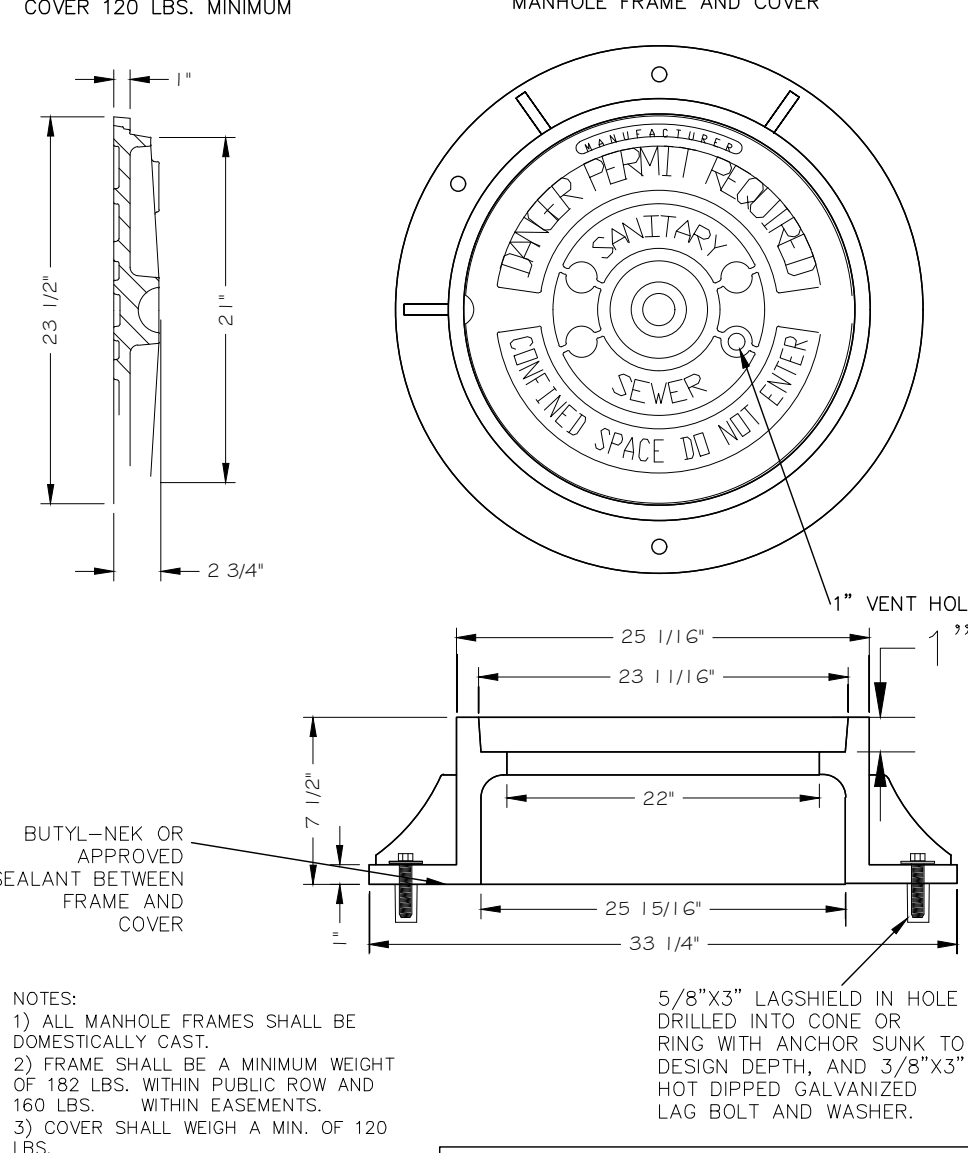
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, 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.

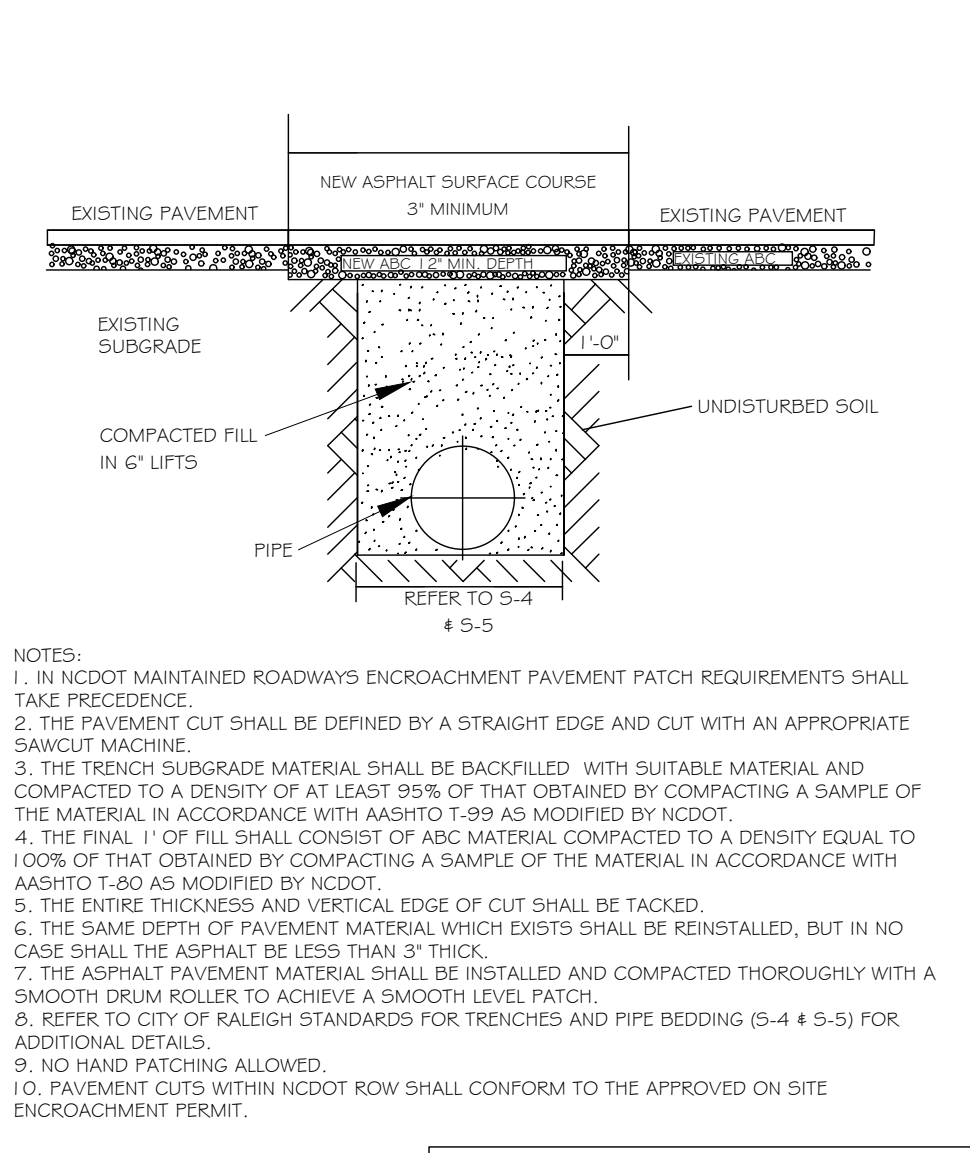
City of Raleigh Development Approval _____
City of Raleigh Review Officer _____



CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
4" CLEANOUT PLUG					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-34	D.W.C.	3-1-87	RRH	3-30-00	



CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
STANDARD MANHOLE COVER					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-25	3-1-87	3-1-87	A.B.B.	2-9-05	
	RRH	3-30-00	D.H.L.	6-18-08	



CITY OF RALEIGH					
DEPARTMENT OF PUBLIC UTILITIES					
STANDARD ASPHALT PAVEMENT PATCH DETAIL					
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE	
S-3	D.W.C.	1-1-99	A.B.B.	4-19-04	
	RRH	3-30-00	J.F.S.	10-6-10	

- Final Drawing -
Issued for Permit Review Purposes Only

CROSLAND SOUTHEAST					
4-12-2024	REVISED PER REVIEW & OWNER COMMENTS				
3-11-2024	REVISED PER REVIEW & OWNER COMMENTS				
2-11-2024	REVISED PER REVIEW & OWNER COMMENTS				
1-11-2024	ISSUED FOR PERMIT REVIEW				
DATE	DESCRIPTION				

WALLBROOK ROADWAY IMPROVEMENTS
VIRGINIA WATER DRIVE EXTENSION (SERVING LOTS 9-11)
Town of Rolesville Project No. CID 23-04
US 401 Business / S. Main Street & Virginia Water Drive
Wake Forest Township, Town of Rolesville, Wake County, North Carolina

ARK CONSULTING GROUP PLLC
ENGINEERS & PLANNERS

7755-B Chatham Blvd
Cary, NC 27513
(919) 558-9888
www.arkconsultinggroup.com

Final Drawing
Issued for Permit Review Purposes Only

Project Manager: BCF
Drawn By: DLCTGN
Checked By: TGN
Project Number: 22049
Drawing Number: D-1404-CID

C4.2

Date: May 1, 2023

GENERAL NOTES:

- THIS ALTA/NSPS LAND TITLE SURVEY WAS PREPARED FOR THE BENEFIT OF WALLBROOK LANDCO, LLC, ITS SUCCESSORS AND/OR ASSIGNS AS THEIR INTERESTS MAY APPEAR, AND INVESTORS TITLE INSURANCE COMPANY.
- THE PROPERTY AS SHOWN HEREON IS BASED ON A FIELD-RUN BOUNDARY SURVEY WITH A RAW CLOSURE OF 1:35,900.
- THE IMPROVEMENTS SHOWN HEREON ARE BASED ON A FIELD-RUN PLANIMETRIC SURVEY PERFORMED BY JOHNSON, MIRMIRAN & THOMPSON FROM MARCH 16 THROUGH MARCH 19, 2020 AND REFLECTS SITE CONDITIONS AS OF THAT DATE.
- ELEVATIONS ARE BASED ON NAVD88 DATUM.
- THE SURVEY IS REFERENCED TO THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM (NCSPCS), NORTH AMERICAN DATUM, 1983, 2001 ADJUSTMENT, NAD83(2001).
- THE USE OF THE WORD CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THOSE FACTS OR FINDINGS WHICH ARE THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL'S KNOWLEDGE, INFORMATION AND BELIEF, AND IN ACCORDANCE WITH THE COMMONLY ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE EITHER EXPRESSED OR IMPLIED.
- THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X, AREA OF MINIMAL FLOODING, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM), WAKE COUNTY, NORTH CAROLINA, PANEL 1758, MAP NO. 3720175800J, EFFECTIVE DATE: MAY 2, 2006.
- AT THE TIME OF THE SURVEY, THERE WERE NO PARKING SPACES.
- AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR LANDFILL.
- AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF A CEMETERY.
- AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

SETBACK REQUIREMENTS:

FRONT: 30'
SIDE: 15'
CORNER: 25'
REAR: 35'

(ZONING INFORMATION BASED ON INFORMATION AS SUPPLIED BY CURRENT COUNTY ZONING DEPARTMENT, NO ZONING REPORT OR LETTER WAS PROVIDED TO SURVEYOR AT TIME OF SURVEY.)

RECORD LEGAL DESCRIPTION

PER INVESTORS TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. 202000244CA2, WITH AN EFFECTIVE DATE OF MARCH 6, 2020 AT 5:00 P.M.:

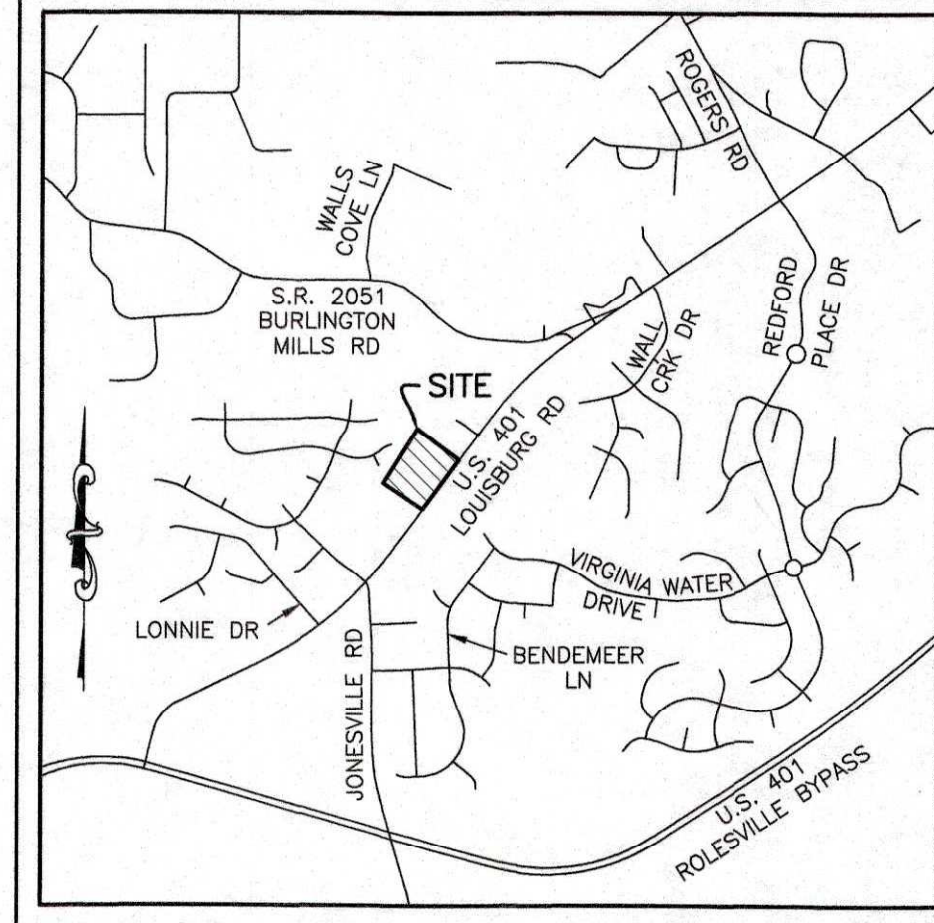
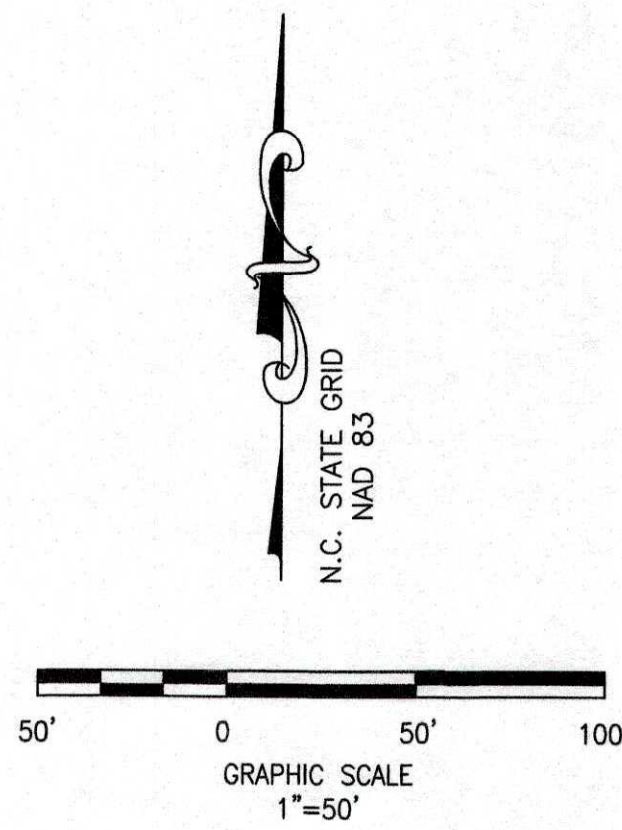
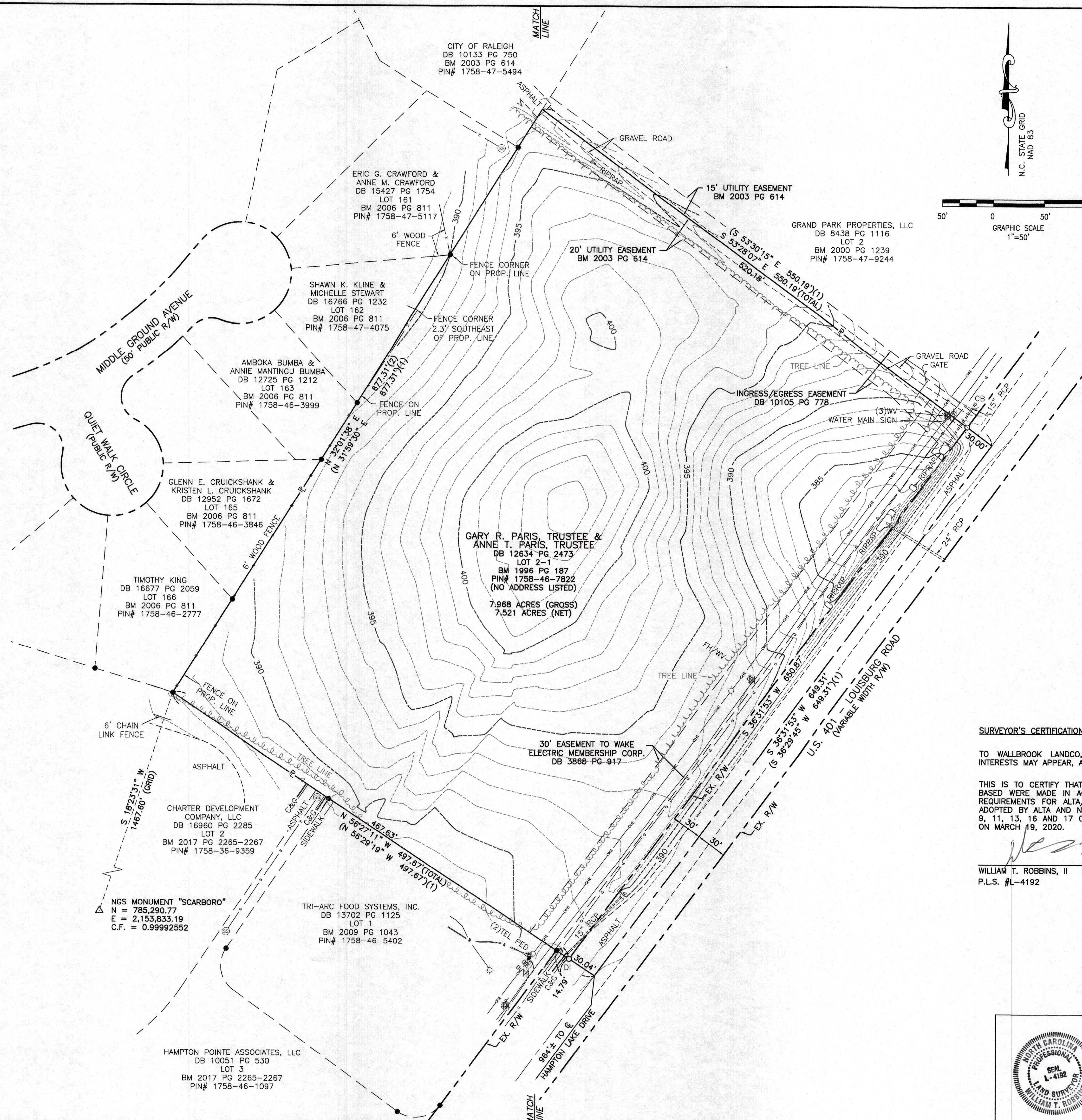
IN THE STATE OF NC, COUNTY OF WAKE,

BEING ALL OF LOT 2-1 OF THAT PLAT ENTITLED "PRELIMINARY SUBDIVISION PLAT AND RECOMBINATION SURVEY FOR TOMMY TWITTY," A COPY OF WHICH IS RECORDED IN BOOK OF MAPS 1996, PAGE 187, WAKE COUNTY REGISTRY.

SCHEDULE B, PART II EXCEPTIONS:

PER INVESTORS TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. 202000244CA2, WITH AN EFFECTIVE DATE OF MARCH 6, 2020 AT 5:00 P.M.:

- (ITEM 3) EASEMENT(S) AND/OR RIGHT(S) OF WAY TO CITY OF RALEIGH RECORDED IN BOOK 10105 AT PAGE 778. [PLOTTED HEREON]
- (ITEM 4) EASEMENT(S) AND/OR RIGHT(S) OF WAY TO WAKE ELECTRIC MEMBERSHIP CORPORATION RECORDED IN BOOK 3868 AT PAGE 917. [PLOTTED HEREON]
- (ITEM 5) TITLE TO THAT PORTION OF THE LAND WITHIN THE RIGHT-OF-WAY OF U.S. HIGHWAY 401 (LOUISBURG ROAD). [PLOTTED HEREON]
- (ITEM 6) MATTERS SHOWN ON RECORDED BOOK OF MAPS 1996 AT PAGE 187 SHOWS THE FOLLOWING LOCATED ON THE LAND:
 - OVERHEAD LINE [PLOTTED HEREON]
 - POWER POLE [PLOTTED HEREON]
 - RIGHT OF WAY FOR U.S. HIGHWAY 401 (LOUISBURG ROAD) [PLOTTED HEREON]



VICINITY MAP
SCALE: 1"=2000'

LEGEND

- (1) = RECORD DATA PER BM 1996 PG 187
- (2) = RECORD DATA PER BM 2006 PG 811
- = FOUND IRON PIPE
- = SET IRON PIN
- △ = NGS MONUMENT
- = PROPERTY LINE
- R/W = RIGHT OF WAY
- CB = CATCH BASIN
- C&G = CURB AND GUTTER
- = CENTERLINE
- DI = DROP INLET
- FH = FIRE HYDRANT
- LP = LIGHT POLE
- PP = POWER POLE
- RCP = REINFORCED CONCRETE PIPE
- = SIGN
- = SANITARY SEWER MANHOLE
- = TELEPHONE PEDESTAL
- WM = WATER METER
- WV = WATER VALVE
- = ELECTRIC LINE
- = GAS LINE
- = OVERHEAD ELECTRIC LINE
- = SANITARY SEWER LINE
- = TELEPHONE LINE
- = WATER LINE

SURVEYOR'S CERTIFICATION:

TO WALLBROOK LANDCO, LLC, ITS SUCCESSORS AND/OR ASSIGNS AS THEIR INTERESTS MAY APPEAR, AND INVESTORS TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6A, 7A, 7B1, 8, 9, 11, 13, 16 AND 17 OF TABLE "A" THEREOF. THE FIELDWORK WAS COMPLETED ON MARCH 19, 2020.

William T. Robbins, II
WILLIAM T. ROBBINS, II
P.L.S. #L-4192
DATE: 2/28/2020

JMT JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future®
9201 Arbutum Parkway Suite 310 Richmond, Virginia 23236
PHONE: (804)-323-9900 FAX: (804)-323-0596
EMAIL: jmtva@jmt-engineering.com

REVISION #	DATE	REASON FOR REVISION



ALTA/NSPS LAND TITLE SURVEY
PREPARED FOR
WALLBROOK LANDCO, LLC
WAKE FOREST TOWNSHIP
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA
DRAWN BY: JSZ PROJECT#: JMT# 20-00915-001
CHECKED BY: WTR CONTRACT#: DATE: 03/28/2020 SCALE: 1"=50' SHEET 1 OF 1

