Pender County

Agenda

Pender County Technical Review Committee Meeting
Thursday, November 2, 2023 @ 9:00 AM
Pender County Public Assembly Room

		Presenter	Page
1.	CALL TO ORDER		
2.	CASES		
2.1.	REZONE 2023-57 REZONE 2023-57 - Pdf		3 - 11
2.2.	MDP 2023-60 MDP 2023-60 - Pdf		13 - 23
2.3.	SDP 2023-362 SDP 2023-362 - Pdf		25 - 31
2.4.	SUBMAJ 2023-101 SUBMAJ 2023-101 - Pdf		33 - 100
2.5.	PR 117-2023 SDP 2023-363 - Pdf		101 - 137
3.	ADJOURNMENT		

Pender County
Wooten CZ

TO:	Technical Review Committee
FROM:	Justin Brantley
DATE:	November 2, 2023
SUBJECT:	REZONE 2023-57

SUMMARY:
Conditional Rezoning application for the expansion of an existing Industrial Site located at the Corner of Porter Road and Malpass Corner Road. The existing industrial site was originally approved as a Special Use Permit in 1988 for Lumber Manufacturing. At this time the owner wishes to seek the allowance of additional uses for the site as well as to expand the development into two adjacent parcels that are under the same ownership. The subject properties total 59 acres.

ACTION REQUESTED:
Case will be removed by the TRC

ATTACHMENTS:
1. Application
2. Narrative & Uses
3. Site Plan

APPLICATION FOR CONDITIONAL REZONING

THIS SECTION FOR OFFICE USE			
Application No.	**ZMA-CD** REZONE 2023-57 CZMA	**Date**	10/16/2023
Application Fee	$ 1,040.70	**Invoice Number:**	00036347
Pre-Application Conference	N/A	**Hearing Date**	TBA

SECTION 1: APPLICANT INFORMATION

Applicant's Name:	TW+AG Timber, LLC	**Owner's Name:**	TW+AG Timber, LLC
Applicant's Address:	8155 Malpass Corner	**Owner's Address:**	←
City, State, & Zip	Currie, NC 28435	**City, State, & Zip**	←
Phone Number:	910-604-0049	**Phone Number:**	←
Email Address:	Wesley@lewisfarmandliquidwaste.com	**Email Address:**	←

Legal relationship of applicant to landowner: SAME

SECTION 2: PROJECT INFORMATION

Property Identification Number (PIN):	2276-79-7246	**Total property acreage:**	37.62
Current Zoning District:	RA (Special Use)	**Proposed Zoning District:**	Conditional Zoning
Project Address or Location:	1753 Porter Road Currie, NC 28435		

Proposed Uses to be Considered (Include NAICS Code):

332311 and 332322
(and Proposed Uses Attached)

Proposed Uses to be Eliminated from Consideration (Include NAICS Code):

ELIMINATE OTHER USES IN TABLE - EXCEPT THOSE LISTED

SECTION 3: SIGNATURES

Applicant's Signature		**Date:**	
Applicant's Name Printed	Wesley Wooten	**Date:**	10-10-23
Owner's Signature	[signature]	**Date:**	10-10-2023
Owner's Name Printed	Wesley Wooten	**Date:**	10-10-23

NOTICE TO APPLICANT

1. Applicant must also submit the information described on the Rezoning Checklist.
2. Applicant or agent authorized in writing must attend the public hearing.
3. Once the public hearing has been advertised, the case will be heard unless the applicant withdraws the application or unless the Planning Board or other authorized person agrees to table or delay the hearing.
4. All fees are non-refundable
5. A complete application packet must be submitted prior to the deadline in order to be placed on the next Planning Board Agenda

APPLICATION FOR CONDITIONAL REZONING

THIS SECTION FOR OFFICE USE			
Application No.	**ZMA-CD** REZONE 2023-57 CZMA	**Date**	10/16/2023
Application Fee	$ 1,040.70	**Invoice Number:**	00036347
Pre-Application Conference	N/A	**Hearing Date**	TBA

SECTION 1: APPLICANT INFORMATION

Applicant's Name:	TW AG + Timber, LLC	**Owner's Name:**	TW AG + Timber LLC
Applicant's Address:	8155 Malpass Corner	**Owner's Address:**	8155 Malpass Corner
City, State, & Zip	Currie, NC 28435	**City, State, & Zip**	Currie, NC 28435
Phone Number:	910-604-0049	**Phone Number:**	←
Email Address:	Wesley@lcwisfarmandliquidwaste.com	**Email Address:**	←

Legal relationship of applicant to landowner: SAME

SECTION 2: PROJECT INFORMATION

Property Identification Number (PIN):	2276-99-3080	**Total property acreage:**	1.21
Current Zoning District:	Agriculture	**Proposed Zoning District:**	CZ
Project Address or Location:	Porter Road		

Proposed Uses to be Considered (Include NAICS Code):

(See attached list of proposed uses)

Proposed Uses to be Eliminated from Consideration (Include NAICS Code):

(Eliminate all others on Table of Use list Except those on attached list)

SECTION 3: SIGNATURES

Applicant's Signature		**Date:**	
Applicant's Name Printed	Wesley Wooten	**Date:**	10-10-23
Owner's Signature		**Date:**	10-10-23
Owner's Name Printed		**Date:**	

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Application Fee	$ 1,040.70	**Invoice Number:**	00036347
Pre-Application Conference	N/A	**Hearing Date**	TBA

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Applicant's Name:	TW AG + Timber, LLC	**Owner's Name:**	TW AG + Timber LLC
Applicant's Address:	8155 Malpass Corner	**Owner's Address:**	8155 Malpass Corner
City, State, & Zip	Currie, NC 28435	**City, State, & Zip**	Currie, NC 28435
Phone Number:	910-604-0049	**Phone Number:**	←
Email Address:	Wesley@lewisfarmandliquidwaste.com	**Email Address:**	←

Legal relationship of applicant to landowner: SAME

SECTION 2: PROJECT INFORMATION

Property Identification Number (PIN):	2276-78-2161	**Total property acreage:**	20.24
Current Zoning District:	Agriculture	**Proposed Zoning District:**	Conditional - CZ
Project Address or Location:	PORTER ROAD		

Proposed Uses to be Considered (Include NAICS Code):

(See attached list of proposed uses)

Proposed Uses to be Eliminated from Consideration (Include NAICS Code):

(Eliminate all others on Table of Use list Except those on attached list)

SECTION 3: SIGNATURES

Applicant's Signature		**Date:**	
Applicant's Name Printed	Wesley Wooten	**Date:**	10-10-23
Owner's Signature		**Date:**	10-10-23
Owner's Name Printed		**Date:**	

NOTICE TO APPLICANT

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October 12, 2023

Pender County Planning
805 South Walker Street
Burgaw, NC 28425

RE: Porter Road Conditional Zoning

Pender County Planning Department:

We submit the following to serve as the application description as a part of the Conditional Zoning request for the Porter Road Parcels owned by TW AG & Timber, LLC.

The applicant, TW AG & Timber, LLC, is applying for approval of a Conditional Zoning for 3 tracts of land. They are located at Malpass Corner Road and Porter Road. TW AG & Timber are the owners of all 3 parcels. The parcels have a combined acreage of 59.07.

Current Parcel Information:

Owner:	TW AG & Timber, LLC
Property Address:	1753 Porter Road, Currie, NC 28435
PIN:	2276-79-7246-0000
Zoning:	RA (Special use from 1988) Lumber and Lumber Manufacturing
Acreage:	37.62

Owner:	TW AG & Timber, LLC
Property Adress:	Porter Road
PIN:	2276-78-2161-0000
Zoning:	Agriculture
Acreage:	20.24

Owner:	TW AG & Timber, LLC
Property Address:	Porter Road
PIN:	2276-89-3080-0000
Zoning:	Agriculture
Acres:	1.21 acres

This property operated as a Lumber and Lumber Manufacturing facility for 32 years and the Owner decided to relocate. TW AG & Timber purchased the property in 2021. They have improved many items on said property (storm drainage, landscaping and building maintenance) over the last couple of years and have started looking for a tenants. Recently, a metal building company who provides metal building components and roofing would like to lease a portion of the property that was formerly the lumber company.

The neighboring 2 parcels were purchased by TW AG Timber last year. They do not have any structures on them and are currently zoned RA. We would like the Conditional Zoning to incorporate all 3 parcels listed above.

We would like to request a Conditional Rezoning for the following proposed uses:

ACCESSORY USES AND STRUCTURES
Agritourism Activities on active farms

SECTOR 22: UTILITIES	
Natural Gas Distribution Except Transmission Lines	221210
Water Supply Facilities	221310
SECTOR 23: CONSTRUCTION	
Construction of Buildings	236
Specialty Trade Contractors	238
Sectors 31-33: MANUFACTURING:	
Artisan Manufacturing	
Food Manufacturing	311
Beverage Tobacco Product Manufacturing	312
Textile Mills	313
Textile Product Mills	314
Apparel Manufacturing	315
Wood Product Manufacturing	321
Truss Manufacturing	321214
Prefabricated Wood Building Manufacturing	321992
Prefabricated Metal Building and Component Manufacturing	332311
Printing and Related Support Activities	323
Soap, Cleaning Compound and Toilet Preparation Manufacturing	3256
Fabricated Product Manufacturing	332
Machine Shops; Turned Product; and Screw, Nut and Bold Manufact.	3327
Machinery Manufacturing	333
Computer & Electronic Product Manufacturing	334
Electrical Equipment, Appliance, & Component Manufacturing	335
Transportation Equipment Manufacturing	336
Furniture and Related Product Manufacturing	337

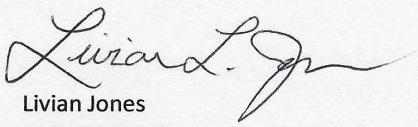
Redi-Mix Concrete Manufacturing	32733
Other Concrete Manufacturing	32739
Fabricated Product Manufacturing	332
Machine Shops: Turned Product; and Screw, Nut and Bolt Manufact.	3327
Miscellaneous Manufacturing	339
Sector 42: WHOLESALE TRADE	
Wholesale Trade	42
Sector 48-49: TRANSPORTATION AND WAREHOUSING:	
Truck Transportation	484
Charter Bus Industry	4855
Support Activities for Transportation	4881
Support Activities for Road Transportation	4884
Warehousing and Storage	493
Sector 53: REAL ESTATE AND RENTAL AND LEASING	
Real Estate and Rental and Leasing	53
Commercial and Industrial Machinery and Equipment	5324
Sector 54: PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES	54
Sector 55: MANAGEMENT OF COMPANIES AND ENTERPRISES	55
Sector 56: ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMDIATION SERVICES	
Administrative and Support Services	561
Solid Waste Collection Public	562111
Solid Waste Collection Private	562111
Other Nonhazardous Waste Treatment and Disposal	562219
Remediation Services	562910
Materials Recovery Facilities	562920
All Other Waste Management Facilities	56299
Sector 61: EDUCATIONAL SERVICES	
Technical and Trade Schools	6115
Sector 81: OTHER SERVICES EXCEPT PUBLIC ADMINISTRATION	
Automotive Repair and Maintenance	8111
Electronic and Precision Equipment Repair and Maintenance	8112
Commercial and Industrial Machinery and Equipment Repair	8113
Linen & Uniform Supply	81233

MISCELLANEOUS:

Bona fide Farm Purposes
Industrial Park
Portable Storage Containers
Storage of Merchandise, Materials or Equipment on Site

Telecommunication Facilities
Temporary Manufactured Homes
Temporary Modular/Manufactured Offices
Temporary Buildings for Construction or Development

Please let me know if you have any questions.
Thanks -



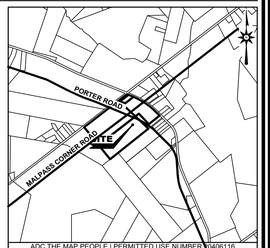
Livian Jones
910-520-3943

LEGEND

ITEM	EXISTING
DIRT LANE	
COMPACTED GRAVEL COVER	
IMPERVIOUS SURFACED ROAD, DRIVE OR PARKING LOT	
CONCRETE SIDEWALK, SLAB / PAVING	
TREE LINE	
CHAIN/LINK FENCE	
STRUCTURE (CONCRETE, WOOD, METAL, ETC.)	
EASEMENT	
DRAINAGE DITCH OR SWALE	
BUILDING RESTRICTION LINE	
PROPERTY OR RIGHT-OF-WAY LINE	
ADJACENT PROPERTY LINE	
STORMWATER FACILITY	
OVERHEAD ELECTRIC LINE	
ROAD CENTERLINE	
LIGHT POLE	☼
SIGN	▲

SITE DATA

1.	OWNER OF RECORD:	TW AG & TIMBER LLC 8155 MALPASS CORNER ROAD CURRIE, NC 28435
2.	SURVEYOR:	JONATHAN MURPHY, PLS. 10505 LEAFWOOD PLACE RALEIGH, NC 27613 919-280-8189
3.	ENGINEER:	BECKER MORGAN GROUP INC. 3333 JAECKLE DRIVE, SUITE 120 WILMINGTON, NC 28403 910-341-7600
4.	PROPERTY MAP NUMBER:	2276-79-7246-0000, 2276-78-2161-0000, 2276-89-3080-0000
5.	ZONING CLASSIFICATION:	EXISTING: RA-RURAL AGRICULTURAL / (PENDER COUNTY) PROPOSED: MIXED USE / (PENDER COUNTY)
6.	DEED SUMMARY:	4775/2417, 363/595, 339/394
7.	PLAT REFERENCE:	N/A
8.	PRESENT USE:	INDUSTRIAL
9.	PROPOSED USE:	MIXED USE CONDITIONAL ZONING
10.	TOTAL SITE AREA:	37.62 ACRES
11.	FEMA: MAP: EFFECTIVE DATE:	PARCEL IS NOT IN FLOOD HAZARD AREA. DESIGNATION IS ZONE "X" 3720227600K 12/6/2019
12.	SETBACKS:	MIXED USE FRONT: 30 FT. SIDE: 15 FT. REAR: 25 FT.
13.	BUFFER REQUIREMENT:	TYPE-C (10' - 25' TYP.)
14.	SIGNAGE	FUTURE PERMIT SUBMISSION
15.	OUTDOOR LIGHTING:	<LIGHTING REQUIREMENT>
17.	MONUMENTATION:	EXISTING: 9 FOUND PROPOSED: 0 SET



ADC THE MAP PEOPLE | PERMITTED USE NUMBER 10406116

VICINITY MAP SCALE: 1" = 2000'

MALPASS CORNER ROAD
60' PUBLIC RIGHT-OF-WAY
N 51° 39' 45" E 1752.03'
TYPE C BUFFER (TYP.)
EX. MONUMENT SIGN
15' B.R.L.
N/F LANDS OF WOLFE TIMBER LLC TM: 2276-68-4163-0000 DEED REFERENCE: 2560/310
N/F TURNER LANDS TM: 2276-79-7246-0000 DEED REFERENCE: 4775/2417
TRACT 1
TRACT 2
TRACT 3
SINGLE-STORY BUILDING GFA: 10,629 SF
GRAVEL DRIVE ± 3,717 SF
SINGLE-STORY BUILDING GFA: 3,672 SF
GRASSED AREA
SINGLE-STORY BUILDING GFA: 3,254 SF
PUBLIC ACCESS
SLIDING ACCESS GATE: ± 26'
EX. SITE LIGHTING
APPROXIMATE AREA OF DRAINAGE SWALES
S 40° 39' 25" E 1019.14'
DIRT PATH
N 38° 21' 18" W 746.27'
EX. 6' CHAIN LINK FENCE (TYP.)
SINGLE-STORY BUILDING GFA: 10,272 SF
GRAVEL AREA ±46,819 SF
SINGLE-STORY METAL FRAME BUILDING GFA: 22,034 SF
2-10'X20' SHEDS
SINGLE-STORY METAL FRAME BUILDING GFA: 7,346 SF
PAVED AREA
KILN BUILDINGS
EX. CONCRETE PADS
SINGLE-STORY METAL FRAME BUILDING GFA: 28,523 SF
20'X32' SHED
SINGLE-STORY BUILDING GFA: 5,463 SF
SINGLE-STORY BUILDING GFA: 11,106 SF
SINGLE-STORY BUILDING GFA: 1,852 SF
EXISTING STORMWATER MANAGEMENT FACILITY
APPROXIMATE LOCATION OF DRAINAGE SWALES
EXISTING TREES
30' ELECTRIC EASEMENT MB 29 PG 17
PORTER ROAD
60' PUBLIC RIGHT-OF-WAY
TOTAL AREA 1,638,922 SF 37.624 AC
SINGLE-STORY METAL FRAME BUILDING GFA: 17,915 SF
SINGLE-STORY METAL FRAME BUILDING GFA: 17,319 SF
SINGLE-STORY METAL FRAME BUILDING GFA: 18,454 SF
SINGLE-STORY METAL FRAME BUILDING GFA: 10,191 SF
RADIUS: 1861.56'
ARC LENGTH: 512.45'
CHD. BRG: S 52° 31' 57" E
CHD. LENGTH: 510.83'
N/F LANDS OF JOHN ROWE TM: 2276-89-3080-0000 DEED REFERENCE: 339/394
N/F LANDS OF JOHN ROWE TM: 2276-78-2161-0000 DEED REFERENCE: 363/595
50' BUILDING SETBACK
FENCE ENCROACHEMENT IS AS SHOWN
N/F LANDS OF JIMMY LEE MCDUFFIE TM: 2276-88-7996-0000
N/F LANDS OF GARY LEE EABRIGO TM: 2276-88-2292-0000
N 50° 35' 32" E 116.78'
S 50° 39' 28" W 443.66'
S 44° 38' 45" E 235.61'
N 38° 20' 39" W 599.63'
S 51° 26' 55" W 1653.59'

0 40 80 160

SCALE: 1" = 80'

C:\Users\mevans\OneDrive - BECKER MORGAN GROUP C O PORT EXCHA\Desktop\Working\202316500-SITE-C3D21-NC.dwg, Jun 13, 2023 - 2:51pm

BECKER MORGAN GROUP

ARCHITECTURE
ENGINEERING

Delaware
309 South Governors Avenue
Dover, DE 19904
302.734.7950
The Tower at STAR Campus
100 Discovery Boulevard, Suite 102
Newark, DE 19713
302.369.3700

Maryland
312 West Main Street, Suite 300
Salisbury, MD 21801
410.546.9100

North Carolina
3333 Jaeckle Drive, Suite 120
Wilmington, NC 28403
910.341.7600

www.beckermorgan.com

PROJECT TITLE

PORTER ROAD REZONING

1753 PORTER ROAD
CURRIE, NC
PENDER COUNTY

SHEET TITLE

SITE PLAN

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER ESTATE_BTL

PROJECT NO.:	2023047.00
DATE:	06/12/2023
SCALE:	1" = 80'
DRAWN BY: MEE	PROJ. MGR.: MDS

SHEET

SITE

COPYRIGHT 2023

Pender County
Signature Auto Sports

TO:	Technical Review Committee
FROM:	Taylor Davis
DATE:	November 2, 2023
SUBJECT:	MDP 2023-60

SUMMARY:
Plans submitted for a two-phase development consisting of a car dealership, office, parts department, showroom, and auto shop. Phase two will consist of six buildings with uses associated to a car dealership and auto shop.

ACTION REQUESTED:
Case will be reviewed by the TRC

ATTACHMENTS:
1. Application
2. Site Plan

Pender County
Planning and Community Development

805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

By- Right Master Development Plan Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

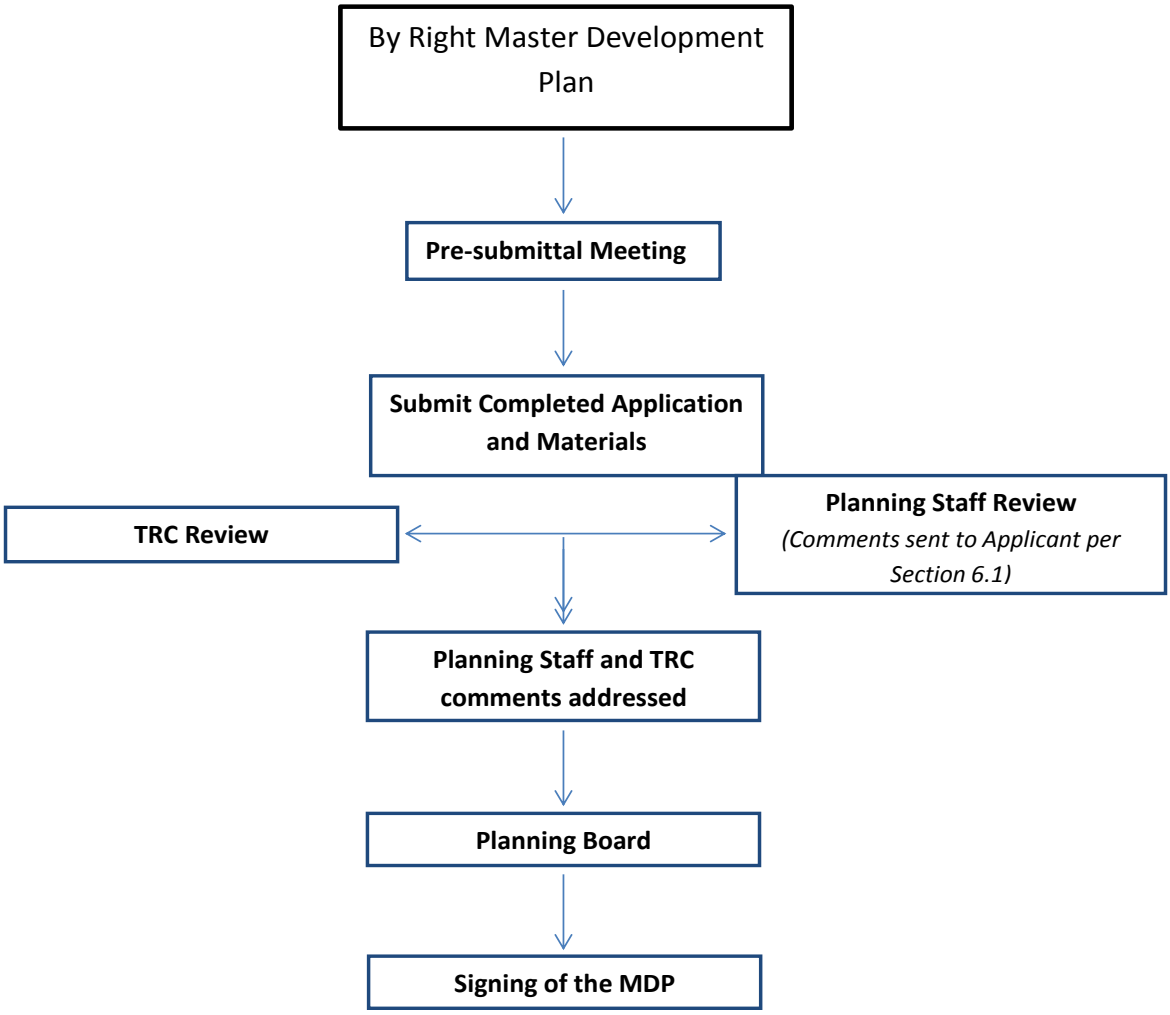
1. _____ **Pre-submittal Meeting**
   Date of Meeting _____
2. _____ **Signed Application**
3. _____ **Payment**
   $500 plus $10 per acre for the first 100 acres, $5 per acre thereafter
4. _____ **Paper Plan Sets**
   One (1) 24 x 36, Fifteen (15) 11 x 17
5. _____ **Digital Submission**
   For all documents submitted in paper copy, bring a digital copy with paper submission.
6. _____ **Adjacent Property List**
   A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the of the perimeter of the project bounds.
7. _____ **Adjacent Property Envelopes**
   The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. _____ **Permits**
   Include any permits issued on the project including but not limited to: environmental, traffic analysis, utility, or other site specific conditions.
9. _____ **Site Plan Requirements**
   A prepared site plan in accordance with the Unified Development Ordinance standards 6.1, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.
   (See Master Development Plan Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant _____ Date 9/20/23

Printed Name Anthony C. Braam

Staff Initials: _____
Date: _____


By Right Master Development Plan
Pre-submittal Meeting
Submit Completed Application and Materials
TRC Review
Planning Staff Review
(Comments sent to Applicant per Section 6.1)
Planning Staff and TRC comments addressed
Planning Board
Signing of the MDP

		Meeting Date	Complete Application Due Date
TRC	**January**	1.8.20	12.13.19
	February	2.5.20	1.17.20
	March	3.4.20	2.14.20
	April	4.1.20	3.13.20
	May	5.6.20	4.17.20
	June	6.3.20	5.15.20
	July	7.1.20	6.12.20
	August	8.5.20	7.17.20
	September	9.2.20	8.14.20
	October	10.7.20	9.18.20
	November	11.4.20	10.16.20
	December	12.2.20	11.13.20

Complete Application Date: All documents must be received by 12PM on the deadline date to be considered a complete application.

Specific requirements can be found in Section 6.1 of the Pender County Unified Development Ordinance

Master Development Plan Specific Requirements

1. Project Narrative - Site plans shall contain a conceptual plan, showing the location and functional relationship between all proposed housing types and land uses, including the following information:

- A land use plan, showing the location, arrangement and approximate boundaries of all proposed land uses.
- The location and approximate boundaries of proposed housing types conceptually shown in accord and with other non-residential uses dimensional requirements.
- The proposed number of dwelling units of each type in each phase and in the total development accompanied by density calculation of the development.
- The location and approximate boundaries of existing environmental features as defined.
- The location of environmental protection land to be included in common open space.
- The approximate acreage in common open space, each use, housing type and in roads, streets or right-of-ways for each phase and the total development.
- Open space labeled Cleary with Acreages (per Section 7.6)
  - Open Space
  - Passive Open Space acreage
  - Active Open Space acreage
- The location and general configuration of recreational facilities, with a general statement of the types of recreational facilities to be provided if applicable.
- The location and extent of proposed buffers, with statements, profiles, cross sections or examples clearly specifying the screening to be provided if applicable.

2. Density

- Non-Residential Acreage
- Wetlands Acreage
- Passive Open space Acreage
- Active Open Space Acreage
- Right of Way Acreage
- Total Units
- Developable Land
- Net Density

3. Location Guidelines

- The approximate location of sewer and water mains, sewage disposal and water source with statements concerning the connection with and availability of existing facilities.
- Letter of intent if a private wastewater service provider will be utilized
- A conceptual plan for stormwater management with the location of stormwater facilities designed to serve more than one lot.
- The location and treatment proposed for all historical structures and sites recognized as significant by the County Commissioners or as identified on any historical landmarks survey for Pender County.
- Calculations describing all proposed bonus factors with the location of and specifications for bonus improvements, when proposed.
- Location and timing of construction for all amenities.
- Landscaping and Buffer requirements per Article 8.

Specific requirements can be found in Section 6.1 of the Pender County Unified Development Ordinance

4. Lot Design (per Section 7.2)

- Access easements have not been included to meet any minimum lot area
- Lots shall be arranged to allow for the opening of future streets
- Lots that have double frontage on streets are prohibited except where it provides separation of residential development from traffic arteries. A buffer of at least 10 feet in width with no right of access abutting such traffic arteries shall be provided on these double frontage lots. - lots are near right angles or radial to street lines have been provided.
- Lot boundaries coincide with natural, existing and new drainage

5. Roadways

- The location and arrangement of street entrances, driveways and parking areas.
- The use of adjoining parcels and the location of adjoining streets and utilities.

6. Traffic - A Traffic Impact Analysis is required when the development generates 100 trips in the morning or evening peak hours or over 1,000 trips per day. The Traffic Impact Analysis must state the dates and times the counts were conducted.

- Estimated AM and PM Peak Hour Trips per the Institute of Transportation Engineers Trip Generation Manual.
- Estimated Average Daily Trips created by the development at build-out per the Institute of Transportation Engineers Trip Generation Manual.

7. Access (per Section7.4)

- All lots shall have direct or indirect access to a public street, private street, or private access easement.
- Access must provide a reasonable means of ingress and egress for emergency vehicles as well as for all those likely to need or desire access to the property in its intended use.

8. Private streets - will be subject to requirements to construct public collector streets under any of the following conditions (per Section 7.5.3.C)

- Dimension of more than 5280 ft.,
- Any street in the subdivision has the potential to serve more than 200 residential or commercial units,
- Access to any lot or unit in the subdivision is more than 5280 ft. by a private street to a public street,
- Existing public streets have been dedicated or constructed to the property line of the subdivision,
- Access to adjacent properties will be hindered as a result of private streets being allowed in the subdivision.

9. Public and Private Street Design (per Section 7.5.1)

- Adjoining street systems
- Existing, planned and proposed streets, topographic, drainage and other natural features of the property
- Continuity in existing streets and proposed streets,
- Public roadways
- Both Public and Private streets designed must be constructed in compliance with the current NCDOT Subdivision Roads Minimum Construction Standards

Specific requirements can be found in Section 6.1 of the Pender County Unified Development Ordinance

10. Specific Standards

- Adequate right-of-way for collector streets
- Reasonable access provided to adjacent properties for development
- No spite strips
- Street intersections are directly aligned if possible.
- If not aligned not offset centerline to centerline by not less than 125 ft.
- intersect as nearly as possible at right angles
- Permanent dead end streets (cul-de-sacs) or temporary dead end (stub) streets are longer than 1,000 ft.
- Street name approval from the Pender County Addressing Coordinator.
- Sight triangles as required in the NCDOT

11. Adopted Plan Compliance

- Compliance with all adopted plans and Ordinances of Pender County
- Collector Roadways have been shown Per the Pender County Collector Street Plan

Pender County
Planning and Community Development

Planning Division
805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

MASTER DEVELOPMENT PLAN

Prior to submission of a preliminary master development plan for approval, the applicant shall request a pre-application review conference with the County staff.

1. The purpose of the pre-application conference shall be to discuss the proposal in relation to the requirements of the Land Use Plan and UDO and to obtain advice on the preparation of the master development plan.
2. At the pre-application conference, the applicant shall provide a land use plan describing the following:
    a. The general location of the site.
    b. The general location of proposed roads.
    c. The general location of proposed uses, environmental areas, housing types or open space.
    d. The uses on adjoining properties.
    e. Utility requirements.

The purpose of the master development plan (MDP) is to promote orderly and planned development of property within Pender County. It is the purpose of the MDP to ensure that such development occurs in a manner that suits the characteristics of the land, is harmonious with adjoining property, is in substantial compliance with the goals and policies of the adopted Land Use Plan, and is in the best interest of the general public. The MDP shall be used to illustrate the characteristics of the property proposed for development and of surrounding properties.

**See Figures 2 and 3 at the end of Section 3.4, Pender County UDO for an illustrative process*

1. The MDP shall at least include all contiguous land under single or common ownership in the above zoning districts.
2. A preliminary MDP may be submitted with an application for a conditional rezoning but shall not be considered binding until approval of a final MDP.

Waivers to MDP – Residential Districts

The Administrator may waive the requirements of a MDP in the Residential Districts if the proposed development contains all of the following criteria:

1. Contains ten (10) or less traditional detached single-family dwelling units;
2. Is not an integral portion of a property proposed or planned for future development or subdivision;
3. Is planned to be developed in a manner that is harmonious with surrounding properties and land uses; and
4. Does not substantially affect the purpose and intent of its zoning district and the intent of this article.

Waivers to MDP – Commercial and Industrial Districts

The Administrator may waive the requirement of a MDP in the Commercial and Industrial Districts if the proposed development contains all of the following criteria:

1. If the proposed subdivision or development is less than five (5) acres in size;
2. Includes no new streets, roads or rights-of-way, does not further extend any existing or dedicated street, road or rights-of-way and does not significantly change the layout of any existing or dedicated street, road or rights-of-way;
3. Is not an integral portion of a property proposed or planned for future development or subdivision;
4. That such development is limited to one individual parcel and one single use in accordance with Section 5.2.

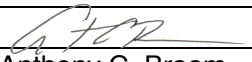
APPLICATION FOR MASTER DEVELOPMENT PLAN

THIS SECTION FOR OFFICE USE			
Application No.	**MDP** MDP 2023-60	**Date**	10.5.23
Application Fee	**$** 551.20	**Invoice Number:**	00036205
Pre-Application Conference		**Hearing Date**	TRC 11.2.23

SECTION 1: APPLICANT INFORMATION			
Applicant's Name:	RSC Engineering, PLLC	**Owner's Name:**	CCH Investments, LLC
Applicant's Address:	15226 US Hwy 17	**Owner's Address:**	138 Bump Along Rd
City, State, & Zip	Hampstead, NC 28443	**City, State, & Zip**	Wilmington, NC 28411
Phone Number:	919-219-2543	**Phone Number:**	910-465-0270
Email Address:	cliff@rscengineering.com	**Email Address:**	ospreycustom@gmail.com

Legal relationship of applicant to land owner: Authorized agent

SECTION 2: PROJECT INFORMATION			
Type of Master Development Plan	☐ **Residential** *RP, PD, RM MH District*	☒ **Commercial** *GB, OI, IT, GI District*	
Property Identification Number (PIN):	3235-62-6536-0000	**Total property acreage:**	5.12
Zoning Classification:	GB	**Acreage to be disturbed:**	5.12
Project Address :	Property does not currently have a street address		
Description of Project Location:	From the intersection of NC 210 & US 117 in Rocky Point, travel west on NC 210. Property is located 0.25 miles west on the right.		
Describe activities to be undertaken on project site:	Project will consist of 2 phases. Phase I will have a car dealership, showroom, office space, and parts department in building 1 and then a body shop in building 2. Phase II will consist of 6 buildings to be used for warehouse/storage space.		

SECTION 3: SIGNATURES			
Applicant's Signature		**Date:**	9/20/23
Applicant's Printed Name	Anthony C. Braam	**Date:**	9/20/23
Owner's Signature		**Date:**	9/20/23
Owner's Printed Name	Aaron Richardet	**Date:**	9/20/23

NOTICE TO APPLICANT

1. Applicant or agent authorized in writing must attend the public hearing.
2. Once the public hearing has been advertised, the case will be heard unless the applicant withdraws the application or unless the Planning Board or other authorized person agrees to table or delay the hearing.
3. All fees are non-refundable
4. A complete application packet must be submitted prior to the deadline in order to be placed on the next Planning Board Agenda

Office Use Only

☒	**MDP Fees: (***$500.00 plus $10/acre for the first 100 acres $5/acre thereafter)*	**Total Fee Calculation: $** 551.20

Attachments Included with Application: (Please include # of copies)

CD /other digital version	☒ Y ☐ N	Plan Sets	# of large	# of 11X17	Other documents/Reports	☐ Y ☐ N

Payment Method:	**Cash :** ☐ **$**_____	**Credit Card:** ☒ Master Card ☐ Visa	**Check:** ☐ Check # _____

Application received by:	Taylor Davis	Date: 10.5.23
Application completeness approved by:	Taylor Davis	Date: 10.5.23
Date scheduled for public hearing: TRC 11.2.23		

PROJECT INFORMATION
SIGNATURE AUTO SPORTS
NAISC CODES: 444120 - USED CAR DEALER
811121 - AUTO BODY REPAIR
493110 - GENERAL WAREHOUSING & STORAGE
PIN: 3235-62-6536-0000
PENDER COUNTY

PROPERTY OWNER
CCH INVESTMENTS
9100 SALEM STREET
WILMINGTON, NC 28411

ENGINEER
RSC ENGINEERING, PLLC
15226 US HWY 17
HAMPSTEAD, NC 28443

SITE DATA
REFERENCE: DB: 4818 PG 1919
ZONE GB: GENERAL BUSINESS
SETBACKS: FRONT=25', SIDE=10', REAR=10'

PARKING
BUILDING #1
VEHICLE SALES: (18,000 SF)(1 SPACE/500 SF) = 36 SPACES
2 SPACES SHOULD BE ADA COMPLIANT

BUILDING #2
LIGHT INDUSTRIAL: (6,000 SF)(1 SPACE/1000 SF) = 6 SPACES
1 SPACE SHOULD BE ADA COMPLIANT

BUILDING #3-#8
STORAGE: MIN 5 SPACES/BLDG)(6 BLDG) = 30 SPACES
1 SPACE PER BUILDING SHOULD BE ADA COMPLIANT

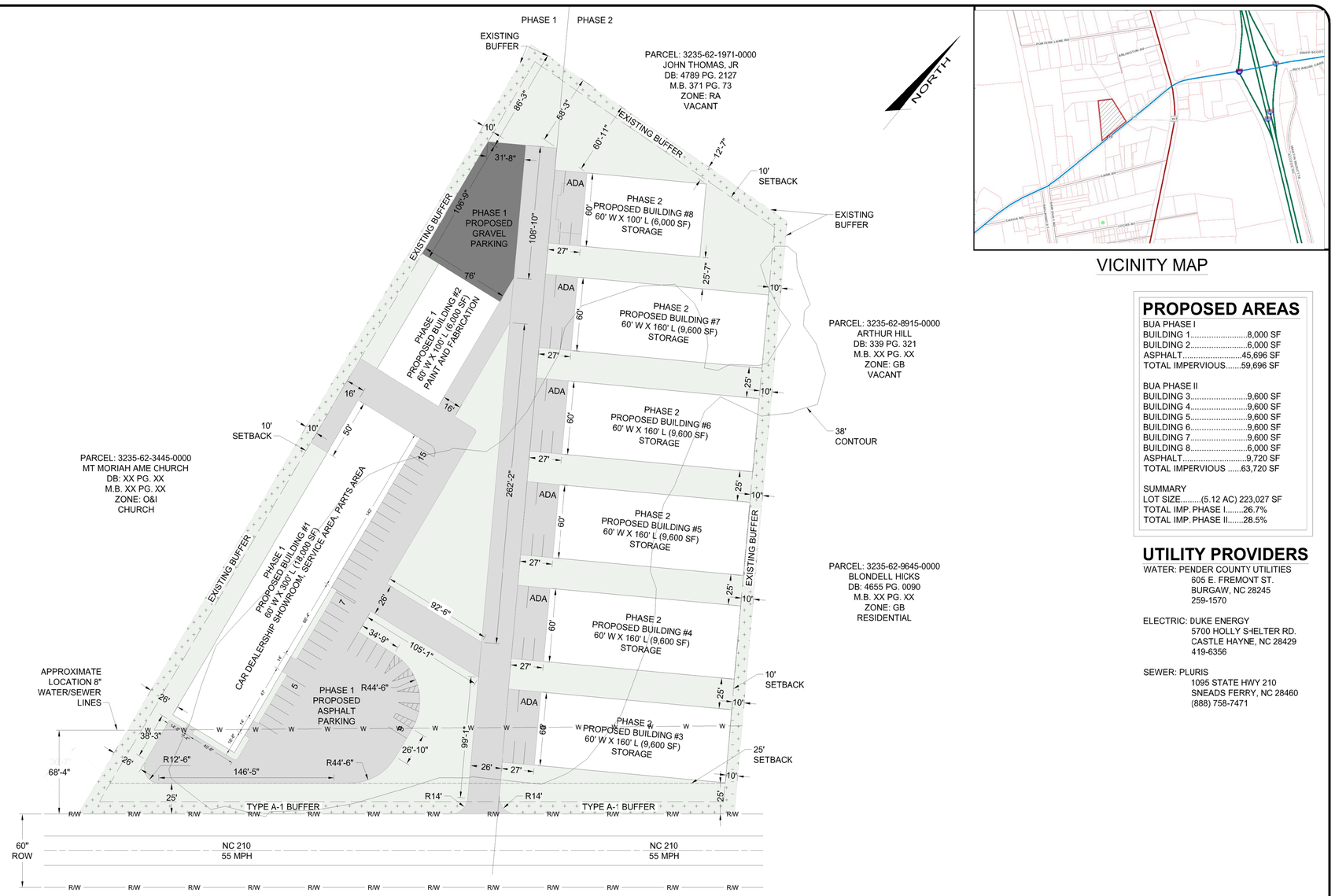
TRIP CALCULATIONS
DAILY TRIPS (ITE CODE)
-CAR SALES (841): 33.34 X 12 = 400
-PARTS & SERVICE (942): 15.85 X 12 = 190
-WAREHOUSING (150): 3.56 X 54 = 192

AM PEAK TRIPS (ITE CODE)
-CAR SALES (841): 2.03 X 12 = 24
-PARTS & SERVICE (942): 2.94 X 12 = 35
-WAREHOUSING (150): 0.30 X 54 = 16

PM PEAK TRIPS (ITE CODE)
-CAR SALES (841): 2.59 X 12 = 31
-PARTS & SERVICE (942): 3.38 X 12 = 41
-WAREHOUSING (150): 0.32 X 54 = 17

SIGN
SIGN LOCATION AND SIZE TO BE DETERMINED
ALL SIGNS WILL COMPLY WITH ARTICLE 9 OF THE PENDER COUNTY UDO

LANDSCAPING
SIDE AND REAR PROPERTY LINES WILL UTILIZE EXISTING BUFFERS
FRONT PROPERTY BOUNDARY WILL HAVE TYPE A-1 BUFFER INSTALLED



SITE PLAN
1"=40'

VICINITY MAP

PROPOSED AREAS

BUA PHASE I
BUILDING 1.....8,000 SF
BUILDING 2.....6,000 SF
ASPHALT.....45,696 SF
TOTAL IMPERVIOUS.....59,696 SF

BUA PHASE II
BUILDING 3.....9,600 SF
BUILDING 4.....9,600 SF
BUILDING 5.....9,600 SF
BUILDING 6.....9,600 SF
BUILDING 7.....9,600 SF
BUILDING 8.....6,000 SF
ASPHALT.....9,720 SF
TOTAL IMPERVIOUS .....63,720 SF

SUMMARY
LOT SIZE.....(5.12 AC) 223,027 SF
TOTAL IMP. PHASE I.....26.7%
TOTAL IMP. PHASE II.....28.5%

UTILITY PROVIDERS

WATER: PENDER COUNTY UTILITIES
605 E. FREMONT ST.
BURGAW, NC 28245
259-1570

ELECTRIC: DUKE ENERGY
5700 HOLLY SHELTER RD.
CASTLE HAYNE, NC 28429
419-6356

SEWER: PLURIS
1095 STATE HWY 210
SNEADS FERRY, NC 28460
(888) 758-7471

APPROVED BY THE PENDER COUNTY DEVELOPMENT ORDINANCE ADMINISTRATOR
ADMINISTRATOR SIGNATURE _____
APPROVAL DATE _____
SITE PLAN VALID FOR TWO (2) YEARS FROM APPROVAL DATE

40 0 20 40 80
1 INCH = 40 FEET

REVISIONS

RSC Engineering, PLLC
DESIGN & MAINTENANCE OF ALTERNATIVE LAND USES
RSC ENGINEERING, PLLC
15226 US HWY 17
HAMPSTEAD, NORTH CAROLINA 28443
PHONE: 910.270.9599 ~ FAX: 910.270.9592
E-Mail: sonya@rscengineering.com

SIGNATURE AUTO SPORTS
DEVELOPED BY
CCH INVESTMENTS, LLC
138 BLMP ALONG ROAD
WILMINGTON, NC 28411

SITE PLAN

DATE: 9/27/2023
SCALE: 1"=40'
JOB # 23094490
DRAWN BY: JDS
SHEET C-101

Pender County
Lark Lane Storage

TO:	Technical Review Committee
FROM:	Taylor Davis
DATE:	November 2, 2023
SUBJECT:	SDP 2023-362

SUMMARY:
Major Site Development Plan submitted for the development of a 3-story mini-storage facility with office.

ACTION REQUESTED:
Case will be reviewed by the TRC

ATTACHMENTS:
1. Application
2. Site Plan

Pender County
Planning and Community Development

Planning Division
805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

MAJOR AND MINOR SITE DEVELOPMENT APPLICATION

THIS SECTION FOR OFFICE USE			
Date: 10.9.23	**Permit Number:**	**Permit Fee:**	**Invoice Number:** 00036243
***Zoning Approval ONLY: YES / NO**		**Final Zoning Compliance Approved: YES / NO / N/A**	
Type of Site Development Plan:	☒ Major	☐ Minor	SDP 2023-362

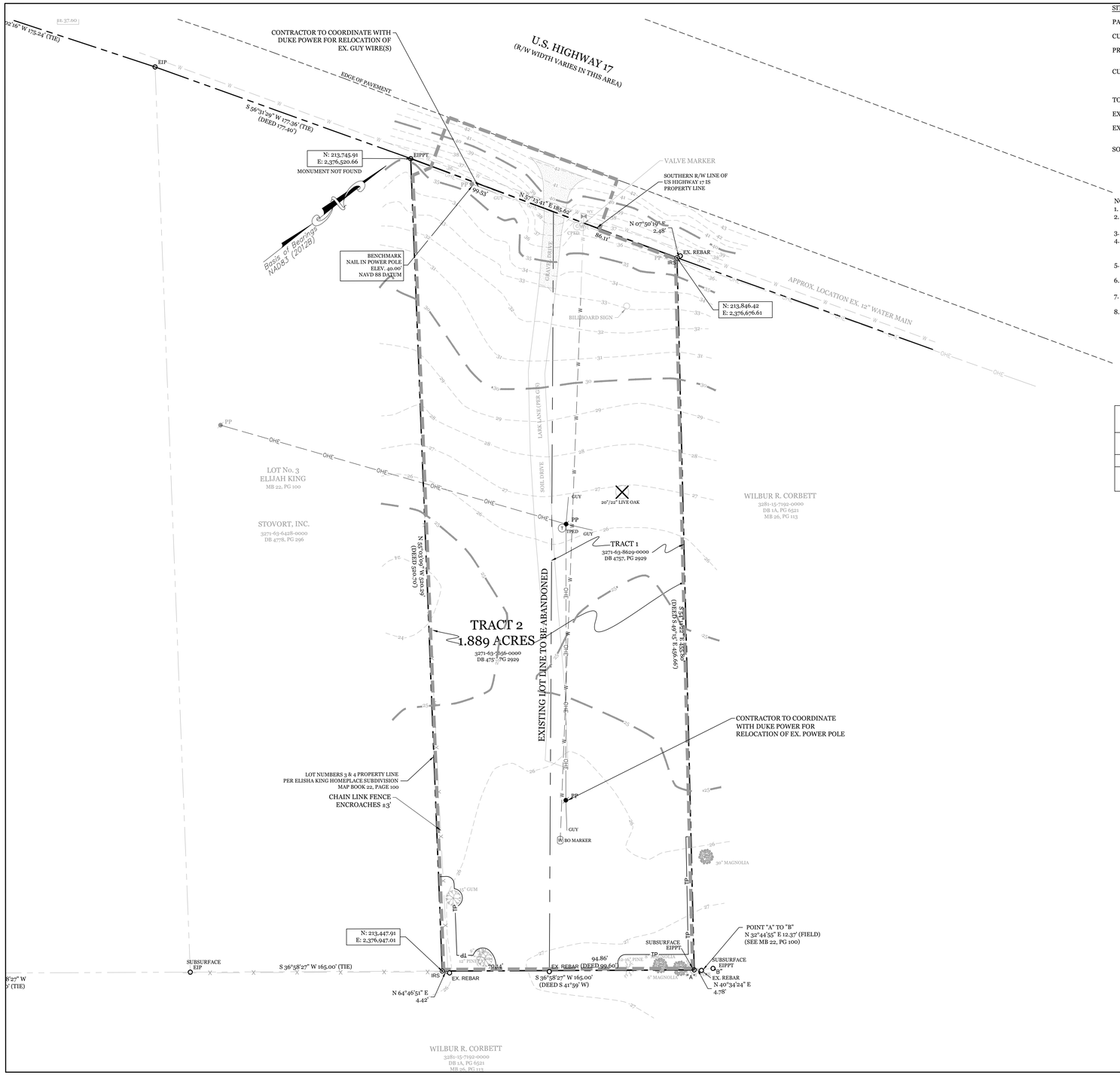
SECTION 1: GENERAL INFORMATION			
Applicant's Name:	Hill Storage, LLC (Chandu Patel)	**Property Owner's Name:**	Hill Storage, LLC (Chandu Patel)
Applicant's Address:	4191 Route-1	**Property Owner's Address:**	4191 Route-1
City, State, & Zip	Monmouth Junction, NJ 08852	**City, State, & Zip**	Monmouth Junction, NJ 08852
Phone Number:	609-6102734	**Phone Number:**	609-6102734
Email Address:	priyapatel114@gmail.com	**Email Address:**	priyapatel114@gmail.com
Legal relationship of applicant to land owner:	Applicant is the land owner		

SECTION 2: PROJECT INFORMATION			
PIN (Property Id #):	3271-63-7656-0000, 3271-63-8629-0000	**Total property acreage:**	1.89
Zoning :	GB	**Acreage to be disturbed:**	1.95
Directions to Site:	Project is located at the intersection of US-17 and Lark Ln.		

Lot Size: 1.89 ac		**Sq Ft of Building:** 30,000		**Building Height:** +/- 36' (3-Story)	
Setbacks	**Front:** 27'	**Side:** 12' / 55'		**Rear:** 129'	
NAICS Code/Use:	531130 / Mini Storage				
Business Name:	Patel Storage Scotts Hill				
Describe activities to be undertaken on project site:	Mini-Storage				
Ownership: ☒ Private ☐ Public	**Number of Employees:** 2/shift		**Number of Members:** NA		**Seating Capacity:** NA

If the applicant is not the owner of the property, a notarized letter from the property owner may be required
**Zoning approval is for the use being proposed ONLY, other department approvals may be required i.e, Fire Marshal, Environmental Health, Permitting, etc...*

SECTION 4: ADDITIONAL COMMENTS			
SECTION 5: SIGNATURES			
Applicant:	Walt	Date:	9/12/23
Owner:	Walt	Date:	9/12/23
Planning Staff:	Taylor Davis	Date:	10.9.23



SITE DATA

PARCEL ID:	3271-63-7656-0000, 3271-63-8629-0000
CURRENT ZONING:	GB
PROJECT ADDRESS:	LARK LN. WILMINGTON, NC 28411
CURRENT OWNER:	HILL STORAGE, LLC 4191 ROUTE 1 MONMOUTH JUNCTION, NJ 08852
TOTAL ACREAGE IN PROJECT BOUNDARY:	82,279 S.F. (± 1.89 ac.)
EXISTING USE:	VACANT SITE
EXISTING ONSITE IMPERVIOUS AREAS: SITE IS VACANT:	0.0 S.F.
SOIL TYPE:	AnB (Alpine fine sand) *(Per Pender County GIS)*

NOTES:
1. EXISTING SURVEY DATA PROVIDED BY V. DEREK DANFORD, PLS., L-4528
2. NO WETLANDS EXIST ON SITE PER SOUTHERN ENVIROMENTAL GROUP, INC. REPORT DATED 2/21/2023.
3. NO SURFACE WATERS EXIST WITHIN 50' OF THIS SITE.
4. THIS LOT IS LOCATED IN ZONE X AS PER FIRM COMMUNITY# 370344, MAP# 3720327100J, EFFECTIVE ON 02/16/2007 & (PRELIMINARY) PER FRIS ON FIRM MAP NUMBER 3720327100K DATED: 08/29/2014.
5. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, A CONSTRUCTION ENTRANCE AND SILT FENCING SHALL BE INSTALLED.
6. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
7. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
8. TREE PROTECTION SIGNAGE SHALL BE ADDED ALONG THE LIMITS OF DISTURBANCE ADJACENT TO TREES EVERY 100' TO PROTECT TREES ADJACENT TO THE CONSTRUCTION SITE.

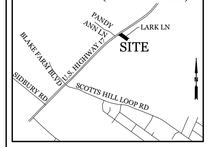
MITIGATION REQUIRED FOR REMOVAL OF SIGNIFICANT TREES

QTY	SIZE	TYPE	REPLACEMENT TREE QTY
1	42"	LIVE OAK	2.00
TOTAL REPLACEMENT TREES (2" CAL. MIN.)			**2**

LEGEND
- PROPERTY LINE
- ADJOINERS
- EXISTING EDGE OF PAVEMENT
- LIMITS OF DISTURBANCE
- TP — TREE PROTECTION FENCE
- TREES TO BE REMOVED

30' 15' 0' 30' 60'
Scale: 1"=30'

VICINITY MAP (NOT TO SCALE):



REVISIONS

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: 910.769.5645
Email: Charlie@intracoastalengineering.com
License Number: P-0662

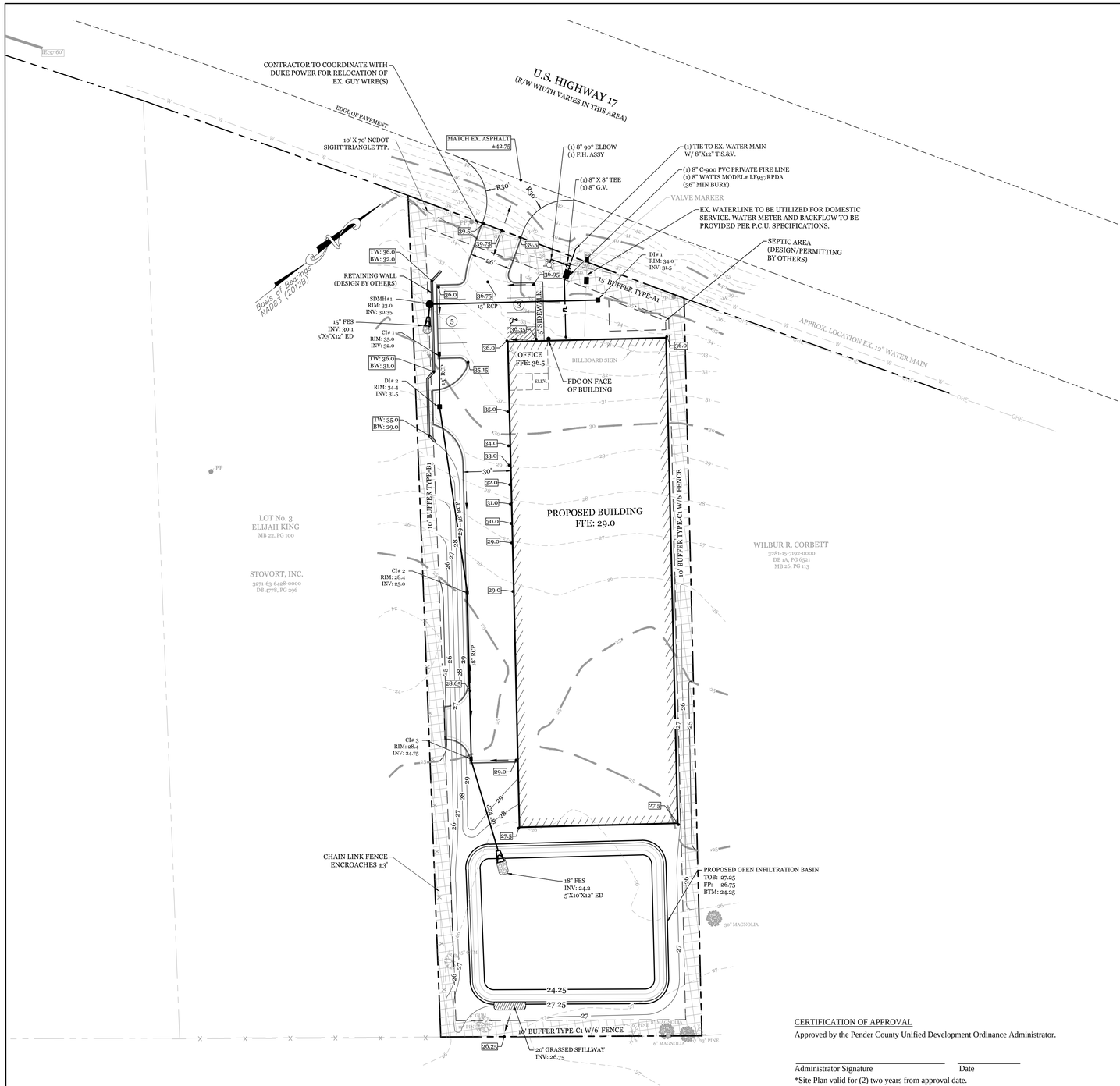
EXISTING CONDITIONS & TREE REMOVAL PLAN
FOR
PATEL STORAGE SCOTTS HILL
PENDER COUNTY, NC

NORTH CAROLINA PROFESSIONAL SEAL 032555 ENGINEER CHARLES D. CARTER
9/20/2023

CLIENT INFORMATION:
Hill Storage, LLC
4191 Route 1
Monmouth Junction, NJ 08852

DRAWN:	JAE	SHEET SIZE:	24X36
CHECKED:	CDC	DATE:	9/20/2023
APPROVED:	CDC	SCALE:	1" = 30'
PROJECT NUMBER:	2023-015		

DRAWING NUMBER: C-0
1 OF 6



SITE DATA

PARCEL ID:	3271-63-7656-0000, 3271-63-8629-0000
CURRENT ZONING:	GB
PROJECT ADDRESS:	LARK LN. WILMINGTON, NC 28411
CURRENT OWNER:	HILL STORAGE, LLC 4191 ROUTE 1 MONMOUTH JUNCTION, NJ 08852
TOTAL ACREAGE IN PROJECT BOUNDARY:	82,279 S.F. (± 1.89 ac.)
TOTAL DISTURBED AREA:	±1.95 ACRES
EXISTING USE:	VACANT SITE
PROPOSED USE:	SELF STORAGE (600 UNITS)
BUILDING SIZE:	30,000 SF Footprint (90,000 SF GFA)
BUILDING HEIGHT:	±36' / 3-STORY (40' MAX)

BUILDING SETBACKS:

FRONT:	REQUIRED= 25'	PROPOSED= 27'
SIDE:	REQUIRED= 10'	PROPOSED= 12'/55'
REAR:	REQUIRED= 10'	PROPOSED= 129'

PROPOSED IMPERVIOUS AREAS:

BUILDING ROOF	30,000 S.F.
ASPHALT	11,060 S.F.
CONCRETE(SIDEWALK, CURBING, ETC.)	1,130 S.F.
FUTURE	2,810 S.F.
TOTAL	45,000 S.F (54.7%)

PROPOSED OFF-SITE IMPERVIOUS AREAS:
ASPHALT DRIVEWAY APRONS 1,260 S.F.

PARKING REQUIRED
STORAGE USE: (5 or 1 per 100 storage units,whichever is greater):

MINIMUM =		6 SPACES
MAXIMUM =	125% OF MINIMUM	8 SPACES

STORAGE FACILITY OFFICE : (1 per 300 sf):

MINIMUM: =	600 S.F./300 S.F.=	2 SPACES
MAXIMUM =	125% OF MINIMUM	3 SPACES

PARKING PROVIDED: 8 SPACES (1 ADA)

ESTIMATED TRIP GENERATION: (Per Trip Generation Manual, 11th Edition):
90,000 SF MINI-WAREHOUSE (ITE CODE 151)
AM PEAK: 8 PM PEAK: 14 DAILY: 131

NOTES:
1. EXISTING SURVEY DATA PROVIDED BY V. DEREK DANFORD, PLS., L-4528
2. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, A CONSTRUCTION ENTRANCE AND SILT FENCING SHALL BE INSTALLED.

DEVELOPMENT NOTES:
1. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH PENDER COUNTY UDO.
2. PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE & PENDER COUNTY REGULATIONS.
3. ANY PROPOSED SIGNAGE SHALL COMPLY WITH ARTICLE 9 OF THE PENDER COUNTY UDO.
4. ALL FENCED STORAGE AND/OR SERVICE AREAS MUST BE COMPLETELY SCREENED FROM THE VIEW OF ROADS AND ADJACENT PROPERTIES BY A SLATTED CHAIN LINK FENCE A MINIMUM OF 6' IN HEIGHT.

UTILITY NOTES:
1. SANITARY SEWER TO BE PROVIDED VIA AN ON-SITE SEPTIC SYSTEM DESIGNED BY OTHERS.
2. WATER TO BE PROVIDED VIA PENDER COUNTY UTILITIES.
3. ELECTRIC POWER SERVICE TO BE PROVIDED BY DUKE ENERGY PROGRESS. 1451 MILITARY CUTOFF RD, WILMINGTON, NC 28403 PH. 866.582.6345
4. ALL PROPOSED UTILITY SERVICES, SUCH AS ELECTRIC POWER, CATV, GAS & TELEPHONE SHALL BE INSTALLED UNDERGROUND.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL NC811 AT 811 OR 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB & GUTTER, PAVEMENT, ETC. THAT MAY BE BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM. .
6. SOLID WASTE DISPOSAL BY ROLL OUT CART. TO BE STORED INDOORS.
7. NO EXTERIOR SITE LIGHTING IS PROPOSED AT THIS TIME.
8. RUNOFF FROM ALL IMPERVIOUS SURFACES, INCLUDING ROOF DRAINS, MUST BE ROUTED TO OPEN INFILTRATION BASIN.
9. ALL RCP PIPE TO BE CLASS-III UNLESS OTHERWISE NOTED.

UTILITY PROVIDERS:
SANITARY SEWER SERVICE PROVIDER: **Private On-Site Septic**

WATER SERVICE PROVIDER:	**Pender County Utilities** 605 E Fremont St, Burgaw, NC 28425	Phone: (910) 259-1570
ELECTRIC SERVICE PROVIDER:	**Duke Energy Progress** 1451 Military Cutoff Rd, Wilmington, NC 28403	Phone: (800) 452-2777

GENERAL TRAFFIC NOTES:
1. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS OFF THE R/W TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
2. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS -OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET PENDER COUNTY AND/OR NCDOT STANDARDS.
3. ALL SIGNS AND PAVEMENT MARKINGS OFF RIGHT OF WAY ARE TO MEET/BE MAINTAINED TO MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
4. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30" TO 10'.

FIRE & SAFETY NOTES:
1. CONSTRUCTION TYPE: II-B (COMMERCIAL)
2. PROPOSED BUILDING WILL BE SPRINKLED
3. PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS.
4. ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
5. HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF
7. HYDRANT MUST BE WITHIN 100' OF THE FDC.
8. FIRE ALARM SYSTEM AS REQUIRED BY SECTION 907, NCSFC.
9. MINIMUM AN 8-INCH FIRE LINE RISER INTO THE BUILDING
10. ANY/ALL PROPOSED GATES TO BE SIREN ACTIVATED.
11. KNOX BOX TO BE PROVIDED ON EXTERIOR OF BUILDING NEAR MAIN ENTRANCE AND AT THE RISER ROOM AND SHOULD INCLUDE BUILDING(S) AND GATE(S) KEYS.
12. VISIBLE ADDRESSING FROM THE ROAD AND/OR APPLICABLE SIGNAGE FOR SUCH, PURSUANT TO CHAPTER 5 NCSFC. ADDRESS NUMBERS MUST BE A MINIMUM OF 6" TALL.
13. RDA TESTING IS REQUIRED PRIOR TO FINAL CONSTRUCTION RELEASE.
14. FM OFFICE WILL NEED TO WITNESS TEST FOR ALARM, SPRINKLER, PERFORM ABOVE CEILING FOR SPRINKLER PIPING INSTALLATION AND PERMITS WILL NEED TO BE OBTAINED FROM THE FCFM OFFICE FOR THIS WORK.
15. FIRE EXTINGUISHERS. EXIT SIGNAGE, EMERGENCY LIGHTING SHALL BE INSTALLED PURSUANT TO NCSFC.
16. AREA TREE PLANTINGS WILL HAVE TO BE PLANTED/MAINTAINED TO NOT IMPEDE TRAVEL WAY FOR EMERGENCY VEHICLES. MUST PROVIDE AND MAINTAIN 20' UNOBSTRUCTED ACCESS WAY PURSUANT TO CHAPTER 5 NCSFC

CERTIFICATION OF APPROVAL

Approved by the Pender County Unified Development Ordinance Administrator.

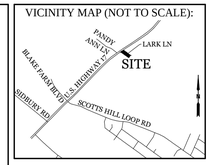
Administrator Signature Date

*Site Plan valid for (2) two years from approval date.

LEGEND
- PROPERTY LINE
- ADJOINERS
- EXISTING EDGE OF PAVEMENT
- PROPOSED FENCE
- RUNOFF DIRECTION
- [25.5] SPOT ELEVATION
- PROPOSED BUFFERS

30' 15' 0' 30' 60'
Scale: 1"=30'

VICINITY MAP (NOT TO SCALE):



REVISIONS

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: (910) towards-0662
Email: Charlie@intracoastalengineering.com
License Number: P-0662

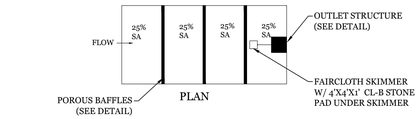
SITE, GRADING, DRAINAGE, & UTILITIES PLAN
FOR
PATEL STORAGE SCOTTS HILL
PENDER COUNTY, NC

NORTH CAROLINA PROFESSIONAL SEAL 032555 ENGINEER CHARLES D. CRAZIER
9/20/2023

CLIENT INFORMATION:
Hill Storage, LLC
4191 Route 1
Monmouth Junction, NJ 08852

DRAWN:	JAE	SHEET SIZE:	24X36
CHECKED:	CDC	DATE:	9/20/2023
APPROVED:	CDC	SCALE:	1" = 30'
PROJECT NUMBER:	2023-015		

DRAWING NUMBER: C-1
2 OF 6

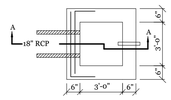


TEMPORARY SEDIMENT BASIN TABLE						
NO.	AREA (ACRES)	REQ'D	PROVIDED	L	W	D
1	1.95	3,510 CF	8,177 CF	81'	35'	2.25'

SEE PLAN SHEET FOR LOCATION

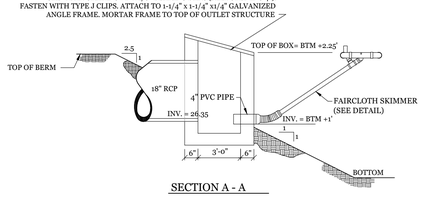
NOTES:
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDE SLOPES.
2. INSTALL A MINIMUM OF 2 COIR FIBER BAFFLES IN ACCORDANCE WITH PRACTICE STANDARD 6.65.
3. INSTALL SKIMMER AND COUPLING TO RISER STRUCTURE OR DIRECTLY INTO EMBANKMENT 1 FT. FROM BOTTOM OF BASIN.
4. THE ARM PIPE SHALL HAVE A MINIMUM LENGTH OF 6 FT. BETWEEN THE SKIMMER AND COUPLING.
2. SEDIMENT BASIN STORAGE ELEVATION TO TOP OF BERM WILL BE NO LESS THAN ONE FOOT.
3. SUMP DIMENSIONS SHOULD ALLOW FOR A MINIMUM OF 1,800 CF/ACRE OF SEDIMENT STORAGE.
4. DEPTH OF SEDIMENT IN SUMP WILL BE CHECKED AFTER EACH STORM AND CLEANED AS NECESSARY (MIN. ONCE EACH 6 MONTHS).
5. REMOVAL OF SEDIMENT BASIN WILL BE DONE IN SUCH A WAY AS TO LIMIT SILTATION.
6. SEDIMENT BASIN BACK SLOPES TO BE 2.5:1 MAX.

TEMPORARY SEDIMENT BASIN DETAIL
NTS



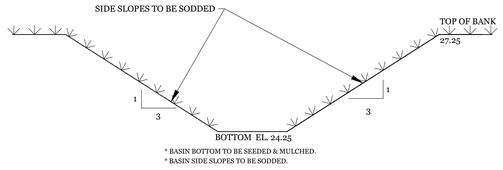
PLAN

GALV. BAR GRATING - 1" x 1/8" BEARING BARS (MAX OPENING 4"). FASTEN WITH TYPE-J CLIPS. ATTACH TO 1-1/4" x 1-1/4" x1/4" GALVANIZED ANGLE FRAME. MORTAR FRAME TO TOP OF OUTLET STRUCTURE.



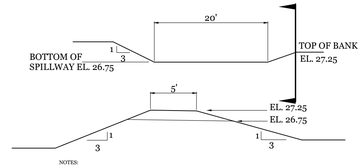
SECTION A - A

TEMP. SEDIMENT BASIN OUTLET STRUCTURE
NTS



* BASIN BOTTOM TO BE SEEDED & MULCHED.
* BASIN SIDE SLOPES TO BE SODDED.

OPEN INFILTRATION BASIN SECTION
NTS

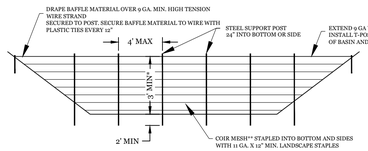


NOTES:
1. SPILLWAY TO BE STABILIZED WITH SOD.

GRASSED SPILLWAY DETAIL
NTS



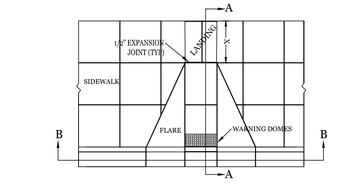
PLAN

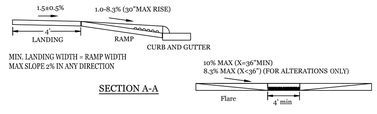


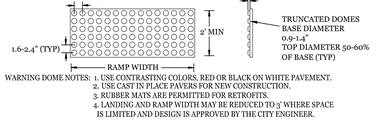
CROSS SECTION

*IF TEMPORARY SEDIMENT BASIN WILL BE CONVERTED TO A PERMANENT STORMWATER BASIN OF GREATER DEPTH, THE BAFFLE HEIGHT SHOULD BE BASED ON THE POOL DEPTH DURING USE AS A TEMP. SEDIMENT BASIN.
** COIR FIBER BAFFLE MATERIAL TO MEET THE FOLLOWING SPECIFICATIONS:
THICKNESS: 0.50" MIN **TENSILE STRENGTH (WET):** 900 X 680 LB/FT MIN. **ELONGATION (WET):** 69% X 34% MAX.
FLOW VELOCITY: 10-12 FT/SEC **WEIGHT:** 200Z./SY MIN. **MINIMUM WIDTH:** 8.5' **OPEN AREA:** 30% MAX.

POROUS BAFFLE DETAIL
NTS

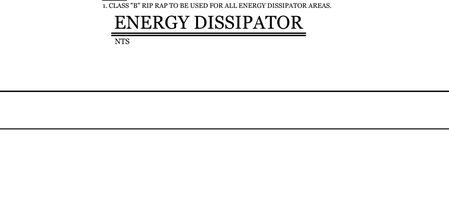






WARNING DOME NOTES:
1. USE CONTRASTING COLORS: RED OR BLACK ON WHITE PAVEMENT.
2. USE CAST IN PLACE PAVERS FOR NEW CONSTRUCTION.
3. RUBBER MATS ARE PERMITTED FOR RETROFITS.
4. LANDING AND RAMP WIDTH MAY BE REDUCED TO 3' WHERE SPACE IS LIMITED AND DESIGN IS APPROVED BY THE CITY ENGINEER.

WHEEL CHAIR RAMP DETAIL
NTS

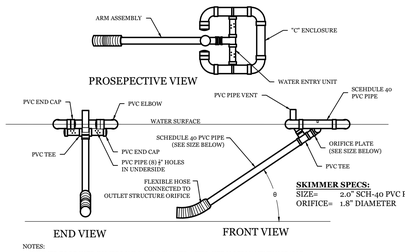


SECTION A - A

NOTES:
1. CLASS "B" RIP RAP TO BE USED FOR ALL ENERGY DISSIPATOR AREAS.

ENERGY DISSIPATOR
NTS

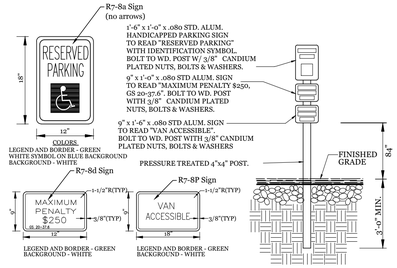
SITE WORK NOTES:
1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BOTH ON AND ADJACENT TO THE SITE.
2. CLEARING: CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN LIMITS OF CONSTRUCTION UNLESS OTHERWISE DESIGNATED TO REMAIN.
3. GRUBBING AND STRIPPING: CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITHIN LIMITS OF CONSTRUCTION.
4. MUCKING: CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY SOFT AREAS.
5. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
6. FILL AND COMPACTION SHOULD COMPLY WITH GEOTECHNICAL RECOMMENDATIONS.
7. THE CONTRACTOR SHALL NOTE THAT THE GRADING PLAN MAY NOT REPRESENT A BALANCED EARTHWORK CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUT AND FILL QUANTITIES AND COMPLETE INSTALLATION TO SPECIFIED GRADES.
8. THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM AN OFF-SITE PROPERLY PERMITTED FACILITY AS REQUIRED.
9. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES AT ALL CROSSINGS PRIOR TO COMMENCING TRENCH EXCAVATION. IF ACTUAL CLEARANCES ARE LESS THAN INDICATED ON PLAN, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. ANY CONDITION DISCOVERED OR EXISTING THAT WOULD NECESSITATE A MODIFICATION OF THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
10. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NC ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. BEFORE COMMENCING ANY EXCAVATIONS IN OR ALONG ROADWAYS OR RIGHT-OF-WAYS, PUBLIC AREAS OR IN PRIVATE EASEMENTS, THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE PERSONNEL OF THEIR INTENT TO EXCAVATE, IN WRITING, NOT LESS THAN 10 DAYS PRIOR TO EXCAVATING.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE DISCONNECTION/ RECONNECTION AND/OR THE RELOCATION OF ALL EXISTING UTILITIES WITH APPROPRIATE PERSONNEL.
13. CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE & CURB BOXES TO FINAL GRADE UPON COMPLETION OF ALL CONSTRUCTION. ANY BOXES DAMAGED OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
14. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AT THE SITE. FURTHERMORE THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES OR QUESTIONS TO THE ENGINEER PRIOR TO INSTALLATION.
15. THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE DIRECTED BY OWNER.
16. ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL, STATE, AND CFPUA CODES. METERS, TAPS, MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL REQUIREMENTS.
17. ALL BACKFILL FROM UTILITY INSTALLATION MUST BE COMPACTED OR AMENDED TO PROVIDE TRAFFIC BEARING CAPACITY. GEOTECHNICAL ENGINEER TO BE CONSULTED AT CONTRACTORS COST AS NECESSARY.
18. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO INSTALLATION. ALL AREAS SHALL BE SLOPED TO DRAIN AWAY FROM BUILDINGS AT ALL TIMES.
19. CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS - AIR ENTRAINED.
20. FIELD TESTING SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY PAID FOR BY THE OWNER. FURTHER TESTING REQUIRED DUE TO A FAILED TEST WILL BE PAID FOR BY THE CONTRACTOR.
21. ALL SIDEWALKS SHALL BE FREE OF CRACKS, BREAKS, OR ANY OTHER DEFECT PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.



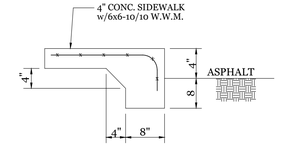
SKIMMER SPECS:
SIZE= 2.0" SCH-40 PVC PIPE
ORIFICE= 1.8" DIAMETER

NOTES:
1. SKIMMER TO BE USED IN WET PONDS AND REMOVED AFTER SITE IS PERMANENTLY STABLE.

FAIRCLOTH SKIMMER DETAIL
NTS



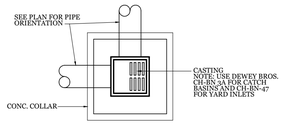
TYPICAL HANDICAPPED SIGN DETAIL
NTS



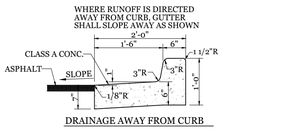
TURNDOWN SIDEWALK
NTS



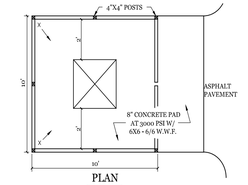
PAVEMENT SECTION
NTS



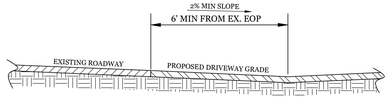
DROP INLET DETAIL
NTS



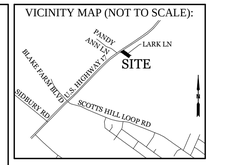
24" CURB SECTION
NTS



DUMPSTER PAD & ENCLOSURE DETAIL
NTS



TYPICAL DRIVEWAY GRADING SECTION
NTS



REVISIONS

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: (910) 769-5611 Fax: (910) 769-5615
Email: Charlie@intracoastalengineering.com
License Number: P-0662

DETAILS FOR PATEL STORAGE SCOTTS HILL PENDER COUNTY, NC

NORTH CAROLINA PROFESSIONAL SEAL 032555 ENGINEER CHARLES D. CARTER

9/20/2023

CLIENT INFORMATION:
Hill Storage, LLC
4191 Route 1
Monmouth Junction, NJ 08852

DRAWN:	JAE	SHEET SIZE:	24X36
CHECKED:	CDC	DATE:	9/20/2023
APPROVED:	CDC	SCALE:	NTS
PROJECT NUMBER:		2023-015	

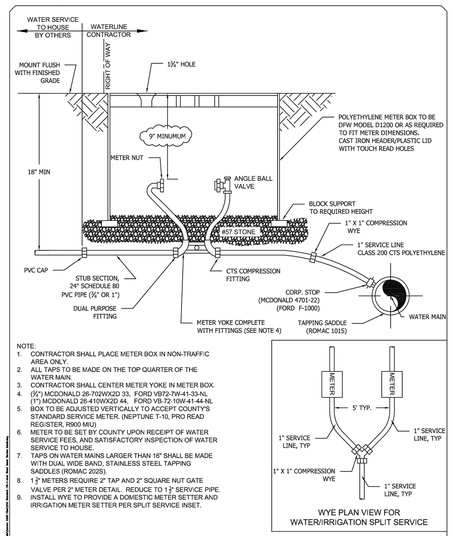
DRAWING NUMBER: C-3
4 OF 6

PCU STANDARD NOTES

1. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE BEGINNING WORK. THE MEETING MUST BE SCHEDULED WITH PENDER COUNTY UTILITIES (PCU) AT LEAST ONE WEEK IN ADVANCE. ATTENDEES MUST INCLUDE PCU, THE UTILITY CONTRACTOR'S SUPERINTENDENT, THE SUPPLIER, AND THE CONSULTING ENGINEER.
2. ALL MATERIALS USED SHALL CONFORM TO PENDER COUNTY UTILITIES REQUIREMENTS. NON-CONFORMING MATERIAL WILL NOT BE ACCEPTED FOR FINAL CERTIFICATION.
3. ALL PIPE SHALL BE C900 DR18 PVC, UNLESS OTHERWISE NOTED (SEE PCU STANDARD DETAIL). PVC PIPE TO BE SDR 21 WHERE C900 IS UNAVAILABLE. THE USE OF DUCTILE IRON PIPE (DIP) IS REQUIRED UNDER PAVED AREAS. PCU MUST APPROVE THE USE OF DIP IN THE FIELD BEFORE INSTALLATION IN OTHER LOCATIONS.
4. PCU STANDARD WATERLINE PIPE RESTRAINING METHOD IS MJ GRIP RINGS. AT A MINIMUM ALL FITTINGS, VALVES, ETC. MUST BE RESTRAINED (SEE PCU STANDARD DETAIL).
5. PCU MUST INSPECT CASING INSTALLATIONS PRIOR TO BACKFILL. PCU MUST WITNESS PRESSURE TESTS, AND WITHDRAWAL OF BACTERIOLOGICAL SAMPLES. CONTACT PCU UTILITIES INSPECTOR TO SCHEDULE.
6. CLOSE-OUT DOCUMENTS WHICH MUST BE RECEIVED PRIOR TO PCU SIGNING THE NCDEQ PWSS APPLICANT CERTIFICATION INCLUDE: BACTERIOLOGICAL TESTS, PRESSURE TESTS, DEED OF DEDICATION, AFFIDAVIT/RELEASE OF LIENS, WARRANTY, AND RECORD DRAWINGS (PDF & CAD).
7. AN 18-MONTH WARRANTY PERIOD APPLIES TO ALL WATERLINE CONSTRUCTION. THIS WARRANTY PERIOD DOES NOT BEGIN UNTIL FINAL APPROVAL OF THE SYSTEM HAS BEEN RECEIVED FROM NCDEQ PWSS.

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
PO BOX 995, BURGAW, NC 28425

STANDARD NOTES
PCU WATER SYSTEMS
VERSION #3 - APRIL 2022



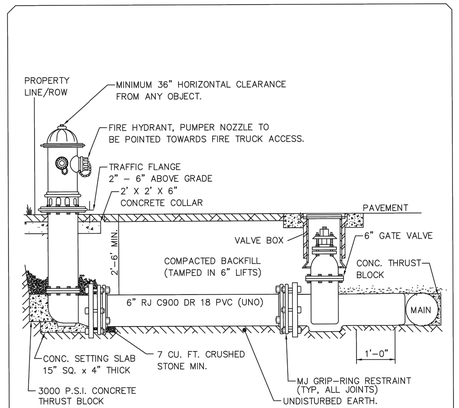
NOTE:
1. CONTRACTOR SHALL PLACE METER BOX IN NON-TRAFFIC AREA ONLY.
2. ALL TAPS TO BE MADE ON THE TOP QUARTER OF THE WATER MAIN.
3. CONTRACTOR SHALL CENTER METER YOKE IN METER BOX.
4. (¾") MCDONALD 26-702WX2D 33, FORD VB73-7W-41-33-NL (1") MCDONALD 26-410WX2D 44, FORD VB-72-10W-41-44-NL
5. BOX TO BE ADJUSTED VERTICALLY TO ACCEPT COUNTY'S STANDARD SERVICE METER. (NEPTUNE T-10, PRO READ REGISTER, R900 MIU)
6. METER TO BE SET BY COUNTY UPON RECEIPT OF WATER SERVICE FEES, AND SATISFACTORY INSPECTION OF WATER SERVICE TO HOUSE.
7. TAPS ON WATER MAINS LARGER THAN 16" SHALL BE MADE WITH DUAL WIDE BAND, STAINLESS STEEL TAPPING SADDLES (ROMAC 202S).
8. 1 ½" METERS REQUIRE 2" TAP AND 2" SQUARE NUT GATE VALVE PER 2" METER DETAIL. REDUCE TO 1 ½" SERVICE PIPE.
9. INSTALL WYE TO PROVIDE A DOMESTIC METER SETTER AND IRRIGATION METER SETTER PER SPLIT SERVICE INSET.

WYE PLAN VIEW FOR WATER/IRRIGATION SPLIT SERVICE

STANDARD WATER SERVICE DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

WATER SERVICE (¾" - 1")
STANDARD DETAIL
VERSION #4 - FEB 2016

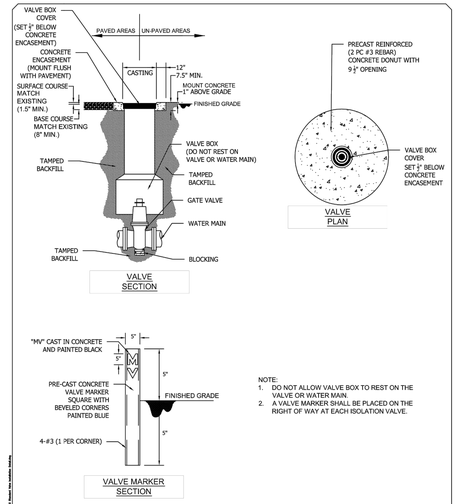


NOTES:
1. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION.
2. FIRE HYDRANTS TO BE LOCATED IN RIGHT-OF-WAY.
3. INSTALL WITH BURY LINE FLUSH TO FINAL GRADE.
4. HYDRANTS TO BE AVK SERIES 2780, MUELLER SUPER CENTURION A473 W/PENDER CO. OPTIONS 981, OR CLOW MEDALLION WITH STAINLESS STEEL STEMS. HYDRANTS SHALL BE NOSTALOC STYLE DRY BARREL.
5. HYDRANTS TO BE RED WITH SILVER CAPS AND BONNET.

FIRE HYDRANT ASSEMBLY DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

FIRE HYDRANT ASSEMBLY
STANDARD DETAIL
VERSION #2 - APRIL 2016

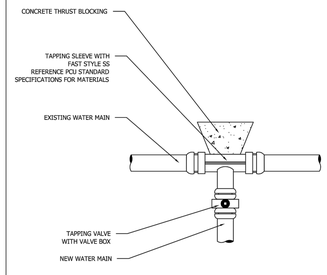


NOTE:
1. DO NOT ALLOW VALVE BOX TO REST ON THE VALVE OR WATER MAIN.
2. A VALVE MARKER SHALL BE PLACED ON THE RIGHT OF WAY AT EACH ISOLATION VALVE.

VALVE INSTALLATION DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

VALVE INSTALLATION
STANDARD DETAIL
VERSION #3 - JUNE 2016

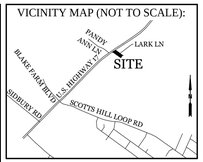


TAPPING SLEEVE AND VALVE ASSEMBLY DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

TAPPING SLEEVE AND VALVE ASSEMBLY
STANDARD DETAIL
VERSION #3 - FEB 2016

VICINITY MAP (NOT TO SCALE):



REVISIONS

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: 910.833.5083 Fax: 910.833.5093
Email: Charlie@intracoastalengineering.com
License Number P-0662

DETAILS
FOR
PATEL STORAGE SCOTTS HILL
PENDER COUNTY, NC

NORTH CAROLINA PROFESSIONAL SEAL 032555 ENGINEER CHARLES D. DEAZLER
9/20/2023

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DRAWING NUMBER: C-4
5 OF 6

Pender County
Blake Farm - Parcel R

TO:	Technical Review Committee
FROM:	Daniel Adams
DATE:	November 2, 2023
SUBJECT:	SUBMAJ 2023-101

SUMMARY:
Residential development including 158 single family homes

ACTION REQUESTED:
Case will be reviewed by the TRC

ATTACHMENTS:
1. Application
2. Site Plan

Pender County
Planning and Community Development

805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Planned Development & Residential Mixed Zoning Districts
Preliminary Plat Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

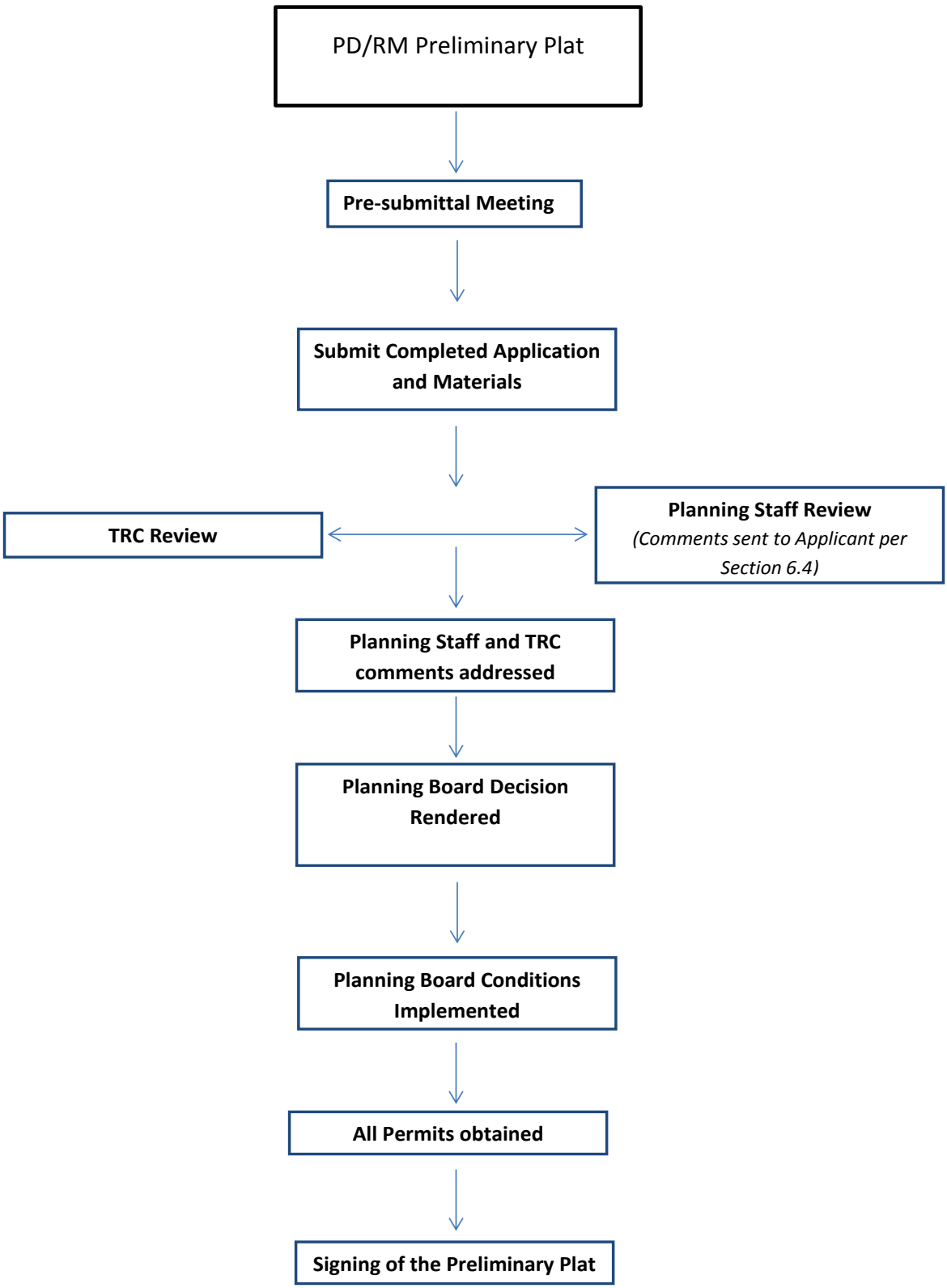
1. ✓ **Pre-submittal Meeting**
   Date of Meeting 6/29/2023
2. ✓ **Signed Application**
3. ✓ **Payment**
   $500 plus $10 per lot for the first 100 lots/units, $5 per lot thereafter $1,790.00
4. ✓ **Paper Plan Sets**
   Two (2) 24 x 36, ~~Fifteen (15) 11 x 17~~ Two (2) 11x 17 Per DLA 8/2/23
5. ✓ **Digital Submission**
   For all documents submitted in paper copy, please bring a digital copy with paper submission.
6. ✓ **Adjacent Property List**
   A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the of the perimeter of the project bounds.
7. ✓ **Adjacent Property Envelopes**
   The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. ✓ **Permits**
   Please include any permits issued on the project including but not limited to: environmental, traffic analysis, utility, or site specific conditions.
9. ✓ **Site Plan Requirements**
   A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.4, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.
   (See Preliminary Plat Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant _____ Date 10-6-23

Printed Name Hastings Sartin, McKim & Creed, Inc.

Staff Initials: _____
Date: _____


PD/RM Preliminary Plat
Pre-submittal Meeting
Submit Completed Application and Materials
TRC Review
Planning Staff Review
(Comments sent to Applicant per Section 6.4)
Planning Staff and TRC comments addressed
Planning Board Decision Rendered
Planning Board Conditions Implemented
All Permits obtained
Signing of the Preliminary Plat

Specific requirements can be found in Section 6.4 of the Pender County Unified Development Ordinance

Preliminary Plat Specific Requirements

Preliminary plats not illustrating or containing the data from Section A shall be returned to the developer or the authorized agent for completion and resubmission.

A. The preliminary plat shall be prepared in accordance with the following specifications:

1. Plat Requirements
   a) The plat must be prepared by an authorized Licensed Professional.
   b) The name(s), address(es), and telephone number(s) of the owner(s), registered land surveyor(s), land planner(s), architect(s), landscape architect(s), and professional engineer(s) responsible for the subdivision and the registration number(s) and seal(s) of the registered land surveyor(s).
   c) A sketch vicinity map at an appropriate scale, showing the relationship between the subdivision and the surrounding area.
   d) The date of the survey and the plan preparation; with spaces per subsequent revision.
   e) The name of the township, county, and state in which the subdivision is located.
   f) Deed book and reference of ownership acquisition.
   g) The names of current owners of adjacent landowners along with PIN, current uses, other legal reference where applicable, shall be shown.
   h) The exact boundary lines of the tract to be developed fully dimensioned by bearings and distances, and the location of intersecting boundary lines of adjoining lands.
   i) Scale at 1” = 50’ or larger, denoted both graphically and numerically.
   j) North arrow in accordance with the Standards of Practice for Land Surveyors.
   k) The location, purpose, and dimensions of areas to be used for purposes other than residential;
   l) The blocks lettered alphabetically throughout the entire subdivision and the lots numbered consecutively throughout each block.
   m) The proposed minimum building setback lines and density calculations.
   n) The location and dimensions of all proposed and existing rights-of-way, utility or other easements, riding trails, pedestrian or bicycle paths, natural buffers, and areas if any to be dedicated to public use with the purpose of each stated.
   o) Property lines, buildings or other structures, water courses, railroads, bridges, culverts, storm drains, and corporate limits, township boundaries, and county lines.
   p) Sufficient survey to determine readily and reproduce on the ground every straight or curved boundary line, road line, lot line, right-of-way line, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, central angles, and tangent distances for the center line of curved roads and curved property lines that are not the boundary of curved roads. All dimensions shall be in accordance with the Standards and Practices of Land Surveyors.
   q) The accurate locations and descriptions of all monuments, markers, and control points.
   r) Sufficient information shall be provided so that a corner of the property can be located on the ground and found with a measurement from the intersection of two state maintained roads.

2. Design Standards
   a) All subdivided land and parcels shall comply with Section 7.2, Lot Design.
   b) Street layout and access shall conform to Section 7.4, Access and Section 7.5, Street Design.
   c) Calculated open space requirements must adhere to Section 7.6, Open Space.
   d) Landscaping and Buffers shall be shown on the site plan and adhere to the landscaping standards set forth in Article 8, Landscaping and Buffers.
3. Road Layout
   a) Right-of-way lines and pavement widths of all roads and the location and width of all adjacent roads and easements.
   b) The location and design of parking areas and pedestrian and vehicular access points. That the design of traffic patterns, traffic control measures and street pavement areas, including plan profiles and cross section views, and with provisions for maintaining traffic flows for both public use as well as emergency management services are consistent with the requirements of this Ordinance and any other adopted plan.
   c) When the subdivision entrance does not connect to a NCDOT maintained road, recorded documents shall be submitted that confirm the property and the proposed lots have access to a NCDOT maintained road by a public or private street that meets the standards of this Ordinance.
   d) For non-residential and multifamily projects, the location of trash handling, recycling, grease bins, and other waste-related facilities employed in the normal operation of the use.
   e) When any development proposes private streets a description of the method to provide Pender County Emergency Service personnel and vehicles immediate access shall be submitted.
   f) Stormwater facilities, water supply, sanitary sewer service, fire protection and hydrants, street signs, and street lighting designed in conformance with department standards, specifications and guidelines;
   g) Plan profile and cross section of drainage and utility services and other proposed easements or dedications as required.

4.) Traffic Impacts
   a. Existing traffic counts for road(s) and intersection(s) studied and dates/times counts were conducted.
   b. Estimated AM and PM Peak Hour Trips per the Institute of Transportation Engineers Trip Generation Manual.
   c. A Traffic Impact Analysis is required when the development generates 100 trips in the morning or evening peak hours or over 1,000 trips per day. The Traffic Impact Analysis must state the dates and times the counts were conducted.

5.) Adopted Plan Compliance
   h) Compliance with all applicable requirements of this Ordinance and any other County adopted plan, policy document or approved Master Development Plan conditions.
   i) Demonstrate compliance with the most recent Comprehensive Land Use Plan and any other applicable adopted land use document(s).
   j) Compliance with site construction specifications.

k) The Administrator, Technical Review Committee, or the Planning Board may request additional information be submitted that is pertinent to review of the proposed subdivision for compliance with the provisions of this Ordinance or other Pender County Ordinances.

B. Upon completion of Section A, the following additional materials or permits are required with the preliminary plat for final approval in accordance with Section 3.10.3.K.:

1. Wastewater (either; a or b, as applicable)

l) On-Site or Off-Site Wastewater Disposal System

a. Verification by the Pender County Health Department.
b. Soil suitability analysis indicating the suitability of the property for individual septic tanks
c. Detailed description of any proposed waste water system and system maintenance arrangements and procedures to serve lots that are not suitable for traditional onsite septic systems, along with a map showing the proposed location of the offsite components of the system, including lines.

m) Community Wastewater Systems

a. Authorization to Construct, as approved by the appropriate State Agency
b. Wastewater line extensions based upon previous approval of wastewater system
c. Construction plans sealed by a registered engineer, as approved by the appropriate State Agency
d. If applicable, Certification that the system will be owned by a Public or Community Water System as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.

2) Water (either a or b, as applicable)

a. Public Water System

i. Authorization to Construct, as approved by the appropriate State Agency
ii. Construction plans sealed by a registered engineer, as approved by the appropriate State Agency ~~NC DEQ~~,
iii. Acceptance of operation and maintenance of the system by a Public (Pender County Utilities) or Community Water system as defined in this Ordinance,
iv. If applicable, Certification that the system will be owned by a Public or Community Water system as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.

b. Private Water

i. Well permits for each individual as demonstrated through verification of receipt of the preliminary plat of the development by the Pender County Health Department.

3. Road Layout

a) Public Right of Way

i) Driveway Permit: Approval by NCDOT of connection of subdivision roads with NCDOT maintained roads.
ii) Plan Approval: Street construction & street drainage plans as approved by NCDOT District Engineer with letter of approval (for public streets).

iii) Verification of receipt of the preliminary plat of the development by the NCDOT District Engineer or his the appointed designee.

b) Private Right of Way

i) Street construction & street drainage plans in accord with NCDOT submittal requirements, design and construction standards or in accord with Section 7.5, Street Design, private street standards. The plans must be signed and sealed by a registered surveyor or engineer.

ii.) A letter from the design professional will accompany the plans certifying that they meet the NCDOT submittal requirements, design and construction standards or Private Street Standards, Pender County (for private streets).

iii) When any street layout or geometric design does not specifically meet the NCDOT Secondary Road Standards or the adopted Pender County Private Street Standards, a narrative explanation, justification detailed drawing of the design shall be submitted for review.

4. Approved road and subdivision names in accordance with Article 11.
5. Stormwater Management and Drainage Plans

a.) Stormwater Management Plan as approved by the appropriate State Agency (with letter of approval).

b) Drainage Plan: a general description and map of the proposed drainage for the subdivision shall include the following:

- The boundaries of all drainage basins that flow through the property from upstream.
- All drainage facilities that flow through the property and receive any stormwater discharge from upstream.
- The boundaries of all drainage basins that receive discharge from the property that is located from the discharge point on the property to the recipient perennial stream.
- All drainage facilities that receive stormwater discharge from the property from the discharge point to the recipient perennial stream.
- This information can be described in a narrative submission and shown on a copy of a USGS 7.5 Minute Quad or other similar topographical map (11 X 17 map submission)
- A drainage plan that will include all portions of the development shall be submitted. This plan shall be prepared and sealed by a registered engineer. The plan and facilities shall provide for a drainage system for these areas that will accommodate the ten-year storm event without flooding or substantial ponding of water in the areas included in the plan. The plan must also accommodate any discharge from properties in upland portions of the drainage basin that flows through the property for the same storm event for the type development for which that property is zoned. The boundary of any drainage area on a portion of the site and/or upland from the site and drainage areas between stormwater discharge points from the site to the recipient perennial stream shall be shown on a map (copy of 7.5 min. USGS Quad or similar map). Any drainage facility receiving stormwater discharge from the development shall have the capacity to carry the anticipated stormwater flow from areas that discharge through them for the 10 year storm event from the point of discharge at the development to the recipient perennial stream without over flowing their banks. The location, size

and/or capacity of all structures included in the drainage system and receiving discharge from the development to the recipient perennial stream shall be shown on the plan and calculations used in designing the drainage system shall be submitted in a legible format. This plan may be included in the street and drainage plan, stormwater management plan or on the preliminary plat, as long as the design professional certifies that the specific drainage plan submitted complies with these requirements and the information required is shown or submitted.

4) Approval from the Division of Coastal Management when the development is located in an Area of Environmental Concern.

5) Sediment & Erosion Control Plans as approved by the appropriate State Agency (with letter of approval).

7) Wetlands

b) Approval of Wetlands Delineation by the Army Corps of Engineers (USACE) (if wetlands in development).

c) Wetlands fill authorization or permit if construction in wetlands is involved.

8) Flood Requirements in accordance with the Flood Damage Prevention Ordinance

9) Any other local, State or Federal permit as required for the specific project.

Pender County
Planning and Community Development

Planning Division
805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Preliminary Plat Subdivision Application

Major Subdivision

Proposed subdivisions consisting of eleven (11) lots or more are classified as Major Subdivisions and are required to follow the Master Development Plan review process found in Figure 2 and 3 at the end of Section 3.4. All major subdivisions shall include a preliminary and final plat. Upon approval of the Master Development Plan by the Planning Board, the applicant may proceed with the preparation of the preliminary plat.

Pre-application Conference

Applicants proposing a major subdivision site plan shall request a pre-application conference with the Administrator prior to submitting the documents for review.

1) The purpose of the pre-application conference shall be to discuss the proposal in relation to the requirements of all adopted Land Use Plans and Unified Development Ordinance and to obtain advice on the preparation of the preliminary plan.
2) If applicable, the applicant shall provide a copy of the approved Master Development Plan for discussion at the pre-application conference.

Review

A. Completed plats, application, fees and other required data must be submitted 45 days before a scheduled Planning Board meeting.
B. When required submission material is submitted as noted above, it shall be placed on the next scheduled Planning Board agenda, if applicable.
C. The Administrator will forward the Major Subdivision application and site plan to the Technical Review Committee for review. The TRC shall make recommendations concerning whether the plan meets the requirements and or plans of their particular state agency, county department or utility authority
D. Major subdivision plans must meet all the requirements prescribed in Section 6.4, Preliminary Plat Contents and Section 6.5, Final Plat Contents.
E. The preliminary plat must be submitted in digital format to the Administrator within the time frame indicated above. The digital submission of the plat will be considered proprietary information. The digital layout will be made available to the Tax Supervisor for parcel update and the digital submission may be returned to the person submitting it.
F. The plat will be reviewed for compliance with this Ordinance.
G. Due to the subdivision of land for residential purposes a portion of land must be dedicated to open space by means of providing recreational area to the residents or payments in lieu of dedication to the County. Open space requirements may be referenced in Section 7.6, Open Space.
H. Planning Board will take action on the plat submission within 65 days after completed submission.
I. Planning Board Master Development Plan approval shall be valid for two years. If all conditions of preliminary plat are met and a phase of the final plat is recorded, the preliminary plat status shall remain valid perpetually for all remaining phases.
J. Preliminary plat approval constitutes approval of the layout and authorizes the developer to proceed with construction of the subdivision and improvements in accord with the approved plat, conditions attached to the approval, and submittal of required permits.

K. All conditions of preliminary plat approval must be completed and submitted within two (2) years of the approval date.

L. If a preliminary plat is not approved, the reasons for disapproval must be specified and provided to the developer in writing. Disapproval of a preliminary plat may be appealed to the Pender County Board of Commissioners.

M. A preliminary plat will not be scheduled for review that is incomplete or does not have the required documents submitted with it.

Minor Subdivision

Proposed subdivisions of ten (10) lots or less, except family and three lot divisions are classified as a minor subdivision and shall follow the preliminary plat review process. Proposed minor subdivisions located in PD, Planned Development district must follow the Master Development Plan review process which requires Planning Board approval.

Pre-application Conference

Applicants who are proposing a residential site development plan shall request a pre-application conference with the Administrator prior to submitting the documents for review.

1) The purpose of the pre-application conference shall be to discuss the proposal in relation to the requirements of any adopted Land Use Plans and Unified Development Ordinance and to obtain advice on the preparation of the preliminary plat.
2) If applicable, the applicant shall provide a copy of the approved Master Development Plan for discussion at the pre-application conference.

Review

A. Application form must be completed and fee paid at the time of submission.

B. Minor subdivision plans must meet all the requirements prescribed in Section 6.4, Preliminary Plat Contents and Section 6.5, Final Plat Contents.

C. The Administrator will forward the Minor Subdivision application and site plan to the Technical Review Committee for review. The TRC shall make recommendations concerning whether the plan meets the requirements and/or plans of their particular state agency, county department or utility authority within five (5) business days.

D. For projects in the PD zoning district, the administrator may request that the site plan be presented to the Planning Board for its review.
   1) The Planning Board may make recommendations to the Administrator concerning the site plan.
   2) The Administrator shall incorporate such recommendations into the review of the site plan.

E. When required submission material is submitted, the Administrator shall review and provide comments or approval to the applicant within fifteen (15) working days.

F. The plat will be reviewed for compliance with this Ordinance.

G. Plat approval constitutes approval of the layout and authorizes the developer to proceed with construction of the subdivision and improvements in accord with the approved plat and any conditions attached to the approval.

H. If a plat is not approved, the reasons for disapproval must be specified and provided to the applicants in writing. Disapproval of a plat may be appealed to the Pender County Zoning Board of Adjustment.

I. Approval of the preliminary plat shall be valid for two (2) years of the approval date unless building permits have been obtained for construction.

APPLICATION FOR SUBDIVISION

THIS SECTION FOR OFFICE USE			
Application No.	SUB	**Date**	
Application Fee	$	**Invoice Number:**	
Master Plan Hearing Date		**Preliminary Plat Hearing Date**	

SECTION 1: APPLICANT INFORMATION

Applicant's Name:	Hastings Sartin, McKim & Creed, Inc.	**Owner's Name:**	D.R. Horton, Inc.
Applicant's Address:	243 North Front St	**Owner's Address:**	131 Racine Dr., Suite 201
City, State, & Zip	Wilmington, NC 28401	**City, State, & Zip**	Wilmington, NC 28403
Phone Number:	910-343-1048	**Phone Number:**	910-515-9561
Email Address:	hsartin@mckimcreed.com	**Email Address:**	elshelton@drhorton.com

Legal relationship of applicant to landowner:

SECTION 2: PROJECT INFORMATION

Preliminary Plat	☑ **Residential** *RP, PD, RM, MH District*	☐ **Mixed Use** *PD*	
Subdivision Type	☑ Major (11 lots or more)	☐ Minor (10 lots or less)	
Property Identification Number (PIN):	3262-72-5914-0000		
Zoning Classification:	PD	**Total property acreage:**	83.65
Number of Lots:	158	**Acreage to be disturbed:**	65.00
Water Provider:	Pender County Utilities	**Wastewater Provider:**	Pluris Hampstead

Additional Information:

2nd Owner: Pender 1164 LLC, 511 North Tejon Street, Suite 200, Colorado Springs, CO 80903

Contact Name: Michael C. Cook, P.C. Member, Ph: 719-632-1222, email: mike@mcooklaw.com

2nd Owner Signature:

SECTION 3: SIGNATURES

Applicant's Signature		**Date:**	10-3-23
Applicant's Printed Name:	Hastings Sartin, McKim & Creed, Inc.	**Date:**	10/3/23
Owner's Signature		**Date:**	10/3/23
Owner's Printed Name:	Ian Flannery, D.R. Horton, Inc.	**Date:**	

NOTICE TO APPLICANT

1. Applicant or agent authorized in writing must attend the public hearing.
2. Once the public hearing has been advertised, the case will be heard unless the applicant withdraws the application or unless the Planning Board or other authorized person agrees to table or delay the hearing.
3. All fees are non-refundable
4. A complete application packet must be submitted prior to the deadline in order to be placed on the next Planning Board Agenda

Office Use Only

☐	**Subdivision Fees:** *$500 + $10/lot-unit for the first 100 lots/units; $5/lot-unit thereafter (Major Subdivision) $150 + $10 per lot (Minor Subdivision)*	**Total Fee Calculation: $** $500 + ($10 x 100 lots)+ ($5 x 58 lots) = $ 1,790.00

Attachments Included with Application: (Please include # of copies)

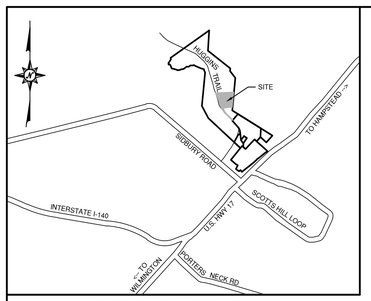
CD /other digital version	☐ Y ☐ N	Plan Sets	# of large	# of 11X17	Other documents/Reports	☐ Y ☐ N
Payment Method:	**Cash :** ☐ $_____		**Credit Card:** ☐ Master Card ☐ Visa		**Check:** ☑ Check # _____	
Application received by:					Date:	
Application completeness approved by:					Date:	
Date scheduled for public hearing:						

BLAKE FARM PARCEL R

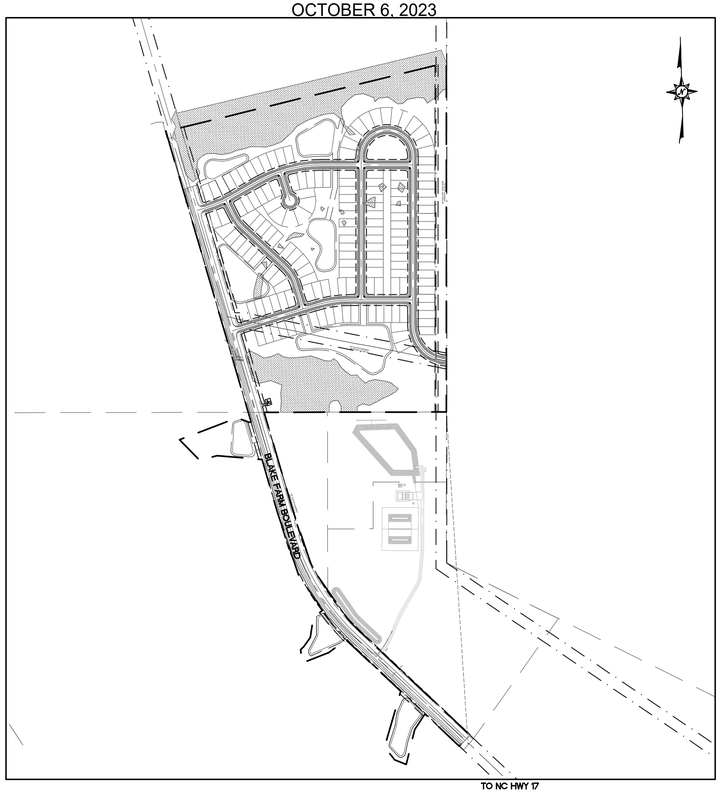
PENDER COUNTY, NC

TRC SUBMITTAL

OCTOBER 6, 2023



VICINITY MAP - NOT TO SCALE



VICINITY MAP
SCALE: 1" = 400'

COUNTY AND AGENCY CONTACTS

A. Pender County
Planning Department
805 S Walker Street
Burgaw, NC 28425
(910)341-3255
Contact: Daniel Adams
Email: dadams@pendercountync.gov

B. NCDENR
Sediment and Erosion Control
127 N Cardinal Dr.
Wilmington, NC 28405
(910) 796-7215
Contact: Dan Sams
Email: dan.sams@ncdenr.gov

C. Pender County Public Utilities
605 E Fremont St
Burgaw, NC 28425
(910) 259-0212
Contact: Katie Leubner
Email: kleubner@pendercountync.gov

D. NCDENR
Division of Environmental Health
Public Water Supply Section
1634 Mail Service Center
Raleigh, NC 27699-1634
(919) 707-9051

E. Pluris Hampstead, LLC
Sanitary Sewer
1095 NC-210
Sneads Ferry, NC 28460
(910) 328-6277
Contact: Nick Evans
Email: nevans@plurisusa.com

F. NCDOT Division 3 - District 1
299 Wilmington Hwy
Jacksonville, NC 28540
(910) 467-0508
Contact: Doug Racine
dracine@ncdot.gov

G. NCDENR
Division of Water Quality
127 Cardinal Drive Ext.
Wilmington, NC 28405
(910) 796-7387
Contact: Tyler Benson
Email: Tyler.Benson@ncdenr.gov

H. FIRE MARSHALL - PENDER COUNTY
Amy Burton
(910) 259-1441
aburton@pendercountync.gov

PROJECT DATA

NAME OF PROJECT:
BLAKE FARM PARCEL R
PENDER COUNTY, NORTH CAROLINA

OWNER / DEVELOPER:
D.R. HORTON
6752 PARKER FARM DRIVE, SUITE 210
WILMINGTON, NC 28405
PHONE: (910) 515 9561
CONTACT: ELIZABETH (LIBBY) SHELTON

PREPARED BY:
MCKIM & CREED, INC
243 NORTH FRONT ST
WILMINGTON, NC 28401
PHONE: (910)343-1048
FAX: (910)251-8282
CONTACT: G. HASTINGS SARTIN II, PE
EMAIL: GSARTIN@MCKIMCREED.COM

BLAKE FARM DENSITY RECONCILIATION 10.04.2023 FOR DRH DEVELOPMENT

Parcel	Per Approved Master Plan		Approved/Under Construction/Existing		Units Remaining
	Land Use	Dwelling Units	Land Use	Dwelling Units	
H*	Residential	45	Residential	49	-4
I*	Residential	39	Residential	33	6
J*	Amenity	0	Amenity	0	0
K	Residential	141	Residential	136	5
L	Residential	130	Residential	119	11
M	Residential	498	Undeveloped	0	498
O	Residential	53	Undeveloped	0	53
P	Residential	379	Undeveloped	0	379
Q	Residential	256	Undeveloped	0	256
R	Residential	138	Undeveloped	158	-20
S	Residential	237	Undeveloped	0	237
T	Residential	110	Undeveloped	0	110
U	Residential	205	Undeveloped	0	205
V	Residential	128	Undeveloped	0	128
W	Residential	89	Undeveloped	0	89
X	Residential	194	Undeveloped	0	194
Y	Residential	65	Undeveloped	0	65
		2707		495	2212

* In TRC Review

BLAKE FARM OPEN SPACE RECONCILIATION 10.04.2023 FOR DRH DEVELOPMENT

Parcel	Per Approved Master Plan		Required Open Space	Approved/Under Construction/Existing		Provided Open Space
	Land Use	Dwelling Units	Acres (.03 AC / UNIT)	Land Use	Dwelling Units	Acres
H*	Residential	45	1.35	Residential	49	1.9
I*	Residential	39	1.17	Residential	33	1.39
J*	Amenity	0	0	Amenity	0	
K	Residential	141	4.23	Residential	136	24.34
L	Residential	130	3.9	Residential	119	0
M	Residential	498	14.94	Undeveloped	0	
O	Residential	53	1.59	Undeveloped	0	
P	Residential	379	11.37	Undeveloped	0	
Q	Residential	256	7.68	Undeveloped	0	
R	Residential	138	4.14	Residential	158	13.14
S	Residential	237	7.11	Undeveloped	0	
T	Residential	110	3.3	Undeveloped	0	
U	Residential	205	6.15	Undeveloped	0	
V	Residential	128	3.84	Undeveloped	0	
W	Residential	89	2.67	Undeveloped	0	
X	Residential	194	5.82	Undeveloped	0	
Y	Residential	65	1.95	Undeveloped	0	
	Total	2707	81.21		495	40.77

* In TRC Review

D·R·HORTON® DHI Listed NYSE
America's Builder
131 Racine Drive, Suite 201
Wilmington, North Carolina 28403
Phone: (843) 709-0752

McKIM&CREED
243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048
Fax: (910)251-8282
License: F-1222
www.mckimcreed.com

Sheet List Table	
Sheet Number	Sheet Title
C1.0	COVER
C1.1	GENERAL NOTES
C2.1	SURVEY
C2.2	SURVEY
C2.3	SURVEY
C2.4	TREE REMOVAL PLAN
C2.5	TREE REMOVAL PLAN
C3.0	SITE PLAN - OVERALL
C3.1	SITE PLAN - ENLARGED
C3.2	SITE PLAN - ENLARGED
C3.3	SITE PLAN - ENLARGED
C3.4	SITE PLAN - ENLARGED
C3.5	SITE PLAN - ENLARGED
C3.6	SITE PLAN - ENLARGED
C4.0	EROSION CONTROL STAGE 1 PLAN - OVERALL
C4.1	EROSION CONTROL STAGE 1 PLAN - ENLARGED
C4.2	EROSION CONTROL STAGE 1 PLAN - ENLARGED
C4.3	EROSION CONTROL STAGE 1 PLAN - ENLARGED
C4.4	EROSION CONTROL STAGE 1 PLAN - ENLARGED
C4.5	EROSION CONTROL STAGE 1 PLAN - ENLARGED
C4.6	EROSION CONTROL STAGE 1 PLAN - ENLARGED
C5.1	EROSION CONTROL STAGE 2 PLAN ENLARGMENT
C5.2	EROSION CONTROL STAGE 2 PLAN ENLARGEMENT
C5.3	EROSION CONTROL STAGE 2 PLAN ENLARGEMENT
C5.4	EROSION CONTROL STAGE 2 PLAN ENLARGEMENT
C5.5	EROSION CONTROL STAGE 2 PLAN ENLARGMENT
C5.6	EROSION CONTROL STAGE 2 PLAN ENLARGMENT
C7.0	GRADING & DRAINAGE PLAN - OVERALL
C7.1	GRADING & DRAINAGE PLAN - ENLARGED
C7.2	GRADING & DRAINAGE PLAN - ENLARGED
C7.3	GRADING & DRAINAGE PLAN - ENLARGED
C7.4	GRADING & DRAINAGE PLAN - ENLARGED
C7.5	GRADING & DRAINAGE PLAN - ENLARGED
C7.6	GRADING & DRAINAGE PLAN - ENLARGED
C8.0	UTILITY PLAN - OVERALL
C8.1	UTILITY PLAN - ENLARGED
C8.2	UTILITY PLAN - ENLARGED
C8.3	UTILITY PLAN - ENLARGED
C8.4	UTILITY PLAN - ENLARGED
C8.5	UTILITY PLAN - ENLARGED
C8.6	UTILITY PLAN - ENLARGED
C9.0	BLAKE FARM BOULEVARD PLAN AND PROFILE (STA. 73+00 TO 83+25)
C9.1	BLAKE FARM BOULDVARD PLAN AND PROFILE (STA. 83+25 TO 93+50)
C9.2	BLAKE FARM BOULEVARD PLAN AND PROFILE (STA. 93+50 TO 103+75)
C9.3	BLAKE FARM BOULDVARD PLAN AND PROFILE (STA. 103+75 TO 114+00)
C9.4	ROAD A PLAN AND PROFILE (STA. 10+00 TO 16+00)
C9.5	ROAD A PLAN AND PROFILE (STA. 16+00 TO 22+15)
C9.6	ROAD B PLAN AND PROFILE (STA. 10+00 TO 17+00)
C9.7	ROAD B PLAN AND PROFILE (STA. 17+00 TO 24+80)
C9.8	ROAD C PLAN AND PROFILE (STA. 10+00 TO 18+88)
C9.9	ROAD D PLAN AND PROFILE (STA. 10+00 TO 11+98)
C9.10	ROAD E PLAN AND PROFILE (STA. 10+00 TO 18+68)
C9.11	ROAD F PLAN AND PROFILE (STA. 10+00 TO 16+43)
C9.12	ROAD G PLAN AND PROFILE (STA. 10+00 TO 17+00)
C9.13	ROAD G PLAN AND PROFILE (STA. 17+00 TO 23+45)
C9.14	TYPICAL STREET SECTIONS
C10.0	LANDSCAPE PLAN - OVERALL
C10.1	LANDSCAPE PLAN - ENLARGEMENT
C10.2	LANDSCAPE PLAN - ENLARGEMENTS
C11.0	SITE DETAILS
C12.0	EROSION CONTROL DETAILS
C12.1	EROSION CONTROL DETAILS
C12.2	EROSION CONTROL DETAILS
C13.0	GRADING AND DRAINAGE DETAILS
C13.1	GRADING AND DRAINAGE DETAILS
C14.0	UTILITY DETAILS
C14.1	UTILITY DETAILS
C15.0	NCDOT AND ROADWAY DETAILS
C15.1	NCDOT AND ROADWAY DETAILS
C17.0	LANDSCAPE DETAILS

Certification of Submission
A copy of this plat has been submitted. Approval is subject to Review; this does not constitute an approval.

Pender County Utilities:_____Date:_____

Pender County Environmental Health:_____Date:_____

Pender County Addressing Coordinator:_____Date:_____

Pender County Fire Marshal:_____Date:_____

Certification of Preliminary Plat Approval
Preliminary Plat Approved by Pender County for a Period of two (2) years subject to the Pender County Unified Development Ordinance requirements and conditions of approval.

Planning Staff:_____Date:_____

BLAKE FARM

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

BLAKE FARM PARCEL R

PRELIMINARY - DO NOT USE FOR CONSTRUCTION

OCTOBER 6, 2023

CONSTRUCTION NOTES

1. CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE NCDOT/PENDER COUNTY UTILITIES/PLURIS HAMPSTEAD, LLC STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR IS FULLY RESPONSIBLE FOR ACQUIRING THE LOCATION OF EXISTING UTILITIES FROM THE APPROPRIATE PARTIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES, USING FLAGMEN, ETC. AS NECESSARY TO INSURE SAFETY TO THE PUBLIC.
4. THESE DRAWINGS SHOW INFORMATION OBTAINED FROM THE AVAILABLE RECORDS REGARDING PIPES, CONDUITS, TELEPHONE LINES, AND OTHER STRUCTURES AND CONDITIONS WHICH EXIST ALONG THE LINES OF WORK AND BELOW THE SURFACE OF THE GROUND. THE OWNER AND ENGINEER DISCLAIM ANY RESPONSIBILITIES FOR THE ACCURACY OR COMPLETENESS OF SAID INFORMATION, AND SUCH INFORMATION IS BEING SHOWN ONLY FOR THE CONVENIENCE OF THE CONTRACTOR WHO MUST VERIFY THE INFORMATION TO HIS OWN SATISFACTION DURING THE BIDDING AND CONSTRUCTION PHASES. IF THE CONTRACTOR RELIES ON SAID INFORMATION, HE DOES SO AT HIS OWN RISK. THE GIVING OF THE INFORMATION ON THE CONTRACT DRAWINGS WILL NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS TO SUPPORT AND PROTECT ALL PIPES, CONDUITS, TELEPHONE LINES, AND OTHER STRUCTURES, WHETHER ABOVE OR BELOW GRADE.
5. SHOULD ANY DAMAGE OCCUR TO EXISTING UTILITIES, IT SHALL BE REPAIRED SOLELY AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL VERIFY EXISTING INVERTS PRIOR TO CONSTRUCTION OF UNDERGROUND UTILITIES. TEST PITTING OF EXISTING LINES PRIOR TO CONSTRUCTION, IF NECESSARY, SHALL BE COORDINATED WITH THE OWNER.
7. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, PROJECT SPECIFICATIONS, AND LOCAL BUILDING CODES.
8. ALL DISTURBED AREAS SHALL BE SMOOTHLY GRADED TO PROMOTE POSITIVE DRAINAGE AND STABILIZED WITH TOPSOIL, SEED, AND MULCH. IF SETTLEMENT OCCURS, TOPSOIL, SEEDING, AND MULCH SHALL BE REPEATED UNTIL SETTLEMENT SUBSIDES. (SEE EROSION AND SEDIMENT CONTROL DETAILS AND SPECIFICATIONS.)
9. WATER MAINS WILL BE INSTALLED AT A DEPTH THAT WILL PROVIDE 36" COVER OVER THE PIPES BELOW PROPOSED GRADE UNLESS SHOWN OTHERWISE ON THESE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.
10. WHEREVER SEWER OR WATER MAINS CROSS ONE ANOTHER, A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE PROVIDED BETWEEN THE BOTTOM OF THE WATER PIPE AND THE TOP OF THE SEWER PIPE.
11. WHEREVER SEWER OR WATER MAINS RUN PARALLEL TO EACH OTHER, A MINIMUM HORIZONTAL SEPARATION OF 10' SHALL BE PROVIDED, OR 18" VERTICAL SEPARATION.
12. IF NEITHER OF THESE CONDITIONS (#10 OR #11 ABOVE) CAN BE MET, THEN THE SEWER SHALL BE CLASS 50 DIP, MINIMUM OF 20 LF CENTERED OVER THE CROSSING.
13. ALL WATER VALVES, BOXES, AND FIRE HYDRANT ASSEMBLIES SHALL BE SET AND ADJUSTED TO FINISHED GRADE. SEE PENDER COUNTY UTILITY DETAIL SHEET C14.0 & C14.1
14. THE OWNER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, BOTH TEMPORARY AND PERMANENT.
15. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL SURVEY CONTROL PRIOR TO STAKING OUT CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
16. ANY PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE REPLACED SOLELY AT THE CONTRACTOR'S EXPENSE.
17. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS.
18. ALL SELECT AND BORROW MATERIAL SHALL MEET CRITERIA SET FORTH BY SECTIONS 1016 AND 1018 OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S STANDARDS AND SPECIFICATIONS FOR ROADS AND STRUCTURES. SEE SECTION FOR PLACEMENT AND COMPACTION INFORMATION.
19. THE ENGINEER AND THE CONTRACTOR SHALL INSPECT ALL EXISTING PIPES USED IN THE FINAL DRAINAGE SYSTEM AND AGREE ON THE CONDITION OF THE PIPES PRIOR TO CONSTRUCTION. IF DAMAGE OCCURS TO THESE PIPES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE PIPE(S).
20. EXISTING PAVING, CONCRETE, AND OTHER UNSUITABLE MATERIALS INCLUDING UNDERCUT EXCAVATION SHALL NOT BE USED AS FILL MATERIAL (UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER) AND SHALL BE DISPOSED OF OUTSIDE THE PROJECT LIMITS AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING AND FEES FOR DISPOSAL.
21. ALL TREES, STUMPS, ROOT MAT, ETC. SHALL BE ENTIRELY REMOVED REGARDLESS OF DEPTH. BURIAL OF ORGANIC MATERIAL WITHIN THE PROJECT LIMITS IS NOT PERMITTED. OPEN BURNING OF DOWNED TREES AND STUMPS IS NOT PERMITTED. CHIPPED MATERIALS MUST BE REMOVED PRIOR TO THE PLACEMENT OF EMBANKMENT OR TOPSOIL.
22. THE CONTRACTOR IS SOLELY RESPONSIBLE TO OBTAIN OFF-SITE SPOIL AREAS FOR DISPOSAL OF EXCESS AND/OR UNSUITABLE MATERIALS AS NECESSARY. OFF-SITE SPOIL AREAS MUST BE SUBMITTED TO THE ENGINEER AND APPLICABLE REGULATORY AGENCIES PRIOR TO UTILIZATION BY THE CONTRACTOR. NO AREAS DESIGNATED AS WETLANDS WILL BE PERMITTED FOR USE AS A DISPOSAL SITE. THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER THAT NO WETLANDS WILL BE IMPACTED. THE ENGINEER WILL NOT CONSIDER ANY DELAYS OR MONETARY CLAIMS OF ANY NATURE RESULTING FROM THE CONTRACTOR'S FAILURE OR DIFFICULTY IN FINDING NECESSARY DISPOSAL SITES TO MEET THE TIME FRAMES AND CAPACITIES REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PLANS, PERMITS, EROSION AND SEDIMENT CONTROL MEASURES, ETC. REQUIRED BY THE APPROPRIATE REGULATORY AGENCIES FOR UTILIZING OFF-SITE SPOIL AREAS. THE CONTRACTOR SHALL CERTIFY TO THE ENGINEER THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO UTILIZING THE OFF-SITE SPOIL AREAS. ALL COSTS FOR PROCURING AND UTILIZING THE OFF-SITE SPOIL AREAS ARE TO BE INCIDENTAL TO THE BASE BID.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIARIZED WITH FIELD DEMOLITION CONDITIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED DEBRIS ASSOCIATED WITH THE PROJECT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. PIT BURNING IS PERMISSIBLE IF APPROVED THROUGH THE PENDER COUNTY FIRE MARSHAL.
3. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST GENERATED BY THE WORK, INCLUDING BUT NOT LIMITED TO DEMOLITION AND CONSTRUCTION ACTIVITIES, SITE VEHICULAR TRAFFIC AND RELATED OPERATIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR HAVING ALL EXISTING UTILITIES LOCATED PRIOR TO BEGINNING ANY DEMOLITION. CONTRACTOR SHALL CONTACT NC ONE CALL AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.
5. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE AND ENGINEER IMMEDIATELY.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF DISCONNECTING AND ABANDONING ALL EXISTING UTILITIES WITH THE OWNER UNLESS OTHERWISE NOTED. ALL EXISTING UTILITIES AND ASSOCIATED PIPING, ETC. NOT IN USE ON THE SITE SHALL BE PROPERLY ABANDONED AND REMOVED AS REQUIRED. COORDINATE WITH THE OWNER.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ANY EXISTING UTILITIES THAT REMAIN IN SERVICE DURING DEMOLITION.
8. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS AND SLOPES ON AND OFF SITE IN ACCORDANCE WITH THE EROSION CONTROL MEASURES SPECIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO DETERMINE WHO IS RESPONSIBLE FOR PROVIDING THE PERMANENT STABILIZATION MEASURES AND THE TYPE OF PERMANENT MEASURES PRIOR TO BEGINNING DEMOLITION AND CONSTRUCTION. THE PERMANENT STABILIZATION MEASURES SHALL BE IN PLACE AND ACCEPTABLE TO THE OWNER'S REPRESENTATIVE AND ENGINEER PRIOR TO PROJECT CLOSEOUT. COORDINATE INSPECTION WITH THE OWNER AND ENGINEER PRIOR TO PROJECT CLOSEOUT.
9. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND CONTACTING THE ENGINEER FOR THE REQUIRED INSPECTIONS ON THE PROJECT.
10. WETLANDS DO EXIST ON SITE AND ARE NOTED ON THE PLANS. UNLESS OTHERWISE INDICATED, THE WETLANDS SHALL NOT BE DISTURBED DURING CONSTRUCTION OF THIS PROJECT.

STORM DRAINAGE AND GRADING NOTES

1. IN ACCORDANCE WITH NC GENERAL STATUTES, NPDES REGULATIONS, AND NCDENR REQUIREMENTS, STORMWATER DISCHARGE OUTFALLS SHALL BE INSPECTED BY THE CONTRACTOR. INSPECTIONS SHALL BE PERFORMED BY THE CONTRACTOR AFTER EACH STORM EVENT OF 1/2 INCH OR GREATER, WITH ONE WEEKLY INSPECTION MINIMUM. NCDENR STANDARD INSPECTION REPORTS SHALL BE PREPARED AND SIGNED WITH COPIES PROVIDED TO THE OWNER, ARCHITECT, AND ENGINEER, BY THE CONTRACTOR.
2. OUTLET PROTECTION SHALL BE INSTALLED AROUND STORM DRAIN OUTFALLS. DEVICES SHALL BE CONSTRUCTED TO FINAL PROPOSED CONDITION UPON STABILIZATION OF CONTRIBUTING GROUND SURFACES AND REMOVAL OF SEDIMENT FROM STORM PIPES.
3. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
4. UNLESS OTHERWISE NOTED, GRADES AND SPOT ELEVATIONS NOTED ON PLANS INDICATE FINISHED GRADE OR PAVEMENT SURFACE. ALL DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE INDICATED.
5. ALL STORM DRAINAGE PIPES 15" INSIDE DIAMETER OR LARGER SHALL BE:
   5.1. RCP CLASS III, OR
   5.2. HP STORM
6. STORM DRAIN PIPES LESS THAN 15" INSIDE DIAMETER SHALL BE HDPE, DOUBLE WALL, TYPE S WITH SOIL TIGHT JOINTS, OR APPROVED EQUAL.
7. STORM DRAINAGE PIPE AND STRUCTURE MATERIALS WITHIN NCDOT RIGHT OF WAY SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS AND SPECIFICATIONS, LATEST EDITION.
8. CONTRACTOR SHALL SUBMIT STORM DRAIN AND STRUCTURE MATERIALS SHOP DRAWING DOCUMENTS TO ENGINEER FOR REVIEW AND APPROVAL.

MATERIALS AND EASEMENT NOTES:

- ALL CATCH BASINS ARE NCDOT STD 840.02/840.03
- ALL DROP INLETS ARE NCDOT STD 840.14/840.16
- ALL STORM DRAINAGE PIPING TO BE CLASS III RCP, UNLESS OTHERWISE NOTED
- ALL SANITARY SEWER LINES AND WATERLINES SHALL BE C-900 PVC, UNLESS OTHERWISE NOTED AND MEET PLURIS HAMPSTEAD, LLC SPECIFICATIONS
- A PUBLIC UTILITY EASEMENT SHALL BE RESERVED WITHIN THE STREET RIGHT-OF-WAY. A 10' NON-MUNICIPAL EASEMENT SHALL BE RESERVED ALONG BOTH SIDES OF ALL STREETS
- WATER UTILITY IS PUBLIC - PENDER COUNTY PUBLIC UTILITIES
- SANITARY SEWER MAIN IS PRIVATE - PLURIS HAMPSTEAD, LLC

UTILITY NOTES

1. SCHEDULE A PRECONSTRUCTION MEETING WITH PENDER COUNTY PUBLIC UTILITIES AND PLURIS HAMPSTEAD, LLC 48 HOURS PRIOR TO CONSTRUCTION OF WATER AND SEWER LINES.
2. WATER AND SANITARY SEWER INFRASTRUCTURE ARE PRIVATE BEYOND THE PUBLIC STREET RIGHT-OF-WAY.
3. BACKFLOW PREVENTION AND METERS SHALL BE PROVIDED FOR DOMESTIC WATER SERVICE (RPZ). DOMESTIC SERVICE BACKFLOW PREVENTER WILL BE LOCATED AS SHOWN ON THE UTILITY PLANS. INSTALLER OF BACKFLOW PREVENTERS MUST CONTACT PCU PRIOR TO INSTALLING UNITS TO GIVE PCU THE OPTION TO VERIFY INSTALLATION PROCEDURES.

   3.1. REDUCED PRESSURE PRINCIPLE ASSEMBLY FOR DOMESTIC WATER SERVICE
4. IF THE CONTRACTOR DESIRES PCU WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
5. WATER: 1.5" & 2" PVC MAINS SHALL BE CONSTRUCTED USING ASTM D2241, IPS, GASKETED PIPE, SDR 21. 4"-12" PVC MAINS AND SERVICES SHALL BE CONSTRUCTED USING ASTM D1704, ASTM D2241 FOR SDR-21, CLASS 200 PVC MEETING.
6. SANITARY SEWER: FOR PIPE SIZES 4" AND 6" PIPE SHALL BE SCH 40 CONFORMING TO THE REQUIREMENTS OF ASTM D1785 WITH SOLVENT WELD JOINTS CONFORMING TO ASTM D2672.
7. WATER AND SEWER SERVICES CANNOT BE ACTIVATED ON NEW MAINS UNTIL ENGINEER'S CERTIFICATION AND AS-BUILTS ARE RECEIVED AND "FINAL APPROVAL" ISSUED BY PUBLIC WATER SUPPLY SECTION OF NCDENR AND "FINAL ENGINEERING CERTIFICATION" ISSUED BY DIVISION OF WATER QUALITY OF NCDENR.
8. PVC WATER MAINS AND POLYETHYLENE SERVICES ARE TO BE MARKED WITH NO. 10 SINGLE STRAND INSULATED COPPER WIRE INSTALLED THE ENTIRE LENGTH AND STRAPPED TO THE PIPES WITH DUCT TAPE. THE INSULATED WIRE IS TO BE STRIPPED TO BARE WIRE AND SECURED TO ALL VALVES. THIS WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
9. MAXIMUM BENDING RADIUS FOR 8" C-900 PVC WATER MAIN BENDS IS 380' (ONE-HALF MANUFACTURER'S RECOMMENDED ALLOWABLE LONGITUDINAL BENDING).
10. UNDERGROUND UTILITIES: ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT WHERE SUCH PLACEMENT IS PROHIBITED OR DEEMED IMPRACTICAL BY THE UTILITY PROVIDER. UNDERGROUND TERMINAL FACILITIES FOR STREET LIGHTING ALONG THE PUBLIC STREETS ABUTTING THE SUBJECT SITE SHALL BE INSTALLED BY THE DEVELOPER.
11. MINIMUM OF 36" COVERAGE ABOVE ALL WATERMAINS AND WATER SERVICES.
12. MINIMUM OF 36" VERTICAL SEPARATION BETWEEN WATERLINES AND STORMDRAIN CURB INLETS
13. A VARIANCE IS NOT ANTICIPATED FROM ANY NORTH CAROLINA DIVISION OF WATER QUALITY (DWQ) REQUIREMENT.
14. PLANS ARE IN COMPLIANCE WITH PENDER COUNTY PUBLIC UTILITIES TECHNICAL STANDARDS AND SPECIFICATIONS.

RELATION OF WATER MAINS TO SANITARY SEWERS:

1. LATERAL SEPARATION OF SANITARY SEWERS AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT LATERAL SEPARATION, IN WHICH CASE:
   1.1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, OR
   1.2. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND ABOVE THE TOP OF THE SEWER.
2. CROSSING A WATER MAIN OVER A SEWER MAIN: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 24 INCHES ABOVE THE TOP OF THE SEWER MAIN, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION - IN WHICH CASE BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
3. CROSSING A WATER MAIN UNDER A SEWER MAIN: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER THE SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. THE WATER MAIN SHALL BE C-900 PVC ENCASED WITHIN A STEEL SLEEVE. REFERENCE PCU STANDARD SPECS AND DETAILS.
4. CROSSING A SEWER MAIN/WATER MAIN OVER OR UNDER A STORM DRAIN: WHENEVER IT IS NECESSARY FOR A SEWER MAIN/WATER MAIN TO CROSS A STORM DRAIN PIPE, THE SEWER MAIN/WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE OUTSIDE OF THE SEWER MAIN/WATER MAIN NEAREST TO THE OUTSIDE OF THE STORM DRAIN PIPE SHALL MAINTAIN A 24 INCH CLEAR SEPARATION DISTANCE HORIZONTAL, OR THE SEWER MAIN SHALL EITHER BE CONSTRUCTED OF DUCTILE IRON PIPE OR ENCASED IN EITHER CONCRETE OR DUCTILE IRON PIPE FOR AT LEAST 5 FEET ON EITHER SIDE OF THE CROSSING. SEE NOTE 3 DIRECTLY ABOVE FOR WATER MAIN MATERIALS.

EXCAVATION, GRADING, AND BACKFILLING NOTES

1. ANY UNDERCUTTING IN GOOD SOIL SHALL BE REPLACED AND THE REPLACEMENT MATERIAL SHALL BE COMPACTED TO NINETY-FIVE (95) PERCENT OF MAXIMUM DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT, AS DETERMINED BY THE ASTM D 698 STANDARD PROCTOR TEST METHOD. IN THE EVENT THAT MATERIAL ENCOUNTERED AT PIPE GRADE, SUBGRADE OF PARKING OR ROADWAYS AND SUBGRADE OF BUILDING FOUNDATIONS IS FOUND TO BE SOFT, SPONGY, OR IN ANY OTHER WAY UNSUITABLE, THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER IMMEDIATELY. SUCH UNSUITABLE MATERIAL SHALL BE REMOVED TO A DEPTH AS SPECIFIED BY THE GEOTECHNICAL ENGINEER AND REPLACED WITH A MINIMUM OF SIX (6) INCHES OF STONE, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
2. BEFORE BACKFILLING IS COMMENCED OVER PIPES AND OTHER INSTALLATIONS, EARTH FILL SHALL BE TAMPED SOLID AROUND AND ABOVE THE PIPE TO A DEPTH OF ONE (1) FOOT ABOVE THE TOP OF THE PIPE. CARE SHALL BE TAKEN TO PREVENT ANY DISTURBANCE TO THE PIPE OR DAMAGE TO NEWLY MADE JOINTS. THE FILLING OF THE TRENCH SHALL BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES OF THE PIPES IN SUCH A MANNER THAT INJURIOUS SIDE PRESSURES DO NOT OCCUR.
3. THE MATERIAL FOR BACKFILLING SHALL BE FREE FROM ALL PERISHABLE AND OBJECTIONABLE MATERIALS. BEFORE PLACING ANY BACKFILL, ALL RUBBISH, FORM, BLOCKS, WIRES OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM EXCAVATION. THE BACK-FILLING OVER PIPES SHALL BE PLACED IN LAYERS NOT OVER SIX (6) INCHES THICK AND COMPACTED TO A MINIMUM DENSITY OF NINETY-FIVE (95) PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST TO A DEPTH OF 12 INCHES BELOW FINISHED GRADE. THE LAST 12 INCHES OF BACKFILL SHALL BE PLACED IN LAYERS NOT OVER SIX (6) INCHES THICK AND COMPACTED TO A MINIMUM DENSITY OF NINETY-EIGHT (98) PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST.

EROSION CONTROL NOTES

1. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
2. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF STATE LAW AND IS SUBJECT TO A FINE. ANY BUILDER THAT ANTICIPATED THE DISTURBANCE OF MORE THAN ONE ACRE WILL BE REQUIRED TO GET AN EROSION CONTROL PERMIT FROM NCDENR - DLQ.
3. GROUND COVER MUST BE PROVIDED ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING; AND, A PERMANENT GROUND COVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
4. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NCDENR - DLQ.
5. SLOPES SHALL BE GRADED NO STEEPER THAN 3:1.
6. ADDITIONAL DEVICES MAY BE REQUIRED AS AGREED UPON BY THE FIELD INSPECTOR, ENGINEER, AND OWNER.
7. IF ACTIVE CONSTRUCTION CEASES IN ANY AREA FOR MORE THAN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER), ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, AND TACKED.
8. WITHIN 24 HOURS FOLLOWING ANY RAIN EVENT, THE CONTRACTOR SHALL INSPECT AND REPAIR, AS NECESSARY, ALL DAMAGED EROSION CONTROL MEASURES.
9. ALL ACTIVITY AND INSTALLATION OF EROSION CONTROL MATTING SHALL BE COMPLETE PRIOR TO ANY RAIN EVENT.

EROSION CONTROL MAINTENANCE PLAN:

1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AND REPAIRED, AS NECESSARY, EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF EVERY ONE-HALF (0.5) INCH OR GREATER RAINFALL.
2. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP. THE SEDIMENT FENCE SHALL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
4. ALL AREAS SHALL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
5. STONE CONSTRUCTION ENTRANCE TO BE CLEANED WHEN SEDIMENT ACCUMULATIONS ARE VISIBLE OR SEDIMENT IS TRACKED ON TO THE PAVEMENT. STONE WILL BE PERIODICALLY TOP DRESSED WITH 2 INCHES OF #4 STONE TO MAINTAIN 6 INCH DEPTH. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS REQUIRED.
6. INSPECT TEMPORARY DIVERSIONS AND CHECK DAMS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE AND CHECK DAM. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.
7. INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS.
8. CHECK THE SEDIMENT BASIN EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.
9. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (0.5" OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED. INLET PROTECTION SHOULD BE CLEANED OUT WHEN IT IS HALF FULL.
10. INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEAN OUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH. AFTER THE CONTRIBUTING DRAINAGE AREAS HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.
11. INSPECT THE SKIMMER FOR CLOGGING. PULL THE SKIMMER TO THE SIDE OF THE BASIN AND REMOVE ANY DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER AND THE ARM OR BARREL PIPE FOR CLOGGING; IF CLOGGED, REMOVE THE DEBRIS.

STANDARD NOTES

1. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING AT 1-800-632-4949.
2. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
3. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
4. ALL TRAFFIC CONTROL SIGNS AND MARKING OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
5. ANY BROKEN OR MISSING SIDEWALK PANELS AND CURBING SHALL BE REPLACED BY THE CONTRACTOR.
6. TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
7. NO LAND DISTURBANCE INCLUDING TREE REMOVAL IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON THE PLANS.
8. IF UNITS ARE SOLD AT ANY POINT, THE BUYER MUST RECEIVE A SUBDIVISION STREET DISCLOSURE STATEMENT.

FIRE PROTECTION NOTES

1. HYDRANT MUST BE WITHIN 100' OF THE FDC.
2. THE FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
3. TEMPORARY STREET SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES.
4. ALL HYDRANTS MUST BE WITHIN 600 FEET OF RESIDENTIAL STRUCTURES.
5. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
6. COMBUSTIBLE MATERIALS MAY NOT BE STORED OR ERECTED ONSITE WITHOUT COUNTY FIRE MARSHAL APPROVAL.
7. NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION.
8. A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM UNDERGROUND UTILITIES
9. CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS TO ALL PORTIONS OF THE JOBSITE WHERE COMBUSTIBLES ARE PRESENT AT ALL

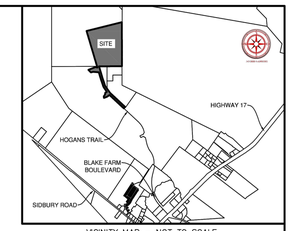
TREE LEGEND

= HOLLY
= WATER OAK
= WHITE OAK
= LAUREL OAK
= LONGLEAF PINE
= RED MAPLE
= CYPRESS

N/F
PENDER 1164 LLC
PIN 3262-72-5914-0000
DB 4369 PG 255
MB 40 PG 76

N/F
WILBUR R. CORBETT AND
REBECCA CORBETT MCGOWAN
PIN 3281-15-7192-0000
DEED BOOK 1A PAGE 6521
MAP BOOK 26 PAGE 113

NC GRID NAD83/2011



VICINITY MAP – NOT TO SCALE

SURVEYOR'S NOTE:

1. ALL DISTANCES ARE HORIZONTAL GROUND IN U.S. SURVEY FEET UNLESS OTHERWISE SHOWN.
2. BEARINGS BASED ON NC GRID NAD83/2011.
3. REFERENCES:AS SHOWN ON MAP
4. UNDERGROUND UTILITIES ARE SHOWN ONLY WHERE ABOVE GROUND SERVICES WERE VISIBLE OR MARKINGS FOUND IN FIELD (SEE NOTE 9).
5. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
6. SUBJECT TO ALL EASEMENTS, RIGHT OF WAYS, AND OR ENCUMBRANCES THAT MAY EFFECT THIS PROPERTY.
7. THIS PROPERTY LIES WITHIN IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO NATIONAL FLOOD INSURANCE PANEL NUMBER 3271 MAP NUMBER 3720327100J EFFECTIVE DATE 02/16/2007.
8. TREES LOCATED AND SHOWN CAN BE REFERENCED FROM PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE SECTION 8.1.3, AND FURTHER DESCRIBED IN THE PLANTING TABLE PER APPENDIX B.
9. SANITARY FORCE MAIN AND DISCHARGE LINE SHOWN IS NOT TO BE RELIED UPON FOR ACCURACY OF LOCATION. LINES SHOWN ARE PER ABOVE GROUND FEATURES FOUND, GREEN FLAGS MARKED BY AN UNKNOWN ENTITY, AND A CONVERSATION WITH A PLURIS REPRESENTATIVE. LINES ARE SHOWN TO GRAPHICALLY DISPLAY THE APPROXIMATE AREA OF SANITARY LINES.
10. BOUNDARY SHOWN IS MARKED PRELIMINARY UNTIL RIGHT OF WAY IS FINALIZED, ADJOINING PROPERTY LINES NOT SURVEYED.
11. THIS IS NOT A BOUNDARY SURVEY. THE PURPOSE OF THIS MAP IS A TOPOGRAPHIC SURVEY AND TREE SURVEY.

I, RYAN LOCKHART PLS L-5427, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS GROUND SURVEY WAS PERFORMED AT 0.04 @ 95% CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS FOR A TOPOGRAPHIC SURVEY TO THE ACCURACY OF CLASS AA AND VERTICAL ACCURACY WHEN THE APPLICABLE TO CLASS A STANDARD, AND THAT THE ORIGINAL DATA WAS OBTAINED ON 06/09/23; THAT THE SURVEY WAS COMPLETED ON 07/31/23;AND ALL COORDINATES ARE BASED ON NORTH CAROLINA STATE PLANE COORDINATE SYSTEM COORDINATES NAD83(2011) AND THAT THE ELEVATIONS ARE BASED ON NAVD88(GEOID18); THAT THIS PLAT MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56. 1600);

THAT THE GPS SURVEY MADE WAS UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO ESTABLISH CONTROL ONLY.

CLASS OF SURVEY: AA
POSITIONAL ACCURACY: 0.04' @ 95%
TYPE OF GPS FIELD PROCEDURE: REAL TIME KINEMATIC
DATES OF SURVEY: 06/23/23-07/31/23
DATUM/EPOCH: NAD83(2011)
PUBLISHED/FIXED-CONTROL USED: NC CORS
GEOID MODEL: GEOID 18
COMBINED GRID FACTOR: 1.00000228
UNITS: U.S. SURVEY FEET
WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER, AND SEAL THIS _____ DAY OF _____, AD

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES

RYAN LOCKHART
PROFESSIONAL LAND SURVEYOR L-5427

LEGEND

= CONTROL POINT
= PVC PIPES VISIBLE (POSSIBLE DISCHARGE LINE)
IRF = IRON ROD FOUND (AS DESCRIBED)
IPF = IRON PIPE FOUND (AS DESCRIBED)
A2 = WETLAND FLAG (NUMBERED AS DESCRIBED)
N/F = NOW OR FORMERLY
RC = REBAR WITH CAP
HDPE = HIGH DENSITY POLYETHYLENE PIPE
CMP = CORRUGATED METAL PIPE
C.S.F. = COMBINED SCALE FACTOR
DBH = DIAMETER AT BREAST HEIGHT (IN INCHES)
PIN = PARCEL IDENTIFICATION NUMBER
= POWER POLE
= SANITARY VALVE
= ELECTRIC BOX

LINE LEGEND

= TIE LINE
SD = STORM DRAINAGE
= EASEMENT (AS DESCRIBED)
= PROJECT LIMITS
= WETLAND LINE
= WOOD LINE
= ADJOINING PROPERTY LINES
= CENTERLINE OF DIRT TRAIL
SS = SANITARY FORCE MAIN/DISCHARGE LINE

HATCH LEGEND

= WETLAND AREA

SCALE: 1" = 80'
0 40' 80' 160' 240'

McKIM&CREED
243 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TELEPHONE: (910) 343-1048
FAX: (910) 251-8282
NORTH CAROLINA FIRM LICENSE NUMBER: F-1222

TOPOGRAPHIC AND TREE SURVEY
FOR
PENDER 1164 LLC
DEED BOOK: 4369 PAGE: 255 & DEED BOOK: 4286 PAGE: 8
PIN: 3271-06-1762-0000 & 3262-72-5914-0000
TOPSAIL TOWNSHIP, PENDER COUNTY, NORTH CAROLINA
AUGUST 10, 2023

JOB NUMBER:	04245-0055
SCALE:	1" = 80'
CAD NUMBER:	VT-BFParcel R
PLS:	RL
PARTY CHIEF:	AM & MS
CAD TECH:	CH & GR
FIELD BOOK/PAGE:	FB/PG
DRAWING NUMBER:	2023-084

SHEET 1 OF 3 C2.1

MATCH LINE SHEET 1

N/F
PENDER 1164 LLC
PIN 3262-72-5914-0000
DB 4369 PG 255
MB 40 PG 76

N/F
PENDER 1164 LLC
PIN 3262-72-5914-0000
DB 4369 PG 255
MB 40 PG 76

MATCH LINE SHEET 1

NC GRID NAD83/2011

CENTERLINE OF DIRT/GRAVEL TRAIL APPROXIMATELY 8-12' WIDE

18" CMP
INVERT ELEVATION: 31.94'

2" PVC PIPE
PROTRUDING ABOVE GROUND 3'

18" CMP
INVERT ELEVATION:31.62'

100' ACCESS AND UTILITY EASEMENT PER MAP BOOK 47 PAGE 98

DIRT PATH

MISSING WETLAND FLAG D1

WETLAND LINE "J"

30" RCP INV: 29.12'

30" RCP INV: 29.52'

J25 STOP

36" CMP INV: 27.15'

36" CMP INV: 26.92'

2-36" CMP INV(S): 26.68'
FOR CMP(S) UNDER ROAD
SIZE IS APPROXIMATE
PIPES ARE CRUSHED AND
UNDERWATER

WETLAND LINE "SA"

N/F
WILBUR R. CORBETT AND
REBECCA CORBETT MCGOWAN
PIN 3281-15-7192-0000
DEED BOOK 1A PAGE 6521
MAP BOOK 26 PAGE 113

1" IRF

1" IRF

TREE LEGEND

	=	HOLLY
	=	WATER OAK
	=	WHITE OAK
	=	LAUREL OAK
	=	LONGLEAF PINE
	=	RED MAPLE
	=	CYPRESS

HATCH LEGEND

	=	WETLAND AREA

LEGEND

	=	CONTROL POINT
	=	PVC PIPES VISIBLE (POSSIBLE DISCHARGE LINE)
IRF	=	IRON ROD FOUND (AS DESCRIBED)
IPF	=	IRON PIPE FOUND (AS DESCRIBED)
A2	=	WETLAND FLAG (NUMBERED AS DESCRIBED)
N/F	=	NOW OR FORMERLY
RC	=	REBAR WITH CAP
HDPE	=	HIGH DENSITY POLYETHYLENE PIPE
CMP	=	CORRUGATED METAL PIPE
C.S.F.	=	COMBINED SCALE FACTOR
DBH	=	DIAMETER AT BREAST HEIGHT (IN INCHES)
PIN	=	PARCEL IDENTIFICATION NUMBER
	=	POWER POLE
	=	SANITARY VALVE
E	=	ELECTRIC BOX

LINE LEGEND

	=	TIE LINE
SD	=	STORM DRAINAGE
	=	EASEMENT (AS DESCRIBED)
	=	PROJECT LIMITS
	=	WETLAND LINE
	=	WOOD LINE
	=	ADJOINING PROPERTY LINES
	=	CENTERLINE OF DIRT TRAIL
SS	=	SANITARY FORCE MAIN/DISCHARGE LINE

100' ACCESS AND UTILITY EASEMENT PER MAP BOOK 47 PAGE 98

AREA OF DISCHARGE LINE IS APPROXIMATE AND IS FOR GRAPHIC DISPLAY ONLY NO SUE WORK HAS BEEN PERFORMED FOR THIS SURVEY

N/F
PENDER 1164 LLC
PIN 3271-06-1762-0000
DB 4286 PG 8
MB 56 PG 87

N/F
BLAKE FARM POND LLC
PIN 3271-08-8507-0000
DB 4606 PG 1545
MB 56 PG 87

N/F
PENDER 1164 LLC
PIN 3271-06-1762-0000
DB 4286 PG 8
MB 56 PG 87

DIRT ROAD

MATCH LINE SHEET 3

MATCH LINE SHEET 3

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES

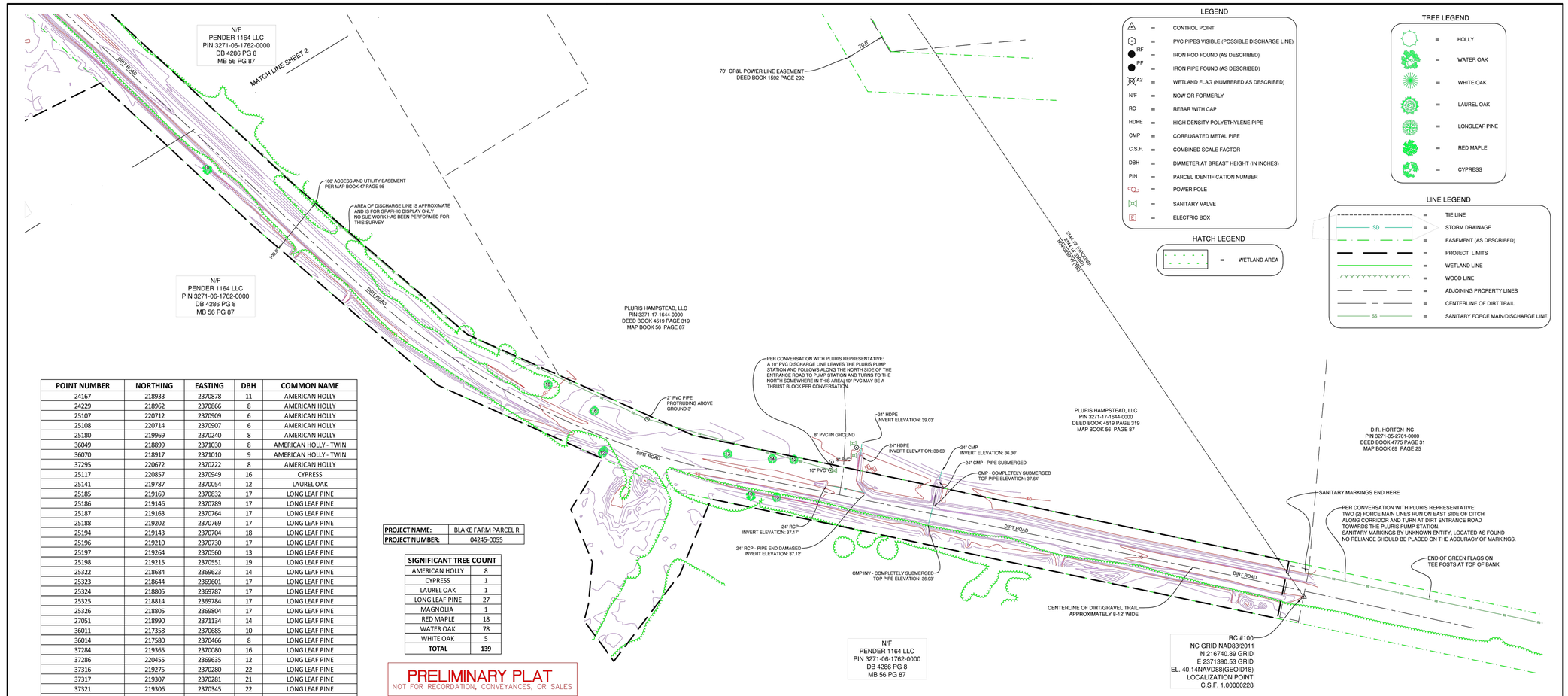
SCALE: 1" =80'
0 40' 80' 160' 240'

McKIM & CREED
243 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TELEPHONE: (910) 343-1048
FAX: (910) 251-8282
NORTH CAROLINA FIRM LICENSE NUMBER: F-1222

TOPOGRAPHIC AND TREE SURVEY
FOR
PENDER 1164 LLC
DEED BOOK: 4369 PAGE: 255 & DEED BOOK: 4286 PAGE: 8
PINS:3271-06-1762-0000 & 3262-72-5914-0000
TOPSAIL TOWNSHIP, PENDER COUNTY, NORTH CAROLINA
AUGUST 10, 2023

JOB NUMBER:	04245-0055
SCALE:	1"=80'
CAD NUMBER:	VT-BFParcel R
PLS:	RL
PARTY CHIEF:	AM & MS
CAD TECH:	CH & GR
FIELD BOOK/PAGE:	FB/PG
DRAWING NUMBER:	2023-084

SHEET 2 OF 3 C2.2



POINT NUMBER	NORTHING	EASTING	DBH	COMMON NAME
24167	218933	2370878	11	AMERICAN HOLLY
24229	218962	2370866	8	AMERICAN HOLLY
25107	220712	2370909	6	AMERICAN HOLLY
25108	220714	2370907	6	AMERICAN HOLLY
25180	219969	2370240	8	AMERICAN HOLLY
36049	218899	2371030	8	AMERICAN HOLLY - TWIN
36070	218917	2371010	9	AMERICAN HOLLY - TWIN
37295	220672	2370222	8	AMERICAN HOLLY
25117	220857	2370949	16	CYPRESS
25141	219787	2370054	12	LAUREL OAK
25185	219169	2370832	17	LONG LEAF PINE
25186	219146	2370789	17	LONG LEAF PINE
25187	219163	2370764	17	LONG LEAF PINE
25188	219202	2370769	17	LONG LEAF PINE
25194	219143	2370704	18	LONG LEAF PINE
25196	219210	2370730	17	LONG LEAF PINE
25197	219264	2370560	13	LONG LEAF PINE
25198	219215	2370551	19	LONG LEAF PINE
25322	218684	2369623	14	LONG LEAF PINE
25323	218644	2369601	17	LONG LEAF PINE
25324	218805	2369787	17	LONG LEAF PINE
25325	218814	2369784	17	LONG LEAF PINE
25326	218805	2369804	17	LONG LEAF PINE
27051	218990	2371134	14	LONG LEAF PINE
36011	217358	2370685	10	LONG LEAF PINE
36014	217580	2370466	8	LONG LEAF PINE
37284	219365	2370080	16	LONG LEAF PINE
37286	220455	2369635	12	LONG LEAF PINE
37316	219275	2370280	22	LONG LEAF PINE
37317	219307	2370281	21	LONG LEAF PINE
37321	219306	2370345	22	LONG LEAF PINE
38133	217398	2370744	12	LONG LEAF PINE
38134	217418	2370712	14	LONG LEAF PINE
38135	217465	2370650	13	LONG LEAF PINE
38190	217647	2370486	16	LONG LEAF PINE
38198	217728	2370440	18	LONG LEAF PINE
200003	217578	2370462	12	LONG LEAF PINE
37335	220360	2370798	12	MAGNOLIA
24163	218911	2370891	14	RED MAPLE
24225	218946	2370858	16	RED MAPLE
25102	220274	2370946	12	RED MAPLE
25113	220793	2370455	12	RED MAPLE - CLUSTER
25134	219665	2370053	13	RED MAPLE
25143	219844	2370132	14	RED MAPLE
25151	219744	2369973	13	RED MAPLE
25155	219993	2370142	14	RED MAPLE
25167	220211	2370547	12	RED MAPLE - CLUSTER
25178	219972	2370214	16	RED MAPLE
25195	219092	2370684	30	RED MAPLE
25199	219157	2370570	16	RED MAPLE
36061	218915	2370939	20	RED MAPLE
36068	218916	2370984	20	RED MAPLE
36069	218917	2370999	12	RED MAPLE
37018	219079	2370929	12	RED MAPLE
37282	219331	2370071	12	RED MAPLE
37294	220651	2370194	12	RED MAPLE
24220	218896	2370870	10	WATER OAK
24248	218928	2370831	13	WATER OAK
25111	220774	2370405	10	WATER OAK
25112	220770	2370418	10	WATER OAK
25115	220833	2370564	10	WATER OAK
25116	220851	2370571	12	WATER OAK
25121	220844	2370559	14	WATER OAK
25127	219563	2370060	8	WATER OAK
25128	219557	2370055	9	WATER OAK
25129	219563	2370052	9	WATER OAK
25130	219565	2370038	9	WATER OAK
25131	219603	2370038	14	WATER OAK
25132	219596	2370042	9	WATER OAK

PROJECT NAME:	BLAKE FARM PARCEL R
PROJECT NUMBER:	04245-0055

SIGNIFICANT TREE COUNT	
AMERICAN HOLLY	8
CYPRESS	1
LAUREL OAK	1
LONG LEAF PINE	27
MAGNOLIA	1
RED MAPLE	18
WATER OAK	78
WHITE OAK	5
TOTAL	**139**

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES

POINT NUMBER	NORTHING	EASTING	DBH	COMMON NAME
25133	219597	2370023	11	WATER OAK
25135	219656	2370048	10	WATER OAK
25139	219741	2370056	10	WATER OAK
25145	219914	2370085	14	WATER OAK
25147	219962	2370100	12	WATER OAK
25148	219875	2370035	10	WATER OAK
25152	219764	2369978	9	WATER OAK
25154	219879	2370051	12	WATER OAK
25158	219452	2370105	11	WATER OAK
25168	220197	2370547	12	WATER OAK
25169	220158	2370581	12	WATER OAK
25170	220138	2370585	12	WATER OAK
25171	220119	2370586	12	WATER OAK
25190	219109	2370834	9	WATER OAK
25357	220395	2369543	9	WATER OAK
25694	219641	2369723	8	WATER OAK
27053	218959	2371117	9	WATER OAK
27054	218957	2371117	8	WATER OAK
27060	218886	2371134	13	WATER OAK - TWIN
36010	217382	2370647	10	WATER OAK - CLUSTER
36025	218347	2370115	10	WATER OAK
36052	219140	2369870	8	WATER OAK
36054	218969	2371083	12	WATER OAK

POINT NUMBER	NORTHING	EASTING	DBH	COMMON NAME
36056	219181	2369867	12	WATER OAK
36059	219188	2369856	12	WATER OAK
37019	219075	2370915	8	WATER OAK
37024	219102	2370883	12	WATER OAK
37027	219075	2370859	9	WATER OAK
37029	219058	2370908	10	WATER OAK
37030	219060	2370895	9	WATER OAK
37057	219204	2370915	10	WATER OAK
37255	218996	2370021	12	WATER OAK
37256	218967	2370042	18	WATER OAK
37258	218930	2370052	14	WATER OAK
37260	218997	2370136	12	WATER OAK
37262	219039	2370093	17	WATER OAK
37263	219056	2370093	16	WATER OAK
37264	219060	2370090	12	WATER OAK
37265	219089	2370084	15	WATER OAK
37266	219069	2370075	14	WATER OAK
37267	219054	2370037	12	WATER OAK
37269	219037	2370038	19	WATER OAK
37271	219031	2370045	14	WATER OAK
37272	218986	2370050	18	WATER OAK
37273	218989	2370082	12	WATER OAK
37274	219192	2369922	20	WATER OAK

POINT NUMBER	NORTHING	EASTING	DBH	COMMON NAME
37283	219331	2370083	12	WATER OAK
37287	220502	2369627	11	WATER OAK
37289	220499	2369610	12	WATER OAK
37290	220509	2369618	12	WATER OAK
37292	220539	2369836	12	WATER OAK
37299	219299	2370135	10	WATER OAK
37305	219289	2370164	10	WATER OAK
37309	219282	2370225	12	WATER OAK
37311	219281	2370234	10	WATER OAK
37318	219254	2370313	16	WATER OAK
37320	219242	2370307	22	WATER OAK
37322	219291	2370377	17	WATER OAK
37326	219221	2370430	11	WATER OAK
37327	219218	2370422	16	WATER OAK
37330	219229	2370379	16	WATER OAK
200004	219141	2369874	10	WATER OAK - TWIN
200005	219169	2369869	12	WATER OAK
200006	219195	2369861	10	WATER OAK
200007	219244	2369845	10	WATER OAK
37300	219266	2370126	12	WHITE OAK
37301	219277	2370109	21	WHITE OAK
37302	219296	2370143	22	WHITE OAK
37308	219337	2370138	14	WHITE OAK
37315	219270	2370275	16	WHITE OAK

NC GRID NAD83/2011

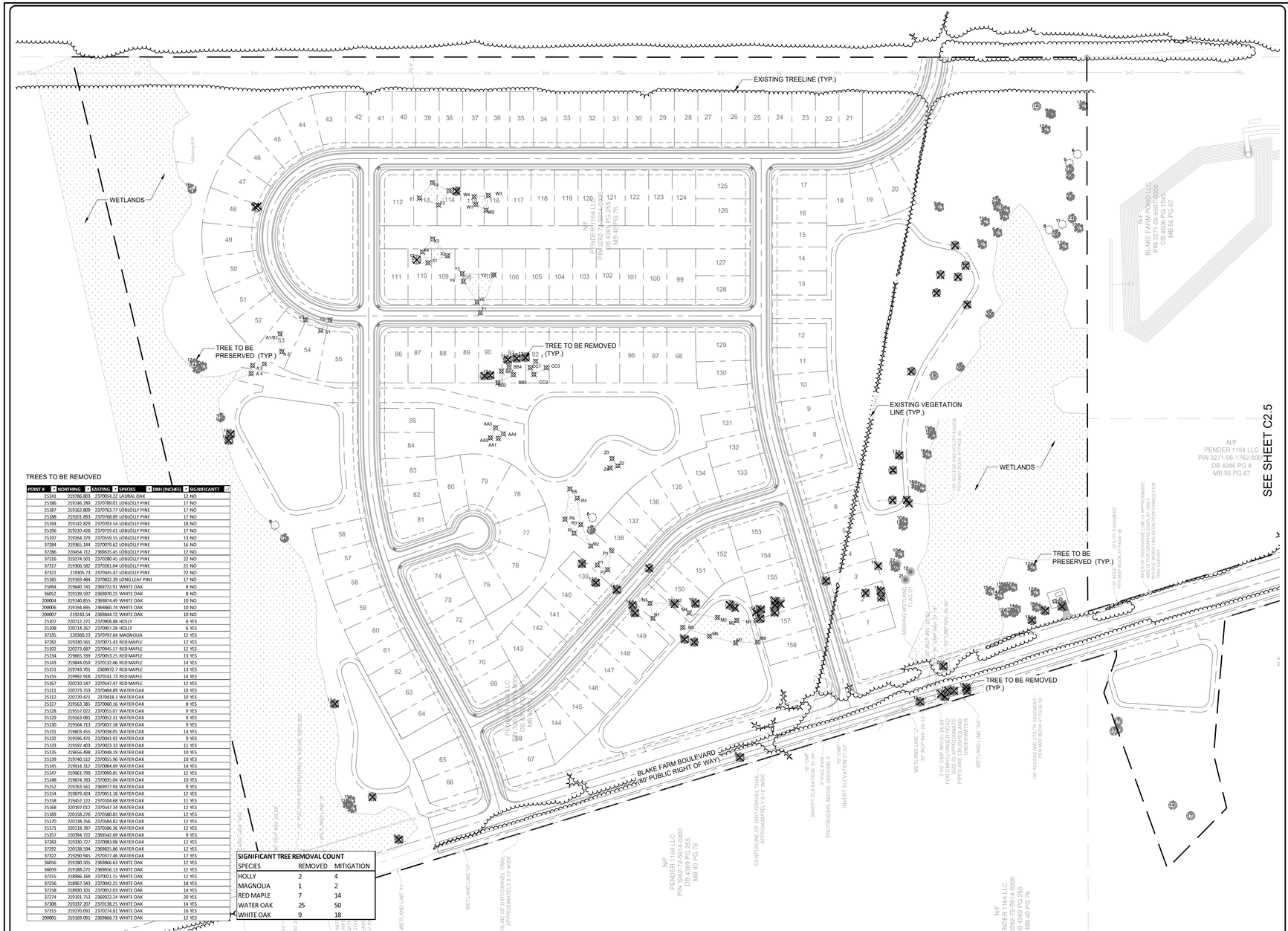
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0 40' 80' 160' 240'

McKIM&CREED
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NORTH CAROLINA FIRM LICENSE NUMBER: F-1222

TOPOGRAPHIC & TREE SURVEY
FOR
PENDER 1164 LLC
DEED BOOK: 4369 PAGE: 255 & DEED BOOK: 4286 PAGE: 8
PIN(S): 3271-06-1762-0000 & 3262-72-5914-0000
TOPSAIL TOWNSHIP, PENDER COUNTY, NORTH CAROLINA
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PARTY CHIEF:	AM & MS
CAD TECH:	CH & GR
FIELD BOOK/PAGE:	FB/PG
DRAWING NUMBER:	2023-084

SHEET 3 OF 3 C2.3



TREES TO BE REMOVED

POINT #	NORTHING	EASTING	SPECIES	DBH (INCHES)	SIGNIFICANT?
25141	219786.803	2370054.22	LAURAL OAK	12	NO
25186	219146.289	2370789.01	LOBLOLLY PINE	17	NO
25187	219162.809	2370763.77	LOBLOLLY PINE	17	NO
25188	219201.893	2370768.88	LOBLOLLY PINE	17	NO
25194	219142.829	2370703.54	LOBLOLLY PINE	18	NO
25196	219210.428	2370729.61	LOBLOLLY PINE	17	NO
25197	219264.379	2370569.55	LOBLOLLY PINE	13	NO
37284	219365.144	2370079.62	LOBLOLLY PINE	16	NO
37286	220454.712	2369635.45	LOBLOLLY PINE	12	NO
37316	219374.501	2370280.45	LOBLOLLY PINE	22	NO
37317	219306.582	2370281.04	LOBLOLLY PINE	21	NO
37321	219305.73	2370345.47	LOBLOLLY PINE	22	NO
25185	219169.484	2370832.39	LONG LEAF PINE	17	NO
25694	219640.741	2369722.91	WHITE OAK	8	NO
36052	219139.597	2369870.25	WHITE OAK	8	NO
200004	219140.855	2369874.49	WHITE OAK	10	NO
200006	219194.695	2369860.74	WHITE OAK	10	NO
200007	219243.54	2369844.72	WHITE OAK	10	NO
25307	220712.271	2370908.88	HOLLY	6	YES
25308	220714.267	2370907.28	HOLLY	6	YES
37335	220360.23	2370797.64	MAGNOLIA	12	YES
37282	219330.561	2370071.43	RED MAPLE	12	YES
25102	220273.687	2370945.57	RED MAPLE	12	YES
25134	219665.339	2370053.25	RED MAPLE	13	YES
25143	219844.059	2370132.06	RED MAPLE	14	YES
25151	219743.701	2369972.7	RED MAPLE	13	YES
25155	219992.918	2370141.73	RED MAPLE	14	YES
25162	220210.547	2370547.47	RED MAPLE	12	YES
25111	220773.753	2370404.89	WATER OAK	10	YES
25112	220770.471	2370418.1	WATER OAK	10	YES
25127	219563.385	2370060.16	WATER OAK	8	YES
25128	219557.022	2370055.07	WATER OAK	9	YES
25129	219563.081	2370052.31	WATER OAK	9	YES
25130	219564.713	2370037.58	WATER OAK	9	YES
25131	219603.455	2370038.05	WATER OAK	14	YES
25132	219596.471	2370041.92	WATER OAK	9	YES
25133	219597.403	2370023.33	WATER OAK	11	YES
25135	219656.498	2370048.19	WATER OAK	10	YES
25139	219740.512	2370055.96	WATER OAK	10	YES
25145	219814.312	2370084.69	WATER OAK	14	YES
25147	219961.799	2370099.85	WATER OAK	12	YES
25148	219874.783	2370035.04	WATER OAK	10	YES
25152	219763.561	2369977.54	WATER OAK	9	YES
25154	219879.424	2370051.18	WATER OAK	12	YES
25158	219452.122	2370104.68	WATER OAK	11	YES
25168	220197.012	2370547.34	WATER OAK	12	YES
25169	220158.276	2370580.85	WATER OAK	12	YES
25170	220138.356	2370584.82	WATER OAK	12	YES
25171	220118.787	2370586.36	WATER OAK	12	YES
25357	220394.722	2369542.68	WATER OAK	9	YES
37283	219330.727	2370083.08	WATER OAK	12	YES
37292	220538.594	2369835.86	WATER OAK	12	YES
37322	219290.945	2370377.46	WATER OAK	17	YES
36056	219180.505	2369866.63	WHITE OAK	12	YES
36059	219188.272	2369856.13	WHITE OAK	12	YES
37255	218996.169	2370021.15	WHITE OAK	12	YES
37256	218967.343	2370042.25	WHITE OAK	18	YES
37258	218930.101	2370052.03	WHITE OAK	14	YES
37274	219191.753	2369922.24	WHITE OAK	20	YES
37308	219337.207	2370138.25	WHITE OAK	14	YES
37315	219270.091	2370274.81	WHITE OAK	16	YES
200005	219169.091	2369868.73	WHITE OAK	12	YES

SIGNIFICANT TREE REMOVAL COUNT

SPECIES	REMOVED	MITIGATION
HOLLY	2	4
MAGNOLIA	1	2
RED MAPLE	7	14
WATER OAK	25	50
WHITE OAK	9	18

2 TREE REMOVAL PLAN

TREE REMOVAL PLAN

1. TREE REMOVAL WILL INVOLVE CLEARING OF THE VEGETATION UNDER THE ESSENTIAL SITE IMPROVEMENTS.

WETLANDS

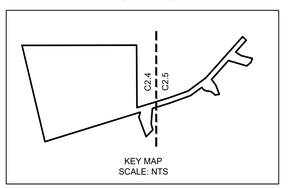
12 TREES TO BE PRESERVED

TREES TO BE REMOVED

TREE LEGEND

- CEDAR
- GUM
- HOLLY
- OAK
- MAGNOLIA
- MAPLE
- PINE
- BIRCH
- BAY
- CYPRESS
- TREE SIZE

100' 0 100' 200'
SCALE 1" = 100'



1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

TREE REMOVAL PLAN

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

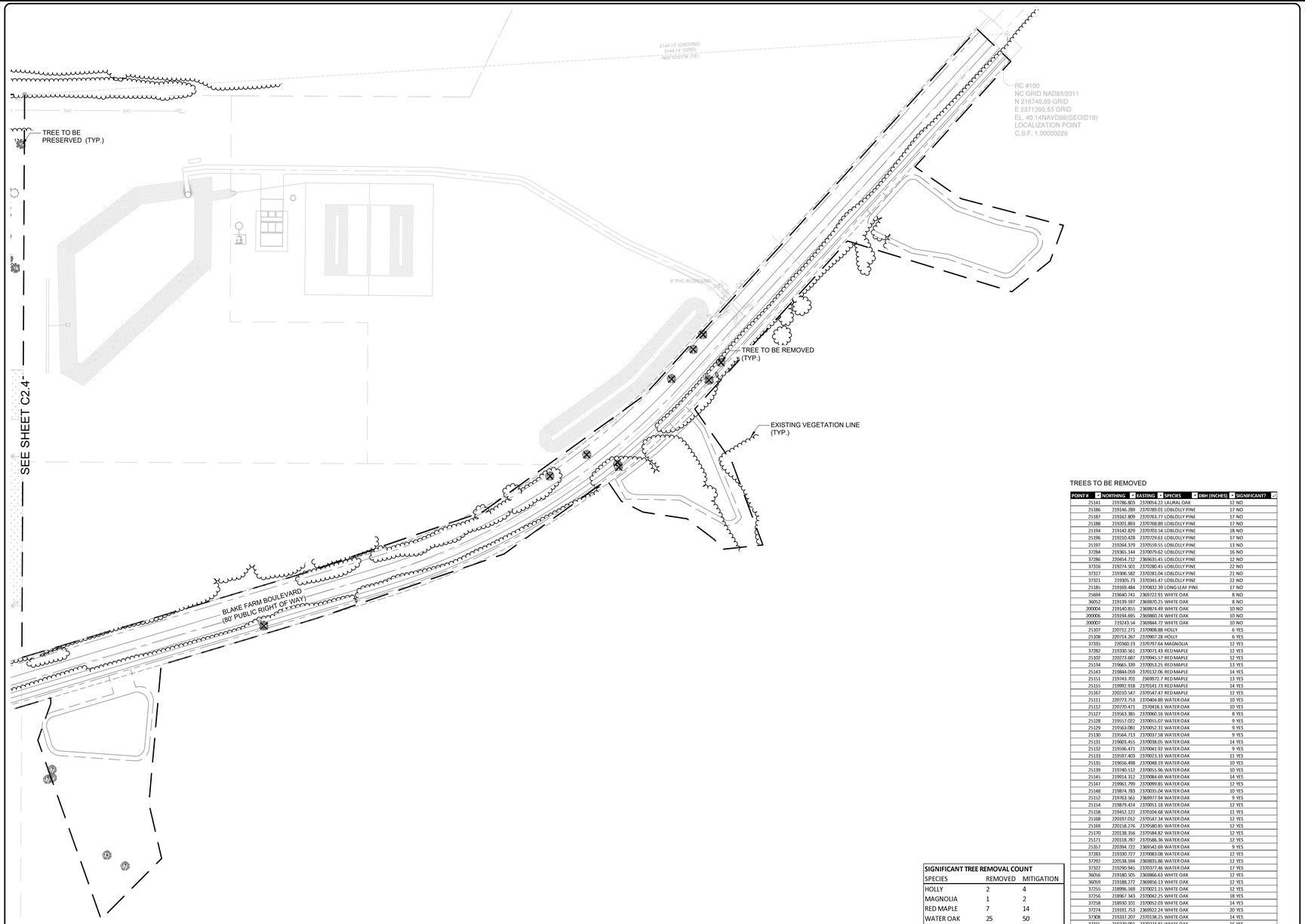
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C2.4 DRAWING NUMBER

---- REVISION

STATUS: PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C2.2_TREE REMOVAL PLAN.DWG ---- 10/06/2023 10:26:04



2 TREE REMOVAL PLAN

TREES TO BE REMOVED

POINT #	NORTHING	EASTING	SPECIES	DBH (INCHES)	SIGNIFICANT?
25141	219786.803	2370054.22	LAURAL OAK	12	NO
25186	219146.289	2370789.01	LOBLOLLY PINE	17	NO
25187	219162.809	2370763.77	LOBLOLLY PINE	17	NO
25188	219201.893	2370768.89	LOBLOLLY PINE	17	NO
25194	219142.829	2370703.54	LOBLOLLY PINE	18	NO
25196	219210.428	2370729.61	LOBLOLLY PINE	17	NO
25197	219264.379	2370519.55	LOBLOLLY PINE	13	NO
37284	219365.144	2370079.62	LOBLOLLY PINE	16	NO
37286	220454.712	2369635.45	LOBLOLLY PINE	13	NO
37316	219274.501	2370280.45	LOBLOLLY PINE	22	NO
37317	219306.582	2370281.04	LOBLOLLY PINE	21	NO
37321	219305.73	2370345.47	LOBLOLLY PINE	22	NO
25185	219169.484	2370832.39	LONG LEAF PINE	17	NO
25684	219640.741	2369722.91	WHITE OAK	8	NO
36062	219139.597	2369870.25	WHITE OAK	8	NO
200004	219140.855	2369874.49	WHITE OAK	10	NO
200006	219194.695	2369860.74	WHITE OAK	10	NO
200007	219243.54	2369844.72	WHITE OAK	10	NO
25107	220712.271	2370908.88	HOLLY	6	YES
25108	220714.267	2370907.28	HOLLY	6	YES
37335	220360.23	2370797.64	MAGNOLIA	12	YES
37282	219330.561	2370071.43	RED MAPLE	12	YES
25102	220273.687	2370945.57	RED MAPLE	12	YES
25134	219665.339	2370053.25	RED MAPLE	13	YES
25143	219844.059	2370132.06	RED MAPLE	14	YES
25151	219743.701	2369972.7	RED MAPLE	13	YES
25155	219992.918	2370141.73	RED MAPLE	14	YES
25167	220210.547	2370547.47	RED MAPLE	12	YES
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25135	219656.498	2370048.19	WATER OAK	10	YES
25139	219740.512	2370055.96	WATER OAK	10	YES
25145	219914.312	2370084.69	WATER OAK	14	YES
25147	219961.799	2370099.85	WATER OAK	12	YES
25148	219874.783	2370035.04	WATER OAK	10	YES
25152	219763.561	2369977.94	WATER OAK	9	YES
25154	219879.424	2370051.18	WATER OAK	12	YES
25158	219452.122	2370304.68	WATER OAK	11	YES
25168	220197.012	2370547.34	WATER OAK	12	YES
25169	220138.276	2370580.85	WATER OAK	12	YES
25170	220138.366	2370584.82	WATER OAK	12	YES
25171	220118.787	2370586.36	WATER OAK	12	YES
25357	220394.722	2369542.69	WATER OAK	9	YES
37283	219330.727	2370083.08	WATER OAK	12	YES
37292	220538.594	2369835.86	WATER OAK	12	YES
37322	219290.945	2370377.46	WATER OAK	12	YES
36056	219180.505	2369866.63	WHITE OAK	12	YES
36059	219188.272	2369856.13	WHITE OAK	12	YES
37255	218996.169	2370021.15	WHITE OAK	12	YES
37256	218967.343	2370042.25	WHITE OAK	18	YES
37258	218930.101	2370052.03	WHITE OAK	14	YES
37274	219191.753	2369922.24	WHITE OAK	20	YES
37308	219337.207	2370138.25	WHITE OAK	14	YES
37315	219270.091	2370274.81	WHITE OAK	16	YES
200005	219169.091	2369868.73	WHITE OAK	12	YES

SIGNIFICANT TREE REMOVAL COUNT

SPECIES	REMOVED	MITIGATION
HOLLY	2	4
MAGNOLIA	1	2
RED MAPLE	7	14
WATER OAK	25	50
WHITE OAK	9	18

TREE REMOVAL PLAN

1. TREE REMOVAL WILL INVOLVE CLEARING OF THE VEGETATION UNDER THE ESSENTIAL SITE IMPROVEMENTS.

WETLANDS

12 TREES TO BE PRESERVED

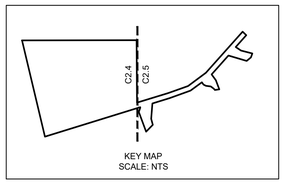
TREES TO BE REMOVED

TREE LEGEND

- CEDAR
- GUM
- HOLLY
- OAK
- MAGNOLIA
- MAPLE
- PINE
- BIRCH
- BAY
- CYPRESS
- TREE SIZE

100' 0 100' 200

SCALE 1" = 100'



KEY MAP
SCALE: NTS

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

TREE REMOVAL PLAN

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

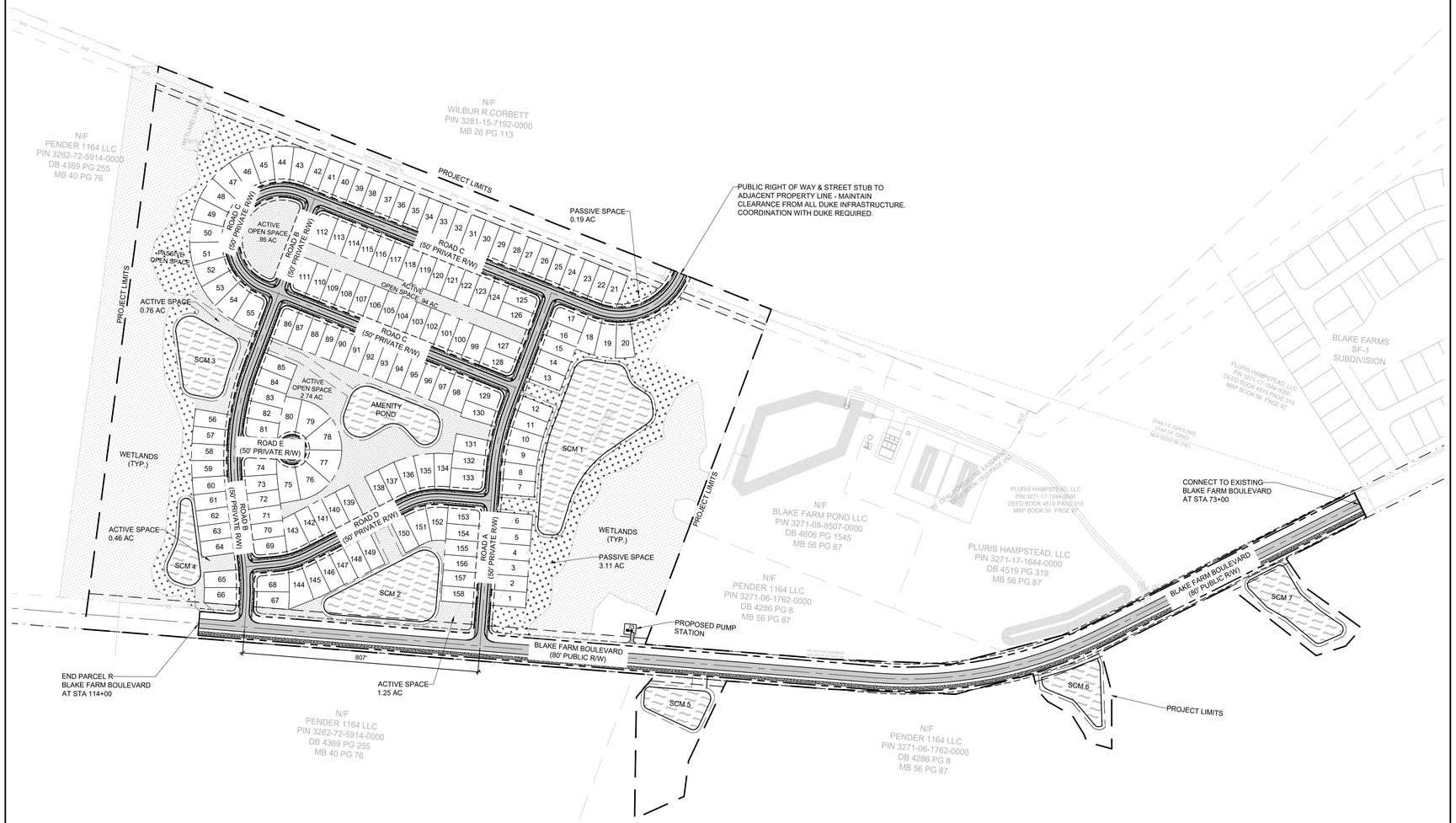
SCALE
HORIZONTAL: 1"=100'
VERTICAL: VSCALE

C2.5
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C2.2_TREE REMOVAL PLAN.DWG — 10/06/2023 10:26:07



2 SITE PLAN - OVERALL

SITE DATA

PROJECT NAME	BLAKE FARM PARCEL R	
PARCEL ID	3262-72-5914-0000	
DEED BOOK & PAGE	DB 4369 PG 76	
PROPERTY ADDRESS	BLAKE FARM BOULEVARD	
PROPERTY DEVELOPER	PENDER 1164 LLC	
CURRENT ZONING	PD (PLANNED DEVELOPMENT)	
PROPOSED USE	SING FAMILY	
TOTAL PROPERTY ACREAGE	±83.65 AC	
PROJECT AREA	±73.00AC	
NC BUILDING CODE CONSTRUCTION TYPE		
TYPICAL LOT SIZE	52' x 120'	
TYPICAL END LOT SIZE	62' x 120'	
NUMBER OF LOTS	158	
DENSITY	ALLOWED	PROVIDED
SEE DENSITY CALCULATIONS ON COVER	-	3.63 DU/AC
BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT	-	10'
REAR	-	10'
SIDE	-	5'
	REQUIRED	PROVIDED
OPEN SPACE .03 ACRE PER DWELLING UNIT .03 x 158 LOTS = 4.74 ACRE OPEN SPACE	4.74 AC	13.14 AC
ACTIVE OPEN SPACE ENHANCED DESIGN INCLUDING NOT LIMITED TO VILLAGE COMMONS, OUTDOOR RECREATION SPACE, CLUSTER MAILBOXES, PLAY AREAS	MIN. 50% OF OPEN SPACE (2.37 ACRE)	6.86 AC (52%)
PASSIVE OPEN SPACE UNDISTURBED NATURAL AREAS INCLUDING NOT LIMITED TO WETLANDS, NATURAL HERITAGE AREAS	MAX. 50% OF OPEN SPACE (2.37 ACRE)	6.33 AC (48%)

DENSITY CALCULATIONS

GENERAL INFORMATION	QUANTITY
PROPERTY ACREAGE	83.65 AC
NON-RESIDENTIAL ACREAGE	
B. WETLANDS ACREAGE	13.11 AC
C. RIGHT OF WAY / PARKING ACREAGE (PRIVATE/PUBLIC RIGHTS OF WAY)	16.00 AC
D. TOTAL OPEN SPACE ACREAGE	13.19 AC
TOTAL NON-RESIDENTIAL ACREAGE	42.3 AC
DEVELOPABLE LAND	41.35 AC
TOTAL UNITS (SINGLE FAMILY LOTS)	158
PARCEL H DENSITY	3.82 DU/AC

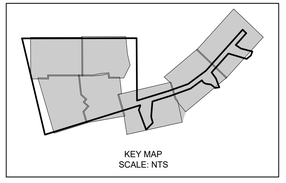
SYMBOL LEGEND

- ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS

GENERAL NOTES

WITH 158 LOTS PROPOSED THE APPLICANT IS REQUIRED TO PROVIDE TWO PREVOCATIONAL UNITS, WHICH EQUATES TO $20,000. THE APPLICANT INTENTS TO DEVELOP THE IDENTIFIED OPEN SPACE AREAS WITHIN PARCEL R TO INCLUDE WALKING TRAILS, BENCHES, PET STATIONS, ETC. THERE WILL ALSO BE TWO LARGE, PROGRAMMED NEIGHBORHOOD AMENITY AREAS WITH THE BLAKE FARM (DRH PORTION) DEVELOPMENT WHICH WILL PROVIDE ADDITIONAL RECREATIONAL OPTIONS FOR THE RESIDENTS OF PARCEL R

175' 0 175' 350
SCALE 1" = 175'



KEY MAP
SCALE: NTS

1 NOTES

REV NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - OVERALL

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

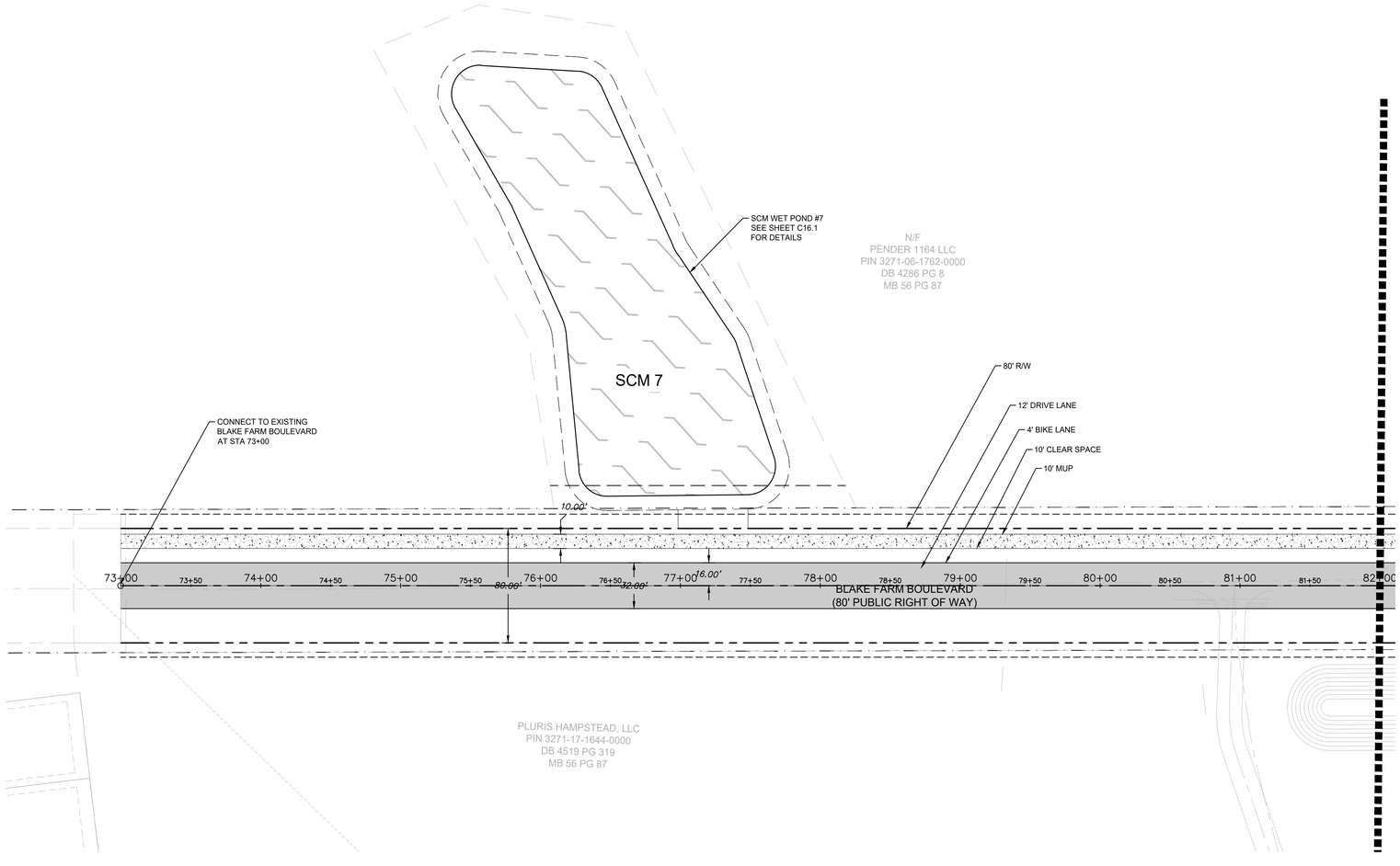
SCALE
HORIZONTAL: 1"=100'
VERTICAL: VSCALE

C3.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C3.0_SITE PLAN.DWG ---- 10/06/2023 10:47:00



2 SITE PLAN ENLARGEMENT

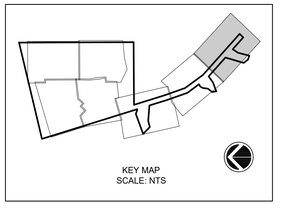
SYMBOL LEGEND

- HEAVY-DUTY ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS
- STORMWATER CONTROL MEASURE

NOTES:

1. SITE PLAN IS GENERAL IN NATURE.
2. TRAFFIC IMPACT ANALYSIS: SCOPE HAS BEEN APPROVED AND THE ANALYSIS IS IN PROGRESS.
3. JURISDICTIONAL DETERMINATION IS IN PROGRESS.
4. REFER TO OVERALL SITE PLAN FOR PROPOSED SETBACKS, BUFFERS, SCREENING & LANDSCAPING INFORMATION.
5. REFER TO OVERALL SITE PLAN FOR OPEN SPACE INFORMATION.
6. DEVELOPMENT IS PROPOSED AS A SINGLE PHASE.
7. SIGNAGE WILL BE IN COMPLIANCE WITH THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE ARTICLE 9.
8. LIGHTING WILL BE IN COMPLIANCE WITH THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE ARTICLE 7.11.
9. BLAKE FARM BOULEVARD RIGHT OF WAY IS 80' WIDE (TYPICAL).
10. LOCAL ROAD RIGHT OF WAY IS 50' WIDE (TYPICAL).
11. REFER TO SHEET C9.14 FOR TYPICAL ROAD SECTIONS.

40' 0 40' 80
SCALE 1" = 40'



KEY MAP
SCALE: NTS

1 NOTES

REV NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - ENLARGED

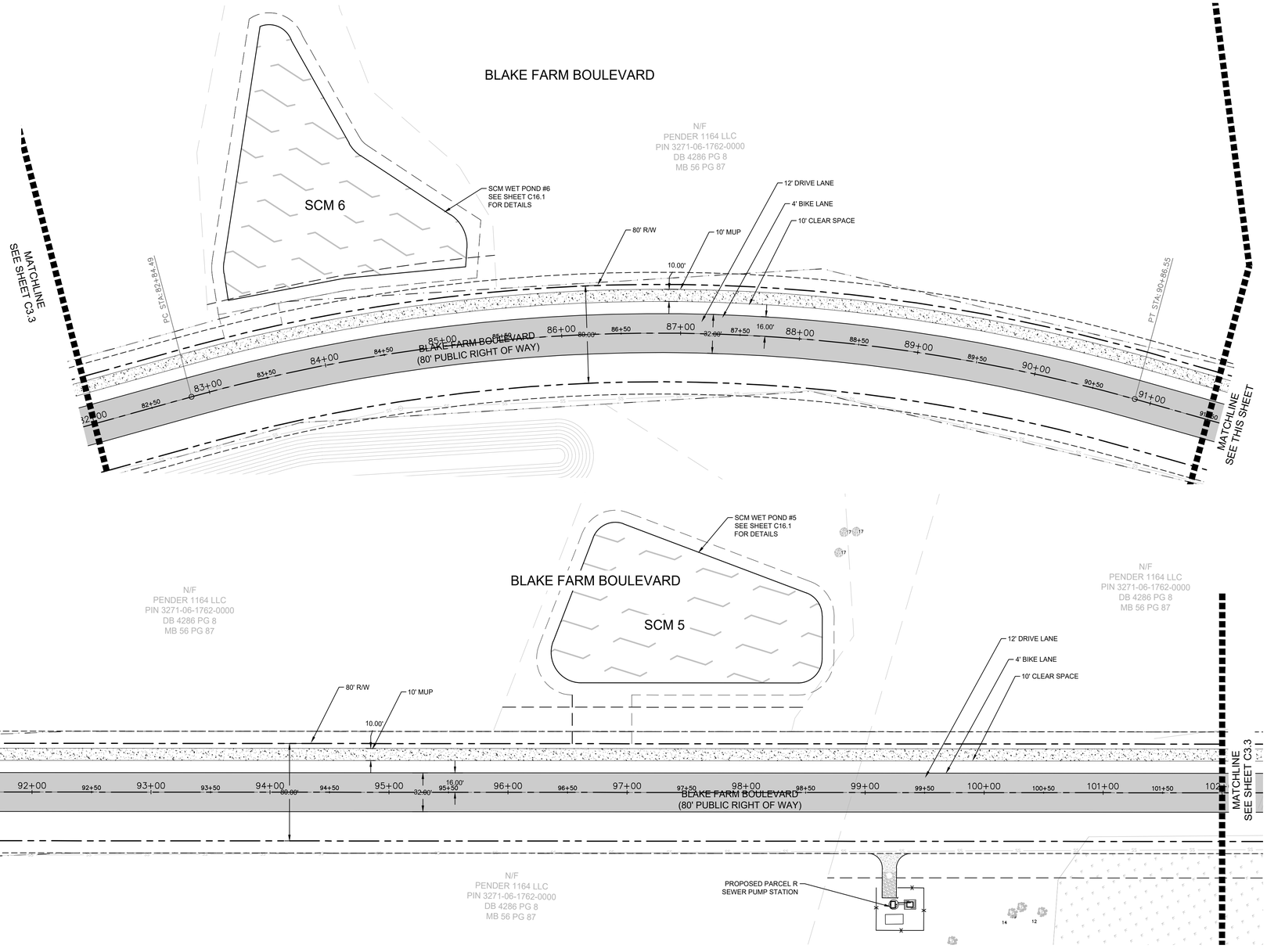
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C3.1
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW



SYMBOL LEGEND

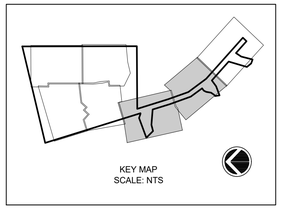
- HEAVY-DUTY ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS
- STORMWATER CONTROL MEASURE

NOTES:

1. SITE PLAN IS GENERAL IN NATURE.
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4. REFER TO OVERALL PLAN FOR PROPOSED SETBACKS, BUFFERS, SCREENING & LANDSCAPING INFORMATION.
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11. REFER TO SHEET C9.14 FOR TYPICAL ROAD SECTIONS.

40' 0 40' 80
SCALE 1" = 40'

40' 0 40' 80
SCALE 1" = 40'



2 | SITE PLAN ENLARGEMENT

1 | NOTES

REV. NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C3.2
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 SITE PLAN

SYMBOL LEGEND

- HEAVY-DUTY ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS
- STORMWATER CONTROL MEASURE

NOTES:

1. SITE PLAN IS GENERAL IN NATURE.
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5. REFER TO OVERALL PLAN FOR OPEN SPACE INFORMATION.
6. DEVELOPMENT IS PROPOSED AS A SINGLE PHASE.
7. SIGNAGE WILL BE IN COMPLIANCE WITH THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE ARTICLE 9.
8. LIGHTING WILL BE IN COMPLIANCE WITH THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE ARTICLE 7.11.
9. COLLECTOR ROAD RIGHT OF WAY IS 80' WIDE (TYPICAL).
10. LOCAL ROAD RIGHT OF WAY IS 50' WIDE (TYPICAL).
11. REFER TO SHEET C9.14 FOR TYPICAL ROAD SECTIONS.

40' 0 40' 80
SCALE 1" = 40'

KEY MAP
SCALE: NTS

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

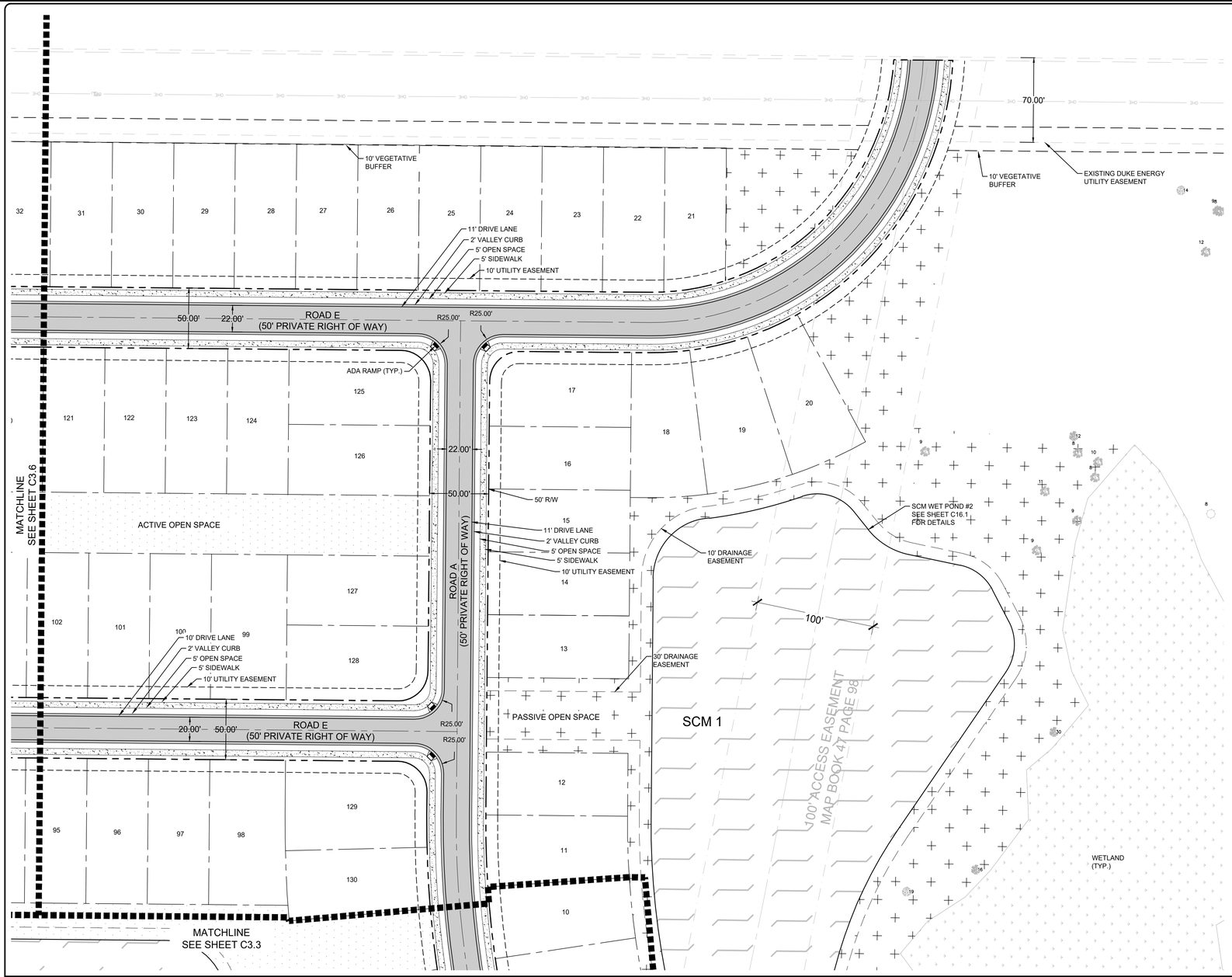
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VERTICAL: N/A

C3.3
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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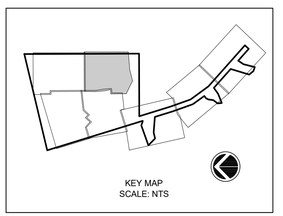
SYMBOL LEGEND

- HEAVY-DUTY ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS
- STORMWATER CONTROL MEASURE

NOTES:

1. SITE PLAN IS GENERAL IN NATURE.
2. TRAFFIC IMPACT ANALYSIS: SCOPE HAS BEEN APPROVED AND THE ANALYSIS IS IN PROGRESS.
3. JURISDICTIONAL DETERMINATION IS IN PROGRESS.
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9. COLLECTOR ROAD RIGHT OF WAY IS 80' WIDE (TYPICAL).
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40' 0 40' 80
SCALE 1" = 40'



2 SITE PLAN ENLARGEMENT

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

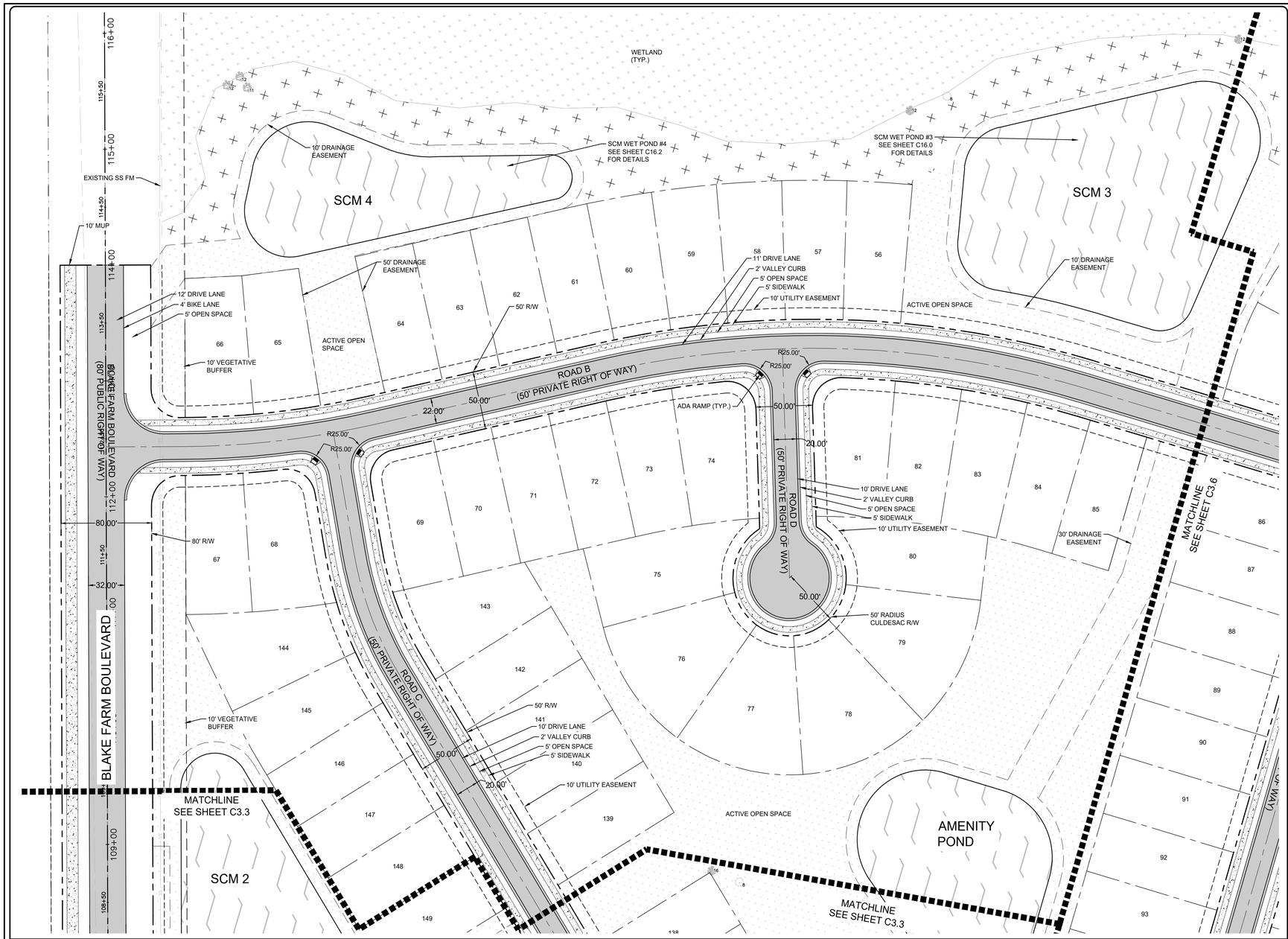
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HORIZONTAL: 1"=40'
VERTICAL: N/A

C3.4
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 SITE PLAN ENLARGEMENT

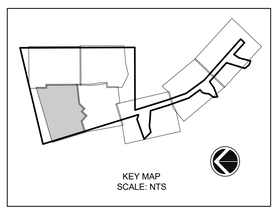
SYMBOL LEGEND

- HEAVY-DUTY ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS
- STORMWATER CONTROL MEASURE

NOTES:

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40' 0 40' 80
SCALE 1" = 40'



1 NOTES

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	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

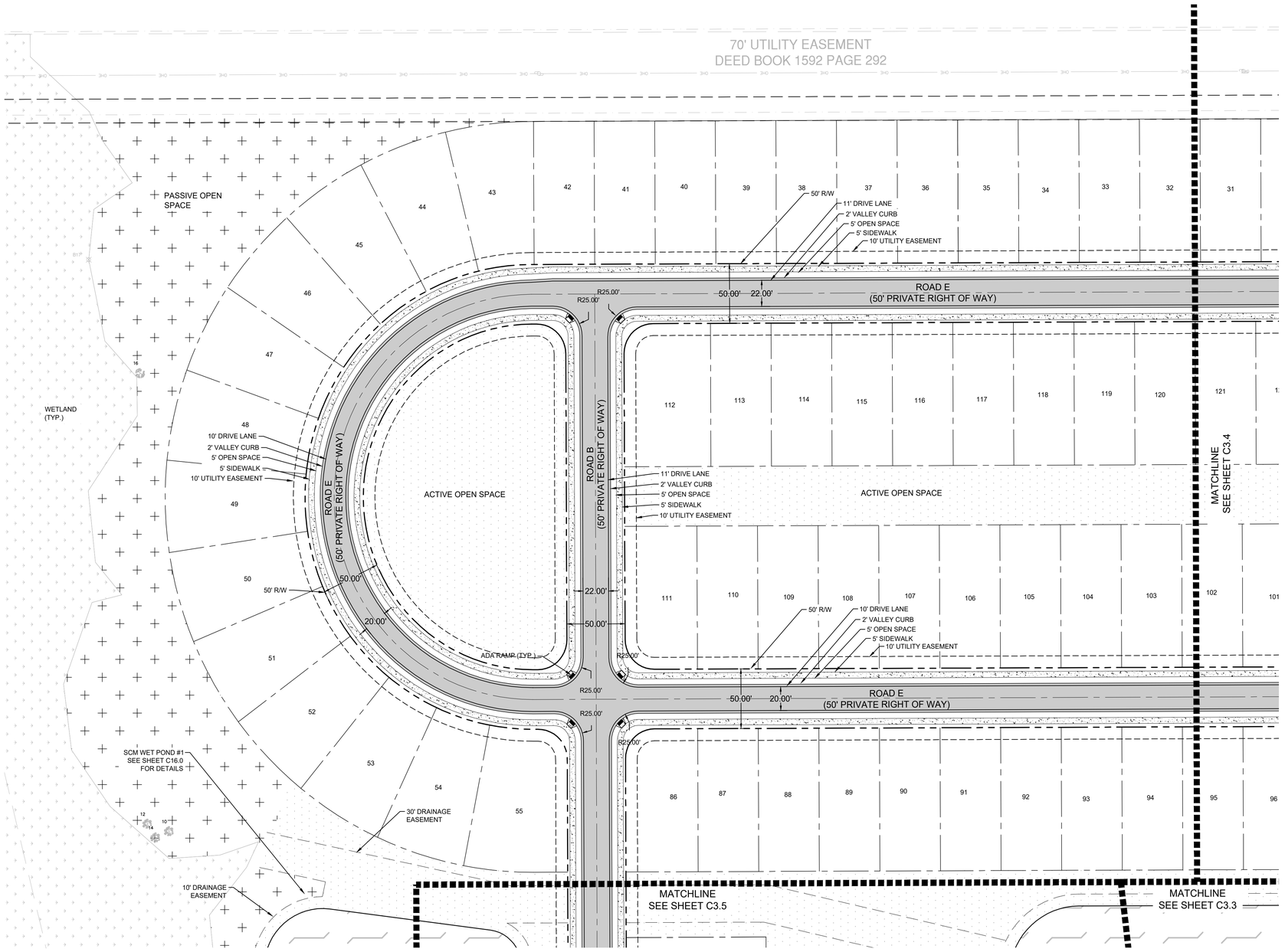
SCALE
HORIZONTAL: 1"=40'
VERTICAL: N/A

C3.5
DRAWING NUMBER

REVISION

STATUS: PENDER COUNTY TRC REVIEW

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2 SITE PLAN ENLARGEMENT

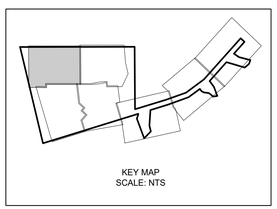
SYMBOL LEGEND

- HEAVY-DUTY ASPHALT
- CONCRETE
- ACTIVE OPEN SPACE
- PASSIVE OPEN SPACE
- PERIMETER BUFFER
- WETLANDS
- STORMWATER CONTROL MEASURE

NOTES:

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40' 0 40' 80
SCALE 1" = 40'



1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

SITE PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: N/A

C3.6
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\60-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C3.1_SITE PLAN ENLARGED.DWG — 10/06/2023 10:27:38



2 EROSION CONTROL STAGE 1 PLAN

TEMPORARY CONSTRUCTION ENTRANCE
LIMITS OF DISTURBANCE — LOD
TEMPORARY SILT FENCE — SF
TEMPORARY DIVERSION DITCH — >TDD
CLEAN WATER DIVERSION DITCH — >CWD
WATTLE / CHECK DAM
RIPRAP OUTLET PAD
DISCHARGE PIPE
FAIRCLOTH SKIMMER
SEDIMENT BASIN BAFFLE
EXISTING WETLANDS
PROJECT BOUNDARY

PHASE 1 CONSTR. SEQUENCE NOTES

1. OBTAIN ALL NECESSARY PERMIT APPROVALS PRIOR TO ANY LAND DISTURBANCE ACTIVITY.
2. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. THE EROSION CONTROL INSPECTOR, ENGINEER, AND CONTRACTOR SHALL BE IN ATTENDANCE.
3. ESTABLISH LIMITS OF DISTURBANCE AS SHOWN.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCES AS SHOWN. CONTRACTOR SHALL MAINTAIN A SUFFICIENT GRAVEL ENTRANCE UNTIL FINAL SUB-GRADE IS ESTABLISHED. IF DIRT/MUD GETS ON THE STREET, THEN A WASH RACK WILL NEED TO BE INSTALLED.
5. INSTALL TREE PROTECTION FENCING,SILT FENCING, AND SILT FENCE OUTLETS AS NOTED ON PLANS BEFORE COMMENCING ANY LAND DISTURBANCE ACTIVITY. ADDITIONAL TREE PROTECTION FENCING AND SILT FENCE MAY BE REQUIRED. SILT FENCE WILL BE INSTALLED INSIDE OF THE LIMITS OF DISTURBANCE LINE (SHOWN AS AN OFFSET FOR GRAPHIC CLARITY).
6. INSTALL TEMPORARY SKIMMER SEDIMENT BASINS WITH FAIR CLOTH SKIMMERS WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS IN ORDER TO TREAT SEDIMENT LADEN WATER.
7. INSTALL TEMPORARY DIVERSION DITCHES AND WATTLES AS SHOWN ON THE PLANS IN ORDER TO CONVEY RUNOFF INTO THE SEDIMENT BASINS.
8. COMMENCE CLEARING, GRUBBING, AND STRIPPING WITHIN THE LIMITS OF CONSTRUCTION. STRIP EXISTING GRADE TO A DEPTH OF 4 INCHES AND HAUL AWAY MATERIAL TO A LOCATION WITHIN THE DEVELOPMENT OR TO AN OFF-SITE PERMITTED LOCATION. COORDINATE LOCATION WITH PROJECT MANAGER.
9. COMMENCE ROUGH GRADING WITHIN THE LIMITS OF DISTURBANCE TO BRING THE SITE TO THE PROPOSED SUBGRADE LEVEL.
10. PROVIDE TEMPORARY STABILIZATION AND SEEDING AS NECESSARY TO PREVENT EROSION ONCE FINAL GRADES ARE ESTABLISHED. REFER TO DETAIL 7/C12.0 FOR GROUND STABILIZATION CRITERIA AND SEEDING SCHEDULE.

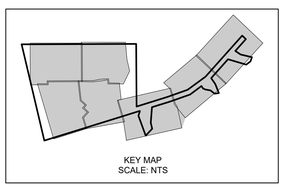
GENERAL EROSION CONTROL NOTES

1. SEE C12.2 - NCG01 GROUND STABILIZATION AND MATERIALS HANDLING FOR REQUIREMENT MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES
2. WHERE SILT FENCE IS REQUIRED IN THE SAME PLACE AS TREE PROTECTION FENCING, ORANGE SILT FENCE AND SIGNAGE FOR TREE PROTECTION MAY BE USED INSTEAD OF DUPLICATE FENCING. SIGNAGE MUST MEET NCDEQ REQUIREMENTS FOR TREE PROTECTION DURING CONSTRUCTION.
3. SILT FENCE AND/OR TREE PROTECTION FENCE TO BE PLACED AT OR INSIDE LIMITS OF DISTURBANCE. THE PLANS ILLUSTRATE THE FENCING AS AN OFFSET FROM THE LIMITS OF DISTURBANCE FOR GRAPHIC CLARITY.
4. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE STATE EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
5. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF STATE LAW AND IS SUBJECT TO A FINE.
6. GROUND COVER MUST BE PROVIDED ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING; AND, A PERMANENT GROUND COVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
7. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NCDEQ.
8. SLOPES SHALL BE GRADED NO STEEPER THAN 3:1.
9. ADDITIONAL DEVICES MAY BE REQUIRED AS AGREED UPON BY THE FIELD INSPECTOR, ENGINEER, AND OWNER.
10. IF ACTIVE CONSTRUCTION CEASES IN ANY AREA FOR MORE THAN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER), ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, AND TACKED.
11. WITHIN 24 HOURS FOLLOWING ANY RAIN EVENT, THE CONTRACTOR SHALL INSPECT AND REPAIR, AS NECESSARY, ALL DAMAGED EROSION CONTROL MEASURES.
12. ALL ACTIVITY AND INSTALLATION OF EROSION CONTROL MATTING WILL BE COMPLETE PRIOR TO ANY RAIN EVENT.

LIMITS OF DISTURBANCE

AREA: 61.5 AC

175' 0 175' 350
SCALE 1" = 175'



KEY MAP
SCALE: NTS

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 1 PLAN - OVERALL

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

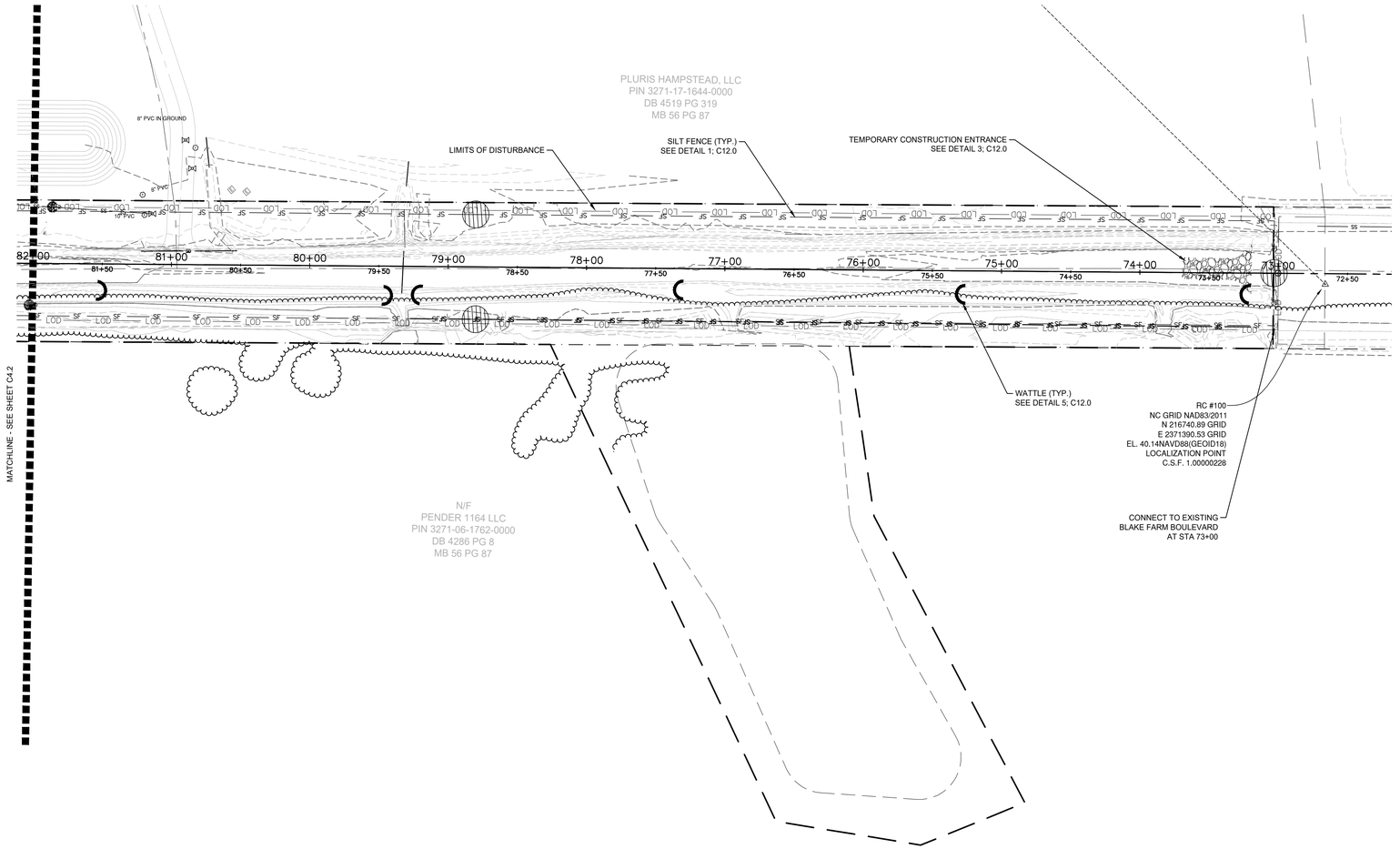
SCALE
HORIZONTAL: 1"=175'
VERTICAL: VSCALE

C4.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C4.0_EROSION CONTROL STAGE 1 PLAN.DWG — 10/06/2023 10:28:15



EROSION CONTROL LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

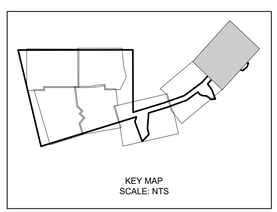
NOTE:

- SILT FENCE TO BE PLACED AT LIMITS OF DISTURBANCE AND HAS BEEN SHOWN AS AN OFFSET FOR CLARITY.
- WATTLE / CHECK DAMS TO BE PLACED EVERY 200 LF IN PERMANENT DIVERSION DITCH.
- WETLAND INFORMATION BASED ON THE SOUTHERN ENVIRONMENTAL GROUP, INC. DELINEATION 7/7/2023 .

LIMITS OF DISTURBANCE =61.5 ACRES

40' 0 40' 80

SCALE 1" = 40'



KEY MAP
SCALE: NTS

2 | EROSION CONTROL STAGE 1 PLAN ENLARGEMENT

1 | NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 1 PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

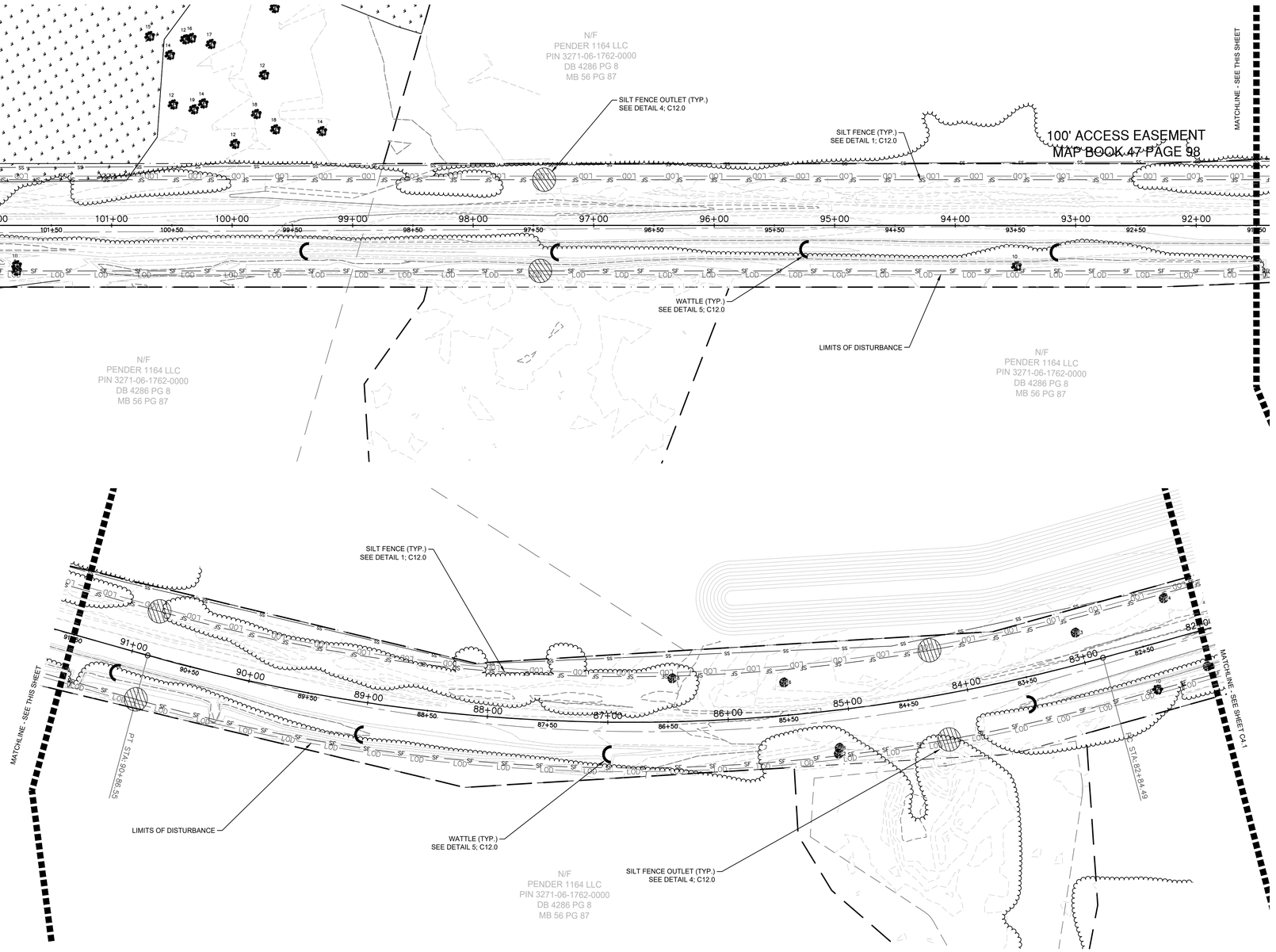
SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C4.1
DRAWING NUMBER

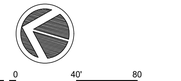
REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 EROSION CONTROL STAGE 1 PLAN ENLARGEMENT



EROSION CONTROL LEGEND

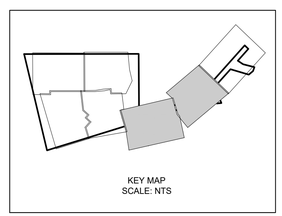
SILT FENCE	SF
LIMITS OF DISTURBANCE	LOD LOD
CLEARING AND GRADING EXTENTS	
TEMPORARY SEDIMENT BASIN BAFFLE	
TEMPORARY DIVERSION DITCH	
DANDY SACK INLET PROTECTION	
SILT FENCE OUTLET	
TEMPORARY CONSTRUCTION ENTRANCE	
WATTLE / CHECK DAM	

NOTE:

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LIMITS OF DISTURBANCE =61.5 ACRES





1 NOTES

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	REVISIONS	

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EROSION CONTROL STAGE 1 PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

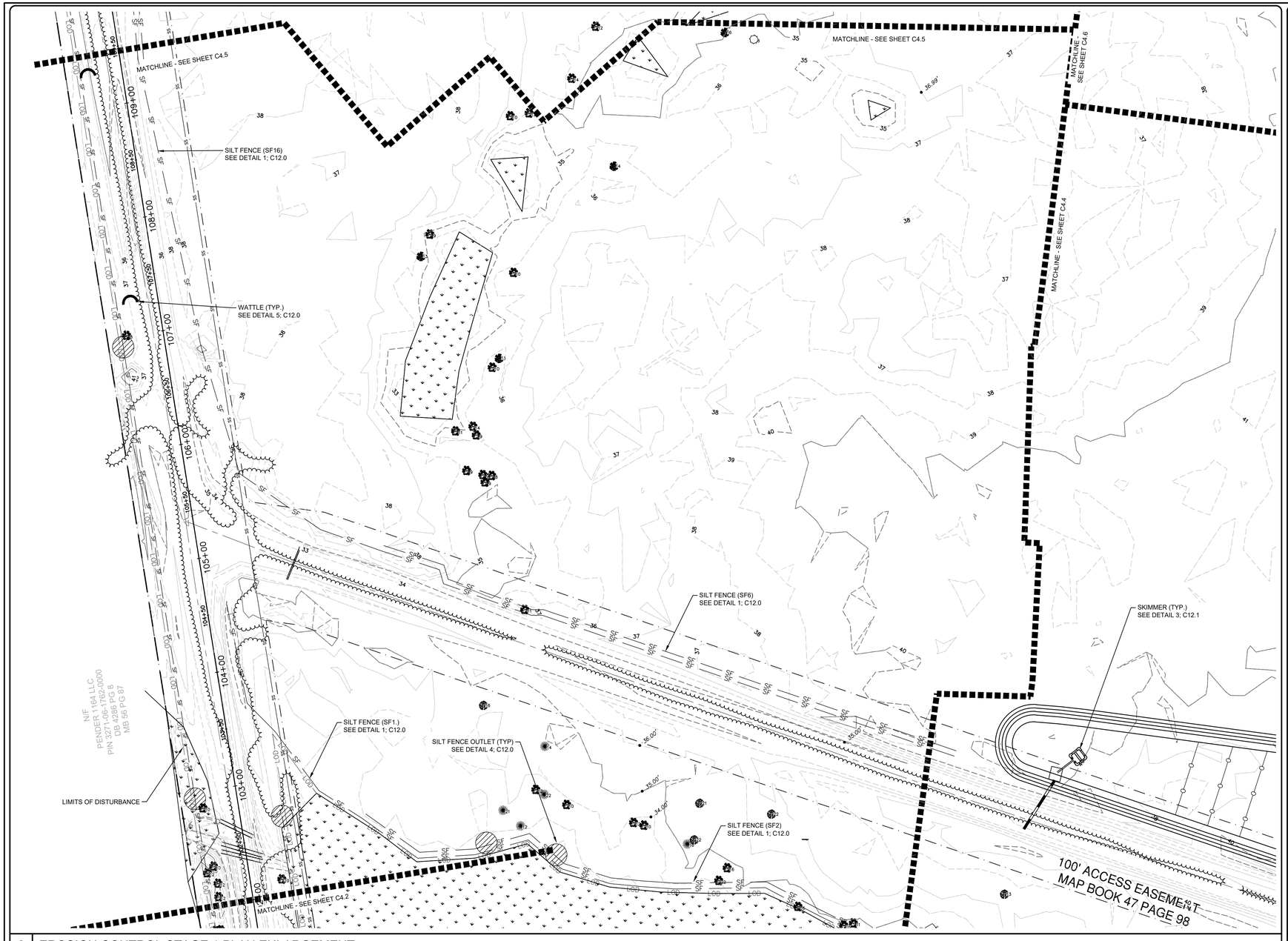
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HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C4.2
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 EROSION CONTROL STAGE 1 PLAN ENLARGEMENT

EROSION CONTROL LEGEND

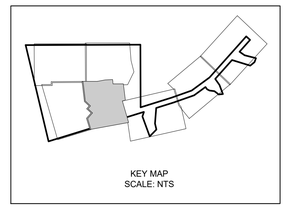
- SILT FENCE — SF
- LIMITS OF DISTURBANCE — LOD — LOD
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
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LIMITS OF DISTURBANCE =61.5 ACRES

40' 0 40' 80
SCALE 1" = 40'



KEY MAP
SCALE: NTS

1 NOTES

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 1 PLAN - ENLARGED

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DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

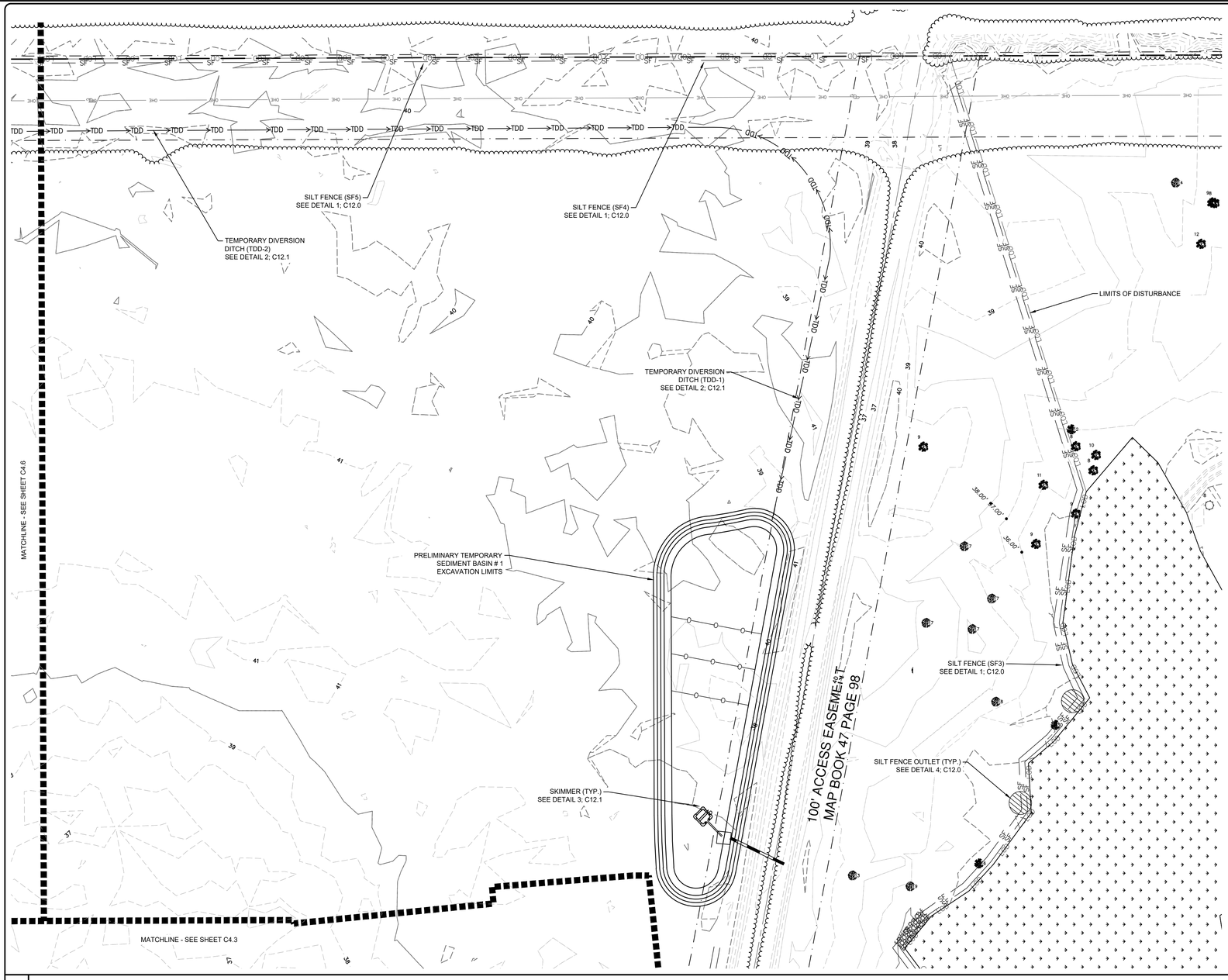
SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C4.3
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C4.1_EROSION CONTROL STAGE 1 PLAN ENLARGED.DWG — 10/06/2023 10:29:02



EROSION CONTROL LEGEND

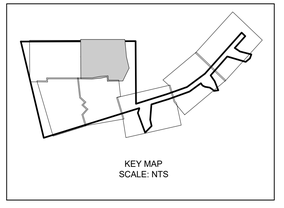
- SILT FENCE
- LIMITS OF DISTURBANCE
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

NOTE:

- SILT FENCE TO BE PLACED AT LIMITS OF DISTURBANCE AND HAS BEEN SHOWN AS AN OFFSET FOR CLARITY.
- WATTLE / CHECK DAMS TO BE PLACED EVERY 200 LF IN PERMANENT DIVERSION DITCH.
- WETLAND INFORMATION BASED ON THE SOUTHERN ENVIRONMENTAL GROUP, INC. DELINEATION 7/7/2023 .

LIMITS OF DISTURBANCE =61.5 ACRES

40' 0 40' 80
SCALE 1" = 40'



2 EROSION CONTROL STAGE 1 PLAN ENLARGEMENT

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 1 PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C4.4
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C4.1_EROSION CONTROL STAGE 1 PLAN ENLARGED.DWG ---- 10/06/2023 10:29:04



2 | EROSION CONTROL STAGE 1 PLAN ENLARGEMENT

EROSION CONTROL LEGEND

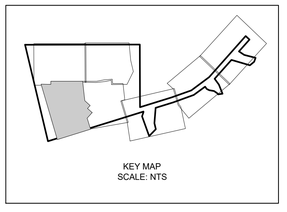
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- LIMITS OF DISTURBANCE — LOD — LOD —
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

NOTE:

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- WETLAND INFORMATION BASED ON THE SOUTHERN ENVIRONMENTAL GROUP, INC. DELINEATION 7/7/2023 .

LIMITS OF DISTURBANCE =61.5 ACRES

40' 0 40' 80
SCALE 1" = 40'



1 | NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 1 PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

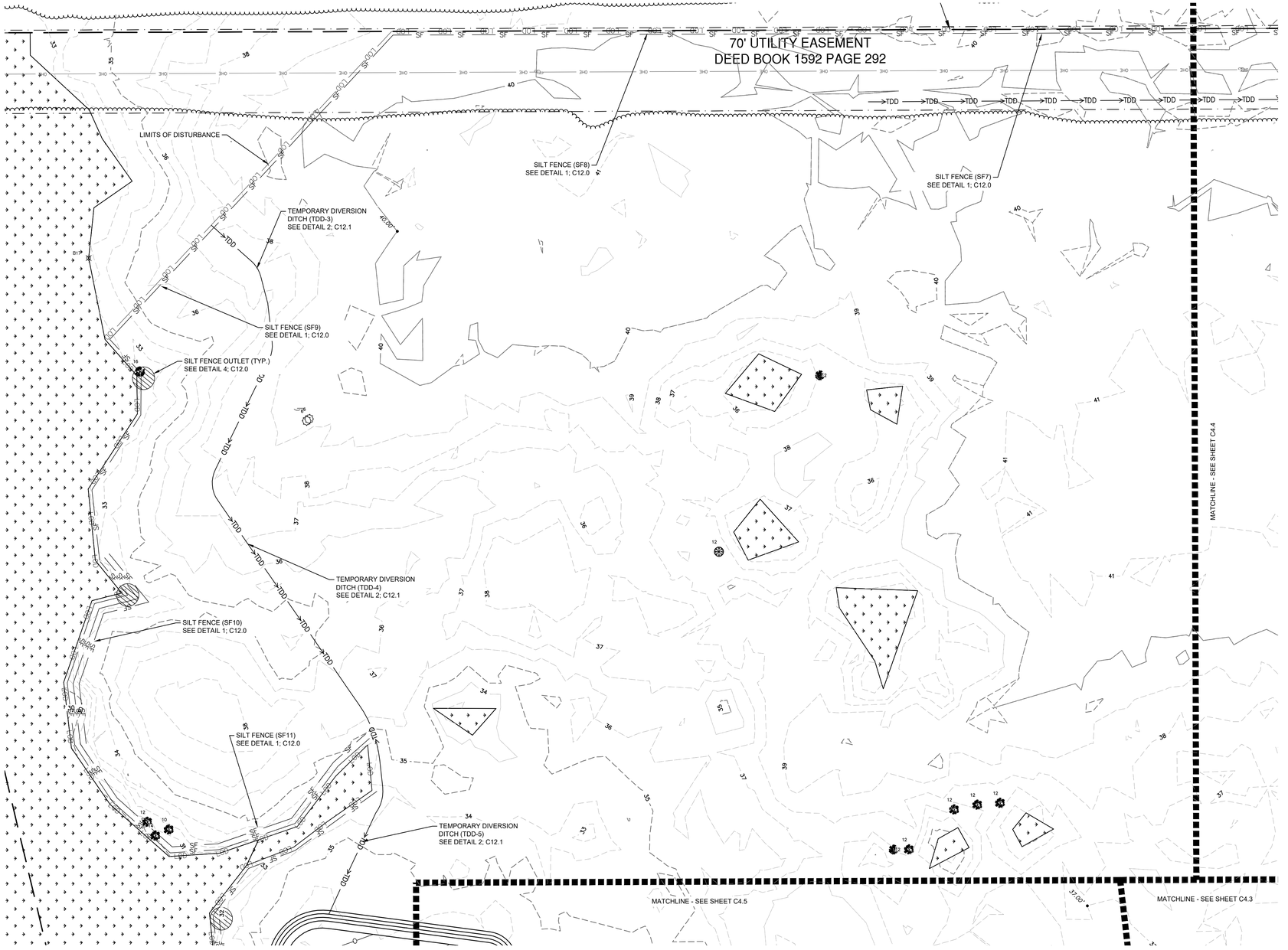
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HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C4.5
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 EROSION CONTROL STAGE 1 PLAN ENLARGEMENT

EROSION CONTROL LEGEND

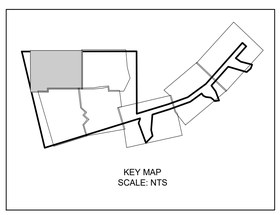
- SILT FENCE — SF
- LIMITS OF DISTURBANCE — LOD — LOD
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

NOTE:

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LIMITS OF DISTURBANCE =61.5 ACRES

40' 0 40' 80
SCALE 1" = 40'



1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 1 PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

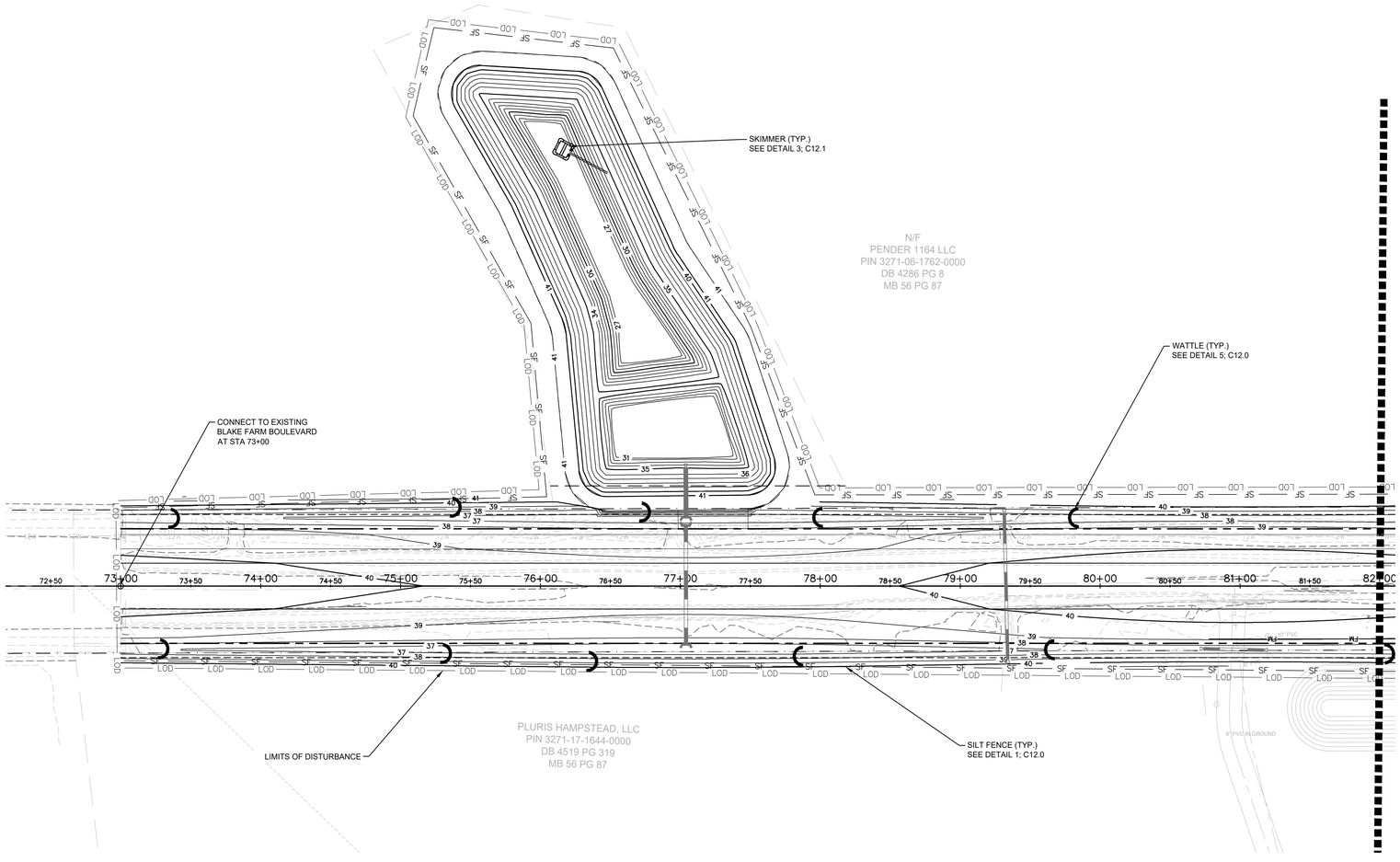
SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C4.6
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C4.1_EROSION CONTROL STAGE 1 PLAN ENLARGED.DWG — 10/06/2023 10:29:10



EROSION CONTROL LEGEND

- SILT FENCE — SF — SF
- LIMITS OF DISTURBANCE — LOD — LOD
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

PHASE 2 CONSTRUCTION SEQUENCE NOTES

1. BEGIN PHASE 2 SEDIMENT AND EROSION CONTROL UPON COMPLETION OF CLEARING, GRUBBING AND STRIPPING OPERATIONS, ROUGH GRADING OF THE SITE, INSTALLATION OF THE STORM WATER COLLECTION SYSTEM.
2. MAINTAIN EROSION CONTROL MEASURES FROM PHASE 1 INTO PHASE 2 AS INDICATED. THIS INCLUDES SILT FENCING, SILT FENCE OUTLETS, SKIMMER SEDIMENT BASINS AND CONSTRUCTION ENTRANCES.
3. REMOVE EROSION CONTROL MEASURES FROM PHASE 1 INTO PHASE 2 AS INDICATED. THIS INCLUDES TEMPORARY DIVERSIONS, EXISTING DRAINAGE DITCHES, CHECK DAMS AND TEMPORARY SEDIMENT TRAPS. STABILIZE THESE AREAS ACCORDING TO THE STABILIZATION MEASURES REQUIRED HEREIN.
4. INSTALL TEMPORARY GROUND STABILIZATION MEASURES, WHERE POSSIBLE, IN ALL AREAS OUTSIDE OF IMMEDIATE CONSTRUCTION ZONES.
5. INSTALL INLET PROTECTION AS INDICATED. SEE INLET PROTECTION DETAILS FOR MORE INFORMATION.
6. CONNECT SKIMMERS TO RISER STRUCTURES FOR TEMPORARY SEDIMENT BASINS AT PERMANENT STORMWATER WET PONDS. BAFFLES MAY BE REMOVED ONCE INLET PROTECTION IS ESTABLISHED.
7. COMPLETE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
8. UPON COMPLETION OF CONSTRUCTION, ESTABLISH PERMANENT GROUND COVER AND OVERALL SITE STABILIZATION.
9. REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES.

EROSION CONTROL MAINTENANCE NOTES

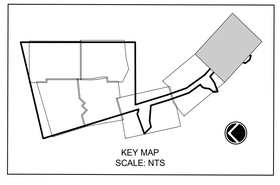
1. THE FOLLOWING EROSION CONTROL MAINTENANCE NOTES SHALL BE ADHERED TO DURING THE ENTIRE CONSTRUCTION PERIOD. SEE ALSO, EROSION CONTROL DETAIL SHEETS C12.0 TO C12.2 FOR ADDITIONAL MAINTENANCE NOTES.
2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AND REPAIRED, AS NECESSARY, EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF EVERY ONE-HALF (0.5) INCH OR GREATER RAINFALL.
3. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP. THE SEDIMENT FENCE WILL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
5. ALL AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
6. STONE CONSTRUCTION ENTRANCE TO BE CLEANED WHEN SEDIMENT ACCUMULATIONS ARE VISIBLE OR SEDIMENT IS TRACKED ON TO THE PAVEMENT. STONE WILL BE PERIODICALLY TOP DRESSED WITH 2 INCHES OF #4 STONE TO MAINTAIN 6 INCH DEPTH. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS REQUIRED.
9. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (0.5" OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED. INLET PROTECTION SHOULD BE CLEANED OUT WHEN IT IS HALF FULL.
10. INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS.
11. CHECK THE SEDIMENT BASIN EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.
12. INSPECT THE SKIMMER FOR CLOGGING. PULL THE SKIMMER TO THE SIDE OF THE BASIN AND REMOVE ANY DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER AND THE ARM OR BARREL PIPE FOR CLOGGING. IF CLOGGED, REMOVE THE DEBRIS.
13. INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEAN OUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH. AFTER THE CONTRIBUTING DRAINAGE AREAS HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.
14. INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.
15. INSPECT DANDY SACKS/GUTTERBUDDY WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS. DANDY SACKS/WATTLES MUST BE REPLACED IF CLOGGED OR TORN. DANDY SACKS/GUTTERBUDDY NEEDS TO BE REINSTALLED IF UNDERMINED OR DISLODGED. DANDY SACKS/GUTTERBUDDY SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.
16. PER NCG-01, INSPECT SILT FENCE OUTLETS AT LEST ONCE A WEEK AND AFTER EACH 1/2 INCH OR GREATER RAINFALL EVENT. COMPLETE ANY REQUIRED REPAIRS IMMEDIATELY. FRESHEN STONE WHEN SEDIMENT ACCUMULATION EXCEEDS 6 INCHES. KEEP MESH FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED. REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING.

LIMITS OF DISTURBANCE

AREA: 61.5 AC

40' 0 40' 80

SCALE 1" = 40'



2 EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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EROSION CONTROL STAGE 2 PLAN ENLARGMENT

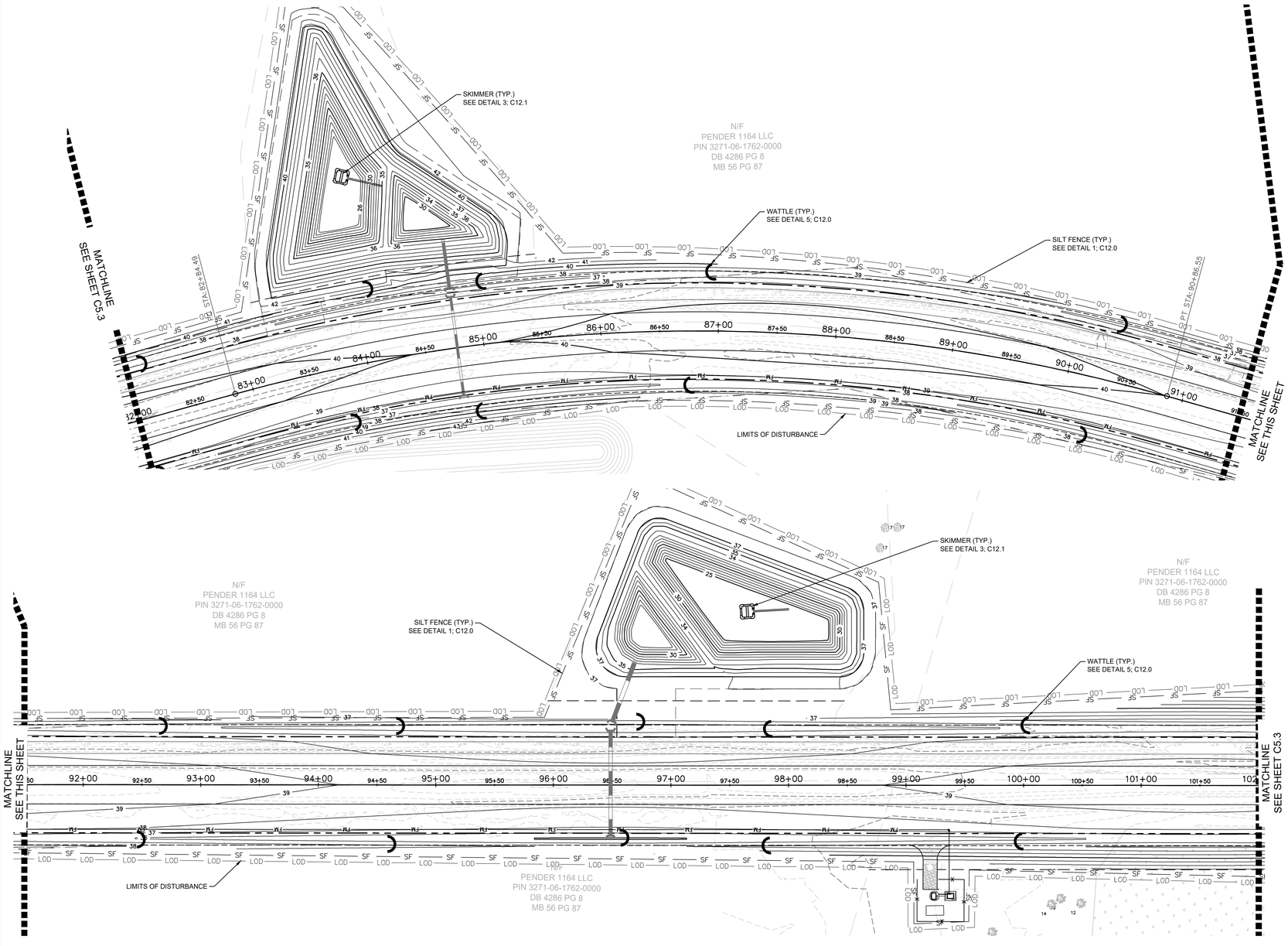
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40
VERTICAL: VSCALE

C5.1
DRAWING NUMBER
0
REVISION

STATUS: PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C5.1_EROSION CONTROL STAGE 2 PLAN ENLARGED.DWG — 10/06/2023 10:30:29



2 EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

EROSION CONTROL LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

PHASE 2 CONSTRUCTION SEQUENCE NOTES

1. BEGIN PHASE 2 SEDIMENT AND EROSION CONTROL UPON COMPLETION OF CLEARING, GRUBBING AND STRIPPING OPERATIONS, ROUGH GRADING OF THE SITE, INSTALLATION OF THE STORM WATER COLLECTION SYSTEM.
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8. UPON COMPLETION OF CONSTRUCTION, ESTABLISH PERMANENT GROUND COVER AND OVERALL SITE STABILIZATION.
9. REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES.

EROSION CONTROL MAINTENANCE NOTES

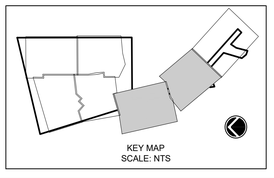
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LIMITS OF DISTURBANCE

AREA: 68.00 AC

40' 0 40' 80
SCALE 1" = 40'

40' 0 40' 80
SCALE 1" = 40'


KEY MAP
SCALE: NTS

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

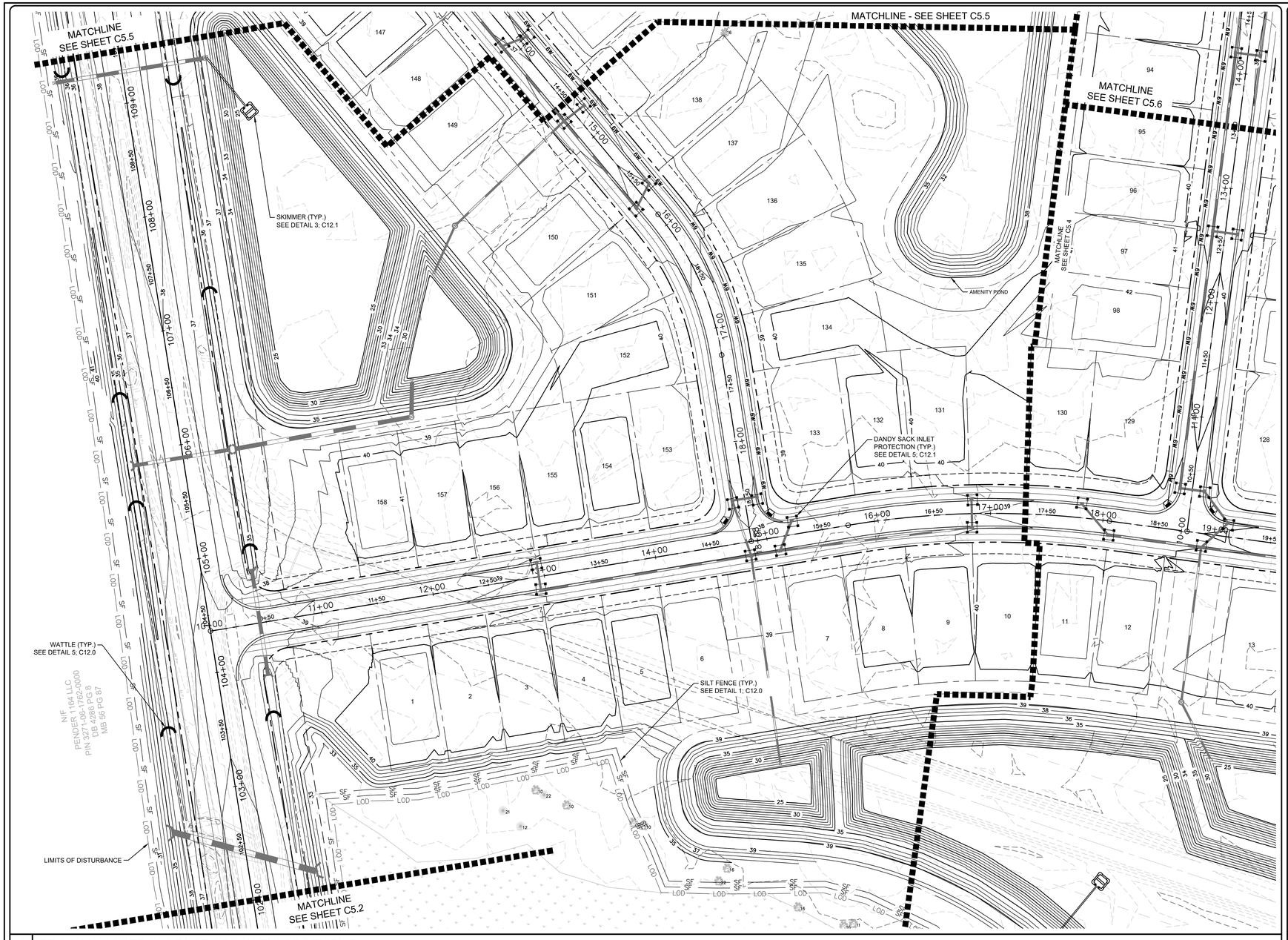
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C5.2
DRAWING NUMBER
0
REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\0424\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C5.1_EROSION CONTROL STAGE 2 PLAN ENLARGED.DWG ---- 10/06/2023 10:30:44



2 | EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

EROSION CONTROL LEGEND

- SILT FENCE — SF — SF —
- LIMITS OF DISTURBANCE — LOD — LOD —
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

PHASE 2 CONSTRUCTION SEQUENCE NOTES

1. BEGIN PHASE 2 SEDIMENT AND EROSION CONTROL UPON COMPLETION OF CLEARING, GRUBBING AND STRIPPING OPERATIONS, ROUGH GRADING OF THE SITE, INSTALLATION OF THE STORM WATER COLLECTION SYSTEM.
2. MAINTAIN EROSION CONTROL MEASURES FROM PHASE 1 INTO PHASE 2 AS INDICATED. THIS INCLUDES SILT FENCING, SILT FENCE OUTLETS, SKIMMER SEDIMENT BASINS AND CONSTRUCTION ENTRANCES.
3. REMOVE EROSION CONTROL MEASURES FROM PHASE 1 INTO PHASE 2 AS INDICATED. THIS INCLUDES TEMPORARY DIVERSIONS, EXISTING DRAINAGE DITCHES, CHECK DAMS AND TEMPORARY SEDIMENT TRAPS. STABILIZE THESE AREAS ACCORDING TO THE STABILIZATION MEASURES REQUIRED HEREIN.
4. INSTALL TEMPORARY GROUND STABILIZATION MEASURES, WHERE POSSIBLE, IN ALL AREAS OUTSIDE OF IMMEDIATE CONSTRUCTION ZONES.
5. INSTALL INLET PROTECTION AS INDICATED. SEE INLET PROTECTION DETAILS FOR MORE INFORMATION.
6. CONNECT SKIMMERS TO RISER STRUCTURES FOR TEMPORARY SEDIMENT BASINS AT PERMANENT STORMWATER WET PONDS. BAFFLES MAY BE REMOVED ONCE INLET PROTECTION IS ESTABLISHED.
7. COMPLETE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
8. UPON COMPLETION OF CONSTRUCTION, ESTABLISH PERMANENT GROUND COVER AND OVERALL SITE STABILIZATION.
9. REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES.

EROSION CONTROL MAINTENANCE NOTES

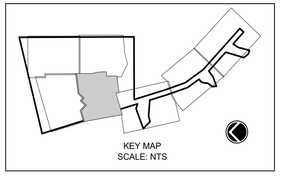
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2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AND REPAIRED, AS NECESSARY, EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF EVERY ONE-HALF (0.5) INCH OR GREATER RAINFALL.
3. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP. THE SEDIMENT FENCE WILL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
5. ALL AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
6. STONE CONSTRUCTION ENTRANCE TO BE CLEANED WHEN SEDIMENT ACCUMULATIONS ARE VISIBLE OR SEDIMENT IS TRACKED ON TO THE PAVEMENT. STONE WILL BE PERIODICALLY TOP DRESSED WITH 2 INCHES OF #4 STONE TO MAINTAIN 6 INCH DEPTH. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS REQUIRED.
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10. INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS.
11. CHECK THE SEDIMENT BASIN EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.
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LIMITS OF DISTURBANCE

AREA: 68.00 AC

40' 0 40' 80

SCALE 1" = 40'



1 | NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

SEAL

SEAL

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243 North Front Street
Wilmington, North Carolina 28401
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EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

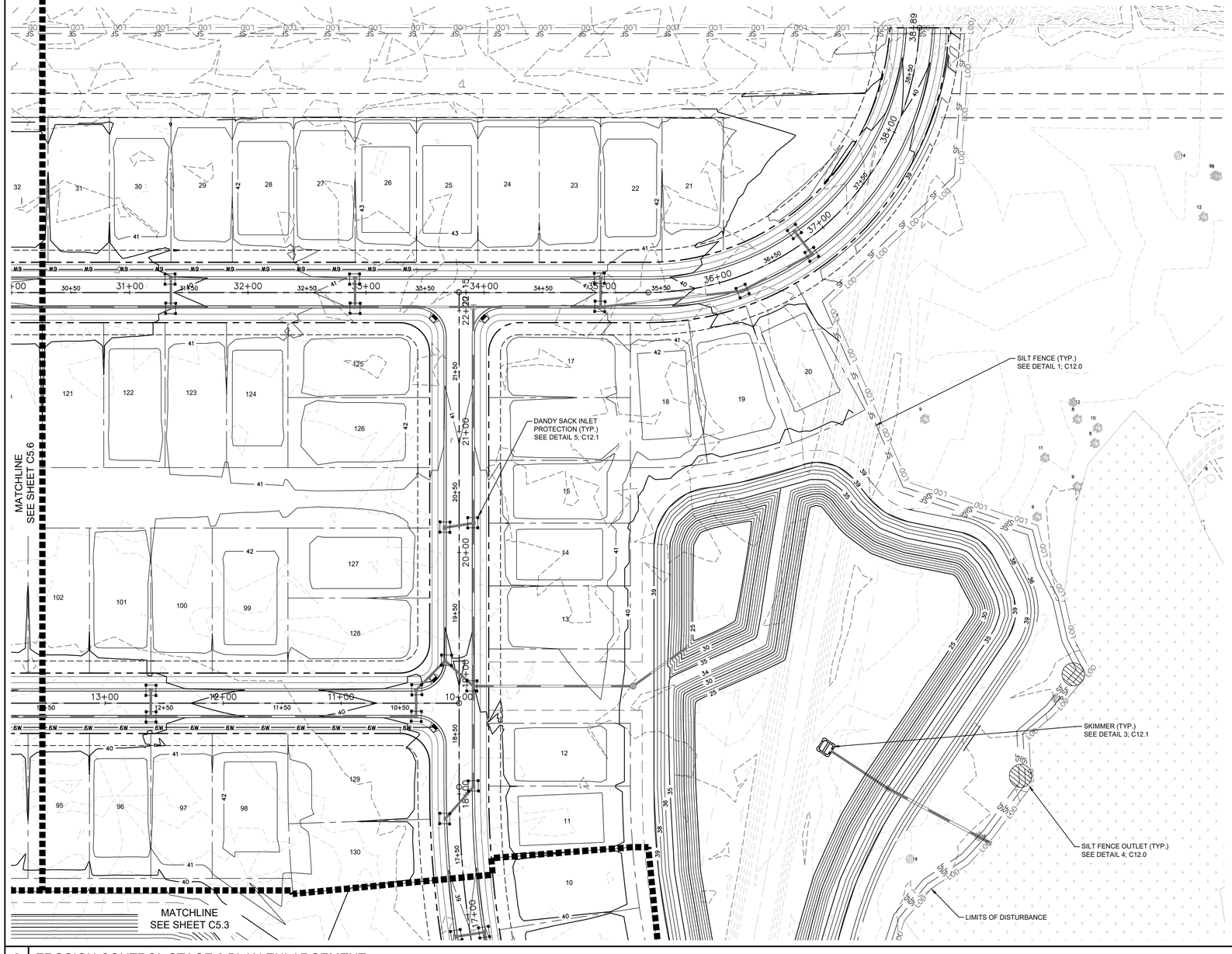
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C5.3
DRAWING NUMBER
0
REVISION

STATUS: PENDER COUNTY TRC REVIEW

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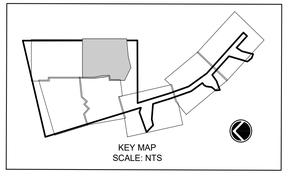
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LIMITS OF DISTURBANCE

AREA: 68.00 AC

40' 0 40' 80

SCALE 1" = 40'



1 NOTES

REV NO.	DESCRIPTIONS REVISIONS	DATE

SEAL

SEAL

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EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

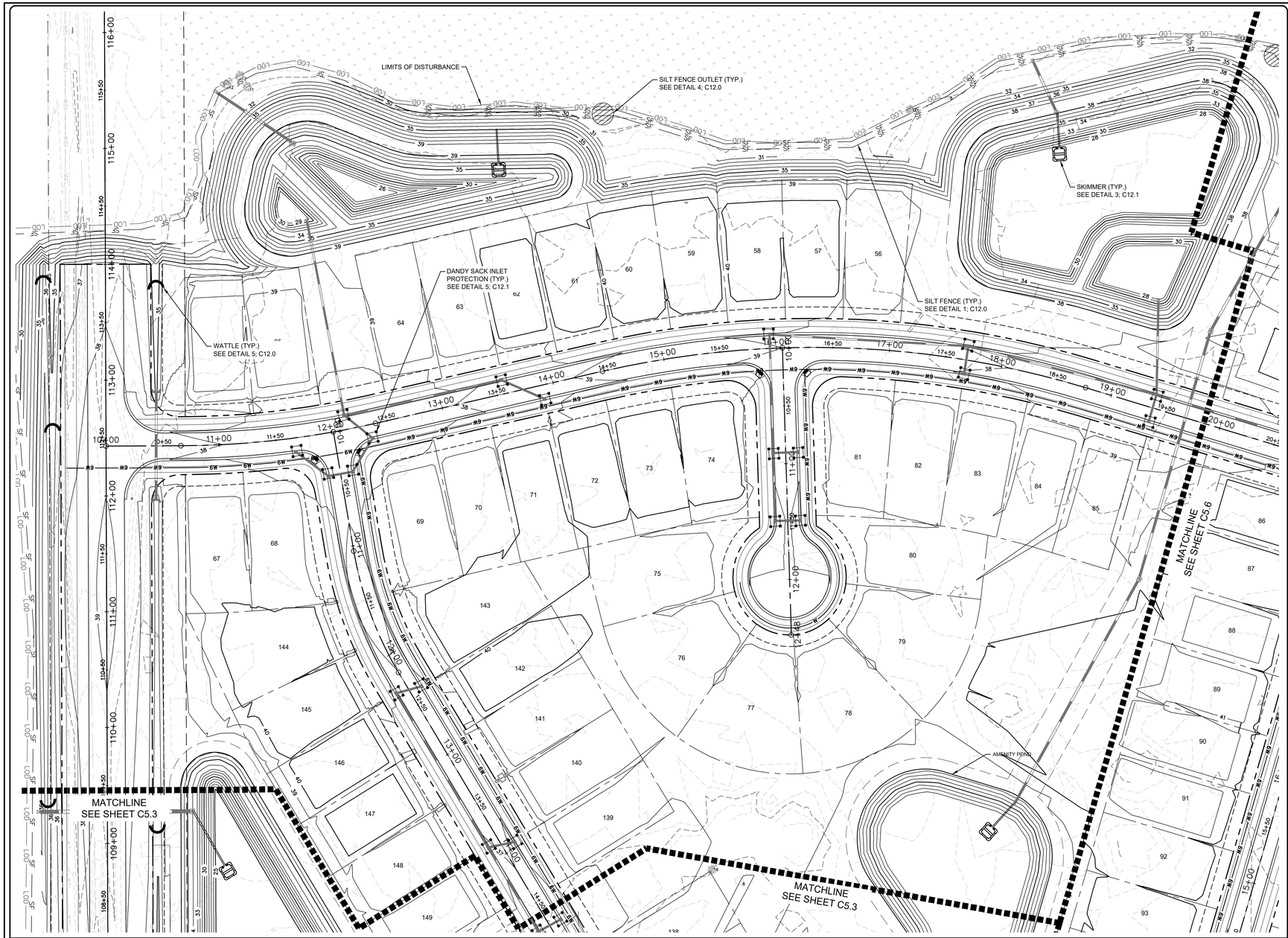
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C5.4
DRAWING NUMBER
0
REVISION

STATUS: PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C5.1_EROSION CONTROL STAGE 2 PLAN ENLARGED.DWG — 10/06/2023 10:31:01



2 | EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

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- SILT FENCE — SF — SF —
- LIMITS OF DISTURBANCE — LOD — LOD —
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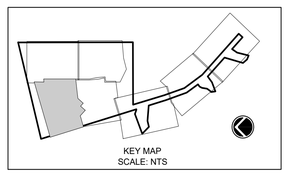
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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 2 PLAN ENLARGMENT

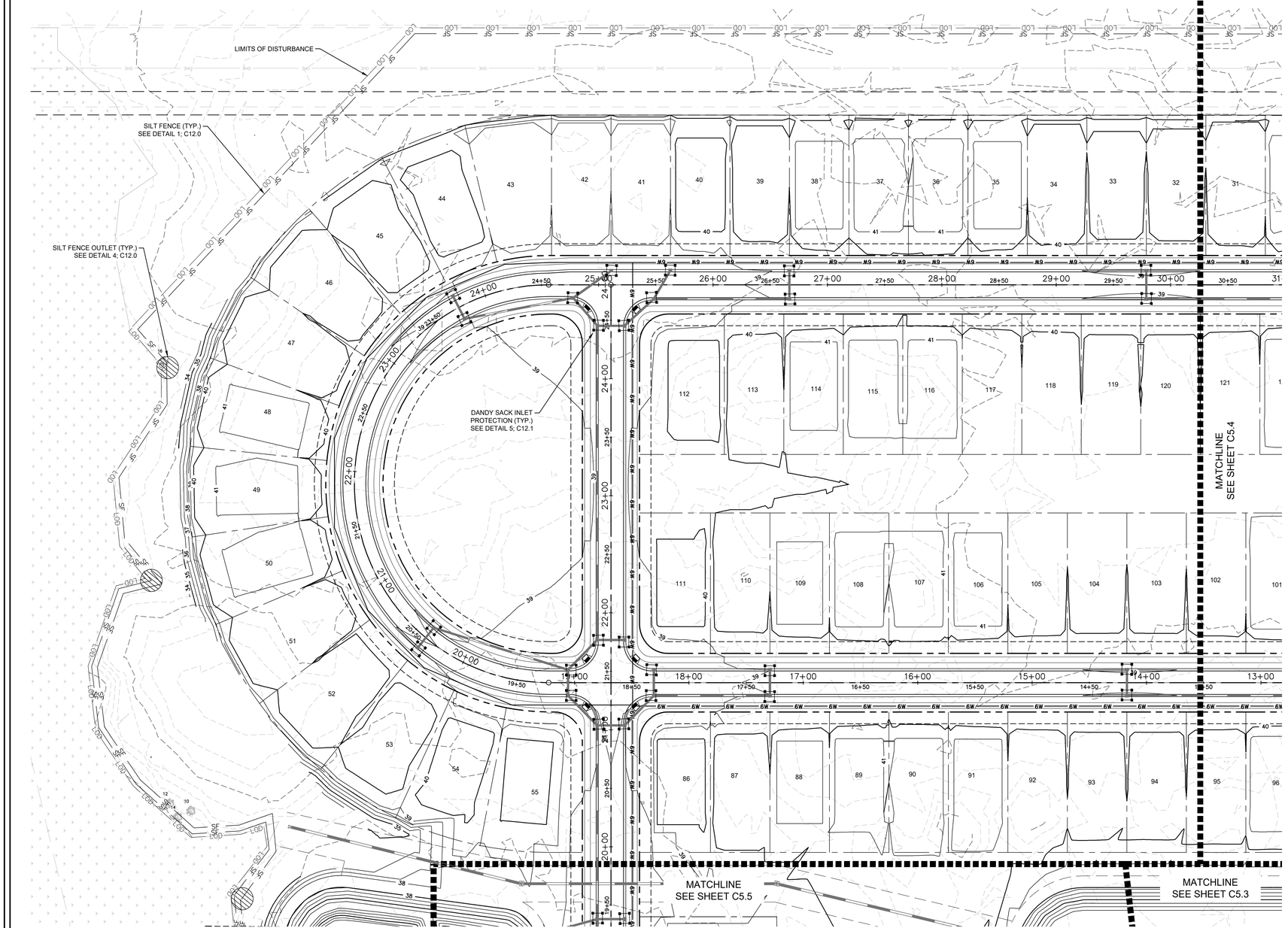
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C5.5
DRAWING NUMBER
0
REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C5.1_EROSION CONTROL STAGE 2 PLAN ENLARGED.DWG ---- 10/06/2023 10:31:08



2 EROSION CONTROL STAGE 2 PLAN ENLARGEMENT

EROSION CONTROL LEGEND

- SILT FENCE — SF — SF
- LIMITS OF DISTURBANCE — LOD — LOD
- CLEARING AND GRADING EXTENTS
- TEMPORARY SEDIMENT BASIN BAFFLE
- TEMPORARY DIVERSION DITCH
- DANDY SACK INLET PROTECTION
- SILT FENCE OUTLET
- TEMPORARY CONSTRUCTION ENTRANCE
- WATTLE / CHECK DAM

PHASE 2 CONSTRUCTION SEQUENCE NOTES

1. BEGIN PHASE 2 SEDIMENT AND EROSION CONTROL UPON COMPLETION OF CLEARING, GRUBBING AND STRIPPING OPERATIONS, ROUGH GRADING OF THE SITE, INSTALLATION OF THE STORM WATER COLLECTION SYSTEM.
2. MAINTAIN EROSION CONTROL MEASURES FROM PHASE 1 INTO PHASE 2 AS INDICATED. THIS INCLUDES SILT FENCING, SILT FENCE OUTLETS, SKIMMER SEDIMENT BASINS AND CONSTRUCTION ENTRANCES.
3. REMOVE EROSION CONTROL MEASURES FROM PHASE 1 INTO PHASE 2 AS INDICATED. THIS INCLUDES TEMPORARY DIVERSIONS, EXISTING DRAINAGE DITCHES, CHECK DAMS AND TEMPORARY SEDIMENT TRAPS. STABILIZE THESE AREAS ACCORDING TO THE STABILIZATION MEASURES REQUIRED HEREIN.
4. INSTALL TEMPORARY GROUND STABILIZATION MEASURES, WHERE POSSIBLE, IN ALL AREAS OUTSIDE OF IMMEDIATE CONSTRUCTION ZONES.
5. INSTALL INLET PROTECTION AS INDICATED. SEE INLET PROTECTION DETAILS FOR MORE INFORMATION.
6. CONNECT SKIMMERS TO RISER STRUCTURES FOR TEMPORARY SEDIMENT BASINS AT PERMANENT STORMWATER WET PONDS. BAFFLES MAY BE REMOVED ONCE INLET PROTECTION IS ESTABLISHED.
7. COMPLETE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
8. UPON COMPLETION OF CONSTRUCTION, ESTABLISH PERMANENT GROUND COVER AND OVERALL SITE STABILIZATION.
9. REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES.

EROSION CONTROL MAINTENANCE NOTES

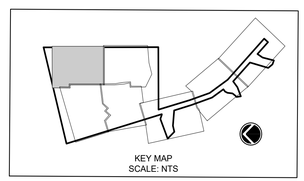
1. THE FOLLOWING EROSION CONTROL MAINTENANCE NOTES SHALL BE ADHERED TO DURING THE ENTIRE CONSTRUCTION PERIOD. SEE ALSO, EROSION CONTROL DETAIL SHEETS C12.0 TO C12.2 FOR ADDITIONAL MAINTENANCE NOTES.
2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AND REPAIRED, AS NECESSARY, EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF EVERY ONE-HALF (0.5) INCH OR GREATER RAINFALL.
3. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP. THE SEDIMENT FENCE WILL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
5. ALL AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
6. STONE CONSTRUCTION ENTRANCE TO BE CLEANED WHEN SEDIMENT ACCUMULATIONS ARE VISIBLE OR SEDIMENT IS TRACKED ON TO THE PAVEMENT. STONE WILL BE PERIODICALLY TOP DRESSED WITH 2 INCHES OF #4 STONE TO MAINTAIN 6 INCH DEPTH. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS REQUIRED.
9. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (0.5" OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED. INLET PROTECTION SHOULD BE CLEANED OUT WHEN IT IS HALF FULL.
10. INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS.
11. CHECK THE SEDIMENT BASIN EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.
12. INSPECT THE SKIMMER FOR CLOGGING. PULL THE SKIMMER TO THE SIDE OF THE BASIN AND REMOVE ANY DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER AND THE ARM OR BARREL PIPE FOR CLOGGING. IF CLOGGED, REMOVE THE DEBRIS.
13. INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEAN OUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH. AFTER THE CONTRIBUTING DRAINAGE AREAS HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.
14. INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.
15. INSPECT DANDY SACKS/GUTTERBUDDY WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS. DANDY SACKS/WATTLES MUST BE REPLACED IF CLOGGED OR TORN. DANDY SACKS/GUTTERBUDDY NEEDS TO BE REINSTALLED IF UNDERMINED OR DISLODGED. DANDY SACKS/GUTTERBUDDY SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.
16. PER NCG-01, INSPECT SILT FENCE OUTLETS AT LEST ONCE A WEEK AND AFTER EACH 1/2 INCH OR GREATER RAINFALL EVENT. COMPLETE ANY REQUIRED REPAIRS IMMEDIATELY. FRESHEN STONE WHEN SEDIMENT ACCUMULATION EXCEEDS 6 INCHES. KEEP MESH FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED. REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING.

LIMITS OF DISTURBANCE

AREA: 68.00 AC

40' 0 40' 80

SCALE 1" = 40'



1 NOTES

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BLAKE FARM PARCEL R

EROSION CONTROL STAGE 2 PLAN ENLARGMENT

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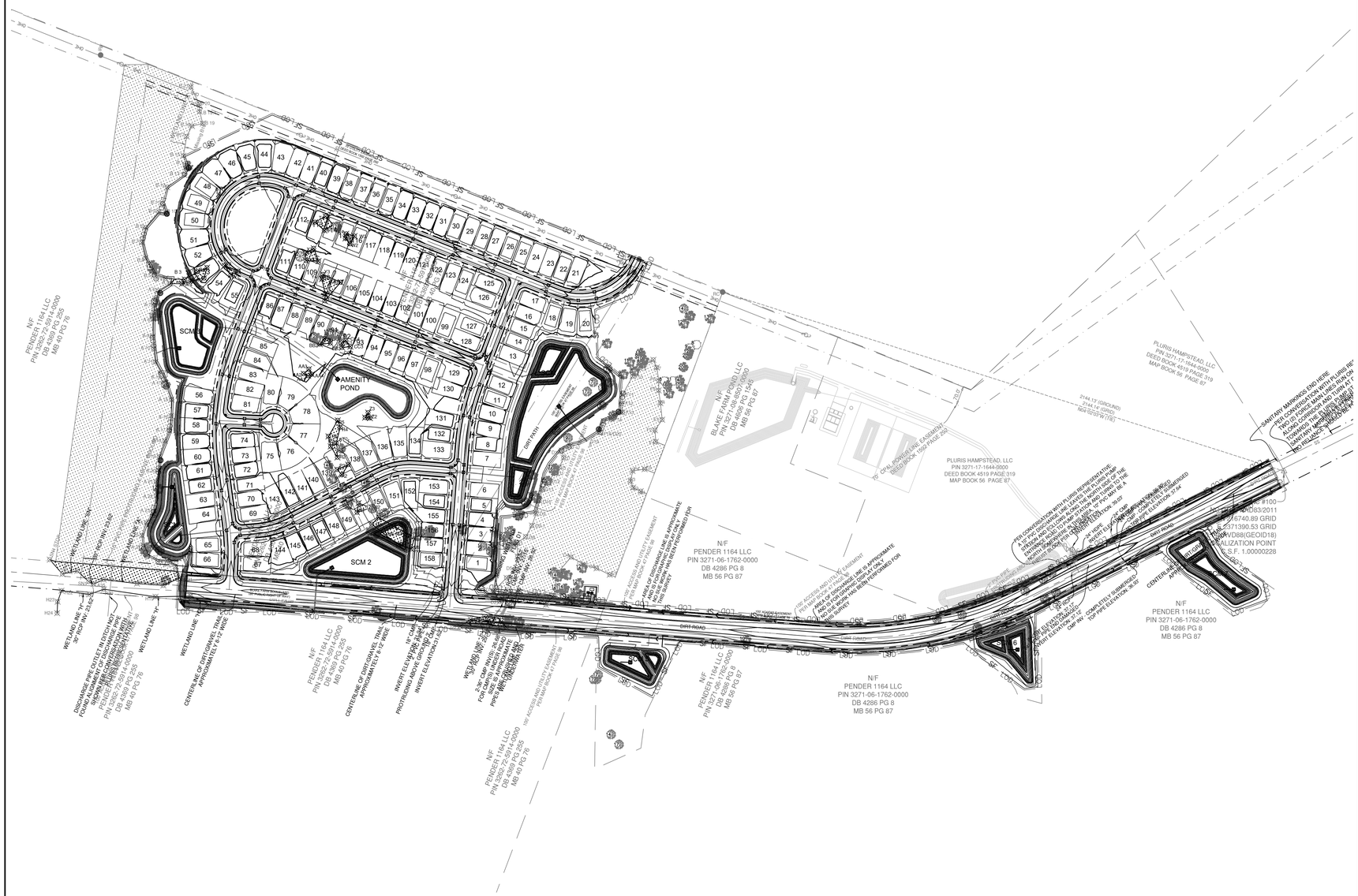
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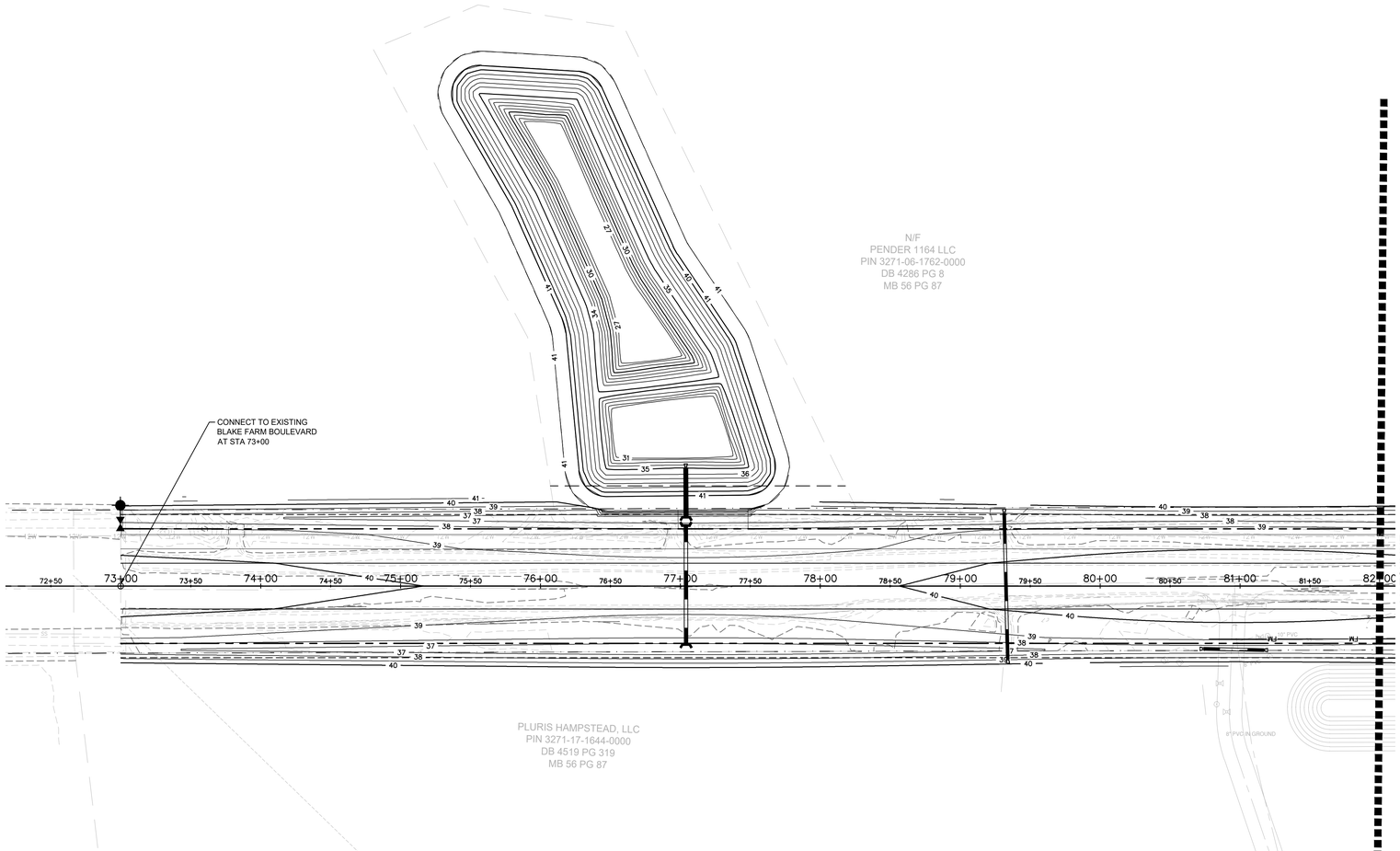
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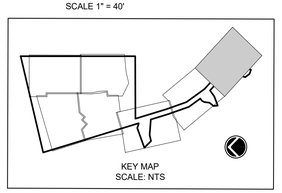

SCM 1
SCM 2
AMENITY POND
N/F PENDER 1164 LLC PIN 3271-06-1762-0000 DB 4286 PG 8 MB 56 PG 87
N/F PENDER 1164 LLC PIN 3271-17-1644-0000 DB 4286 PG 8 MB 56 PG 87
N/F BLAKE FARM POND LLC PIN 3271-17-1644-0000 DB 4519 PG 345 MB 56 PG 87
PLURIS HAMPSTEAD, LLC PIN 3271-17-1644-0000 DEED BOOK 4519 PAGE 319 MAP BOOK 56 PAGE 87
N/F PENDER 1164 LLC PIN 3271-06-1762-0000 DB 4286 PG 8 MB 56 PG 87
N/F PENDER 11164 LLC PIN 3260-97-5914-0000 DB 4369 PG 255 MB 40 PG 78
SANITARY MH RIMS#2 END HERE PER CONVERSATION WITH PLURIS REP. TIE OF CORRECT MANHOLE TO BE PROVIDED IN CONSTRUCTION PLANS
DISCHARGE PIPE OUTLET IN DITCH NOT FOUND IN FIELD. CONFIRM LOCATION AND PROVIDE RIP-RAP IF NECESSARY
WETLAND LINE "A"
WETLAND LINE "B"
WETLAND LINE "C"
CENTERLINE OF DRIVE/PAVEL TRAIL APPROXIMATELY 9'-12' WIDE
CENTERLINE OF DRIVE/PAVEL TRAIL APPROXIMATELY 12' WIDE
INVERT ELEVATION OF 6" CMP PROTRUDING ABOVE GROUND APPROX. 2'
INVERT ELEVATION=342.0
WELL ABS LINE "A" 2" SCH 40 PVC PIPE FOR OBSERVATION PURPOSES ONLY
WELL ABS LINE "B" 2" SCH 40 PVC PIPE FOR OBSERVATION PURPOSES ONLY
DRIVE/PAVEL TRAIL TO BE REMOVED
SWIFT PRINT
BRIT ROAD
PER CONVERSATION WITH PLURIS REPRESENTATIVE A TEE AND MANHOLE WILL BE LEAVE IN THE EXISTING PLAN EXISTING INVERT ELEVATION IN THE EXISTING MANHOLE IS 340.29 AND THE INVERT OF THE NORTH & WESTERN PIPE IS 336.29 THE INVERT OF THE SOUTH PIPE MAY BE A LITTLE LOWER
PROPOSED 6" SCH 40 PVC FORCE MAIN
EXISTING 6" SCH 40 PVC FORCE MAIN
EXISTING 6" CMP
CMP INV. 337.24
CMP INV. 337.17
CMP INV. 336.93
CMP INV. 336.87
TOP PIPE ELEVATION 340.29
TOP PIPE ELEVATION 340.23
TOP PIPE ELEVATION 340.17
TOP PIPE ELEVATION 340.11
TOP PIPE ELEVATION 340.05
TOP PIPE ELEVATION 339.99
TOP PIPE ELEVATION 339.93
TOP PIPE ELEVATION 339.87
TOP PIPE ELEVATION 339.81
TOP PIPE ELEVATION 339.75
TOP PIPE ELEVATION



SYMBOLS LEGEND

- STORM DRAIN LINE
- SS — SANITARY SEWER
- W — W — W — WATER LINE
- SANITARY SEWER MANHOLE
- FIRE HYDRANT
- WATER BLOW-OFF
- WATER VALVE
- WATER REDUCER
- WATER CROSSING
- WATER TEE
- STORM DRAIN DROP INLET (DI)
- STORM DRAIN CURB INLET (CI)
- STORM DRAIN JUNCTION BOX (JB)
- STORM DRAIN MANHOLE (MH)
- FLARED END SECTION (FES)
- OUTLET STRUCTURE (OS)

40' 0 40' 80
SCALE 1" = 40'



2 GRADING & DRAINAGE PLAN ENLARGEMENT

1 NOTES

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BLAKE FARM PARCEL R

GRADING & DRAINAGE PLAN - ENLARGED

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MCE PROJ. #	04245-0055
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PROJ. MGR.	TSM

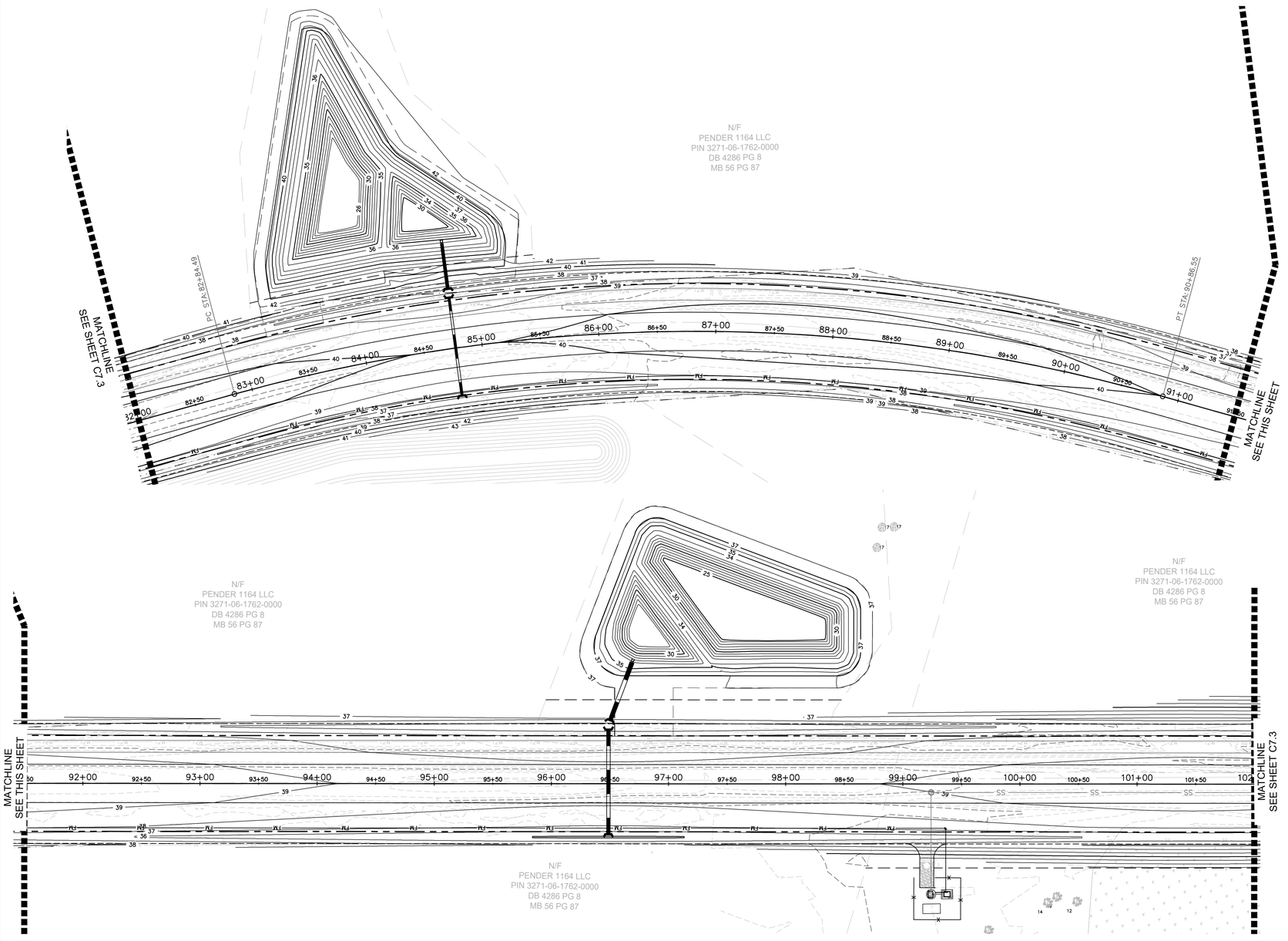
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HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C7.1
DRAWING NUMBER

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STATUS:
PENDER COUNTY TRC REVIEW

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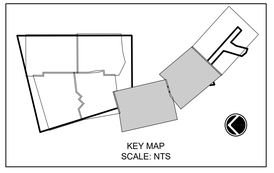


SYMBOLS LEGEND

- STORM DRAIN LINE
- SANITARY SEWER
- WATER LINE
- SANITARY SEWER MANHOLE
- FIRE HYDRANT
- WATER BLOW-OFF
- WATER VALVE
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40' 0 40' 80
SCALE 1" = 40'

40' 0 40' 80
SCALE 1" = 40'



2 GRAPHIC SCALE AND E&SC PLAN ENLARGEMENT

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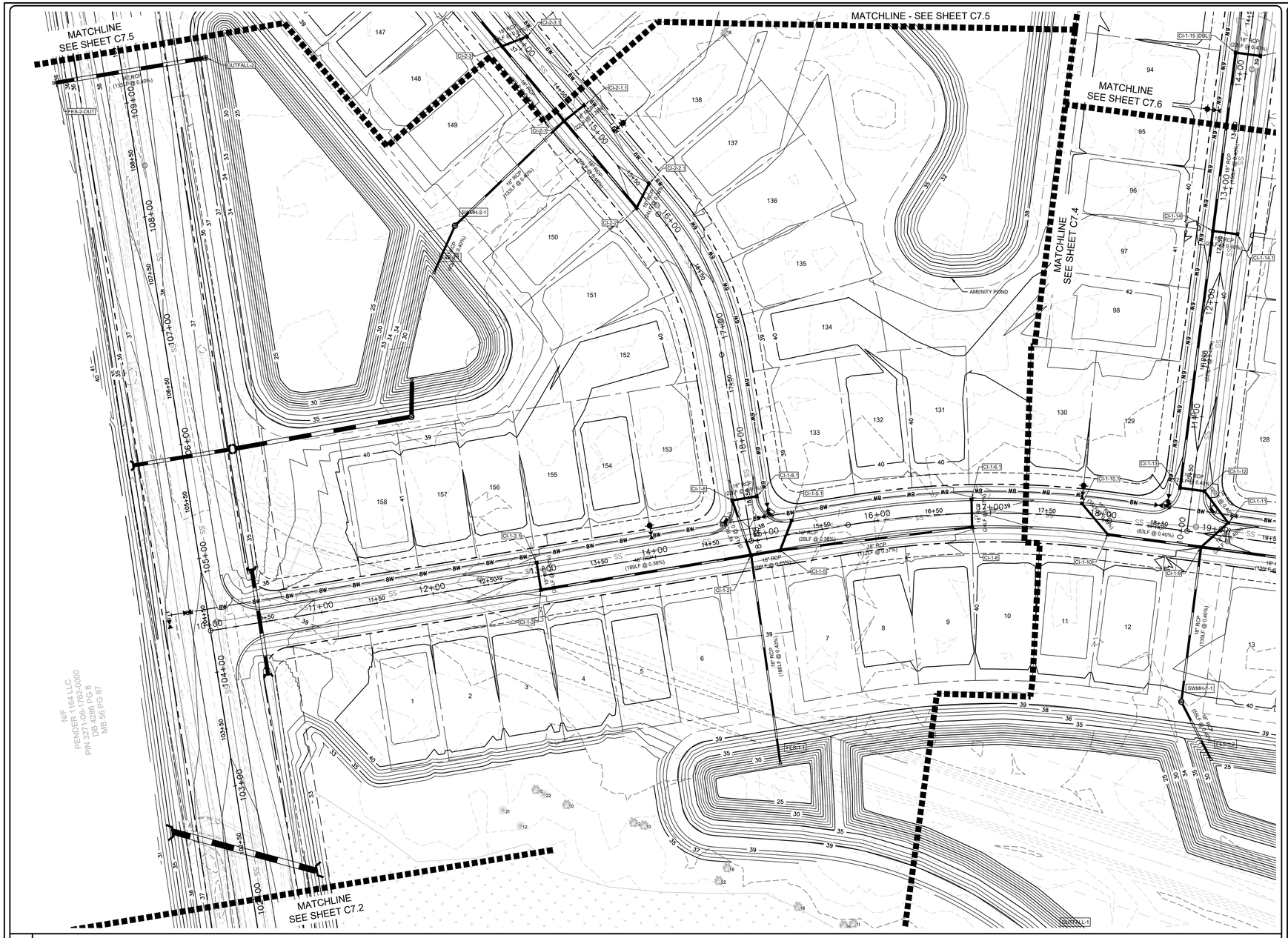
GRADING & DRAINAGE PLAN - ENLARGED

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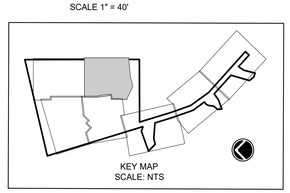

MATCHLINE - SEE SHEET C7.5
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MATCHLINE SEE SHEET C7.6
MATCHLINE SEE SHEET C7.4
MATCHLINE SEE SHEET C7.2
AMENITY POND
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FES-2-OUT
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40' 0 40' 80
SCALE 1" = 40'



2 GRADING DRAINAGE AND E&SC PLAN ENLARGEMENT

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GRADING & DRAINAGE PLAN - ENLARGED

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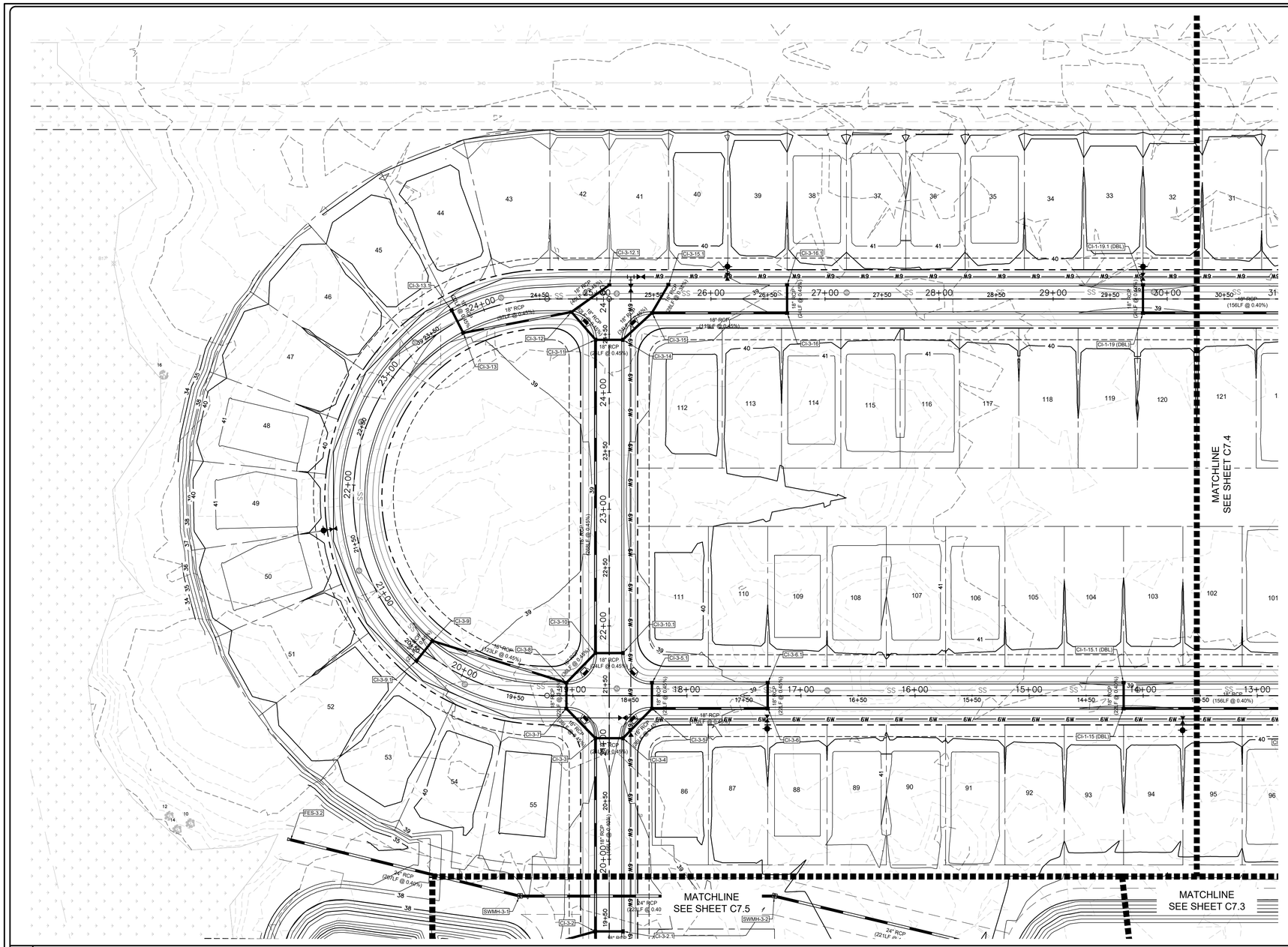
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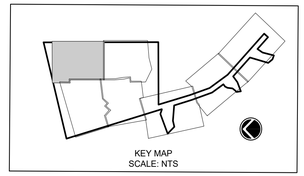

MATCHLINE
SEE SHEET C5.3
MATCHLINE
SEE SHEET C5.6
MATCHLINE
SEE SHEET C5.3
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FES-4
OUTFALL-4
FES-3-OUT
OUTFALL-3
FES-3-1
SWMH-3-1
SWMH-3-2
FES-2-OUT
OUTFALL-2
FES-3-3
CI-4-1 (DG)
CI-4-2
CI-4-3
CI-4-4
CI-4-5
CI-4-6
CI-4-7
CI-4-8
CI-4-9
CI-4-9.1
CI-3-10
CI-3-18
CI-3-17
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CI-3-20
CI-3-20.1
CI-2-4
CI-2-4.1
CI-2-3
CI-2-3.1
CI-2-1.1
CI-3-4
18" RCP (140LF @ 0.47%)
18" RCP (102LF @ 0.40%)
18" RCP (171LF @ 0.40%)
18" RCP (22LF @ 3.90%)
18" RCP (80LF @ 0.40%)
24" RCP (220LF @ 0.40%)
24" RCP (220LF @ 0.40%)
24" RCP (220



SYMBOLS LEGEND

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- SANITARY SEWER
- WATER LINE
- SANITARY SEWER MANHOLE
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40' 0 40' 80
SCALE 1" = 40'



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GRADING & DRAINAGE PLAN - ENLARGED

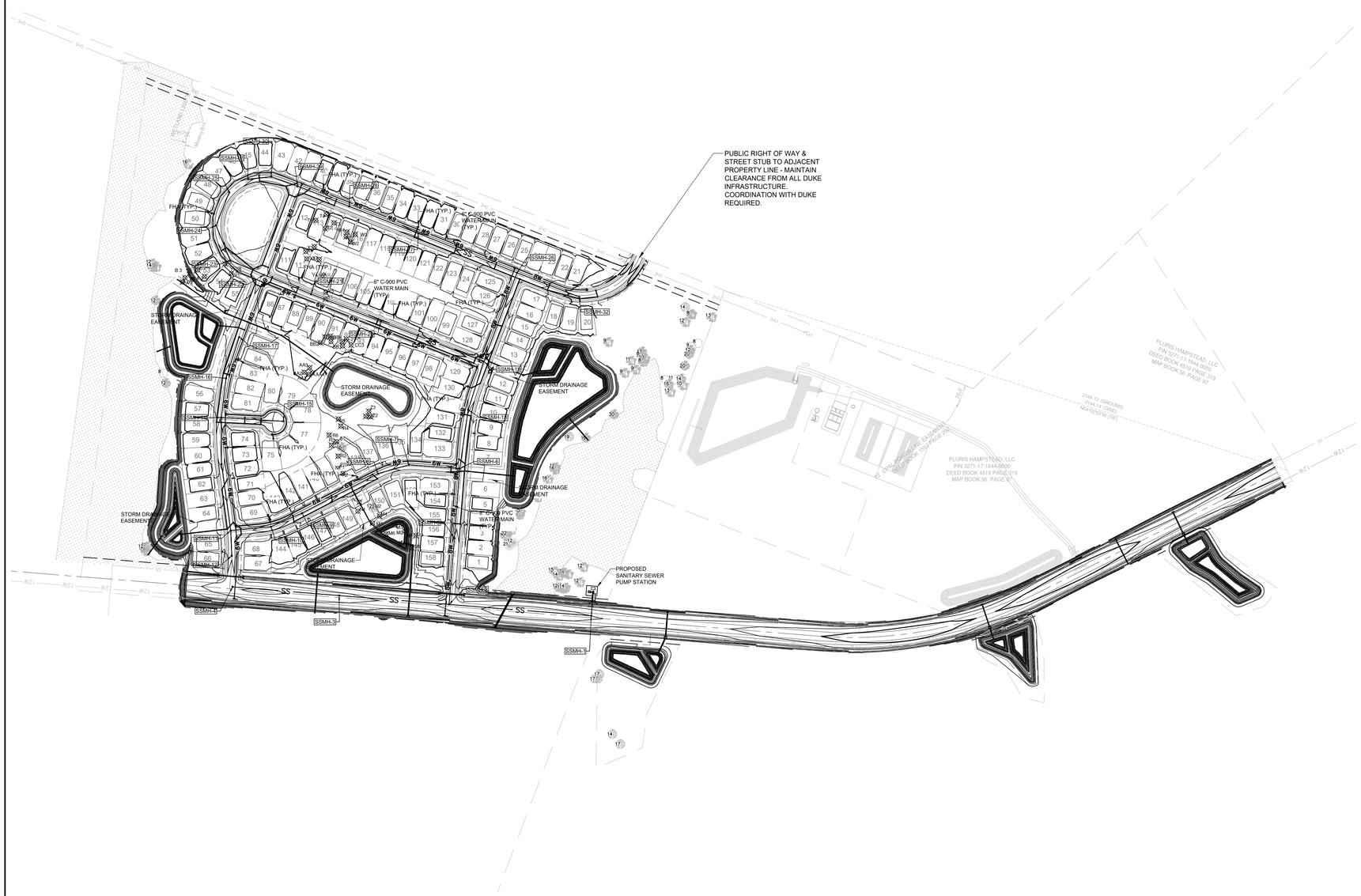
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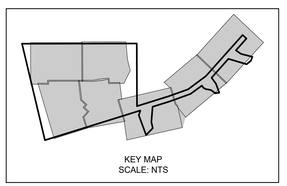
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STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C7.1_GRADING DRAINAGE AND E&SC STAGE 2 PLAN ENLARGED.DWG ---- 10/06/2023 10:33:33





KEY MAP
SCALE: NTS

175' 0 175' 350
SCALE 1" = 175'

2 UTILITY PLAN

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

UTILITY PLAN - OVERALL

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

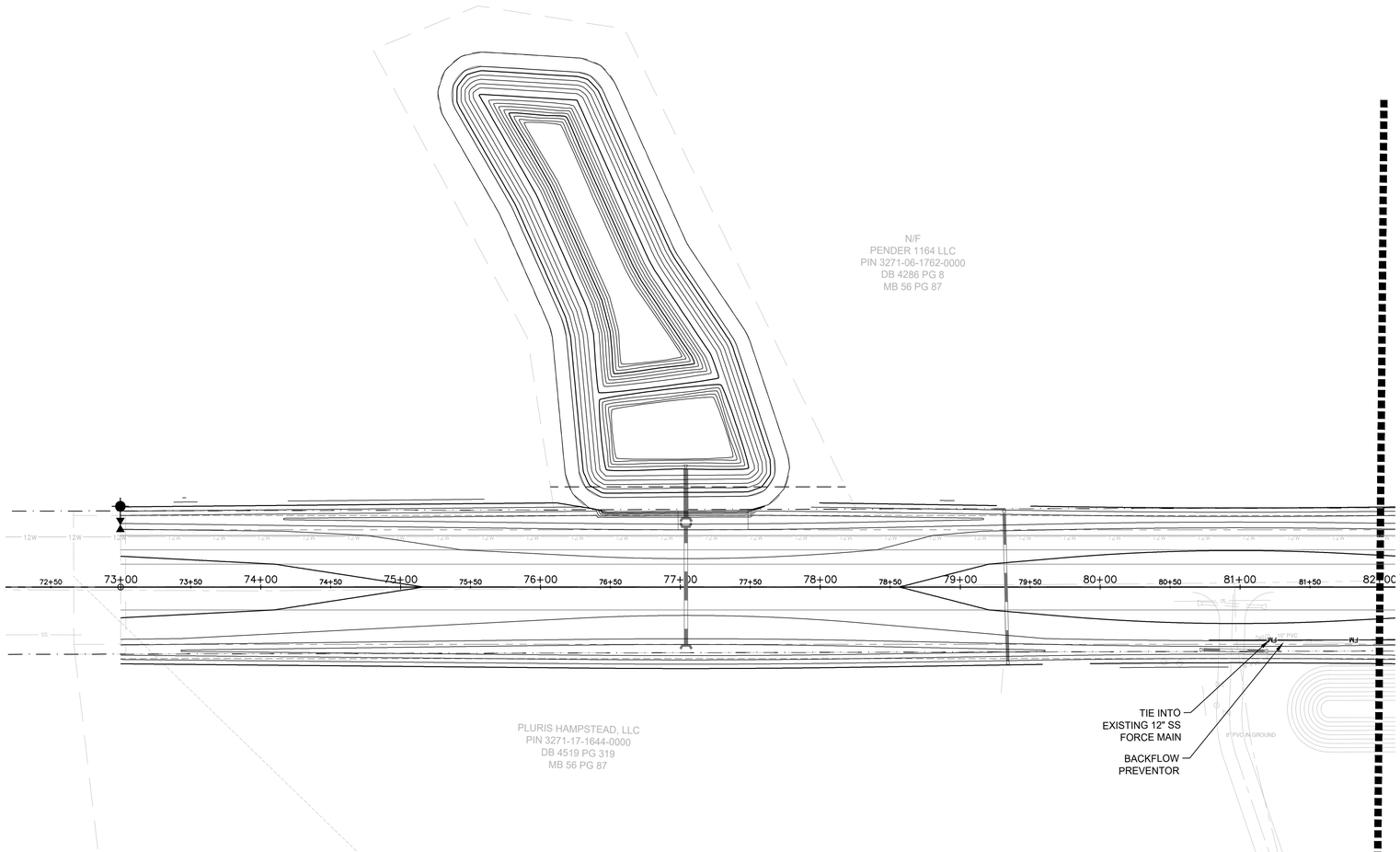
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C8.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

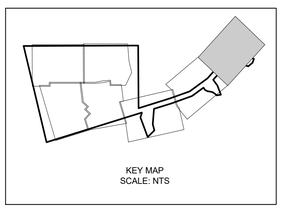
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SYMBOLS LEGEND

- SS — SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- W — WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- HYDRANT AND VALVE ASSEMBLY
- FIRE DEPARTMENT CONNECTION
- SD — STORM DRAINAGE LINE
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE DROP INLET
- STORM DRAINAGE CURB INLET
- STORM DRAINAGE FLARED END SECTION

40' 0 40' 80
SCALE 1" = 40'



KEY MAP
SCALE: NTS

2 UTILITY PLAN ENLARGEMENT

1 NOTES

REV NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

UTILITY PLAN - ENLARGED

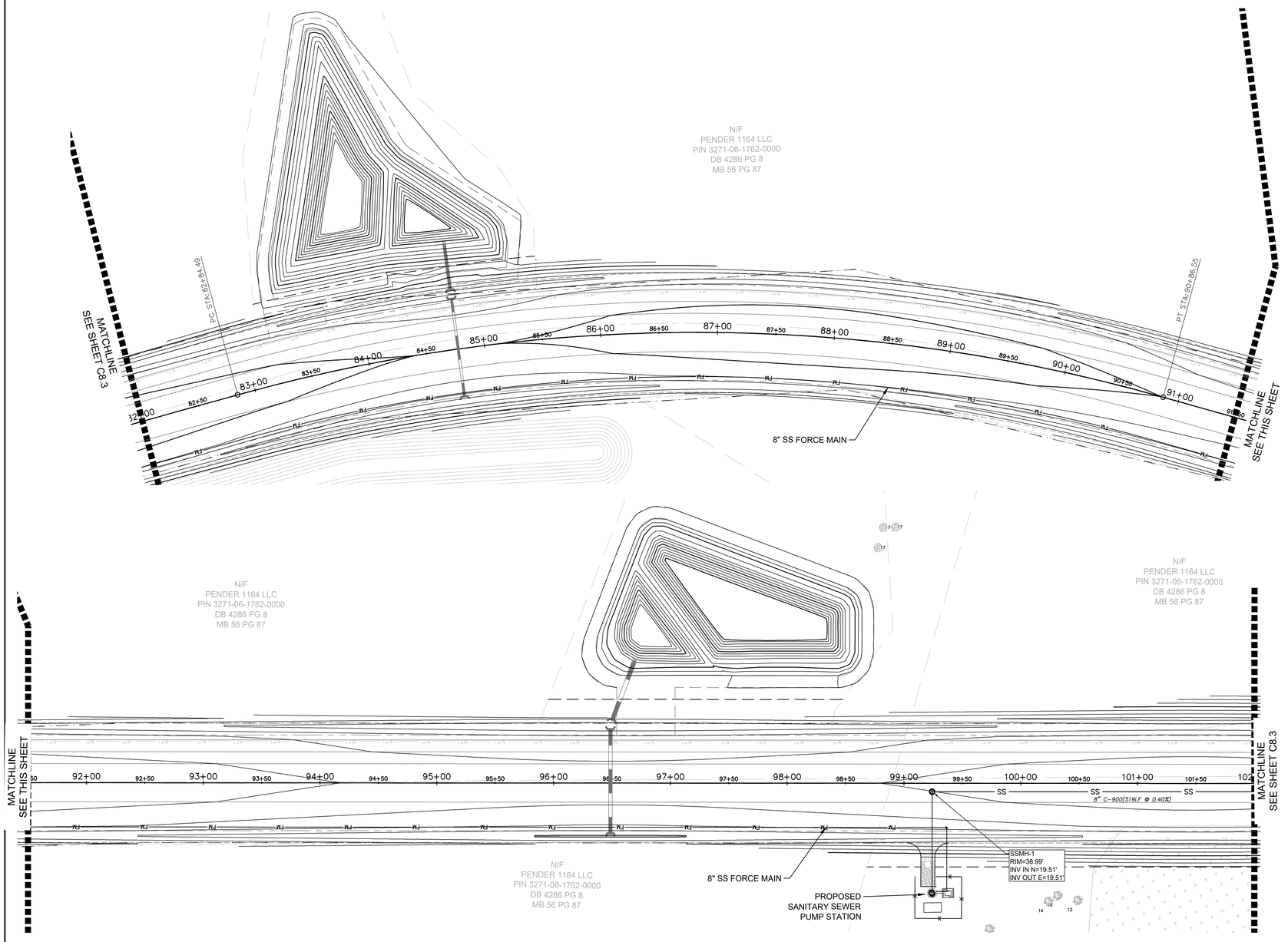
DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C8.1
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW



SYMBOLS LEGEND

- SS — SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- W — WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- HYDRANT AND VALVE ASSEMBLY
- FIRE DEPARTMENT CONNECTION
- SD — STORM DRAINAGE LINE
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE DROP INLET
- STORM DRAINAGE CURB INLET
- STORM DRAINAGE FLARED END SECTION

40' 0 40' 80
SCALE 1" = 40'

40' 0 40' 80
SCALE 1" = 40'

KEY MAP
SCALE: NTS

2 UTILITY PLAN ENLARGEMENT

1 NOTES

REV NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

UTILITY PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

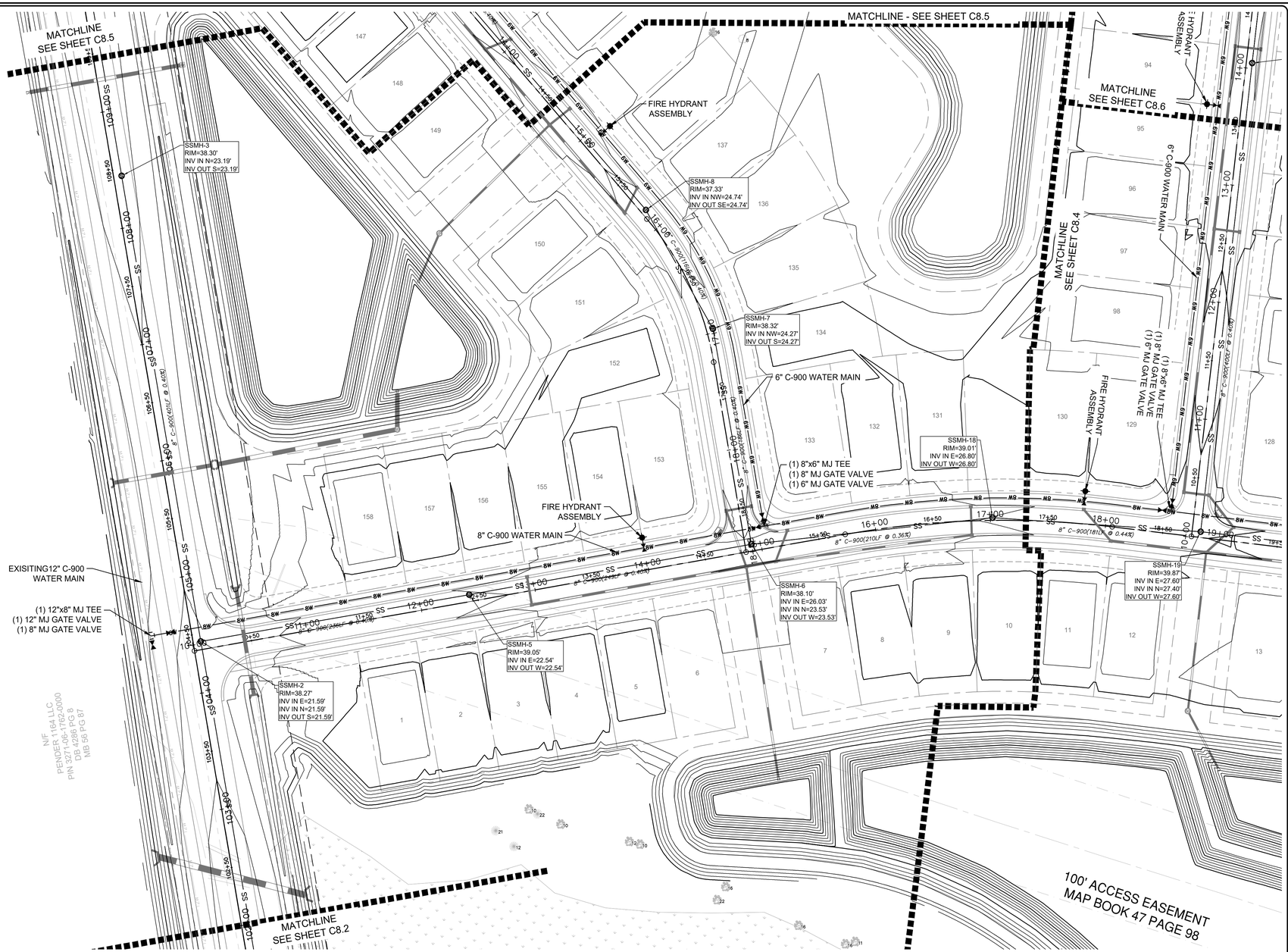
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VERTICAL: VSCALE

C8.2
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 | UTILITY PLAN ENLARGEMENT

SYMBOLS LEGEND

- SS — SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- W — WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- HYDRANT AND VALVE ASSEMBLY
- FDC — FIRE DEPARTMENT CONNECTION
- SD — STORM DRAINAGE LINE
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE DROP INLET
- STORM DRAINAGE CURB INLET
- STORM DRAINAGE FLARED END SECTION

40' 0 40' 80
SCALE 1" = 40'

KEY MAP
SCALE: NTS

1 | NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

UTILITY PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

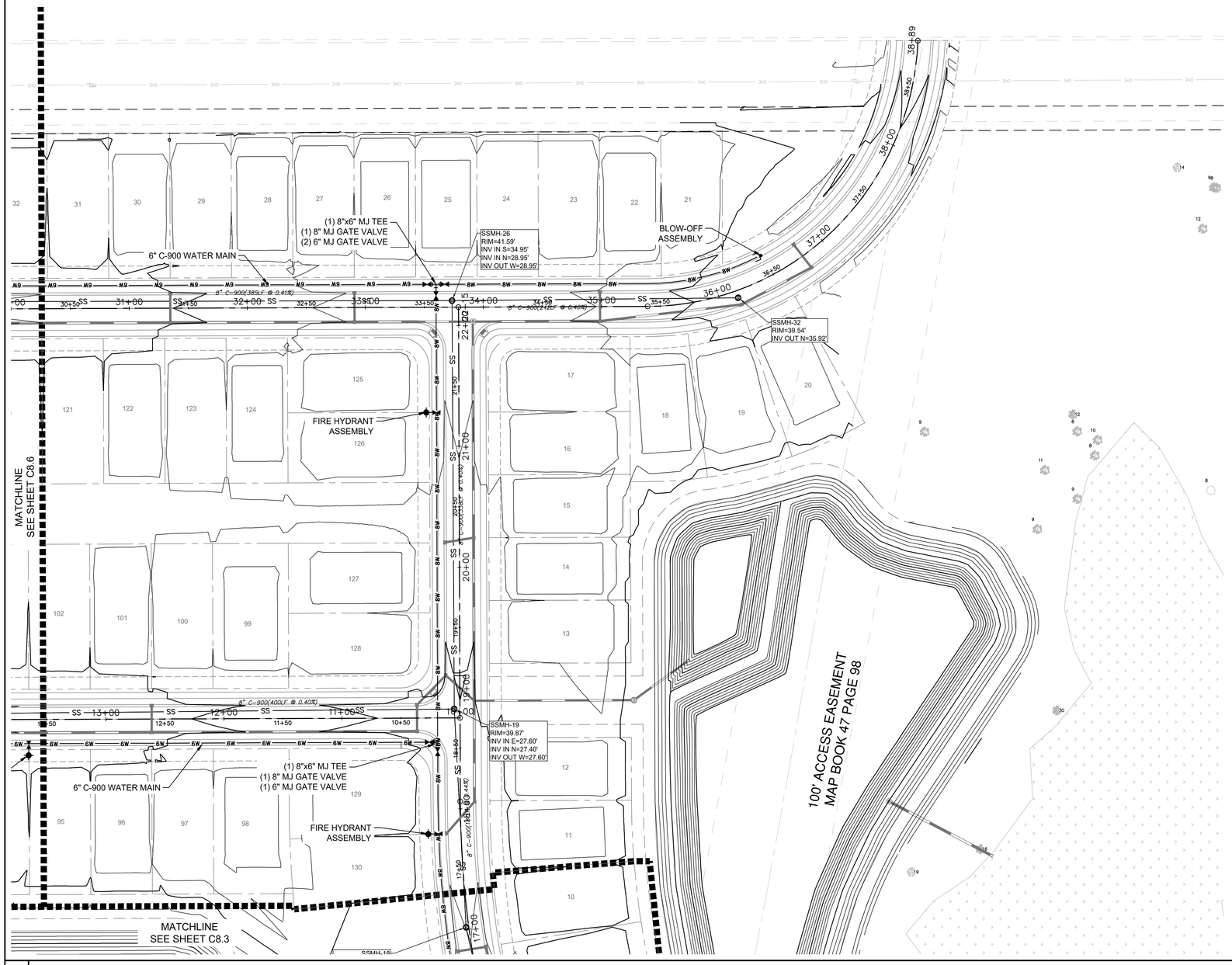
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VERTICAL: VSCALE

C8.3
DRAWING NUMBER

REVISION

STATUS: PENDER COUNTY TRC REVIEW

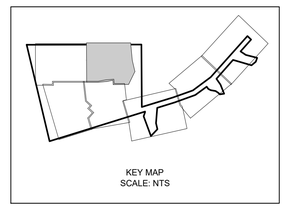
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SYMBOLS LEGEND

- SS — SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- W — WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- HYDRANT AND VALVE ASSEMBLY
- FDC — FIRE DEPARTMENT CONNECTION
- SD — STORM DRAINAGE LINE
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE DROP INLET
- STORM DRAINAGE CURB INLET
- STORM DRAINAGE FLARED END SECTION

40' 0 40' 80
SCALE 1" = 40'



2 UTILITY PLAN ENLARGEMENT

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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UTILITY PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

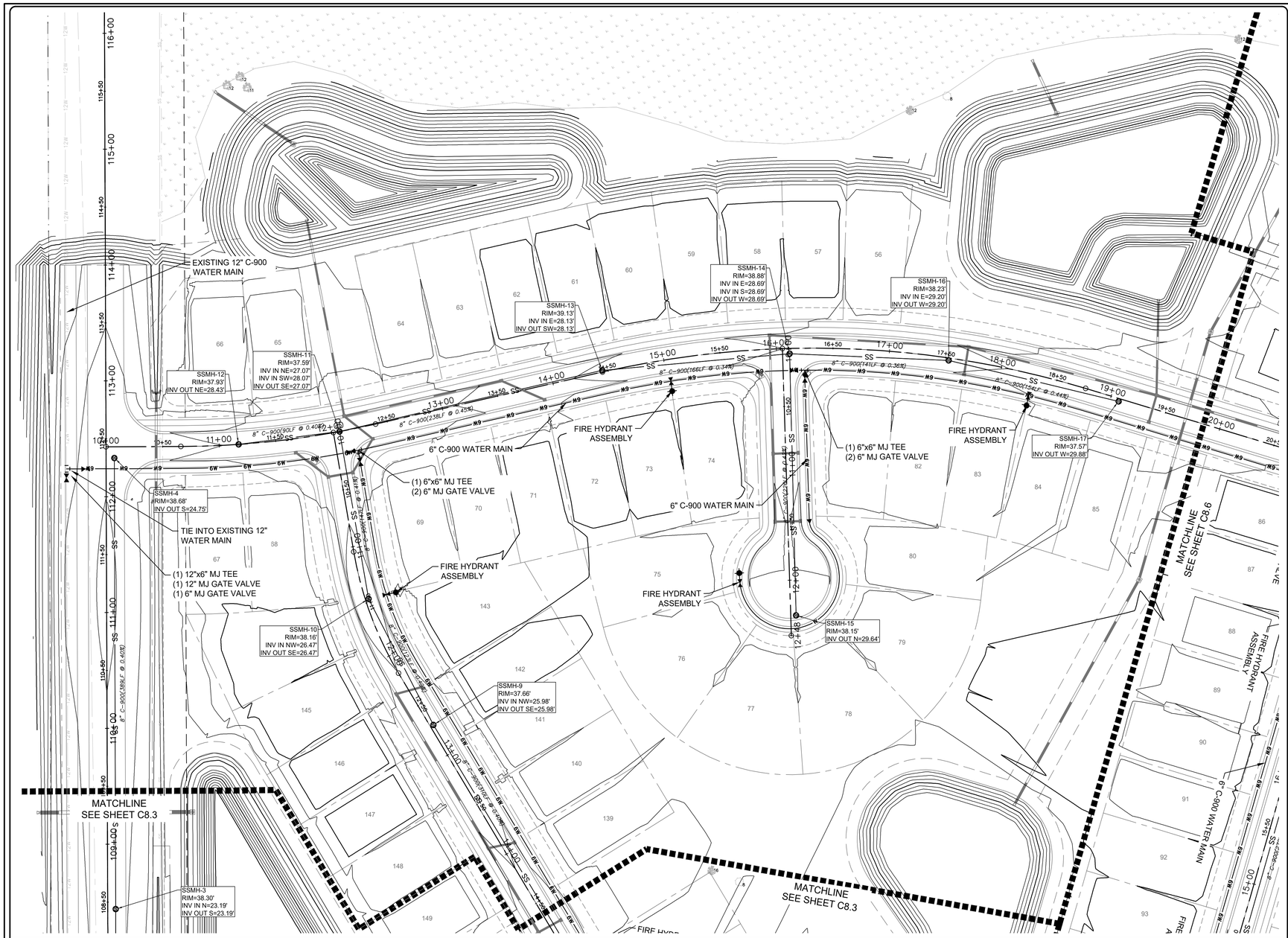
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HORIZONTAL: 1"=40'
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C8.4
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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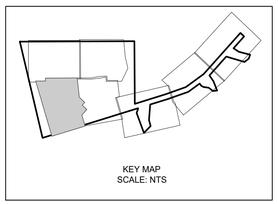


2 UTILITY PLAN ENLARGEMENT

SYMBOLS LEGEND

- SS — SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- W — WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- HYDRANT AND VALVE ASSEMBLY
- FIRE DEPARTMENT CONNECTION
- SD — STORM DRAINAGE LINE
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE DROP INLET
- STORM DRAINAGE CURB INLET
- STORM DRAINAGE FLARED END SECTION

40' 0 40' 80
SCALE 1" = 40'



1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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UTILITY PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

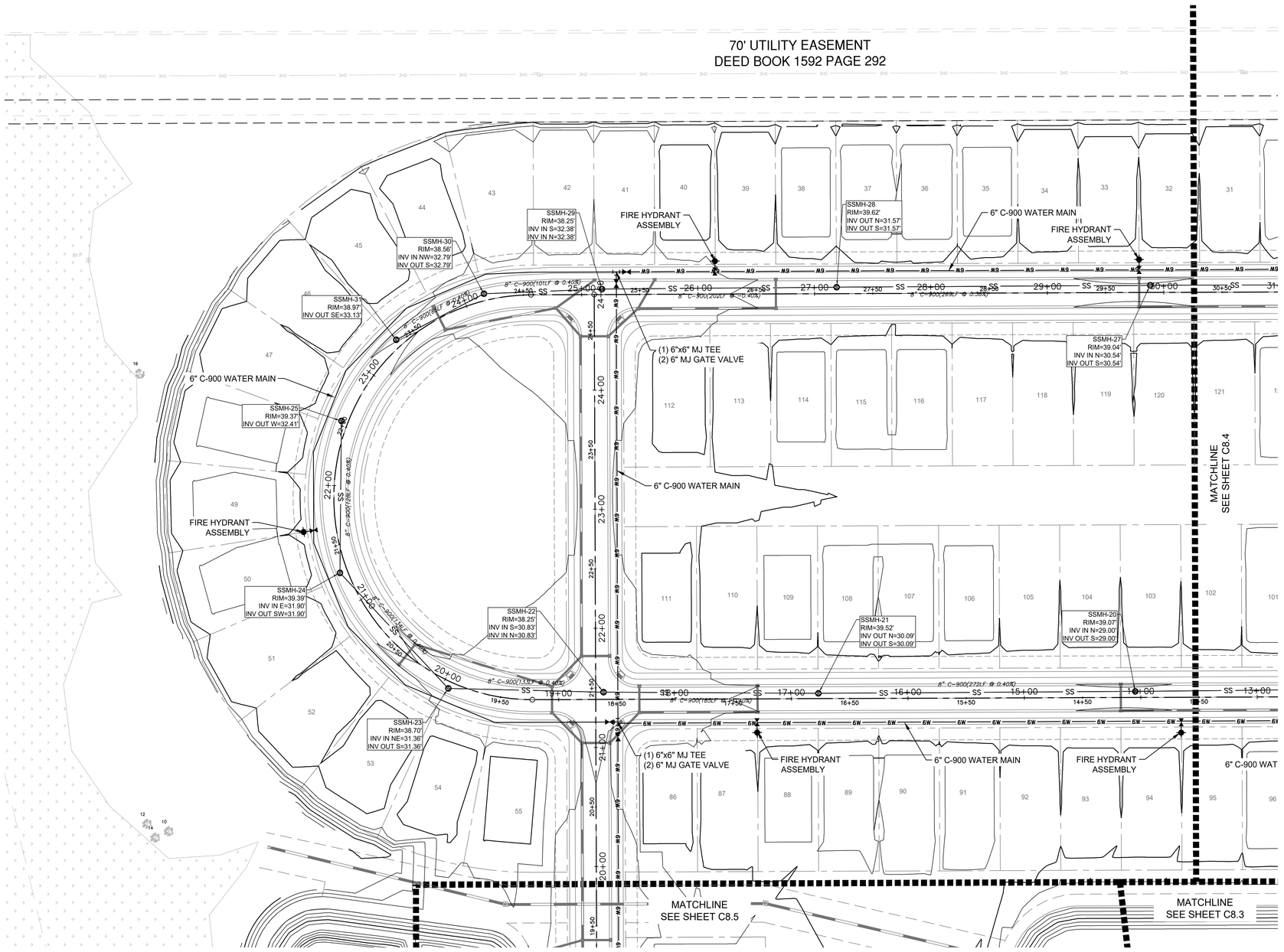
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C8.5
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

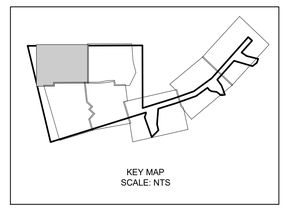
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SYMBOLS LEGEND

- SS — SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- W — WATER LINE
- WATER METER
- BACKFLOW PREVENTER
- HYDRANT AND VALVE ASSEMBLY
- FDC — FIRE DEPARTMENT CONNECTION
- SD — STORM DRAINAGE LINE
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE DROP INLET
- STORM DRAINAGE CURB INLET
- STORM DRAINAGE FLARED END SECTION

40' 0 40' 80
SCALE 1" = 40'



2 UTILITY PLAN ENLARGEMENT

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
REVISIONS		

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BLAKE FARM PARCEL R

UTILITY PLAN - ENLARGED

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=40'
VERTICAL: VSCALE

C8.6
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

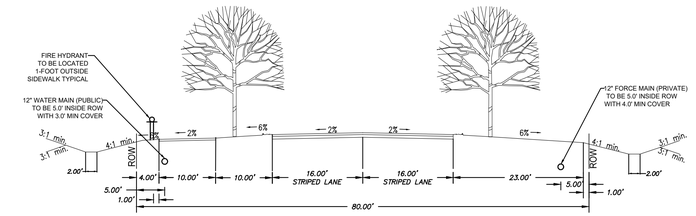
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BLAKE FARM BOULEVARD

80' R/W (PUBLIC)

WITHOUT MEDIAN

FROM STA. 73+00 TO STA. 114+00

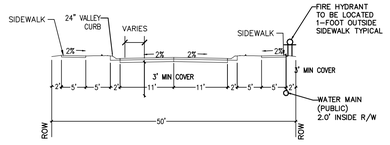


2 | BLAKE FARM BOULEVARD ROAD SECTION

RESIDENTIAL COLLECTOR

50' R/W (PUBLIC)

ROAD A AND ROAD B

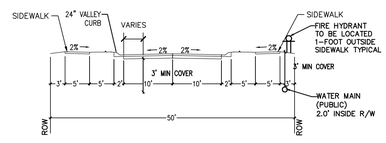


1 | 50' ROW ROAD SECTION

RESIDENTIAL LOCAL

50' R/W (PUBLIC)

ROADS C, D, E, F, G



1 | 50' ROW ROAD SECTION

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

TYPICAL STREET SECTIONS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

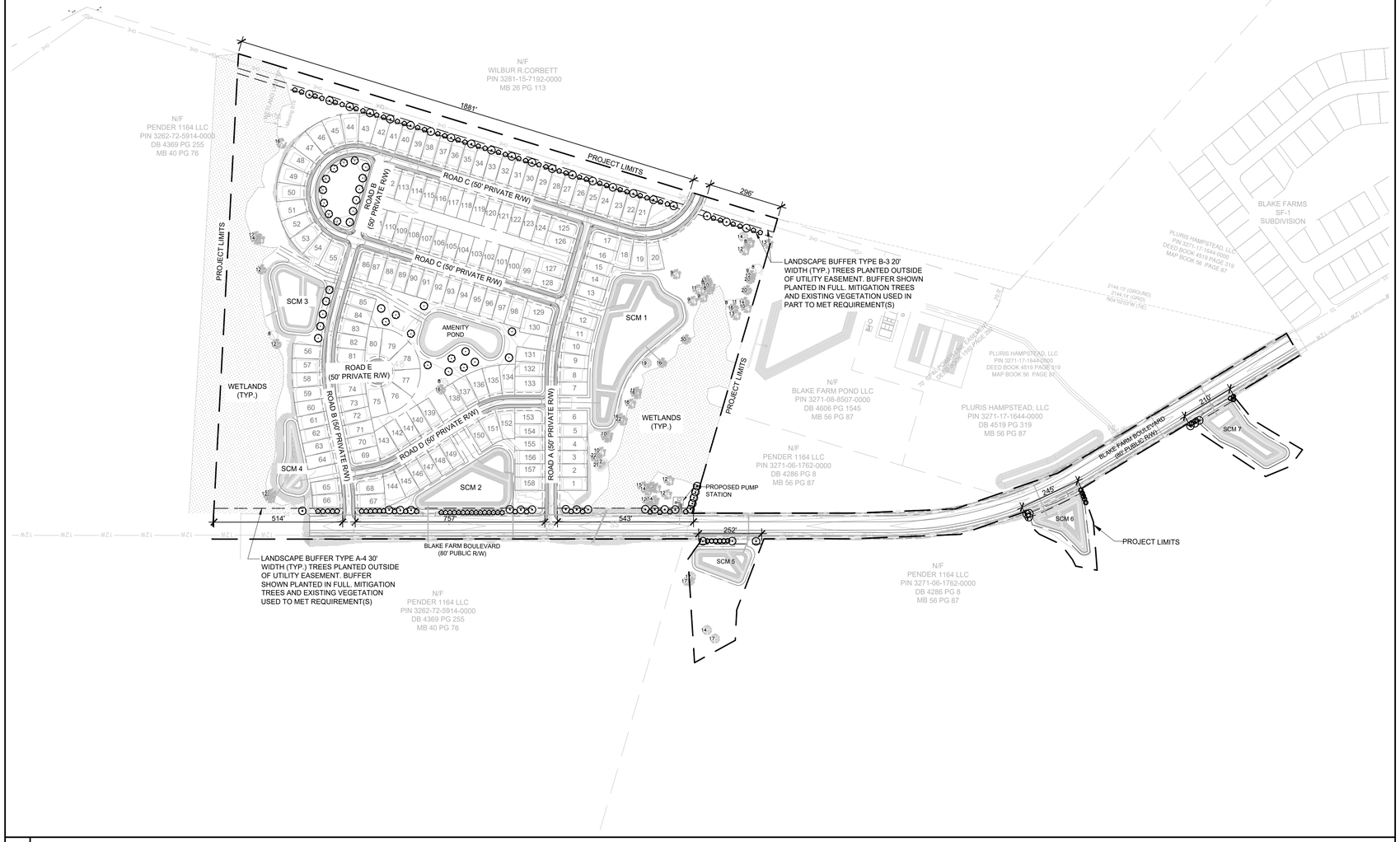
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HORIZONTAL: HSCALE
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C9.14
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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2 LANDSCAPE PLAN - OVERALL

LANDSCAPE DATA

REGULATION	REQUIRED	PROPOSED
MITIGATION		
ANY SIGNIFICANT TREE REMOVED SHALL BE MITIGATED BY PLANTING OF TWO (2) TREES OF THE SAME SPECIES WITH A MINIMUM CALIPER OF 2" OR GREATER 2 SIGNIFICANT HOLLY X 2 = 4 HOLLIES 1 SIGNIFICANT MAGNOLIA X 1 = 2 MAGNOLIAS 7 SIGNIFICANT MAPLES x 2 = 14 MAPLES 25 SIGNIFICANT WATER OAKS X 2 = 50 WATER OAKS 9 SIGNIFICANT WHITE OAKS X 2 = 18 WHITE OAKS	4 HOLLIES 2 MAGNOLIAS 14 MAPLES 50 WATER OAKS 18 WHITE OAKS	4 HOLLIES 2 MAGNOLIAS 14 MAPLES 50 WATER OAKS 18 WHITE OAKS
NOTE: REFER TO TREE REMOVAL TABLE FOR TREE REMOVAL LIST AND MITIGATION CALCULATIONS		
BUFFER YARD - PD BOUNDARY BUFFERS		
SOUTH: B-3* 20' WIDE STRIP 1 CANOPY TREES, 2 UNDERSTORY TREES PER 100 LF 2,177 LF/100 = 21.77 21.77 x 1 = 21.77 = 22 CANOPY TREES 21.77 x 2 = 43.54 = 44 UNDERSTORY TREES	20' WIDTH 22 CANOPY TREES 44 UNDERSTORY TREES	20' WIDTH 22 CANOPY TREES 44 UNDERSTORY TREES
*NOTE: BUFFERS REQUIREMENTS INTENDED TO UTILIZE EXISTING VEGETATION TO SATISFY TREE REQUIREMENTS. CLOSER TO TIME OF PROJECT COMPLETION, A SITE VISIT WITH LANDSCAPE ARCHITECT AND PENDER COUNTY PLANNING REPRESENTATIVE IS REQUESTED TO DETERMINE WHETHER SUPPLEMENTAL VEGETATION IS REQUIRED TO MEET INTENT OF ORDINANCE.		
BUFFER YARD - ALONG BLAKE FARM BOULEVARD		
BLAKE FARM BOULEVARD: A-4 (PARCEL R FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET. 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 1,814 LF / 100 = 18.14 1,814 x 1 = 18.14 = 19 CANOPY TREES 18.14 x 2 = 36.28 = 37 UNDERSTORY TREES	30' WIDTH 19 CANOPY TREES 37 UNDERSTORY TREES	30' WIDTH 19 CANOPY TREES 37 UNDERSTORY TREES
BLAKE FARM BOULEVARD: A-4 (SCM 5 FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET. 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 252 LF / 100 = 2.52 2.52 x 1 = 2.52 = 3 CANOPY TREES 2.52 x 2 = 5.04 = 6 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 6 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 6 UNDERSTORY TREES
BLAKE FARM BOULEVARD: A-4 (SCM 6 FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET. 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 245 LF / 100 = 2.45 2.45 x 1 = 2.45 = 3 CANOPY TREES 2.45 x 2 = 4.90 = 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES
BLAKE FARM BOULEVARD: A-4 (SCM 7 FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET. 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 210 LF / 100 = 2.10 2.10 x 1 = 2.10 = 10 CANOPY TREES 2.10 x 2 = 4.20 = 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES
*NOTE: BUFFERS REQUIREMENTS INTENDED TO UTILIZE EXISTING VEGETATION TO SATISFY TREE REQUIREMENTS. CLOSER TO TIME OF PROJECT COMPLETION, A SITE VISIT WITH LANDSCAPE ARCHITECT AND PENDER COUNTY PLANNING REPRESENTATIVE IS REQUESTED TO DETERMINE WHETHER SUPPLEMENTAL VEGETATION IS REQUIRED TO MEET INTENT OF ORDINANCE.		

PLANT LEGEND

CANOPY TREE	BOTANICAL / COMMON NAME
	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY MAPLE
	QUERCUS ALBA WHITE OAK
	QUERCUS NIGRA WATER OAK
UNDERSTORY TREES	**BOTANICAL / COMMON NAME**
	ILEX X 'NELLIE R. STEVENS' NELLIE R. STEVENS HOLLY
	MAGNOLIA GRANDIFLORA 'SOUTHERN CHARM' TEDDY BEAR® SOUTHERN MAGNOLIA

1 NOTES

REV NO.	DESCRIPTIONS	DATE
	REVISIONS	

SEAL

SEAL

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BLAKE FARM PARCEL R

LANDSCAPE PLAN - OVERALL

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

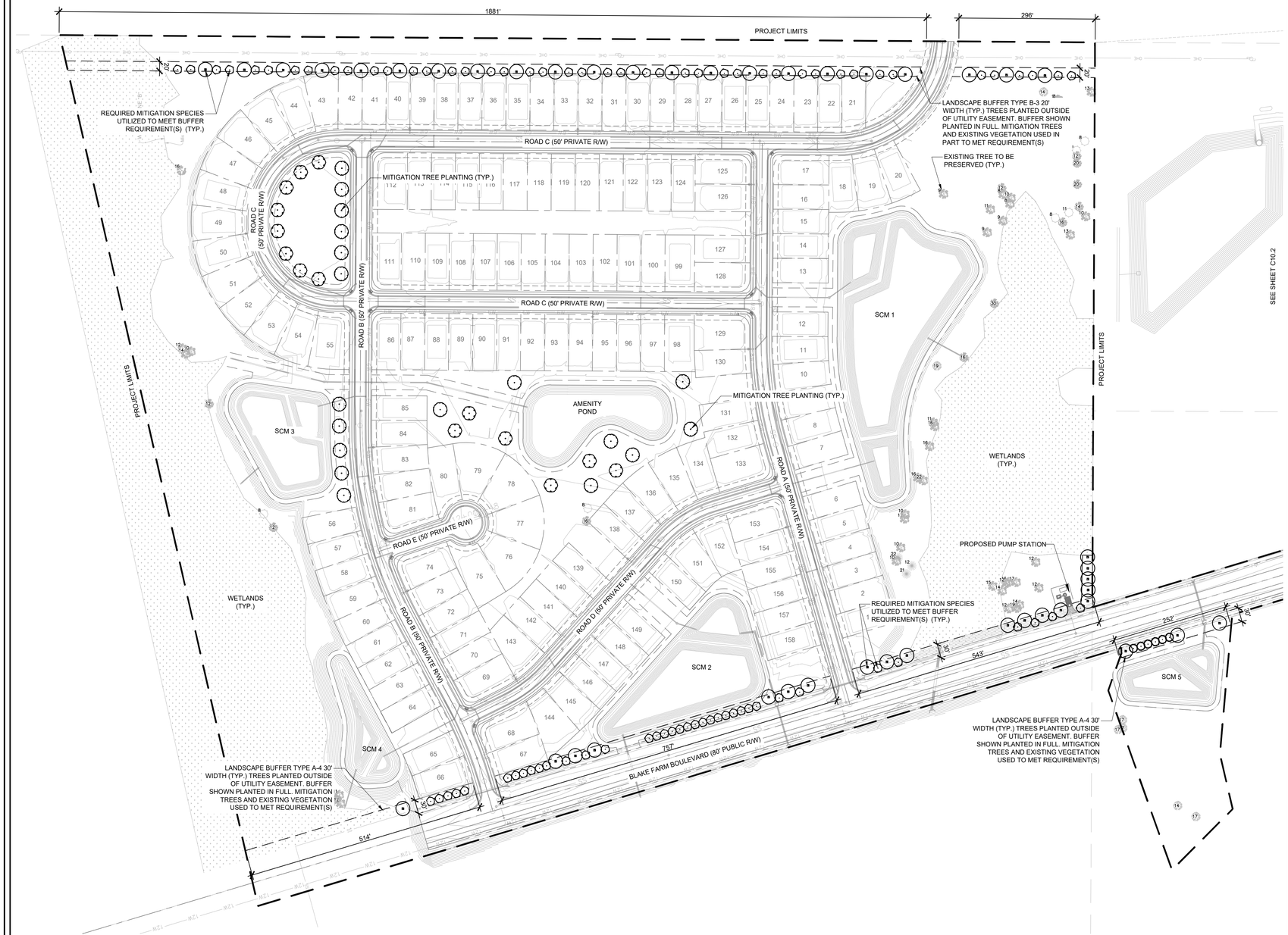
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VERTICAL: N/A

C10.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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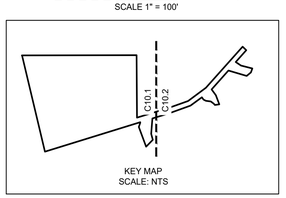
LANDSCAPE DATA

REGULATION	REQUIRED	PROPOSED
MITIGATION		
ANY SIGNIFICANT TREE REMOVED SHALL BE MITIGATED BY PLANTING OF TWO (2) TREES OF THE SAME SPECIES WITH A MINIMUM CALIPER OF 2" OR GREATER. 2 SIGNIFICANT HOLLY X 2 = 4 HOLLIES 1 SIGNIFICANT MAGNOLIA X 1 = 2 MAGNOLIAS 7 SIGNIFICANT MAPLES x 2 = 14 MAPLES 25 SIGNIFICANT WATER OAKS X 2 = 50 WATER OAKS 9 SIGNIFICANT WHITE OAKS X 2 = 18 WHITE OAKS	4 HOLLIES 2 MAGNOLIAS 14 MAPLES 50 WATER OAKS 18 WHITE OAKS	4 HOLLIES 2 MAGNOLIAS 14 MAPLES 50 WATER OAKS 18 WHITE OAKS
NOTE: REFER TO TREE REMOVAL TABLE FOR TREE REMOVAL LIST AND MITIGATION CALCULATIONS		
BUFFER YARD - PD BOUNDARY BUFFERS		
SOUTH: B-3* 20' WIDE STRIP 1 CANOPY TREES, 2 UNDERSTORY TREES PER 100 LF 2,177 LF/100 = 21.77 21.77 x 1 = 21.77 = 22 CANOPY TREES 21.77 x 2 = 43.54 = 44 UNDERSTORY TREES	20' WIDTH 22 CANOPY TREES 44 UNDERSTORY TREES	20' WIDTH 22 CANOPY TREES 44 UNDERSTORY TREES
*NOTE: BUFFERS REQUIREMENTS INTENDED TO UTILIZE EXISTING VEGETATION TO SATISFY TREE REQUIREMENTS. CLOSER TO TIME OF PROJECT COMPLETION, A SITE VISIT WITH LANDSCAPE ARCHITECT AND PENDER COUNTY PLANNING REPRESENTATIVE IS REQUESTED TO DETERMINE WHETHER SUPPLEMENTAL VEGETATION IS REQUIRED TO MEET INTENT OF ORDINANCE.		
BUFFER YARD - ALONG BLAKE FARM BOULEVARD		
BLAKE FARM BOULEVARD: A-4 (PARCEL R FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET. 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 1,814 LF / 100 = 18.14 1,814 x 1 = 18.14 = 19 CANOPY TREES 18.14 x 2 = 36.28 = 37 UNDERSTORY TREES	30' WIDTH 19 CANOPY TREES 37 UNDERSTORY TREES	30' WIDTH 19 CANOPY TREES 37 UNDERSTORY TREES
BLAKE FARM BOULEVARD: A-4 (SCM 5 FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET. 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 252 LF / 100 = 2.52 2.52 x 1 = 2.52 = 3 CANOPY TREES 2.52 x 2 = 5.04 = 6 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 6 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 6 UNDERSTORY TREES
*NOTE: BUFFERS REQUIREMENTS INTENDED TO UTILIZE EXISTING VEGETATION TO SATISFY TREE REQUIREMENTS. CLOSER TO TIME OF PROJECT COMPLETION, A SITE VISIT WITH LANDSCAPE ARCHITECT AND PENDER COUNTY PLANNING REPRESENTATIVE IS REQUESTED TO DETERMINE WHETHER SUPPLEMENTAL VEGETATION IS REQUIRED TO MEET INTENT OF ORDINANCE.		

PLANT LEGEND

CANOPY TREE	BOTANICAL / COMMON NAME
	ACER RUBRUM `OCTOBER GLORY` TM OCTOBER GLORY MAPLE
	QUERCUS ALBA WHITE OAK
	QUERCUS NIGRA WATER OAK
UNDERSTORY TREES	**BOTANICAL / COMMON NAME**
	ILEX X 'NELLIE R. STEVENS' NELLIE R. STEVENS HOLLY
	MAGNOLIA GRANDIFLORA 'SOUTHERN CHARM' TEDDY BEAR® SOUTHERN MAGNOLIA

100' 0 100' 200'
SCALE 1" = 100'



KEY MAP
SCALE: NTS

2 LANDSCAPE PLAN - ENLARGEMENT

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

LANDSCAPE PLAN - ENLARGEMENT

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

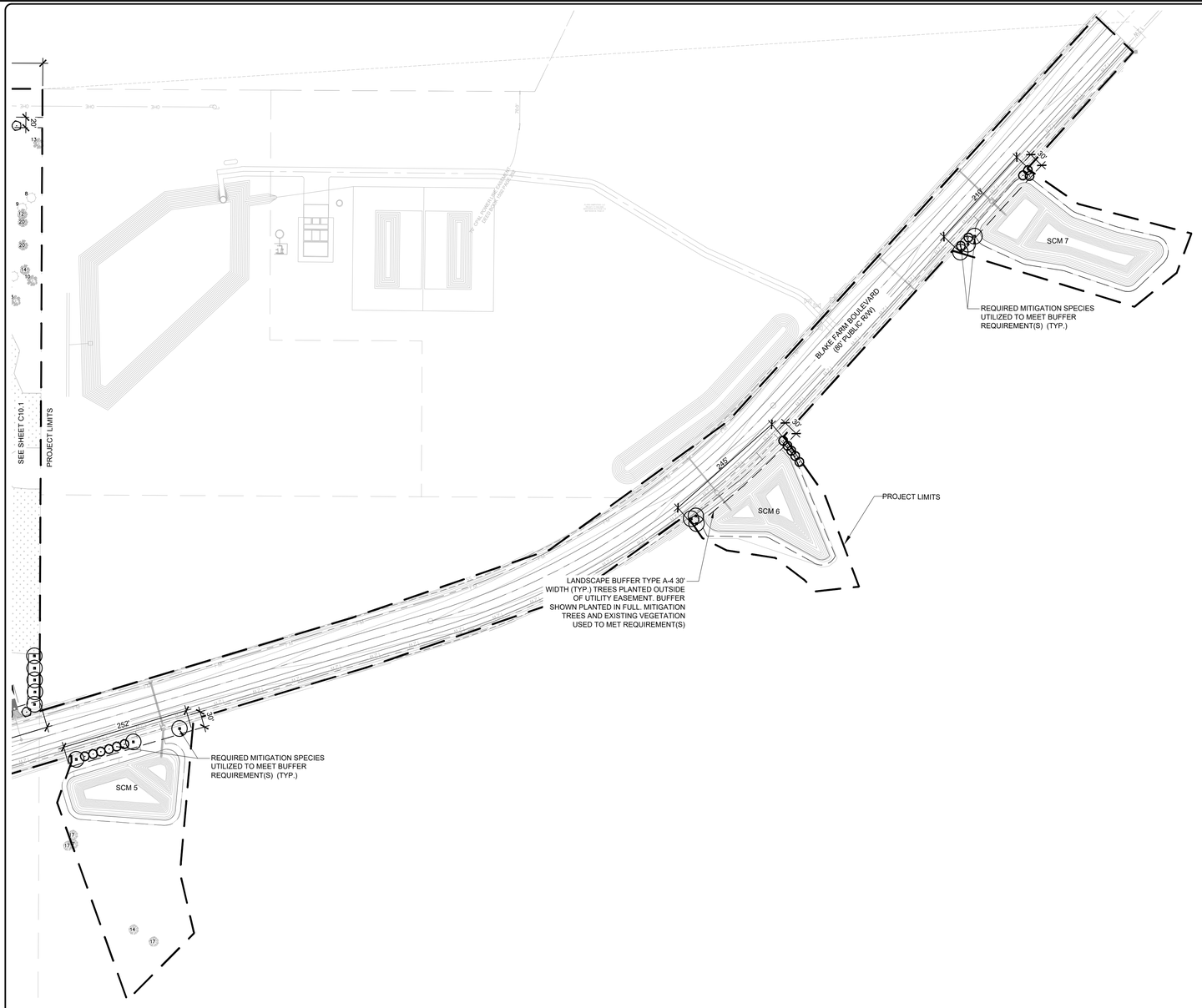
SCALE
HORIZONTAL: 1"=100'
VERTICAL: N/A

C10.1
DRAWING NUMBER

REVISION

STATUS: PENDER COUNTY TRC REVIEW

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LANDSCAPE DATA

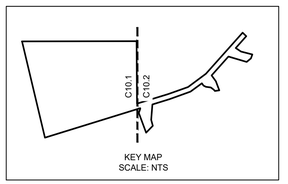
REGULATION	REQUIRED	PROPOSED
MITIGATION		
ANY SIGNIFICANT TREE REMOVED SHALL BE MITIGATED BY PLANTING OF TWO (2) TREES OF THE SAME SPECIES WITH A MINIMUM CALIPER OF 2" OR GREATER 2 SIGNIFICANT HOLLY X 2 = 4 HOLLIES 1 SIGNIFICANT MAGNOLIA X 1 = 2 MAGNOLIAS 7 SIGNIFICANT MAPLES x 2 = 14 MAPLES 25 SIGNIFICANT WATER OAKS X 2 = 50 WATER OAKS 9 SIGNIFICANT WHITE OAKS X 2 = 18 WHITE OAKS	4 HOLLIES 2 MAGNOLIAS 14 MAPLES 50 WATER OAKS 18 WHITE OAKS	4 HOLLIES 2 MAGNOLIAS 14 MAPLES 50 WATER OAKS 18 WHITE OAKS
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BLAKE FARM BOULEVARD: A-4 (SCM 6 FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 245 LF / 100 = 2.45 2.45 x 1 = 2.45 = 3 CANOPY TREES 2.45 x 2 = 4.90 = 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES
BLAKE FARM BOULEVARD: A-4 (SCM 7 FRONTAGE) 30' WIDE STRIP 1 CANOPY TREE, 2 UNDERSTORY TREES AND EITHER A GRASS OR OTHER APPROVED VEGETATIVE GROUND COVER OF AT LEAST 98% COVERAGE (EXCEPT WITHIN 4' OF THE BASE OF ANY TREE OR SHRUB) OR 32 SHRUBS PER 100 LINEAR FEET WILL BE APPLIED ALONG MAIN STREET 1 CANOPY TREE, 2 UNDERSTORY TREES PER 100 LF 210 LF / 100 = 2.10 2.10 x 1 = 2.10 = 16 CANOPY TREES 2.10 x 2 = 4.20 = 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES	30' WIDTH 3 CANOPY TREES 5 UNDERSTORY TREES

*NOTE: BUFFERS REQUIREMENTS INTENDED TO UTILIZE EXISTING VEGETATION TO SATISFY TREE REQUIREMENTS. CLOSER TO TIME OF PROJECT COMPLETION, A SITE VISIT WITH LANDSCAPE ARCHITECT AND PENDER COUNTY PLANNING REPRESENTATIVE IS REQUESTED TO DETERMINE WHETHER SUPPLEMENTAL VEGETATION IS REQUIRED TO MEET INTENT OF ORDINANCE.

PLANT LEGEND

CANOPY TREE	BOTANICAL / COMMON NAME
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100' 0 100' 200'
SCALE 1" = 100'



KEY MAP
SCALE: NTS

2 LANDSCAPE PLAN - ENLARGEMENTS

1 NOTES

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

LANDSCAPE PLAN - ENLARGEMENTS

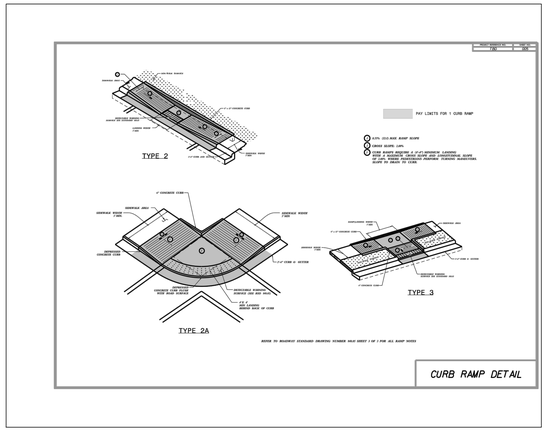
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MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: 1"=100'
VERTICAL: N/A

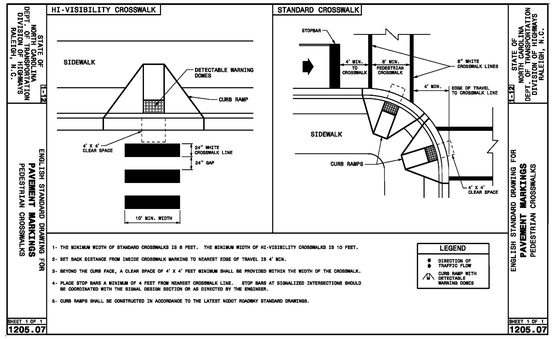
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DRAWING NUMBER

REVISION

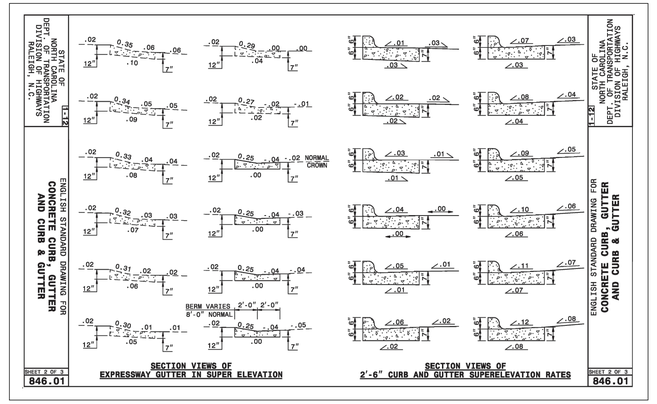
STATUS:
PENDER COUNTY TRC REVIEW



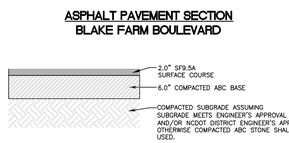
6 CURB RAMP NTS



5 CURB RAMP NTS



2 CONCRETE CURB AND GUTTER NTS

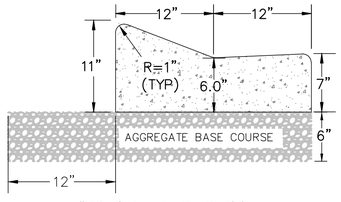


ASPHALT PAVEMENT SECTION
BLAKE FARM BOULEVARD

ASPHALT PAVEMENT SECTION
(COLLECTORS AND LOCAL STREETS)

NOTE:
1) PAVEMENT SECTIONS ARE BASED UPON A SOILS REPORT PREPARED BY ECS CAROLINAS DATED JULY 24, 2014.
2) NCDOT SUBDIVISION GUIDELINES FOR GROUP II, FAIR TO POOR SOILS ARE LESS CONSERVATIVE. SO THE ECS GUIDELINES WERE USED FOR BLAKE FARM.

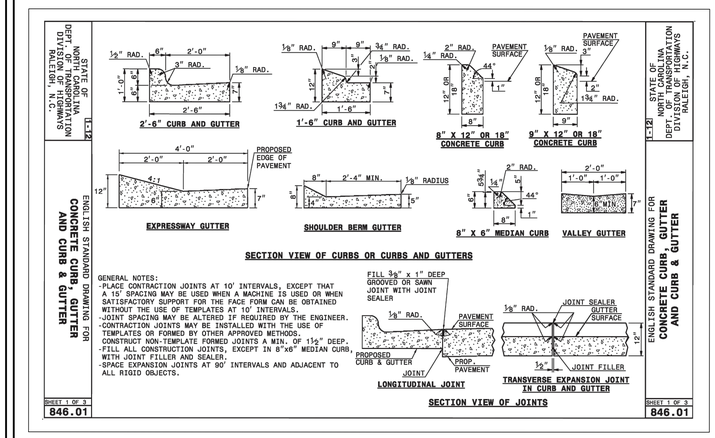
4 ASPHALT PAVING



STD. 24" VALLEY CURB
NOT TO SCALE

NOTES:
1. EXPANSION JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS
2. 50' MAX EXPANSION JOINT SPACING, 10' MAX CONTRACTION JOINT SPACING
3. MINIMUM INSTALLATION LENGTH IS 5 FT.
4. CONCRETE TO BE 3000 PSI MIN

3 VALLEY CURB NTS



1 CONCRETE CURB AND GUTTER NTS

REV.NO.	DESCRIPTIONS	DATE
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BLAKE FARM PARCEL R

SITE DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: HSCALE
VERTICAL: VSCALE

C11.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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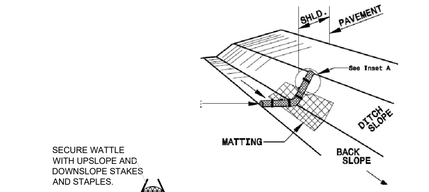
SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTRANCE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW*).
5. CONTINUE TILLAGE UNTIL A WELL - PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.
10. APPLY:
    AGRICULTURAL LIMESTONE - 2 TONS/ACRE
    FERTILIZER - 1000 LBS/ACRE (10-10-10)
    SUPERPHOSPHATE - 500 LBS/ACRE (20%)
    RYE SEED - 120LBS/ACRE
    GERMAN MILLET - 40LBS/ACRE
    ANNUAL LESPEDEZA (KOBE) SEED - 50 LBS/ACRE
    MULCH - 2 TONS/ACRE (SMALL GRAIN STRAW)

NOTE (G.S. 113A-57 (2))

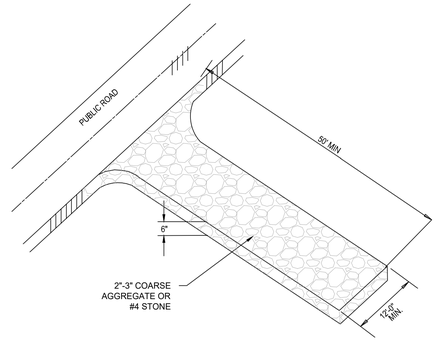
THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 21 CALENDAR DAYS OF COMPLETION OF ANY GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.

7 SEEDBED PREPARATION NTS

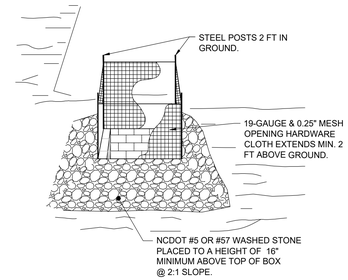


NOTES:
1. USE MINIMUM 18" DIA. EXCELSIOR WATTLE.
2. USE 2"x2" WOODEN STAKES 2-FT IN LENGTH ON THE UPSLOPE AND DOWNSLOPE AT AN ANGLE TO WEDGE THE WATTLE TO THE BOTTOM OF THE SWALE.
3. STAPLE EVERY 1 LF ON BOTH SIDES OF THE WATTLE TO SECURE IT TO THE BOTTOM OF THE SWALE.

5 TEMPORARY WATTLE / CHECK DAM

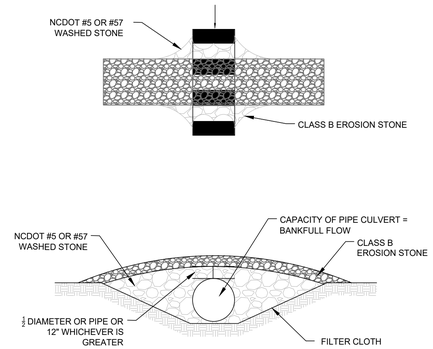


3 TEMPORARY CONSTRUCTION ENTRANCE

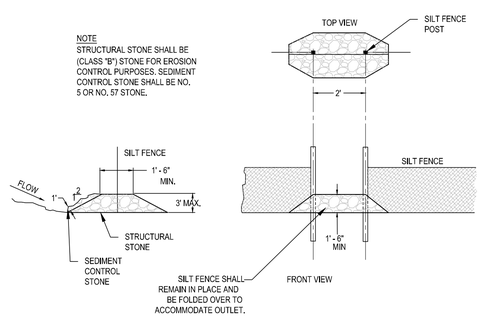


NOTES:
1. DRIVE 5-FOOT STEEL POSTS (1.25 lb/lf steel) 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
2. SURROUND THE POSTS WITH AT LEAST 19-GAUGE HARDWARE CLOTH WITH A 1/4-INCH MESH OPENING. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM FOR A MIN. 2 FEET ABOVE THE GROUND. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING AND REMOVAL IS RECOMMENDED.
3. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET. THE TOP ELEVATION OF THE STRUCTURE MUST BE AT LEAST 12-INCHES LOWER THAN THE SURROUNDING GROUND ELEVATION DOWNSLOPE FROM THE INLET TO ENSURE THAT STORM FLOWS GET INTO THE INTENDED INLET; UNLESS OTHER SEDIMENT-CONTROL DEVICES ARE INSTALLED TO PREVENT OFF-SITE SEDIMENT-RUNOFF.

2 TEMPORARY INLET PROTECTION



6 TEMPORARY DITCH CROSSING



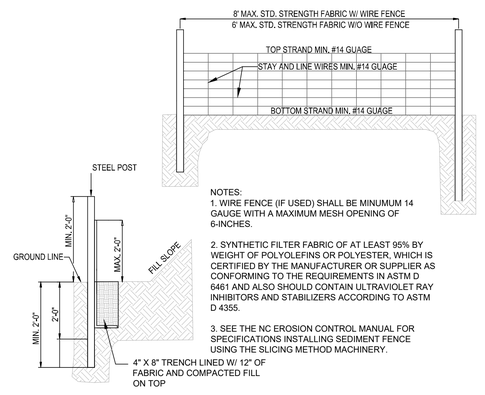
4 SILT FENCE OUTLET

SILT FENCE CALCULATION TABLE

PROJECT: BLAKE FARM - PARCEL R
DATE PREPARED: 10/5/2023
DESCRIPTION: SILT FENCE CALCULATIONS
PREPARED FOR : NEW HANOVER COUNTY
ENGINEER: McKIM&CREED
PROJECT NO. 04245-0055
PREPARED BY : MRA
REVIEWED BY : RAM

SILT FENCE No.	Approx. Slope	Drainage Area ac	Drainage Area sf	Length ft	Max Area for Silt Fence sf	Silt Fence Adequate? YES/NO
			SILT FENCE			
SF 1	2%	0.52	22831	229	22,900	YES
SF2	3%	1.27	55314	738	55,350	YES
SF3	3%	2.43	105798	1411	105,825	YES
SF4	2%	0.35	15061	151	15,100	YES
SF5	2%	0.53	23296	233	23,300	YES
SF6	2%	2.50	108807	1089	108,900	YES
SF7	2%	0.62	26970	272	27,200	YES
SF8	2%	1.14	49743	498	49,800	YES
SF9	8%	0.58	25064	502	25,100	YES
SF10	6%	0.65	28334	567	28,350	YES
SF11	7%	0.67	29302	587	29,350	YES
SF12	6%	1.16	50434	1009	50,450	YES
SF13	3%	0.86	37589	502	37,650	YES
SF14	4%	1.81	78918	1053	78,975	YES
SF15	4%	1.13	49170	656	49,200	YES
SF16	2%	1.22	53023	531	53,100	YES

Notes:
1. Calculation taken from Table 6.62a of the NCDENR ESC Manual.



NOTES:
1. WIRE FENCE (IF USED) SHALL BE MINUMUM 14 GAUGE WITH A MAXIMUM MESH OPENING OF 6-INCHES.
2. SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461 AND ALSO SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS ACCORDING TO ASTM D 4355.
3. SEE THE NC EROSION CONTROL MANUAL FOR SPECIFICATIONS INSTALLING SEDIMENT FENCE USING THE SLICING METHOD MACHINERY.

1 TEMPORARY SILT FENCE

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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BLAKE FARM PARCEL R

EROSION CONTROL DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

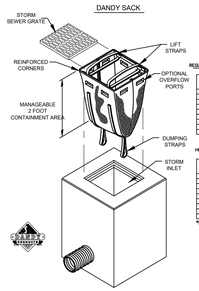
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C12.0
DRAWING NUMBER

REVISION

STATUS: PENDER COUNTY TRC REVIEW

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DANDY SACK™ SPECIFICATIONS

NOTE: THE DANDY SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

REGULAR FLOW DANDY SACK™ (BLACK)

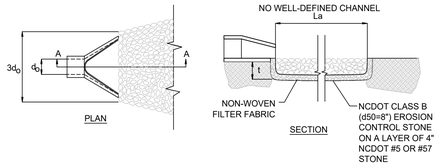
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.78 (400) x 1.60 (360)
Grab Tensile Elongation	ASTM D 4632	%	50 x 15
Puncture Strength	ASTM D 4833	kN (lbs)	0.67 (150)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150) x 0.53 (120)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Sieve)	0.43 (40)
Flow Rate	ASTM D 4491	l/min/m² (gpm/ft²)	4882 (100)
Permittivity	ASTM D 4491	Sec⁻¹	0.80

HI-FLOW DANDY SACK™ (SAFETY ORANGE)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.40 (320) x 1.60 (360)
Grab Tensile Elongation	ASTM D 4632	%	50 x 15
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.40 (90)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.40 (90) x 0.31 (70)
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Sieve)	0.43 (40)
Flow Rate	ASTM D 4491	l/min/m² (gpm/ft²)	4882 (100)
Permittivity	ASTM D 4491	Sec⁻¹	0.80

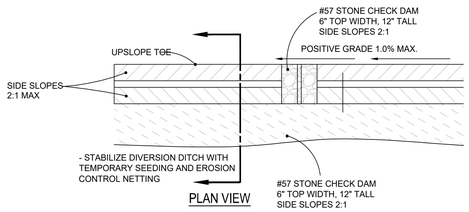
*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows

5 DANDY SACK INTLET PROTECTION NTS

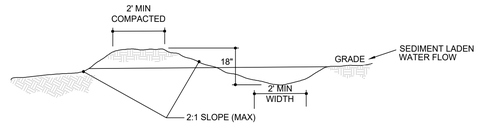


Apron Length = 10.0 ft.
Apron Width = 7.5 ft.

4 RIPRAP OUTLET PROTECTION



PLAN VIEW



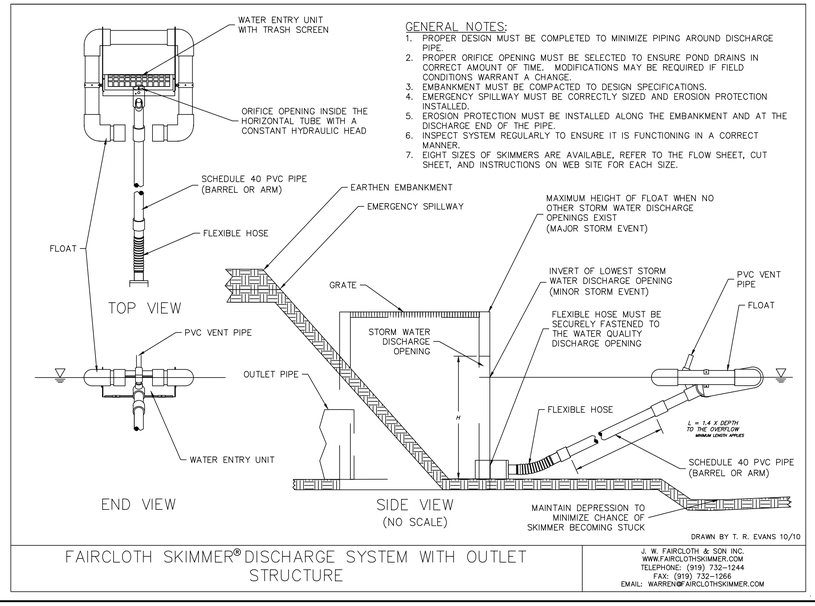
CROSS SECTION

TDD NUMBER	DA (AC)	Q 10 (CFS)	LENGTH (FT)	HIGH (FT)	LOW (FT)	ELEVATION DIFF. (FT)	SLOPE (%)	INITIAL LINING	MANNING n	VELOCITY (FPS)	COMMENT
TDD 1	3.87	8.8	785	38.50	37.00	1.50	0.19	BARE EARTH	0.035	1.07	NO LINING
TDD 2	1.82	4.1	453	39.40	38.50	0.90	0.20	BARE EARTH	0.035	0.50	NO LINING
TDD 3	0.87	2.0	250	36.50	36.00	0.50	0.20	BARE EARTH	0.035	0.24	NO LINING
TDD 4	2.06	4.7	210	36.00	35.58	0.42	0.20	BARE EARTH	0.035	0.57	NO LINING
TDD 5	3.10	7.1	183	35.58	35.20	0.38	0.21	BARE EARTH	0.035	0.64	NO LINING
TDD 6	2.56	5.8	328	35.50	34.80	0.70	0.21	BARE EARTH	0.035	0.71	NO LINING
TDD 7	0.71	1.6	220	36.00	35.50	0.50	0.23	BARE EARTH	0.035	0.14	NO LINING

								TEMPORARY ROCK CHECK DAMS/WATTLES		
TDD NUMBER	SECONDARY LINING	MANNING n	VELOCITY (FPS)	COMMENT	DEPTH in	MIN. DEPTH in	CHECK DAM SPACING (FT)	NUMBER REQUIRED	NUMBER PROVIDED
TDD 1	EXCELSIOR	0.035	1.07	EXCELSIOR OK	18.0	18	200	4	4
TDD 2	EXCELSIOR	0.035	0.50	EXCELSIOR OK	18.0	18	200	2	2
TDD 3	EXCELSIOR	0.035	0.24	EXCELSIOR OK	18.0	18	200	1	1
TDD 4	EXCELSIOR	0.035	0.57	EXCELSIOR OK	18.0	18	200	1	1
TDD 5	EXCELSIOR	0.035	0.64	EXCELSIOR OK	21.0	18	200	1	1
TDD 6	EXCELSIOR	0.035	0.71	EXCELSIOR OK	18.0	18	200	2	2
TDD 7	EXCELSIOR	0.035	0.14	EXCELSIOR OK.	36.0	18	200	1	1

Notes:
1. Q10 taken from Rational Method.
2. Manning n value for bare earth = 0.020 per NC ESC Manual Table 8.05f
3. Manning n value for excelsior (curled wood) matting = 0.035 per NC ESC Manual Table 8.05f
4. Tractive Force (Shear Stress) was also evaluated and found to be sufficient for the proposed lining.

2 TEMPORARY DIVERSION DITCH



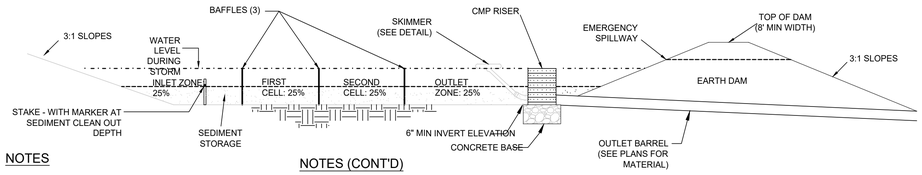
GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

DRAWN BY T. R. EVANS 10/10

FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH OUTLET STRUCTURE

J. W. FAIRCLOTH & SON INC.
WWW.FAIRCLOTHSKIMMER.COM
TELEPHONE: (919) 732-1244
FAX: (919) 732-1266
EMAIL: WARREN@FAIRCLOTHSKIMMER.COM

3 FAIRCLOTH SKIMMER



NOTES

1. BAFFLE MATERIAL SHALL BE MATERIALS SUCH AS 700 G/M COIR EROSION BLANKET, COIR MESH, OR TREE PROTECTION FENCE FOLDED OVER TO REDUCE PORE SIZE.
2. THE BAFFLE MATERIAL NEEDS TO BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR SILT FENCE.

NOTES (CONT'D)

3. LOCATE THE EMERGENCY SPILLWAY ON NATURAL SOILS IF POSSIBLE AND AVOID PLACING IT THROUGH FILL MATERIAL WHEREVER POSSIBLE.
4. ALL RUNOFF MUST DISCHARGE TO THE INLET SIDE OF THE BASIN. DISCHARGE RUNOFF INTO THE BASIN IN A MANNER THAT MINIMIZES EROSION.

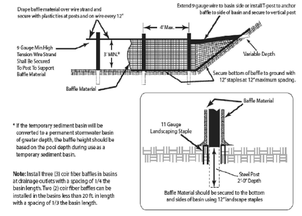
SKIMMER BASIN CALCULATION TABLE

Skimmer No.	Drainage Area ac	Rational C Runoff Coeff.	I10 Intensity in/hr	Q10 Peak Flow cfs	Required SA (435 x Q10) sf	Provided SA sf	Required Vol (1800cf/ac x DA) cf	Provided Vol cf	Storage Depth ft	Storage Vol Drained cf	Weir Width ft
TSB-1	5.69	0.30	7.70	13.14	5,716	22,788	10,240	32,339	1.50	32,339	32.9
TSB-2	9.31	0.30	5.25	14.66	6,378	32,793	16,757	40,669	1.30	40,669	36.7

FAIRCLOTH SKIMMER SIZE CALCULATION

							OUTLET PARAMETERS				
Skimmer No.	Dewatering Time (days)	Skimmer Outflow cf/day	Skimmer Size in	Orifice Diameter in	Orifice Radius in	Barrel Outflow gpm	Barrel Pipe in	Skimmer Basin Bottom Elevation ft	Orifice Elevation ft	Top of Riser Elevation ft	Temp. Emergency Spillway Elev ft	Length : Width (>2:1)
TSB-1	3	4,073	4.0	2.90	1.45	21.2	4.0	35.00	36.50	37.00	38.00	TRUE
TSB-2	3	5,661	2.0	1.70	0.85	29.4	4.0	35.00	34.30	34.80	36.00	TRUE

NOTES:
1. Q10 Peak Flow were taken from Rational Method.
2. Required Surface Areas and Volumes were taken from NCDENR ESC Manual.
3. Faircloth Skimmer Orifices sized using the Faircloth Skimmer online calculator
4. Emergency Weir Width taken from Skimmer Basin Criteria Section of NCDENR ESC Manual Table and/or Hydraulic Routing of the basin to ensure non-erosive velocity.
5. Minimum Barrel Pipe on the Skimmer is 4-inches. (On a 1% slope the capacity is 100 GPM)



1 TEMPORARY SKIMMER SEDIMENT BASIN

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

SEAL

SEAL

McKIM&CREED
243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
License: F-1222
www.mckimcreed.com

D·R·HORTON® DHI Listed NYSE America's Builder

BLAKE FARM PARCEL R

EROSION CONTROL DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: HSCALE
VERTICAL: VSCALE

C12.1
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C12.0 EROSION CONTROL DETAILS.DWG — 10/06/2023 10:38:47

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

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

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site 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 other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • 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

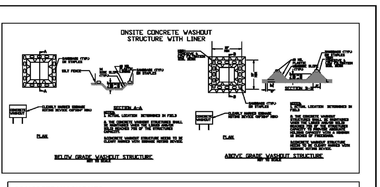
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, 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

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. 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.
3. 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.
2. 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.
4. 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.

NORTH CAROLINA *Environmental Quality*

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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 or 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 as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) ESC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) 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 of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter ESC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. 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 documented in the manner described:

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

In addition to the E&SC Plan documents above, the following items shall be kept on the site

and available for agency 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 30 days. 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.

(c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
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).

(a) 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.

(b) Anticipated bypasses and unanticipated bypasses.

(c) 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 Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the 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 release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***At report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)];	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 127.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

NORTH CAROLINA *Environmental Quality*

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

1 NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

1 NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

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EROSION CONTROL DETAILS

PENDER COUNTY TRC REVIEW

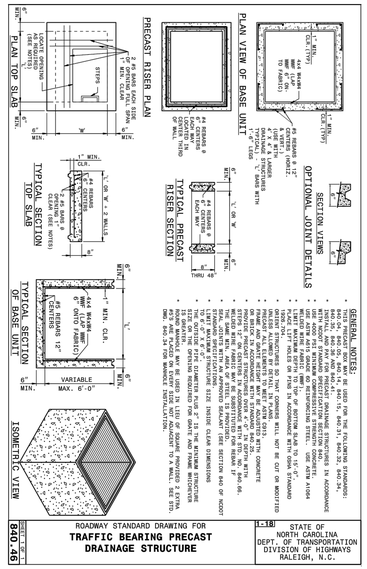
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PROJECT #	04282.00
DESIGNED	BMJ
DRAWN	BMJ
CHECKED	GHS
PROJ. MGR.	TSM
QA/QC	TSM

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VERTICAL: VSCALE

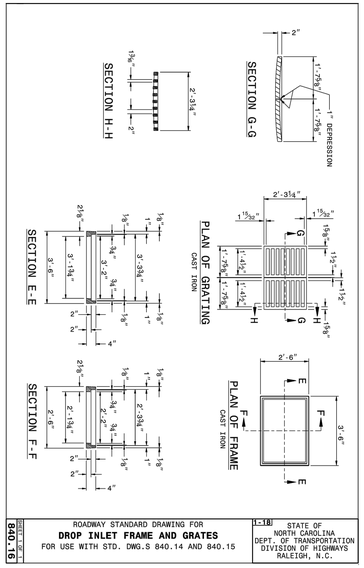
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REVISION	DESCRIPTION	DATE

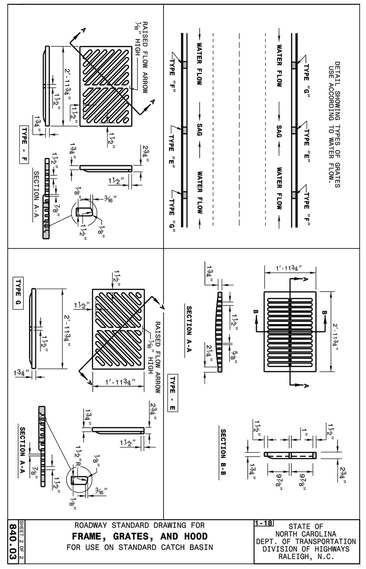
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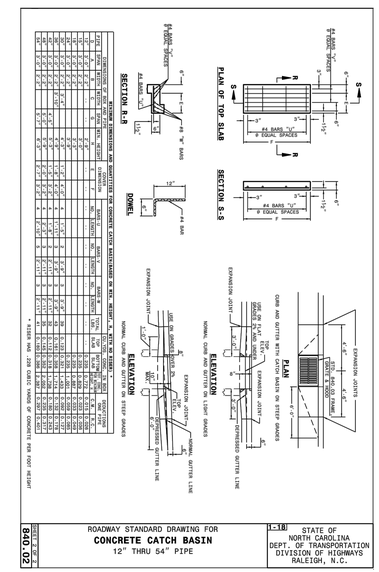
8 | TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE | NTS



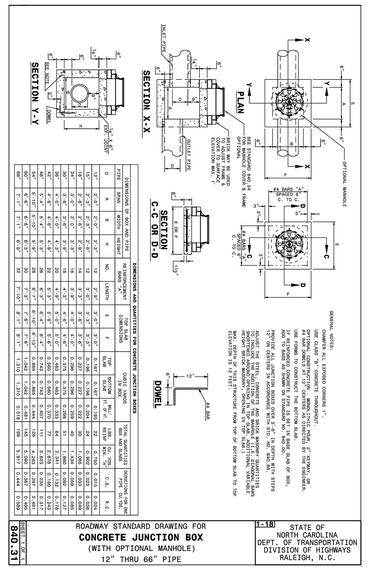
6 | DROP INLET FRAME AND GRATES | NTS



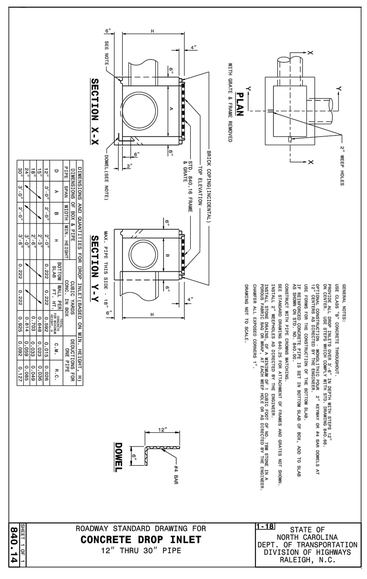
4 | FRAME, GRATES, AND HOOD | NTS



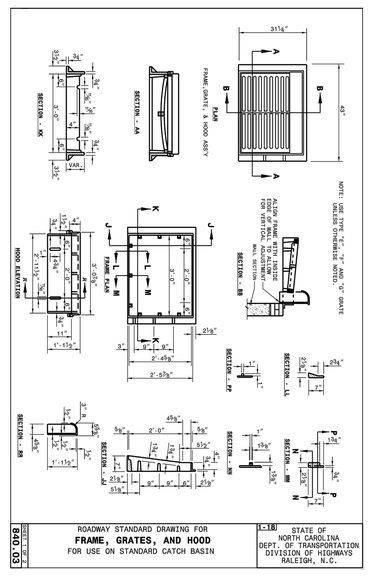
2 | CONCRETE CATCH BASIN | NTS



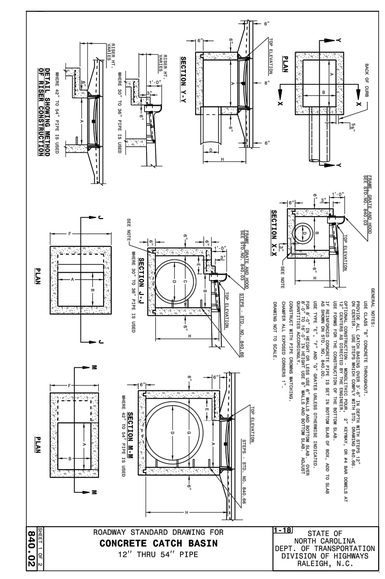
7 | CONCRETE JUNCTION BOX | NTS



5 | CONCRETE DROP INLET | NTS



3 | FRAME, GRATES, AND HOOD | NTS



1 | CONCRETE CATCH BASIN | NTS

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GRADING AND DRAINAGE DETAILS

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CHECKED	TSM
PROJ. MGR.	TSM

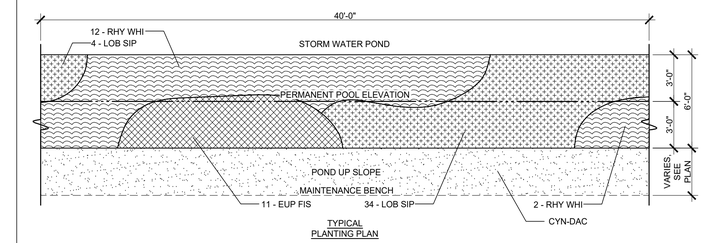
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STATUS:
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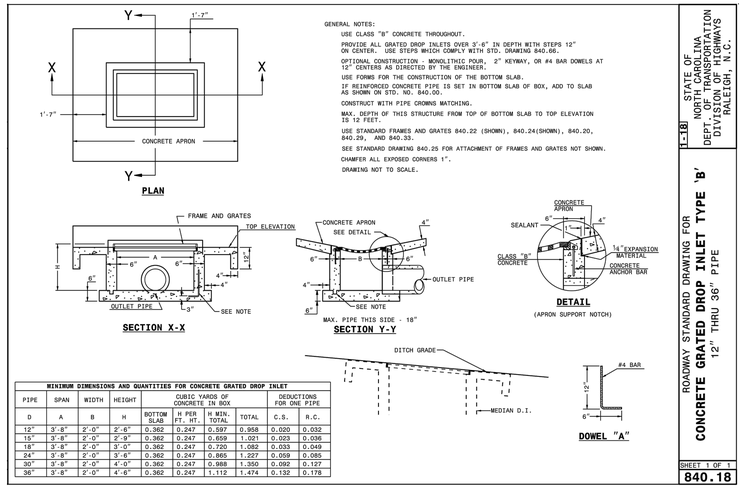


TYPICAL PLANTING PLAN

TYPICAL PLANTING SCHEDULE PER 40' LF

SUBMERSIBLE	CODE	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	SPACING	QTY
	EUP FIS	EUPATORIADELPHUS FISTULOSUS	JOE PYE WEED	1 GAL.	18"-24" HT.	30" O.C.	11
	LOB SIP	LOBELIA SIPHILITICA	GREAT LOBELIA	5" DEEP PLUG	12"-18" HT.	18" O.C.	38
	RHY WHI	RHYNCHOSPORA COLORATA	STARRUSH WHITETOP	4" POT	12"-18" HT.	36" O.C.	14
GROUND COVERS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**		**QTY**
	CYN DAC	CYNODON DACTYLON	BERMUDA GRASS	SEED	3 LBS / 1000 SF		SEE PLAN

2 VEGETATIVE SHELF PLANTING NTS



GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

PROVIDE ALL GRATED DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.

CONSTRUCT WITH PIPE CROWNS MATCHING.

MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.

USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24(SHOWN), 840.20, 840.29, AND 840.33.

SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.

CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE GRATED DROP INLET

PIPE	SPAN	WIDTH	HEIGHT	CUBIC YARDS OF CONCRETE IN BOX				DEDUCTIONS FOR ONE PIPE	
D	A	B	H	BOTTOM SLAB	H PER FT. HT.	H MIN. TOTAL	TOTAL	C.S.	R.C.
12"	3'-8"	2'-0"	2'-6"	0.362	0.247	0.597	0.958	0.020	0.032
15"	3'-8"	2'-0"	2'-9"	0.362	0.247	0.659	1.021	0.023	0.036
18"	3'-8"	2'-0"	3'-0"	0.362	0.247	0.720	1.082	0.033	0.049
24"	3'-8"	2'-0"	3'-6"	0.362	0.247	0.865	1.227	0.059	0.085
30"	3'-8"	2'-0"	4'-0"	0.362	0.247	0.988	1.350	0.092	0.127
36"	3'-8"	2'-0"	4'-6"	0.362	0.247	1.112	1.474	0.132	0.178

ROADWAY STANDARD DRAWING FOR
CONCRETE GRATED DROP INLET TYPE 'B'
12' THRU 36" PIPE

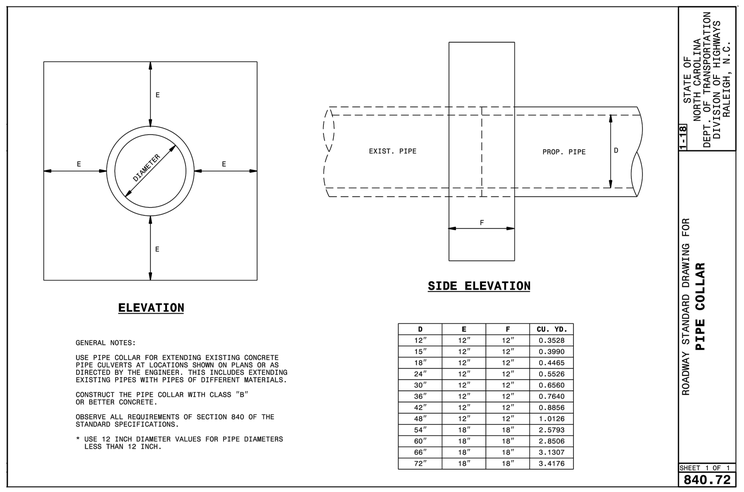
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-18

SHEET 1 OF 1

840.18

4 CONCRETE GRATED DROP INLET NTS



D	E	F	CU. YD.
12"	12"	12"	0.3528
15"	12"	12"	0.3990
18"	12"	12"	0.4465
24"	12"	12"	0.5526
30"	12"	12"	0.6560
36"	12"	12"	0.7640
42"	12"	12"	0.8856
48"	12"	12"	1.0126
54"	18"	18"	2.5793
60"	18"	18"	2.8506
66"	18"	18"	3.1307
72"	18"	18"	3.4176

GENERAL NOTES:

USE PIPE COLLAR FOR EXTENDING EXISTING CONCRETE PIPE CULVERTS AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. THIS INCLUDES EXTENDING EXISTING PIPES WITH PIPES OF DIFFERENT MATERIALS.

CONSTRUCT THE PIPE COLLAR WITH CLASS "B" OR BETTER CONCRETE.

OBSERVE ALL REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.

* USE 12 INCH DIAMETER VALUES FOR PIPE DIAMETERS LESS THAN 12 INCH.

ROADWAY STANDARD DRAWING FOR
PIPE COLLAR

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

1-18

SHEET 1 OF 1

840.72

1 PIPE COLLAR NTS

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GRADING AND DRAINAGE DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

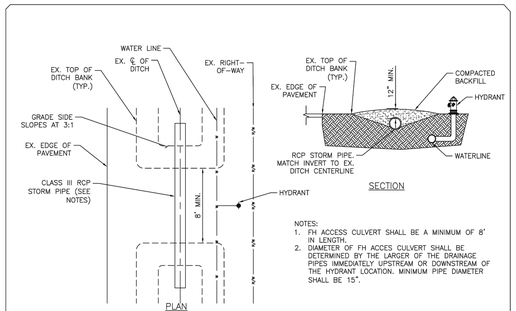
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VERTICAL: VSCALE

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DRAWING NUMBER

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STATUS:
PENDER COUNTY TRC REVIEW

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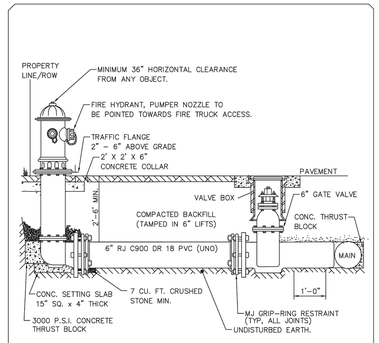
NOTES:
1. FH ACCESS CULVERT SHALL BE A MINIMUM OF 8' IN LENGTH.
2. DIAMETER OF FH ACCES CULVERT SHALL BE DETERMINED BY THE LARGER OF THE DRAINAGE PIPES IMMEDIATELY UPSTREAM OR DOWNSTREAM OF THE HYDRANT LOCATION. MINIMUM PIPE DIAMETER SHALL BE 15".

FIRE HYDRANT ACCESS DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

FIRE HYDRANT ACCESS
STANDARD DETAIL
VERSION #1 - SEPTEMBER 2015

6 | FIRE HYDRANT ACCESS DETAIL | NTS



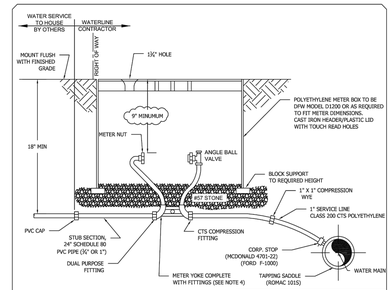
NOTES:
1. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION.
2. FIRE HYDRANTS TO BE LOCATED IN RIGHT-OF-WAY.
3. INSTALL WITH BURY LINE FLUSH TO FINAL GRADE.
4. HYDRANTS TO BE AVK SERIES 2780, MUELLER SUPER CENTURION A423 W/PENDER CO. OPTIONS 981, OR CLOW MEDALLION WITH STAINLESS STEEL STEMS. HYDRANTS SHALL BE NOSTALGIC STYLE DRY BARREL.
5. HYDRANTS TO BE RED WITH SILVER CAPS AND BONNET.

FIRE HYDRANT ASSEMBLY DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

FIRE HYDRANT ASSEMBLY
STANDARD DETAIL
VERSION #2 - APRIL 2016

4 | FIRE HYDRANT DETAIL | NTS

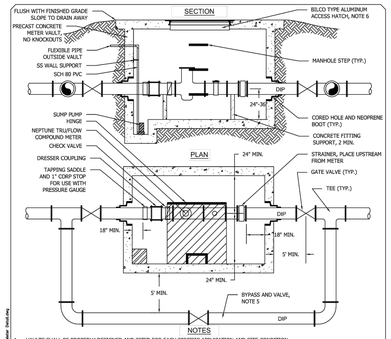


STANDARD WATER SERVICE DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

WATER SERVICE (3⁄4" - 1")
STANDARD DETAIL
VERSION #4 - FEB 2016

2 | 1" WATER SERVICE DETAIL | NTS



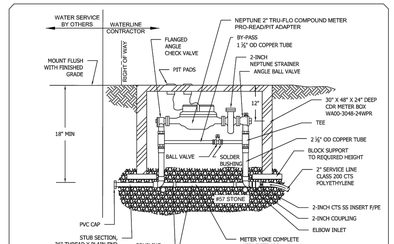
NOTES
1. VAULTS SHALL BE PROPERLY DESIGNED AND SIZED FOR EACH SPECIFIC APPLICATION AND SITE CONDITION.
2. VAULTS SHALL BE LOCATED SUCH THAT THE ROW ELEVATION IS A MINIMUM OF 2 FEET ABOVE THE BASE FLOOD ELEVATION.
3. PROVIDE ADEQUATE DESIGN FOR ALL SITE CONDITIONS INCLUDING BUT NOT LIMITED TO FLOTATION, TRAFFIC LOADING, ACCESSIBILITY, PROJECTED DEMAND, AND OTHER DESIGN CRITERIA AS REQUIRED.
4. MINIMUM CLEARANCES SHOWN ARE REQUIRED FOR PROPER ACCESSIBILITY TO ALLOW OPERATION AND MAINTENANCE. CLEARANCES SHALL BE VERIFIED DURING THE SUBMITTAL PROCESS.
5. METERS SHALL BE PROVIDED A BYPASS WITH AT LEAST ONE VALVE OF THE SAME SIZE AS THE METER.
6. THE ACCESS HATCH SHALL BE LOCATED OVER THE METER, AND SHALL BE LOCATED TO ALLOW ENTRY WITHOUT CLIMBING OVER VAULT COMPONENTS. HATCH SHALL ALSO BE LOCATED AND OF APPROPRIATE SIZE TO ALLOW REMOVAL OF EQUIPMENT. PROVIDE 1 1⁄2" HOLE IN ACCESS HATCH FOR TOUCH-READ SYSTEM.
7. THRUST RESTRAINT AND SUPPORTS SHALL BE PROPERLY DESIGNED, SIZED, AND INSTALLED TO PREVENT MOVEMENT OF ALL VAULT COMPONENTS, INCLUDING THE BY PASS.
8. THERE SHALL BE NO VALVES, DIRECTIONAL CHANGES, OR OTHER DISTURBANCES WITHIN 5 PIPE DIAMETERS UPSTREAM OF THE METER THAT MAY INTERFERE WITH LAMINAR FLOW.
9. VAULTS SHALL BE PROPERLY WATERPROOFED AND HYDROSTATICALLY TESTED. AN AUTOMATIC SUMP PUMP SHALL BE PROVIDED. THE FLOOR OF THE VAULT SHALL BE SLOPED TOWARD THE SUMP.
10. AT LEAST ONE, 20 AMP, GFI OUTLET WITH STANDARD THREE PRONG RECEPTACLE SHALL BE PROVIDED ON THE ELECTRIC PANEL. THE OUTLET SHALL BE WEATHER PROOF AND HAVE A LOCKABLE COVER.
11. AT LEAST ONE SPARE BREAKER SHALL BE PROVIDED IN THE ELECTRICAL PANEL.

BULK METER DETAIL
NOT TO SCALE

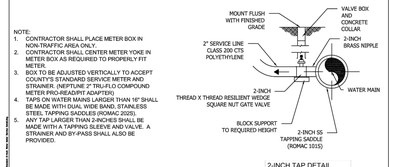
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605 EAST FREMONT STREET
BURGAW, NC 28525

BULK METER
STANDARD DETAIL
VERSION #3 - FEB 2016

5 | BULK METER DETAIL | NTS



2-INCH METER DETAIL



2-INCH TAP DETAIL

NOTE:
1. CONTRACTOR SHALL PLACE METER BOX IN NON-TRAFFIC AREA ONLY.
2. CONTRACTOR SHALL CENTER METER YOKE IN METER BOX AS REQUIRED TO PROPERLY FIT METER.
3. BOX TO BE ADJUSTED VERTICALLY TO ACCEPT COUNTY'S STANDARD SERVICE METER AND STRAINER. (NEPTUNE 2" TRU-FLO COMPOUND METER PRO-READ/PIT ADAPTER)
4. TAPS ON WATER MAINS LARGER THAN 16" SHALL BE MADE WITH DUAL WIDE BAND, STAINLESS STEEL, TAPPING SADDLES (ROMAC 202S).
5. ANY TAP LARGER THAN 2-INCHES SHALL BE MADE WITH A TAPPING SLEEVE AND VALVE. A STRAINER AND BY-PASS SHALL ALSO BE PROVIDED.

STANDARD 2-INCH WATER SERVICE DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

2-INCH WATER SERVICE
STANDARD DETAIL
VERSION #1 - AUGUST 2010

3 | 2" WATER SERVICE DETAIL | NTS

PCU STANDARD NOTES

1. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE BEGINNING WORK. THE MEETING MUST BE SCHEDULED WITH PENDER COUNTY UTILITIES (PCU) AT LEAST ONE WEEK IN ADVANCE. ATTENDEES MUST INCLUDE PCU, THE UTILITY CONTRACTOR'S SUPERINTENDENT, THE SUPPLIER, AND THE CONSULTING ENGINEER.
2. ALL MATERIALS USED SHALL CONFORM TO PENDER COUNTY UTILITIES REQUIREMENTS. NON-CONFORMING MATERIAL WILL NOT BE ACCEPTED FOR FINAL CERTIFICATION.
3. ALL PIPE SHALL BE C900 DR18 PVC, UNLESS OTHERWISE NOTED (SEE PCU STANDARD DETAIL). PVC PIPE TO BE SDR 21 WHERE C900 IS UNAVAILABLE. THE USE OF DUCTILE IRON PIPE (DIP) IS REQUIRED UNDER PAVED AREAS. PCU MUST APPROVE THE USE OF DIP IN THE FIELD BEFORE INSTALLATION IN OTHER LOCATIONS.
4. PCU STANDARD WATERLINE PIPE RESTRAINING METHOD IS MJ GRIP RINGS. AT A MINIMUM ALL FITTINGS, VALVES, ETC. MUST BE RESTRAINED (SEE PCU STANDARD DETAIL).
5. PCU MUST INSPECT CASING INSTALLATIONS PRIOR TO BACKFILL. PCU MUST WITNESS PRESSURE TESTS, AND WITHDRAWAL OF BACTERIOLOGICAL SAMPLES. CONTACT PCU UTILITIES INSPECTOR TO SCHEDULE.
6. CLOSE-OUT DOCUMENTS WHICH MUST BE RECEIVED PRIOR TO PCU SIGNING THE NCDEQ PWSS APPLICANT CERTIFICATION INCLUDE: BACTERIOLOGICAL TESTS, PRESSURE TESTS, DEED OF DEDICATION, AFFIDAVIT/RELEASE OF LIENS, WARRANTY, AND RECORD DRAWINGS (PDF & CAD).
7. AN 18-MONTH WARRANTY PERIOD APPLIES TO ALL WATERLINE CONSTRUCTION. THIS WARRANTY PERIOD DOES NOT BEGIN UNTIL FINAL APPROVAL OF THE SYSTEM HAS BEEN RECEIVED FROM NCDEQ PWSS.

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
PO BOX 995, BURGAW, NC 28425

STANDARD NOTES
PCU WATER SYSTEMS
VERSION #3 - APRIL 2022

1 | STANDARD NOTES | NTS

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UTILITY DETAILS

DATE:	10/06/2023
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CHECKED	TSM
PROJ. MGR.	TSM

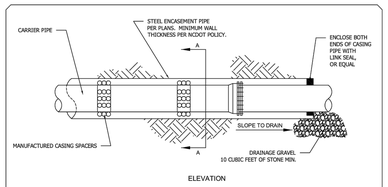
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STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C14.0 UTILITY DETAILS.DWG ---- 10/06/2023 10:39:11



NOTE:
1. EITHER STAINLESS STEEL OR HDPE CASING SPACERS ARE ACCEPTABLE, BUT IN EITHER CASE, THE SPACERS MUST BE MANUFACTURED.
2. CARRIER PIPE SHALL BE C900 DR 18 PVC WITH RESTRAINED JOINTS.
3. ENCASEMENT PIPE TO BE STEEL WITH MINIMUM WALL THICKNESS IN ACCORDANCE WITH NCDOT MINIMUM REQUIREMENTS OR BETTER.
4. TOP OF ENCASEMENT PIPE SHALL BE INSTALLED A MINIMUM OF THREE FEET BELOW EXISTING AND/OR PROPOSED PAVEMENT SUB-GRADE.

STANDARD BORE ENCASEMENT DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

BORE ENCASEMENT
STANDARD DETAIL
VERSION #3 - APRIL 2017

7 | BORE ENCASEMENT | NTS

Restrained Length In Feet Each Side of Fitting Joint

PIPE DIAMETER (INCHES)	D. I. P.				P. V. C.			
	90°	45°	22 ½°	11 ¼°	90°	45°	22 ½°	11 ¼°
3"	30'	15'	10'	5'	40'	20'	10'	5'
4"	35'	15'	10'	5'	50'	25'	15'	10'
6"	55'	25'	10'	5'	80'	35'	20'	10'
8"	65'	30'	15'	10'	90'	40'	20'	10'
10"	90'	30'	20'	10'	110'	50'	25'	15'
12"	95	40'	20'	10'	130'	55'	30'	15'
16"	120'	50'	25'	15'	165'	70'	35'	20'
20"	150'	65'	30'	15'	200'	85'	40'	20'
24"	180'	70'	35'	20'	210'	90'	45'	25'
30"	190'	80'	40'	20'	260'	105'	50'	25'
36"	220'	95'	45'	25'	0	0	0	0
42"	240'	100'	50'	25'	0	0	0	0
48"	260'	120'	60'	30'	0	0	0	0

Restrained lengths for valves, dead ends and branches from tees shall be the same as for 90° (degree) bends

Restrained Length In Feet For Reducer

PIPE DIAMETER (INCHES)	3"	4"	6"	8"	10"	12"	16"	20"	24"	30"
3"	0	0	0	0	0	0	0	0	0	0
4"	40'	0	0	0	0	0	0	0	0	0
6"	50'	45'	0	0	0	0	0	0	0	0
8"	75'	70'	40'	0	0	0	0	0	0	0
10"	90'	90'	70'	40'	0	0	0	0	0	0
12"	120'	115'	100'	75'	40'	0	0	0	0	0
16"	160'	155'	140'	125'	100'	70'	0	0	0	0
20"	200'	195'	185'	170'	150'	130'	70'	0	0	0
24"	190'	185'	180'	170'	160'	140'	135'	120'	90'	0
30"	195'	190'	185'	180'	170'	160'	130'	105'	70'	0
36"	225'	220'	215'	210'	205'	195'	180'	160'	125'	70'
42"	245'	240'	235'	230'	225'	220'	205'	180'	155'	105'
48"	255'	250'	245'	240'	235'	230'	215'	195'	175'	125'

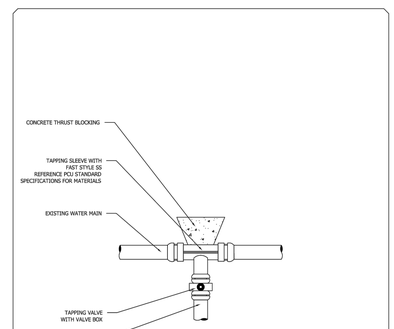
Length of restrained joint for larger diameter pipe

NOTES:
1. PENDER COUNTY STANDARD RESTRAINT METHOD IS MJ "GRIP RING" TYPE. ALL RJ TO BE MJ "GRIP RING" TYPE, UNLESS SPECIFICALLY APPROVED BY PCU IN WRITING.
2. ALL FITTINGS AND JOINTS SHALL BE RESTRAINED JOINT.
3. "L" ABOVE IS GIVEN IN FEET FROM FITTING JOINT.

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
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RESTRAINED JOINT TABLE
STANDARD DETAIL
VERSION #1 - OCTOBER 2015

5 | RESTRAINED JOINT TABLE | NTS

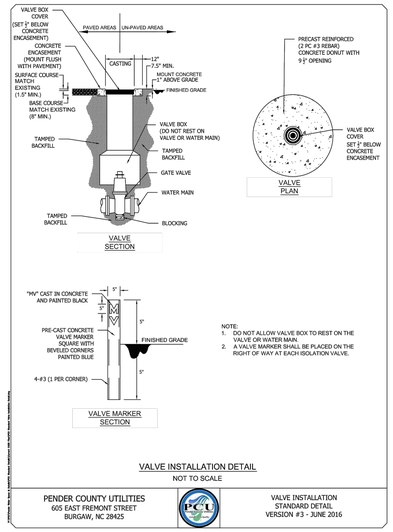


TAPPING SLEEVE AND VALVE ASSEMBLY DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
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TAPPING SLEEVE AND VALVE ASSEMBLY
STANDARD DETAIL
VERSION #3 - FEB 2016

3 | TAPPING SLEEVE AND VALVE ASSEMBLY | NTS



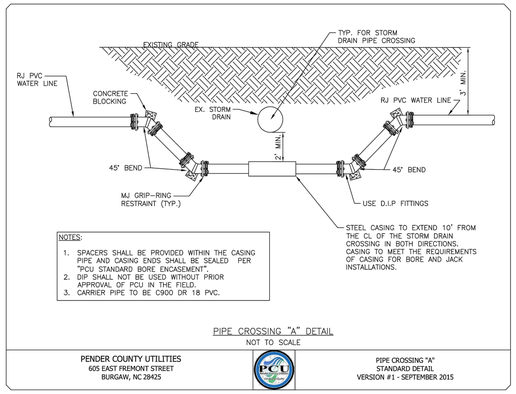
NOTE:
1. DO NOT ALLOW VALVE BOX TO REST ON THE VALVE OR WATER MAIN.
2. A VALVE MARKER SHALL BE PLACED ON THE RIGHT OF WAY AT EACH ISOLATION VALVE.

VALVE INSTALLATION DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

VALVE INSTALLATION
STANDARD DETAIL
VERSION #3 - JUNE 2016

2 | VALVE INSTALLATION | NTS



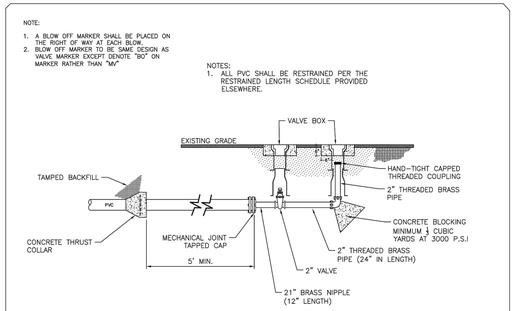
NOTES:
1. SPACERS SHALL BE PROVIDED WITHIN THE CASING PIPE AND CASING ENDS SHALL BE SEALED PER "PCU STANDARD BORE ENCASEMENT".
2. DIP SHALL NOT BE USED WITHOUT PRIOR APPROVAL OF PCU IN THE FIELD.
3. CARRIER PIPE TO BE C900 DR 18 PVC.

PIPE CROSSING "A" DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

PIPE CROSSING "A"
STANDARD DETAIL
VERSION #1 - SEPTEMBER 2015

6 | PIPE CROSSING | NTS

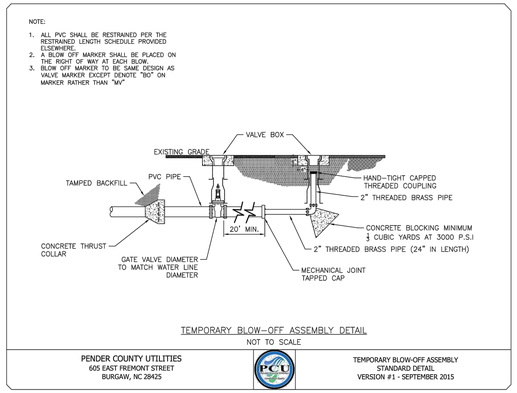


PERMANENT BLOW-OFF ASSEMBLY DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

PERMANENT BLOW-OFF ASSEMBLY
STANDARD DETAIL
VERSION #1 - SEPTEMBER 2015

4 | PERMANENT BLOW OFF ASSEMBLY | NTS



TEMPORARY BLOW-OFF ASSEMBLY DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

TEMPORARY BLOW-OFF ASSEMBLY
STANDARD DETAIL
VERSION #1 - SEPTEMBER 2015

1 | TEMPORARY BLOW OFF ASSEMBLY | NTS

REV.NO.	DESCRIPTIONS	DATE
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UTILITY DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: HSCALE
VERTICAL: VSCALE

C14.1
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C14.0 UTILITY DETAILS.DWG ---- 10/06/2023 10:39:15

THERMOPLASTIC PAVEMENT MARKING MATERIALS

PAVEMENT MARKING LINES

---------- THERMOPLASTIC (4", 90 mils)

---------- THERMOPLASTIC (4", 90 mils)

T4 - 3 FT. - 9FT. /SP WHITE MINISKIP
T2 - WHITE SOLID LANE LINE
T13 - YELLOW DOUBLE CENTER LINE

---------- THERMOPLASTIC (4", 90 mils)

T42 - YELLOW DIAGONAL

---------- THERMOPLASTIC (8", 90 mils)

T61 - WHITE STOP BAR

PAVEMENT MARKING SYMBOLS

---------- THERMOPLASTIC (90 mils)

T70 - LEFT TURN ARROW

T71 - RIGHT TURN ARROW

T72 - STRAIGHT ARROW

T74 - COMBO. RIGHT/STRAIGHT ARROW

CRYSTAL / RED PAVEMENT MARKER NCDOT 1253.01 (SNOWPLOWABLE)

NOTES:

PAVEMENT MARKINGS:
ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS. PAVEMENT MARKINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL HAVE THE PAVEMENT MARKINGS PRE-MARKED, INSPECTED, AND APPROVED BY NCDOT PERSONNEL PRIOR TO THE PLACEMENT OF FINAL PAVEMENT MARKINGS.

SIGNING:
ALL TRAFFIC SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). SIGN POST INSTALLATION SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS.

TRAFFIC CONTROL:
TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS AND THE TRAFFIC CONTROL PLANS INCLUDED HEREIN.

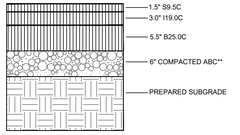
NOTES:

1. PAVEMENT SECTION FOR TURN LANE SHALL BE 5.5" B25.0C, 3" I 19.0C, AND 1.5" SF9.5C.

EXISTING TRAFFIC LANE DIRECTIONAL ARROW (i.e. LEFT, THRU, RIGHT)

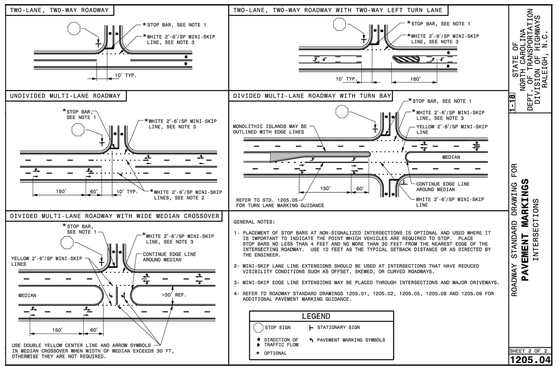
PROPOSED TRAFFIC LANE DIRECTIONAL ARROW (i.e. LEFT, THRU, RIGHT)

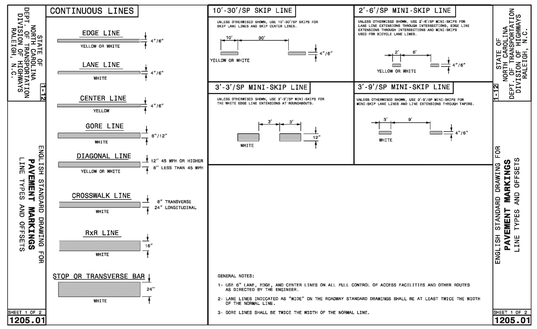
TEMPORARY LANE CLOSURE VALUES	
MINIMUM "L"	660'
SIGHT STOPPING DISTANCE	495'
BUFFER	290'
BARRIER FLARE	12:1
WARNING SIGN SPACING	500'

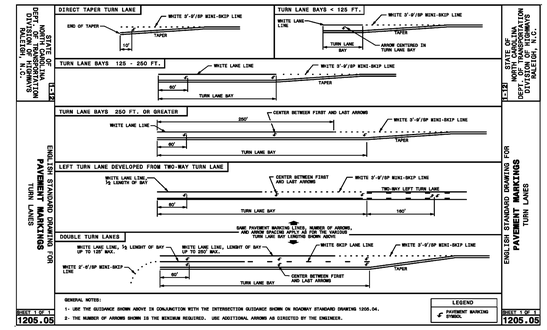


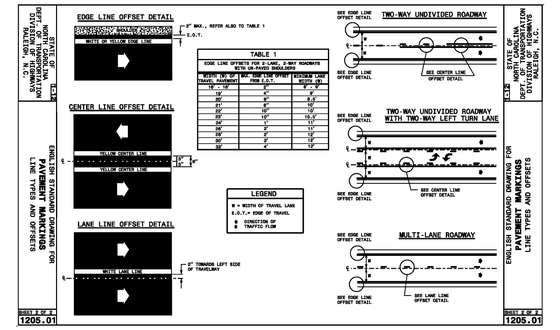
ROADWAY PAVEMENT SECTION
(ALL PAVEMENT WITHIN RIGHT OF WAY)

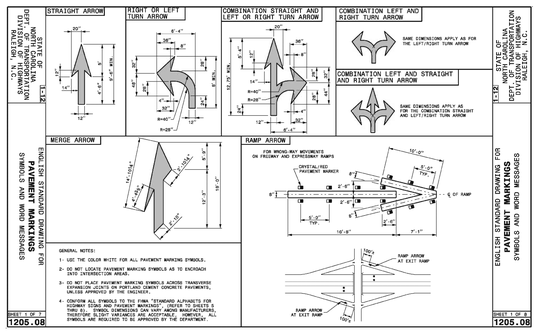
** COMPACTED ABC NOTE-1:
COMPACTED ABC MUST MEET THE NCDOT STANDARD SPECIFICATION GRADATION. REFER TO NCDOT STD SPECS (JAN 2018 EDITION) SECTION 520, AND SECTIONS 1005, 1006, AND 1010 FOR ALL OF THE MATERIAL GRADATION AND SPECIFICATIONS.

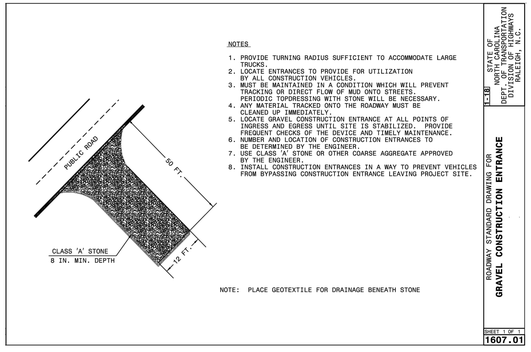


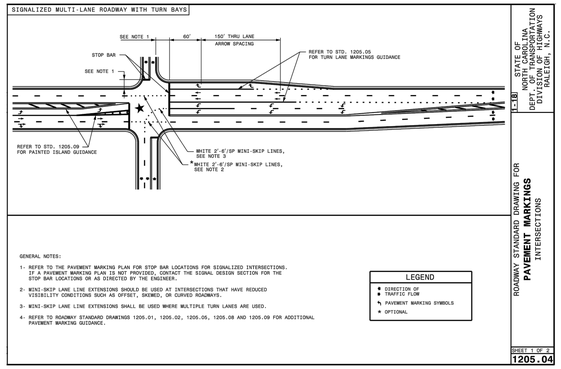












1 | NCDOT AND ROADWAY DETAILS — NTS

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

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NCDOT AND ROADWAY DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

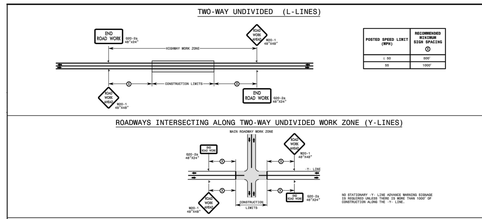
SCALE
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C15.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

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POSTED SPEED LIMIT (MPH)	RECOMMENDED SPACING OF SIGN SPACING D
≤ 35	350'
40	1000'

GENERAL NOTES

1- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK UNLESS COVERED.

2- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT LONGER THAN 3 CONSECUTIVE DAYS.

3- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.

4- ERECT SIGNS PER RSD 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATIONS FOR WORK ZONE SIGNS.

5- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH RSD. 1110.01.

6- DO NOT BACK BRACE SIGN SUPPORTS.

LEGEND

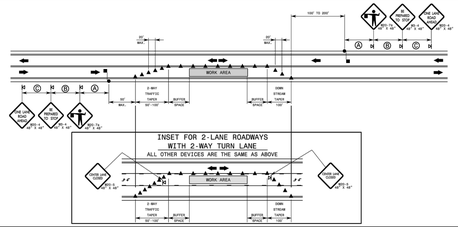
▷ STATIONARY SIGN
⇔ DIRECTION OF TRAFFIC FLOW

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

1-C.M.

ROADWAY STANDARD DRAWING FOR
WORK ZONE ADVANCE WARNING SIGNS FOR TWO WAY UNDIVIDED FACILITIES

SHEET 3 OF 3
1101.01



GENERAL NOTES FOR FLAGGING OPERATIONS

1- REFER TO RSD. 1101.11, SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.

2- INSTALL L-LINE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TAPER(S).

3- REMOVE L-LINE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TAPER(S).

4- FLAG JOINTS THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.

5- EXTEND THE BUFFER SPACE AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO FLAGGER (REFER TO RSD. 1101.11, SHEET 2).

6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.

7- SIGNS ON PORTABLE STANDS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM SIGN MOUNTING.

8- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. PLACE ADVANCE FLAGGER LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (M3D-7a) AND BE PREPARED TO STOP SIGNS (M3D-7b) ON THE APPROACHES TO THE INTERSECTIONS PLACE HIGHWAY 15 -IN FLASH MODE AND USE LAW ENFORCEMENT.

9- REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.

10- DO NOT EXCEED A 1 MILE L-LINE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

11- IF VEHICLE QUEUED WILL REACH WITHIN 15' OF EITHER SIDE OF ACTIVE RAILROAD TRACKS AT RAILROAD GRADE CROSSINGS, THE CONTRACTOR SHALL IMMEDIATELY TAKE ACTION TO PREVENT STOPPING WITHIN THE GRADE CROSSING. PROVIDE OFFICER OR FLAGGER EVEN IF AUTOMATIC WARNING MEASURES ALREADY EXIST.

GENERAL NOTES FOR PILOT CAR OPERATIONS

1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.

2- IF ADVISORY SPEED 15 MPH SIGNS OF LESS (SEE "D" DISTANCE) ARE NOT BE REQUIRED FOR THE WORK AREA, IF USING A PILOT CAR.

3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.

4- MOUNT SIGN M3D-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.

5- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURES BEFORE THE FIRST VEHICLE HAS PASSED THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

6- ADVISE MOTORISTS AND BYSTANDERS WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE RAMBLE AND TRAVEL THROUGH HIGHWAY DURING FLAGGING AND PILOT CAR OPERATIONS.

LEGEND

▶◀ FLAGGER
▲ CONE
▽ PORTABLE SIGN
⇔ DIRECTION OF TRAFFIC FLOW

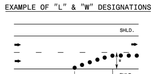
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DEPT. OF TRANSPORTATION
DIV. OF HIGHWAYS
RALEIGH, N.C.

1-C.M.

ROADWAY STANDARD DRAWING FOR
TEMPORARY LANE CLOSURES
2-LANE, 2-WAY ROADWAY-1 LANE CLOSED

SHEET 1 OF 14
1101.02

EXAMPLE OF "L" & "W" DESIGNATIONS



TAPER LENGTH CRITERIA FOR
CHANNELIZING DEVICES IN WORK ZONES

TYPES OF TAPERS (DEVICE TYPE)	TAPER LENGTH
MERGING TAPER	½ L MINIMUM
SHIFTING TAPER	½ L MINIMUM
SHOULDER TAPER	½ L MINIMUM
TWO-WAY TRAFFIC TAPER	.50 - 100 FOOT MINIMUM
DOWNSTREAM TAPER	100 FOOT MINIMUM

DO NOT INTRODUCE A MERGING OR SHIFTING TAPER WITHIN A CURVE OF THE ROADWAY

QUICK REFERENCE - "L" DISTANCE TABLE

POSTED SPEED LIMIT (MPH)	MINIMUM LONGITUDINAL DISTANCE "L" (FEET) TRAVERSE TAPERS: LATERAL WIDTH "W" (FEET) 1	2	3	4	5	6	7	8	9	10	11	12
20	10	15	20	30	35	40	50	55	60	70	75	80
25	15	25	35	45	55	65	75	85	95	105	115	125
30	15	30	45	60	75	90	105	120	135	150	165	180
35	20	45	65	90	110	135	145	160	180	200	225	245
40	30	60	90	120	150	180	190	210	240	270	295	320
45	45	90	135	180	225	270	315	360	405	450	495	540
50	50	100	150	200	250	300	350	400	450	500	550	600
55	55	110	165	220	275	330	385	440	495	550	605	660
60	60	120	180	240	300	360	420	480	540	600	660	720
65	65	130	195	260	325	390	455	520	585	650	715	780
70	70	140	210	280	350	420	490	560	630	700	770	840

GENERAL NOTES

1- TABLE FOR "L" DISTANCE IS BASED ON CHANNELIZATION TAPER FORMULA FROM THE MUTCD. WHERE:

SPEED LIMIT	FORMULA
40 MPH OR LESS	$L_{min} = \frac{W \times S^2}{60}$
45 MPH OR GREATER	$L_{min} = W \times S$

L = MINIMUM TAPER LENGTH IN FEET (LONGITUDINAL DISTANCE)
W = WIDTH OF OFFSET IN FEET (LATERAL DISTANCE)
S = 85TH PERCENTILE SPEED OR POSTED SPEED LIMIT SPEED IN MPH PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

2- "L" DISTANCE IS FOR APPLICATION WITH CHANNELIZING DEVICE AND PAVEMENT MARKING TAPERS AND TRANSITIONS. CHANNELIZING DEVICES INCLUDE DRUMS, CONES, TUBULAR MARKERS, BARRICADES, RAISED ASPHALT ISLANDS, AND VERTICAL PANELS.

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

1-C.M.

ROADWAY STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
"L" DISTANCE AND CHANNELIZING DEVICE TAPER CRITERIA

SHEET 1 OF 4
1101.11

DESIGN SPEED (MPH)	MINIMUM SIGHT DISTANCE: STOPPING SIGHT DISTANCE (FEET)	PASSING SIGHT DISTANCE (FEET)	MINIMUM LONGITUDINAL BUFFER SPACE (FEET)
30	200	1090	85
35	250	1280	120
40	305	1470	155
45	360	1625	195
50	425	1835	240
55	495	1985	290
60	570	2135	345
65	645	2285	405
70	730	2480	470
75	820	2580	540
80	910	2680	615

GENERAL NOTES

1- TABLES ARE BASED ON THE AASHTO GREEN BOOK "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". MINIMUM SIGHT DISTANCE VALUES ARE FOR PASSENGER CAR VEHICLES ON WET AND LEVEL ROADWAYS. CONSULT THE AASHTO GREEN BOOK TO MAKE FINAL DETERMINATION OF STOPPING SIGHT DISTANCE REQUIREMENTS.

2- BUFFER SPACE TABLE IS BASED ON THE BRAKING DISTANCE PORTION OF STOPPING SIGHT DISTANCE FOR WET AND LEVEL PAVEMENTS.

3- USE OF STOPPING SIGHT DISTANCE IN TRAFFIC CONTROL PLAN APPLICATIONS INCLUDES PROVIDING SIGHT DISTANCE FOR TRAFFIC APPROACHING A LANE CLOSURE. PROVIDE 2-LANE, 2-WAY ROADWAYS STOPPING SIGHT DISTANCE TO THE FLAGGER. FOR LANE CLOSURES ON MULTILANE ROADWAYS PROVIDE STOPPING SIGHT DISTANCE TO THE BEGINNING OF THE LANE CLOSURE MERGE TAPER, OR FLASHING ARROW BOARD. EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED.

4- USE OF MINIMUM PASSING SIGHT DISTANCE TABLE IN TRAFFIC CONTROL PLAN APPLICATIONS INCLUDES PROVIDING SIGHT DISTANCE REQUIREMENTS FOR PLACEMENT OF PAVEMENT MARKING PASSING/NO-PASSING ZONES FOR 2-LANE, 2-WAY ROADWAYS.

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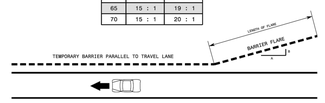
1-C.M.

ROADWAY STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
BUFFER SPACE & SIGHT DISTANCE

SHEET 2 OF 4
1101.11

TEMPORARY BARRIER FLARE RATES

POSTED SPEED LIMIT (MPH)	UNANCHORED (A:B)	ANCHORED (A:B)
≤ 30	7 : 1	8 : 1
35	8 : 1	9 : 1
40	8 : 1	10 : 1
45	10 : 1	12 : 1
50	11 : 1	14 : 1
55	12 : 1	16 : 1
60	14 : 1	18 : 1
65	15 : 1	19 : 1
70	15 : 1	20 : 1



GENERAL NOTES

1- REFER TO THE 2011 ROADSIDE DESIGN GUIDE OR THE LATEST EDITION.

2- A BARRIER IS CONSIDERED FLARED WHEN IT IS NOT PARALLEL TO THE EDGE OF THE TRAVELWAY.

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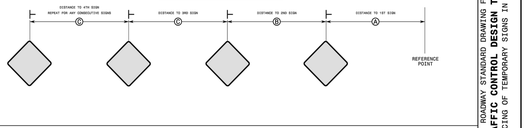
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ROADWAY STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
TEMPORARY BARRIER FLARE RATES

SHEET 3 OF 4
1101.11

ADVANCE WARNING SIGN SPACING CHART: POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS (FEET): A	B	C
≤ 35	350	350	350
40-50	350	350	500
55	350	350	500
CONTROLLED ACCESS ROADS (≥ 55)	1350	1600	2700

STATIONARY OR PORTABLE SIGNS



GENERAL NOTES

1- REFER TO 2009 MUTCD OR THE LATEST EDITION.

2- USE THIS STANDARD DRAWING IN CONJUNCTION WITH OTHER TRAFFIC CONTROL ROADWAY STANDARD DRAWINGS WHERE SIGN SPACING DISTANCES A, B, C, ARE SPECIFIED.

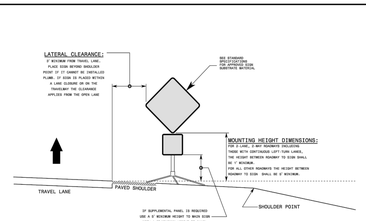
3- APPLY THE ADVANCE WARNING SIGN SPACING CHART WHERE A SERIES OF 2 OR MORE SIGNS ARE USED. ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE. FIELD ADJUST AS VARIOUS CONDITIONS OCCUR, SUCH AS LIMITED SIGHT DISTANCE, OBSTRUCTION INTERFERENCE, ETC.

STATE OF NORTH CAROLINA
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1-C.M.

ROADWAY STANDARD DRAWING FOR
TRAFFIC CONTROL DESIGN TABLES
SPACING OF TEMPORARY SIGNS IN SERIES

SHEET 4 OF 4
1101.11



GENERAL NOTES

1- DIMENSIONS SHOWN ARE MINIMUM VALUES. MOUNT SIGNS SO THEY WILL BE CLEARLY VISIBLE TO APPROACHING TRAFFIC EVEN WHEN SIGNS ARE MOUNTED BEHIND TRAFFIC CONTROL DEVICES SUCH AS DRUMS, BARRIER, OR OTHER OBJECTS.

2- ALL PORTABLE SIGNS AND STANDS MUST MEET OR EXCEED THE REQUIREMENTS OF NCHRP 350 FOR CATEGORY II DEVICES. USE PORTABLE WORK ZONE SIGNS AND STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER.

3- ALL PORTABLE WORK ZONE SIGNS AND STANDS MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.

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

1-C.M.

ROADWAY STANDARD DRAWING FOR
PORTABLE WORK ZONE SIGNS
MOUNTING HEIGHT & LATERAL CLEARANCE

SHEET 1 OF 1
1110.02

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER OR NCDOT.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER OR NCDOT.

PROJECT NOTES

A. DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

B. REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.

C. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

D. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

E. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITH THE CLOSED TRAVEL LANE.

F. DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

G. BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER.

H. DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 350 FEET IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

SIGNING

I. INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

J. ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

K. INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 100 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

L. INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

I INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

M. PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45-50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

MISCELLANEOUS

N. NCDOT ROADS ONLY: PRIOR TO OPENING ANY LANE OF TRAFFIC THE ROAD SHALL BE REPAIRED TO NCDOT STANDARDS. THIS WILL INCLUDE, BUT IS NOT LIMITED TO:
-- NCDOT APPROVED PRODUCTS AND MATERIALS.
-- PROPER COMPACTION OF MATERIALS.
-- REPAIR ASPHALT PER NCDOT STANDARD DRAWING 654.01.
-- ANY DAMAGE CAUSED AS A RESULT TO THE CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE APPLICANT/DEVELOPER TO RESOLVE.

TRAFFIC PATTERN ALTERATIONS

O. NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

TRAFFIC CONTROL DEVICES

P. SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. WHEN LANE CLOSURES ARE NOT IN EFFECT, WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

Q. PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

R. PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

S. ONLY UNIFORMED POLICE OFFICERS SHALL DIRECT TRAFFIC THROUGH SIGNALIZED INTERSECTIONS. THE TRAFFIC SIGNAL MAY BE PUT INTO FLASHING OPERATION OR MAY REMAIL IN NORMAL OPERATION AT THE DISCRETION OF THE OFFICER.

OFFICERS SHALL BE PROPERLY ATTIRED AND SHALL DIRECT TRAFFIC WITH HAND MOTIONS. FLASHLIGHTS WITH RED CONES SHOULD BE USED AT NIGHT. OFFICERS MAY ALSO USE A WHISTLE TO SIGNAL WHEN THEY ARE CHANGING THE DIRECTION OF THE RIGHT OF WAY.

STANDARDS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" HIGHWAY DESIGN BRANCH - N. C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N. C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

- 903.10 - GROUND MOUNTED SIGN SUPPORTS
- 904.10 - ORIENTATION OF GROUND MOUNTED SIGNS
- 940.50 - MOUNTING OF TYPE "D", "E", AND "F" SIGNS ON "U" CHANNEL POSTS
- 1101.01 - WORK ZONE WARNING SIGNS
- 1101.02 - TEMPORARY LANE CLOSURES
- 1101.04 - TEMPORARY SHOULDER CLOSURES
- 1101.11 - TRAFFIC CONTROL DESIGN TABLES
- 1110.01 - STATIONARY WORK ZONE SIGNS
- 1110.02 - PORTABLE WORK ZONE SIGNS
- 1130.01 - DRUMS
- 1135.01 - CONES
- 1150.01 - FLAGGING DEVICES
- 1180.01 - SKINNY - DRUM

1 NCDOT DETAILS NTS

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

SEAL

SEAL

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NCDOT AND ROADWAY DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: HSCALE
VERTICAL: VSCALE

C15.1
DRAWING NUMBER

REVISION

STATUS: PENDER COUNTY TRC REVIEW

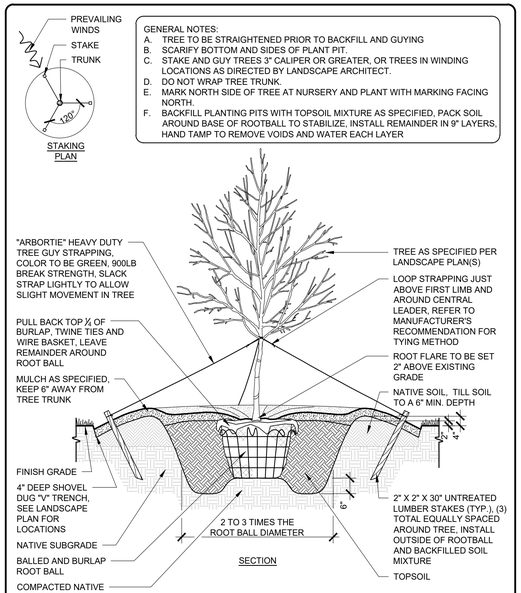
I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C15.0 NCDOT DETAILS.DWG — 10/06/2023 10:39:28

1. ALL EXISTING VEGETATION THAT IS USED TO MEET LANDSCAPING REQUIREMENTS, ALL REQUIRED PLANTED LIVING MATERIAL, AND ALL REQUIRED BERMS SHALL BE MAINTAINED BY THE OWNER OF THE PROPERTY ON A CONTINUING BASIS. ANY PLANTED MATERIAL WHICH BECOMES DAMAGED OR DISEASED OR DIES SHALL BE REPLACED BY THE OWNER WITHIN 60 DAYS OF THE OCCURRENCE OF SUCH CONDITION. IF, IN THE OPINION OF THE ZONING ADMINISTRATOR THERE ARE SEASONAL CONDITIONS WHICH WILL NOT PERMIT THE TIMELY REPLACEMENT OF THE VEGETATION (E.G. TOO HOT OR TOO COOL FOR SUCCESSFUL REPLANTING) THIS REQUIREMENT MAY BE ADMINISTRATIVELY WAIVED UNTIL A TIME CERTAIN WHEN THE REPLANTING WOULD BE SUCCESSFUL.
2. VERIFICATION OF TOTAL LANDSCAPE MATERIAL QUANTITIES AS SHOWN ON THE LANDSCAPE PLANS AND IN THE PLANT SCHEDULE SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO FINAL BIDDING OR INSTALLATION.
3. ALL PLANTING TYPES SHALL COMPLY WITH LOCAL GOVERNING CODES AND REGULATIONS, CONFORM TO REQUIREMENTS OF PLANT LIST AND TO THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARD OF NURSERY STOCK" AND "HORTICULTURAL STANDARDS" AS TO SPECIES, AGE, SIZE, AND PLANTING RECOMMENDATIONS.
4. LANDSCAPE MATERIAL PLACED IN PREPARED HOLES SHALL BE PROPERLY BACKFILLED PRIOR TO THE END OF THE WORKING DAY.
5. ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
6. LANDSCAPE ARCHITECT SHALL APPROVE ANY ON-SITE PLANT STORAGE AREA FOR ACCESSIBILITY, SHADE CONDITIONS, HEALING-IN MULCH MATERIAL AND TEMPORARY WATERING METHODS.
7. ALL ROPE AND WRAPPING TWINE SHALL BE CUT AND REMOVED FROM AROUND THE UPPER PARTS OF THE ROOT BALL. METAL BASKET WIRES AND BURLAP SHALL BE PULLED BACK AND TUCKED UNDER THE EDGES OF THE SAUCER RINGS ON ALL TREES AND LARGE SHRUBS. ALL SYNTHETIC BURLAP SHALL BE REMOVED FROM PLANT BALLS PRIOR TO BACK FILLING.
8. ALL PLANT BEDS OR RAISED SAUCER RINGS SHALL BE EDGED WITH SMOOTH, CONTINUOUS CURVES.
9. ALL PLANT MATERIAL SHALL BE PLANTED AT HEIGHTS AND WIDTHS AS ILLUSTRATED IN PLANTING DETAILS.
10. TREE GUYING SHALL BE PERFORMED WITHIN A WEEK OF PLANTING. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TREE GUYING STRAPPING AND STAKES AFTER THE FIRST FULL GROWING SEASON OR ONE YEAR, WHICH EVER COMES FIRST.
11. CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO PLANTING.
12. ANY EXPOSED OR UNCOVERED LINES SHALL BE SHOWN TO GENERAL CONTRACTOR PRIOR TO BACKFILLING.
13. ALL PLANT BEDS AND RAISED SAUCER RINGS SHALL BE GRADED TO PROVIDE ADEQUATE DRAINAGE AND SHALL BE MULCHED AS SPECIFIED.
14. ALL MATERIALS, PLANTING AND LANDSCAPE WORK SHALL CONFORM TO THE CURRENT MUNICIPAL AUTHORITIES STANDARD SPECIFICATIONS AND DETAILS.
15. ALL LANDSCAPE AREAS THAT ARE NOT PLANTED, MULCHED OR PAVED SHALL BE SEEDED OR SODDED.
16. FIRST YEAR PRUNING OF TREE CROWN SHALL BE LIMITED TO REMOVAL OF DEAD & DAMAGED WOOD.
17. TREE PROTECTION FENCE SHALL BE INSTALLED, INSPECTED AND APPROVED PRIOR TO CLEARING, GRADING AND CONSTRUCTION ACTIVITY OR ISSUANCE OF ANY RELATED PERMITS. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
18. MULCH LINE SHALL CONSIST OF SMOOTH CONTINUOUS CURVES.
19. ALL TREES NOT WITHIN A PLANT BED SHALL BE TREATED WITH A 6' DIAMETER MULCH RING TYPICAL, UNLESS OTHERWISE INDICATED ON THE PLANTING PLANS.
20. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS OR AS OTHERWISE DICTATED BY LOCAL REGULATIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.
21. SUBSTITUTIONS OF PLANT MATERIALS SPECIFIED CAN ONLY OCCUR WITH PRIOR APPROVAL BY LANDSCAPE ARCHITECT.
22. ESTABLISH PLANT BED CONFIGURATION. LANDSCAPE ARCHITECT TO APPROVE BED LAYOUT IN FIELD.
23. AREAS DAMAGED BY ACTIVITIES OF CONTRACTOR SHALL BE RE-ESTABLISHED TO PRE-DISTURBANCE CONDITION AT NO ADDITIONAL COST TO THE OWNER.
24. USE HERBICIDES, PESTICIDES, AND FERTILIZER IN A MANNER CONSISTENT WITH THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT AND IN ACCORDANCE WITH LABEL RESTRICTIONS.
25. CONTRACTOR SHALL INSURE THAT ALL PLANT MATERIAL IS FREE OF FIRE ANTS PRIOR TO INSTALLATION.
26. LANDSCAPE ARCHITECT OR OWNER SHALL APPROVE PLACEMENT OF TREES PRIOR TO PLANTING.
27. STREET TREES SHALL BE MAINTAINED TO PROVIDE 13'-6" CLEAR HEIGHT FOR THE PORTION OF THE TREE CANOPY THAT EXTENDS OVER THE VEHICULAR NETWORK.
28. TREES SHALL BE LOCATED A MINIMUM OF 15 FEET FROM STREETLIGHTS.
29. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
30. DEEPROOT ROOT BARRIER OR APPROVED EQUAL SHALL BE INSTALLED AT ANY TREE LOCATIONS AND WHERE A TREE IS WITHIN 10' OF A UTILITY OR HARDSCAPE. THE ROOT BARRIER SHALL BE INSTALLED ACCORDING TO MANUFACTURER RECOMMENDATION.
31. LANDSCAPE CONTRACTOR SHALL PROVIDE IRRIGATION DESIGN AND INSTALL IRRIGATION SYSTEM.
32. MULCH SHALL BE SHREDDED HARDWOOD, SPREAD AT THICKNESS OF 3" DEEP ACROSS PLANTING AREAS.

4 GENERAL LANDSCAPE NOTES

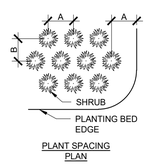
PLANT SCHEDULE						
CANOPY TREE	SIZE	CALIPER	HEIGHT		QTY	REMARKS
ACER RUBRUM 'OCTOBER GLORY' TM OCTOBER GLORY MAPLE	B & B	2" CAL.	10'-12' HT.		14	SINGLE DOMINANT LEADER, UNIFORM CANOPY & MATCHED
QUERCUS ALBA WHITE OAK	B & B	2" CAL.	8'-10' HT.		18	SINGLE DOMINANT LEADER, UNIFORM CANOPY AND MATCHED
QUERCUS NIGRA WATER OAK	B & B	2" CAL.	10'-12' HT.		50	SINGLE DOMINANT LEADER, UNIFORM CANOPY & MATCHED
UNDERSTORY TREES	SIZE	CALIPER	HEIGHT		QTY	REMARKS
ILEX X 'NELLIE R. STEVENS' NELLIE R. STEVENS HOLLY	B & B	2" CAL.	8'-10' HT.		16	SINGLE DOMINANT LEADER, UNIFORM CANOPY AND MATCHED.
MAGNOLIA GRANDIFLORA 'SOUTHERN CHARM' TEDDY BEAR® SOUTHERN MAGNOLIA	B & B	2" CAL.	8'-10' HT.		81	SINGLE DOMINANT LEADER, UNIFORM CANOPY AND MATCHED.

5 PLANT SCHEDULE



GENERAL NOTES:
A. TREE TO BE STRAIGHTENED PRIOR TO BACKFILL AND GUYING
B. SCARIFY BOTTOM AND SIDES OF PLANT PIT.
C. STAKE AND GUY TREES 3" CALIPER OR GREATER, OR TREES IN WINDING LOCATIONS AS DIRECTED BY LANDSCAPE ARCHITECT.
D. DO NOT WRAP TREE TRUNK.
E. MARK NORTH SIDE OF TREE AT NURSERY AND PLANT WITH MARKING FACING NORTH.
F. BACKFILL PLANTING PITS WITH TOPSOIL MIXTURE AS SPECIFIED, PACK SOIL AROUND BASE OF ROOTBALL TO STABILIZE, INSTALL REMAINDER IN 9" LAYERS, HAND TAMP TO REMOVE VOIDS AND WATER EACH LAYER

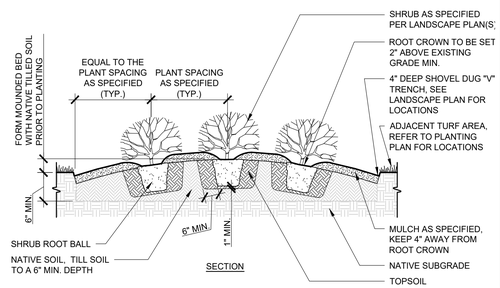
3 TYPICAL TREE PLANTING



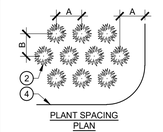
PLANT SPACING CHART

SPACING (A)	ROW OFFSET (B)	SPACING (A)	ROW OFFSET (B)
1'-0" O.C.	10" O.C.	5'-0" O.C.	4'-4" O.C.
1'-6" O.C.	1'-4" O.C.	6'-0" O.C.	5'-2" O.C.
2'-0" O.C.	1'-9" O.C.	7'-0" O.C.	6'-1" O.C.
2'-6" O.C.	2'-2" O.C.	8'-0" O.C.	6'-11" O.C.
3'-0" O.C.	2'-7" O.C.	9'-0" O.C.	7'-10" O.C.
3'-6" O.C.	3'-0" O.C.	10'-0" O.C.	8'-8" O.C.
4'-0" O.C.	3'-6" O.C.		

GENERAL NOTES:
A. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
B. THE BOTTOM OF SHRUB ROOT BALLS SHALL NOT PROJECT INTO THE NATIVE SUBGRADE . LARGER PLANTS WILL REQUIRE ADDITIONAL TOPSOIL DEPTH.
C. BACKFILL PLANTING PITS WITH TOPSOIL MIXTURE AS SPECIFIED, INSTALL IN 6" LAYERS, HAND TAMP TO REMOVE VOIDS AND WATER EACH LAYER
D. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED BY HAND PRIOR TO PLACEMENT AND BACKFILLING WITH PREPARED SOILS. HAND TOOLS SHALL NOT BE USED TO SCARIFY ROOT BALLS.



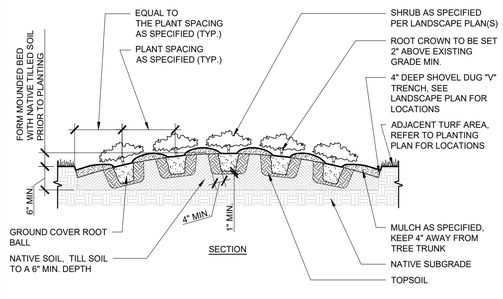
2 TYPICAL SHRUB PLANTING



PLANT SPACING CHART

SPACING (A)	ROW OFFSET (B)	SPACING (A)	ROW OFFSET (B)
6" O.C.	5" O.C.	24" O.C.	1'-9" O.C.
8" O.C.	7" O.C.	36" O.C.	2'-7" O.C.
12" O.C.	10" O.C.	4'-0" O.C.	3'-6" O.C.
15" O.C.	1'-1" O.C.	5'-0" O.C.	4'-4" O.C.
18" O.C.	1'-4" O.C.	6'-0" O.C.	5'-2" O.C.

GENERAL NOTES:
A. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
B. THE BOTTOM OF GROUND COVER ROOT BALLS SHALL NOT PROJECT INTO THE NATIVE SUBGRADE . LARGER PLANTS WILL REQUIRE ADDITIONAL TOPSOIL DEPTH.
C. BACKFILL PLANTING PITS WITH TOPSOIL MIXTURE AS SPECIFIED, INSTALL IN 6" LAYERS, HAND TAMP TO REMOVE VOIDS AND WATER EACH LAYER
D. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED BY HAND PRIOR TO PLACEMENT AND BACKFILLING WITH PREPARED SOILS. HAND TOOLS SHALL NOT BE USED TO SCARIFY ROOT BALLS.



1 TYPICAL GROUND COVER PLANTING

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

SEAL

SEAL

McKIM&CREED
243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
License: F-1222
www.mckimcreed.com

D·R·HORTON® DHI Listed NYSE America's Builder

BLAKE FARM PARCEL R

LANDSCAPE DETAILS

DATE:	10/06/2023
MCE PROJ. #	04245-0055
DRAWN	ALM/BMJ
DESIGNED	GHS
CHECKED	TSM
PROJ. MGR.	TSM

SCALE
HORIZONTAL: N/A
VERTICAL: AS SHOWN

C17.0
DRAWING NUMBER

REVISION

STATUS:
PENDER COUNTY TRC REVIEW

I:\04245\0055\ENG\80-DRAWINGS\81_PRODUCTION_SHEETS\2_WORKING_DWGS\C17.0 LANDSCAPE DETAILS.DWG ---- 10/06/2023 10:39:42

Pender County
Rocky Point Auto Auction

TO:	Technical Review Committee
FROM:	Justin Brantley
DATE:	November 2, 2023
SUBJECT:	PR 117-2023

SUMMARY:
Major Site Development Plan commercial application for the development of an auto auction business on approximately 17 acres of a larger parcel totaling approximately 70 acres.

ACTION REQUESTED:
Case will be reviewed by the TRC

ATTACHMENTS:
1. Application
2. Site Plan

Pender County
Planning and Community Development

805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Major Site Development Plan Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1. X — **Pre-submittal Meeting**
   Date of Meeting 12/21/2022
2. X — **Signed Application**
3. X — **Payment**
   $250
4. X — **Paper Plan Sets** (One (1) 24 x 36 set per email.)
   Two (2) 24 x 36, Fifteen (15) 11 x 17
5. X — **Digital Submission**
   For all documents submitted in paper copy, bring a digital copy with paper submission.
6. X — **Adjacent Property List**
   A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the perimeter of the project bounds.
7. X — **Adjacent Property Envelopes**
   The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. N/A — **Permits** (Permits will be provided when received.)
   Include any permits issued on the project including but not limited to: environmental, traffic, utility, or site specific conditions.
9. X — **Site Plan Requirements**
   A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.3, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.
   (See Major Site Development Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant _____ Date 7-28-2023

Printed Name RYAN KRALL

Staff Initials: _____
Date: _____

Pender County
Planning and Community Development

Planning Division
805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

MAJOR AND MINOR SITE DEVELOPMENT APPLICATION

SDP 2023-363	THIS SECTION FOR OFFICE USE		
Date: 10/13/2023	**Permit Number:**	**Permit Fee:** $250.00	**Invoice Number:** 00036244
***Zoning Approval ONLY: YES / NO**	**Final Zoning Compliance Approved: YES / NO / N/A**		
Type of Site Development Plan:	☒ Major	☐ Minor	

SECTION 1: GENERAL INFORMATION

Applicant's Name:	Ryan Krall	**Property Owner's Name:**	NC Rocky Point US 117,LLC
Applicant's Address:	201 Riverplace, Suite 400	**Property Owner's Address:**	201 Riverplace, Suite 400
City, State, & Zip	Greenville,SC 29601	**City, State, & Zip**	Greenville,SC 29601
Phone Number:	864-603-1760	**Phone Number:**	864-603-1760
Email Address:	rkrall@realtylinkdev.com	**Email Address:**	rkrall@realtylinkdev.com
Legal relationship of applicant to land owner:	Engineer		

SECTION 2: PROJECT INFORMATION

PIN (Property Id #):	3235-91-0904-0000	**Total property acreage:**	70.70 AC.
Zoning :	General Industrial (GI)	**Acreage to be disturbed:**	17.30 AC.
Directions to Site:	The site is located off US-HWY 117 S. approximately 1800'		
	south of the intersection of US-HWY 177 and State HWY 210.		

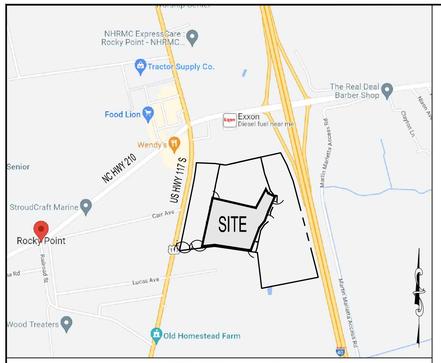
Lot Size: 17.30 AC.		**Sq Ft of Building:** 14,400 SF		**Building Height:**	
Setbacks	**Front:** 30'	**Side:** 15'		**Rear:** 30'	
NAICS Code/Use:	Auto Auction				
Business Name:	Rocky Point Auto Auction				
Describe activities to be undertaken on project site:	Weekly auto auctions limited to dealers only.				
Ownership: ☒ **Private** ☐ **Public**	**Number of Employees:** 25		**Number of Members:** 50		**Seating Capacity:**

If the applicant is not the owner of the property, a notarized letter from the property owner may be required
Zoning approval is for the use being proposed ONLY, other department approvals may be required i.e. Fire Marshal, Environmental Health, Permitting, etc...

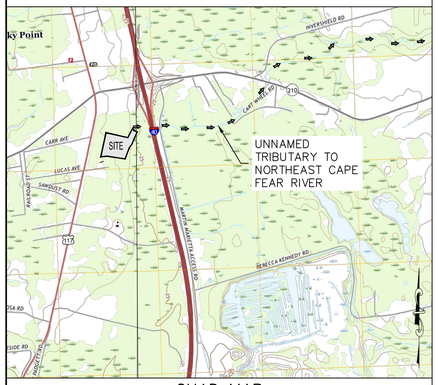
SECTION 4: ADDITIONAL COMMENTS			
SECTION 5: SIGNATURES			
Applicant:		Date:	7·28·2023
Owner:		Date:	7·28·2023
Planning Staff:		Date:	

ROCKY POINT AUTO AUCTION

US HWY 117, ROCKY POINT, NORTH CAROLINA
PENDER COUNTY



LOCATION MAP
SCALE: 1" = 1,000'



QUAD MAP
SCALE: 1" = 2,000'



AERIAL MAP
SCALE: 1" = 400'

CIVIL ABBREVIATIONS:

BTTM	BOTTOM	NCDENR	NC DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES
BES	BEVELED END SECTION		
BM	BENCHMARK	NCDEQ	NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY
BMP	EROSION CONTROL BEST MANAGEMENT PRACTICES	NOT	NOTICE OF TERMINATION
BW	BOTH WAYS	NTS	NOT TO SCALE
CB	CATCH BASIN	NOI	NOTICE OF INTENT
CI	CURB INLET	NOT	NOTICE OF TERMINATION
CGP	NPDES CONSTRUCTION GENERAL PERMIT SCR 100000	NTS	NOT TO SCALE
		OC	ON CENTER
CL	CENTERLINE	ODSA	OPERATOR OF DAY TO DAY SITE ACTIVITIES
CMP	CORRUGATED METAL PIPE		
CO	CLEANOUT	PC	POINT OF CURVATURE
CONC	CONCRETE	PCU	PENDER COUNTY UTILITIES
CY	CUBIC YARDS	POA	POINT OF ANALYSIS
DCVA	DOUBLE CHECK VALVE ASSEMBLY	PP	POWER POLE
DI	DROP INLET	PT	POINT OF TANGENT
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE
DIP	DUCTILE IRON PIPE	PVMT	PAVEMENT
DS	DOWNSPOUT	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	RD	ROOF DRAIN
EXST	EXISTING	REQD	REQUIRED
EW	EACH WAY	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
FFE	FINISHED FLOOR ELEVATION		
FG	FINISHED GRADE	R/W	RIGHT OF WAY
FH	FIRE HYDRANT	SABC	STABILIZED AGGREGATE BASE COURSE
FM	FORCE MAIN		
GI	GRATE INLET	SF	SQUARE FEET
HDPE	HIGH DENSITY POLYETHYLENE	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
IAW	IN ACCORDANCE WITH		
IE	INVERT ELEVATION	SS	SANITARY SEWER SERVICE
JB	JUNCTION BOX	STA	STATION
LF	LINEAR FEET	TELECOM	TELECOMMUNICATION
LOD	LIMITS OF DISTURBANCE	TBM	TEMPORARY BENCH MARK
LP	LIGHT POLE	TC	TOP OF CURB
MATL	MATERIAL	TG	TOP OF GUTTER
MAX	MAXIMUM	TP	TOP OF PAVEMENT
MH	MANHOLE	TYP	TYPICAL
MIN	MINIMUM	VC	VITRIFIED CLAY
MS4	MUNICIPAL SEPARATE STORM SEWER SYSTEM	W	WATER
		W/	WITH
NCDOT	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	WS	WATER SERVICE
		WV	WATER VALVE

GENERAL NOTES:

1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING 811 FOR UTILITY LOCATION AND DETERMINING THE EXACT LOCATION OF ALL UTILITIES PRIOR TO BEGINNING ANY WORK. IF UTILITIES OTHER THAN THOSE SHOWN HEREON ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND TAKE APPROPRIATE MEASURES TO PROTECT THE LINE(S) AND ENSURE CONTINUED SERVICE. DAMAGE CAUSED TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL VERIFY THE CONNECTION POINTS OF NEW UTILITIES TO EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL REVIEW AND STAMP APPROVED ANY AND ALL SHOP DRAWINGS AND SUBMITTALS PRIOR TO SUBMITTING TO THE ENGINEER FOR REVIEW.
3. IN PERFORMING CONSTRUCTION OBSERVATION VISITS TO THE JOB SITE, THE ENGINEER SHALL HAVE NO CONTROL OVER NOR RESPONSIBILITY FOR THE CONTRACTOR'S MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES IN PERFORMING THE WORK.
4. THE CONTRACTOR'S MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES IN PERFORMING THE WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR, WHO IS ALSO RESPONSIBLE FOR COMPLYING WITH ALL HEALTH AND SAFETY PRECAUTIONS AS REQUIRED BY ANY REGULATORY AGENCY.
5. CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN, UNLESS SPECIFICALLY INDICATED OTHERWISE.

GENERAL SURVEY NOTES:

1. TOPOGRAPHIC AND BOUNDARY INFORMATION BY ESP ASSOCIATES, INC., NOT VERIFIED BY ADC ENGINEERING, INC.
2. THE ELEVATIONS DEPICTED HEREON ARE BASED ON NAD88 DATUM. THE HORIZONTAL CONTROL IS BASED ON NCSPC NAD'83.
3. ALL PROJECT STAKEOUT SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR TO BE PAID FOR BY THE CONTRACTOR. FOR STAKEOUT, DO NOT RELY SOLELY ON THE PHYSICAL SCALE AS SHOWN IN DRAWINGS. REFER TO THE GIVEN DIMENSIONS, SYMBOL LEGEND, KEYNOTES, AND REFERENCED DETAILS FOR CORRECT STAKEOUT.

GENERAL GRADING NOTES:

1. THE CONTRACTOR SHALL INSTALL TREE PROTECTION BARRICADES AND WETLAND BUFFER PROTECTION SIGNS PRIOR TO BEGINNING EARTHWORK OPERATIONS.
2. OFFSITE BORROW NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR FROM SOURCES DEVELOPED BY THE CONTRACTOR.
3. ALL NECESSARY BORROW/WASTE MATERIAL SHALL BE FROM/TAKEN TO A NCDEQ PERMITTED FACILITY.
4. CONTRACTOR SHALL GRADE ALL AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL APPROVAL.
5. THE DESIGN ADEQUACY AND SAFETY OF ALL BRACING, SHORING AND TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL PROVIDE ASBUILTS OF THE STORM DRAINAGE SYSTEM IAW NCDEQ AND PENDER COUNTY REQUIREMENTS.
7. CONTRACTOR TO NOTIFY ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO REMOVAL.

GENERAL SWPPP NOTES:

1. ALL CONTRACTORS/SUBCONTRACTORS/PERSONS THAT WILL BE ENGAGED IS LAND DISTURBING ACTIVITIES SHALL COMPLY WITH ALL EROSION CONTROL AND STORMWATER POLLUTION PREVENTION REQUIREMENTS CONTAINED THROUGHOUT THE DRAWINGS, SWPPP, SPECIFICATIONS AND PERMITS.
2. THE CONTRACTOR SHALL PLACE 4" OF TOPSOIL IN ALL DISTURBED AREAS NOT TO BE PAVED. THE CONTRACTOR SHALL ALSO PROVIDE TEMPORARY SEEDING AND PERMANENT STABILIZATION IN ALL AREAS INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION THAT ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS.
3. IT IS THE CONTRACTORS RESPONSIBILITY FOR DESIGN, ADEQUACY AND IMPLEMENTATION OF ALL DEWATERING. ALL DEWATERING ACTIVITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STORMWATER POLLUTION PREVENTION PLAN.

GENERAL UTILITY NOTES:

1. ALL UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NCDEQ AND PENDER COUNTY UTILITIES (PCU). WHERE ANY DISCREPANCIES EXIST BETWEEN THESE DOCUMENTS, THE MOST STRICT REQUIREMENTS SHALL BE ADHERED TO.
2. THE CONTRACTOR SHALL PROVIDE ASBUILTS AND EASEMENTS PLATS OF THE NEW WATER AND SEWER SYSTEM IAW UTILITY PROVIDER REQUIREMENTS.
3. GENERAL CONTRACTOR SHALL COORDINATE ALL SITE UTILITIES AND STORM DRAINAGE INSTALLATION SCHEDULES TO AVOID POTENTIAL UTILITY CONFLICTS. GRAVITY DEPENDENT UTILITIES SHALL BE INSTALLED PRIOR TO NON-GRAVITY DEPENDENT UTILITIES.
4. CONTRACTOR SHALL CONTACT 811 TO LOCATE EXISTING UTILITIES PRIOR TO ANY WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND PROTECTING ALL UTILITIES. CONTACT THE ENGINEER IN THE EVENT THAT UTILITIES CONFLICT WITH NEW FACILITIES.
5. WATER AND WASTEWATER SYSTEM CLOSEOUT:
   - 5.1. CONTRACTOR SHALL SCHEDULE WORK AND ACCOUNT FOR TIME IN THE SCHEDULE FOR "CLOSEOUT" ACTIVITIES TO OCCUR AFTER INSTALLATION OF THE UTILITY. MORE INFORMATION OF THESE REQUIREMENTS IS LOCATED IN THE PROJECT SPECIFICATIONS, AND PENDER COUNTY GUIDELINES. REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO:
     - 5.1.1. INSPECTIONS AND TESTING IN ACCORDANCE WITH PROJECT AND PENDER COUNTY SPECIFICATIONS
     - 5.1.2. PREPARATION, REVIEW, AND CORRECTION OF AS-BUILT/RECORD DRAWINGS PROVIDED BY CONTRACTOR'S SURVEYOR.
     - 5.1.3. PREPARATION, REVIEW, AND CORRECTION OF EASEMENT PLATS AND LEGAL DESCRIPTION PREPARED BY CONTRACTOR'S SURVEYOR.
     - 5.1.4. PREPARATION AND EXECUTION OF WAIVER OF LIEN BY UTILITY SUBCONTRACTOR
     - 5.1.5. PREPARATION AND EXECUTION OF LEGAL DOCUMENTS BY OWNER AND UTILITY OPERATOR
     - 5.1.6. REVIEW OF DOCUMENTATION BY ENGINEER AND UTILITY OPERATOR REVIEW OF DOCUMENTATION BY SCDHEC
   - 5.2. CONTRACTOR SHALL ASSUME REASONABLE TIME FRAMES FOR OWNER, ENGINEER, AND UTILITY OPERATOR AT EACH STAGE OF CLOSEOUT. REVIEW TIMES CAN VARY BASED UPON THE INITIAL QUALITY AND COMPLETENESS OF THE DOCUMENTS PROVIDED. THE MINIMUM TIME FROM COMPLETION OF SUCCESSFUL INSPECTIONS AND TESTING AND THE INITIAL SUBMITTAL OF CONTRACTOR DOCUMENTS TO THE RECEIPT OF PERMIT TO OPERATE SHALL BE ASSUMED TO BE 45 DAYS.

PENDER COUNTY UTILITIES NOTES:

1. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE BEGINNING WORK. THE MEETING MUST BE SCHEDULED WITH PENDER COUNTY UTILITIES (PCU) AT LEAST ONE WEEK ADVANCE. ATTENDEES MUST INCLUDE PCU, THE UTILITY CONTRACTOR'S SUPERINTENDENT, THE SUPPLIER, AND THE CONSULTING ENGINEER.
2. ALL MATERIALS USED SHALL CONFORM TO PENDER COUNTY UTILITIES REQUIREMENTS. NON-CONFORMING MATERIAL WILL NOT BE ACCEPTED FOR FINAL CERTIFICATION.
3. ALL PIPE SHALL BE C900 DR18 PVC, UNLESS OTHERWISE NOTED (SEE PCU STANDARD DETAIL). PVC PIPE TO BE SDR 21 WHERE C900 IS UNAVAILABLE. THE USE OF DUCTILE IRON PIPE (DIP) IS REQUIRED UNDER PAVED AREAS. PCU MUST APPROVE THE USE OF DIP IN THE FIELD BEFORE INSTALLATION IN OTHER LOCATIONS.
4. PCU STANDARD WATERLINE PIPE RESTRAINING METHOD IS MJ GRIP RINGS. AT A MINIMUM ALL FITTINGS, VALVES, ETC. MUST BE RESTRAINED (SEE PCU STANDARD DETAIL).
5. PCU MUST INSPECT CASING INSTALLATIONS PRIOR TO BACKFILL. PCU MUST WITNESS PRESSURE TESTS, AND WITHDRAWAL OF BACTERIOLOGICAL SAMPLES. CONTACT PCU UTILITIES INSPECTOR TO SCHEDULE.
6. CLOSE-OUT DOCUMENTS WHICH MUST BE RECEIVED PRIOR TO PCU SIGNING THE NCDEQ PWSS APPLICANT CERTIFICATION INCLUDE: BACTERIOLOGICAL TESTS, PRESSURE TESTS, DEED OF DEDICATION, AFFIDAVIT/RELEASE OF LIENS, WARRANTY, AND RECORD DRAWINGS (PDF & CAD).
7. AN 18-MONTH WARRANTY PERIOD APPLIES TO ALL WATERLINE CONSTRUCTION. THIS WARRANTY PERIOD DOES NOT BEGIN UNTIL FINAL APPROVAL OF THE SYSTEM HAS BEEN RECEIVED FROM NCDEQ PWSS

TRAFFIC CONTROL NOTES:

1. CONTRACTOR SHALL PERFORM ALL NECESSARY COORDINATION WITH NCDOT AND PENDER COUNTY. FOR WORK INSIDE THE RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO PREPARATION OF AND OBTAINING APPROVAL OF ALL NECESSARY TRAFFIC CONTROL PLANS AS WELL AS PLANNING AND EXECUTION OF ALL NECESSARY COORDINATION MEETINGS.
2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE APPROVED ENCROACHMENT PERMIT(S).
3. CONTRACTOR SHALL MAINTAIN NCDOT SITE VISIBILITY TRIANGLES AT ALL ACCESS POINTS FOR THE DURATION OF CONSTRUCTION.
4. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), CURRENT EDITION.
5. SEE SHEET C610 FOR TRAFFIC CONTROL DETAILS.

LIST OF DRAWINGS

SHEET	TITLE	ISSUED	REVISED
C001	CIVIL COVER PAGE	7/21/2023	8/8/2023
C002	OVERALL MASTER DEVELOPMENT PLAN	7/21/2023	8/8/2023
C003	OVERALL SITE PLAN	7/21/2023	8/8/2023
	TOPOGRAHIC SURVEY (PROVIDED BY ESP ASSOCIATES,INC)		
C101	DEMOLITION PLAN - AREA 1	7/21/2023	8/8/2023
C102	DEMOLITION PLAN - AREA 2	7/21/2023	8/8/2023
C201	SITE PLAN - AREA 1	7/21/2023	8/8/2023
C202	SITE PLAN - AREA 2	7/21/2023	8/8/2023
C220	AUTOTURN PLAN	7/21/2023	
C301	GRADING AND STROM DRAINAGE PLAN - AREA 1	7/21/2023	8/8/2023
C302	GRADING AND STORM DRAINAGE PLAN - AREA 2	7/21/2023	8/8/2023
C310	STORM DRAINAGE PROFILES	7/21/2023	8/8/2023
C320	STORM WATER POND PLAN	7/21/2023	8/8/2023
C330	DRAINAGE AREA PLAN - PRE-DEVELOPMENT	7/21/2023	8/8/2023
C331	DRAINAGE AREA PLAN - POST-DEVELOPMENT	7/21/2023	8/8/2023
C401	UTILITY PLAN - AREA 1	7/21/2023	8/8/2023
C402	UTILITY PLAN - AREA 2	7/21/2023	8/8/2023
C610	CIVIL DETAILS - TRAFFIC CONTROL	7/21/2023	
C620	CIVIL DETAILS - PAVEMENT	7/21/2023	
C621	CIVIL DETAILS - SIGNAGE	7/21/2023	
C622	CIVIL DETAILS - FENCING	7/21/2023	
C623	CIVIL DETAILS - STRIPING	7/21/2023	
C630	CIVIL DETAILS - STORM DRAINAGE	7/21/2023	
C631	CIVIL DETAILS - STORM DRAINAGE	7/21/2023	
C640	CIVIL DETAILS - UTILITY	7/21/2023	
C641	CIVIL DETAILS - UTILITY	7/21/2023	
C642	CIVIL DETAILS - UTILITY	7/21/2023	
C700	EROSION CONTROL NOTES	7/21/2023	
C711	EROSION CONTROL PLAN - INITIAL - AREA 1	7/21/2023	8/8/2023
C712	EROSION CONTROL PLAN - INITIAL - AREA 2	7/21/2023	8/8/2023
C721	EROSION CONTROL PLAN - STABILIZATION - AREA 1	7/21/2023	8/8/2023
C722	EROSION CONTROL PLAN - STABILIZATION - AREA 2	7/21/2023	8/8/2023
C740	CIVIL DETAILS - EROSION CONTROL	7/21/2023	
C741	CIVIL DETAILS - EROSION CONTROL	7/21/2023	
C742	CIVIL DETAILS - EROSION CONTROL	7/21/2023	
C743	CIVIL DETAILS - EROSION CONTROL	7/21/2023	8/8/2023
L200	OVERALL LANDSCAPE SITE PLAN	7/21/2023	8/8/2023
L201	LANDSCAPE PLANTING PLAN - AREA 1	7/21/2023	8/8/2023
L202	LANDSCAPE PLANTING PLAN - AREA 2	7/21/2023	8/8/2023
L300	LANDSCAPE PLANTING DETAILS, SCHEDULE & NOTES	7/21/2023	8/8/2023

ZONING CODE SUMMARY

PROJECT NAME	ROCKY POINT AUTO AUCTION	ADDRESS	US HWY 117 S
DEVELOPER	NC ROCKY POINT US 117, LLC		
PLANS PREPARED BY	ADC ENGINEERING, INC.		
ZONING	GENERAL INDUSTRIAL	JURISDICTION	PENDER COUNTY
PROPOSED USE	AUTO AUCTION (NAICS 4231)		
FUTURE DEVELOPMENT USE	GAS STATION (NAICS 4571), RETAIL (NAICS 44-45), RESTAURANT (NAICS 72251), BANK (NAICS 522110), OFFICE (NAICS 81391)		

BUILDING INFORMATION				
MAXIMUM BUILDING HEIGHT	50'			
BUILDING COVERAGE	14.400 SF	GROSS FLOOR AREA	+/-14,400 SF	
LOT SIZE	16.56 ACRES	# OF BUILDINGS	1	
YARD/SETBACK REQUIREMENTS				
FRONT	50' (GI)	25' (GB)		
SIDE	25' (GI)	10' (GB)		
REAR	30' (GI)	10' (GB)		
LANDSCAPE BUFFER REQUIREMENTS				
FRONT (ROAD)	BUFFER C-1 (10')			
FRONT (SIMILAR USE)	BUFFER D-1 (15')			
SIDE (SOUTH)	BUFFER C-2 (15' WITH EVERGREEN VEGETATION)			
SIDE (SIMILAR USE)	BUFFER D-1 (15')			
REAR (SIMILAR USE)	BUFFER D-1 (15')			
OPEN AREA				
PRE-DEVELOPED SITE	16.56	AC	100%	
POST-DEVELOPED SITE	8.04	AC	49%	
IMPERVIOUS COVERAGE				
PRE-DEVELOPED SITE	0.00	AC	0.0%	
POST-DEVELOPED SITE	8.52	AC	51.4%	
WETLAND AREA				
PRE-DEVELOPED SITE	0.00	AC	0.0%	
POST-DEVELOPED SITE	0.00	AC	0.0%	

Off-Street Parking Calculations

Use	Pender County Requirements								Required	
				Requirement (i.e. square footage, #)						
Vehicle Sales	1	per	500	Square Feet	X	14,400	=		29	
							TOTAL =		29	
ADA Parking Requirement										
							Total ADA Parking Spaces =		2	
							Van Accessible Spaces =		1	
Provided Parking										**Provided**
							Proposed Paved Standard Spaces =			56
							Proposed Paved Van ADA Spaces =			2
							Proposed Paved Standard ADA Spaces =			2
							Proposed Paved Vehicle Storage Spaces =			532
							Proposed Unpaved Vehicle Storage Spaces =			287
							TOTAL =			879

ENGINEER-
ADC ENGINEERING, INC.
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
LARRY BARTHELEMY, IV, PE
(864) 751-9122 TELEPHONE

DEVELOPER
NC ROCKY POINT US 117, LLC
201 RIVERPLACE, SUITE 400
GREENVILLE, SC 29601
JOHN McLENDON
(864) 905-4737 TELEPHONE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

LARRY K. CARTER
SEAL 027779
LARRY K. BARTHELEMY IV
ENGINEER
08/08/2023

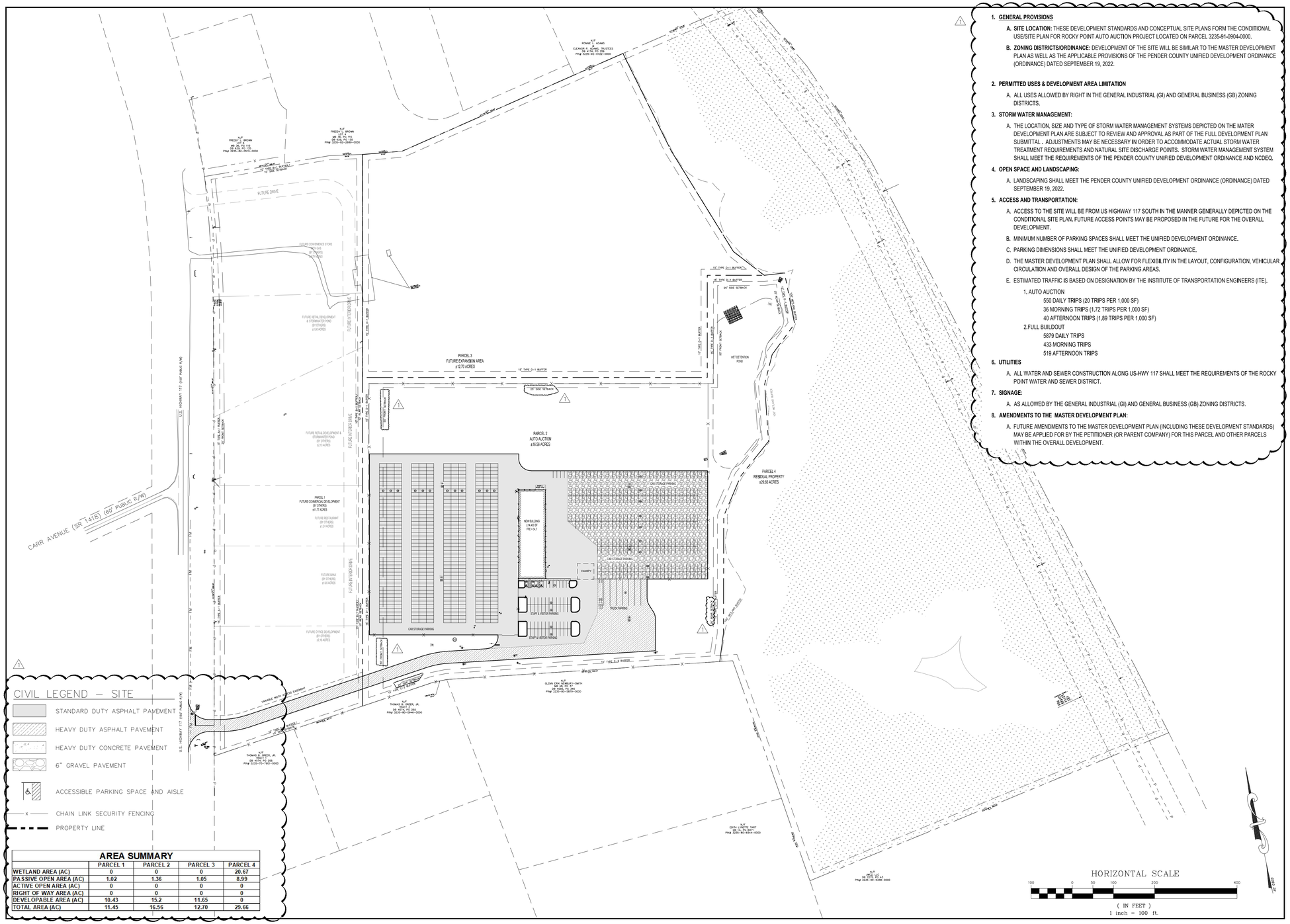
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CIVIL COVER PAGE

C001



AREA SUMMARY

	PARCEL 1	PARCEL 2	PARCEL 3	PARCEL 4
WETLAND AREA (AC)	0	0	0	20.67
PASSIVE OPEN AREA (AC)	1.02	1.36	1.05	8.99
ACTIVE OPEN AREA (AC)	0	0	0	0
RIGHT OF WAY AREA (AC)	0	0	0	0
DEVELOPABLE AREA (AC)	10.43	15.2	11.65	0
TOTAL AREA (AC)	11.45	16.56	12.70	29.66

1. **GENERAL PROVISIONS**
   - A. **SITE LOCATION:** THESE DEVELOPMENT STANDARDS AND CONCEPTUAL SITE PLANS FORM THE CONDITIONAL USE/SITE PLAN FOR ROCKY POINT AUTO AUCTION PROJECT LOCATED ON PARCEL 3235-91-0904-0000.
   - B. **ZONING DISTRICTS/ORDINANCE:** DEVELOPMENT OF THE SITE WILL BE SIMILAR TO THE MASTER DEVELOPMENT PLAN AS WELL AS THE APPLICABLE PROVISIONS OF THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE (ORDINANCE) DATED SEPTEMBER 19, 2022.
2. **PERMITTED USES & DEVELOPMENT AREA LIMITATION**
   - A. ALL USES ALLOWED BY RIGHT IN THE GENERAL INDUSTRIAL (GI) AND GENERAL BUSINESS (GB) ZONING DISTRICTS.
3. **STORM WATER MANAGEMENT:**
   - A. THE LOCATION, SIZE AND TYPE OF STORM WATER MANAGEMENT SYSTEMS DEPICTED ON THE MATER DEVELOPMENT PLAN ARE SUBJECT TO REVIEW AND APPROVAL AS PART OF THE FULL DEVELOPMENT PLAN SUBMITTAL. ADJUSTMENTS MAY BE NECESSARY IN ORDER TO ACCOMMODATE ACTUAL STORM WATER TREATMENT REQUIREMENTS AND NATURAL SITE DISCHARGE POINTS. STORM WATER MANAGEMENT SYSTEM SHALL MEET THE REQUIREMENTS OF THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE AND NCDEQ.
4. **OPEN SPACE AND LANDSCAPING:**
   - A. LANDSCAPING SHALL MEET THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE (ORDINANCE) DATED SEPTEMBER 19, 2022.
5. **ACCESS AND TRANSPORTATION:**
   - A. ACCESS TO THE SITE WILL BE FROM US HIGHWAY 117 SOUTH IN THE MANNER GENERALLY DEPICTED ON THE CONDITIONAL SITE PLAN. FUTURE ACCESS POINTS MAY BE PROPOSED IN THE FUTURE FOR THE OVERALL DEVELOPMENT.
   - B. MINIMUM NUMBER OF PARKING SPACES SHALL MEET THE UNIFIED DEVELOPMENT ORDINANCE.
   - C. PARKING DIMENSIONS SHALL MEET THE UNIFIED DEVELOPMENT ORDINANCE.
   - D. THE MASTER DEVELOPMENT PLAN SHALL ALLOW FOR FLEXIBILITY IN THE LAYOUT, CONFIGURATION, VEHICULAR CIRCULATION AND OVERALL DESIGN OF THE PARKING AREAS.
   - E. ESTIMATED TRAFFIC IS BASED ON DESIGNATION BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE).
     - 1, AUTO AUCTION
       - 550 DAILY TRIPS (20 TRIPS PER 1,000 SF)
       - 36 MORNING TRIPS (1.72 TRIPS PER 1,000 SF)
       - 40 AFTERNOON TRIPS (1,89 TRIPS PER 1,000 SF)
     - 2.FULL BUILDOUT
       - 5879 DAILY TRIPS
       - 433 MORNING TRIPS
       - 519 AFTERNOON TRIPS
6. **UTILITIES**
   - A. ALL WATER AND SEWER CONSTRUCTION ALONG US-HWY 117 SHALL MEET THE REQUIREMENTS OF THE ROCKY POINT WATER AND SEWER DISTRICT.
7. **SIGNAGE:**
   - A. AS ALLOWED BY THE GENERAL INDUSTRIAL (GI) AND GENERAL BUSINESS (GB) ZONING DISTRICTS.
8. **AMENDMENTS TO THE MASTER DEVELOPMENT PLAN:**
   - A. FUTURE AMENDMENTS TO THE MASTER DEVELOPMENT PLAN (INCLUDING THESE DEVELOPMENT STANDARDS) MAY BE APPLIED FOR BY THE PETITIONER (OR PARENT COMPANY) FOR THIS PARCEL AND OTHER PARCELS WITHIN THE OVERALL DEVELOPMENT.

ROCKY POINT AUTO AUCTION

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
MARSECK K. BARTHELEMY, II
08/08/2023

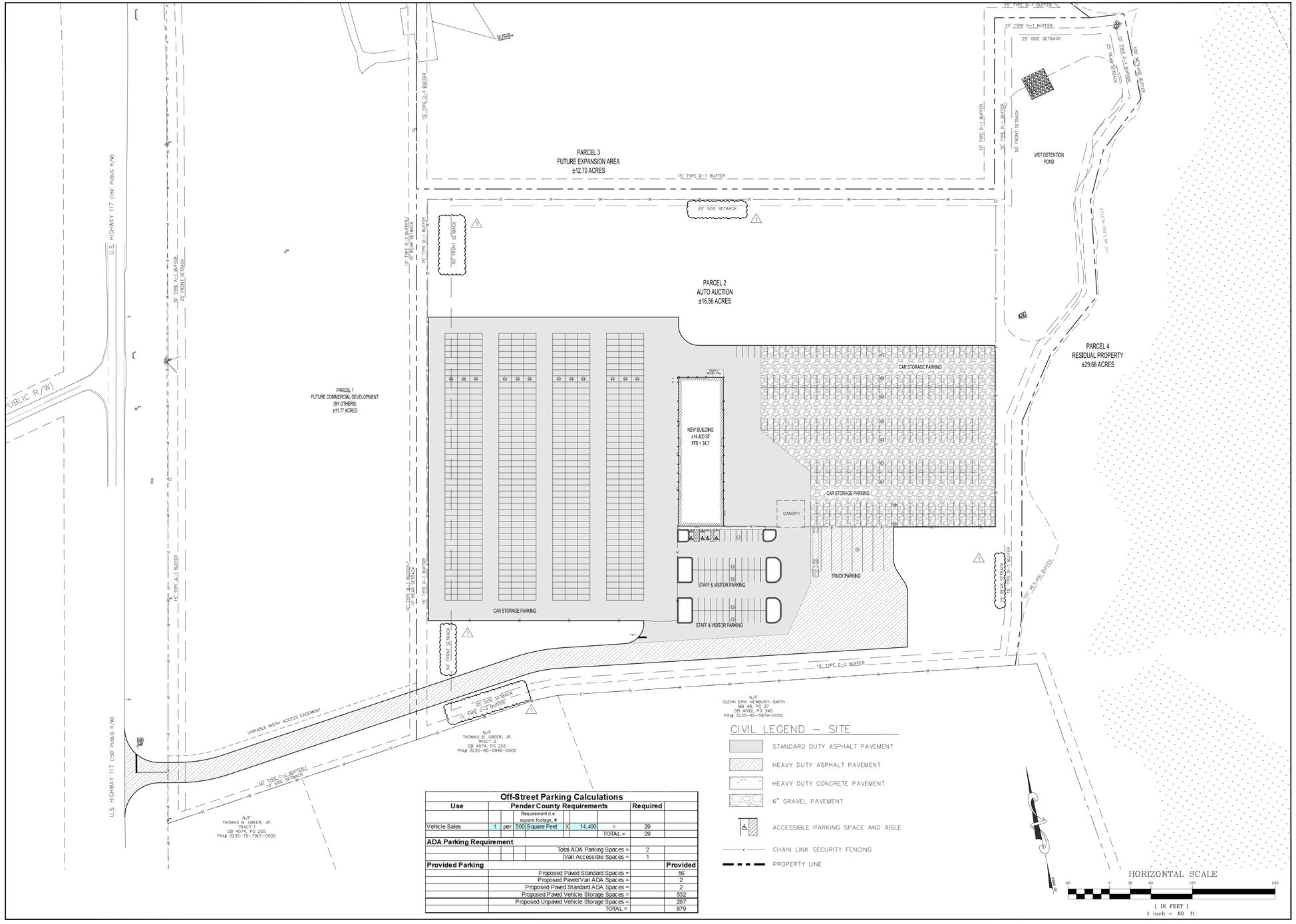
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OVERALL MASTER DEVELOPMENT PLAN

C002



Off-Street Parking Calculations

Use	Pender County Requirements						Required	
			Requirement (i.e. square footage, #					
Vehicle Sales	1	per	500 Square Feet	X	14,400	=	29	
						TOTAL =	29	
ADA Parking Requirement								
						Total ADA Parking Spaces =	2	
						Van Accessible Spaces =	1	
Provided Parking								**Provided**
						Proposed Paved Standard Spaces =		56
						Proposed Paved Van ADA Spaces =		2
						Proposed Paved Standard ADA Spaces =		2
						Proposed Paved Vehicle Storage Spaces =		532
						Proposed Unpaved Vehicle Storage Spaces =		287
						TOTAL =		879

CIVIL LEGEND – SITE

- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- 6" GRAVEL PAVEMENT
- ACCESSIBLE PARKING SPACE AND AISLE
- CHAIN LINK SECURITY FENCING
- PROPERTY LINE

HORIZONTAL SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
REGISTERED
SEAL
027779
ENGINEER
LAWRENCE K. BARTHELMY, II
08/08/2023

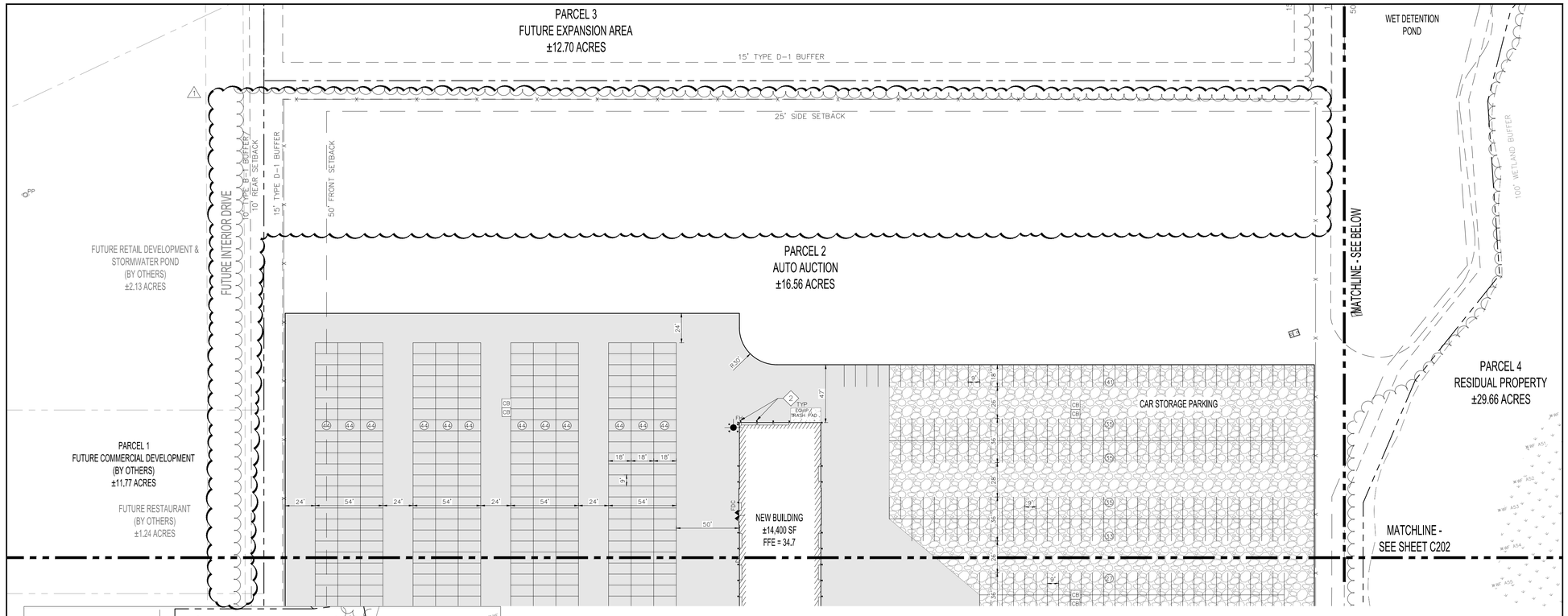
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OVERALL SITE PLAN

C003



SITE NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. ALL STRIPING AND MARKINGS WITHIN THE RIGHT-OF-WAY SHALL BE REFLECTIVE THERMOPLASTIC IAW NCDOT SPECIFICATIONS.
3. SEE SHEET C610 FOR TRAFFIC CONTROL DETAILS.
4. SEE SHEET C001 FOR CIVIL ABBREVIATIONS AND GENERAL NOTES.
5. ALL DIMENSION ARE TO FRONT FACE OF CURB/EDGE OF PAVEMENT.
6. ALL BUILDING COORDINATES ARE TO OUTSIDE CORNER FACE OF BUILDING. LAYOUT SHALL BE BASED ON THE CONTROL POINTS SHOWN.
7. ALL BUILDING LAYOUTS SHALL BE CHECKED WITH THE ARCHITECTURAL FLOOR PLANS PRIOR TO STAKEOUT.

SIGN LEGEND:

(A) STOP SIGN (R1-1-36)
(B) ACCESSIBLE PARKING SIGN – PLUS "VAN" WHERE INDICATED

JOINT LEGEND:

C-J — CONTRACTION JOINT – INSTALL IAW DETAIL I/C620.
TEEJ — THICKENED EDGE EXPANSION JOINT– INSTALL IAW DETAIL I/C620.
EJ — EXPANSION JOINT – INSTALL IAW DETAIL I/C620.
R — REINFORCED SLAB – INSTALL IAW DETAIL I/C620.
DJ — DOWELED CONSTRUCTION JOINT – INSTALL IAW DETAIL I/C620.
TE — THICKENED EDGE – INSTALL IAW DETAIL I/C620.

KEYNOTES: ◇

1. TIE NEW PAVEMENT INTO EXISTING PAVEMENT IAW DETAIL D/C620.
2. INSTALL NEW BOLLARD IAW DETAIL C/C621.
3. INSTALL NEW AUTOMATIC VEHICULAR ACCESS SLIDING GATE IAW DETAIL A/C622.

TBM TABLE

TBM #	NORTHING	EASTING	ELEVATION	DESCRIPTION
TBM 1	251,096.213	2,337,575.020	39.03	5/8" IRON REBAR SET
TBM 2	251,800.429	2,337,686.424	36.84	5/8" IRON REBAR SET

Off-Street Parking Calculations

Use	Pender County Requirements							Required	
			Requirement (i.e. square footage, #)						
Vehicle Sales	1	per	500	Square Feet	X	14,400	=	29	
							TOTAL =	29	
ADA Parking Requirement									
							Total ADA Parking Spaces =	2	
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Provided Parking									**Provided**
							Proposed Paved Standard Spaces =		56
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							Proposed Paved Vehicle Storage Spaces =		532
							Proposed Unpaved Vehicle Storage Spaces =		287
							TOTAL =		879

CIVIL LEGEND – SITE

- HEAVY DUTY ASPHALT PAVEMENT – INSTALL IAW DETAIL A/C620.
- GRAVEL PAVEMENT – INSTALL IAW DETAIL E/C620.
- HEAVY DUTY CONCRETE PAVEMENT – INSTALL IAW DETAIL B/C620.
- ACCESSIBLE PARKING SPACE AND AISLE – IAW DETAIL H/C620.
- 24" STOP BAR (THERMOPLASTIC) – INSTALL IAW DETAIL F/C620.
- INTERIOR TRAFFIC ARROW – INSTALL IAW DETAIL B/C623.
- HIGHWAY/DRIVEWAY TRAFFIC ARROW (THERMOPLASTIC) – INSTALL IAW DETAIL A/C623.
- DYSL/4" DOUBLE YELLOW SOLID LINE / 4" WIDE EACH
- SYDL/4" SINGLE YELLOW DASHED LINE / 4" WIDE
- SWDL/4" SINGLE WHITE DASHED LINE / 4" WIDE
- SWSL/4" SINGLE WHITE SOLID LINE / 4" WIDE
- (25) PARKING SPACES – STRIPE WITH 4" SINGLE WHITE SOLID LINE
- NEW TRAFFIC SIGN – INSTALL PER PLAN AND IAW DETAILS A/C621.
- x 6' HIGH CHAIN LINK FENCE – IAW DETAIL A/C622.
- PROPERTY LINE

HORIZONTAL SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
MARRECK K. BARTHELEMY II
08/08/2023

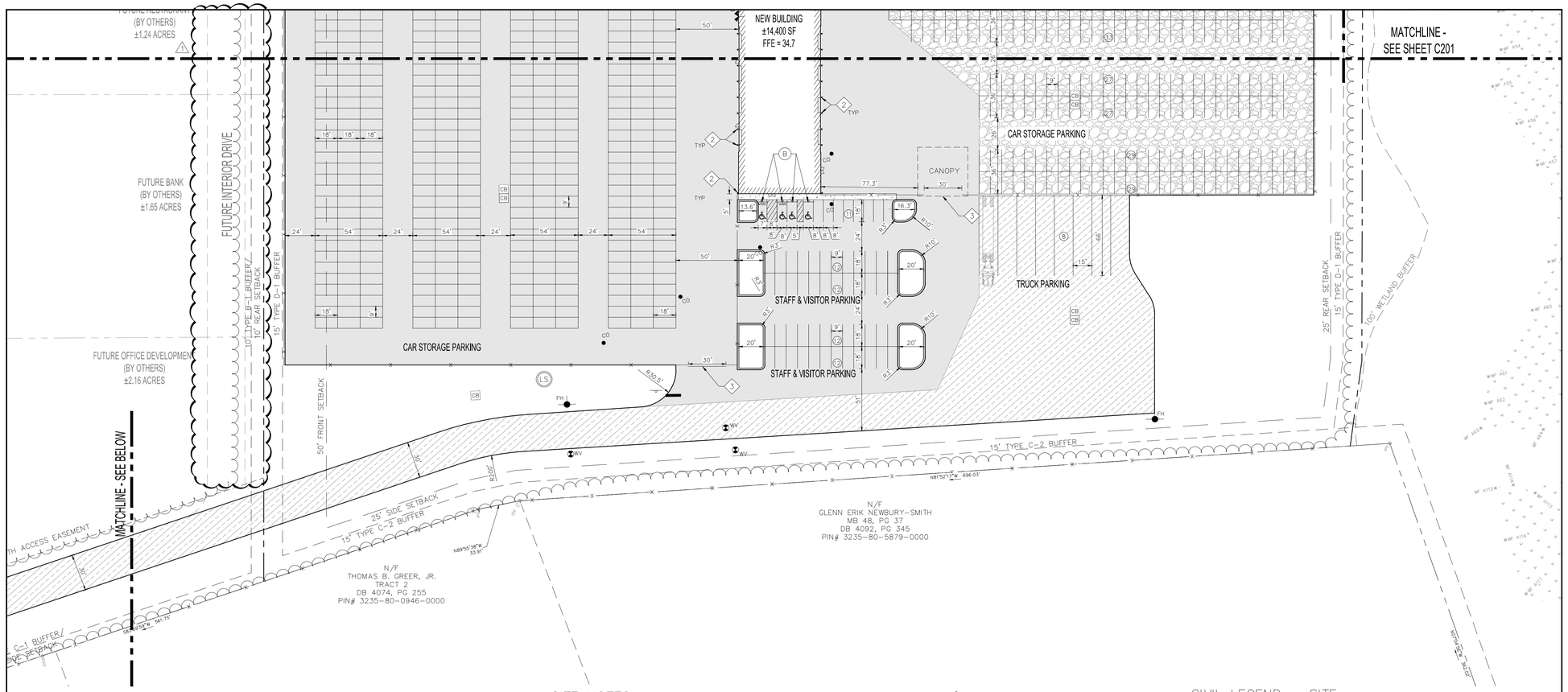
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SITE PLAN - AREA 1

C201



SITE NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. ALL STRIPING AND MARKINGS WITHIN THE RIGHT-OF-WAY SHALL BE REFLECTIVE THERMOPLASTIC IAW NCDOT SPECIFICATIONS.
3. SEE SHEET C610 FOR TRAFFIC CONTROL DETAILS.
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JOINT LEGEND:

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—TEEJ— THICKENED EDGE EXPANSION JOINT– INSTALL IAW DETAIL I/C620.
—EJ— EXPANSION JOINT – INSTALL IAW DETAIL I/C620.
—R— REINFORCED SLAB – INSTALL IAW DETAIL I/C620.
—DJ— DOWELED CONSTRUCTION JOINT – INSTALL IAW DETAIL I/C620.
—TE— THICKENED EDGE – INSTALL IAW DETAIL I/C620.

KEYNOTES:

1. TIE NEW PAVEMENT INTO EXISTING PAVEMENT IAW DETAIL D/C620.
2. INSTALL NEW BOLLARD IAW DETAIL C/C621.
3. INSTALL NEW AUTOMATIC VEHICULAR ACCESS SLIDING GATE IAW DETAIL A/C622.

TBM TABLE

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- GRAVEL PAVEMENT – INSTALL IAW DETAIL E/C620.
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- (25) PARKING SPACES – STRIPE WITH 4" SINGLE WHITE SOLID LINE
- NEW TRAFFIC SIGN – INSTALL PER PLAN AND IAW DETAILS A/C621.
- x 6' HIGH CHAIN LINK FENCE – IAW DETAIL A/C622.
- PROPERTY LINE

HORIZONTAL SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
MARCUS K. BARTHELMY, II
08/08/2023

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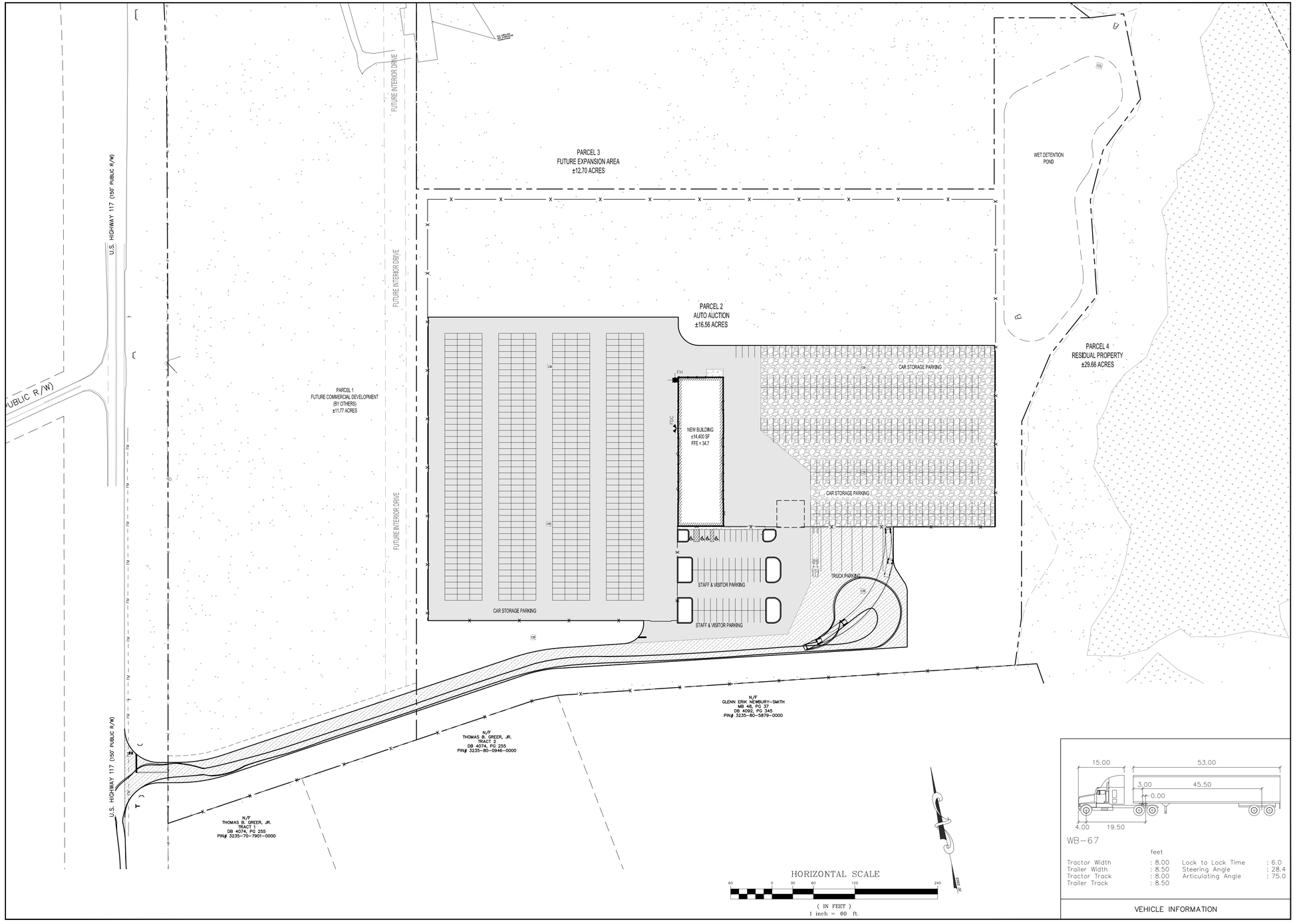
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SITE PLAN - AREA 2

C202



VEHICLE INFORMATION

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
S.E.A.
027779
ENGINEER
MAREECE K. BARTHEAM, IV
07/21/2023

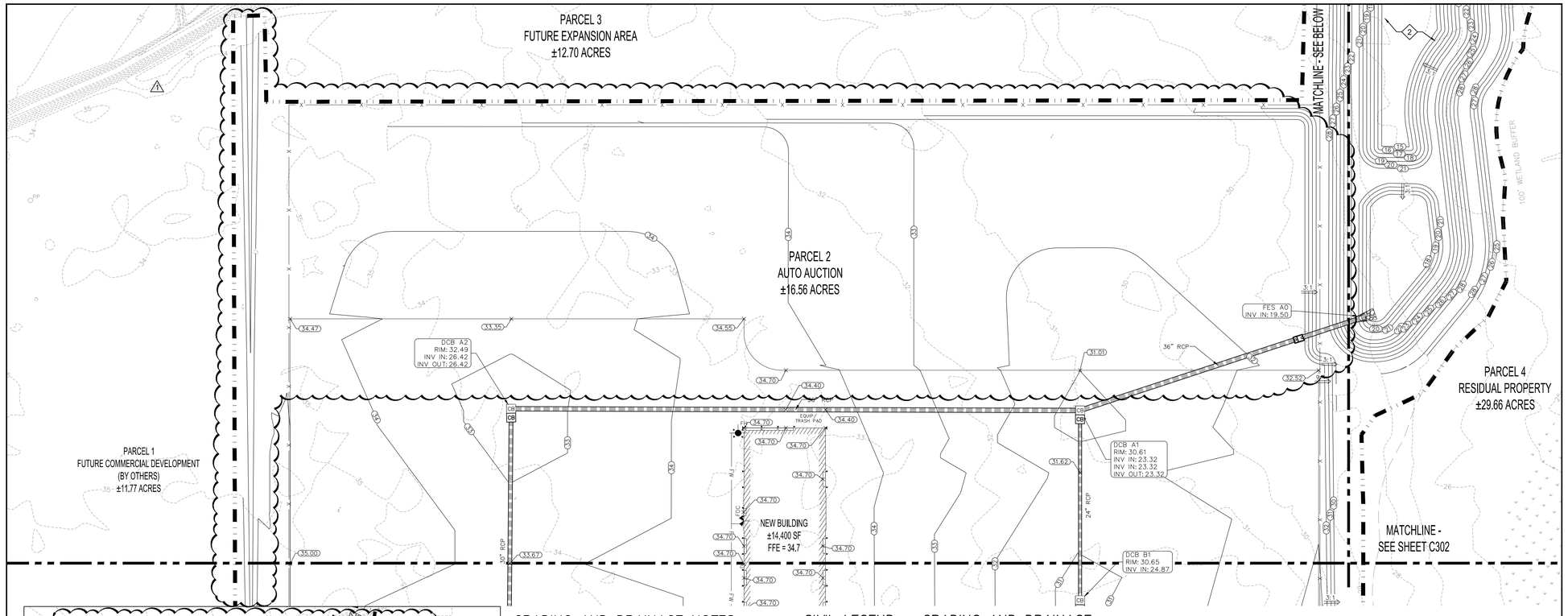
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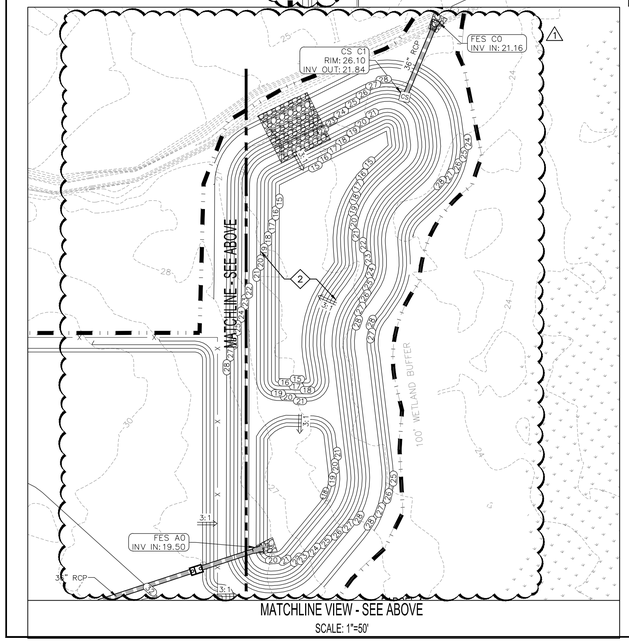
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AUTOTURN PLAN

C220





MATCHLINE VIEW - SEE ABOVE
SCALE: 1"=50'

GRADING AND DRAINAGE NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. GENERAL CONTRACTOR SHALL COORDINATE ALL SITE UTILITIES AND STORM DRAINAGE INSTALLATION SCHEDULES TO AVOID POTENTIAL UTILITY CONFLICTS. GRAVITY DEPENDENT UTILITIES SHALL BE INSTALLED PRIOR TO NON-GRAVITY DEPENDENT UTILITIES.
3. ADJUST EXISTING STORM AND UTILITY COVERS TO FINISH GRADE.
4. STORM DRAINAGE PIPING SHALL ENTER THE SIDES OF DRAINAGE STRUCTURES. NO CORNER PENETRATIONS ARE ALLOWED.
5. CLEAN OUT ALL SEDIMENT AND DEBRIS FROM ALL NEW STORM DRAINAGE PIPES AND STRUCTURES.
6. SEE SHEET C310 FOR STORM DRAINAGE PROFILES. SEE SHEET C320 FOR POND OUTFALL STORM DRAINAGE PROFILE.

KEYNOTES: ◇

1. MATCH EXISTING PAVEMENT ELEVATIONS.
2. INSTALL NEW WET DETENTION POND IAW DETAIL B/C320.

CIVIL LEGEND – GRADING AND DRAINAGE

CB	CATCH BASIN – INSTALL IAW DETAIL B/C630.
CB CB	DOUBLE CATCH BASIN – INSTALL IAW DETAIL E/C630.
CS	CONTROL STRUCTURE – INSTALL IAW DETAIL A/C320.
	STORM DRAINAGE PIPE (SEE PROFILE FOR SLOPE AND MATERIAL) – INSTALL IAW DETAIL F/C630.
DS	DOWNSPOUT – INSTALL IAW ARCHITECTURAL PLANS.
	OIL WATER SEPARATOR (3,000 GAL) – INSTALL IAW DETAIL A/C631.
	HEADWALL – INSTALL IAW DETAIL C/C630.
	FLARED END SECTION – INSTALL IAW DETAIL D/C630.
20.00	NEW FINISHED GRADE SPOT ELEVATION
11	NEW FINISHED CONTOUR
X 14.00	EXISTING GRADE SPOT
19	EXISTING GRADE CONTOUR
	DRAINAGE FLOW ARROW
	SWALE – INSTALL IAW DETAIL G/C630.
3:1	SLOPE AND SLOPE DIRECTION
	PERMANENT RIP RAP APRON – INSTALL IAW DETAIL E/C742.
	EMERGENCY SPILLWAY – INSTALL IAW DETAIL C/C320.
	±PROPERTY LINE
	±LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE

HORIZONTAL SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

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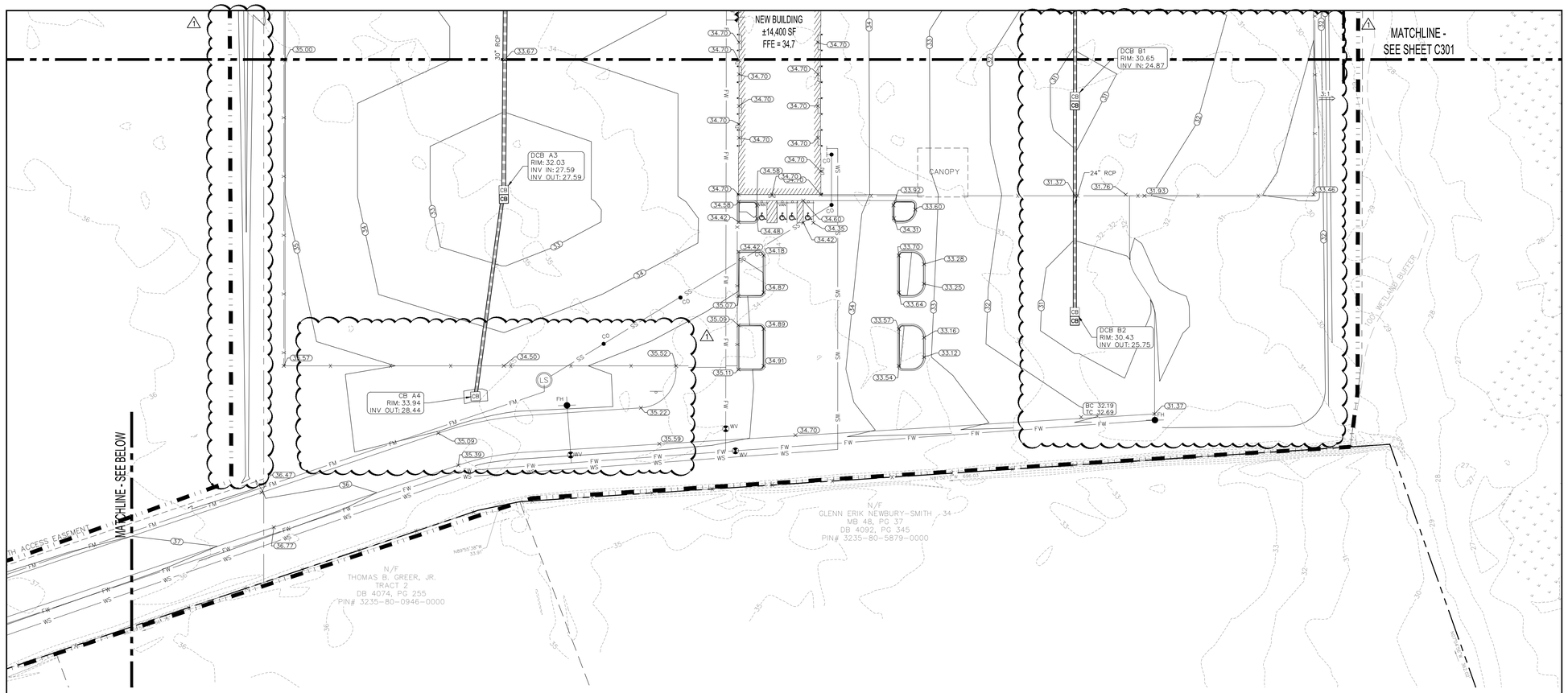
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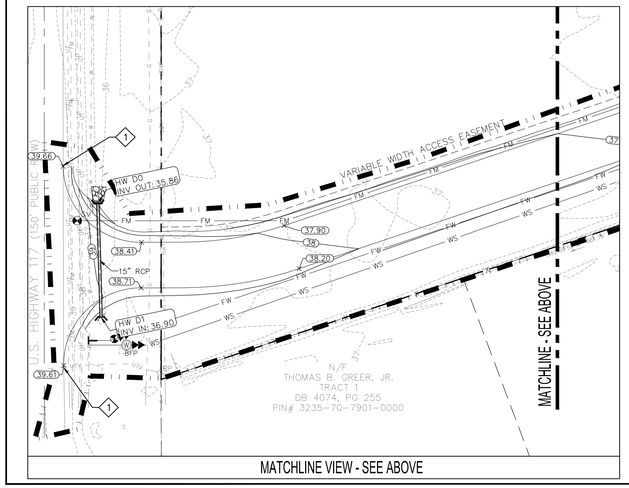
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GRADING AND STORM DRAINAGE PLAN - AREA 1

C301





MATCHLINE VIEW - SEE ABOVE

GRADING AND DRAINAGE NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. GENERAL CONTRACTOR SHALL COORDINATE ALL SITE UTILITIES AND STORM DRAINAGE INSTALLATION SCHEDULES TO AVOID POTENTIAL UTILITY CONFLICTS. GRAVITY DEPENDENT UTILITIES SHALL BE INSTALLED PRIOR TO NON-GRAVITY DEPENDENT UTILITIES.
3. ADJUST EXISTING STORM AND UTILITY COVERS TO FINISH GRADE.
4. STORM DRAINAGE PIPING SHALL ENTER THE SIDES OF DRAINAGE STRUCTURES. NO CORNER PENETRATIONS ARE ALLOWED.
5. CLEAN OUT ALL SEDIMENT AND DEBRIS FROM ALL NEW STORM DRAINAGE PIPES AND STRUCTURES.
6. SEE SHEET C310 FOR STORM DRAINAGE PROFILES. SEE SHEET C320 FOR POND OUTFALL STORM DRAINAGE PROFILE.

KEYNOTES: ◇

1. MATCH EXISTING PAVEMENT ELEVATIONS.
2. INSTALL NEW WET DETENTION POND IAW DETAIL B/C320.

CIVIL LEGEND – GRADING AND DRAINAGE

CB	CATCH BASIN – INSTALL IAW DETAIL B/C630.
CB CB	DOUBLE CATCH BASIN – INSTALL IAW DETAIL E/C630.
CS	CONTROL STRUCTURE – INSTALL IAW DETAIL A/C320.
	STORM DRAINAGE PIPE (SEE PROFILE FOR SLOPE AND MATERIAL) – INSTALL IAW DETAIL F/C630.
DS	DOWNSPOUT – INSTALL IAW ARCHITECTURAL PLANS.
	OIL WATER SEPARATOR (3,000 GAL) – INSTALL IAW DETAIL A/C631.
	HEADWALL – INSTALL IAW DETAIL C/C630.
	FLARED END SECTION – INSTALL IAW DETAIL D/C630.
20.00	NEW FINISHED GRADE SPOT ELEVATION
11	NEW FINISHED CONTOUR
X 14.00	EXISTING GRADE SPOT
19	EXISTING GRADE CONTOUR
	DRAINAGE FLOW ARROW
	SWALE – INSTALL IAW DETAIL G/C630.
3:1	SLOPE AND SLOPE DIRECTION
	PERMANENT RIP RAP APRON – INSTALL IAW DETAIL E/C742.
	EMERGENCY SPILLWAY – INSTALL IAW DETAIL C/C320.
	±PROPERTY LINE
	±LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
MARESCK K. BARTHELEMY, IV
08/08/2023

ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
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NC COA #C-1572

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GRADING AND STORM DRAINAGE PLAN - AREA 2

C302

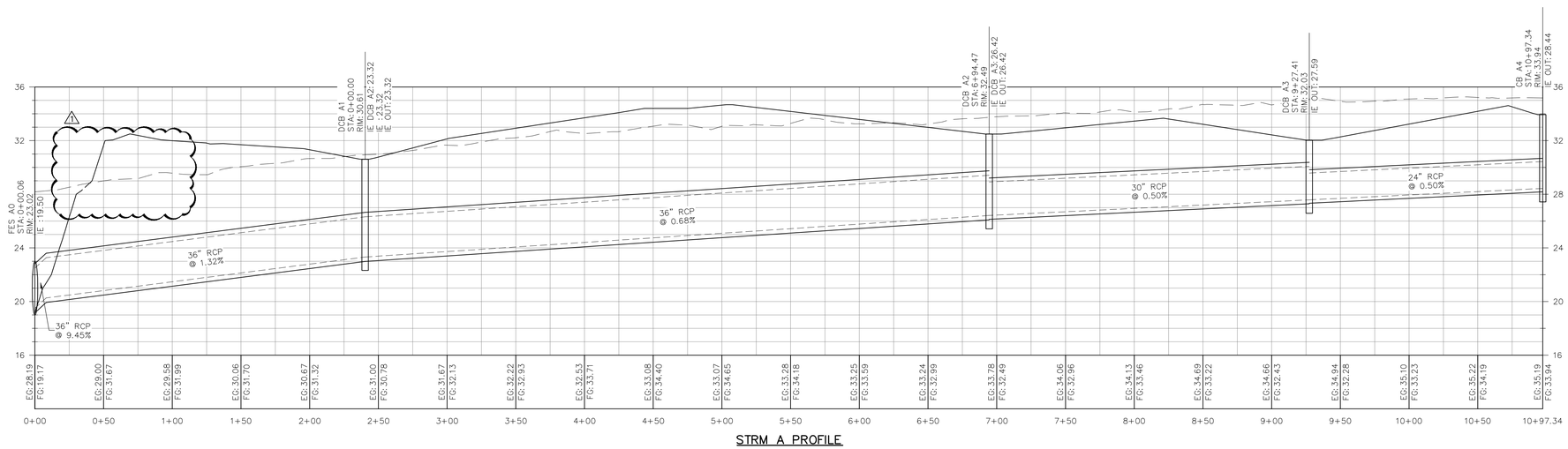
STORM DRAINAGE PROFILE NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.

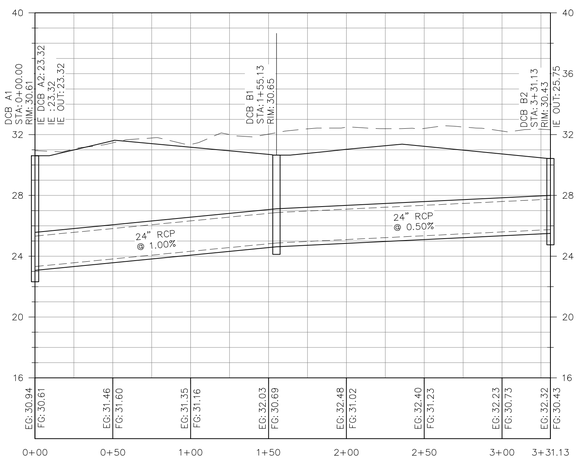
DRAINAGE PROFILE LEGEND:

EXISTING GRADE

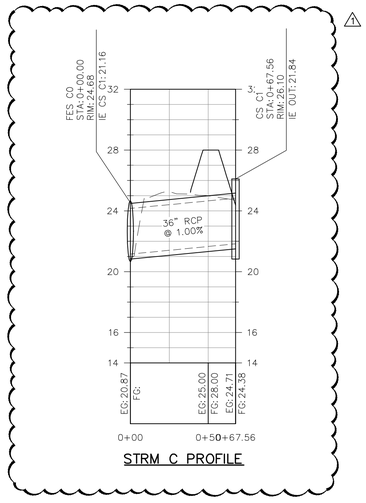
FINISHED GRADE



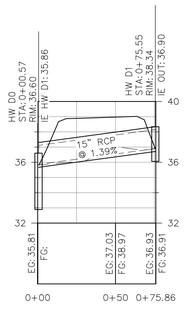
STRM A PROFILE



STRM B PROFILE



STRM C PROFILE



STRM D PROFILE

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

VERTICAL SCALE

4 0 2 4 8 16

(IN FEET)
1 inch = 4 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
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SEAL
027779
ENGINEER
LAWRENCE K. BARTHELMES
08/08/2023

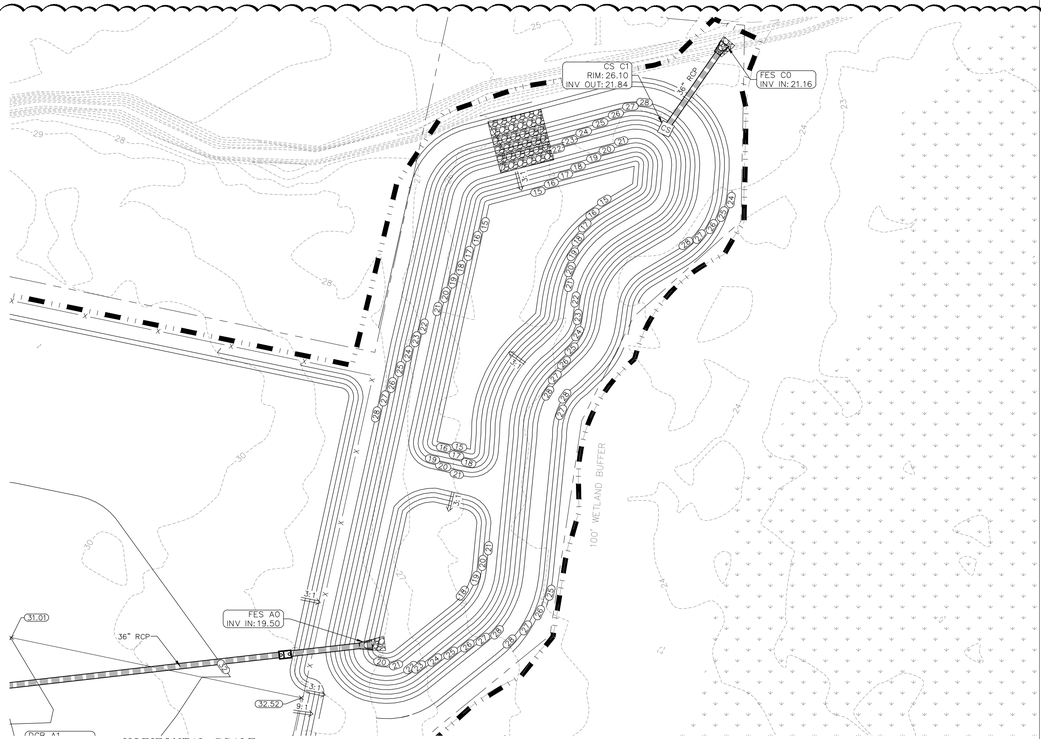
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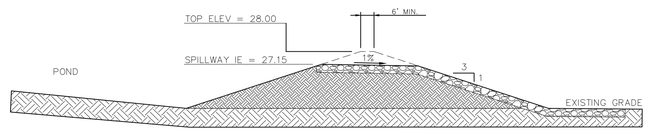
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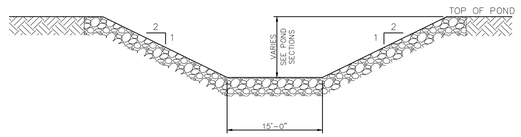
STORM DRAINAGE PROFILES

C310





SPILLWAY ELEVATION

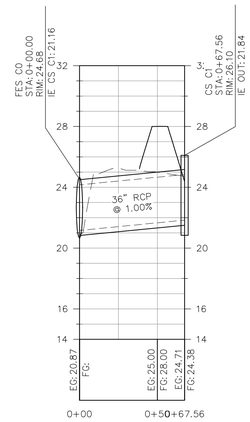


(OW) OVER FLOW WEIR SECTION

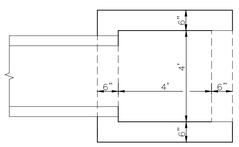
Pond 1 - Permanent Pool Volume Information

Stage (ft)	Area (Ac)	Forebay Area (sf)	Main Pool Area (sf)	Permanent Pool Area (sf)	Forebay Stage Volume (cf)	Forebay Cum. Volume (cf)	Perm. Pool Stage Volume (cf)	Perm. Pool Cum. Volume (cf)
15	0.15		6,730	6,730	0	0	0	0
16	0.19		8,275	8,275	0	0	7,503	7,503
17	0.23		9,879	9,879	0	0	9,077	16,580
18	0.35	3,909	11,539	15,448	1,955	1,955	12,664	29,243
19	0.41	4,727	13,255	17,982	4,319	6,273	16,715	45,958
20	0.47	5,602	15,028	20,630	5,165	11,437	19,306	65,264
21	0.54	6,534	16,857	23,391	6,068	17,505	22,011	87,275
21.5	0.60	7,522	18,744	26,266	3,514	21,019	12,414	99,689

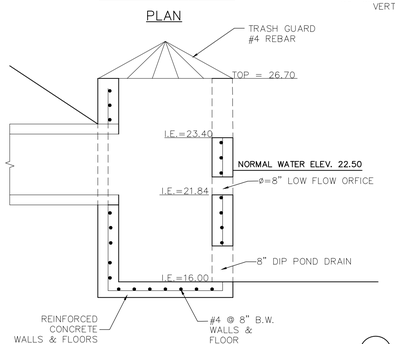
POND INFORMATION				
STAGE (FT)	AREA (AC)	AREA (SF)	STAGE VOLUME (cf)	CUM. VOLUME (cf)
22	0.685	29838	0	0
23	0.749	32605	31208	31208
24	0.813	35428	34003	65211
25	0.879	38308	36855	102066
26	0.947	41244	39763	141829
27	1.016	44237	42727	184557
28	1.086	47286	45748	230305



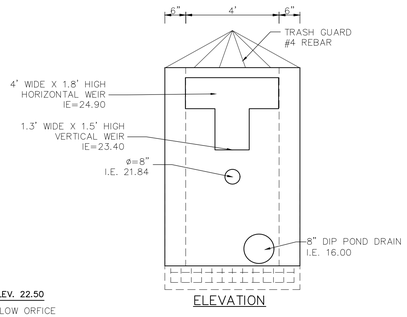
STRM C PROFILE



PLAN

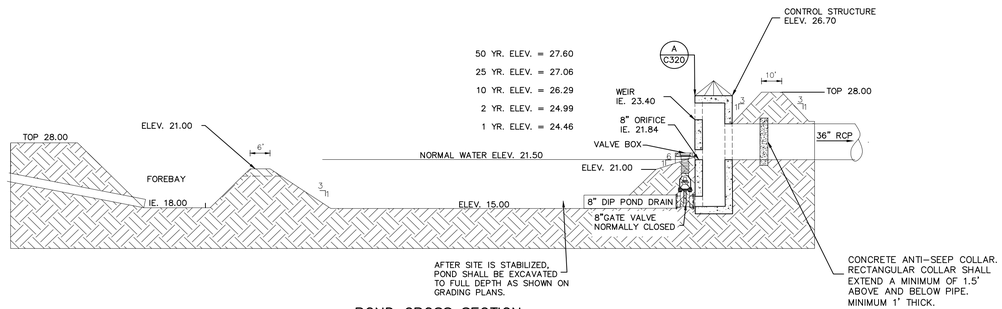


SECTION



ELEVATION

(A) POND OUTLET CONTROL STRUCTURE
NOT TO SCALE



POND CROSS SECTION

(B) WET POND SECTION
NOT TO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL 027779
ENGINEER
MARIECK K. BARTHELEMY, II
08/08/2023

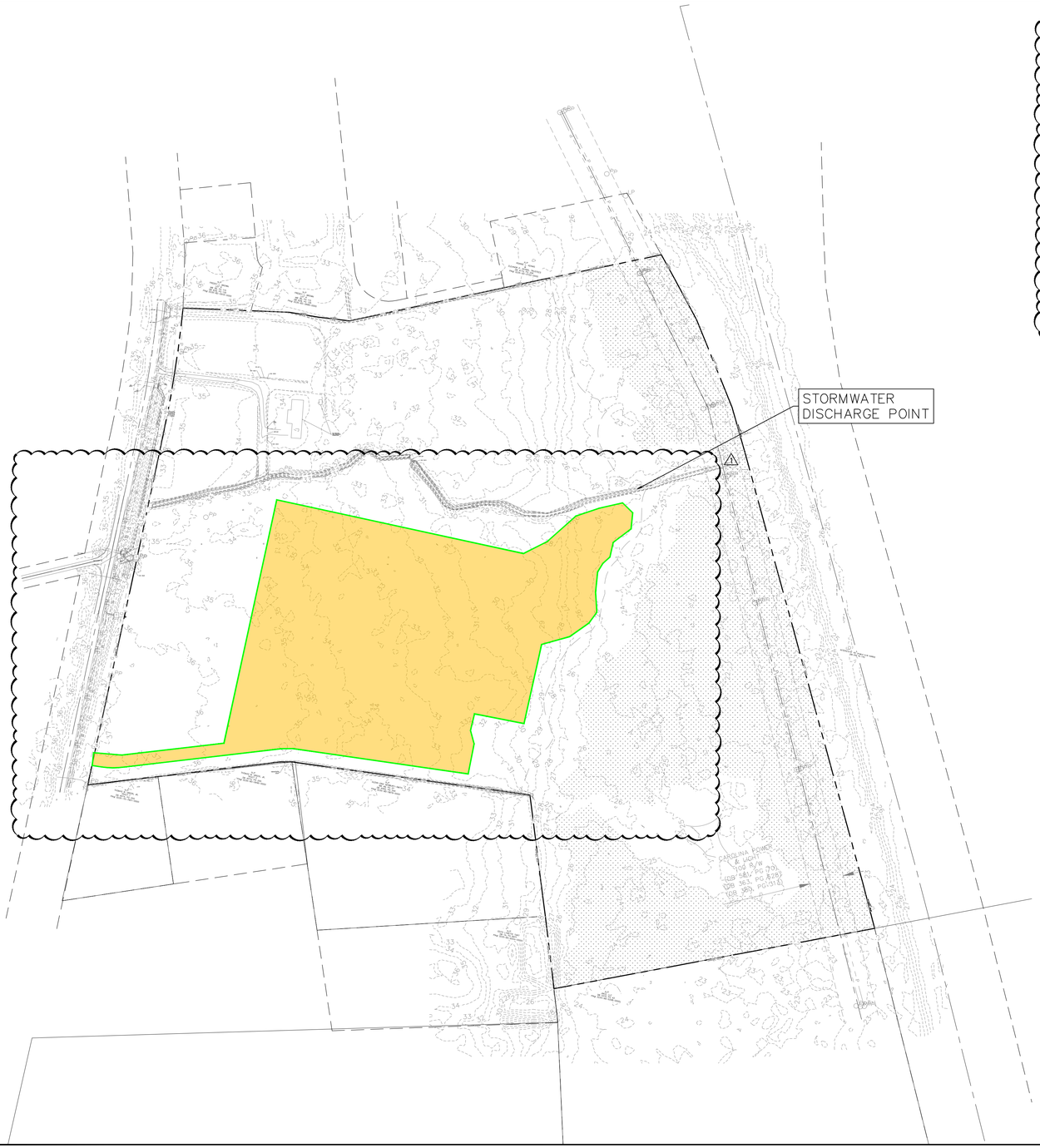
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STORMWATER POND PLAN

C320



PRE-DEVELOPMENT CONDITIONS:	
BASIN	PRE BASIN
TOTAL AREA (AC)	14.60
IMPERVIOUS AREA (PVMT/BLDG)	0.00
PERVIOUS AREA (AC)	14.60
STORMWATER RUNOFF	
POI	PRE BASIN
1-YR (CFS)	7.1
2-YR (CFS)	13.4
10-YR (CFS)	39.0
25-YR (CFS)	60.1
50-YR (CFS)	79.9
WEIGHTED CN	60
Tc (MIN.)	22.6
SHEET FLOW	
N-VALUE	0.24
LENGTH (FT)	100
SLOPE %	0.6
SHALLOW FLOW	
LENGTH (FT)	218
SLOPE %	0.3
PAVED/UNPAVED	Unpaved
CHANNEL FLOW	
CHANNEL SLOPE	0.8
N-VALUE	0.015
LENGTH (FT)	1805

1

CIVIL LEGEND – DRAINAGE AREA:

DRAINAGE AREA LIMITS

IMPERVIOUS AREA

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
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ENGINEER
MARCUS K. BARTHELEMY, II
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DRAINAGE AREA PLAN - PRE-DEVELOPMENT

C330



POST-DEVELOPMENT CONDITONS:	
BASIN	POST BASIN
TOTAL AREA (AC)	14.60
IMPERVIOUS AREA (PVMT/BLDG)	12.22
PERVIOUS AREA (AC)	2.38
STORMWATER RUNOFF	
POI	POST BASIN
1-YR (CFS)	6.8
2-YR (CFS)	11.2
10-YR (CFS)	38.9
25-YR (CFS)	59.8
50-YR (CFS)	83.5
WEIGHTED CN	92
Tc (MIN.)	11.5
SHEET FLOW	
N-VALUE	0.011
LENGTH (FT)	100
SLOPE %	1.0
SHALLOW FLOW	
LENGTH (FT)	300
SLOPE %	0.5
PAVED/UNPAVED	Paved
CHANNEL FLOW	
CHANNEL SLOPE	0.8
N-VALUE	0.015
LENGTH (FT)	660

CIVIL LEGEND – DRAINAGE AREA:

DRAINAGE AREA LIMITS

IMPERVIOUS AREA

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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Greenville, South Carolina

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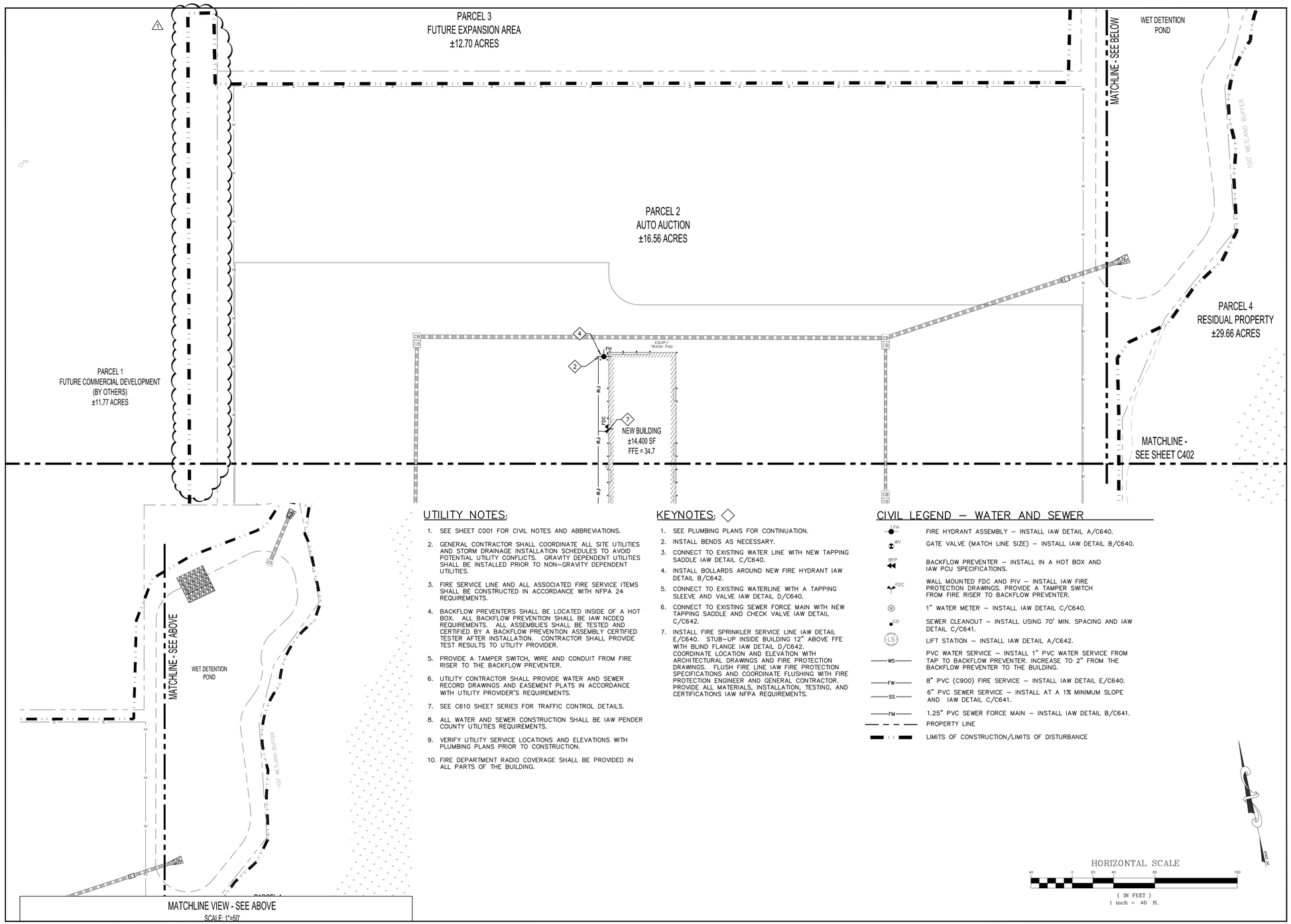
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DRAINAGE AREA PLAN-POST-DEVELOPMENT

C331



UTILITY NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. GENERAL CONTRACTOR SHALL COORDINATE ALL SITE UTILITIES AND STORM DRAINAGE INSTALLATION SCHEDULES TO AVOID POTENTIAL UTILITY CONFLICTS. GRAVITY DEPENDENT UTILITIES SHALL BE INSTALLED PRIOR TO NON-GRAVITY DEPENDENT UTILITIES.
3. FIRE SERVICE LINE AND ALL ASSOCIATED FIRE SERVICE ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH NFPA 24 REQUIREMENTS.
4. BACKFLOW PREVENTERS SHALL BE LOCATED INSIDE OF A HOT BOX. ALL BACKFLOW PREVENTION SHALL BE IAW NCDEQ REQUIREMENTS. ALL ASSEMBLIES SHALL BE TESTED AND CERTIFIED BY A BACKFLOW PREVENTION ASSEMBLY CERTIFIED TESTER AFTER INSTALLATION. CONTRACTOR SHALL PROVIDE TEST RESULTS TO UTILITY PROVIDER.
5. PROVIDE A TAMPER SWITCH, WIRE AND CONDUIT FROM FIRE RISER TO THE BACKFLOW PREVENTER.
6. UTILITY CONTRACTOR SHALL PROVIDE WATER AND SEWER RECORD DRAWINGS AND EASEMENT PLATS IN ACCORDANCE WITH UTILITY PROVIDER'S REQUIREMENTS.
7. SEE C610 SHEET SERIES FOR TRAFFIC CONTROL DETAILS.
8. ALL WATER AND SEWER CONSTRUCTION SHALL BE IAW PENDER COUNTY UTILITIES REQUIREMENTS.
9. VERIFY UTILITY SERVICE LOCATIONS AND ELEVATIONS WITH PLUMBING PLANS PRIOR TO CONSTRUCTION.
10. FIRE DEPARTMENT RADIO COVERAGE SHALL BE PROVIDED IN ALL PARTS OF THE BUILDING.

KEYNOTES: ◇

1. SEE PLUMBING PLANS FOR CONTINUATION.
2. INSTALL BENDS AS NECESSARY.
3. CONNECT TO EXISTING WATER LINE WITH NEW TAPPING SADDLE IAW DETAIL C/C640.
4. INSTALL BOLLARDS AROUND NEW FIRE HYDRANT IAW DETAIL B/C642.
5. CONNECT TO EXISTING WATERLINE WITH A TAPPING SLEEVE AND VALVE IAW DETAIL D/C640.
6. CONNECT TO EXISTING SEWER FORCE MAIN WITH NEW TAPPING SADDLE AND CHECK VALVE IAW DETAIL C/C642.
7. INSTALL FIRE SPRINKLER SERVICE LINE IAW DETAIL E/C640. STUB-UP INSIDE BUILDING 12" ABOVE FFE WITH BLIND FLANGE IAW DETAIL D/C642. COORDINATE LOCATION AND ELEVATION WITH ARCHITECTURAL DRAWINGS AND FIRE PROTECTION DRAWINGS. FLUSH FIRE LINE IAW FIRE PROTECTION SPECIFICATIONS AND COORDINATE FLUSHING WITH FIRE PROTECTION ENGINEER AND GENERAL CONTRACTOR. PROVIDE ALL MATERIALS, INSTALLATION, TESTING, AND CERTIFICATIONS IAW NFPA REQUIREMENTS.

CIVIL LEGEND – WATER AND SEWER

FH	FIRE HYDRANT ASSEMBLY – INSTALL IAW DETAIL A/C640.
WV	GATE VALVE (MATCH LINE SIZE) – INSTALL IAW DETAIL B/C640.
BFP	BACKFLOW PREVENTER – INSTALL IN A HOT BOX AND IAW PCU SPECIFICATIONS.
FDC	WALL MOUNTED FDC AND PIV – INSTALL IAW FIRE PROTECTION DRAWINGS. PROVIDE A TAMPER SWITCH FROM FIRE RISER TO BACKFLOW PREVENTER.
W	1" WATER METER – INSTALL IAW DETAIL C/C640.
CO	SEWER CLEANOUT – INSTALL USING 70° MIN. SPACING AND IAW DETAIL C/C641.
LS	LIFT STATION – INSTALL IAW DETAIL A/C642.
WS	PVC WATER SERVICE – INSTALL 1" PVC WATER SERVICE FROM TAP TO BACKFLOW PREVENTER. INCREASE TO 2" FROM THE BACKFLOW PREVENTER TO THE BUILDING.
FW	8" PVC (C900) FIRE SERVICE – INSTALL IAW DETAIL E/C640.
SS	6" PVC SEWER SERVICE – INSTALL AT A 1% MINIMUM SLOPE AND IAW DETAIL C/C641.
FM	1.25" PVC SEWER FORCE MAIN – INSTALL IAW DETAIL B/C641.
	PROPERTY LINE
	LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE

HORIZONTAL SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

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ROCKY POINT
NORTH CAROLINA

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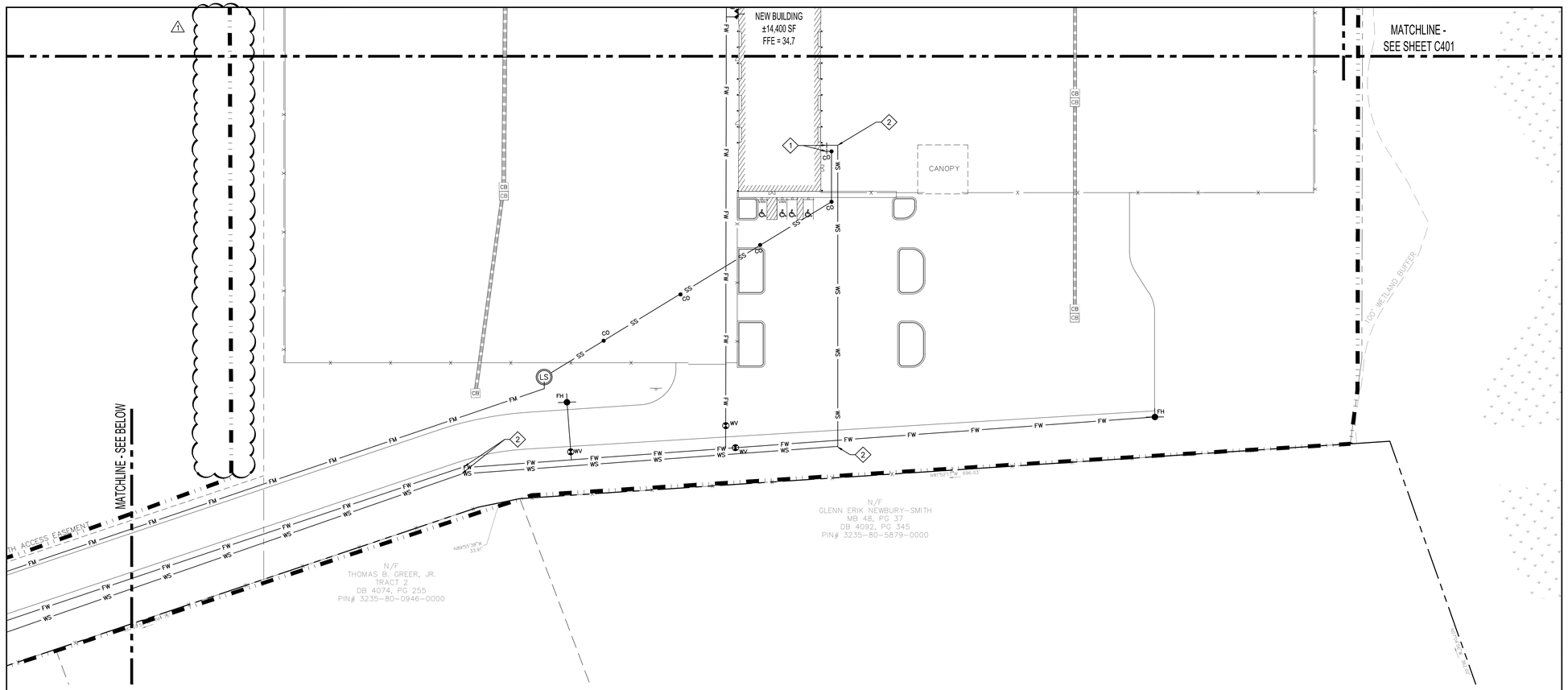
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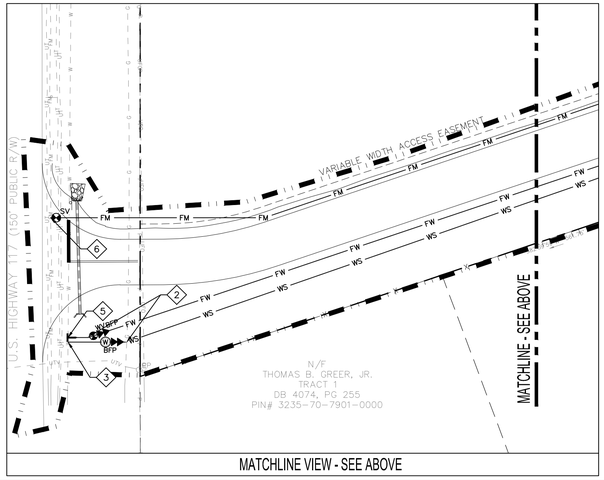
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UTILITY PLAN - AREA 1

C401





MATCHLINE VIEW - SEE ABOVE

UTILITY NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. GENERAL CONTRACTOR SHALL COORDINATE ALL SITE UTILITIES AND STORM DRAINAGE INSTALLATION SCHEDULES TO AVOID POTENTIAL UTILITY CONFLICTS. GRAVITY DEPENDENT UTILITIES SHALL BE INSTALLED PRIOR TO NON-GRAVITY DEPENDENT UTILITIES.
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5. PROVIDE A TAMPER SWITCH, WIRE AND CONDUIT FROM FIRE RISER TO THE BACKFLOW PREVENTER.
6. UTILITY CONTRACTOR SHALL PROVIDE WATER AND SEWER RECORD DRAWINGS AND EASEMENT PLATS IN ACCORDANCE WITH UTILITY PROVIDER'S REQUIREMENTS.
7. SEE C610 SHEET SERIES FOR TRAFFIC CONTROL DETAILS.
8. ALL WATER AND SEWER CONSTRUCTION SHALL BE IAW PENDER COUNTY UTILITIES REQUIREMENTS.
9. VERIFY UTILITY SERVICE LOCATIONS AND ELEVATIONS WITH PLUMBING PLANS PRIOR TO CONSTRUCTION.
10. FIRE DEPARTMENT RADIO COVERAGE SHALL BE PROVIDED IN ALL PARTS OF THE BUILDING.

KEYNOTES: ◇

1. SEE PLUMBING PLANS FOR CONTINUATION.
2. INSTALL BENDS AS NECESSARY.
3. CONNECT TO EXISTING WATER LINE WITH NEW TAPPING SADDLE IAW DETAIL C/C640.
4. INSTALL BOLLARDS AROUND NEW FIRE HYDRANT IAW DETAIL B/C642.
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CIVIL LEGEND – WATER AND SEWER

FH	FIRE HYDRANT ASSEMBLY – INSTALL IAW DETAIL A/C640.
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	PROPERTY LINE
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HORIZONTAL SCALE

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(IN FEET)
1 inch = 40 ft.

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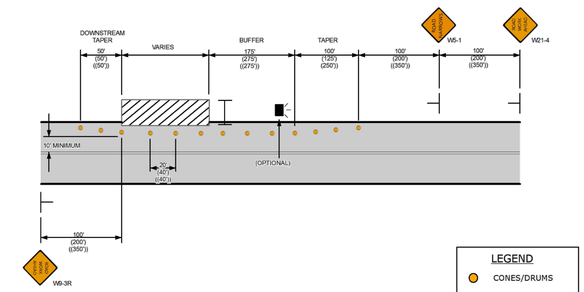
REVISION:

1	GENERAL REVISIONS	08/08/2023

UTILITY PLAN - AREA 2

C402

DIAGRAM 4
WORK AREA ON SHOULDER
(MINOR ENCROACHMENT ON PAVEMENT)



NOTES:

1. SPACING - 25 M.P.H OR LESS
   (SPACING) - 30 & 35 M.P.H.
   ((SPACING)) - 40 M.P.H. OR MORE

2. TYPE III BARRICADE REQUIRED AT ALL TIMES.

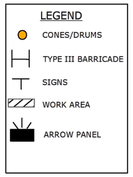
3. NO ADVANCED SIGNAGE REQUIRED IF 6' OR MORE OF CLEARANCE IS MAINTAINED FROM EDGE OF PAVEMENT.

4. WHEN EXCAVATING WITHIN 4' OF THE EDGE OF VEMENT, THE ADJACENT LANE SHOULD BE CLOSED TO TRAFFIC USING OTHER APPLICABLE DIAGRAMS UNLESS BRACING OR SHORING IS USED.

5. IF BIKE LANE IS PRESENT THE PROPER CLOSURE IS REQUIRED USING SIGNS AND CONES REFER TO DIAGRAM 31.

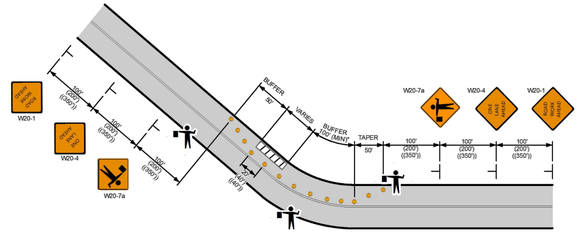
56

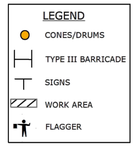




57

DIAGRAM 9
2 WAY, ONE LANE TRAFFIC
(FLAGGER CONTROL)





NOTES:

1. SPACING - 25 M.P.H OR LESS
   (SPACING) - 30 & 35 M.P.H.
   ((SPACING)) - 40 M.P.H. OR MORE

2. *BUFFER SHALL EXTEND BACK TO THE BEGINNING OF THE CURVE OR HILL TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE APPROACHING TRAFFIC.

3. ON LOW VOLUME, RESIDENTIAL STREETS WHERE THERE IS ADEQUATE VISIBILITY, A SINGLE FLAGGER POSITIONED AS SHOWN MAY BE ACCEPTABLE.

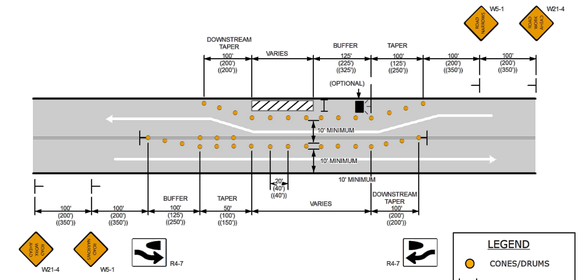
4. IF WORK IS WITHIN 50' OF AN INTERSECTION SEE DIAGRAM 10 OR 11.

5. IF BIKE LANE IS PRESENT THE PROPER CLOSURE IS REQUIRED USING SIGNS AND CONES REFER TO DIAGRAM 31.

66

67

DIAGRAM 6
WORK AREA IN TRAVEL LANE
(MAINTAINING 2-WAY TRAFFIC)



NOTES:

1. SPACING - 25 M.P.H OR LESS
   (SPACING) - 30 & 35 M.P.H.
   ((SPACING)) - 40 M.P.H. OR MORE

2. TYPE III BARRICADE REQUIRED AT ALL TIMES.

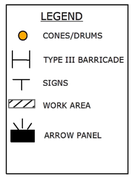
3. IF CLOSURE IS LONG-TERM (SEE SECTION 17), PAVEMENT MARKING SHALL BE REVISED TO MATCH THE TRAFFIC PATTERN. DRUMS ON CENTERLINE ARE NOT REQUIRED IF PAVEMENT MARKINGS ARE REVISED.

4. WHEN EXCAVATING WITHIN 4' OF THE EDGE OF VEMENT, THE ADJACENT LANE SHOULD BE CLOSED TO TRAFFIC USING OTHER APPLICABLE DIAGRAMS UNLESS BRACING OR SHORING IS USED.

5. IF BIKE LANE IS PRESENT THE PROPER CLOSURE IS REQUIRED USING SIGNS AND CONES REFER TO DIAGRAM 31.

60





61

A TRAFFIC CONTROL DETAILS

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
LEWIS K. BARTHOLEMY
07/21/2023

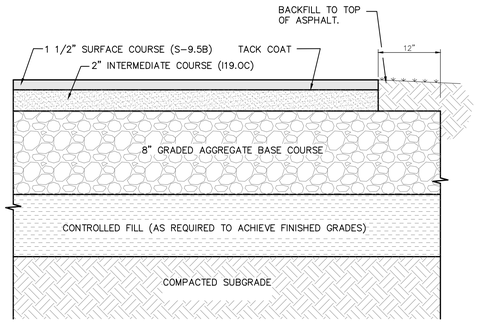
ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

North Carolina 811
www.nc811.org

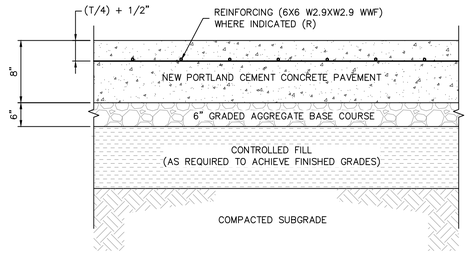
DATE:	07/21/2023
ADC PROJECT #:	22530
DESIGNED:	LKB
CHECKED:	LKB
DRAWN:	LKB
REVISION:	

CIVIL DETAILS
- TRAFFIC CONTROL

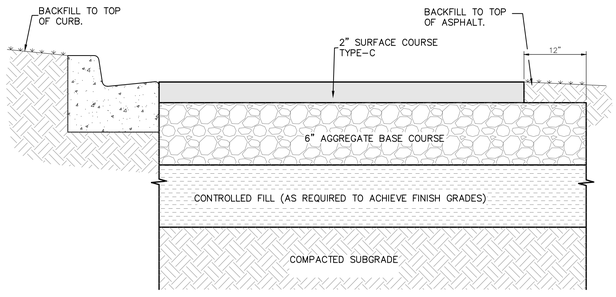
C610



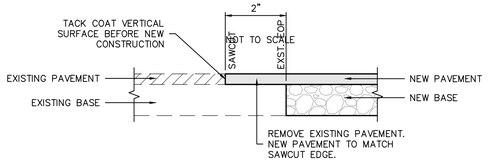
A HEAVY DUTY ASPHALTIC CONCRETE PAVEMENT SECTION
NOT TO SCALE



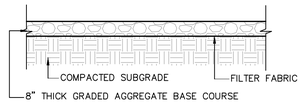
B TYPICAL PORTLAND CEMENT CONCRETE PAVEMENT SECTION



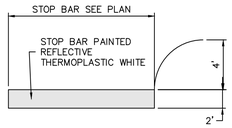
C STANDARD DUTY ASPHALTIC CONCRETE PAVEMENT SECTION



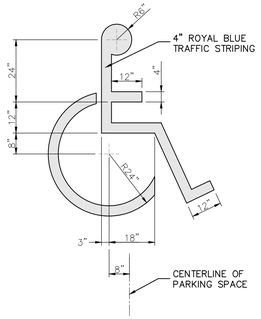
D PAVEMENT TIE-IN TO EXISTING PAVEMENT



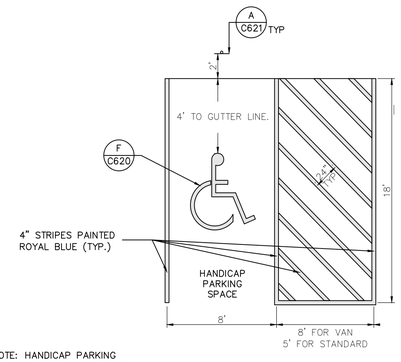
E GRAVEL PAVEMENT



F STOP BAR

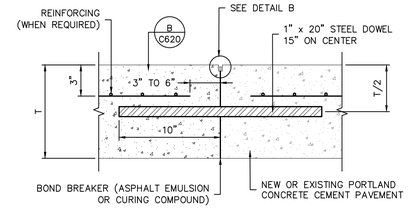


G INTERNATIONAL DISABLED SYMBOL
NOT TO SCALE

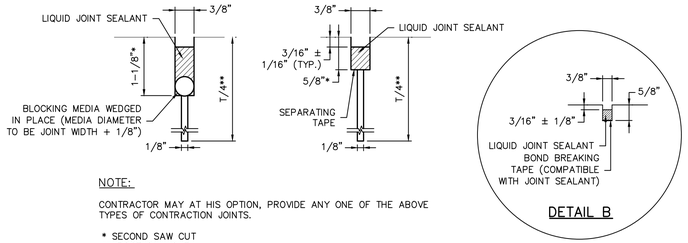


NOTE: HANDICAP PARKING SPACES SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

H HANDICAP PARKING DETAIL
NOT TO SCALE



DOWELLED CONSTRUCTION JOINT (DJ)

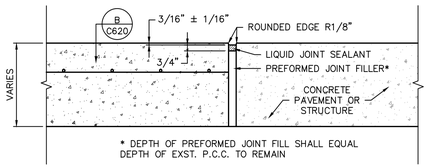


NOTE:

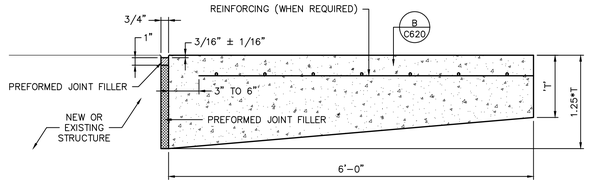
CONTRACTOR MAY AT HIS OPTION, PROVIDE ANY ONE OF THE ABOVE TYPES OF CONTRACTION JOINTS.

* SECOND SAW CUT
** FIRST SAW CUT

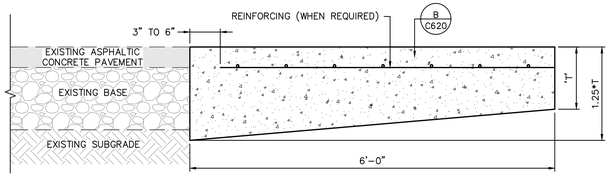
CONTRACTION JOINTS (CJ)
PAVEMENT THICKNESS = T



EXPANSION JOINT (EJ)
PAVEMENT THICKNESS = T



THICKENED EDGE EXPANSION JOINT (TEEJ)
PAVEMENT THICKNESS = T



THICKENED EDGE (TE)
PAVEMENT THICKNESS = T

I PAVEMENT JOINTS

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
LAURENCE K. BARTHELEMY
ENGINEER
07/21/2023

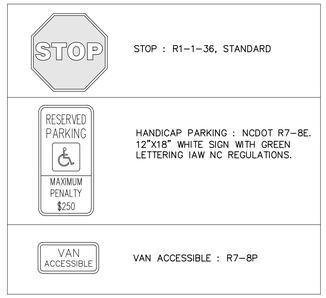
ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

North Carolina 811
www.nc811.org

DATE:	07/21/2023
ADC PROJECT #:	22530
DESIGNED:	LKB
CHECKED:	LKB
DRAWN:	LKB
REVISION:	

CIVIL DETAILS
- PAVEMENT

C620



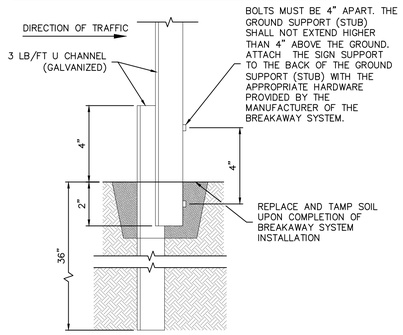
STOP : R1-1-36, STANDARD

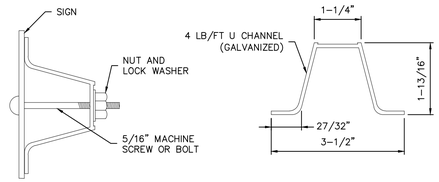
HANDICAP PARKING : NCDOT R7-8E. 12"X18" WHITE SIGN WITH GREEN LETTERING IAW NC REGULATIONS.

VAN ACCESSIBLE : R7-8P

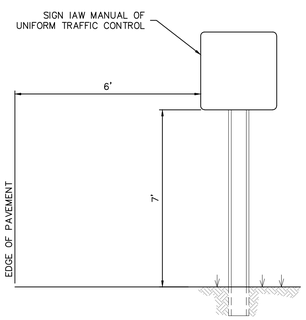
NOTE:

SIGNS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), LATEST EDITION.



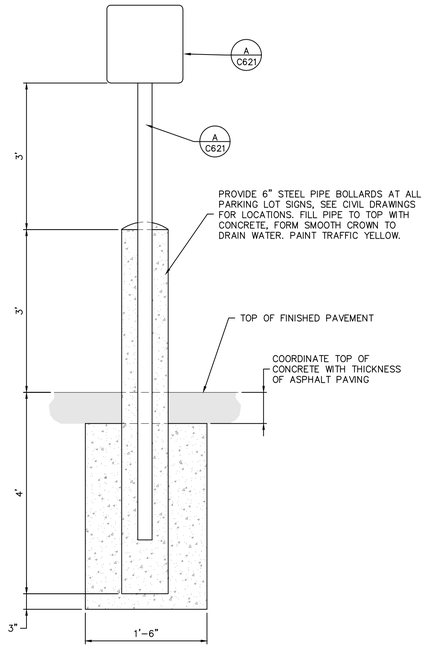


BREAKWAY SIGN POST DETAIL

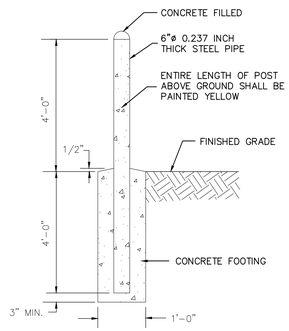


STANDARD SIGN LOCATION DETAIL

A STANDARD SIGN LOCATION DETAIL



B SIGN POST IN BOLLARD
(IN SIDEWALK OR PAVEMENT)



C BOLLARD DETAIL
NOT TO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

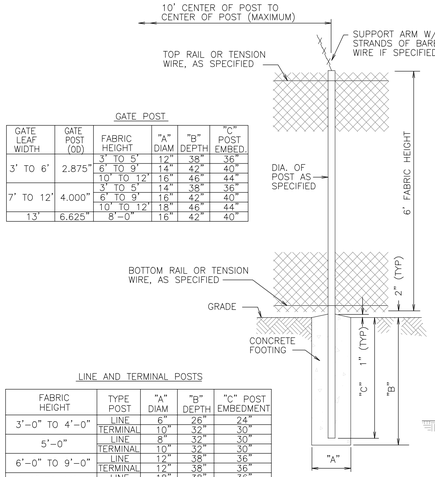


ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

DATE:	07/21/2023
ADC PROJECT #:	22530
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REVISION:	

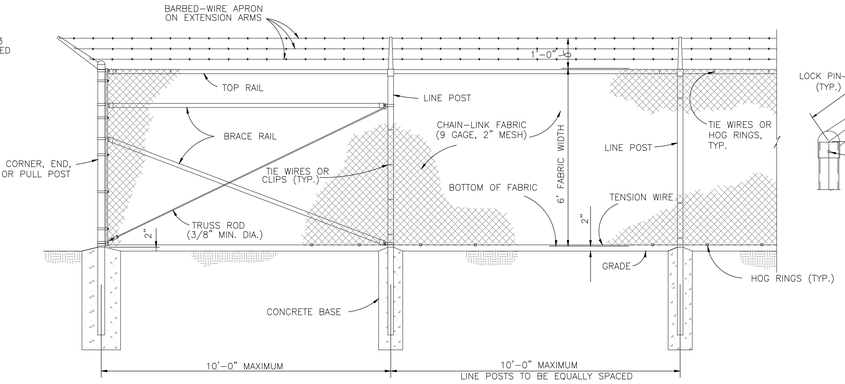
CIVIL DETAILS
- SIGNAGE

C621

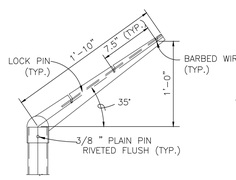


GATE POST

GATE LEAF WIDTH	GATE POST (OD)	FABRIC HEIGHT	"A" DIAM	"B" DEPTH	"C" POST EMBED.
3' TO 6'	2.875"	3' TO 5'	12"	38"	36"
		6' TO 9'	14"	42"	40"
		10' TO 12'	16"	46"	44"
7' TO 12'	4.000"	3' TO 5'	14"	38"	36"
		6' TO 9'	16"	42"	40"
		10' TO 12'	18"	46"	44"
13'	6.625"	8'-0"	16"	42"	40"



CHAIN-LINK SECURITY FENCE DETAIL
N.T.S.



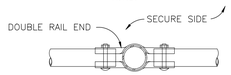
EXTENSION ARM DETAILS
N.T.S.

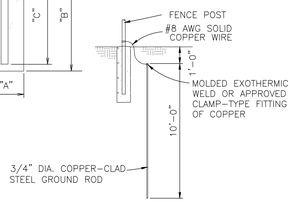
LINE AND TERMINAL POSTS

FABRIC HEIGHT	TYPE POST	"A" DIAM	"B" DEPTH	"C" POST EMBEDMENT
3'-0" TO 4'-0"	LINE	6"	26"	24"
5'-0"	TERMINAL	10"	32"	30"
	LINE	8"	32"	30"
	TERMINAL	10"	32"	30"
6'-0" TO 9'-0"	LINE	12"	38"	36"
	TERMINAL	12"	38"	36"
10'-0" TO 12'-0"	LINE	18"	38"	36"
	TERMINAL	18"	38"	36"
13'-0" TO 18'-0"	LINE	24"	42"	40"
	TERMINAL	24"	42"	40"

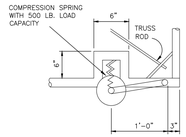
NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND PULL POSTS

CHAIN LINK FENCE FOUNDATION
N.T.S.

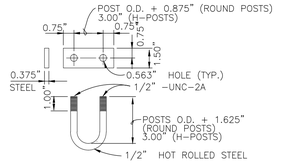


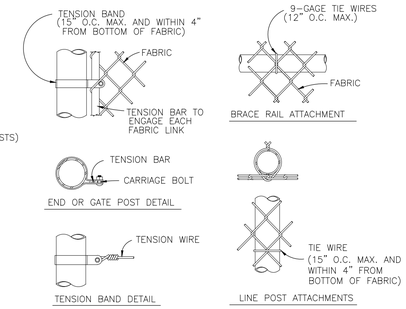


GROUNDING DETAIL
N.T.S.

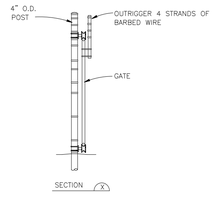


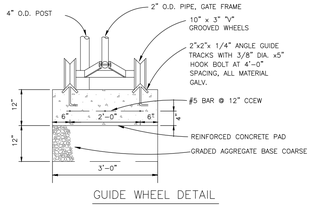
GUIDE WHEEL DETAIL



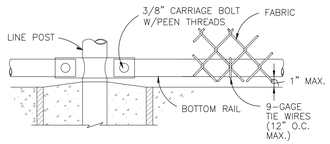


FASTENING DETAILS
N.T.S.

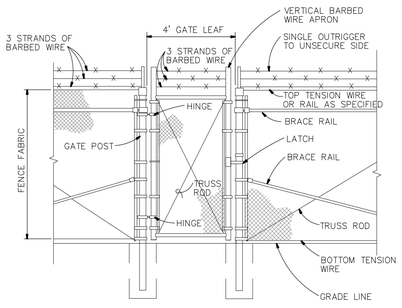




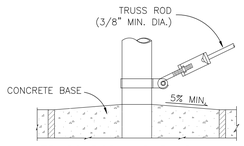
GUIDE WHEEL DETAIL



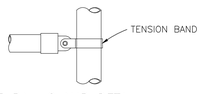
BOTTOM RAIL DETAILS
N.T.S.



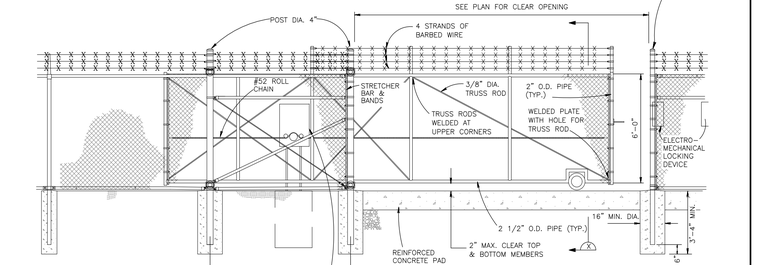
PERSONNEL GATE
NOT TO SCALE



TRUSS ROD AND BAND
N.T.S.



BRACE RAIL CLAMP DETAIL
N.T.S.



SLIDING GATE DETAILS
NOT TO SCALE

NOTES:
1. REFER TO ELECTRICAL PLANS FOR INFORMATION REGARDING POWER, COMMUNICATIONS, AND ACCESS CONTROL CARD READ AND PEDESTAL.
2. PROVIDE A CHAMBERLAIN MOTORIZED SLIDING GATE.
3. PROVIDE A KNOX BOX FOR EMERGENCY ACCESS. GATES SHALL BE SIREN ACTIVATED FOR EMERGENCY VEHICLE ACCESS.
4. FENCE CONTRACTOR SHALL PROVIDE AND INSTALL GATE OPERATOR/CONTROLLER AND ENCLOSURE. OPERATOR/CONTROLLER SHALL BE ETL LISTED AND INCLUDE THE FOLLOWING FUNCTIONS: FULL SYSTEMS CAPABLE CONTROLLER, SOFT START/STOP, REVERSING IRD SENSOR, SECONDARY SAFETY INPUT, MULTIPLE OPENING OPTIONS DURING POWER OUTAGE, AND CONVENIENT ON/OFF SWITCH.
5. EXIT LOOP SHALL BE PREFORMED FOR SAW CUTTING INTO ASPHALT PAVEMENT. THE LOOP SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. SEAL PAVEMENT JOINTS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. EXIT LOOP SHALL INCLUDE LIGHTENING PROTECTION AND LOOP DETECTOR FOR AUTOMATIC GATES.

A FENCE DETAILS

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA



ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
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NC COA #C-1572

North Carolina 811 www.nc811.org

DATE:	07/21/2023
ADC PROJECT #:	22530
DESIGNED:	LKB
CHECKED:	LKB
DRAWN:	LKB
REVISION:	

CIVIL DETAILS
- FENCING

C622

CONTINUOUS LINES

EDGE LINE — 4"/6" — YELLOW OR WHITE

LANE LINE — 4"/6" — WHITE

CENTER LINE — 4"/6" — YELLOW

GORE LINE — 8"/12" — WHITE

DIAGONAL LINE — 12" 45 MPH OR HIGHER; 8" LESS THAN 45 MPH — YELLOW OR WHITE

CROSSWALK LINE — 8" TRANSVERSE; 24" LONGITUDINAL — WHITE

RxR LINE — 16" — WHITE

STOP OR TRANSVERSE BAR — 24" — WHITE

10'-30'/SP SKIP LINE

UNLESS OTHERWISED SHOWN, USE 10'-30'/SP SKIPS FOR SKIP LANE LINES AND SKIP CENTER LINES.



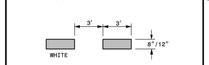
2'-6'/SP MINI-SKIP LINE

UNLESS OTHERWISED SHOWN, USE 2'-6'/SP MINI-SKIPS FOR LANE LINE EXTENSIONS THROUGH INTERSECTIONS, EDGE LINE EXTENSIONS THROUGH INTERSECTIONS AND MINI-SKIPS USED FOR BICYCLE LANE LINES.



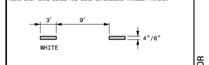
3'-3'/SP MINI-SKIP LINE

UNLESS OTHERWISED SHOWN, USE 3'-3'/SP MINI-SKIPS FOR THE WHITE EDGE LINE EXTENSIONS AT ROUNDABOUTS.



3'-9'/SP MINI-SKIP LINE

UNLESS OTHERWISED SHOWN, USE 3'-9'/SP MINI-SKIPS FOR MINI-SKIP LANE LINES AND LINE EXTENSIONS THROUGH TAPERS.



GENERAL NOTES:

1- USE 6" LANE, EDGE, AND CENTER LINES ON ALL FULL CONTROL OF ACCESS FACILITIES AND OTHER ROUTES AS DIRECTED BY THE ENGINEER.

2- LANE LINES INDICATED AS "WIDE" ON THE ROADWAY STANDARD DRAWINGS SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.

3- GORE LINES SHALL BE TWICE THE WIDTH OF THE NORMAL LINE.

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

1.1.18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** LINE TYPES AND OFFSETS

SHEET 1 OF 2

1205.01

EDGE LINE OFFSET DETAIL

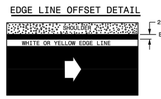
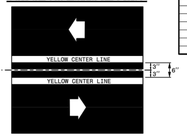


TABLE 1

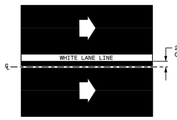
EDGE LINE OFFSETS FOR 2-LANE, 2-WAY ROADWAYS WITH UN-PAVED SHOULDERS

WIDTH (W) OF TRAVEL PAVEMENT	MAX. EDGE LINE OFFSET FROM E.O.T.	MINIMUM LANE WIDTH (W)
16' - 18'	2"	8' - 9'
19'	4"	9'
20'	6"	9.5'
21'	8"	10'
22'	10"	10'
23'	10"	10.5'
24'	1'	11'
26'	2'	11'
28'	2'	12'
30'	3'	12'
32'	4'	12'

CENTER LINE OFFSET DETAIL



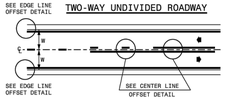
LANE LINE OFFSET DETAIL



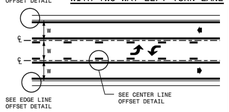
LEGEND

W = WIDTH OF TRAVEL LANE
E.O.T.= EDGE OF TRAVEL
DIRECTION OF TRAFFIC FLOW

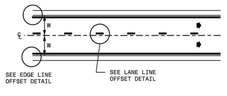
TWO-WAY UNDIVIDED ROADWAY



TWO-WAY UNDIVIDED ROADWAY WITH TWO-WAY LEFT TURN LANE



MULTI-LANE ROADWAY



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

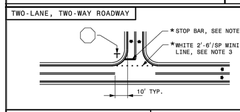
1.1.18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** LINE TYPES AND OFFSETS

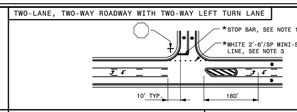
SHEET 2 OF 2

1205.01

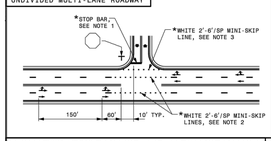
TWO-LANE, TWO-WAY ROADWAY



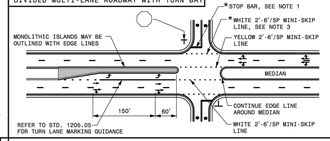
TWO-LANE, TWO-WAY ROADWAY WITH TWO-WAY LEFT TURN LANE



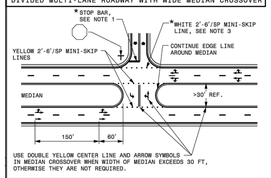
UNDIVIDED MULTI-LANE ROADWAY



DIVIDED MULTI-LANE ROADWAY WITH TURN BAY



DIVIDED MULTI-LANE ROADWAY WITH WIDE MEDIAN CROSSOVER



USE DOUBLE YELLOW CENTER LINE AND ARROW SYMBOLS IN MEDIAN CROSSOVER WHEN WIDTH OF MEDIAN EXCEEDS 30 FT, OTHERWISE THEY ARE NOT REQUIRED.

GENERAL NOTES:

1- PLACEMENT OF STOP BARS AT NON-SIGNALIZED INTERSECTIONS IS OPTIONAL AND USED WHERE IT IS IMPORTANT TO INDICATE THE POINT WHICH VEHICLES ARE REQUIRED TO STOP. PLACE STOP BARS NO LESS THAN 4 FEET AND NO MORE THAN 30 FEET FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY. USE 10 FEET AS THE TYPICAL SETBACK DISTANCE OR AS DIRECTED BY THE ENGINEER.

2- MINI-SKIP LANE LINE EXTENSIONS SHOULD BE USED AT INTERSECTIONS THAT HAVE REDUCED VISIBILITY CONDITIONS SUCH AS OFFSET, SKEWED, OR CURVED ROADWAYS.

3- MINI-SKIP EDGE LINE EXTENSIONS MAY BE PLACED THROUGH INTERSECTIONS AND MAJOR DRIVEWAYS.

4- REFER TO ROADWAY STANDARD DRAWINGS 1205.01, 1205.02, 1205.05, 1205.08 AND 1205.09 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

LEGEND

STOP SIGN — STATIONARY SIGN
DIRECTION OF TRAFFIC FLOW — PAVEMENT MARKING SYMBOLS
OPTIONAL

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

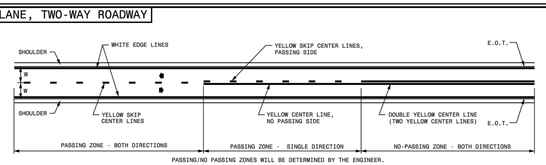
1.1.18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** INTERSECTIONS

SHEET 2 OF 2

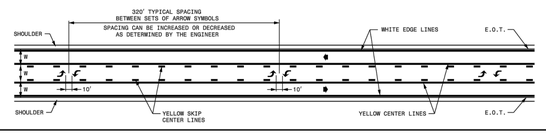
1205.04

TWO-LANE, TWO-WAY ROADWAY



PASSING/NO PASSING ZONES WILL BE DETERMINED BY THE ENGINEER.

TWO-LANE, TWO-WAY ROADWAY WITH TWO-WAY LEFT TURN LANE



GENERAL NOTES:

1- EDGE LINES ARE NOT REQUIRED ALONG CURB AND GUTTER LOCATIONS.

2- CONTINUE EDGE LINES THROUGH MINOR DRIVEWAYS. DO NOT CONTINUE EDGE LINES AT INTERSECTIONS AND MAJOR DRIVEWAYS, SEE ROADWAY STANDARD DRAWING 1205.05 FOR ADDITIONAL GUIDANCE.

3- REFER TO ROADWAY STANDARD DRAWINGS 1205.01 AND 1205.08 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

LEGEND

W = WIDTH OF TRAVEL LANE
E.O.T.= EDGE OF TRAVEL
DIRECTION OF TRAFFIC FLOW
PAVEMENT MARKING SYMBOLS

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

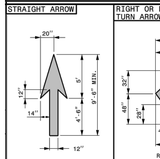
1.1.18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** TWO-LANE AND MULTI-LANE ROADWAYS

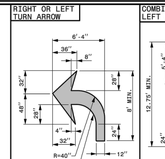
SHEET 1 OF 2

1205.02

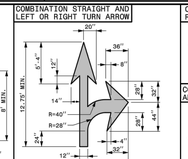
STRAIGHT ARROW



RIGHT OR LEFT TURN ARROW



COMBINATION STRAIGHT AND LEFT OR RIGHT TURN ARROW

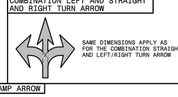


COMBINATION LEFT AND RIGHT TURN ARROW



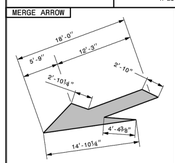
SAME DIMENSIONS APPLY AS FOR THE LEFT/RIGHT TURN ARROW

COMBINATION LEFT AND STRAIGHT AND RIGHT TURN ARROW

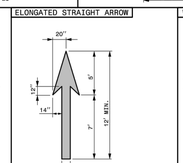


SAME DIMENSIONS APPLY AS FOR THE COMBINATION STRAIGHT AND LEFT/RIGHT TURN ARROW

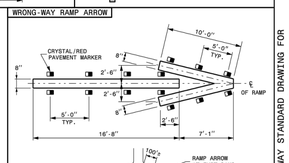
MERGE ARROW



ELONGATED STRAIGHT ARROW



WRONG-WAY RAMP ARROW



NOTE:

1- WHEN INSTALLING COLD APPLIED PLASTIC ON CONCRETE, IT IS RECOMMENDED TO USE COLD APPLIED PLASTIC WITH A BLACK CONTRASTING BOLDER.

GENERAL NOTES:

1- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS.

2- DO NOT LOCATE PAVEMENT MARKING SYMBOLS AS TO ENCROACH INTO INTERSECTION AREAS.

3- DO NOT PLACE SYMBOLS ACROSS TRANSVERSE EXPANSION JOINTS ON PORTLAND CEMENT CONCRETE PAVEMENTS, UNLESS APPROVED BY THE ENGINEER.

4- CONFORM ALL SYMBOLS TO THE FHWA "STANDARD HIGHWAY SIGNS" MANUAL WHICH INCLUDES PAVEMENT MARKINGS AND STANDARD ALPHABETS (REFER TO SHEETS 6 THRU 9). DIMENSIONS CAN VARY AMONG MANUFACTURERS, THEREFORE SLIGHT VARIANCES ARE ACCEPTABLE HOWEVER, ALL SYMBOLS ARE REQUIRED TO BE APPROVED BY THE DEPARTMENT.

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

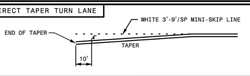
1.1.18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** SYMBOLS AND WORD MESSAGES

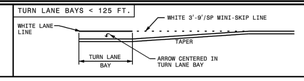
SHEET 1 OF 9

1205.08

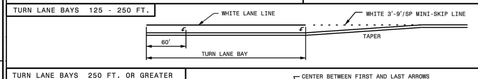
DIRECT TAPER TURN LANE



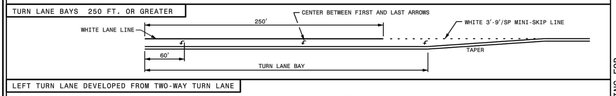
TURN LANE BAYS < 125 FT.



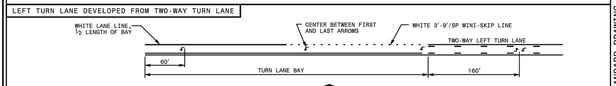
TURN LANE BAYS 125 - 250 FT.



TURN LANE BAYS 250 FT. OR GREATER



LEFT TURN LANE DEVELOPED FROM TWO-WAY TURN LANE



DOUBLE TURN LANES



SAME PAVEMENT MARKING LINES, NUMBER OF ARROWS, AND ARROW SPACING APPLY AS FOR THE VARIOUS TURN LANE BAY LENGTHS SHOWN ABOVE

GENERAL NOTES:

1- USE THE GUIDANCE SHOWN ABOVE IN CONJUNCTION WITH THE INTERSECTION GUIDANCE SHOWN ON ROADWAY STANDARD DRAWING 1205.04.

2- THE NUMBER OF ARROWS SHOWN IS THE MINIMUM REQUIRED. USE ADDITIONAL ARROWS AS DIRECTED BY THE ENGINEER.

LEGEND

PAVEMENT MARKING SYMBOL

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

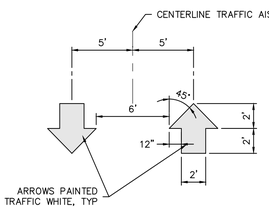
1.1.18

ROADWAY STANDARD DRAWING FOR **PAVEMENT MARKINGS** TURN LANES

SHEET 1 OF 1

1205.05

A PAVEMENT STRIPING



B INTERIOR ARROW DETAIL

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027779 LANDRICK K. BARTHELEMY
07/21/2023

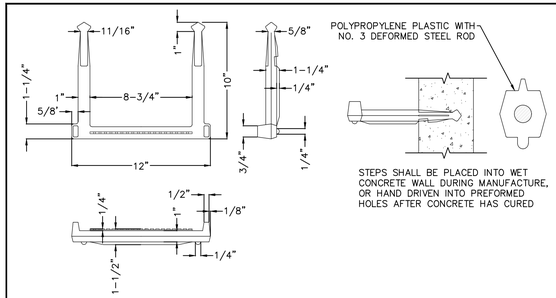
ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

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DATE: 07/21/2023
ADC PROJECT #: 22530
DESIGNED: LKB
CHECKED: LKB
DRAWN: LKB
REVISION:

CIVIL DETAILS
- STRIPING

C623

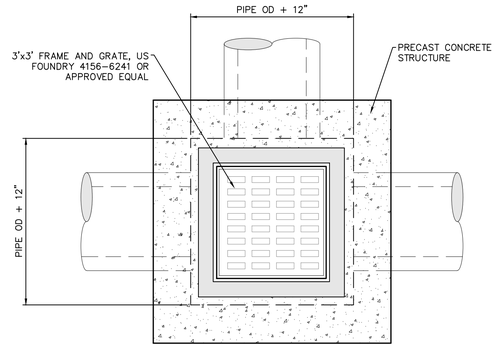


POLYPROPYLENE PLASTIC WITH NO. 3 DEFORMED STEEL ROD

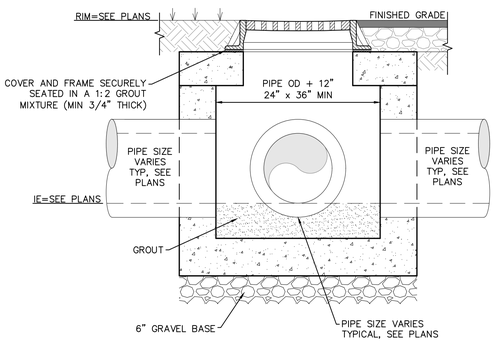
STEPS SHALL BE PLACED INTO WET CONCRETE WALL DURING MANUFACTURE, OR HAND DRIVEN INTO PREFORMED HOLES AFTER CONCRETE HAS CURED

MANHOLE STEPS SHALL BE M.A. IND., INC. MODEL NO. PS1 OR AN APPROVED EQUAL

(A) MANHOLE STEP



PLAN VIEW – CATCH BASIN WITH SLAB TOP
FINISHED GRADE, PAVING, OR TURF NOT SHOWN THIS VIEW

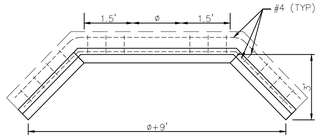


SECTION VIEW CATCH BASIN WITH SLAB TOP

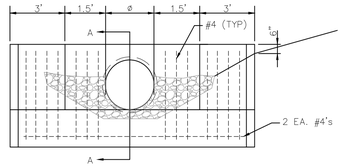
NOTES:

1. CONSTRUCTION OF THE CATCH BASIN WALLS SHALL BE PRECAST CONCRETE. PRECAST WALLS SHALL BE DESIGNED BY MANUFACTURER FOR SOIL LOADING AND HS-20 TRAFFIC LOADING.
2. INSTALL STEPS IN STRUCTURES GREATER THAN 4' DEEP IAW DETAIL A/C630. STEPS SHALL BE PLACED INLINE WITH LID/GRATE.
3. TOP SLAB SHALL BE PRECAST DESIGNED BY MANUFACTURER FOR HS-20 TRAFFIC LOADING.
4. PRECAST BOTTOM SHALL BE DESIGNED BY MANUFACTURER HS-20 LOADING.
5. PIPE ENDS SHALL BE FIELD CUT FLUSH WITH THE INSIDE OF THE STRUCTURE.
6. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE STRUCTURE. CONNECTION SHALL NOT BE MADE AT CORNERS OF STRUCTURE.

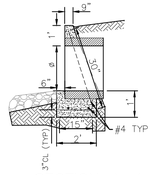
(CB) (B) CATCH BASIN DETAILS
N.T.S.



PLAN

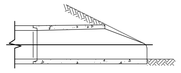


ELEVATION

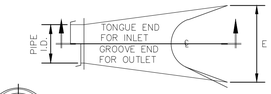


SECTION A–A

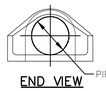
(C) CONCRETE HEADWALL DETAIL
NOT TO SCALE



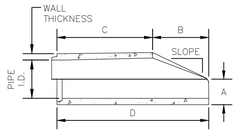
INSTALLATION DETAIL



PLAN VIEW



END VIEW

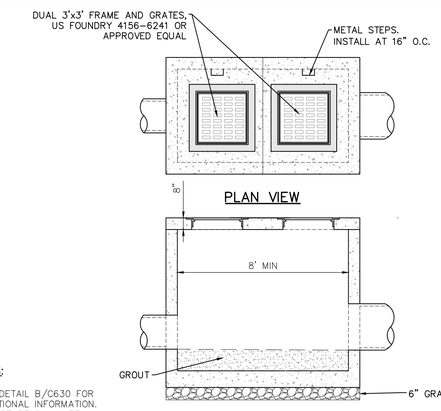


SECTION VIEW AT CENTERLINE

PIPE INNER DIAMETER (INCHES)	WALL THICKNESS (INCHES)	A (INCHES)	B (INCHES)	C (INCHES)	D (INCHES)	E (INCHES)	SLOPE
12	2	4	24	48 7/8	72 7/8	30	3:1
15	2 1/4	6	27	46	73	30	3:1
18	2 1/2	9	27	46	73	36	3:1
24	3	9 1/2	43 1/2	30	73 1/2	48	3:1
30	3 1/2	12	54	19 3/4	73 3/4	60	3:1
36	4	15	63	34 3/4	97 3/4	72	3:1
42	4 1/2	21	63	35	98	78	3:1
48	5	24	72	26	98	84	3:1

DIMENSIONS MAY VARY DEPENDING UPON EQUIPMENT AVAILABILITY.

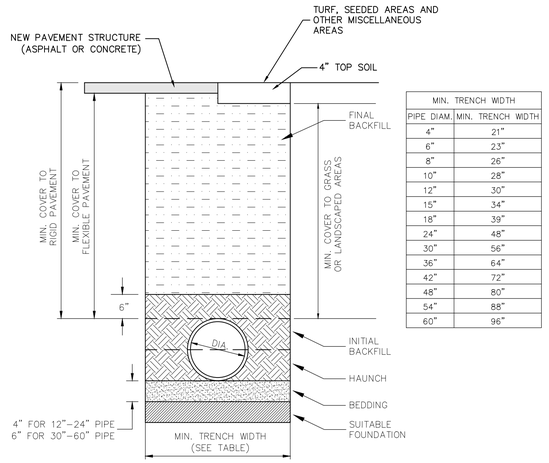
(D) PRECAST CONCRETE FLARED END SECTION
N.T.S.



NOTES:

1. SEE DETAIL B/C630 FOR ADDITIONAL INFORMATION.
2. STRUCTURE SHALL BE RATED FOR A HS-20 LOADING.

(CB)(CB) (E) DOUBLE CATCH BASIN DETAIL
N.T.S.

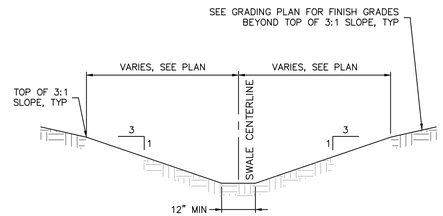


MIN. TRENCH WIDTH	
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"–24"; 6" FOR 30"–60".
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II, OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM 23321.
6. MINIMUM COVER: MINIMUM COVER, IN NON-TRAFFIC APPLICATION (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"–60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.

(F) PIPE TRENCH DETAIL
NOT TO SCALE



(G) TYPICAL SWALE SECTION
NOT TO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 027779 ENGINEER LUKASZ K. BARTHELEMY
07/21/2023

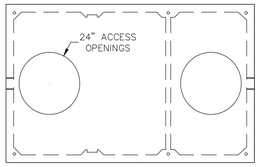
ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

North Carolina 811 www.nc811.org

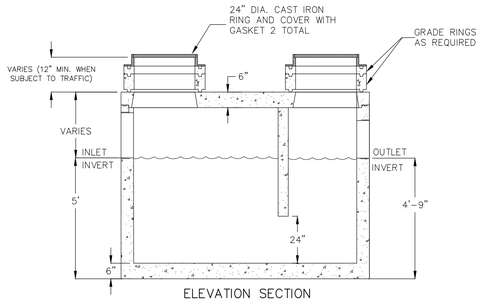
DATE:	07/21/2023
ADC PROJECT #:	22530
DESIGNED:	LKB
CHECKED:	LKB
DRAWN:	LKB
REVISION:	

CIVIL DETAILS
- STORM DRAINAGE

C630



PLAN VIEW



ELEVATION SECTION

NOTES:
1. OPERATING CAPACITY: 3,000 GALLONS.
2. DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK) AND 1 TO 6 FEET EARTH COVER.
3. BEDDING NOTE: SUITABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.
4. OIL-WATER SEPARATOR SHALL BE CLEANED PER MANUFACTURERS RECOMMENDATIONS.

A 3,000 GALLON OIL-WATER SEPARATOR
N.T.S.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

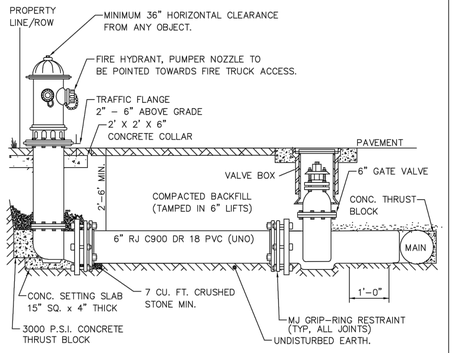


ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

DATE: 07/21/2023
ADC PROJECT #: 22530
DESIGNED: LKB
CHECKED: LKB
DRAWN: LKB
REVISION:

CIVIL DETAILS
- STORM DRAINAGE

C631



NOTES:

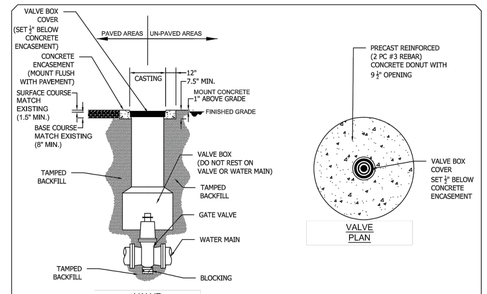
1. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION.
2. FIRE HYDRANTS TO BE LOCATED IN RIGHT-OF-WAY.
3. INSTALL WITH BURY LINE FLUSH TO FINAL GRADE.
4. HYDRANTS TO BE AVK SERIES 2780, MUELLER SUPER CENTURION A473 W/PENDER CO. OPTIONS 981, OR CLOW MEDALLION WITH STAINLESS STEEL STEMS. HYDRANTS SHALL BE NOSTALGIC STYLE DRY BARREL.
5. HYDRANTS TO BE RED WITH SILVER CAPS AND BONNET.

FIRE HYDRANT ASSEMBLY DETAIL

NOT TO SCALE

PENDER COUNTY UTILITIES 605 EAST FREMONT STREET BURGAW, NC 28425	PCU	FIRE HYDRANT ASSEMBLY STANDARD DETAIL VERSION #2 - APRIL 2016

A FIRE HYDRANT ASSEMBLY
N.T.S.



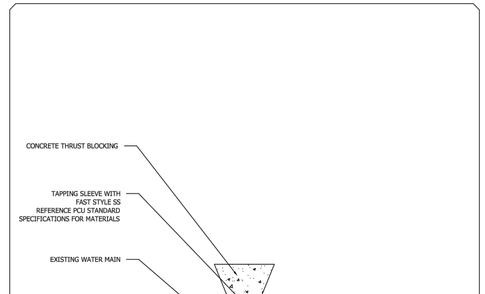
NOTE:
1. DO NOT ALLOW VALVE BOX TO REST ON THE VALVE OR WATER MAIN.
2. A VALVE MARKER SHALL BE PLACED ON THE RIGHT OF WAY AT EACH ISOLATION VALVE.

VALVE INSTALLATION DETAIL

NOT TO SCALE

PENDER COUNTY UTILITIES 605 EAST FREMONT STREET BURGAW, NC 28425	PCU	VALVE INSTALLATION STANDARD DETAIL VERSION #3 - JUNE 2016

B GATE VALVE
N.T.S.

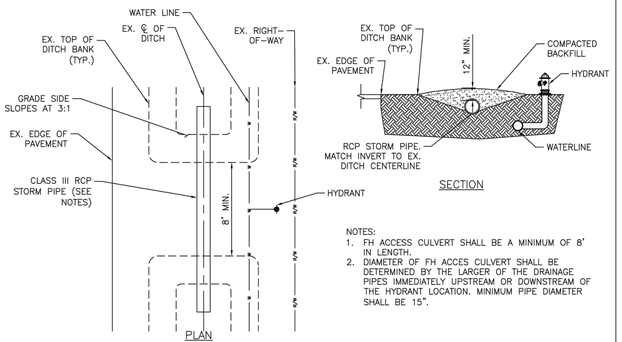


TAPPING SLEEVE AND VALVE ASSEMBLY DETAIL

NOT TO SCALE

PENDER COUNTY UTILITIES 605 EAST FREMONT STREET BURGAW, NC 28425	PCU	TAPPING SLEEVE AND VALVE ASSEMBLY STANDARD DETAIL VERSION #3 - FEB 2016

D TAPPING SLEEVE & VALVE
N.T.S.



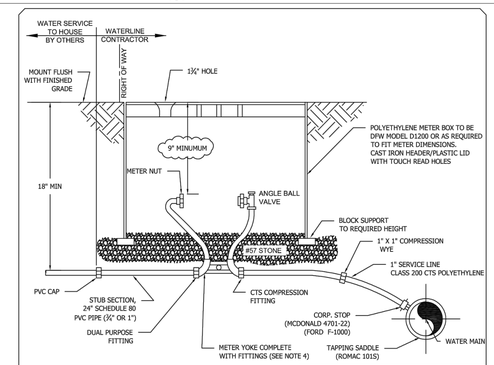
NOTES:
1. FH ACCESS CULVERT SHALL BE A MINIMUM OF 8' IN LENGTH.
2. DIAMETER OF FH ACCES CULVERT SHALL BE DETERMINED BY THE LARGER OF THE DRAINAGE PIPES IMMEDIATELY UPSTREAM OR DOWNSTREAM OF THE HYDRANT LOCATION. MINIMUM PIPE DIAMETER SHALL BE 15".

FIRE HYDRANT ACCESS DETAIL

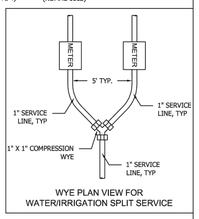
NOT TO SCALE

PENDER COUNTY UTILITIES 605 EAST FREMONT STREET BURGAW, NC 28425	PCU	FIRE HYDRANT ACCESS STANDARD DETAIL VERSION #1 - SEPTEMBER 2015

A FIRE HYDRANT ASSEMBLY
N.T.S.



NOTE:
1. CONTRACTOR SHALL PLACE METER BOX IN NON-TRAFFIC AREA ONLY.
2. ALL TAPS TO BE MADE ON THE TOP QUARTER OF THE WATER MAIN.
3. CONTRACTOR SHALL CENTER METER YOKE IN METER BOX.
4. (¾") MCDONALD 26-702WX2D 33, FORD VB72-7W-41-33-NL (1") MCDONALD 26-410WX2D 44, FORD VB-72-10W-41-44-NL
5. BOX TO BE ADJUSTED VERTICALLY TO ACCEPT COUNTY'S STANDARD SERVICE METER. (NEPTUNE T-10, PRO READ REGISTER, R900 MIU)
6. METER TO BE SET BY COUNTY UPON RECEIPT OF WATER SERVICE FEES, AND SATISFACTORY INSPECTION OF WATER SERVICE TO HOUSE.
7. TAPS ON WATER MAINS LARGER THAN 16" SHALL BE MADE WITH DUAL WIDE BAND, STAINLESS STEEL TAPPING SADDLES (ROMAC 202S).
8. 1 ½" METERS REQUIRE 2" TAP AND 2" SQUARE NUT GATE VALVE PER 2" METER DETAIL. REDUCE TO 1 ½" SERVICE PIPE.
9. INSTALL WYE TO PROVIDE A DOMESTIC METER SETTER AND IRRIGATION METER SETTER PER SPLIT SERVICE INSET.

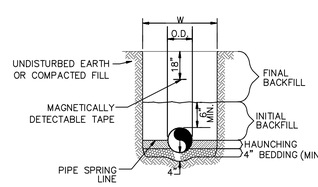


STANDARD WATER SERVICE DETAIL

NOT TO SCALE

PENDER COUNTY UTILITIES 605 EAST FREMONT STREET BURGAW, NC 28425	PCU	WATER SERVICE (¾" - 1") STANDARD DETAIL VERSION #4 - FEB 2016

C WATER SERVICE
N.T.S.



PIPE DIA.	W
≤12"	O.D. OF PIPE + (12" TO 18")
>12"	> O.D. OF PIPE + 18"

GENERAL NOTES

1. BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 85% PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
4. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
5. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV-A COMPACTED TO 95% STANDARD PROCTOR.
7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

E UTILITY TRENCHING AND BEDDING
NOT TO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL
027779
LUKE K. BARTHELMY
ENGINEER
07/21/2023

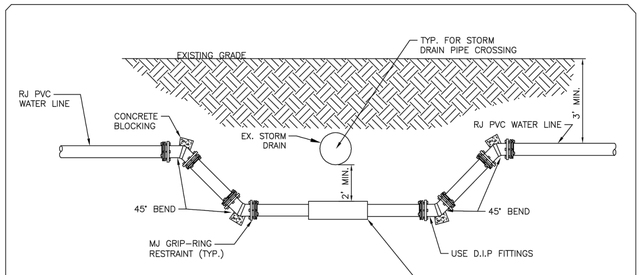
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NC COA #C-1572

North Carolina 811 www.nc811.org

DATE: 07/21/2023
ADC PROJECT #: 22530
DESIGNED: LKB
CHECKED: LKB
DRAWN: LKB
REVISION:

CIVIL DETAILS - UTILITY

C640

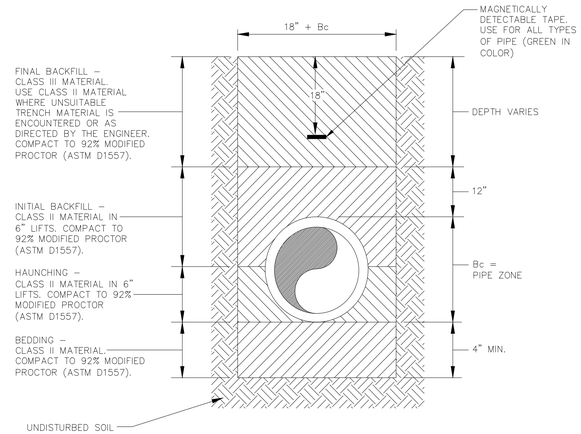


NOTES:
1. SPACERS SHALL BE PROVIDED WITHIN THE CASING PIPE AND CASING ENDS SHALL BE SEALED PER "PCU STANDARD BORE ENCASEMENT".
2. DIP SHALL NOT BE USED WITHOUT PRIOR APPROVAL OF PCU IN THE FIELD.
3. CARRIER PIPE TO BE C900 DR 18 PVC.

PIPE CROSSING "A" DETAIL
NOT TO SCALE

PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

PIPE CROSSING "A"
STANDARD DETAIL
VERSION #1 - SEPTEMBER 2015



B GRAVITY SEWERMAIN TRENCHING/ BEDDING
NOT TO SCALE

Restrained Length In Feet Each Side of Fitting Joint									
PIPE DIAMETER (INCHES)	D. I. P.				P. V. C.				
	90°	45°	22 ½°	11 ¼°	90°	45°	22 ½°	11 ¼°
3"	30'	15'	10'	5'	40'	20'	10'	5'
4"	30'	15'	10'	5'	55'	25'	15'	10'
6"	55'	25'	10'	5'	80'	35'	20'	10'
8"	65'	30'	15'	10'	90'	40'	20'	10'
10"	80'	35'	20'	10'	110'	50'	25'	15'
12"	90'	40'	20'	10'	130'	55'	30'	15'
16"	120'	50'	25'	15'	165'	70'	35'	20'
20"	150'	65'	30'	15'	200'	85'	40'	20'
24"	180'	70'	35'	20'	210'	90'	45'	25'
30"	190'	80'	40'	20'	260'	105'	50'	25'
36"	220'	95'	45'	25'	0	0	0	0
42"	245'	105'	50'	25'	0	0	0	0
48"	260'	120'	60'	30'	0	0	0	0

Restrained lengths for valves, dead ends and branches from tees shall be the same as for 90° (degree) bends

Restrained Length In Feet For Reducer									
PIPE DIAMETER (INCHES)	3"	4"	6"	8"	10"	12"	16"	20"	24"	30"
3"	0	0	0	0	0	0	0	0	0	0
4"	40'	0	0	0	0	0	0	0	0	0
6"	50'	45'	0	0	0	0	0	0	0	0
8"	75'	70'	40'	0	0	0	0	0	0	0
10"	95'	90'	70'	40'	0	0	0	0	0	0
12"	120'	115'	100'	75'	40'	0	0	0	0	0
16"	160'	155'	140'	125'	100'	70'	0	0	0	0
20"	200'	195'	185'	170'	150'	130'	75'	0	0	0
24"	190'	155'	150'	140'	135'	120'	90'	50'	0	0
30"	195'	190'	185'	180'	170'	160'	120'	105'	70'	0
36"	225'	220'	215'	210'	205'	195'	180'	155'	125'	70'
42"	245'	240'	235'	230'	225'	220'	205'	180'	155'	105'
48"	255'	250'	245'	240'	235'	230'	215'	195'	175'	125'

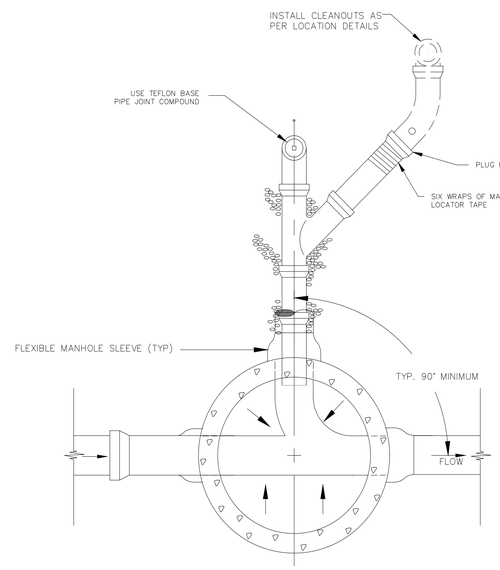
Length of restrained joint for larger diameter pipe

NOTES:
1. PENDER COUNTY STANDARD RESTRAINT METHOD IS MJ "GRIP RING" TYPE. ALL RJ TO BE MJ "GRIP RING" TYPE, UNLESS SPECIFICALLY APPROVED BY PCU IN WRITING.
2. ALL FITTINGS AND JOINTS SHALL BE RESTRAINED JOINT.
3. "L" ABOVE IS GIVEN IN FEET FROM FITTING JOINT.

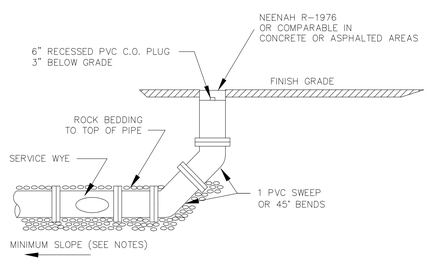
PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425

RESTRAINED JOINT TABLE
STANDARD DETAIL
VERSION #1 - OCTOBER 2015

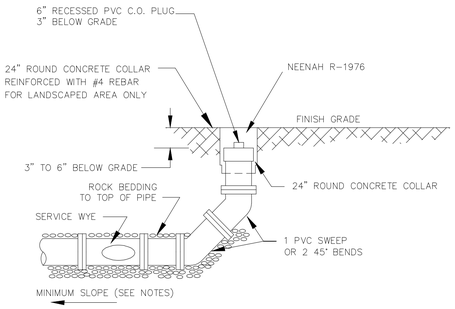
A CROSSING AND RESTRAINED JOINT DETAIL
N.T.S.



C SEWER SERVICE
NOT TO SCALE



CLEANOUT IN PAVEMENT



CLEANOUT IN LANDSCAPED AREA

NOTES:
1. INSTALL SEWER SERVICES AT THE FOLLOWING MINIMUM SLOPES:
   6" SEWER SERVICE = 1.0% SLOPE
2. SEE UTILITY PLANS AND PROFILES FOR SEWER SERVICE SIZES.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027779 LUKE K. BARTHELMY ENGINEER
07/21/2023

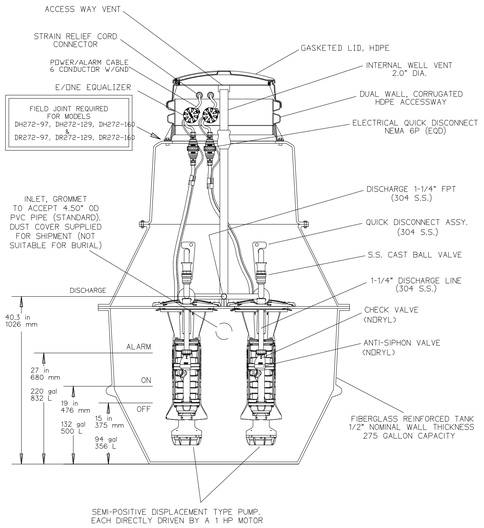
ADC ENGINEERING
25 WOODS LAKE ROAD, SUITE 210
GREENVILLE, SC 29607
864-751-9121
ADCENGINEERING.COM
NC COA #C-1572

North Carolina 811 www.nc811.org

DATE: 07/21/2023
ADC PROJECT #: 22530
DESIGNED: LKB
CHECKED: LKB
DRAWN: LKB
REVISION:

CIVIL DETAILS - UTILITY

C641



CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS
FOR DETAILS

NOTE: DIMENSIONS ARE FOR REF ONLY

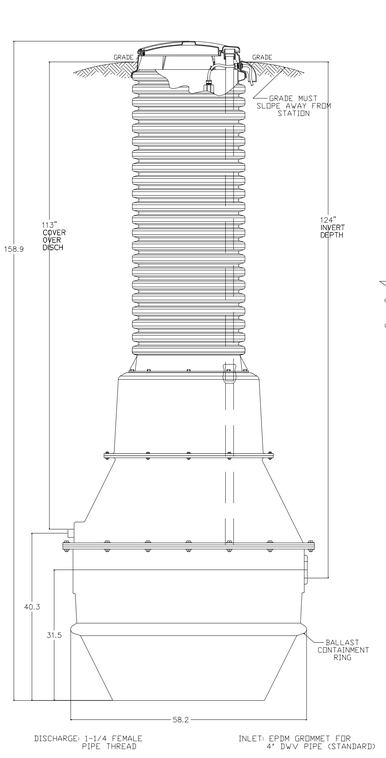
NOTES:
1. INSTALL LIFT STATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. CONNECT CONTROL PANEL TO BUILDING ELECTRICAL. INSTALL A BUCK BOOST TRANSFORMER FOR 208V.

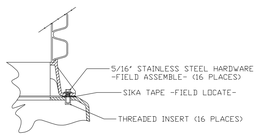
AD	CH	10/20/10	E	
DR BY	CHK'D	DATE	ISSUE	SCALE

SEWER SYSTEMS

MODEL DH272 / DR272
DETAIL SHEET

NA0053P02





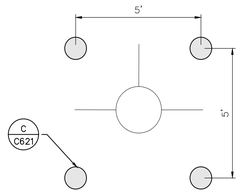
DETAIL, FIELD JOINT

SEE INSTALLATION INSTRUCTIONS
FOR FURTHER DETAILS

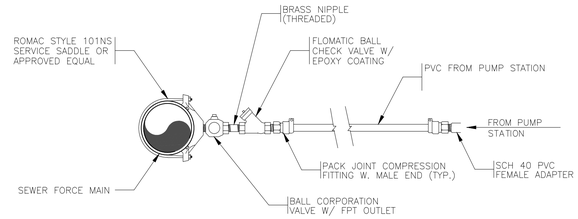
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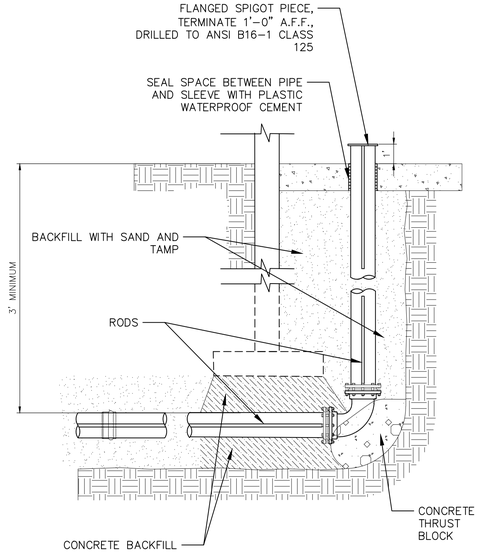
A SEWER LIFT STATION
NOT TO SCALE



B HYDRANT BOLLARDS
NOT TO SCALE



C FORCE MAIN LATERAL/TIE IN
NOT TO SCALE



NOTES:
1. PIPE OR PIPE JOINTS SHALL NOT BE LOCATED UNDER FOUNDATION FOOTINGS.

D SPRINKLER SERVICE LEAD-IN DETAIL
NO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA



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C642

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

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

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site 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 other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • 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.
4. 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

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. 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.
3. 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.
2. 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.
4. 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.

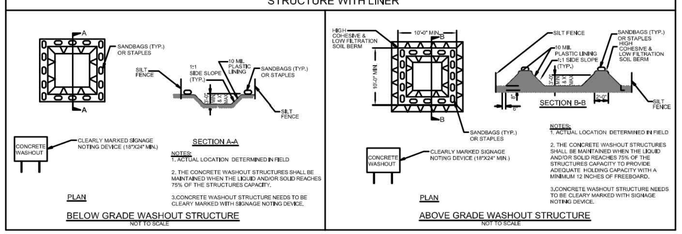
HERBICIDES, PESTICIDES AND RODENTICIDES

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.

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



NORTH CAROLINA *Environmental Quality*

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

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 or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-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	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) 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	1. 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). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. 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 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 deposition in a stream or wetland	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the 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 release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours,*** an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible.*** The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6)]. • Division staff may waive the requirement for a written report on a case-by-case basis.

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.

NORTH CAROLINA *Environmental Quality*

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

NC Rocky Point US 117, LLC
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SEAL
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MARESCA K. BARTHELEMY, IV
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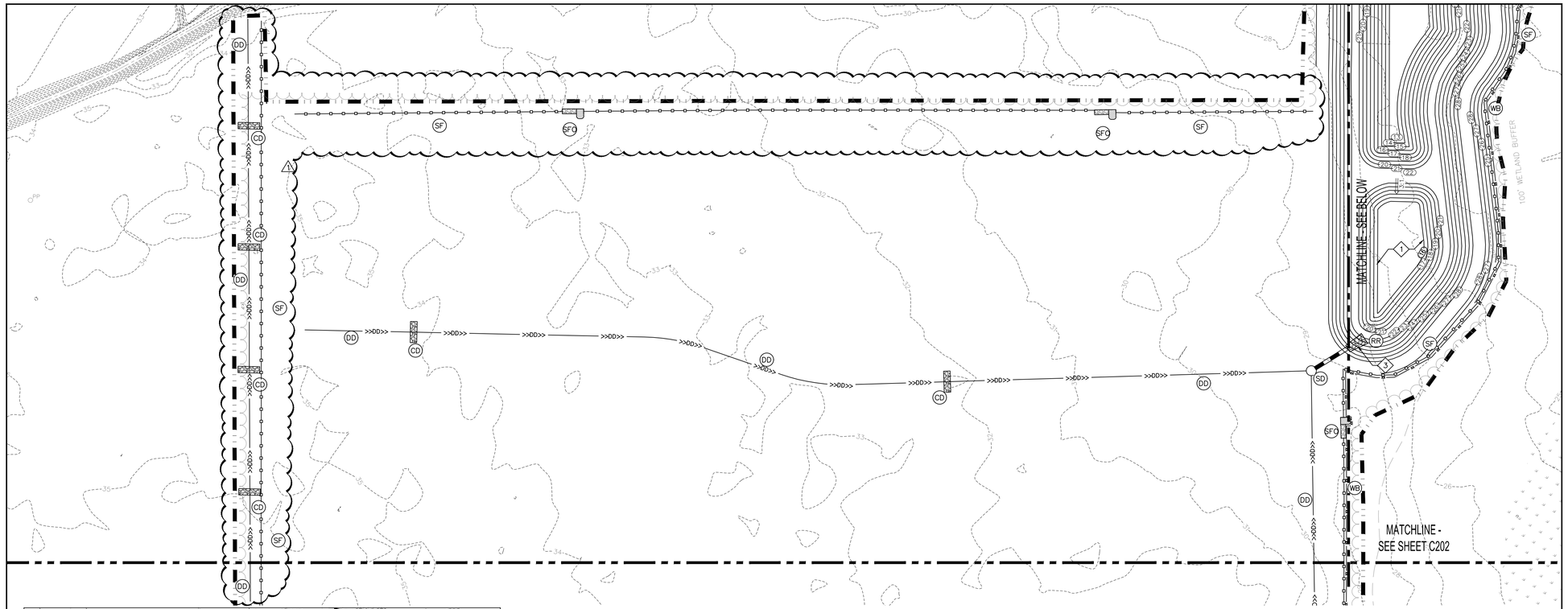
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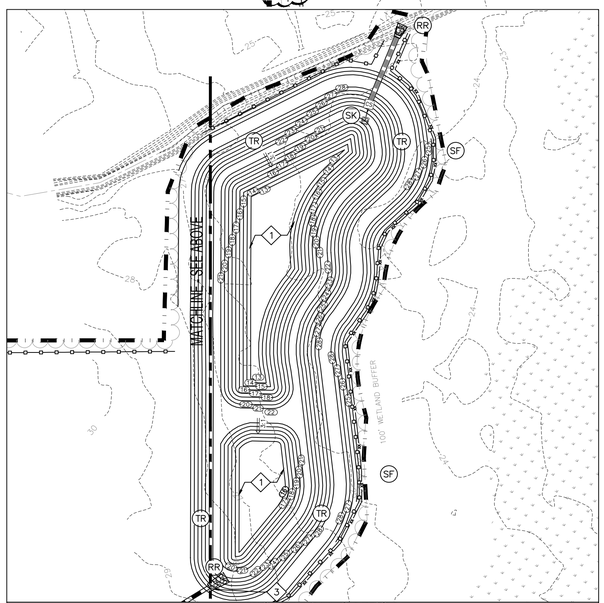
CERTIFICATION STATEMENT:

I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF *TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976* AS AMENDED, PURSUANT TO *REGULATION 72-300* ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF *SCR100000*.

EROSION CONTROL NOTES

C701





MATCHLINE VIEW - SEE ABOVE
SCALE: 1"=50'

INITIAL SWPPP NOTES:

1. PRIOR TO ANY LAND DISTURBANCE ACTIVITY CONDUCT A PRE-CONSTRUCTION CONFERENCE. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT SWPPP PRE-CONSTRUCTION MEETING WITH SWPPP PREPARING ENGINEER, NCDEQ, OWNER AND ALL LAND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.
2. STAKE OUT CLEARING LIMITS.
3. CONDUCT LIMITED CLEARING, TIMBERING AND DEMOLITION AS REQUIRED TO INSTALL PERIMETER BEST MANAGEMENT PRACTICES AND CONSTRUCTION ENTRANCE.
4. INSTALL SILT FENCE, SILT FENCE OUTLETS AND CONSTRUCTION ENTRANCE AS SHOWN ON THE PLANS.
5. INSTALL SEDIMENT BASIN, PARTIAL STORM DRAINAGE, SKIMMER, DIVERSION DITCHES AND ROCK CHECK DAMS.
6. CLEAR AND GRUB SITE.
7. TEMPORARILY SEED OTHER DISTURBED AREAS IAW THE PLANS AND THE CONSTRUCTION GENERAL PERMIT.
8. MAINTAIN BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION.
9. COMPLETE INSPECTION REPORTS IAW THE CONSTRUCTION GENERAL PERMIT.
10. APPLY TEMPORARY SEEDING AND JUTE MAT TO SEDIMENT BASINS AND DIVERSION DITCHES.

CIVIL LEGEND – EROSION CONTROL

- (CE) CONSTRUCTION ENTRANCE – INSTALL IAW DETAIL A/C740.
- (CD) ROCK CHECK DAM – INSTALL IAW DETAIL B/C740.
- (SF) REINFORCED SILT FENCE – INSTALL IAW DETAIL C/C740.
- (WB) WETLAND BUFFER SIGN AND ORANGE CONSTRUCTION FENCE – INSTALL IAW DETAIL A/C741.
- (RR) RIP RAP – INSTALL IAW DETAIL B/C741.
- (SD) PIPE SLOPE DRAIN – INSTALL IAW DETAIL C/C741.
- (TS) TEMPORARY SEEDING – INSTALL IAW DETAIL D/C741
- (PS) PERMANENT STABILIZATION – INSTALL IAW LANDSCAPE PLANS.
- (SFO) REINFORCED SILT FENCE OUTLET – INSTALL IAW DETAIL E/C741.
- (IP1) BLOCK AND GRAVEL INLET PROTECTION – INSTALL IAW DETAIL A/C742.
- (IP2) SEDIMENT TUBE INLET PROTECTION – INSTALL IAW DETAIL B/C742.
- (IP3) FILTER SACK INLET PROTECTION – INSTALL IAW DETAIL C/C742.
- (TR) TRACKING – INSTALL IAW DETAIL D/C742.
- (SK) SKIMMER – INSTALL IAW DETAIL D/C743.
- (CW) CONCRETE WASHOUT – SEE SHEET C701.
- WETLANDS WHICH ARE TO REMAIN UNDISTURBED AND PROTECTED.
- LIMITS OF CONSTRUCTION/ DISTURBANCE

KEYNOTES: ◇

1. INSTALL TEMPORARY SEDIMENT BASIN IAW DETAIL A/C743. MUST HAVE GROUND COVER WITHIN 7 DAYS.
2. INSTALL TEMPORARY PIPE UNDER CONSTRUCTION ENTRANCE AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
3. REINFORCE DIVERSION DITCH WITH RIP RAP WHEN DITCH ENTERS BASIN TO CONTROL EROSION.
4. TRANSITION INLET PROTECTION AS CONSTRUCTION PROGRESSES.

GENERAL NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. SEE SHEET C701 FOR ADDITIONAL CONTROL NOTES.
3. ALL CONTRACTORS/SUBCONTRACTORS/PERSON THAT WILL BE ENGAGED IN LAND DISTURBING ACTIVITIES SHALL COMPLY WITH ALL EROSION CONTROL AND STORMWATER POLLUTION PREVENTION REQUIREMENTS CONTAINED THROUGHOUT THE DRAWINGS, SPECIFICATIONS AND PERMITS.
4. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL BMP INSPECTIONS IAW SWPPP AND NCDEQ REQUIREMENTS.
5. REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM EXISTING AND NEW STORM DRAINAGE SYSTEM WITHIN THE LIMITS OF DISTURBANCE.
6. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURE TO PREVENT EROSION AND POLLUTANT DISCHARGE OFF-SITE.

HORIZONTAL SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
MARIECK K. BARTHELEMY, II
08/08/2023

ADC ENGINEERING
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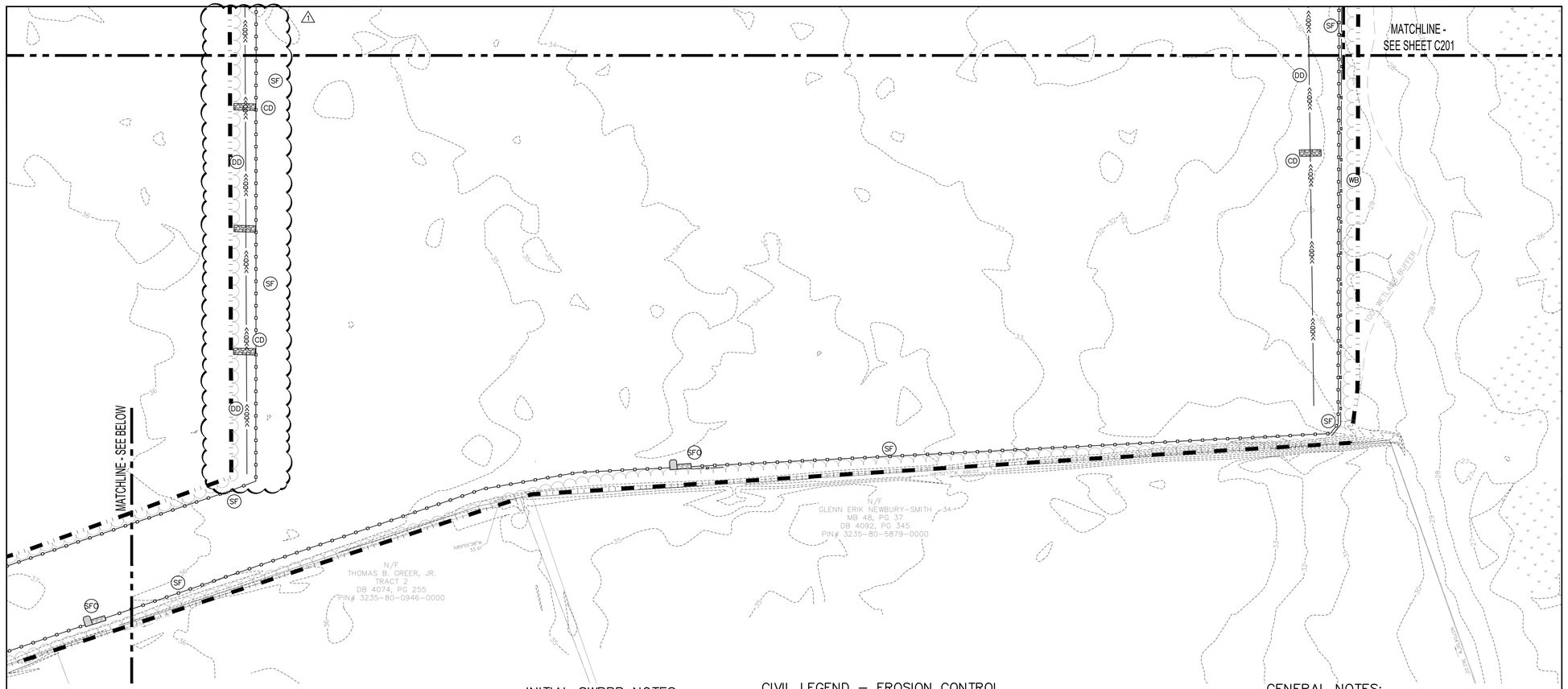
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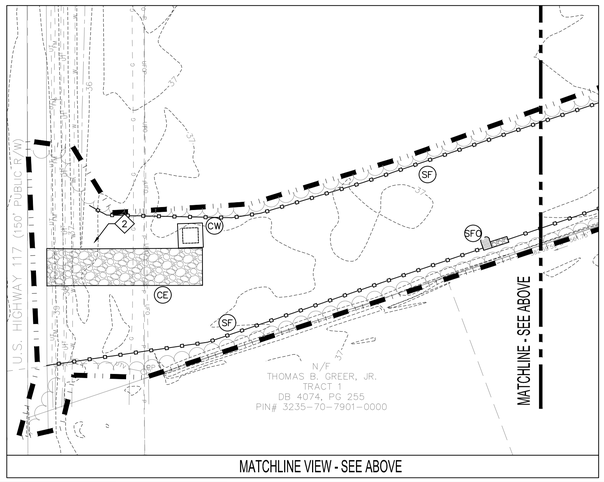
REVISION:

1	GENERAL REVISIONS	08/08/2023

EROSION CONTROL PLAN - INITIAL AREA 1

C711





MATCHLINE VIEW - SEE ABOVE

INITIAL SWPPP NOTES:

1. PRIOR TO ANY LAND DISTURBANCE ACTIVITY CONDUCT A PRE-CONSTRUCTION CONFERENCE. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT SWPPP PRE-CONSTRUCTION MEETING WITH SWPPP PREPARING ENGINEER, NCDEQ, OWNER AND ALL LAND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.
2. STAKE OUT CLEARING LIMITS.
3. CONDUCT LIMITED CLEARING, TIMBERING AND DEMOLITION AS REQUIRED TO INSTALL PERIMETER BEST MANAGEMENT PRACTICES AND CONSTRUCTION ENTRANCE.
4. INSTALL SILT FENCE, SILT FENCE OUTLETS AND CONSTRUCTION ENTRANCE AS SHOWN ON THE PLANS.
5. INSTALL SEDIMENT BASIN, PARTIAL STORM DRAINAGE, SKIMMER, DIVERSION DITCHES AND ROCK CHECK DAMS.
6. CLEAR AND GRUB SITE.
7. TEMPORARILY SEED OTHER DISTURBED AREAS IAW THE PLANS AND THE CONSTRUCTION GENERAL PERMIT.
8. MAINTAIN BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION.
9. COMPLETE INSPECTION REPORTS IAW THE CONSTRUCTION GENERAL PERMIT.
10. APPLY TEMPORARY SEEDING AND JUTE MAT TO SEDIMENT BASINS AND DIVERSION DITCHES.

CIVIL LEGEND – EROSION CONTROL

- CE — CONSTRUCTION ENTRANCE – INSTALL IAW DETAIL A/C740.
- CD — ROCK CHECK DAM – INSTALL IAW DETAIL B/C740.
- SF — REINFORCED SILT FENCE – INSTALL IAW DETAIL C/C740.
- WB — WETLAND BUFFER SIGN AND ORANGE CONSTRUCTION FENCE – INSTALL IAW DETAIL A/C741.
- RR — RIP RAP – INSTALL IAW DETAIL B/C741.
- SD — PIPE SLOPE DRAIN – INSTALL IAW DETAIL C/C741.
- TS — TEMPORARY SEEDING – INSTALL IAW DETAIL D/C741
- PS — PERMANENT STABILIZATION – INSTALL IAW LANDSCAPE PLANS.
- SFO — REINFORCED SILT FENCE OUTLET – INSTALL IAW DETAIL E/C741.
- IP1 — BLOCK AND GRAVEL INLET PROTECTION – INSTALL IAW DETAIL A/C742.
- IP2 — SEDIMENT TUBE INLET PROTECTION – INSTALL IAW DETAIL B/C742.
- IP3 — FILTER SACK INLET PROTECTION – INSTALL IAW DETAIL C/C742.
- TR — TRACKING – INSTALL IAW DETAIL D/C742.
- SK — SKIMMER – INSTALL IAW DETAIL D/C743.
- CW — CONCRETE WASHOUT – SEE SHEET C701.
- WETLANDS WHICH ARE TO REMAIN UNDISTURBED AND PROTECTED.
- LIMITS OF CONSTRUCTION/ DISTURBANCE

KEYNOTES: ◇

1. INSTALL TEMPORARY SEDIMENT BASIN IAW DETAIL A/C743. MUST HAVE GROUND COVER WITHIN 7 DAYS.
2. INSTALL TEMPORARY PIPE UNDER CONSTRUCTION ENTRANCE AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
3. REINFORCE DIVERSION DITCH WITH RIP RAP WHEN DITCH ENTERS BASIN TO CONTROL EROSION.
4. TRANSITION INLET PROTECTION AS CONSTRUCTION PROGRESSES.

GENERAL NOTES:

1. 1. SEE SHEET C001 FOR CIVIL NOTES AND ABBREVIATIONS.
2. SEE SHEET C741 FOR ADDITIONAL CONTROL NOTES.
3. ALL CONTRACTORS/SUBCONTRACTORS/PERSON THAT WILL BE ENGAGED IN LAND DISTURBING ACTIVITIES SHALL COMPLY WITH ALL EROSION CONTROL AND STORMWATER POLLUTION PREVENTION REQUIREMENTS CONTAINED THROUGHOUT THE DRAWINGS, SPECIFICATIONS AND PERMITS.
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5. REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM EXISTING AND NEW STORM DRAINAGE SYSTEM WITHIN THE LIMITS OF DISTURBANCE.
6. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURE TO PREVENT EROSION AND POLLUTANT DISCHARGE OFF-SITE.

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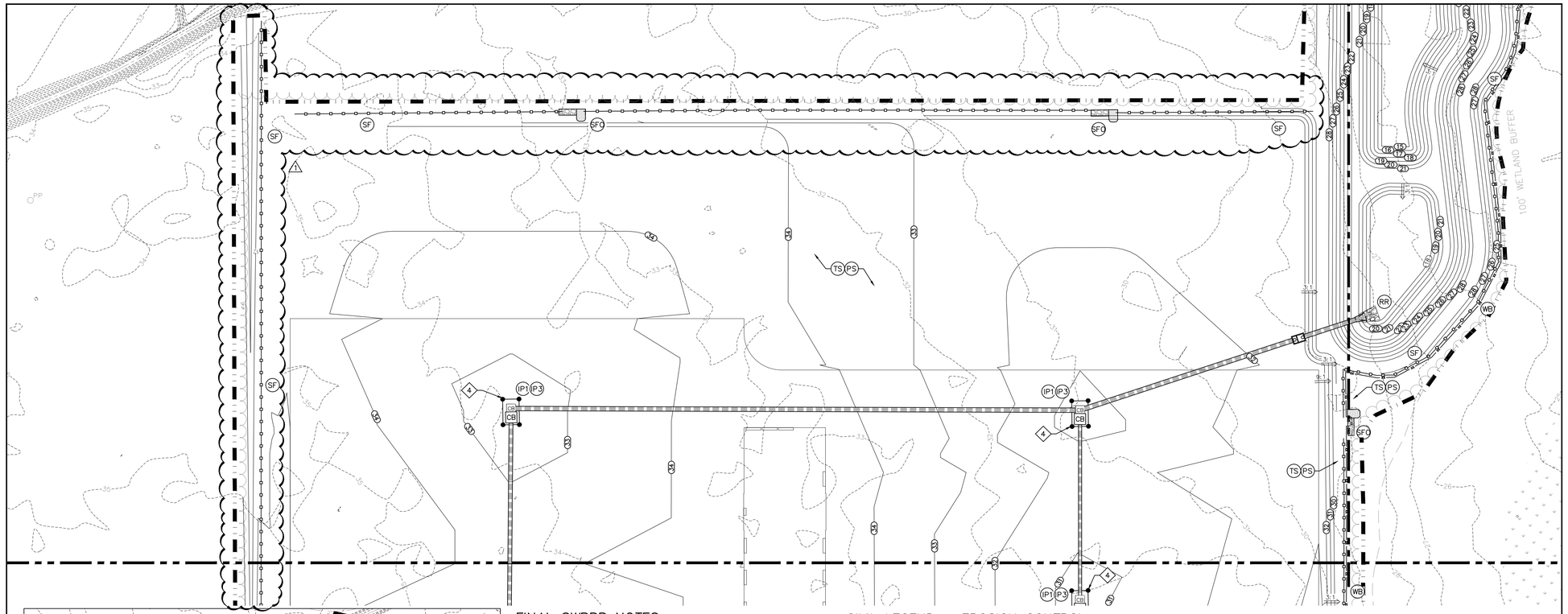
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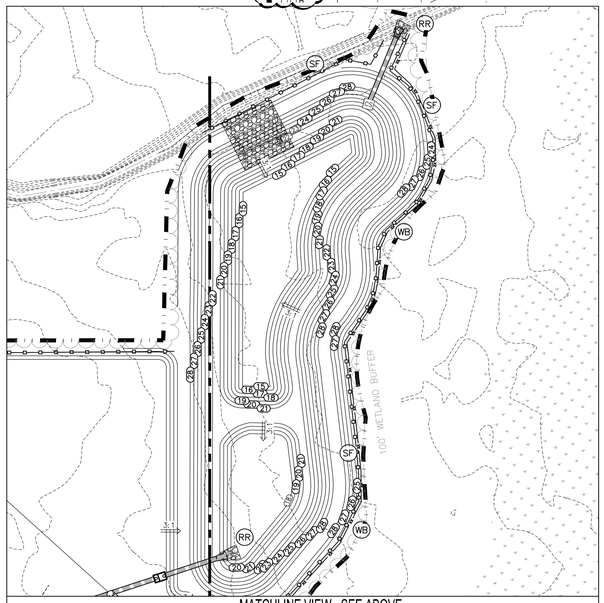
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1 GENERAL REVISIONS 08/08/2023

EROSION CONTROL PLAN - INITIAL AREA 2

C712





MATCHLINE VIEW - SEE ABOVE

SCALE: 1"=50'

FINAL SWPPP NOTES:

1. CONDUCT REMAINING CLEARING, TIMBERING AND DEMOLITION ACTIVITIES AS SHOWN ON THE PLANS.
2. CONDUCT MASS GRADING AS SHOWN.
3. ADJUST AND STABILIZE SILT FENCE AS SITE IS BROUGHT TO ROUGH GRADE.
4. INSTALL CONCRETE WASH OUT AREA.
5. BEGIN BUILDING CONSTRUCTION.
6. GRADE SITE TO ELEVATIONS SHOWN ON PLAN. SEE GRADING PLANS FOR SPOT ELEVATIONS.
7. INSTALL INLET PROTECTION AS STORM DRAINAGE STRUCTURES ARE COMPLETED.
8. INSTALL/COORDINATE REMAINING UTILITIES.
9. PREPARE SITE FOR PAVING.
10. INSTALL CURBS, SIDEWALKS, AND PAVE SITE.
11. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
12. COMPLETE REMAINING GRADING.
13. COMPLETE FINAL GRADING OF PERMANENT POND IAW GRADING PLANS AND DETAILS. SKIMMER MUST REMAIN AT POND OUTLETS AS SHOWN UNTIL SITE IS STABILIZED.
14. CONTRACTOR TO VERIFY THE VOLUME AND TOPOGRAPHY OF THE PERMANENT POND.
15. PERMANENTLY STABILIZE DISTURBED AREAS IAW DETAILS AND LANDSCAPE PLAN.
16. MAINTAIN BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION.
17. CLEAN ALL STORM PIPES AND BOXES.
18. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES INCLUDING SKIMMER, IN POND AFTER APPROVAL OF THE ENGINEER AND NCDEQ AND STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF THE BEST MANAGEMENT PRACTICES.
19. CONTINUE INSPECTION REPORTS IAW CONSTRUCTION GENERAL PERMIT UNTIL THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.
20. SUBMIT NOTICE OF TERMINATION AND AS-BUILTS TO NCDEQ AND PENDER COUNTY.

CIVIL LEGEND – EROSION CONTROL

CE	CONSTRUCTION ENTRANCE – INSTALL IAW DETAIL A/C740.	IP1	BLOCK AND GRAVEL INLET PROTECTION – INSTALL IAW DETAIL A/C742.
CD	ROCK CHECK DAM – INSTALL IAW DETAIL B/C740.	IP2	SEDIMENT TUBE INLET PROTECTION – INSTALL IAW DETAIL B/C742.
SF	REINFORCED SILT FENCE – INSTALL IAW DETAIL C/C740.	IP3	FILTER SACK INLET PROTECTION – INSTALL IAW DETAIL C/C742.
WB	WETLAND BUFFER SIGN AND ORANGE CONSTRUCTION FENCE – INSTALL IAW DETAIL A/C741.	TR	TRACKING – INSTALL IAW DETAIL D/C742.
RR	RIP RAP – INSTALL IAW DETAIL B/C741.	SK	SKIMMER – INSTALL IAW DETAIL D/C743.
SD	PIPE SLOPE DRAIN – INSTALL IAW DETAIL C/C741.	CW	CONCRETE WASHOUT – SEE SHEET C701.
TS	TEMPORARY SEEDING – INSTALL IAW DETAIL D/C741		WETLANDS WHICH ARE TO REMAIN UNDISTURBED AND PROTECTED.
PS	PERMANENT STABILIZATION – INSTALL IAW LANDSCAPE PLANS.		LIMITS OF CONSTRUCTION/ DISTURBANCE
SFO	REINFORCED SILT FENCE OUTLET – INSTALL IAW DETAIL E/C741.		

GENERAL NOTES:

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KEYNOTES: ◇

1. INSTALL TEMPORARY SEDIMENT BASIN IAW DETAIL A/C743. MUST HAVE GROUND COVER WITHIN 7 DAYS.
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HORIZONTAL SCALE

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(IN FEET)

1 inch = 40 ft.

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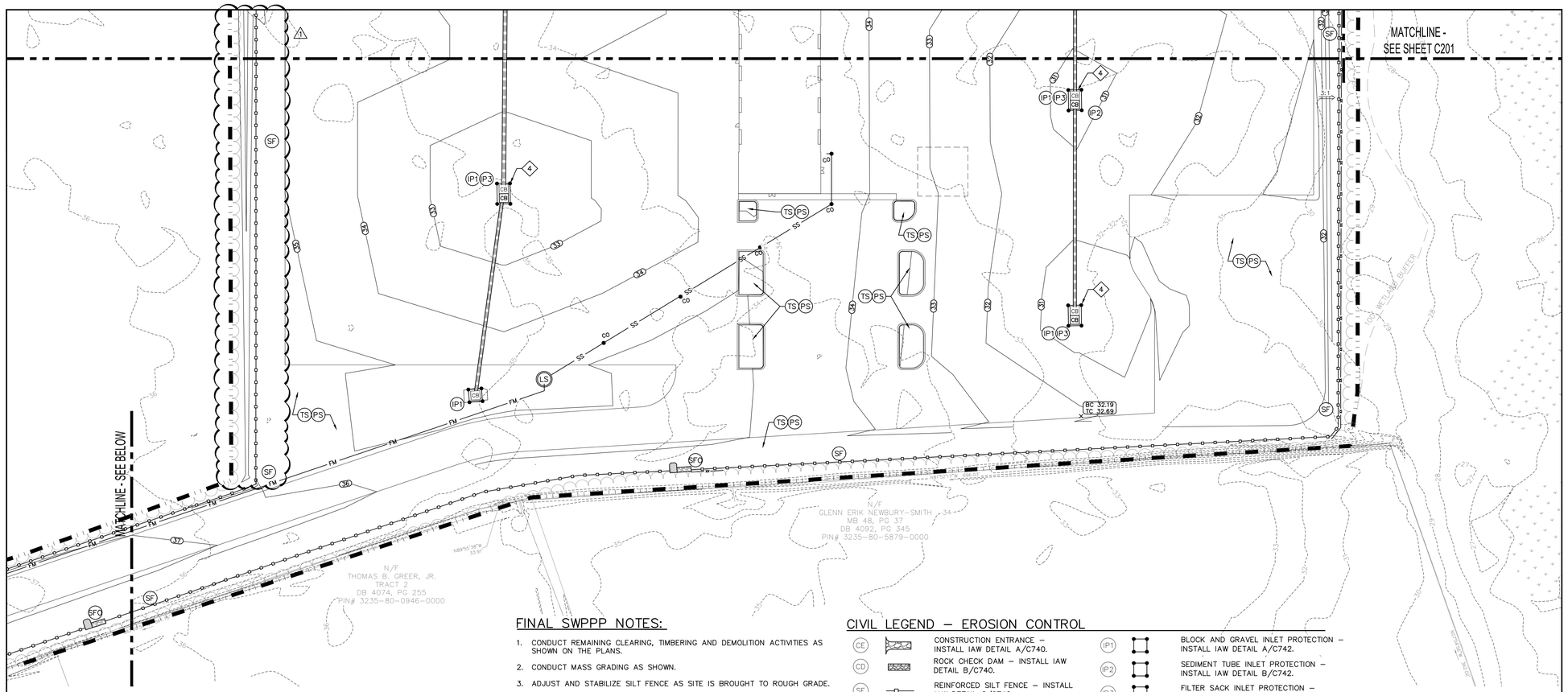
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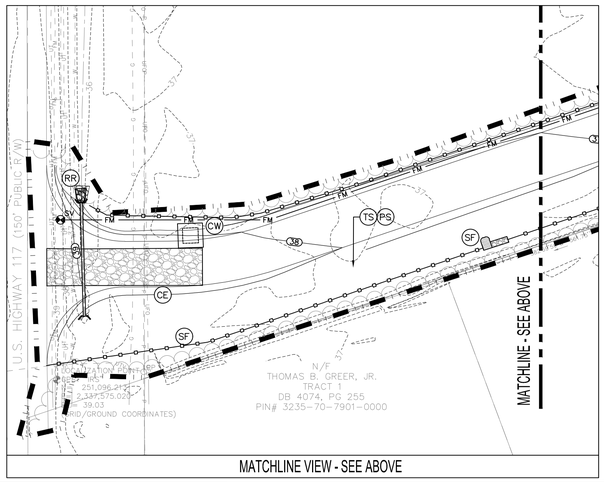
REVISION:

1	GENERAL REVISIONS	08/08/2023

EROSION CONTROL PLAN - FINAL AREA 1

C721





MATCHLINE VIEW - SEE ABOVE

FINAL SWPPP NOTES:

1. CONDUCT REMAINING CLEARING, TIMBERING AND DEMOLITION ACTIVITIES AS SHOWN ON THE PLANS.
2. CONDUCT MASS GRADING AS SHOWN.
3. ADJUST AND STABILIZE SILT FENCE AS SITE IS BROUGHT TO ROUGH GRADE.
4. INSTALL BUILDING PAD AS SHOWN AND CERTIFY TO OWNER.
5. INSTALL CONCRETE WASH OUT AREA AND CONTRACTOR LAYDOWN AREA.
6. BEGIN BUILDING CONSTRUCTION.
7. INSTALL WALLS.
8. TEMPORARILY SEED DISTURBED AREAS IAW THE PLANS, DETAILS AND THE CONSTRUCTION GENERAL PERMIT.
9. GRADE SITE TO ELEVATIONS SHOWN ON PLAN. SEE GRADING PLANS FOR SPOT ELEVATIONS.
10. INSTALL INLET PROTECTION AS STRUCTURES ARE COMPLETED.
11. INSTALL/COORDINATE REMAINING UTILITIES.
12. PREPARE SITE FOR PAVING.
13. INSTALL CURBS, SIDEWALKS, AND PAVE SITE.
14. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
15. COMPLETE REMAINING GRADING.
16. COMPLETE FINAL GRADING OF PERMANENT PONDS AND INSTALL LOW-FLOW CHANNELS AND OUTLET PROTECTION, IAW GRADING PLANS AND DETAILS. SKIMMER AND FILTER RINGS MUST REMAIN AT POND OUTLETS AS SHOWN UNTIL SITE IS STABILIZED.
17. CONTRACTOR TO VERIFY THE VOLUME AND TOPOGRAPHY OF THE PERMANENT POND.
18. PERMANENTLY STABILIZE DISTURBED AREAS IAW DETAILS AND LANDSCAPE PLAN.
19. MAINTAIN BEST MANAGEMENT PRACTICES THROUGHOUT CONSTRUCTION.
20. CLEAN ALL STORM PIPES AND BOXES.
21. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES INCLUDING SKIMMER, WEIR COVER AND FILTER RINGS IN PONDS AFTER APPROVAL OF THE ENGINEER AND THE CONTRACTING OFFICER AND STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF THE BEST MANAGEMENT PRACTICES.
22. CONTINUE INSPECTION REPORTS IAW CONSTRUCTION GENERAL PERMIT UNTIL THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.

CIVIL LEGEND – EROSION CONTROL

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GENERAL NOTES:

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KEYNOTES:

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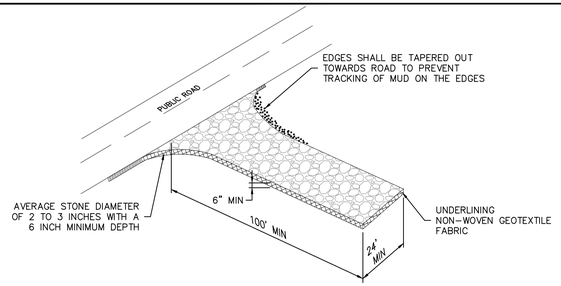
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REVISION:
1 GENERAL REVISIONS 08/08/2023

EROSION CONTROL PLAN - FINAL AREA 2

C722



NOTES:

1. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
2. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.

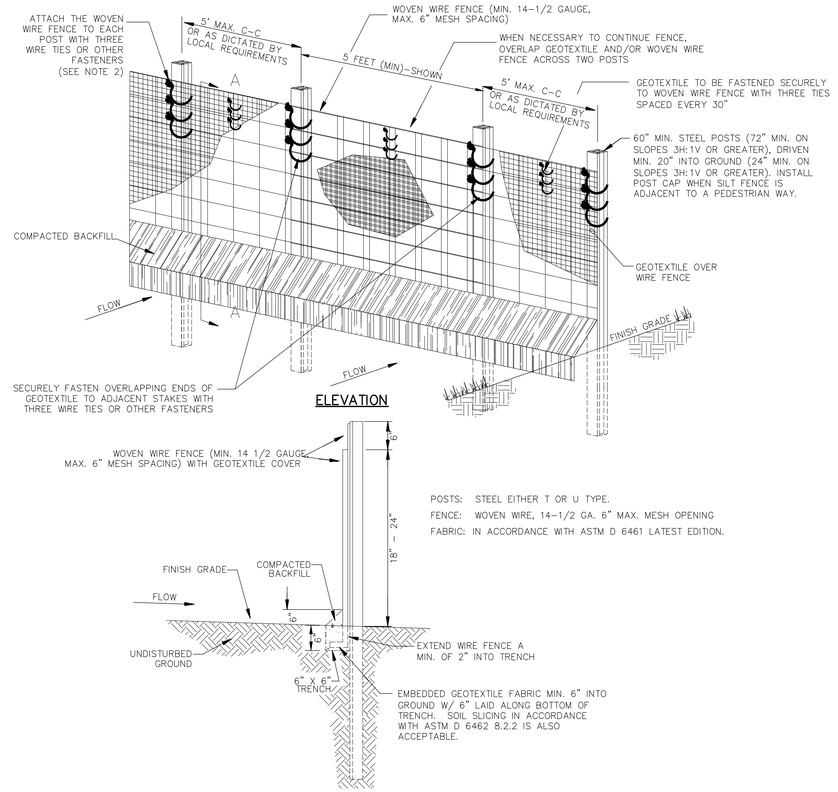
GENERAL NOTES:

1. STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL EGRESS/INGRESS A CONSTRUCTION SITE ONTO A PUBLIC ROAD OR ANY IMPERVIOUS SURFACES, SUCH AS PARKING LOTS.
2. INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE.
3. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
4. THE ENTRANCE SHALL CONSIST OF 2-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES.
5. MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FEET WIDE BY 100-FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS.
6. THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING AT THE EDGE OF THE ENTRANCE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.
8. LIMESTONE MAY NOT BE USED FOR THE STONE PAD.

INSPECTION AND MAINTENANCE:

1. THE KEY TO FUNCTIONAL CONSTRUCTION ENTRANCES IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF CONSTRUCTION ENTRANCES SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION.
3. DURING REGULAR INSPECTIONS, CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. INSPECTION FREQUENCIES MAY NEED TO BE MORE FREQUENT DURING LONG PERIODS OF WET WEATHER.
4. RESHAPE THE STONE PAD AS NECESSARY FOR DRAINAGE AND RUNOFF CONTROL.
5. WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY SITE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE THE AMOUNT OF MUD BEING CARRIED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE PAD.
6. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO ADJACENT IMPERVIOUS SURFACES BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.
7. DURING MAINTENANCE ACTIVITIES, ANY BROKEN PAVEMENT SHOULD BE REPAIRED IMMEDIATELY.
8. CONSTRUCTION ENTRANCES SHOULD BE REMOVED AFTER THE SITE HAS REACHED FINAL STABILIZATION. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH CONSTRUCTION ENTRANCES HAVE BEEN REMOVED, UNLESS AREA WILL BE CONVERTED TO AN IMPERVIOUS SURFACE TO SERVE POST-CONSTRUCTION.

CE A CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



ELEVATION

POSTS: STEEL EITHER T OR U TYPE.
FENCE: WOVEN WIRE, 14-1/2 GA. 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

A-A-SECTION

SILT FENCE - GENERAL NOTES

1. DO NOT PLACE SILT FENCE ACROSS CHANNELS OR IN OTHER AREAS SUBJECT TO CONCENTRATED FLOWS. SILT FENCE SHOULD NOT BE USED AS A VELOCITY CONTROL BMP. CONCENTRATED FLOWS ARE ANY FLOWS GREATER THAN 0.5 CFS.
2. MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE SILT FENCE SHALL BE 100-FEET.
3. MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO THE FENCE LINE) SHALL BE 2:1.
4. SILT FENCE JOINTS, WHEN NECESSARY, SHALL BE COMPLETED BY ONE OF THE FOLLOWING OPTIONS:
   - WRAP EACH FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 1-FOOT MINIMUM OVERLAP;
   - OVERLAP SILT FENCE BY INSTALLING 3-FEET PASSED THE SUPPORT POST TO WHICH THE NEW SILT FENCE ROLL IS ATTACHED. ATTACH OLD ROLL TO NEW ROLL WITH HEAVY-DUTY PLASTIC TIES; OR,
   - OVERLAP ENTIRE WIDTH OF EACH SILT FENCE ROLL FROM ONE SUPPORT POST TO THE NEXT SUPPORT POST.
5. ATTACH FILTER FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED WITHIN THE TOP 8-INCHES OF THE FABRIC.
6. INSTALL THE SILT FENCE PERPENDICULAR TO THE DIRECTION OF THE STORMWATER FLOW AND PLACE THE SILT FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.
7. INSTALL SILT FENCE CHECKS (TIE-BACKS) EVERY 50-100 FEET, DEPENDENT ON SLOPE, ALONG SILT FENCE THAT IS INSTALLED WITH SLOPE AND WHERE CONCENTRATED FLOWS ARE EXPECTED OR ARE DOCUMENTED ALONG THE PROPOSED/INSTALLED SILT FENCE.

SILT FENCE - POST REQUIREMENTS

1. SILT FENCE POSTS MUST BE 48-INCH LONG STEEL POSTS THAT MEET, AT A MINIMUM, THE FOLLOWING PHYSICAL CHARACTERISTICS.
   - COMPOSED OF A HIGH STRENGTH STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
   - INCLUDE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND A NOMINAL "T" LENGTH OF 1.48-INCHES.
   - WEIGH 1.25 POUNDS PER FOOT (± 8%)
2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING OF FILTER FABRIC.
3. STEEL POSTS MAY NEED TO HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM WHEN INSTALLED ALONG STEEP SLOPES OR INSTALLED IN LOOSE SOILS. THE PLATE SHOULD HAVE A MINIMUM CROSS SECTION OF 17-SQUARE INCHES AND BE COMPOSED OF 15 GAUGE STEEL, AT A MINIMUM. THE METAL SOIL STABILIZATION PLATE SHOULD BE COMPLETELY BURIED.
4. INSTALL POSTS TO A MINIMUM OF 24-INCHES A MINIMUM HEIGHT OF 1- TO 2- INCHES ABOVE THE FABRIC SHALL BE MAINTAINED, AND A MAXIMUM HEIGHT OF 3 FEET SHALL BE MAINTAINED ABOVE THE GROUND.
5. POST SPACING SHALL BE AT A MAXIMUM OF 6-FEET ON CENTER.

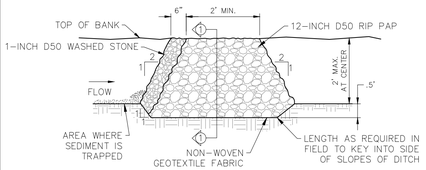
SILT FENCE - INSPECTION & MAINTENANCE

1. THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION.
3. ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE SILT FENCE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE.
5. REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
6. CHECK FOR AREAS WHERE STORMWATER RUNOFF HAS ERODED A CHANNEL BENEATH THE SILT FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE SILT FENCE. INSTALL CHECKS/TIE-BACKS AND/OR REINSTALL SILT FENCE, AS NECESSARY.
7. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DECOMPOSE, AND FOR ANY OTHER CIRCUMSTANCE THAT MAY RENDER THE SILT FENCE INEFFECTIVE. REMOVED DAMAGED SILT FENCE AND REINSTALL NEW SILT FENCE IMMEDIATELY.
8. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED AND ONCE IT IS REMOVED, THE RESULTING DISTURBED AREA SHALL BE PERMANENTLY STABILIZED.

SILT FENCE - FABRIC REQUIREMENTS

1. SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS:
   - COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES THAT ARE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER;
   - FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION;
   - FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES; AND,
   - HAVE A MINIMUM WIDTH OF 36-INCHES.
2. USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34, MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
3. 12-INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH IS BACKFILLED.
4. FILTER FABRIC SHALL BE PURCHASED IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS.
5. FILTER FABRIC SHALL BE INSTALLED AT A MINIMUM OF 24-INCHES ABOVE THE GROUND.

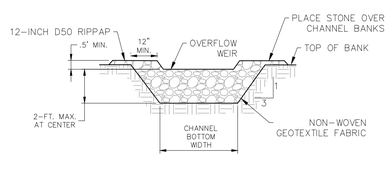
SF C REINFORCED SILT FENCE DETAIL
NOT TO SCALE



NOTE:

ROCK CHECK TO BE REMOVED BY GRADING CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND GRASSING IS ESTABLISHED

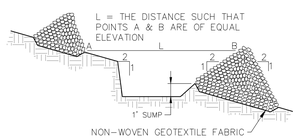
TYPICAL DITCH CHECK SECTION



CROSS SECTION 1-1
THRU STONE DITCH CHECK

INSPECTION AND MAINTENANCE:

1. INSPECT ROCK DITCH CHECKS ONCE PER CALENDAR WEEK AND WITHIN 24 HOURS OF A RAINFALL EVENT THAT PRODUCES 1/2 INCH OR MORE OF PRECIPITATION.
2. INSPECT FOR SEDIMENT AND DEBRIS ACCUMULATION.
3. INSPECT DITCH CHECK EDGES FOR EROSION AND REPAIR PROMPTLY AS REQUIRED.
4. REMOVE SEDIMENT WHEN IT REACHES 1/3 THE ORIGINAL CHECK HEIGHT.
5. IN THE CASE OF GRASS-LINED DITCHES AND SWALES, ROCK DITCH CHECKS SHALL BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE UNLESS THE SLOPE OF THE SWALE IS GREATER THAN 4%.
6. AFTER CONSTRUCTION IS COMPLETE, ALL STONE SHOULD BE REMOVED BY THE GRADING CONTRACTOR IF VEGETATION WILL BE USED FOR PERMANENT EROSION CONTROL MEASURES.
7. THE AREA BENEATH THE ROCK DITCH CHECKS SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER ROCK CHECK DAM REMOVAL.



SPACING BETWEEN DITCH CHECK

CD B ROCK DITCH CHECK
NOT TO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA



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DATE:	07/21/2023
ADC PROJECT #:	22530
DESIGNED:	LKB
CHECKED:	LKB
DRAWN:	LKB
REVISION:	

CIVIL DETAILS
- EROSION CONTROL

C740



DIMENSIONS:

HEIGHT: 30"
WIDTH: 24"

SIGN MOUNTING:

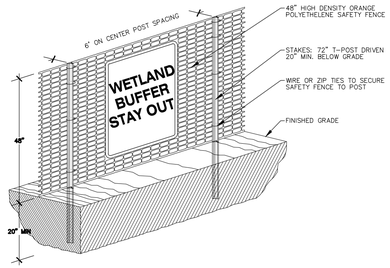
WETLAND BUFFER SIGN TO BE MOUNTED ON GALVANIZED "U" CHANNEL WITH THE APPROPRIATE SIGN FACE

COLORS:

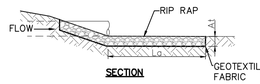
LEGEND: BLACK (RETROFLECTIVE)
BACKGROUND: ORANGE (RETROFLECTIVE)

SIGN SPACING:

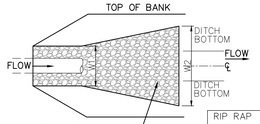
50' ON CENTER AROUND THE PERIMETER OF THE WETLAND BUFFER



xx (A) WETLAND BUFFER SIGN AND ORANGE CONSTRUCTION FENCE
NOT TO SCALE



SECTION



NOTE:
1. PLACE RIP-RAP IN ALL AREAS INDICATED ON THE DRAWING. THE STONE SHALL CONSIST OF FIELD STONE OR ROUGH, UNHEWN QUARRY STONE AS NEARLY UNIFORM IN SECTION AS IS PRACTICAL THE STONES SHALL BE DENSE, RESISTANT TO THE ACTION OF AIR AND WATER, AND SUITABLE IN ALL ASPECTS FOR THE PURPOSE INTENDED.
2. GRADE SUBGRADE BELOW RIP-RAP PAD SMOOTHLY BEFORE PLACING THE STONES.
3. TOP OF RIP RAP SHALL BE LOWER THAN PIPE INVERT.

MAINTENANCE INSTRUCTIONS
1. INSPECT RIP RAP APRONS DAILY.
2. REPAIR/REPLACE/SUPPLEMENT RIP RAP THAT HAS BEEN DISPLACED OR COVERED WITH SEDIMENT.

RIP RAP APRON #	d50 (ft)	dmax (ft)	MIN. WT.	CLASS	APRON THICKNESS (At)	La (ft)	W1 (ft)	W2 (ft)
FES C0	.6	.9	75	B	1.35	19	9	22
HW D0	.5	.75	12	A	1.125	8	3.75	9.25

d50 = AVERAGE STONE SIZE

dmax = MAXIMUM STONE SIZE
* WRAP RIP RAP 3' UP SIDE OF SWALE, BOTH SIDES

RR (B) RIP RAP APRON
NOT TO SCALE

TEMPORARY SEEDING

WINTER/EARLY SPRING SEASON

Seeding mixture

Species	Rate (lb/acre)
Rye (grain)	120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

Seeding dates
Mountains—Above 2500 feet: Feb. 15 - May 15
Below 2500 feet: Feb. 1- May 1
Piedmont—Jan. 1 - May 1
Coastal Plain—Dec. 1 - Apr. 15

Soil amendments
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

SUMMER SEASON

Seeding mixture

Species	Rate (lb/acre)
German millet	40

In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.

Seeding dates
Mountains—May 15 - Aug. 15
Piedmont—May 1 - Aug. 15
Coastal Plain—Apr. 15 - Aug. 15

Soil amendments
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

FALL SEASON

Seeding mixture

Species	Rate (lb/acre)
Rye (grain)	120

Seeding dates
Mountains—Aug. 15 - Dec. 15
Coastal Plain and Piedmont—Aug. 15 - Dec. 30

Soil amendments
Follow soil tests or apply 2,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.

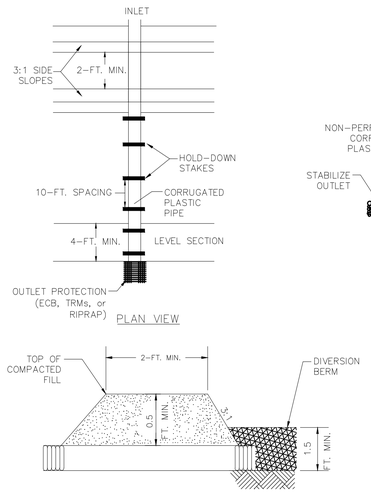
Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extent temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.

NOTES:

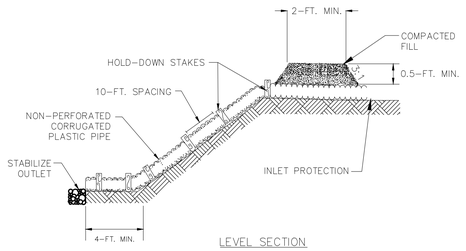
1. THE GC IS REQUIRED TO, AT A MINIMUM, INITIATE SOIL STABILIZATION MEASURES IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT LIKELY RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. DIVERSION CHANNELS/DITCHES SHALL BE STABILIZED WITHIN 7 DAYS OF INSTALLATION.
2. THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON-VEGETATED MEASURES, IF UTILIZED.
3. ALL DISTURBED AREAS MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES APPROPRIATE FOR SITE SOIL AND CLIMATE CONDITIONS. MULCH IS REQUIRED FOR ALL SEEDING APPLICATIONS, AND ALL MULCH APPLICATIONS MUST INCLUDE A SUITABLE FORM OF MULCH ANCHORING TO MINIMIZE MOVEMENT OF MULCH BY WIND OR WATER.
4. ALTERNATIVE STABILIZATION MEASURES TO SEEDING, SUCH AS ANCHORED MULCH APPLICATION (WITHOUT SEEDING), MAY BE UTILIZED DURING PERIODS WHEN VEGETATIVE GROWTH IS UNLIKELY (E.G. WINTER MONTHS).
5. IT IS NOT ACCEPTABLE TO ALLOW BARE SOIL TO REMAIN EXPOSED AT ANY TIME DURING THE YEAR, REGARDLESS OF WEATHER/TEMPERATURE/SITE CONDITIONS.
6. ALTERNATIVE STABILIZATION MEASURES INCLUDE, BUT ARE NOT LIMITED TO: ANCHORED STRAW/HAY MULCH, WOOD CELLULOSE FIBER MULCH, SPRAY-ON SOIL GLUES/BINDERS, AND ROLLED EROSION CONTROL PRODUCTS.
7. ALL ROLLED EROSION CONTROL PRODUCTS SHALL HAVE CURRENT QDOR(TM) STATUS ISSUED BY THE EROSION CONTROL TECHNOLOGY COUNCIL (ECTC) PLUS ANY STATE OR AGENCY-SPECIFIC REQUIREMENTS. EVIDENCE OF QDOR(TM) APPROVAL SHALL ACCOMPANY THE PRODUCT SHIPPED TO THE JOBSITE FOR READY IDENTIFICATION BY THE CONTRACTOR OR AGENCY INSPECTOR.
8. ROLLED EROSION CONTROL PRODUCTS (NETS, BLANKETS, TURF REINFORCED MATES) AND VEGETATED AREAS NOT MEETING REQUIRED VEGETATIVE DENSITIES FOR FINAL STABILIZATION MUST BE INSPECTED ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2 INCH OR MORE OF PRECIPITATION. RILLING, RUTTING AND OTHER SIGNS OF EROSION INDICATE THE SPECIFIED EROSION CONTROL DEVICE IS NOT FUNCTIONING OR INSTALLED PROPERLY AND/OR ADDITIONAL EROSION CONTROL DEVICES ARE WARRANTED.

TS (D) SEEDING NOTES
NO SCALE



PLAN VIEW

TYPICAL PIPE SLOPE DRAIN LAYOUT

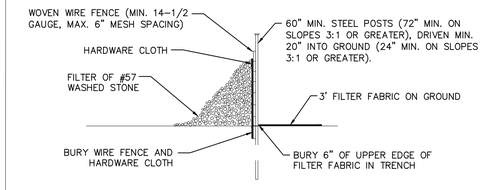


LEVEL SECTION

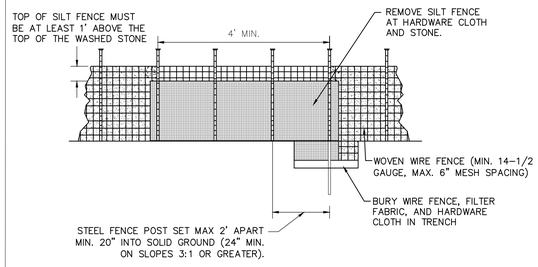
INSPECTION AND MAINTENANCE:

1. INSPECT PIPE SLOPE DRAIN INLET AND OUTLET POINTS EVERY CALENDAR WEEK AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½-INCHES OR MORE OF PRECIPITATION.
2. THE INLET SHALL BE FREE FROM UNDERCUTTING, AND NO WATER SHOULD BE GOING AROUND THE POINT OF ENTRY. IF THERE ARE PROBLEMS, THE HEADWALL SHALL BE REINFORCED WITH COMPACTED EARTH OR SANDBAGS. THE OUTLET POINT SHALL BE FREE OF EROSION AND INSTALLED WITH APPROPRIATE OUTLET PROTECTION.
3. ALL TEMPORARY PIPE SLOPE DRAINS SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP IS NO LONGER NEEDED. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHOULD BE PERMANENTLY STABILIZED.

SD (C) PIPE SLOPE DRAIN
NOT TO SCALE



NOTES:
1. INSPECT STONE OUTLET EVERY DAY.
2. INSPECT FOR SEDIMENT AND DEBRIS ACCUMULATION.
3. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 1/2 THE STONE OUTLET IS COVERED.
4. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.
5. INSTALL 6' LONG BERM STANDING 1' TALL PERPENDICULAR TO SILT FENCE.



FRONT VIEW

SFO (E) REINFORCED SILT FENCE OUTLET DETAIL
NOT TO SCALE

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
LUKE K. BARTHELEMY
07/21/2023

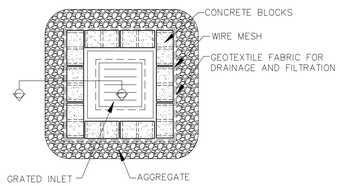
ADC ENGINEERING
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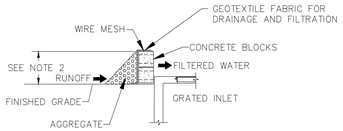
DATE: 07/21/2023
ADC PROJECT #: 22530
DESIGNED: LKB
CHECKED: LKB
DRAWN: LKB
REVISION:

CIVIL DETAILS
- EROSION CONTROL

C741



PLAN



SECTION 1–1

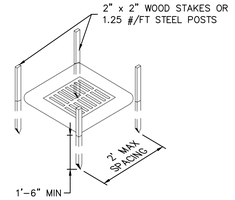
INSTALLATION NOTES:

1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. MIN. HEIGHT OF BARRIER SHALL BE 12" AND MAX. HEIGHT SHALL BE 24".
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE 3/4"–2" ANGULAR CLEAN STONE, WHICH WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

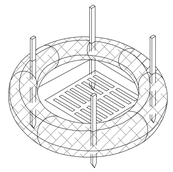
MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS AFTER A RAIN EVENT THAT PRODUCES 1/2–INCH OR MORE OF PRECIPITATION FOR SEDIMENT ACCUMULATION.
2. REMOVE SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW–RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

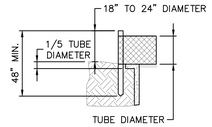
IP1 A BLOCK AND AGGREGATE INLET PROTECTION
NOT TO SCALE



POST INSTALLATION DETAIL



FILTER FABRIC INSTALLATION DETAIL



FILTER FABRIC BURIAL DETAIL

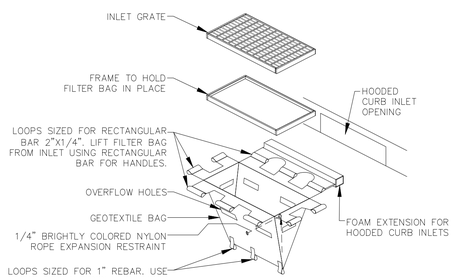
IP2 B SEDIMENT TUBE INLET PROTECTION

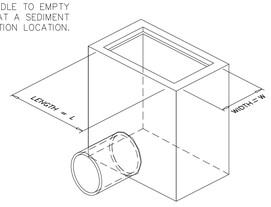
GENERAL NOTES:

1. SEDIMENT TUBES ARE ELONGATED TUBES OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER, OR HARDWOOD MULCH, STRAW, PINE NEEDLE, AND LEAF MULCH–FILLED SEDIMENT TUBES ARE NOT PERMITTED.
2. THE OUTER NETTING OF THE SEDIMENT TUBE SHOULD CONSIST OF SEAMLESS, HIGH–DENSITY POLYETHYLENE PHOTO–DEGRADABLE MATERIALS TREATED WITH ULTRAVIOLET STABILIZERS OR A SEAMLESS, HIGH–DENSITY POLYETHYLENE NON–DEGRADABLE MATERIAL.
3. SEDIMENT TUBE DIAMETERS SHALL RANGE FROM 18" TO 24". SEDIMENT TUBES WITH SMALLER DIAMETERS ARE PROHIBITED WHEN USED AS INLET PROTECTION.
4. CURLED EXCELSIOR WOOD. OR NATURAL COCONUT PRODUCTS THAT ARE ROLLED UP TO CREATE A SEDIMENT TUBE ARE NOT ALLOWED.
5. SEDIMENT TUBES SHOULD BE STAKED USING WOODEN OAK STAKES (2" x 2") OR STEEL POSTS (STANDARD "U" OR "T" SECTIONS WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT) AT A MINIMUM OF 48" IN LENGTH PLACE ON 2 FOOT CENTERS.
6. INSTALL ALL SEDIMENT TUBES TO ENSURE THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE TUBE. MANUFACTURER'S RECOMMENDATIONS SHOULD ALWAYS BE CONSULTED BEFORE INSTALLATION.
7. THE ENDS OF ADJACENT SEDIMENT TUBES SHOULD BE OVERLAPPED 6" TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT.
8. SEDIMENT TUBES SHOULD NOT BE STACKED ON TOP OF ONE ANOTHER.
9. EACH SEDIMENT TUBE SHOULD BE INSTALLED IN A TRENCH WITH A DEPTH EQUAL TO 1/5 THE DIAMETER OF THE SEDIMENT TUBE.
10. INSTALL STAKES AT A DIAGONAL FACING INCOMING RUNOFF.

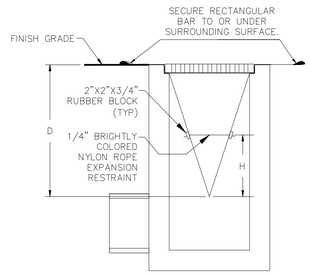
INSPECTION AND MAINTENANCE:

1. THE KEY TO FUNCTIONAL INLET PROTECTION IS WEEKLY INSPECTIONS, ROUTING MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF SEDIMENT TUBE INLET PROTECTION SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24 HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2" OR MORE OF PRECIPITATION.
3. ATTENTION TO SEDIMENT ACCUMULATION IN FRONT OF THE SEDIMENT TUBE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SEDIMENT TUBE. WHEN A SUMP IN INSTALLED IN FRONT OF THE INLET PROTECTION, SEDIMENT SHALL BE REMOVED WHEN IT FILLS APPROXIMATELY 1/3 THE DEPTH OF THE SUMP.
5. REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
6. LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED FROM IN FRONT OF TUBES WHEN FOUND.
7. INLET PROTECTION STRUCTURES SHOULD BE REMOVED AFTER THE DISTURBED AREAS ARE PERMANENTLY STABILIZED. REMOVE ALL CONSTRUCTION MATERIAL AND SEDIMENT, AND DISPOSE OF THEM PROPERLY. GRADE THE DISTURBED AREA TO THE ELEVATION OF THE DROP INLET STRUCTURE CREST. STABILIZE ALL BARE AREAS IMMEDIATELY.





ISOMETRIC VIEW



SECTION VIEW
(FILTER SACK INSTALLED)

NOTES:

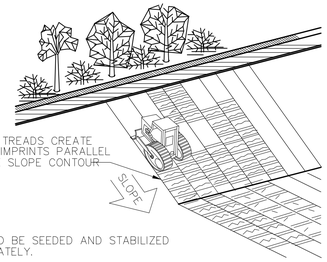
1. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
2. PLACE AN OIL ABSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
3. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
4. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
5. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

MAINTENANCE NOTES:

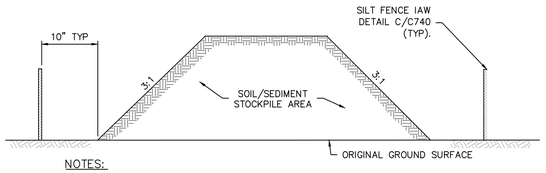
1. INSPECT INLET PROTECTION DEVICES ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS OF A RAINFALL EVENT THAT PRODUCES 1/2–INCH OR MORE OF PRECIPITATION FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW–RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
5. PROVIDE FOAM FILTER FOR HOODED CURB INLETS AS SHOWN.

GEOTEXTILE SPECIFICATION TABLE		
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	135 LBS
MULLEN BURST	ASTM D–3786	420 PSI
TRAPEZOID TEAR	ASTM D–4533	45 LBS
UV RESISTANCE	ASTM D–4355	90 %
APPARENT OPENING SIZE	ASTM D–4751	20 US SIEVE
FLOW RATE	ASTM D–4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	1.5 SEC –1

IP3 C FILTER SACK INLET PROTECTION
NOT TO SCALE



TR D TRACKING



NOTES:

1. SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE, OR IF STOCKPILE AREA IS LOCATED ON/NEAR A SLOPE THE SILT FENCE IS TO EXTEND ALONG CONTOURS OF THE DOWN–GRADIENT AREA.
2. IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, TEMPORARY STABILIZATION MEASURES MUST BE IMPLEMENTED.
3. SILT FENCE SHALL BE MAINTAINED UNTIL STOCKPILE AREA HAS EITHER BEEN REMOVED OR PERMANENTLY STABILIZED.
4. THE KEY TO FUNCTIONAL TEMPORARY STOCKPILE AREAS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.

E TEMPORARY STOCKPILE AREA

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
NORTH CAROLINA

NORTH CAROLINA
SEAL
027779
ENGINEER
LINDSAY K. BARTHOLEMEW
07/21/2023

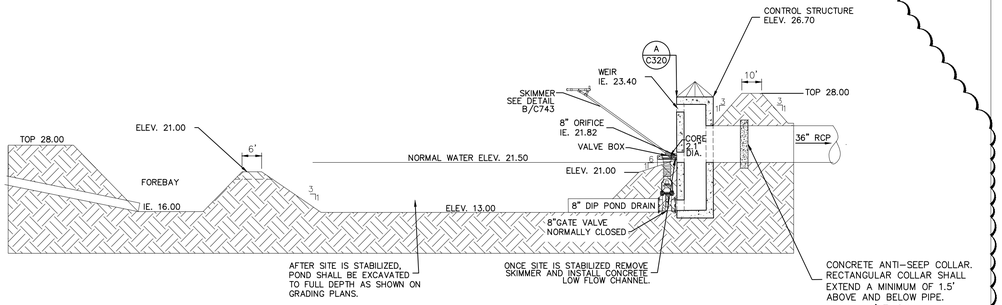
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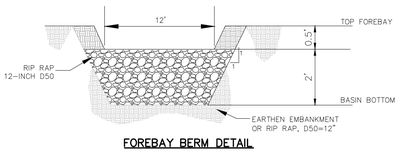
DATE: 07/21/2023
ADC PROJECT #: 22530
DESIGNED: LKB
CHECKED: LKB
DRAWN: LKB
REVISION:

CIVIL DETAILS
- EROSION CONTROL

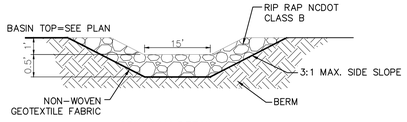
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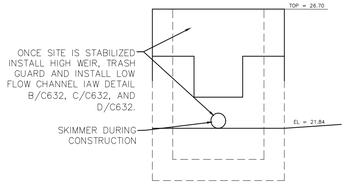
POND CROSS SECTION



FOREBAY BERM DETAIL



SPILLWAY DETAIL



DROP STRUCTURE FOR DURING CONSTRUCTION

MAINTENANCE NOTES:

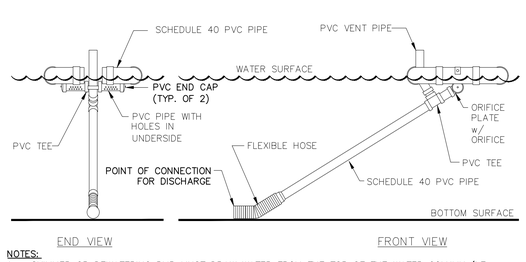
1. SEDIMENT BASINS MUST BE INSPECTED AND MUST BE CLEANED WHEN THE ORIGINAL CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR LESS, AS REQUIRED BY GOVERNING AGENCY.
2. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT BARRIERS OR FROM BASINS SHALL BE INCORPORATED INTO ON-SITE SOILS OR SPREAD OUT ON AN UPLAND PORTION OF THE SITE AND STABILIZED.
3. VERIFY THAT NO EROSION IS OCCURRING AT DISCHARGE POINTS TO AND FROM IMPOUNDMENTS AND VERIFY THAT BASIN SIDE SLOPES ARE STABILIZED AND SHOW NO SIGNS OF EROSION.
4. OUTLET STRUCTURES IN SEDIMENT BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES.

NOTES:

1. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
2. FILL MATERIAL AROUND PIPE SHALL BE COMPACTED IN 4 INCH LIFTS. A MINIMUM OF 2 FEET OF COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE BEFORE CROSSING IT WITH CONSTRUCTION TRAFFIC.
3. SIDE SLOPES SHALL BE 3:1 OR FLATTER AND MUST BE STABILIZED IMMEDIATELY AS SURFACES ARE BROUGHT TO FINAL GRADE OR PER TEMPORARY STABILIZATION STANDARDS.
4. WATER MUST ONLY BE REMOVED FROM THE SURFACE OF THE CONTAINED WATER. A SKIMMER OR SIMILAR FLOATING DEVICE MUST BE USED, TO ONLY REMOVE WATER FROM THE SURFACE.

TEMPORARY SEDIMENT BASIN	
	POND
TOP ELEVATION	28.00 FT
BOTTOM OF FOREBAY ELEVATION	16.00 FT
BOTTOM OF MAIN POOL ELEVATION	13.00 FT
STORAGE VOLUME REQUIRED	52,560 CF
STORAGE VOLUME PROVIDED	168,659 CF
STORAGE DEPTH REQUIRED	1.60 FT

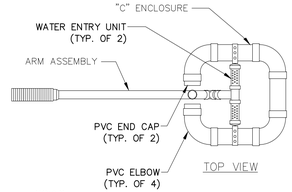
SB A TEMPORARY SEDIMENT BASIN DETAIL



END VIEW FRONT VIEW

NOTES:

1. SKIMMER OR DEWATERING BMP MUST DRAW WATER FROM THE TOP OF THE WATER COLUMN (I.E., WATER SURFACE) PER US EPA CGP.
2. DO NOT USE RISERS WITH PERFORATED PIPE OR ANY OTHER SYSTEM/BMP THAT DRAWS WATER FROM BELOW THE WATER SURFACE.



TOP VIEW

NOTES:

1. BASIS OF DESIGN IS A "8.0-INCH FAIRCLOTH SKIMMER ®" EQUIVALENT SKIMMMER SHALL BE CAPABLE OF FASTENING TO THE OUTLET STRUCTURE WATERTIGHT AND DEWATERING AS FOLLOWS: BASIN = 195,956 CF OF WATER OVER A 2-5 DAY PERIOD WITH A TARGET OF 3 DAYS.
2. IF SKIMMER IS COMMERCIALLY AVAILABLE, INSTALL, DEWATER, AND MAINTAIN PER MANUFACTURER'S SPECIFICATIONS.

FLOW CAPACITIES (IN CU. FT.) FOR THE *FAIRCLOTH SKIMMER®*

Skimmer size	1.5"	2"	2.5"	3"	4"	5"	6"	8"
24 hours	1,728	3,283	6,234	9,774	20,109	32,832	51,840	97,978
2 day	3,456	6,566	12,468	19,548	40,218	65,664	103,680	195,956
3 day	5,184	9,849	18,702	29,322	60,327	98,496	155,520	293,934
4 day	6,912	13,132	24,936	39,096	80,436	131,328	207,360	391,912
5 day	8,640	16,415	31,170	48,870	100,545	164,160	259,200	489,890
6 day	10,368	19,698	37,404	58,644	120,654	196,992	311,040	587,868
7 day	12,096	22,981	43,638	68,418	140,763	229,824	362,880	685,846

SK B SKIMMER (SEDIMENT BASIN)

NC Rocky Point US 117, LLC
Greenville, South Carolina

ROCKY POINT AUTO AUCTION

ROCKY POINT
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1	GENERAL REVISIONS 08/08/2023

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