

#	DATE	ISSUED FOR INITIAL REVIEW	REVISED PER REVIEW COMMENTS
1	1-APR-24	ISSUED FOR INITIAL REVIEW	
1	3-JUN-24	REVISED PER REVIEW COMMENTS	



**EXISTING CONDITIONS & DEMOLITION PLAN**  
**WALLBROOK - LOT 7**  
**MASS GRADING / EROSION CONTROL**  
 Town of Rolesville Project No. CID 24-02  
 S Main St. / US-401 Business & Wall Creek Drive  
 Rolesville, Wake County, North Carolina

NC License: P-1109  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd  
 Raleigh, NC 27608  
 (757) 558-0888  
 www.arkconsultinggroup.com

**Final Limited**  
 Final Construction  
 6/1/2024

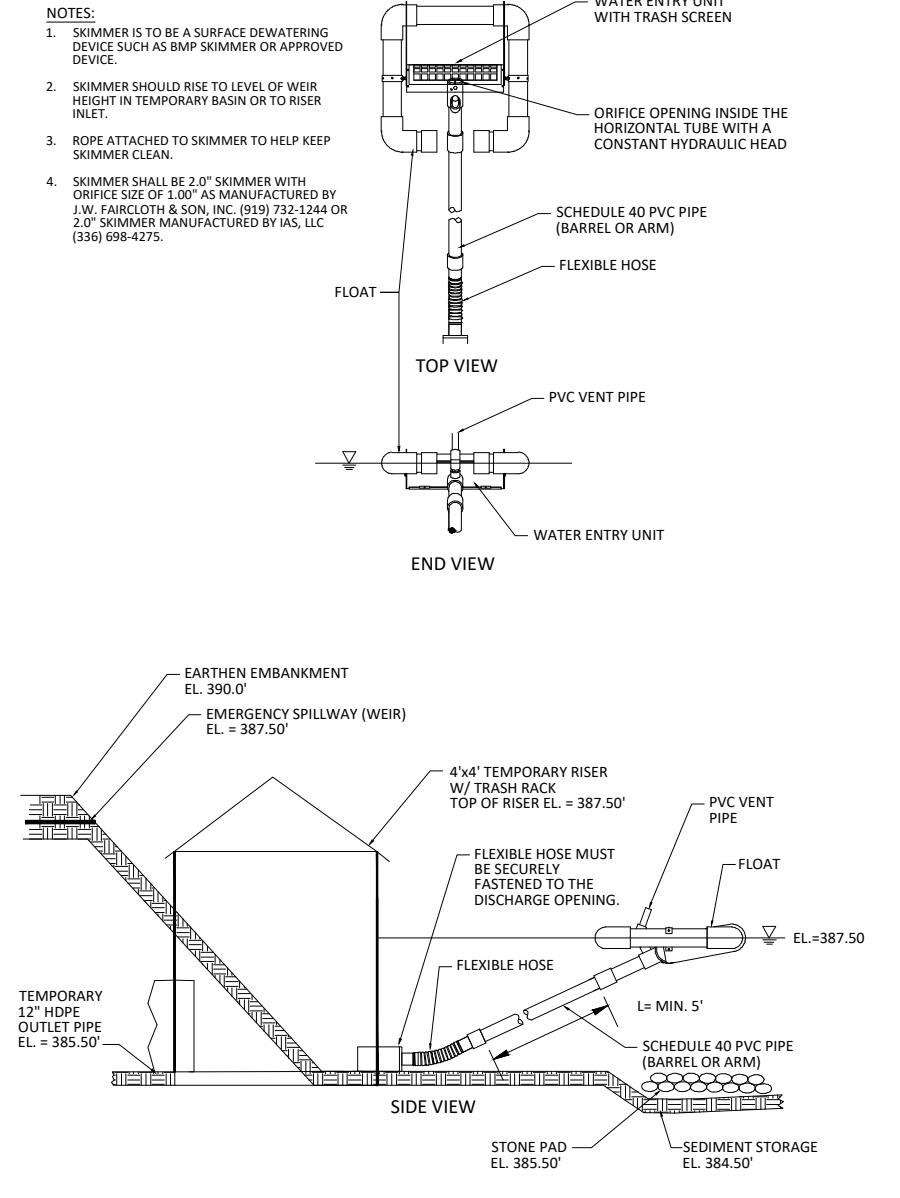
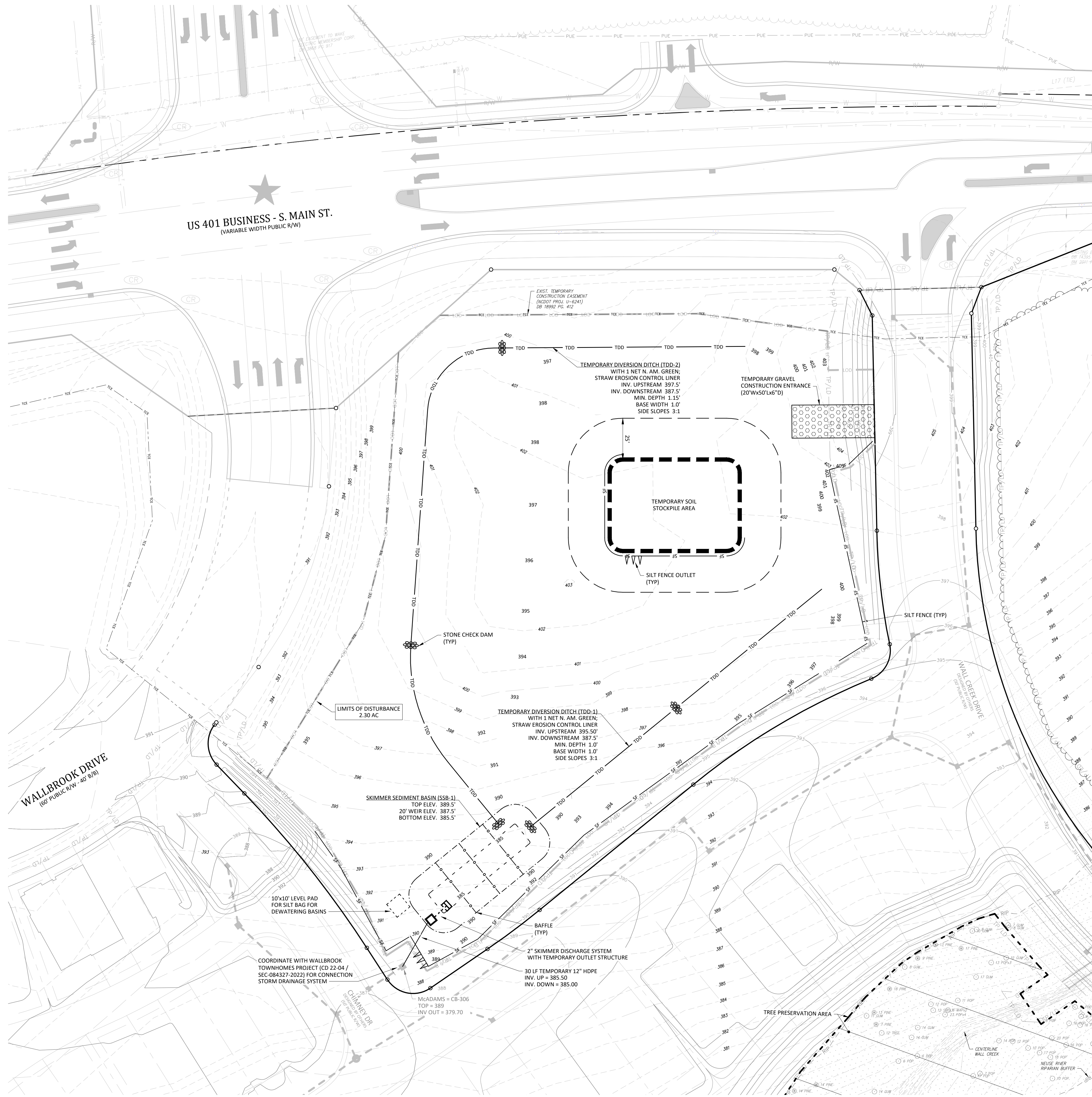
Project Manager: BCF  
 Drawn By: DLC  
 Checked By: TN  
 Project Number: 21089  
 Drawing Number: D-1471

**C0.2**  
 Date: April 1, 2024









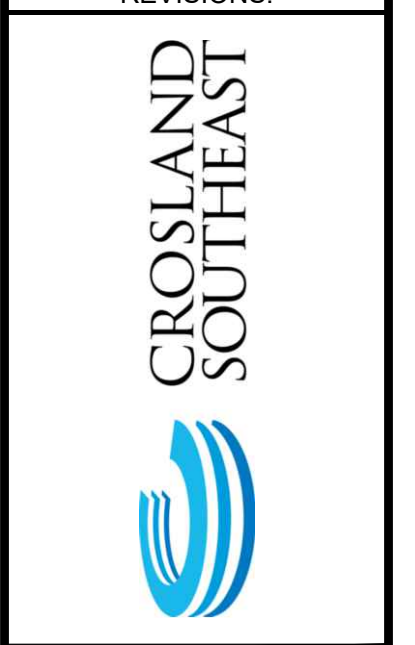
**SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR SSB-1**  
NOT TO SCALE

**CONTOUR LEGEND**

400	PROPOSED CONTOURS
400	DESIGN CONTOURS PUBLIX AT WALLBROOK (SDP 23-05 / CID 23-01) (ARK CONSULTING GROUP)
400	DESIGN CONTOURS WALLBROOK TOWNHOMES (CD 22-04) (MACADAMS CO.)
400	EXISTING INDEX CONTOUR
399	EXISTING CONTOUR

**REVISIONS:**

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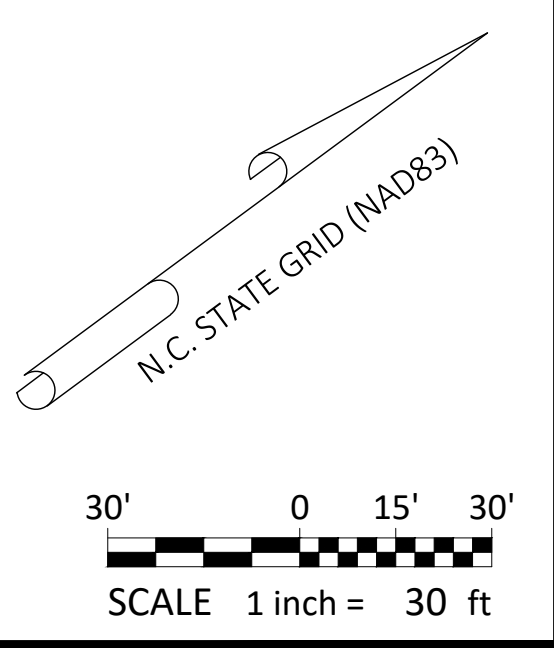
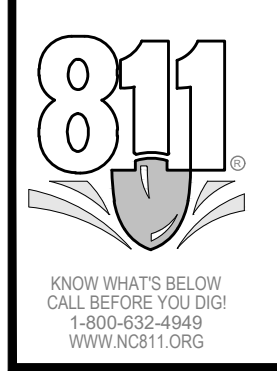
**EROSION CONTROL PHASE 1**  
**WALLBROOK - LOT 7**  
**MASS GRADING / EROSION CONTROL**  
Town of Rolesville Project No. CID 24-02  
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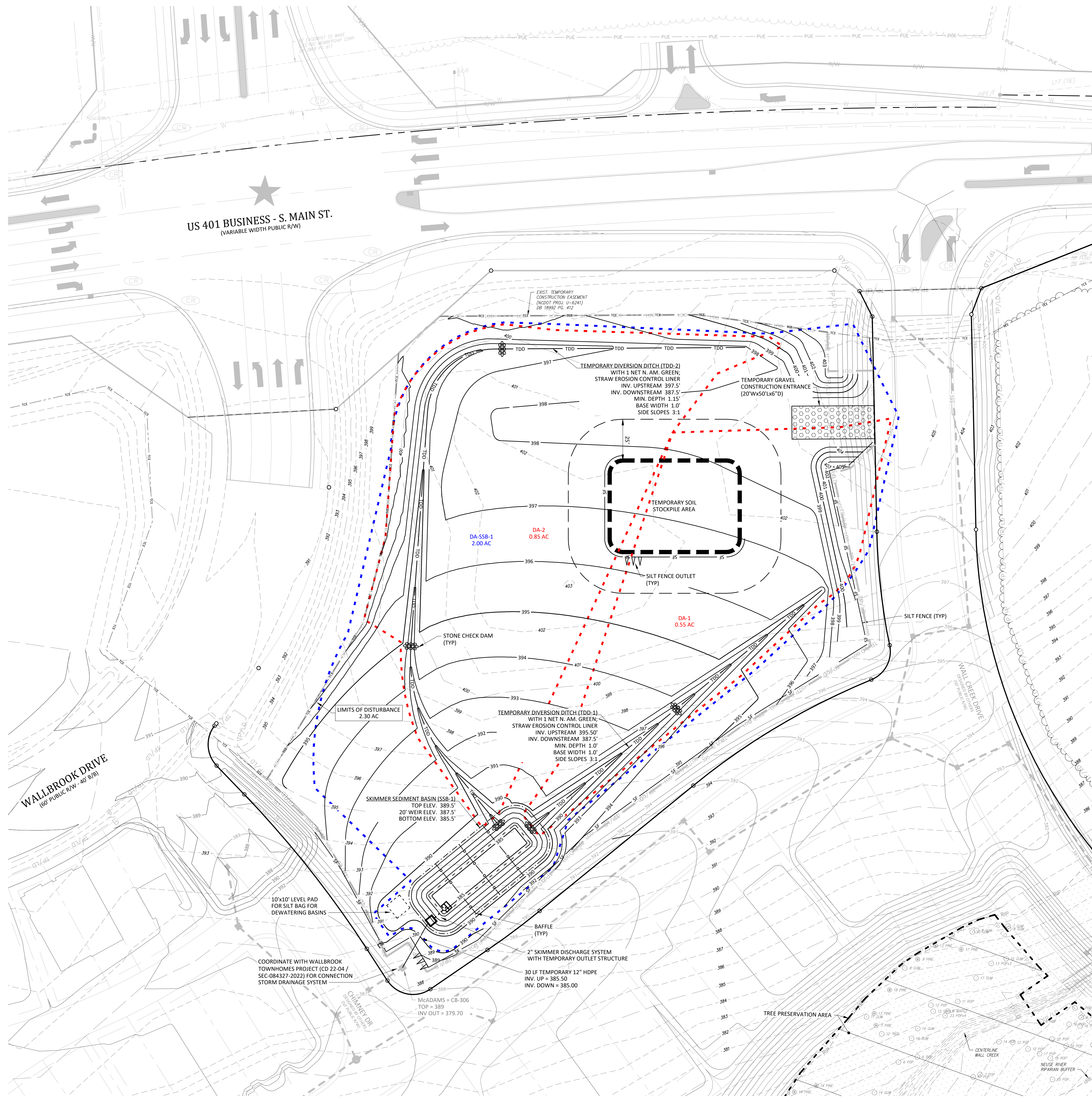
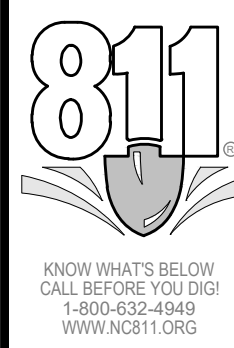
**6/7/2024**  
Final Limited  
Final Construction

Project Manager:	BCF
Drawn By:	DLC
Checked By:	TN
Project Number:	21089
Drawing Number:	D-1471

**C1.1**  
Date: April 1, 2024

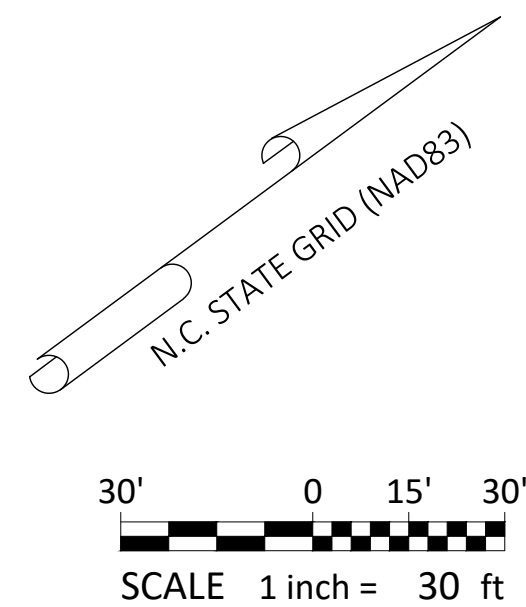






CONTOUR LEGEND

	400	PROPOSED CONTOURS
	400	DESIGN CONTOURS PUBLIX AT WALLBROOK (SDP 23-05 / CID 23-01) (ARK CONSULTING GROUP)
	400	DESIGN CONTOURS WALLBROOK TOWNHOMES (CD 22-04) (MCADAMS CO.)
	400	EXISTING INDEX CONTOUR
	399	EXISTING CONTOUR



EROSION CONTROL PHASE 2 & MASS GRADING PLAN  
**WALLBROOK - LOT 7**  
 MASS GRADING / EROSION CONTROL  
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 6/7/2024  
 Final Limited Liability Construction

Project Manager:	BCF
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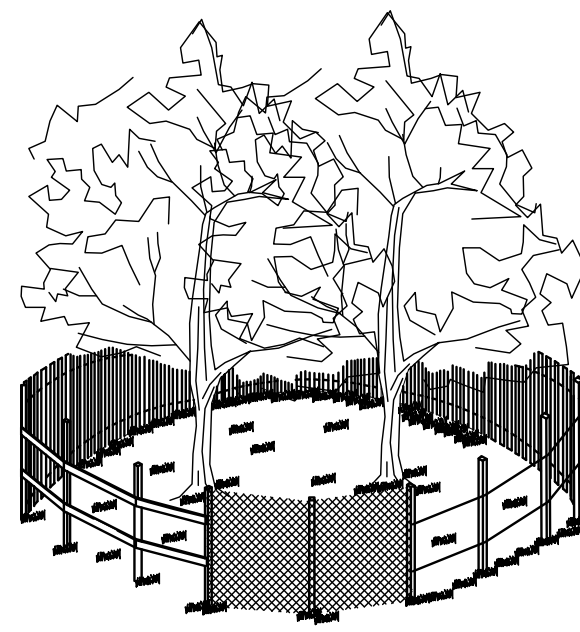
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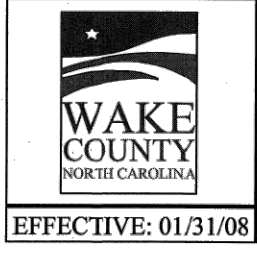
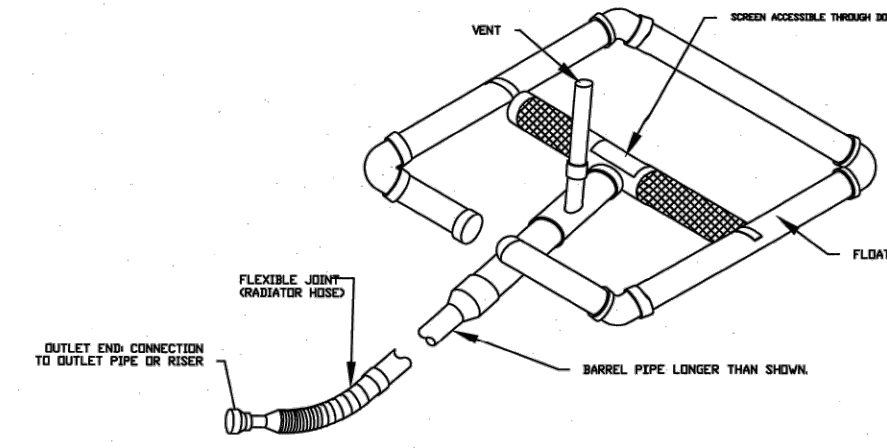
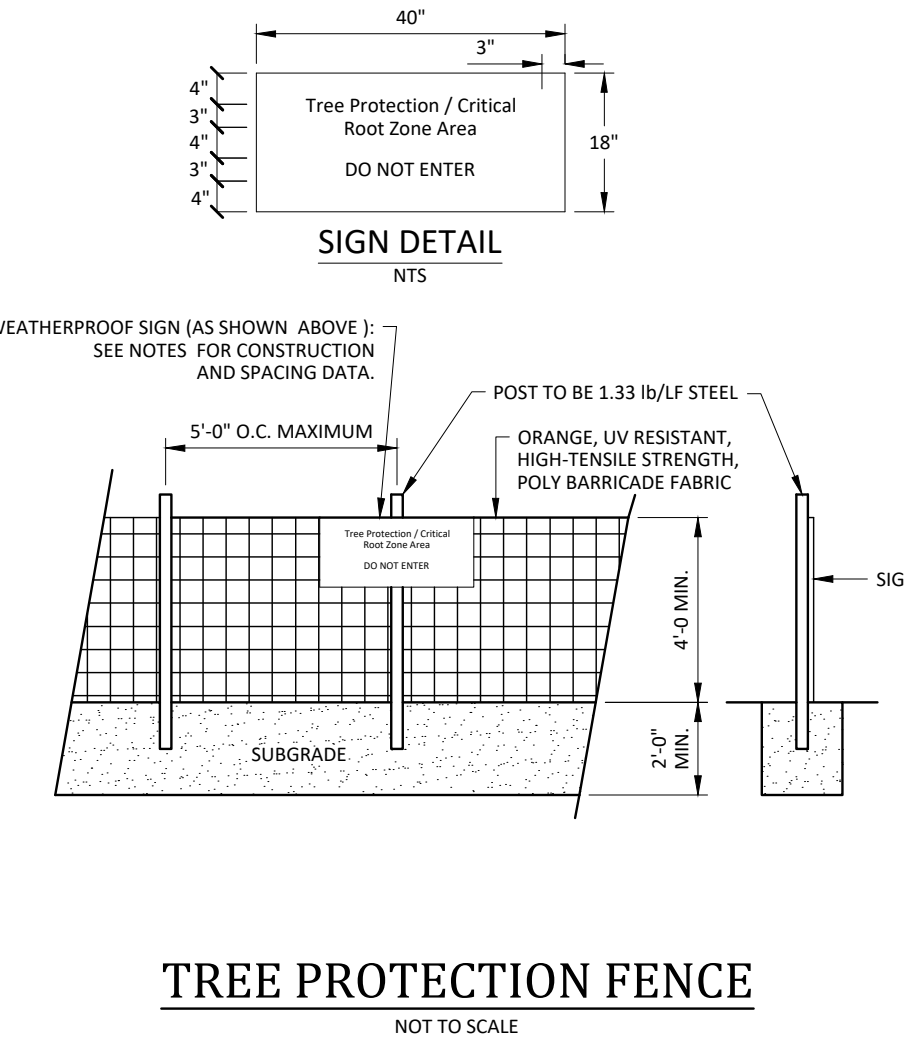




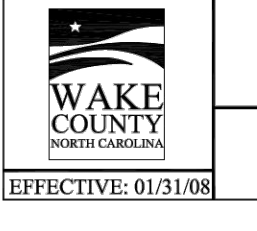
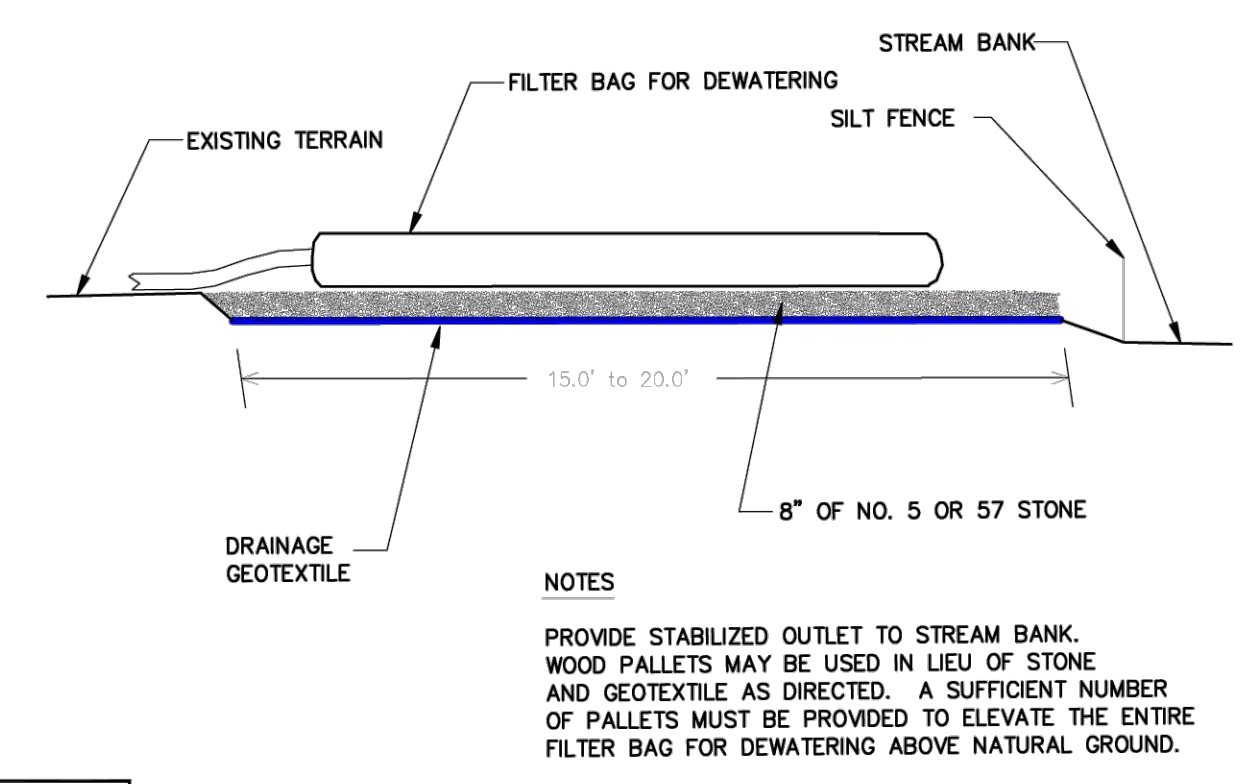




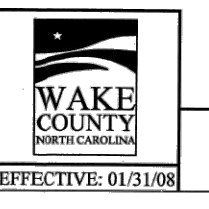
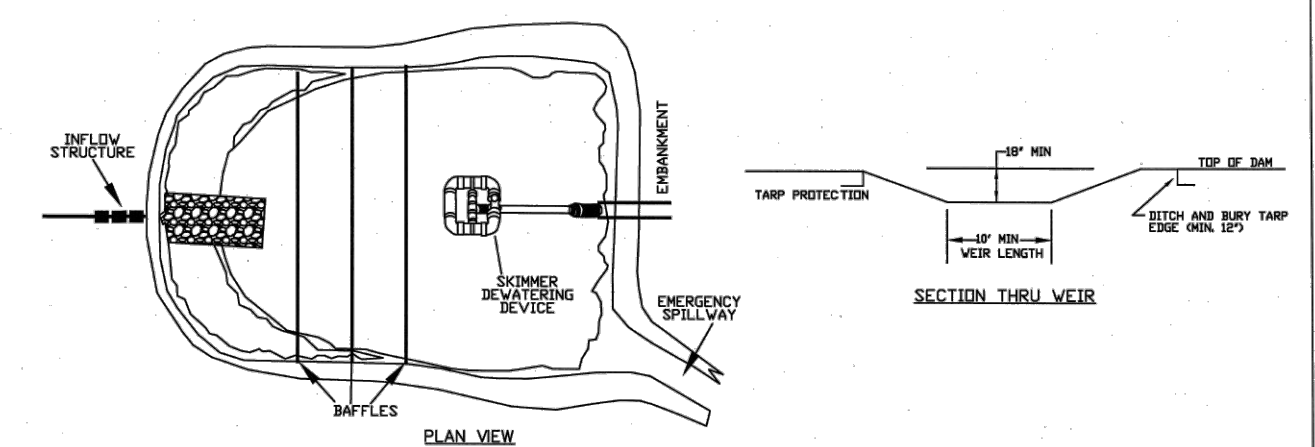
- NOTES:
1. SIGNS ARE TO BE PLACED NO GREATER THAN 200' ON CENTER. PLACE SIGN AT EACH END OF LINEAR TREE PROTECTION AREA AND 200' ON CENTER THEREAFTER.
  2. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
  3. ATTACH SIGNS SECURELY TO FENCE POSTS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



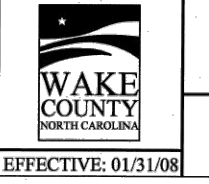
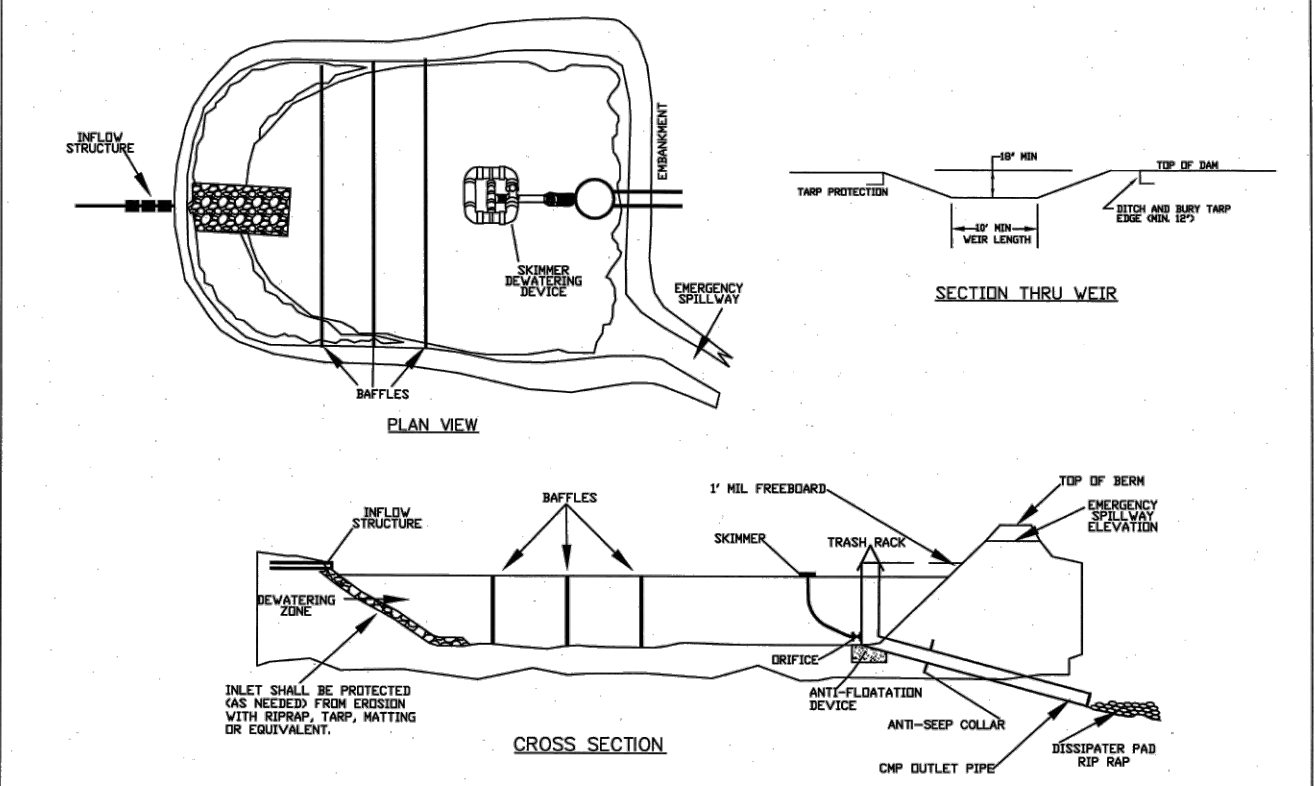
STANDARD SKIMMER DETAIL



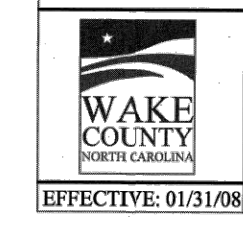
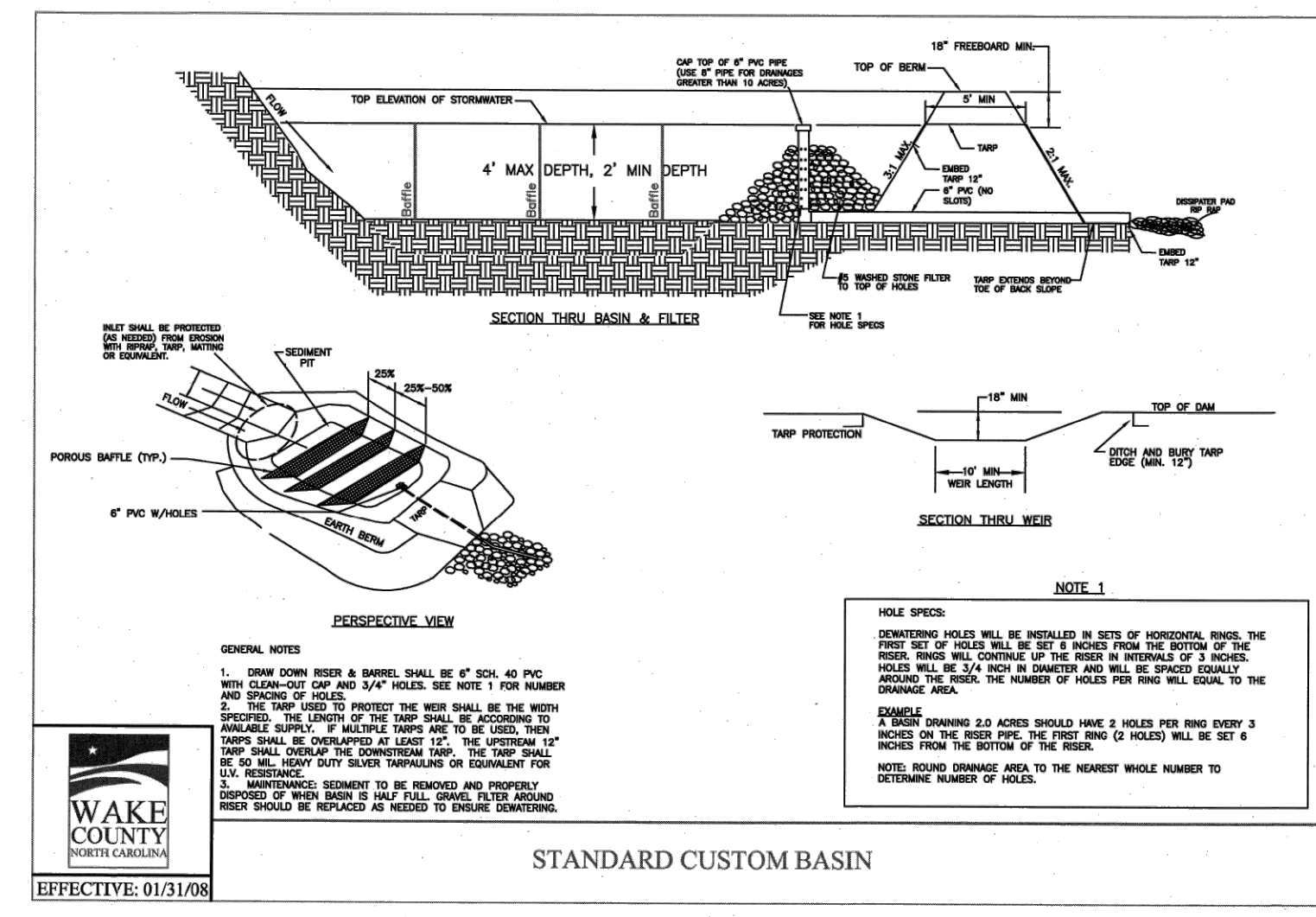
STANDARD FILTER BAG FOR DEWATERING ACTIVITIES



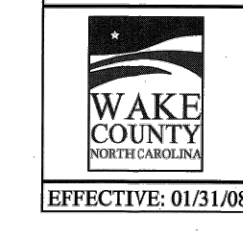
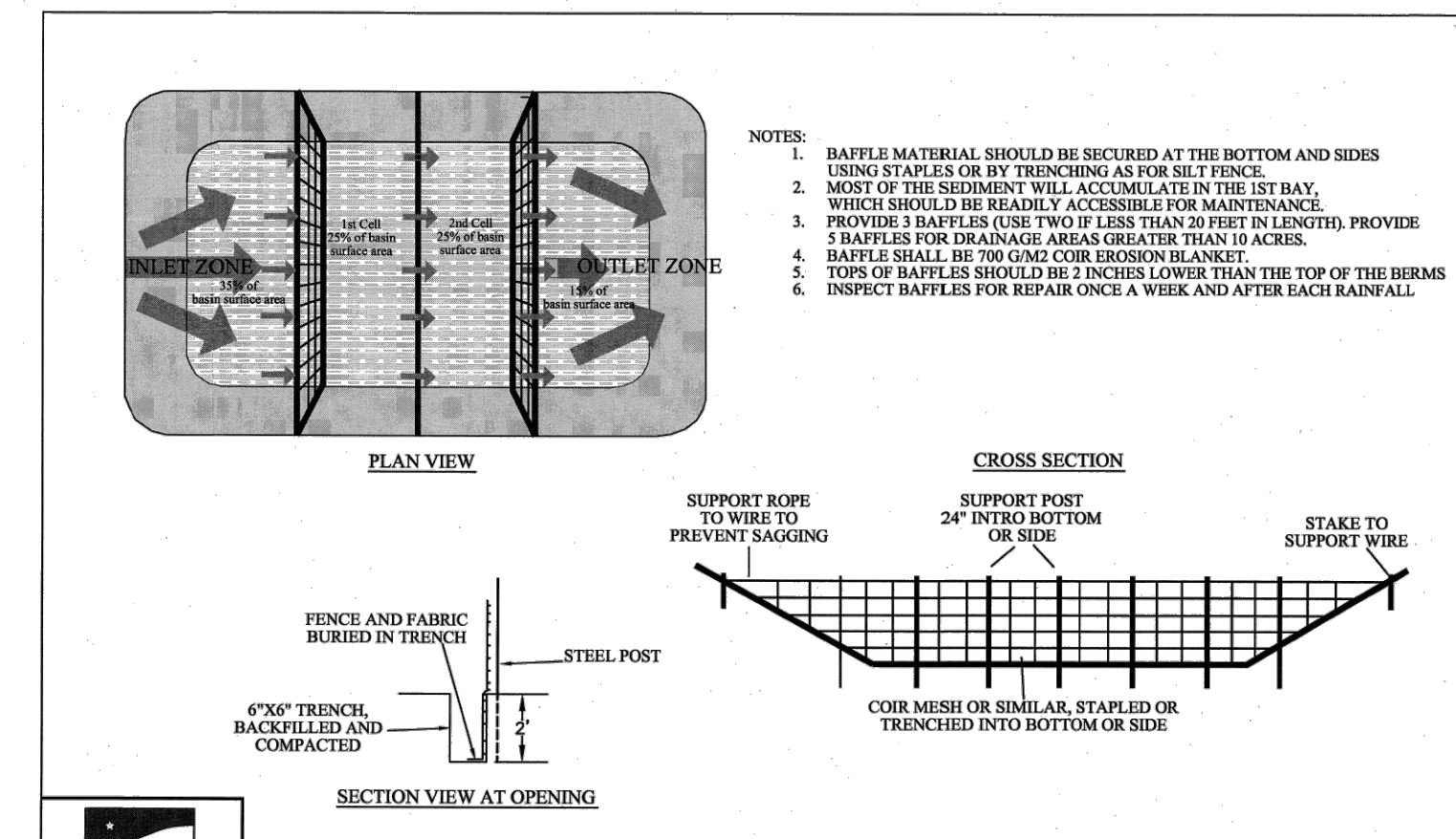
STANDARD SKIMMER BASIN



STANDARD SKIMMER ATTACHED TO PERMANENT RISER



STANDARD CUSTOM BASIN



STANDARD BAFFLES DETAIL

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	
		Weir (ft)	Depth (ft)						Weir (ft)	Size (in)
SSB-1	Skimmer Sediment Basin	20	0.2	1.5	2.0	3.0	92	39	2.00	1.00

Device ID	Device Type	Add'l Flow (cfs)	Disturbed Area (AC)	Tc (min)	Intensity (in/hr)*	C	Qreq (cfs)	Up Invert	Down Invert	Length (ft)	Base Width (ft)	Left Slope (x:1)	Right Slope (x:1)	Flow Depth (ft)	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 <sup>2</sup> )	Liner Type	Allowable Shear Stress, τ (lbs/ft <sup>2</sup> )
TDD-2	Temporary Diversion	0.0	0.80	5	7.18	0.5	2.87	397.5	387.5	475	1	3	3	1.12	0.020	0.02105	4.85	7.40	0.66	0.59	2.87	Yes	1.466147893	N. Am. Green; Straw; 1 nets	1.55

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



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