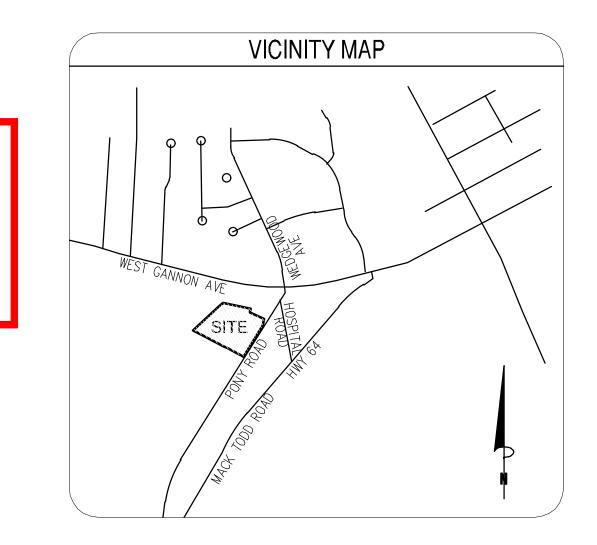
## WAKE COUNTY NOTES

# CONSTRUCTION DOCUMENTS

Proposed The Carrington 303 Pony Road Zebulon, North Carolina Wake County

**Approved Town of Zebulon Meade Bradshaw III** 05/26/2022



COVER  $\Omega$ 

> PRELIMINARY DO NOT

**USE FOR** CONSTRUCTION

PLAN STATUS 0/29/21|1ST SUBMISSION

2/9/22 PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 5/2/22 | PER TOWN REVIEW DATE DESCRIPTION MEL XXX

DESIGN DRAWN CHKD H: 1" = 40' SCALE V: 1" = XXX' JOB No. 000000-00-000 DATE October 29, 202

FILE No. 000000-D-CP-00

C1.0

SHEET

# DEVELOPER

The Carrington, LP Attn. Kevin Connelly 125 Old Chapin Rd. Lexington, SC 29072 (803) 798-0572 tkc@connellybuilders.com

# CIVIL ENGINEER

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



Index of Drawings

C2.4

A-1

A-3

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SHEET TITLE

COVER SHEET
GENERAL NOTES, ABBREVIATIONS, AND LEGEND

DEMOLITION PLAN

EROSION CONTROL PLAN — INITIAL

EROSION CONTROL PLAN - FINAL

EROSION CONTROL NOTES

NC CONSTRUCTION GENERAL PERMIT (NCGO1) NOTES

GRADING & DRAINAGE PLAN

GRADING & DRAINAGE NOTES

**EROSION CONTROL DETAILS** 

EROSION CONTROL DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

ORMWATER MANAGEMENT DETAIL

ORMWATER MANAGEMENT DETAIL

TORMWATER MANAGEMENT DETAILS

BUILDING ELEVATIONS - 1 AND 2 BEDROOM UNI

FLOOR PLANS
BUILDING ELEVATIONS — BUILDING 1ST & 2ND

FLOOR PLANS
BUILDING ELEVATIONS — BUILDING 3RD & 4TH

**BUILDING ELEVATIONS** 



62,896 SF 1.44 ACRE(S) 18.83 % OF AREA 271,061 SF 6.22 ACRE(S) 81.17 % OF AREA EXISTING IMPERVIOUS AREA: 5,984 SF 0.14 ACRE(S) 1.79 % OF AREA INCREASE IN IMPERVIOUS AREA: 56,912 SF 1.31 ACRE(S)

22,721 SF 0.52 ACRE(S) 6.80 % OF AREA 5,235 SF 0.12 ACRE(S) 1.57 % OF AREA

34,940 SF 0.80 ACRE(S) 10.46 % OF AREA

PROJECT DEVELOPMENT DATA

**IMPERVIOUS AREA SUMMARY** 

DEVELOPMENT NAME: STREET ADDRESS: 303 PONY ROAD ZEBULON, NC 1795-83-7655

SIDEWALK

PAVEMENT

0053208 012841/02154 DEED BOOK/PAGE: ZONING DISTRICT(S): O&I (OFFICE AND INSTITUTIONAL)

SPECIAL USE PERMIT SUP 2019-01 CARDINAL PINES SITE ACRES: OVERALL AREA = 333,957 SF (7.667 AC) DISTURBED AREA: 3.1 ACRES

LATITUDE & LONGITUDE: N35.818581, W-78.328735

INSIDE TOWN LIMITS: VACANT EXISTING USE: 72 SENIOR APARTMENT UNITS PROPOSED BUILDING USE:

(40) 2 BEDROOM UNITS PROPOSED RESIDENTIAL DENSITY: 72 UNITS / 7.667 ACRES = 9.39 UNITS / ACRE

MAXIMUM RESIDENTIAL DENSITY: 12 UNITS/ACRE GROSS BUILDING AREA: MINIMUM LOT SIZE: 120 FT MINIMUM LOT WIDTH:

MINIMUM PERIMETER SETBACK: 25 FT MAXIMUM LOT COVERAGE: 40% OF TOTAL AREA

MINIMUM OPEN SPACE: 10% OF TOTAL AREA (50% TO BE ACTIVE OPEN SPACE) OPEN SPACE PROVIDED:

(32) 1 BEDROOM UNITS

MAXIMUM BUILDING HEIGHT: 50 FT/4 STORIES MINIMUM DISTANCE BETWEEN BUILDINGS: 25 FT

PARKING REQUIREMENT: 1.0 SPACES PER SENIOR DWELLING UNIT (NCHFA) 1.0 SPACE PER UNIT REQUESTED (PARKING STUDY) 72 UNITS = 72 PARKING SPACES

TOTAL REQUIRED: PARKING SPACES PROVIDED:

PARKING SPACE DIMENSIONS: 10' x 19' MIN 8.5' x 18' COMPACT (30% MAX) 20 FT ONE-WAY, 24 FT TWO-WAY MIN DRIVE AISLE:

ACCESSIBLE SPACES PROVIDED: 12

LANDSCAPE BUFFERS:

10 FT TYPE A BUFFER (ADJACENT RMF) 15 FT TYPE C STREETSCAPE BUFFER ALONG PONY ROAD

# SUP 2019-01

#### Town of Zebulon Special Use Permit Granted

SUP 2019-01 - Cardinal Pines

WDT Development, LLC

Zebulon, NC 27597

On June 3, 2019, the Board of Commissioners for the Town of Zebulon convened a meeting to consider taking action regarding an application for a Special Use Permit for multi-family apartments located within the Transitional Residential zoning district.

430 S. Woodland Road lenderson, NC 27536 Joseph B Vinson Jewel S Vinson Trustee PO Box 1128

2705431949 Multi-Family Apartments Transitional Residential (TR) Parcel Size: Approximately 7.07 acres

Having heard all the evidence and arguments presented at the a joint quasi-judicial hearing held on May 21, 2019, the Board of Commissioners finds that the application is complete, that the applicant has demonstrated that the findings of fact as indicated in §152.038(B) of the Town of Zebulon Code of Ordinances have been met for the development proposed, and the purpose indicated is hereby approved with the conditions listed below, subject to all applicable provisions of the Zebulou Code of Ordinances, including §152.060 Vested Right.

# Expiration Date: June 7, 2021

# Candition(s) of Approval:

- 1) A sidewalk connection should be made behind the building for connectivity and a
- 2) There should be a sidewalk connection from the front entrance of the building to the public sidewalk on Pony Rand; and
- 3) The project must receive Technical Review Committee approval from the Town of Zebulan conforming to the Code of Ordinances and Land Development Regulations.

IN WITNESS WHEREOF, the Town of Zebulon has eaused this permit to be issued in its name.



# CURRENT PROPERTY OWNERS

Joseph B. Vinson & Jewel S. Vinson (Trustee) Parrish Realty c/o Renee Baker P.O. Box 1128 Zebulon, NC 27597

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT	
APPROVED	
EROSION CONTROL   S	
STORMWATER MGMT.   S	
FLOOD STUDY   S	
DATE	
ENVIRONMENTAL CONSULTANT SIGNATURE	

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

# SITE PERMITTING APPROVAL

# Water and Sewer Permits (If applicable)

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

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specification of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and constructions methods used for this project shall conform to the standards and specifications of the City's Public Utilities City of Raleigh Public Utilities Department Permit # <u>S</u>

# ATTENTION CONTRACTORS

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

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

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

CITY OF RALEIGH PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval

Raleigh Water Review Officer

ANY CONSTRUCTION

15. EROSION CONTROL MEASURES TO BE COORDINATED WITH CONSTRUCTION MANAGER.

16. EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE APPROPRIATE GOVERNING AGENCY.

WEIGHT OR WIDTH

WEST BOUND LANE

WITH THRUST BLOCK

WATER SURFACE ELEVATION

WATER LINE

WATER MAIN

W/M OR WM

WATER METER

WATER VALVE

TRANSFORMER

YARD INLET YEAR

CROSSING

RAINFALL INTENSITY

INVERT ELEVATION

IRON PIPE FOUND

IRON PIPE SET IRRIGATION

JUNCTION BOX

INCH

JOINT

INVERT

IRON PIPE

INSIDE DIAMETER OR IDENTIFICATION

MEL | MEL | XXX | DESIGN | DRAWN | CHKD | SCALE | H: 1" = XXX' | V: 1" = XXX' | JOB No. | 000000-00-000 | DATE | October | 29, | 2021 | FILE No. | 000000-D-CP-000 |

SHEET C1.1

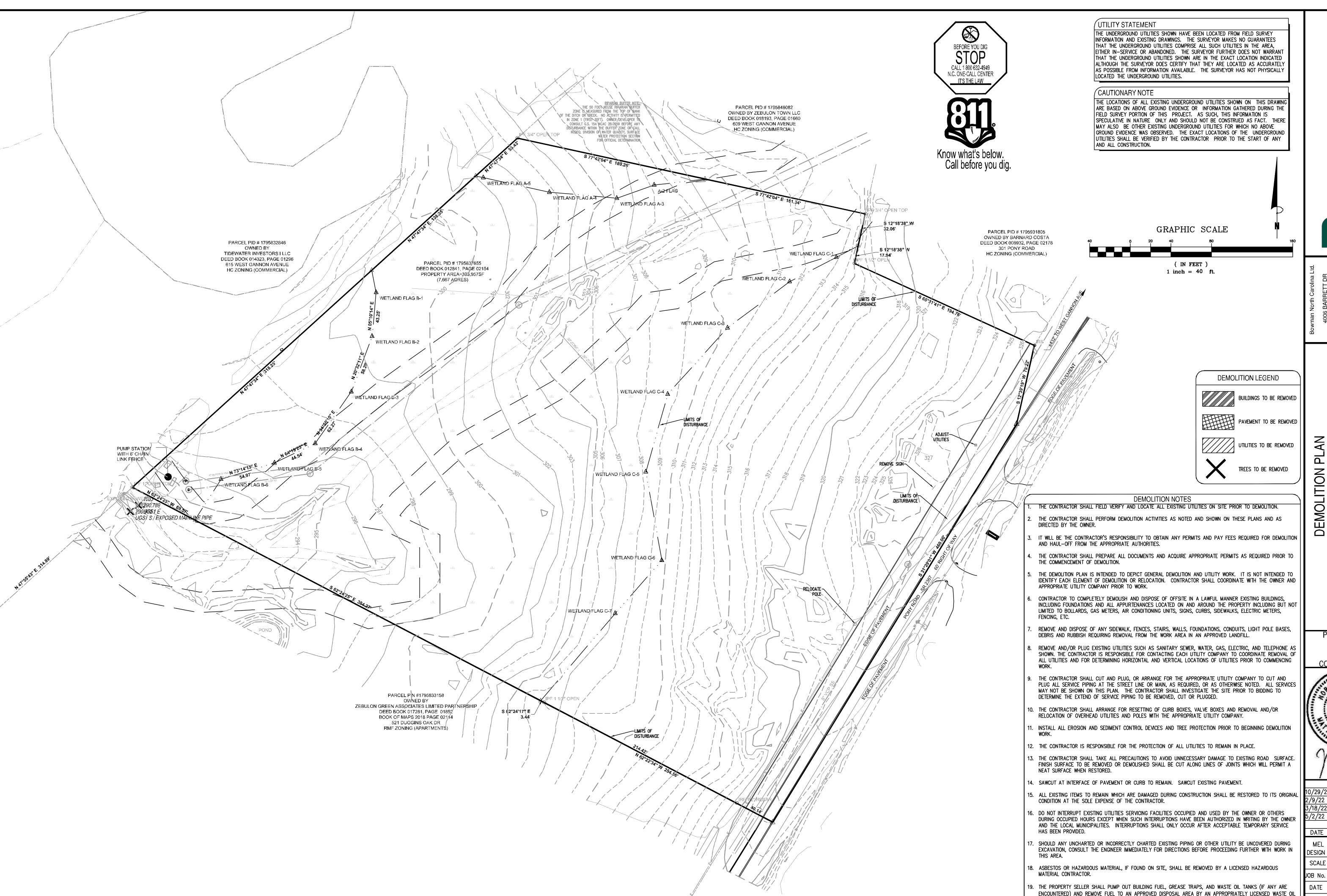
1. THIS IS A STANDARD SHEET, THEREFORE SOME ABBREVIATIONS MAY APPEAR ON THIS SHEET AND

ADDITIONAL LEGENDS AND NOTES MAY BE FOUND ON OTHER SHEETS ASSOCIATED WITH THIS PLAN.

THESE LEGENDS AND NOTES ARE TO BE REFERENCED IN ADDITION TO THIS STANDARD SHEET.

**LEGEND NOTES** 

NOT BE USED ON THE PROJECT.

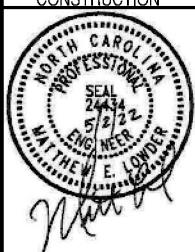


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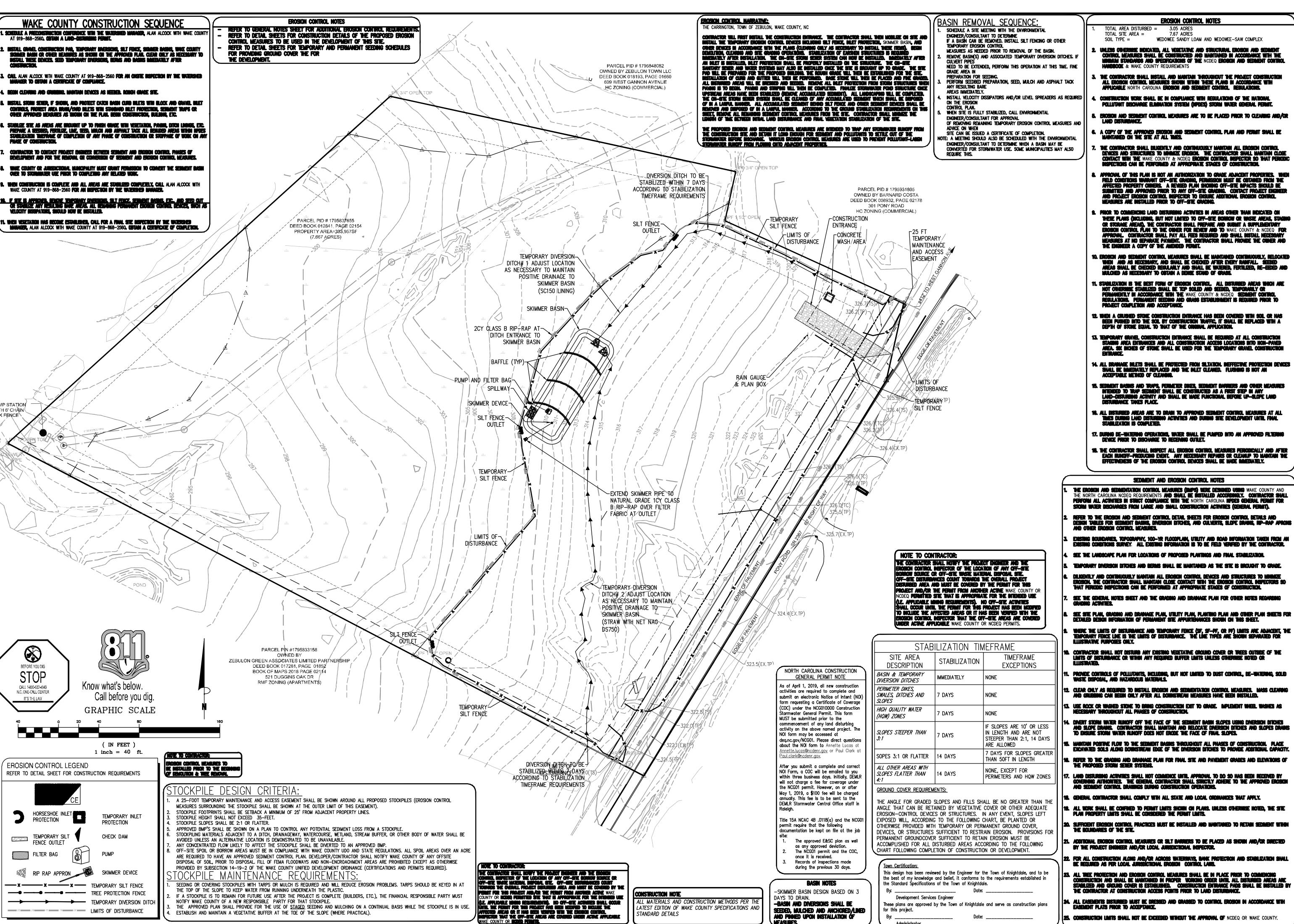
DO NOT USE FOR **CONSTRUCTION** 



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29/21	1ST	SUBMIS	SSION	
			REVIEW	
			REVIEW	
/22	PER	TOWN	REVIEW	
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	DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE	5/2/22	PER TOWN	REVIEW
	HAS BEEN PROVIDED.	DATE	DESCRIP	TION
<i>'</i> .	SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.	MEL DESIGN		XXX CHKD
3.	ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS	SCALE	H: 1" = XX V: 1" = XX	
	MATERIAL CONTRACTOR.	JOB No.	000000-0	000-000
).	THE PROPERTY SELLER SHALL PUMP OUT BUILDING FUEL, GREASE TRAPS, AND WASTE OIL TANKS (IF ANY ARE	DATE	October 2	9, 2021
	ENCOUNTERED) AND REMOVE FUEL TO AN APPROVED DISPOSAL AREA BY AN APPROPRIATELY LICENSED WASTE OIL HANDLING CONTRACTOR IN STRICT ACCORDANCE WITH FEDERAL AND STATE REQUIREMENTS BEFORE CONSTRUCTION	FILE No	. 000000-D	-CP-000

20. THE CONTRACTOR SHALL PROPERLY AND LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS OFF OF THE SITE.



BASIN NOTES

-SKIMMER BASIN DESIGN BASED ON 3

SEEDED, MULCHED AND ANCHORED/LINED

-BASIN AND DIVERSIONS SHALL BE

AND PINNED UPON INSTALLATION OF

DAYS TO DRAIN.

MEASURES.

ALL MATERIALS AND CONSTRUCTION METHODS PER TI

ATEST EDITION OF WAKE COUNTY SPECIFICATIONS AN

STANDARD DETAILS

the Standard Specifications of the Town of Knightdale.

These plans are approved by the Town of Knightdale and serve as construction plans

Development Services Engineer

for this project.

Administrator

erosion control notes 7.67 ACRES WEDOWEE SANDY LOAM AND WEDOWEE-SAW COMPLEX UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NODEQ EROSION AND SEDMENT CONTROL

THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS IN ACCORDANCE WITH APPLICABLE NORTH CAROLINA EROSION AND SEDMENT CONTROL. REGULATIONS.

. Construction work shall be in confliance with redulations of the national Pollutant discharge elimination system (Apoes) storm water general permit.

5. EROSION AND SEDMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.

6. A COPY OF THE APPROVED EROSION AND SEDMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL.

DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE
CONTACT WITH THE WAKE COUNTY & NCDEQ EROSION CONTROL INSPECTOR SO THAT PERIODIC
INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.

APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WANRANT OFF—SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY CHINERS. A REVISED PLAN SHOWING OFF—SITE IMPACTS SHOULD BE SUBMITTED AND APPROVED PRIOR TO ANY OFF—SITE GRADING. CONTACT PROJECT ENGINEER AND PROJECT EROSION CONTROL INSPECTOR TO ENSURE ADDITIONAL EROSION CONTROL MEASURES ARE INSTALLED PRIOR TO OFF—SITE GRADING.

. Prior to commencing land disturbing activities in Areas other than indicated on THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-STE BOTTOW OR WISTE ATEAS, STAGING OR STORAGE ATEAS). THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO WAKE COUNTY & NODEQ FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGNEER A COPY OF THE AMERICAN PERMIT.

EROSION AND SEDMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED ANEAS SHALL BE CHECKED RESULANLY AND SHALL BE WATERED, FERTILIZED, RE-EEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.

I. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOLED AND SEEDED, TEMPORARLY OR PERMANENTLY IN ACCORDANCE WITH THE WAKE COUNTY & NCDEQ SEDMENT CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO

12. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.

13. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO MON-PAVED AREA SK INCHES OF STONE SHALL BE USED FOR THE TEMPORARY GRAVEL CONSTRUCTION

14. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.

15. SEDMENT BASINS AND TRAPS, FERMETER DIKES, SEDMENT BARRIERS AND CTHER MEASURES INTENDED TO TRAP SEDMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.

16. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS COMPLETED.

17. DURING DE-WATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN AFFRONED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING QUILET.

18. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNGIF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE INMEDIATELY.

SEDIMENT AND EROSION CONTROL NOTES

THE NORTH CAROLINA NCDEQ REQUIREMENTS AND SHALL BE INSTALLED ACCORDINGLY. CONTRACTOR SHALL PERFORM ALL ACTIVITIES IN STRICT COMPLIANCE WITH THE NORTH CAROLINA MPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (GENERAL PERMIT).

REFER TO THE EROSION AND SEDMENT CONTROL DETAIL SHEETS FOR EROSION CONTROL DETAILS AND DESIGN TABLES FOR SEDMENT BASINS, DIVERSION DITCHES, AND CULVERTS, SLOPE DRAINS, RIP—RAP APRONS AND OTHER EROSION CONTROL MEASURES.

SEE THE LANDSCAPE PLAN FOR LOCATIONS OF PROPOSED PLANTINGS AND FINAL STABILIZATION.

TEMPORARY DIVERSION DITCHES AND BERMS SHALL BE MAINTAINED AS THE SITE IS BROUGHT TO GRADE.

DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTORS SO THAT PERIODIC INSPECTIONS CAM BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.

SEE THE GENERAL NOTES SHEET AND THE GRADING AND DRAINAGE PLAN FOR OTHER NOTES REGARDING GRADING ACTIVITIES.

SEE SITE PLAN, GRADDIC AND DRADVAGE PLAN, UTILITY PLAN, PLANTING PLAN AND OTHER PLAN SHEETS FOR DETAILED DESIGN INFORMATION OF PERMANENT SITE APPURTENANCES SHOWN ON THIS SHEET.

CONTRACTOR SHALL NOT DISTURB ANY EXISTING VEGETATIVE GROUND COVER OR TREES OUTSIDE OF THE LIMITS OF DISTURBANCE OR WITHIN ANY REQUIRED BUFFER LIMITS UNLESS OTHERWISE NOTED OR

PROVIDE CONTROLS OF POLLUTANTS, INCLUDING, BUT NOT LIMITED TO DUST CONTROL, DE-WATERING, SOLID WASTE DISPOSAL, AND HAZARDOUS WATERIALS.

CLEAR CHLY AS REQUIRED TO INSTALL EROSION AND SEDIMENTATION CONTROL NEASURES. MASS CLEARING AND GRUBBING CAN BEGIN ONLY AFTER ALL DOWNSTREAM MEASURES HAVE BEEN INSTALLED.

. USE ROCK OR WASHED STONE TO BRING CONSTRUCTION EXIT TO GRADE. IMPLEMENT WHEEL WASHES AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION.

MAINTAIN POSITIVE FLOW TO THE SEDMENT BASINS THROUGHOUT ALL PHASES OF CONSTRUCTION. PLACE EXCAVATED SOLS ALONG DOWNSTREAM EDGE OF THE DIVERSION DITCHES TO PROVIDE ADDITIONAL CAPACITY.

REFER TO THE GRADING AND DRAINAGE PLAN FOR FINAL SITE AND PAVENENT GRADES AND ELEVATIONS OF THE PROPOSED STORM SEXER SYSTEMS.

LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED ENOSIGN AND SEDMENT CONTROL DRAWINGS DURING CONSTRUCTION OPERATIONS.

I. ALL WORK SHALL BE CONFINED TO PERMIT LIMITS SHOWN ON PLANS. UNLESS OTHERWISE NOTED, THE SITE PLAN PROPERTY LIMITS SHALL BE CONSIDERED THE PERMIT LIMITS.

ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.

ALL TREE PROTECTION AND EROSION CONTROL NEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND GROUND COVER IS ESTABLISHED. CONSTRUCTION ENTRANCE PADS SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.

ALL EASEMENTS DISTURBED MUST BE DRESSED AND CRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR TO ACCEPTANCE.

CONSTRUCTION LIMITS SHALL NOT BE DICEEDED WITHOUT THE APPROVAL OF NICDEQ OR WAKE COUNTY.

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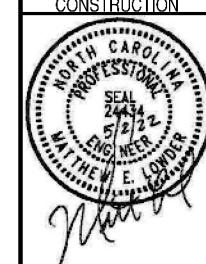
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PRELIMINARY DO NOT USE FOR CONSTRUCTION



PLAN STATUS 29/21|1ST SUBMISSION 2/9/22 | PER TOWN REVIEW 3/18/22 | PER TOWN REVIEW 2/22 | PER TOWN REVIEW

DATE | DESCRIPTION MEL MEL DESIGN | DRAWN | CHKD H: 1" = 40' SCALE JOB No. 000000-00-000

DATE October 29, 202 FILE No. 000000-D-CP-00

LIMITS OF DISTURBANCE

SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYED IN AT

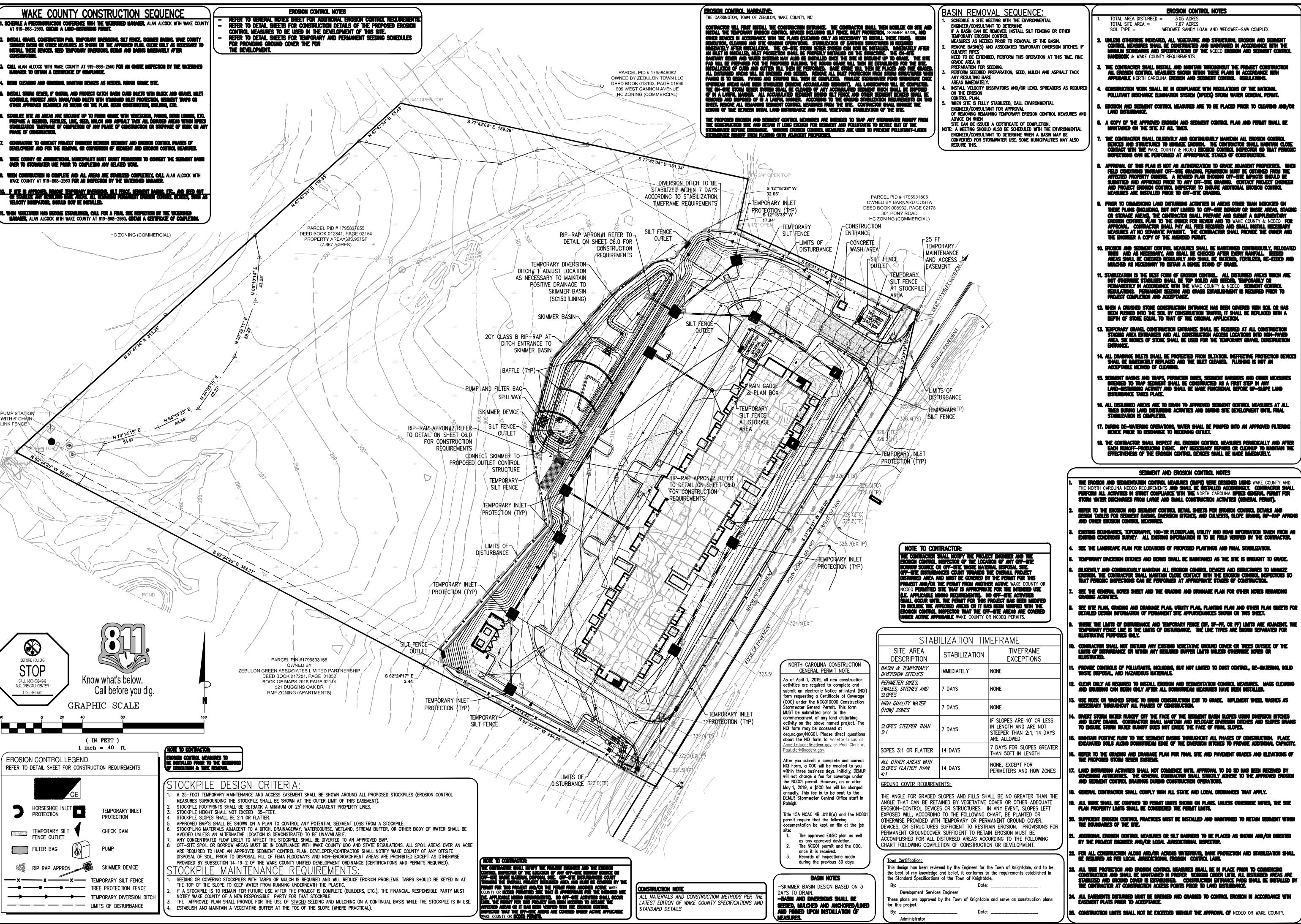
IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST

THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE

THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.

ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE. PARTY FOR THAT STOCKPILE



RALEIGH, NC 27609 Phone: (919)553-6570 bowman.com

Wake County

The Carrington 303 Pony Road

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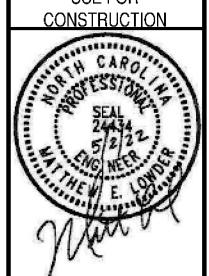
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PRELIMINARY
DO NOT
USE FOR



PLAN STATUS
10/29/21 1ST SUBMISSION
2/9/22 PER TOWN REVIEW
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DATE DESCRIPTION

MEL MEL XXX

DESIGN DRAWN CHKD

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

SCALE V: 1" = 40'

JOB No. 000000-00-000

DATE October 29, 2021

FILE No. 000000-D-CP-00

L NO. 000000-D-C

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

#### BASIN NOTES:

SKIMMER BASIN DESIGN BASED ON 3 DAYS TO DRAIN.

BASIN AND DIVERSIONS SHALL BE SEEDED, MULCHED AND ANCHORED/LINED AND PINNED UPON INSTALLATION OF MEASURES.

#### NOTE TO CONTRACTOR:

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

#### NOTE TO CONTRACTOR:

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

#### **EROSION CONTROL NOTES:**

- TOTAL AREA DISTURBED = 3.05 ACRES TOTAL SITE AREA = 7.67 ACRES
- WEDOWEE SANDY LOAM AND WEDOWEE-SAW COMPLEX UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NCDEQ EROSION AND SEDIMENT CONTROL HANDBOOK
- 3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS IN ACCORDANCE WITH APPLICABLE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS.
- 4. CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER GENERAL PERMIT.
- 5. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND
- 6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCDEQ EROSION CONTROL INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS. A REVISED PLAN SHOWING OFF-SITE IMPACTS SHOULD BE SUBMITTED AND APPROVED PRIOR TO ANY OFF-SITE GRADING. CONTACT PROJECT ENGINEER AND PROJECT EROSION CONTROL INSPECTOR TO ENSURE ADDITIONAL EROSION CONTROL MEASURES ARE INSTALLED PRIOR TO OFF-SITE GRADING.
- 9. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS, STAGING OR STORAGE AREAS). THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO NCDEQ FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE AMENDED PERMIT.
- 10. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN CHECKED REGULARLY AND SHALL BE WATERED, FERTILIZED, RE-EEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.
- 11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDED, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE NCDEQ SEDIMENT CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
- 12. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.
- 13. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA. SIX INCHES OF STONE SHALL BE USED FOR THE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
- 14. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF
- 15. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
- 16. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS
- 17. DURING DE-WATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.
- 18. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

#### **EROSION CONTROL NARRATIVE:**

THE CARRINGTON, TOWN OF ZEBULON, WAKE COUNTY, NC

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

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

#### GENERAL NOTES:

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

#### SEDIMENT & EROSION CONTROL NOTES:

- 1. THE EROSION AND SEDIMENTATION CONTROL MEASURES (BMPS) WERE DESIGNED USING THE NORTH CAROLINA NCDEQ REQUIREMENTS AND SHALL BE INSTALLED ACCORDINGLY. CONTRACTOR SHALL PERFORM ALL ACTIVITIES IN STRICT COMPLIANCE WITH THE NORTH CAROLINA NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (GENERAL PERMIT).
- 2. REFER TO THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS FOR EROSION CONTROL DETAILS AND DESIGN TABLES FOR SEDIMENT BASINS, DIVERSION DITCHES, AND CULVERTS, SLOPE DRAINS, RIP-RAP APRONS AND OTHER EROSION CONTROL MEASURES.
- 3. EXISTING BOUNDARIES, TOPOGRAPHY, 100-YR FLOODPLAIN, UTILITY AND ROAD INFORMATION TAKEN FROM AN EXISTING CONDITIONS SURVEY. ALL EXISTING INFORMATION IS TO BE FIELD VERIFIED BY THE
- 4. SEE THE LANDSCAPE PLAN FOR LOCATIONS OF PROPOSED PLANTINGS AND FINAL STABILIZATION.
- 5. TEMPORARY DIVERSION DITCHES AND BERMS SHALL BE MAINTAINED AS THE SITE IS BROUGHT TO
- 6. DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTORS SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF
- 7. SEE THE GENERAL NOTES SHEET AND THE GRADING AND DRAINAGE PLAN FOR OTHER NOTES REGARDING GRADING ACTIVITIES.
- 8. SEE SITE PLAN, GRADING AND DRAINAGE PLAN, UTILITY PLAN, PLANTING PLAN AND OTHER PLAN SHEETS FOR DETAILED DESIGN INFORMATION OF PERMANENT SITE APPURTENANCES SHOWN ON THIS
- 9. WHERE THE LIMITS OF DISTURBANCE AND TEMPORARY FENCE (SF. SF-PF, OR PF) LIMITS ARE ADJACENT, THE TEMPORARY FENCE LINE IS THE LIMITS OF DISTURBANCE. THE LINE TYPES ARE SHOWN SEPARATED FOR ILLUSTRATIVE PURPOSES ONLY.
- 10. CONTRACTOR SHALL NOT DISTURB ANY EXISTING VEGETATIVE GROUND COVER OR TREES OUTSIDE OF THE LIMITS OF DISTURBANCE OR WITHIN ANY REQUIRED BUFFER LIMITS UNLESS OTHERWISE NOTED OR ILLUSTRATED.
- 11. PROVIDE CONTROLS OF POLLUTANTS, INCLUDING, BUT NOT LIMITED TO DUST CONTROL, DE-WATERING, SOLID WASTE DISPOSAL, AND HAZARDOUS MATERIALS.
- 12. CLEAR ONLY AS REQUIRED TO INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES. MASS CLEARING AND GRUBBING CAN BEGIN ONLY AFTER ALL DOWNSTREAM MEASURES HAVE BEEN INSTALLED.
- 13. USE ROCK OR WASHED STONE TO BRING CONSTRUCTION EXIT TO GRADE. IMPLEMENT WHEEL WASHES AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION.
- 14. DIVERT STORM WATER RUNOFF OFF THE FACE OF THE SEDIMENT BASIN SLOPES USING DIVERSION DITCHES AND SLOPE DRAINS. CONTRACTOR SHALL MAINTAIN AND RELOCATE DIVERSION DITCHES AND SLOPES DRAINS TO ENSURE STORM WATER RUNOFF DOES NOT ERODE THE FACE OF FINAL SLOPES.
- 15. MAINTAIN POSITIVE FLOW TO THE SEDIMENT BASINS THROUGHOUT ALL PHASES OF CONSTRUCTION. PLACE EXCAVATED SOILS ALONG DOWNSTREAM EDGE OF THE DIVERSION DITCHES TO PROVIDE ADDITIONAL CAPACITY.
- 16. REFER TO THE GRADING AND DRAINAGE PLAN FOR FINAL SITE AND PAVEMENT GRADES AND ELEVATIONS OF THE PROPOSED STORM SEWER SYSTEMS.
- 17. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE APPROVED EROSION AND SEDIMENT CONTROL DRAWINGS DURING CONSTRUCTION OPERATIONS.
- 18. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY. 19. ALL WORK SHALL BE CONFINED TO PERMIT LIMITS SHOWN ON PLANS. UNLESS OTHERWISE NOTED, THE
- 20. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE.
- 21. ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.

SITE PLAN PROPERTY LIMITS SHALL BE CONSIDERED THE PERMIT LIMITS.

- 22. FOR ALL CONSTRUCTION ALONG AND/OR ACROSS WATERWAYS, BANK PROTECTION AND STABILIZATION SHALL BE REQUIRED AS PER LOCAL JURISDICTIONAL EROSION CONTROL LAWS.
- 23. ALL TREE PROTECTION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND GROUND COVER IS ESTABLISHED. CONSTRUCTION ENTRANCE PADS SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.
- 24. ALL EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR TO ACCEPTANCE.
- 25. CONSTRUCTION LIMITS SHALL NOT BE EXCEEDED WITHOUT THE APPROVAL OF NCDEQ INSPECTOR.

#### NORTH CAROLINA CONSTRUCTION GENERAL PERMIT NOTE:

As of April 1, 2019, all new construction activities are required to complete and submit an electronic Notice of Intent (NOI) form requesting a Certificate of Coverage (COC) under the NCG010000 Construction Stormwater General Permit. This form MUST be submitted prior to the commencement of any land disturbing activity on the above named project. The NOI form may be accessed at deg.nc.gov/NCG01. Please direct questions about the NOI form to Annette Lucas at Annette.lucas@ncdenr.gov or Paul Clark at

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

Office staff in Raleigh.

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

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

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

TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS. DWO AND DEMLR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESSED AT: <a href="http://portal.ncdenr.org/web/lr/erosion">http://portal.ncdenr.org/web/lr/erosion</a>

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

#### TREE PROTECTION NOTES:

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

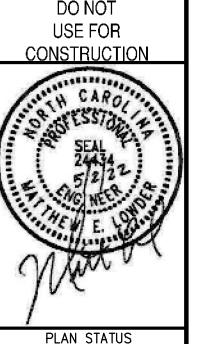
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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCGO1 CONSTRUCTION GENERAL PERMIT.

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 NCGO1 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

SECTION E: GROUND STABIL	<u>IZATION</u>	
	Required Ground Stabil	ization 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 (HQV Zones	) 7	None
(c) Slopes steeper than 3:1	7	
(d) Slopes 3:1 to 4:1	14	<ul> <li>-7 days for slopes greater than 50' in length and with slopes steeper than 4:1</li> <li>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones</li> <li>-10 days for Falls Lake Watershed</li> </ul>
(e) Areas with slopes flatter than 4:1	14	<ul> <li>7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones</li> <li>10 days for Falls Lake Watershed unless the is zero slope</li> </ul>

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 shal be maintained in a manner to render the surface stable against accelerated erosion until permanent around stabilization is achieved.

# GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in Permanent Stabilization Temporary Stabilization

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

#### POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

. Select flocculants that are appropriate for the soils being exposed during construction, selectina from the NC DWR List of Approved PAMS/Flocculants.

- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures. Apply flocculants at the concentrations specified in the NC DWR List of Approved
- PAMS/Flocculants and in accordance with the manufacturer's instructions. Provide ponding grea for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

#### EQUIPMENT AND VEHICLE MAINTENANCE

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

# LITTER. BUILDING MATERIAL AND LAND CLEARING WASTE

or disposal center that handles these materials.

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

### PAINT AND OTHER LIQUID WASTE

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

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

## EARTHEN STOCKPILE MANAGEMENT

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

# ONSITE CONCRETE WASHOUT - CLEARLY MARKED SIGNAGE NOTING SECTION A-A ACTUAL LOCATION DETERMINED IN FIELD

NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

# CONCRETE WASHOUTS

Do not discharge concrete or cement slurry from the site. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solic waste regulations and at an approved facility.

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE

ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE

CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

INCHES OF FREEBOARD.

MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES
75% OF THE STRUCTURES CAPACITY TO PROVIDE

ABOVE GRADE WASHOUT STRUCTURE NOT TO SCALE

- Manage washout from mortar mixers in accordance with the above item and in addition place th mixer and associated materials on impervious barrier and within lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. local standard details are not available, use one of the two types of temporary concrete
- washouts provided on this detail. 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
- 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
- storm drain inlet(s) closest to the washout which could receive spills or overflow. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in
- front of the washout. Additional controls may be required by the approving authority. Install at least one sign directing concrete trucks to the washout within the project limits. Posi
- signage on the washout itself to identify this location. 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

## ERBICIDES, PESTICIDES AND RODENTICIDES

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

# HAZARDOUS AND TOXIC WASTE

Create designated hazardous waste collection areas on—site. Place hazardous waste containers under cover or in secondary containment.

Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

# 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) Karngauge Maintained in good working order	Daily	Daily rainfall amounts.  If no daily rain gauge observations are made during weekend of holiday periods, and no individual-day rainfall information available, record the cumulative rain measurement for those unattended days jand this will determine if a site inspection needed). Days on which no rainfall occurred shall be recorded a "zero." The permittee may use another rain-monitoring device approved by the Division.
2  E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	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 dschaige outfalls  SDOs	At least once per 7 calendar days and within 24 hours of a rain event ≥ 10 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 > 10 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 a explanation as to the actions taken to control future releases.
[5] Streams or wet lands onsite or offsite Iwhere accessible]	At least once per 7 calendar days and within 24 hours of a rain event ≥ 10 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.
[b] Ground stabilization measures	After each phase of grading	1. The phase of grading finstallation 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.

## 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

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

# (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.

i. 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]

# SELF-INSPECTION, RECORDKEEPING AND 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.

#### (d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

#### Reporting Timeframes and Other Requirements

bypasses (40 CFR

with the conditions

of this permit that

may endanger

environment[40]

CFR 122.41(I)(7)]

health or the

122.41(m)(3)]

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

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment	Within 24 hours, an oral or electronic notification.
deposition in a	Within 7 calendar days, a report that contains a description of the
stream or wetland	sediment and actions taken to address the cause of the deposition.
	Division staff may waive the requirement for a written report on a
	case-by-case basis.
	If the stream is named on the <u>NC 303(d) list</u> as impaired for sediment-
	related causes, the permittee may be required to perform additional
	monitoring, inspections or apply more stringent practices if staff
	determine that additional requirements are needed to assure compliance
	with the federal or state impaired-waters conditions.
(b) Oil spills and	Within 24 hours, an oral or electronic notification. The notification
release of	shall include information about the date, time, nature, volume and
hazardous	location of the spill or release.
substances per Item	
1(b)-(c) above	
(c) Anticipated	A report at least ten days before the date of the bypass, if possible.
bypasses [40 CFR	The report shall include an evaluation of the anticipated quality and
122.41(m)(3)]	effect of the bypass.
(d) Unanticipated	Within 24 hours, an oral or electronic notification.

quality and effect of the bypass.

(e) Noncompliance • Within 24 hours, an oral prejectronic notification.

case-by-case basis.

Within 7 calendar days, a report that includes an evaluation of the

Within 7 calendar days, a report that contains a description of the

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(I)(6),

Division staff may waive the requirement for a written report on a

noncompliance, and its causes; the period of noncompliance,

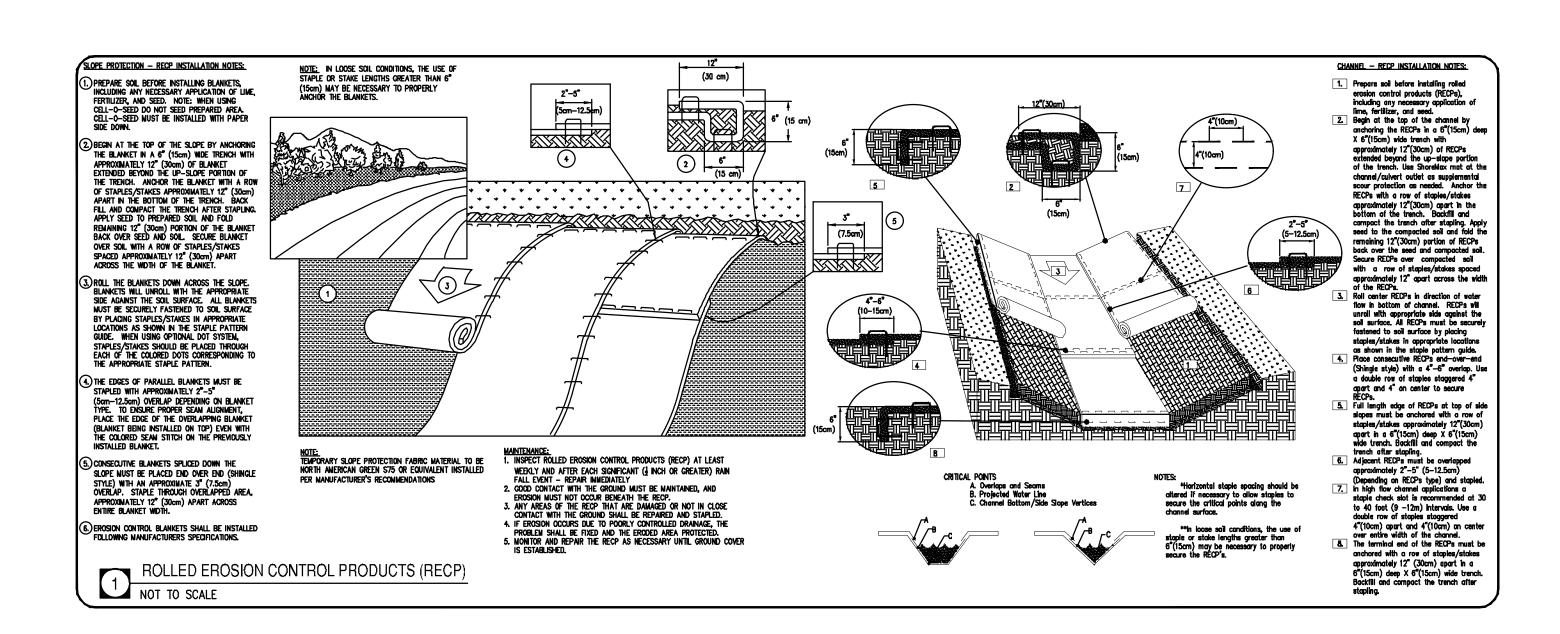
PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

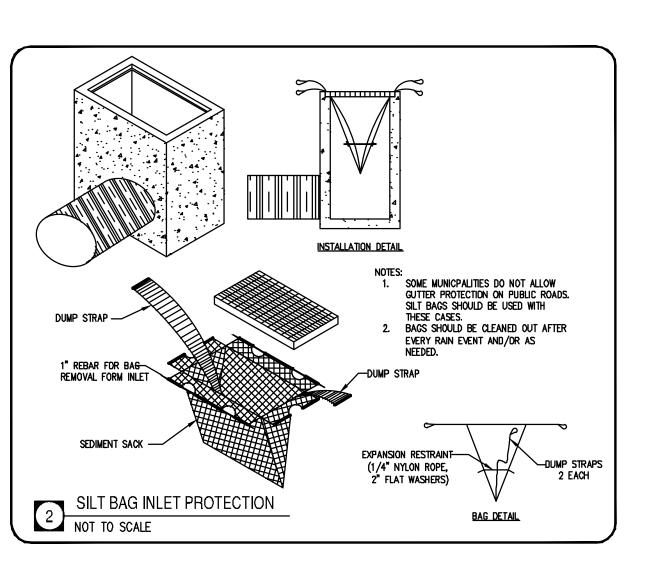
Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be arawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw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

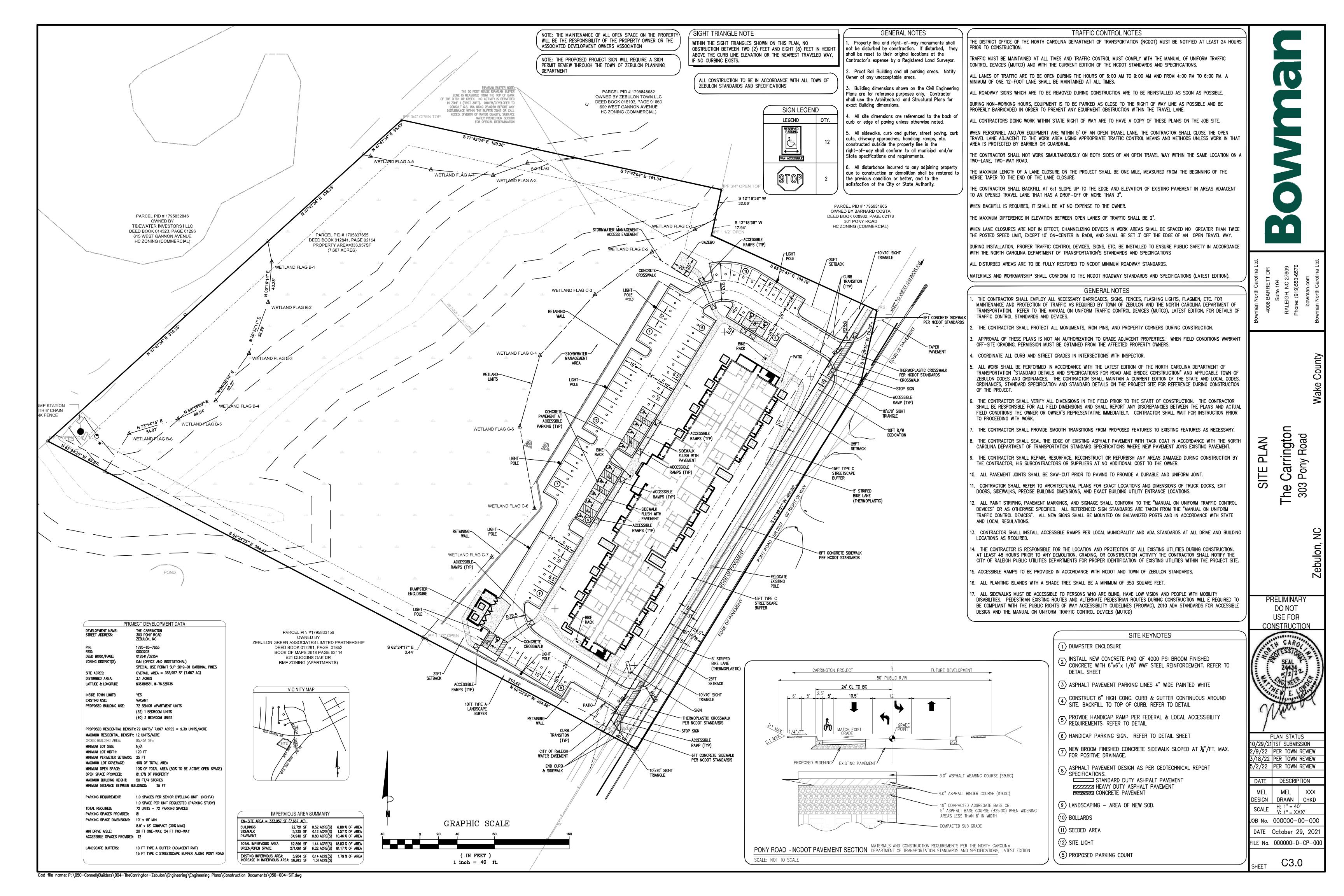
- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has 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
- (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.

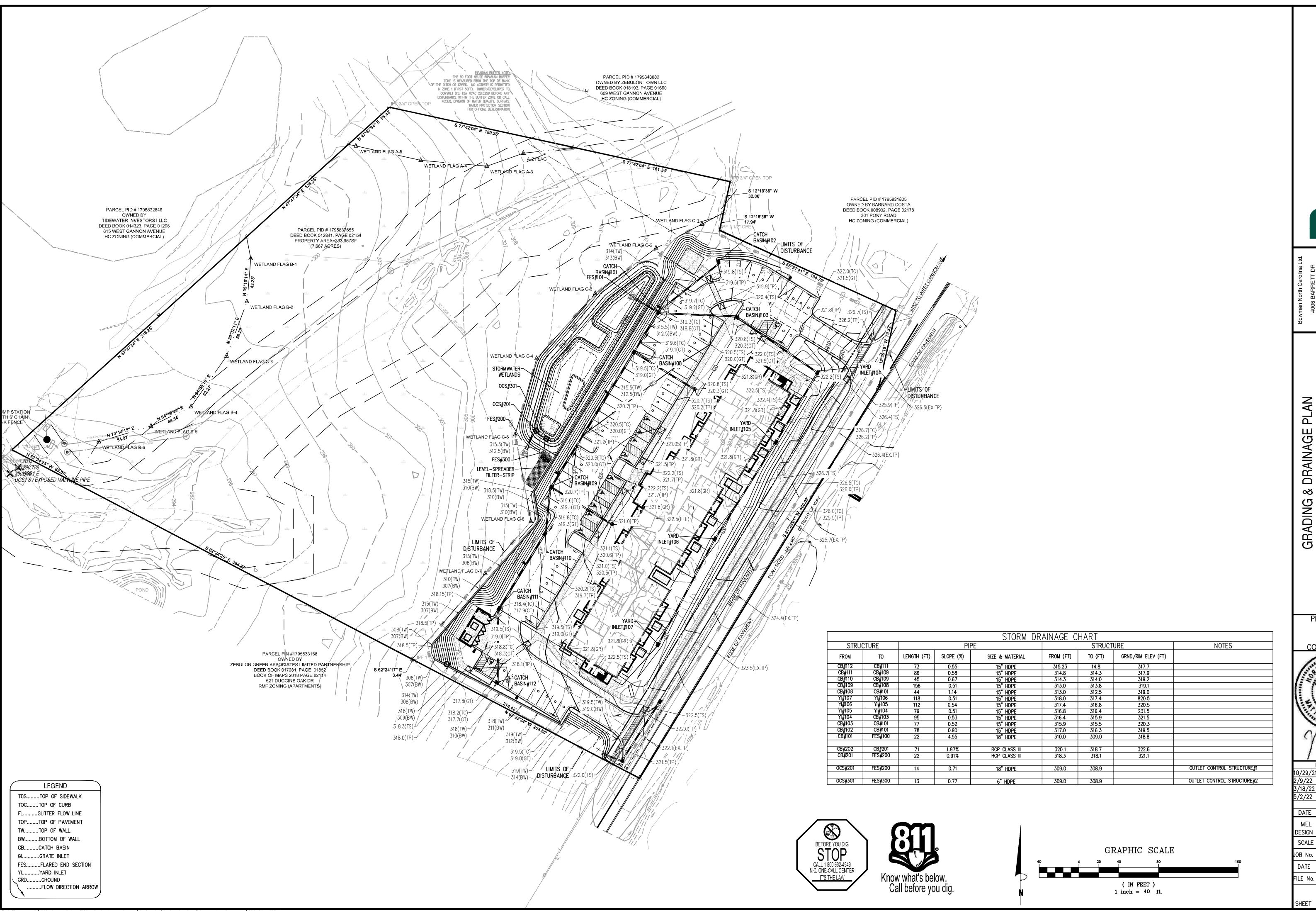
NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19



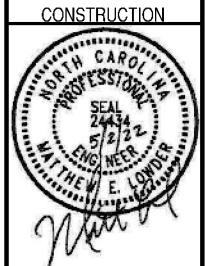






The Carrington 303 Pony Road

PRELIMINARY DO NOT USE FOR



PLAN STATUS 10/29/21 IST SUBMISSION 2/9/22 PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 5/2/22 PER TOWN REVIEW

DATE DESCRIPTION MEL XXX DESIGN DRAWN CHKD SCALE H: 1" = 40' V: 1" = XXX'

JOB No. 000000-00-000 DATE October 29, 2021 FILE No. 000000-D-CP-00(

C4.0

2. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.

DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION.

- 3. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
- 4. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS
- AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.

  5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL
- 6. THE CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- 7. LIMITS OF CLEARING SHOWN ON GRADING PLAN ARE BASED UPON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.
- 8. THE PROPOSED CONTOURS SHOWN IN DRIVES AND PARKING LOTS AND SIDEWALKS ARE FINISHED ELEVATIONS INCLUDING ASPHALT. REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
- 9. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN BY GRAVITY FLOW ACROSS NEW
- PAVEMENT AREAS TO NEW OR EXISTING DRAINAGE INLETS OR SHEET OVERLAND.

10. ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN, IS PROHIBITED.

- 11. LAND DISTURBANCE WITHOUT AN APPROVED ESC PLAN IS PROHIBITED.
- 12. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON DENUDED AREAS AND ESPECIALLY WHEN THE CONSTRUCTION SEQUENCE REQUIRES IT.
- 13. ALL GRADED AREAS ARE TO BE STABILIZED (SEEDED OR LANDSCAPED) WITHIN 14 DAYS OF HAVING REACHED FINAL GRADE.
- 14. EXISTING GRADES, CONTOURS, UTILITIES AND OTHER EXISTING FEATURES FROM FIELD RUN SURVEY.
- 15. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY DEWATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS. THE DESIGN ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE DESIGN(S) TO INSTALL SAID ITEMS.
- 17. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATION, ELEVATION, AND DIMENSIONS OF EXIT DOORS, RAMPS, BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- 18. ALL FILL MATERIALS, EXISTING BUILDING FOUNDATIONS, PAVEMENT AND UTILITY STRUCTURES, TOPSOIL, AND ANY OTHER DELETERIOUS MATERIALS SHALL BE COMPLETELY REMOVED FROM WITHIN THE BEARING ZONE BELOW THE STRUCTURE.
- 19. ALL FOUNDATION EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL REPRESENTATIVE TO DETERMINE WHETHER UNSUITABLE MATERIAL MUST BE REMOVED. ALL UNDESIREABLE MATERIAL SHALL BE REMOVED, BACKFILLED AND COMPACTED AS REQUIRED BY THE GEOTECHNICAL REPRESENTATIVE.
- 20. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED OR DEPICTED.
- 21. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 22. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- 23. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- 24. ALL UNSURFACED AREAS DISTRURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER.
- 25. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.

DRAINAGE NOTES

- 1. A MINIMUM GRADE OF 0.50 % SHALL BE MAINTAINED ON ALL PIPES, UNLESS OTHERWISE NOTED.
- 2. PIPE LENGTHS AND SLOPES INDICATED ON THE PLANS ARE APPROXIMATE ONLY.
- 3. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
- A. NO MORE THAN 500 LF OF TRENCH MAY BE OPENED AT ONE TIME.
  B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

D. MATERIAL USED FOR BACK-FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND

- C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING
  DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF—SITE
  OPERTY
- PROMOTE STABILIZATION.

  E. RESTABALIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL REGULATIONS.

  F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- 4. CATCH BASINS, MANHOLES, FRAMES, GRATES, ETC. SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS. REFERENCE THE FOLLOWING STANDARD DETAILS:
- 840.02 CONCRETE CATCH BASIN 840.03 — FRAME, GRATES, AND HOOD FOR CATCH BASINS
  - 840.14 CONCRETE DROP INLET 840.04 — CONCRETE OPEN THROAT CATCH BASIN
  - 840.14 CONCRETE DROP INLET 840.16 - DROP INLET FRAME AND GRATES
  - 840.31 CONCRETE JUNCTION BOX 840.36 — TRAFFIC BEARING GRATED DROP INLET
  - 840.52 PRECAST MANHOLE
  - 840.45 PRECAST DRAINAGE STRUCTURE 838.80 — PRECAST CONCRETE ENDWALL
- 5. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
- 6. STORM PIPE SHALL BE AS FOLLOW UNLESS OTHERWISE NOTED:
- TYPE 1: RCP, CLASS III PER ASTM C-76, WITH FLEXIBLE PLASTIC BITUMEN GASKETS AT JOINTS.
- TYPE 2: HIGH DENSITY POLYETHYLENE PIPE (HDPE) AASHTO DESIGNATION M252 TYPE S, M294 TYPE S AND MP7—97 TYPE S, SMOOTH INTERIOR/ANNULAR EXTERIOR. ONLY PERMITTED WHEN SPECIFICALLY INDICATED ON THE CONSTRUCTION DRAWINGS. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER'S INSTALLATION GUIDELINES. PIPE JOINTS AND FITTINGS SHALL BE WATERTIGHT.
- 7. ALL STORM DRAINAGE WITHIN THE PUBLIC ROADS SHALL BE CLASS III REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED.
- 8. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE SILT AND DEBRIS.
- 9. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS
  RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS
  OR BETTER.
- 10. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- 11. PRECAST STRUCTURES MAYBE USED AT CONTRACTORS OPTION.
- 12. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- 13. STRUCTURE TOP ELEVATIONS SHOWN HERE ARE APPROXIMATE. CONTRACTOR SHALL ADJUST AS NECESSARY.
- 14. RIM ELEVATIONS AS NOTED ARE TO THE GUTTER FLOW LINE.

EROSION CONTROL NOTES:
AN EROSION AND SEDIMENTATION CONTROL PERMIT SHALL BE REQUIRED BY WAKE COUNTY PRIOR TO START OF CONSTRUCTION

SURVEY NOTE:

ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A LAND SURVEY PREPARED BY: BOWMAN

STREAM/WETLAND NOTE:
THERE ARE EXISTING STREAM/AND OR WETLAND FEATURES ON

THE PROPOSED PARCEL. THÉRE ARE NO PROPOSED IMPACTS
TO THE EXISTING STREAM AND/OR WETLAND FEATURES

FLOOD ZONE NOTE:
THE PROPERTY IS LOCATED IN FLOOD ZONE X AS SHOWN ON

FEMA FLOOD PANED 3720179500J, DATED MAY 2, 2006. MAPS SUBJECT TO CHANGE BY FEMA

IMPERVIOUS AREA SUMMARY											
ON-SITE AREA = 333,957 SF	(7.667 AC)										
BUILDINGS SIDEWALK PAVEMENT	22,721 SF 5,235 SF 34,940 SF	0.52 ACRE(S) 0.12 ACRE(S) 0.80 ACRE(S)	6.80 % OF AR 1.57 % OF AR 10.46 % OF AR								
TOTAL IMPERVIOUS AREA GREEN/OPEN SPACE	62,896 SF 271,061 SF	1.44 ACRE(S) 6.22 ACRE(S)	18.83% OF AR 81.17% OF AR								
EXISTING IMPERVIOUS AREA: INCREASE IN IMPERVIOUS AREA	5,984 SF : 56,912 SF	0.14 ACRE(S) 1.31 ACRE(S)	1.79 % OF AR								

Suite 104 RALEIGH, NC 27609 Phone: (919)553-6570 howman com

ake County

Carrington Pony Road

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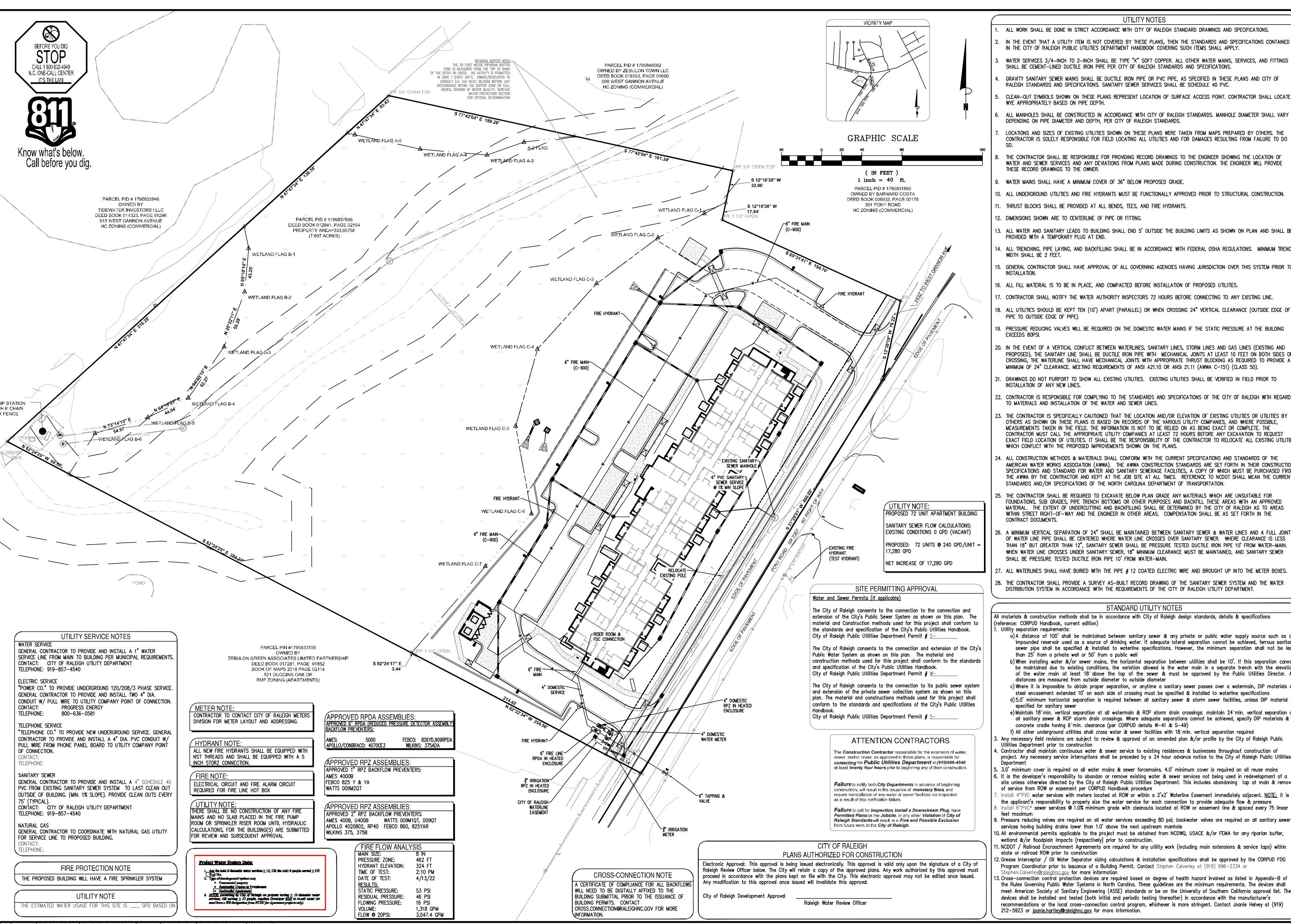
**DRAINAGE** 

GRADING &

PRELIMINARY

DESIGN | DRAWN | CHKD SCALE | H: 1" = 40' V: 1" = XXX' JOB No. 000000-00-000 DATE October 29, 202' FILE No. 000000-D-CP-00

NO. 000000-D-CF



UTILITY NOTES

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

# STANDARD UTILITY NOTES

- I materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications
- a) A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to waterline specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well
- b) When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter
- c)Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to waterline specifications d) 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
- e) Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 24" min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6"min. clearance (per CORPUD details W-41 & S-49)
- f) All other underground utilities shall cross water & sewer facilities with 18"min. vertical separation required Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public
- Utilities Department prior to construction Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities
- . 3.0' minimum cover is required on all water mains & sewer forcemains. 4.0' minimum cover is required on all reuse mains 5. It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal
- of service from ROW or easement per CORPUD Handbook procedure Install 4"PVC water services with meters located at ROW or within a 2'x2' Waterline Easement immediately adjacent. NOTE; it is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure
- Install 6"PVC\* sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer
- 0. All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
- 1. NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction
- 2. Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the CORPUD FOG Program Coordinator prior to issuance of a Building Permit. Contact Stephen Calverley at (919) 996-2334 or
- the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross—connection control program, whichever is more stringent. Contact Joanie Helvey at (919) 212—5923 or <u>joanie.hartley@raleighnc.gov</u> for more information.

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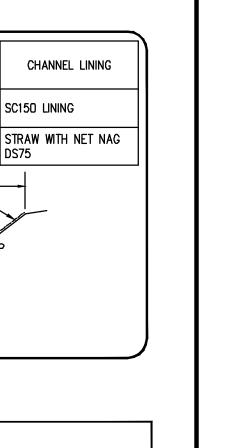
PRELIMINARY DO NOT USE FOR



/29/21|1ST SUBMISSION 9/22 | PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 2/22 | PER TOWN REVIEW DATE DESCRIPTION MEL | DESIGN | DRAWN | CHKD

PLAN STATUS

SCALE H: 1" = XXX' V: 1" = XXX' JOB No. 000000-00-000 DATE October 29, 202 FILE No. 000000-D-CP-00(



CHANNEL LINING

1.4' | 1.0' | 6.6' | 2:1 | SC150 LINING

1.0' 7.0' 2:1

EXTEND LINING TO

TOP OF DITCH

CHANNEL LINING

trrington ny Road Cal

ETAIL

NTROL

**EROSION COP** 

ONE NUMBERLITIES DO NOT ALLOW GUTTER PROTECTION ON UR TO ROADS, SILT BAGS SHOULD RE USET WITH THESE CASE AGS STOULD BE CLEANED OUT AF LEREMENT HAIN EMEN NOVOR AS NEEDED.

PRELIMINARY DO NOT

**USE FOR** CONSTRUCTION

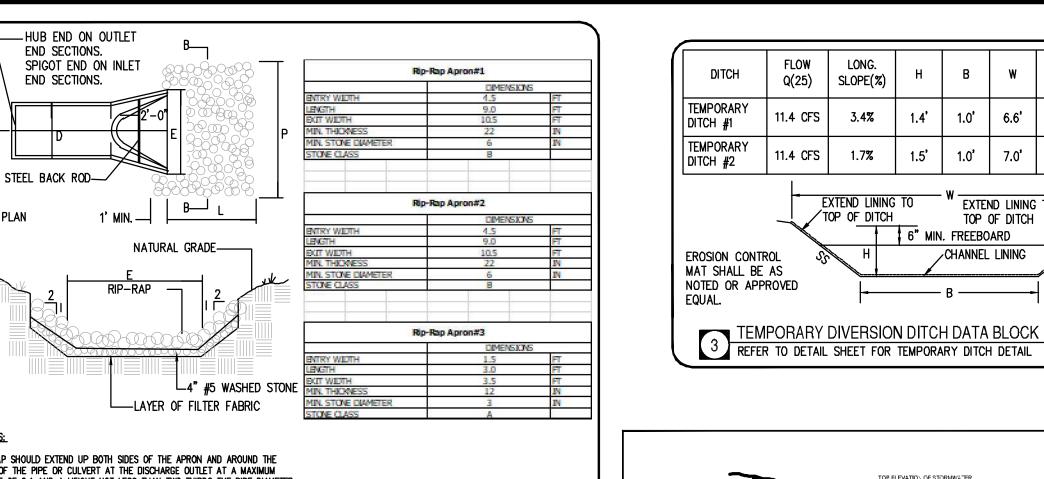
PLAN STATUS /29/21|1ST SUBMISSION

2/9/22 | PER TOWN REVIEW 3/18/22 | PER TOWN REVIEW 5/2/22 PER TOWN REVIEW DATE | DESCRIPTION

MEL DESIGN | DRAWN | CHKD SCALE V: N/A

JOB No. 000000-00-000 DATE October 29, 202 FILE No. 000000-D-CP-00

C6.0



RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.

THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIP-RAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.

MAXIMUM TAPER TO RECEIVING CHANNEL 5:1.

THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL.

ALL SUBGRADE STRUCTURE TO BE COMPACTED TO 95% OR GREATER. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.

NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE

CONSTRUCTION SPECIFICATIONS:

OUTLET STRUCTURE

1.5 FT

EMBANKMENT

ELEV=312.0

EMERGENCY— SPILLWAY

10 FT

SPILLWAY SECTION

SPILLWAY

ELEV=310.5

SPILLWAY

CONSTRUCTION SPECIFICATIONS:

1. CLEAR, GRUB, AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACE SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER, AND STOCKPILE OR DISPOSE OF IT PROPERLY. HAUL ALL OBJECTIONABLE MATERIAL TO THE DESIGNATED DISPOSAL AREA. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.

2. ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER, AND OTHER OBJECTIONABLE MATERIAL. PLACE THE BILL IN LIFTS NOT TO EXCEED 9 INCHES, AND MACHINE COMPACT IT. OVER FILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.

3. SHAPE THE BASIN TO THE SPECIFIED DIMENSIONS, PREVENT THE SKIMMER DEVICE FROM SETTLING INTO THE MUD BY EXCAVATING A SHALLOW PIT UNDER THE SKIMMER OR PROVIDING A LOW SUPPORT UNDER THE SKIMMER OF STONE OR TIMBER.

4. PLACE THE BARREL (TYPICALLY 4—INCH SCHEDULE 40 PVC PIPE) ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4—INCH LAYERS AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM THE FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MIN. DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.

5. ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURERS INSTRUCTIONS, OR AS DESIGNED.

6. LAY THE ASSEMBLED SKIMMER ON THE BARTEL PIPE AND POSITION THE SKIMMER OVER THE EXCAVATED PIT OR SUPPORT. BE SURE TO ATTACH A ROPE TO THE SKIMMER OND THE BARREL PIPE AND POSITION THE BASIN WITH THE FLEXIBLE JOIN TO THE SKIMMER TO THE SIDE FOR MAINTENANCE.

7. EARTHEN SPILLWAYS—INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST FXTENT POSSIBLE. THE ACHIEVEMENT OF

ATTACH A KOPE TO THE SKIMMER AND ANCHOR IT TO THE SIDE OF THE BASIN. THIS WILL BE USED TO PULL THE SKIMMER TO THE SIDE FOR MAINTENANCE.

EARTHEN SPILLWAYS—INSTALL THE SPILLWAY IN UNDISTURBED SOIL TO THE GREATEST EXTENT POSSIBLE. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE SPILLWAY. THE SPILLWAY SHOULD BE LINED WITH A LAMINATED SLATIC OR IMPERMEABLE CEOTEXTILE FABRIC. THE FABRIC MUST BE WIDE AND LONG ENOUGH TO COVER THE BOTTON AND SIDES AND EXTEND ONTO THE TOP OF THE DAN FOR ANCHORING IN A TRENCH. THE EDGES MAY BE SECURED WITH 8—NICH STAPLES OR PINS. THE FABRIC MUST BE LONG ENOUGH TO EXTEND DOWN THE SLOPE AND EXIT ONTO STABLE GROUND, THE WIDTH OF THE FABRIC MUST BE ONE PIECE, NOT JOINED OR SPILCED; OTHERWISE WATER CAN GET UNDER THE FABRIC. IF THE LENGTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH OF THE FABRIC IS INSUFFICIENT FOR THE ENTIRE LENGTH

OF THE SPILLWAY, MULTIPLE SECTIONS, SPANNING THE COMPLETE WIDTH, MAY BE USED. THE UPPER SECTION(S) SHOULD OVERLAP

WITH A TRENCH WITH STAPLES OR PINS.

NLETS— DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS
WITH OUTLET PROTECTION TO DIVER SEDIMENT—LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP

EFFICIENCY.

EROSION CONTROL—CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS, COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY MAMEDIATELY AFTER CONSTRUCTION.

10. INSTALL POROUS BAFFLES AS SPECIFIED IN PRACTICE 6.65, POROUS BAFFLES.

11. AFTER ALL THE SEDIMENT—PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND STABILIZE PROPERLY.

THE LOWER SECTIONS(S) SO THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC

SUBGRADE PREPARATION-PREPARE THE SUBGRADE FOR RIPRAP AND FILTER TO THE REQUIRED LINES AND GRADES SHOWN ON THE PLANS. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY APPROXIMATING THAT OF THE SURROUNDING UNDISTURBED MATERIAL OR OVERFILL DEPRESSIONS WITH RIPRAP. REMOVE BRUSH, TREES, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. CUT THE SUBGRADE SUFFICIENTLY DEEP THAT THE FINISHED GRADE OF THE RIPRAP WILL BE AT THE ELEVATION OF THE SURROUNDING AREA. CHANNELS SHOULD BE EXCAVATED SUFFICIENTLY TO ALLOW PLACEMENT OF THE RIPRAP IN A MANNER SUCH THAT THE FINISHED INSIDE DIMENSIONS AND GRADE OF THE RIPRAP MEET DESIGN SPECIFICATIONS. SYNTHETIC FILTER FABRIC-PLACE THE CLOTH FILTER DIRECTLY ON THE PREPARED FOUNDATION. OVERLAP THE EDGES BY AT LEAST 12 INCHES, AND SPACE ANCHOR PINS EVERY 3 FT ALONG THE OVERLAP. BURY THE UPSTREAM END OF THE CLOTH A MINIMUM OF 12 INCHES BELOW

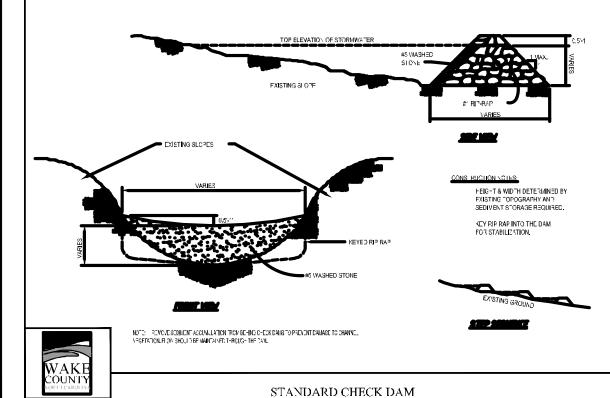
GROUND AND WHERE NECESSARY, BURY THE LOWER END OF THE CLOTH OR OVER LAP WITH THE NEXT SECTION AS REQUIRED. SEE FIGURE 6.14A PAGE 6.14.6. TAKE CARE NOT TO DAMAGE THE CLOTH WHEN PLACING RIPRAP. IF DAMAGE OCCURS REMOVE THE RIPRAP, AND REPAIR THE SHEET BY ADDING ANOTHER LAYER OF FILTER MATERIAL WITH A MINIMUM OVERLAP OF 12 INCHES AROUND THE DAMAGED AREA. IF EXTENSIVE DAMAGE IS SUSPECTED, REMOVE AND REPLACE THE ENTIRE WHERE LARGE STONES ARE USED OR MACHINE PLACEMENT IS DIFFICULT, A 4-INCH LAYER OF FINE GRAVEL OR SAND MAY BE NEEDED TO PROTECT THE FILTER CLOTH.

STONE PLACEMENT—PLACEMENT OF RIPRAP SHOULD FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE FILTER. PLACE RIPRAP SO THAT IT FORMS A DENSE, WELL—GRADED MASS OF STONE WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF STONES THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY, AND CONTROLLED DUMPING DURING FINAL PLACEMENT. PLACE RIPRAP TO ITS FULL

THICKNESS IN ONE OPERATION. DO NOT PLACE RIPRAP BY DUMPING THROUGH CHUTES OR OTHER METHODS THAT CAUSE SEGREGATION OF STONE SIZES. TAKE CARE NOT TO DISLODGE THE UNDERLYING BASE OR FILTER WHEN PLACING THE STONES. THE TOE OF THE RIPRAP SLOPE SHOULD BE KEYED TO A STABLE FOUNDATION AT ITS BASE AS SHOWN IN FIGURE 6.15B. THE TOE SHOULD BE EXCAVATED TO A DEPTH ABOUT 1.5 TIMES THE DESIGN THICKNESS OF THE RIPRAP, AND SHOULD EXTEND HORIZONTALLY FROM THE SLOPE. THE FINISHED SLOPE SHOULD BE FREE OF POCKETS OF SMALL STONE OR CLUSTERS OF LARGE HAND PLACING MAY BE NECESSARY TO ACHIEVE THE PROPER DISTRIBUTION OF STONE SIZES TO PRODUCE A RELATIVELY SMOOTH, UNIFORM SURFACE. THE FINISHED GRADE OF THE RIPRAP SHOULD BLEND WITH THE SURROUNDING AREA. NO OVERFALL OR PROTRUSION OF RIPRAP SHOULD BE APPARENT

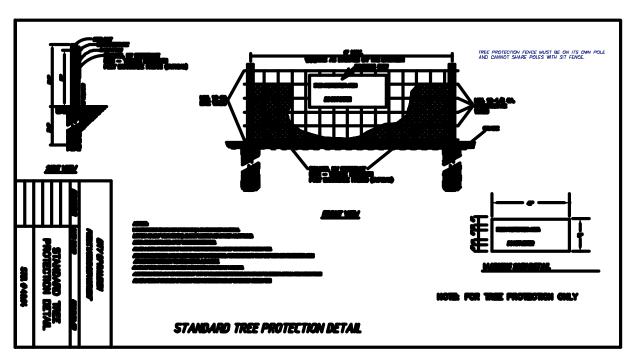
RIP-RAP APRON NOT TO SCALE

IN GENERAL, ONCE A RIPRAP INSTALLATION HAS BEEN PROPERLY DESIGNED AND INSTALLED IT REQUIRES VERY LITTLE MAINTENANCE, RIPRAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED



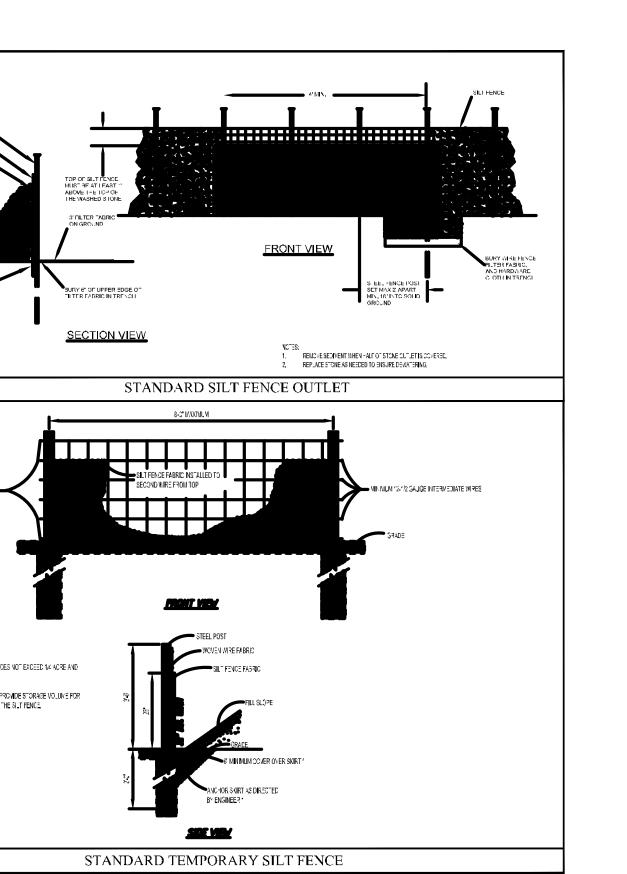
1.5'

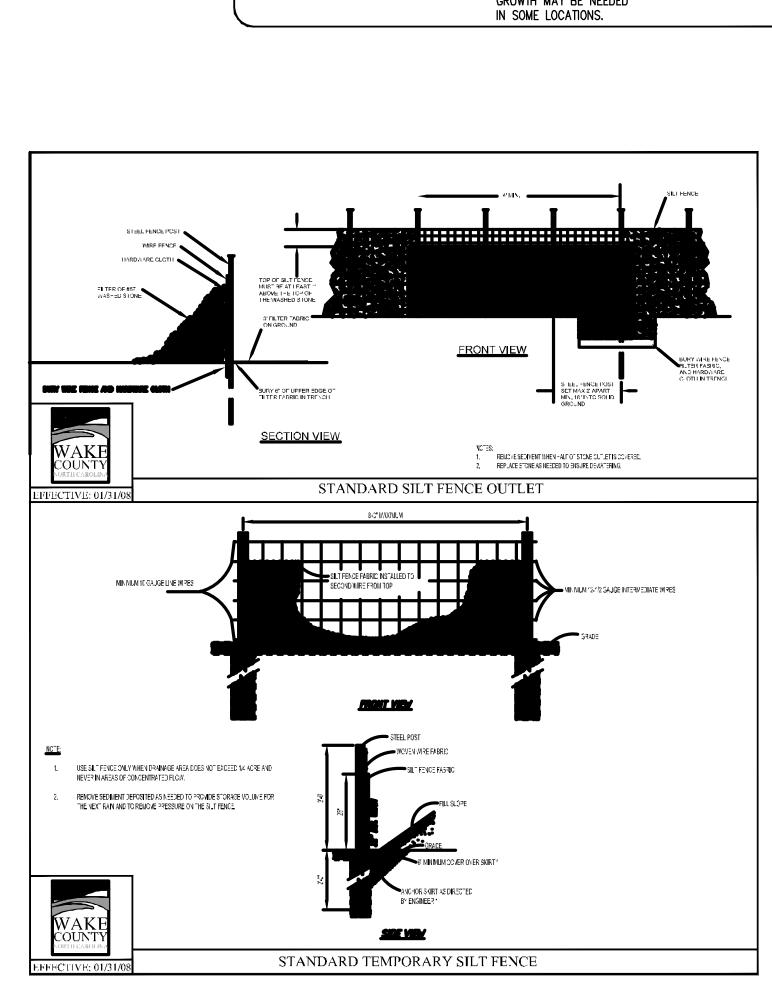
6" MIN. FREEBOARD

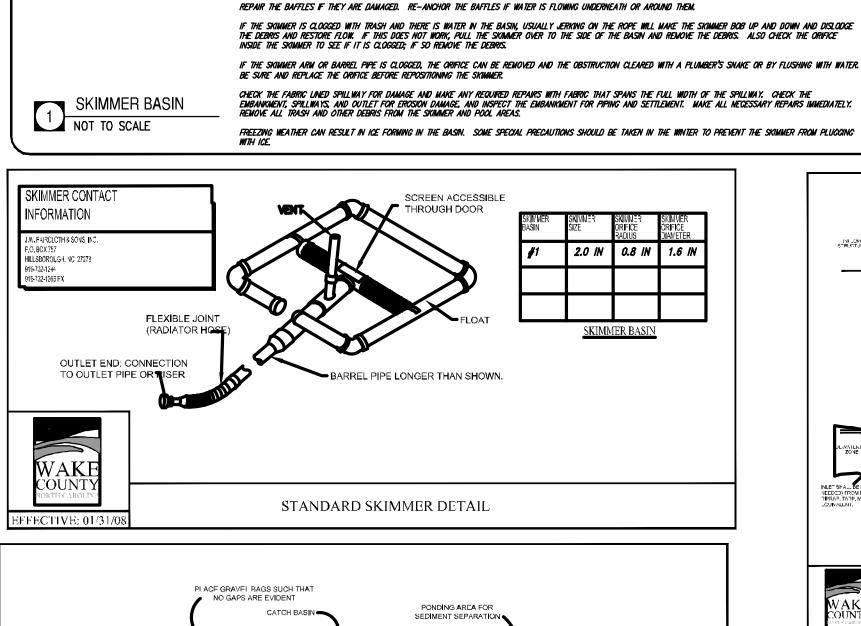


STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE

STANDARD FILTER BAG FOR DEWATERING ACTIVITIES







SEDIMENT BASIN REQUIREMENTS:

ARM ASSEMBLY

PERSPECTIVE VIEW

PVC END CAP-

<u>BAFFLE MAINTENANCE</u> Inspect Baffles at least one a neek and after

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 CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE NATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

END VIEW

SEDIMENT BASINS AND TRAPS SHALL MEET THE FOLLOWING REQUIREMENTS:

A) OUTLET STRUCTURES SHALL BE UTILIZED THAT WITHDRAW WATER FROM THE SURFACE.

) FOR BASINS OR TRAPS THAT HAVE A DRAINAGE AREA OF LESS THAN 1.0 ACRE, DRAW-DOWN DESIGNS SPECIFIED IN THE DIVISION OF LAND RESOURCES OR DELEGATED LOCAL PROGRAM REQUIREMENTS ARE ACCEPTABLE.

1) ALL TREATMENT CHEMICALS MUST BE STORED IN LEAK-PROOF CONTAINERS THAT ARE KEPT UNDER
STORM-RESISTANT COVER OR SURROUNDED BY SECONDARY CONTAINMENT STRUCTURES DESIGNED TO PROTECT ADJACENT
SURFACE WATERS.
2) ALL TREATMENT CHEMICALS MUST BE USED IN ACCORDANCE WITH DOSING SPECIFICATIONS AND APPLICATION RATES
PROVIDED BY THE MANUFACTURER, SUPPLIER AND AS SPECIFIED BY THE DIVISION OF WATER QUALITY.

3) THE PERMITTEE MUST ONLY USE CHEMICALS THAT HAVE BEEN APPROVED BY THE NC DIVISION OF WATER QUALITY

AND POSTED ON THEIR "NORTH CAROLINA DIMSION OF WATER QUALITY APPROVED PAMS/FLOCCULANTS LIST" FOUND ON THEIR WEB SITE AT: http://portal.ncdenr.org/web/wq/ws/su.
THE PERMITTEE MUST ROUTE STORMWATER TREATED WITH POLYMERS, FLOCCULANTS, OR OTHER TREATMENT

CHEMICALS THROUGH SEDIMENT TRAPPING, FILTERING, AND/OR SETTLING DEMCES(S) TO ENSURE ADEQUATE REMOVAL OF SEDIMENT FLOCCULENT PRIOR TO DISCHARGE TO SURFACE WATERS.

DISCHARGE REQUIREMENT — DISCHARGES MUST MEET THE STATUTORY REQUIREMENTS OF THE SEDIMENT POLLUTION CONTROL ACT AND UTILIZE THE PROVISIONS OF SECTION 6.74 OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL TO ASSURE THAT BUFFERS AND VEGETATED AREAS WILL BE USED TO REDUCE THE POTENTIAL FOR VISIBLE SILTATION OUTSIDE OF THE 25% BUFFER ZONE NEAREST THE LAND—DISTURBING ACTIVITY.

PVC ELBOW

SCHEDULE 40 -COUPLING CONNECTION

WATER SURFACE

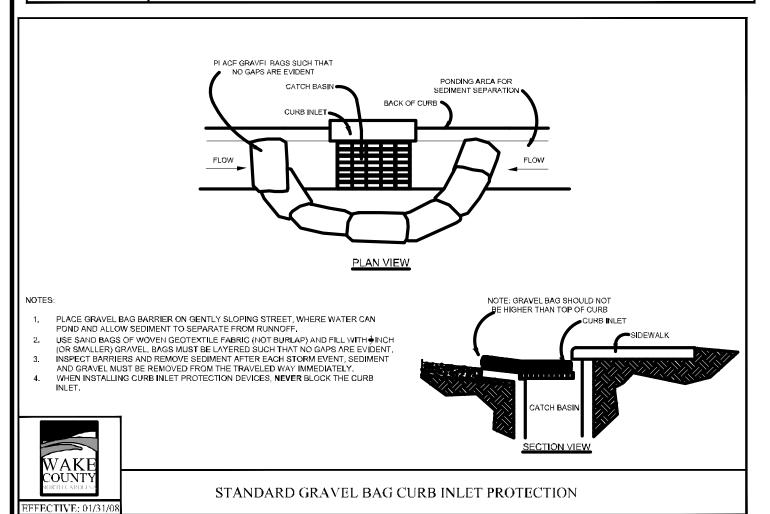
FRONT VIEW

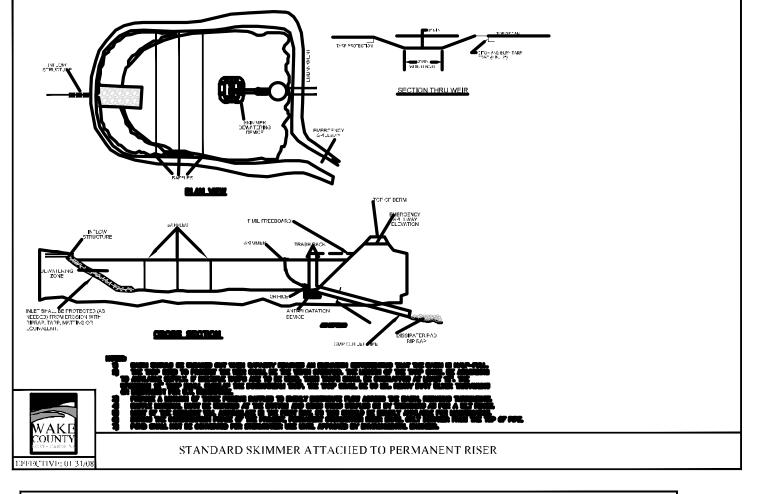
STANDARD SKIMMER DETAIL

COIR MESH OR SIMILAR, STAPLED OR TRENCHED INTO BOTTOM OR SIDE

SKIMMER BASIN MAINTENANCE
INSPECT SKIMMER SEDIMENT BASIN AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE
SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO
ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST
CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

CROSS SECTION





Skimmer Basin

CROSS-SECTION VIEW

3,850

5,094

6,604

2.0

1.6

5.0

2:1

**─**BAFFLE **├**BAFFLE

BASIN 2.83 2.83 11.4 NA NA 1.0 2.0 4.0 10 1.5 5.0 REFER TO BMP PLAN

35

43

27

1' FREEBOARD

STONE PAD

BAFFLE SHALL BE 700 G/N2 COIR EROSION BLANKET.
TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS
INSPECT BAFFLES FOR REPAIR ONCE A WEEK AND AFTER EACH RAINFALL

1st Cell 2nd Cell OUTLET ZONE
25% of basin 25% of basin 25% of basin surface area

<u>Plan view</u>

110 x

118 x

102 x

310.00

312.00

302.00

PLAN VIEW

SKIMMER CONTACT INFORMATION

O. BOX 757

919-732-1244 919-732-1266 FX

W. FAIRCLOTH & SONS, INC.

HILLSBOROUGH, NC 27278

SURFACE AREA REQUIRED

SURFACE AREA PROVIDED

VOLUME REQUIRED

**VOLUME PROVIDED** 

BOTTOM OF BASIN

FILTER FABRIC—

DATA BLOCK

SECTION VIEW AT OPENING

STEEL POST

SKIMMER SIZE

SIDESLOPES

STORAGE ELEVATION

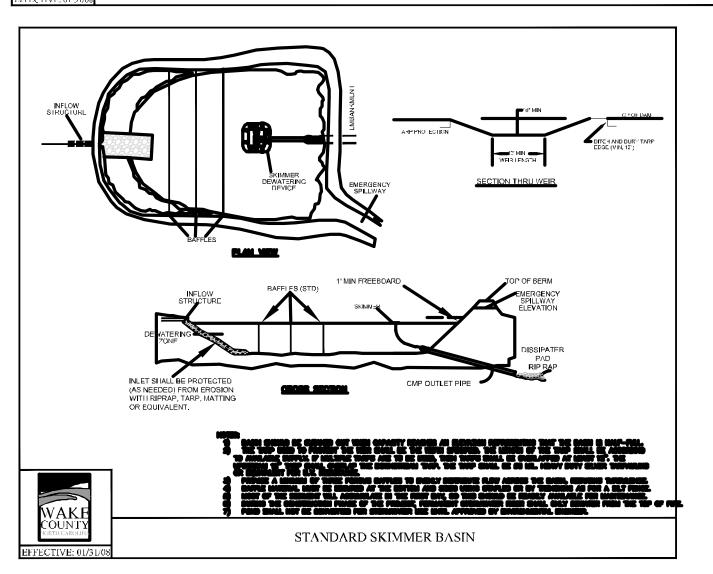
EMGY. SPILLWAY LENGTH

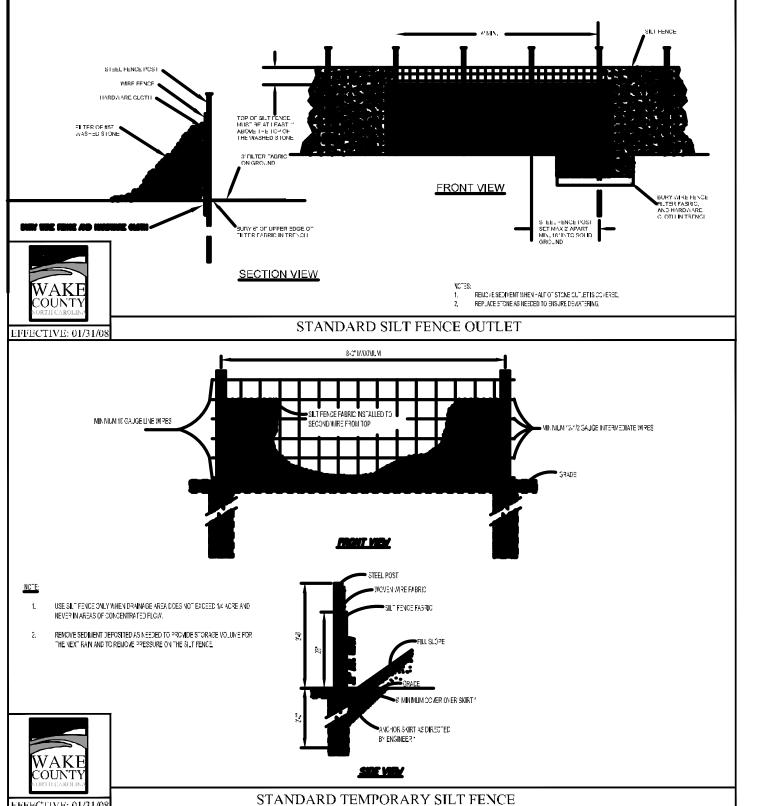
SKIMMER ORIFICE DIAMETER

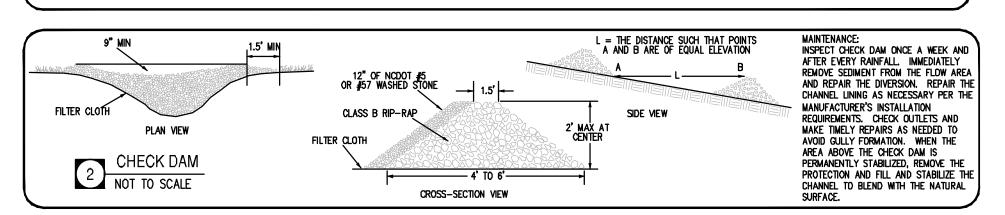
SKIMMER ORIFICE RADIUS

STORAGE DEPTH

TOP OF DAM

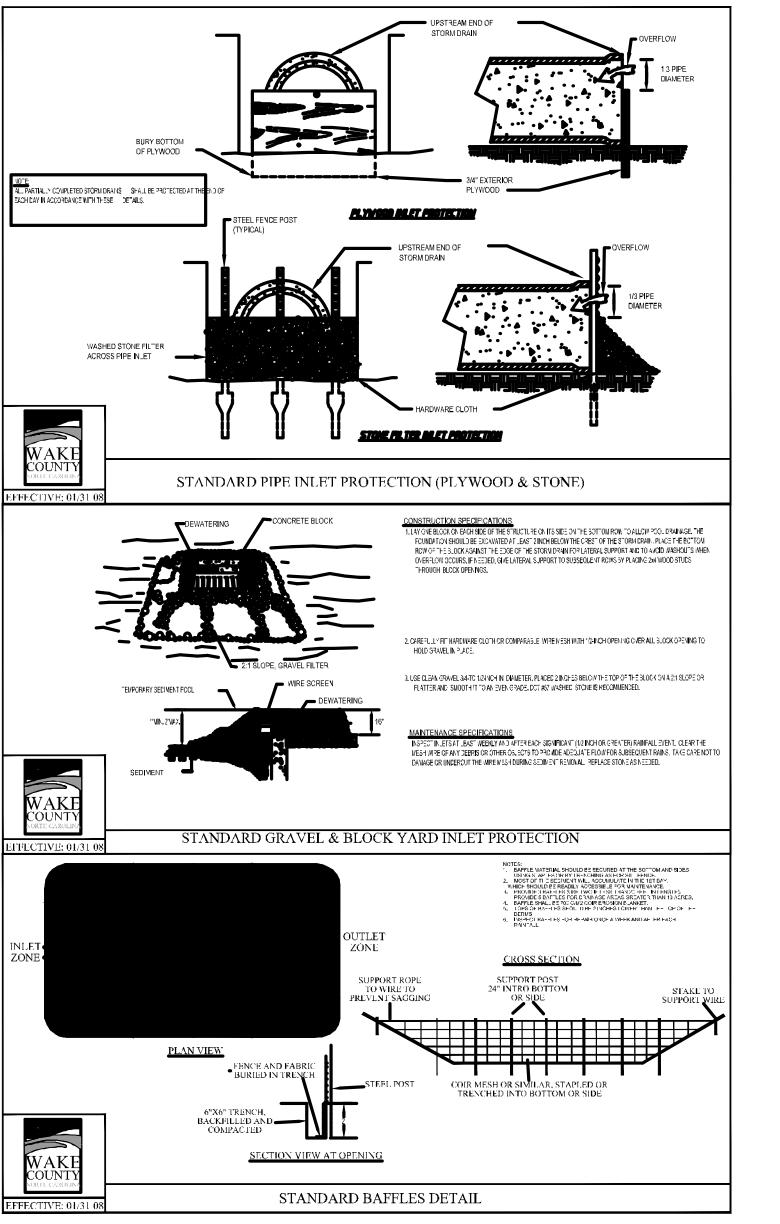


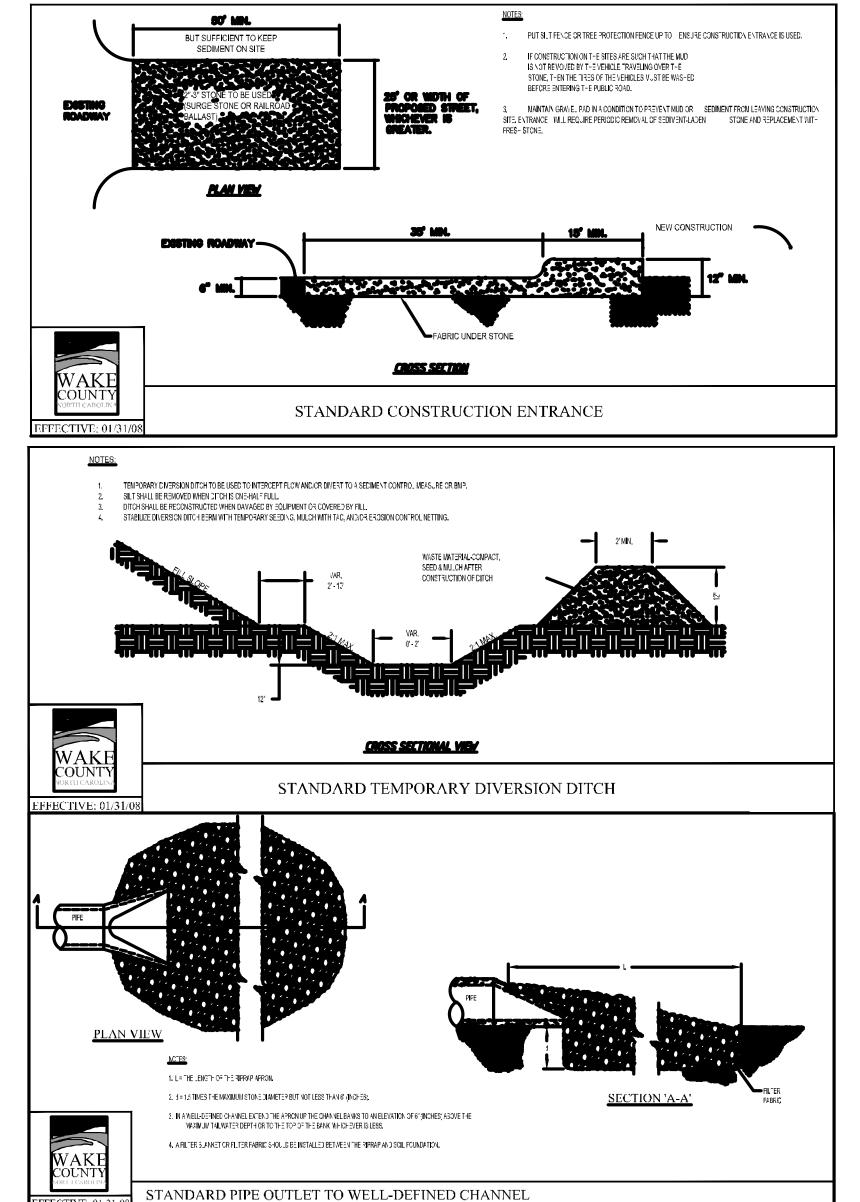




NOT TO SCALE

EMPORARY SE	EEDING SPECIFICATIONS/SCHEDU	<u>LE</u>	SEEDBED PREPARATION:	<u>:</u>			
ate	Туре	Planting Rate		AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL			
larch – Oct.	Browntop Millet	40 lbs/acre	CONDITIONS, IF AVAILABLE	<u>.</u>			
lov. – Feb.	Winter Rye	120 lbs/acre	2. RIP THE ENTIRE AREA TO	SIX INCHES DEEP.			
ERMANENT SE	EEDING SPECIFICATIONS/SCHEDU	LE					
	SIDE DITCHES, SLOPES (MAX 3:1)		<ol> <li>REMOVE ALL LOOSE ROCK, REASONABLY SMOOTH AN</li> </ol>	ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE			
ate	Туре	Planting Rate	REASONABLI SMOOTH AN	D UNIFORM.			
ug 15 – Nov 1	Deer Tongue	300 lbs/acre	4. APPLY AGRICULTURAL LIME	, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH			
lov 1 – Mar 1	Deer Tongue & Abruzzi Rye	300 lbs/acre	SOIL (SEE SEEDING MIXTU	RE).			
lar 1 – Apr 15	Deer Tongue	300 lbs/acre		·			
	Hulled Common Bermuda Grass	25 lbs/acre		A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS			
ul 1 — Aug 15	Deer Tongue & Browntop Millet	240 lbs/acre—Deer Tongue;	PREPARED FOUR TO SIX I	NCHES DEEP.			
	or Sorghum—Sudan Hybrids	35 lbs/acre Browntop Millet 30 lbs/acre Sorghum—Sudan Hybrids	6. SEED ON A FRESHLY PREF EQUIPMENT OR CULTIPACK	PARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING CAFTER SEEDING.			
OR SHOULDERS	SIDE DITCHES, SLOPES (3:1 - 2:1)						
ate	Type	Planting Rate	7. MULCH IMMEDIATELY AFTER	R SEEDING AND ANCHOR MULCH.			
lar 1 — Jun 1	Switchgrass &	50 lbs/acre (Switchgrass)	R INCOPPLE ALL CEPTED ADE	AS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE			
	use the following combinations:			SSIBLE. IF STAND SHOULD BE MORE THAN 60% DAMAGED,			
lar 1 – Apr 15	Add Deer Tongue	240 lbs/acre		THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.			
lar 1 – Jun 30	Or add Julled Common	25 lbs/acre					
4 P 4	Bermuda Grass	240 lbs/acre Deer Tonque	<ol> <li>CONSULT S&amp;EC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.</li> </ol>				
un 1 – Sep 1	Deer Tongue & Browntop Millet or Sorghum—Sudan Hybrids	35 lbs/acre Browntop Millet					
	or sorgnum-sudun nyurids	30 lbs/acre Sorghum—Sudan Hybrids	SEEDING MIXTURE:				
iep 1 – Mar 1	Switchgrass &:	70 lbs/acre Switchgrass		7 TOUR (1995 (7 TOUR (1995 III SI 14 DOUR)			
op i moi i	Deer Tonque	240 lbs/acre Deer Tongue	AGRICULTURE LIMESTONE:	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)			
ov 1 – Mar 1	Add Abruzzi Rve	25 lbs/dcre	FERTILIZER:	1,000 LBS/ACRE - 10-10-10			
	•	•	SUPERPHOSPHATE: MULCH:	500 LBS/ACRE – 20% ANALYSIS 2 TONS/ACRE – SMALL GRAIN STRAW			
	igineer for additional information c JES for vegetation of denuded area		ANCHOR:	ASPHALT EMULSION AT 400 GALS/ACRE			
	N RATES ARE THOSE THAT DO WELL UND		ANCHOR.	ASPRIALI EMOLSION AT 400 GALS/ACKE			
	R SEEDING RATE COMBINATIONS ARE PO		CONCILL SAFE ENGINEER FOR	R ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES			
				AREAS. THE ABOVE VEGETATION RATES ARE THOSE THAT DO			
	RESEED ACCORDING TO OPTIMUM SEASO			NS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.			
	NT VEGETATION. DO NOT ALLOW TEMPO						
U GROW MURE IF ESCUE MAY BE S	HAN 12" IN HEIGHT BEFORE MOWNG; OTI	HEKWIOE,		CORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT			
LOWE MAI DE S	HADED OUT.			TEMPORARY COVER TO GROW MORE THAN 12" IN HEIGHT			
	MPORARY SEEDING		DEFURE MUNING; UIHERWISE,	FESCUE MAY BE SHADED OUT.			







Suite 10
RALEIGH, NC
Phone: (919)5

arrington ony Road

The Carring 303 Pony Ro

EROSION CONTROL DETAIL

PRELIMINARY
DO NOT



PLAN STATUS

10/29/21 IST SUBMISSION

2/9/22 PER TOWN REVIEW

3/18/22 PER TOWN REVIEW

5/2/22 PER TOWN REVIEW

DATE DESCRIPTION

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DESIGN DRAWN CHKD

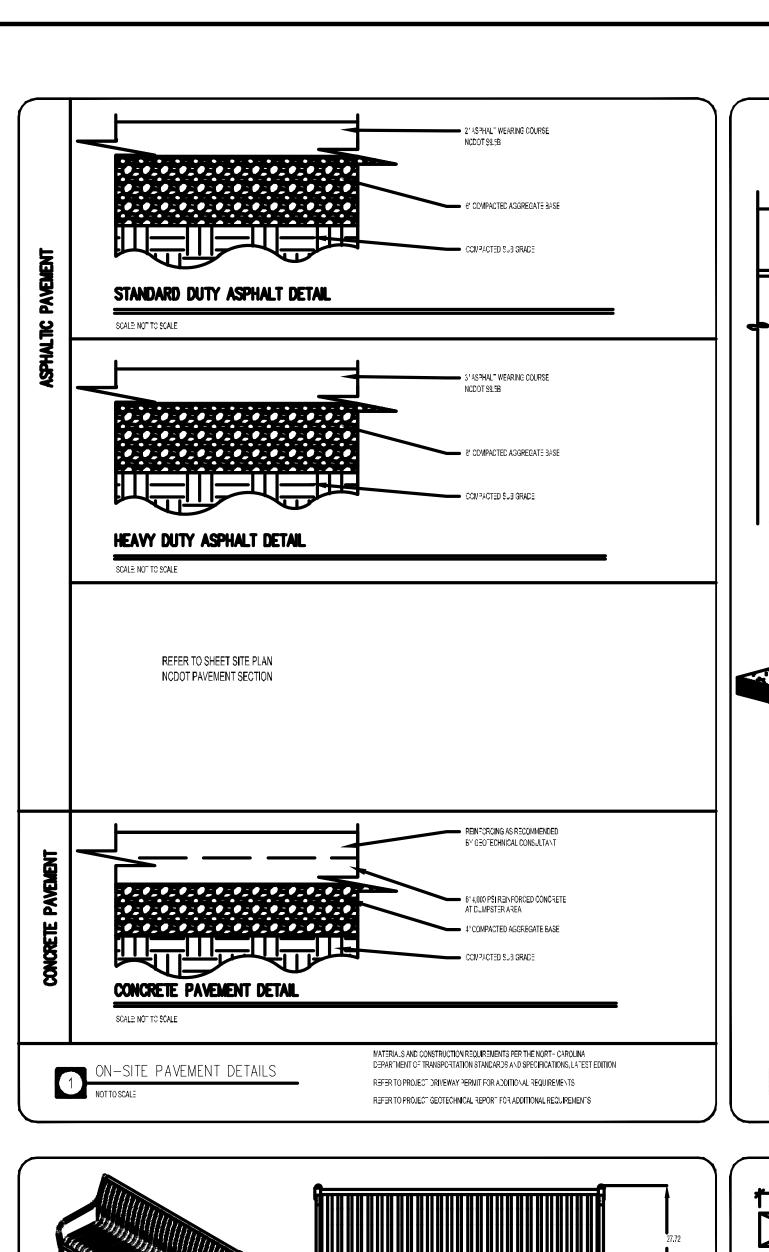
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V: N/A

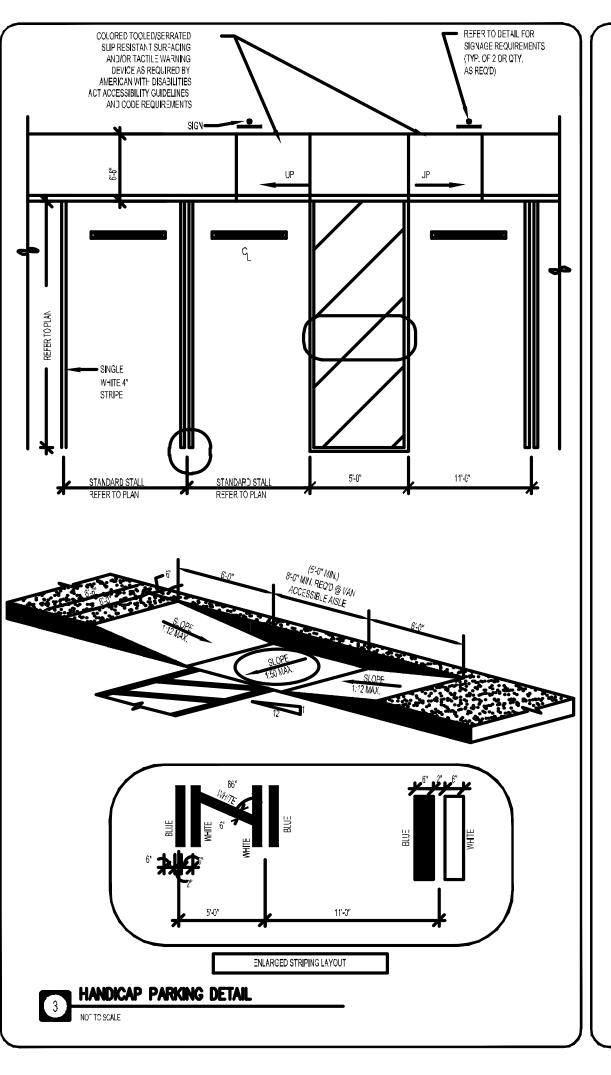
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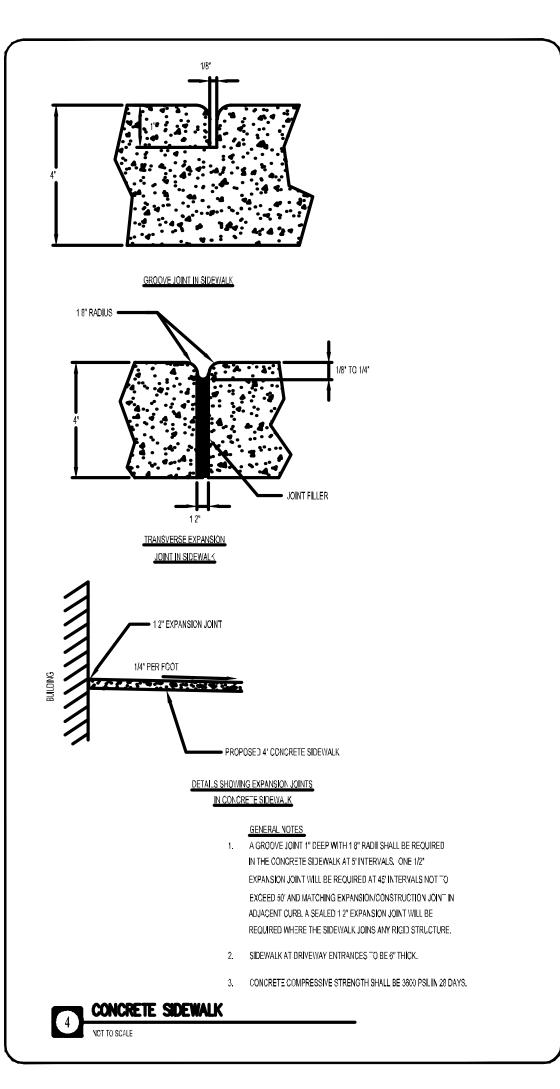
DATE October 29, 2021
FILE No. 000000-D-CP-000

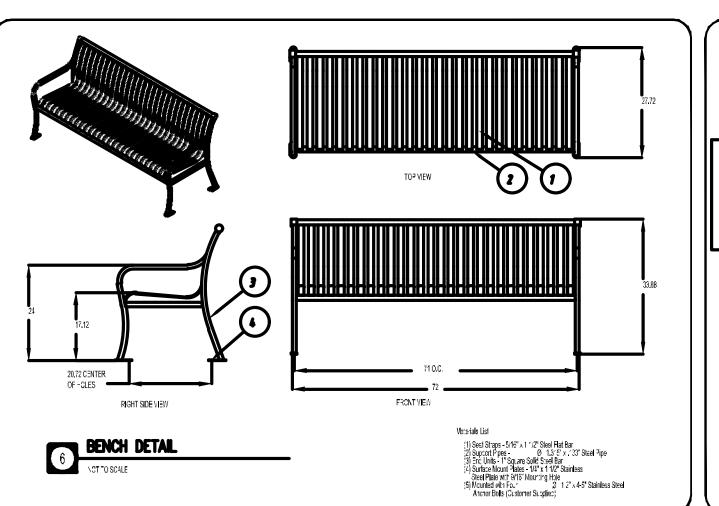
C6.1

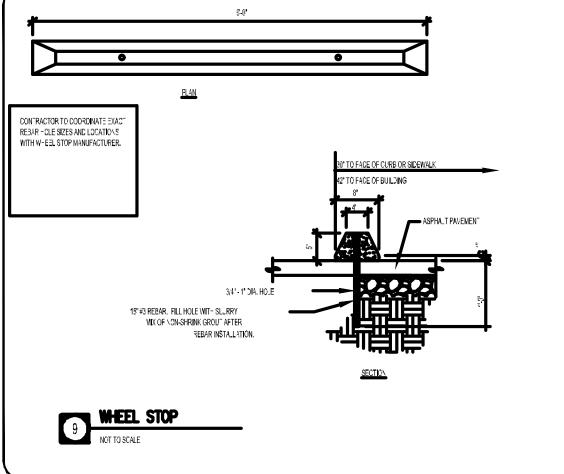
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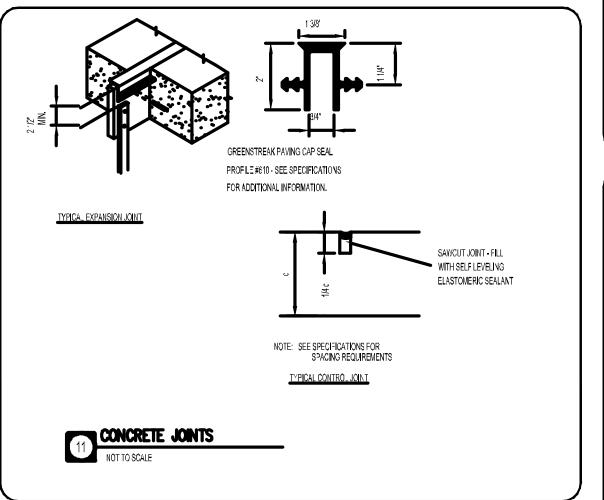


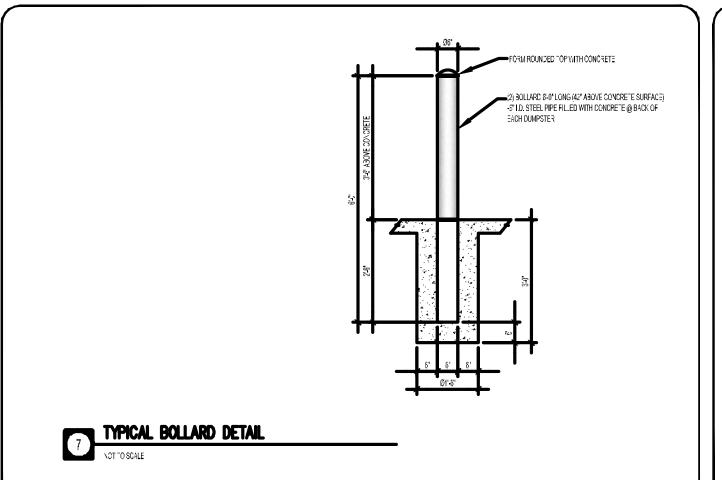


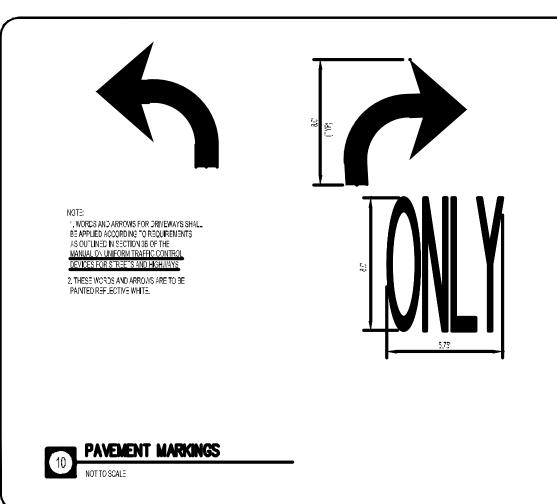


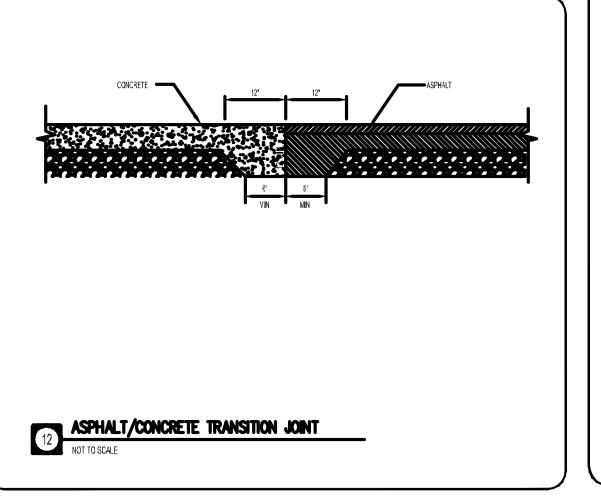


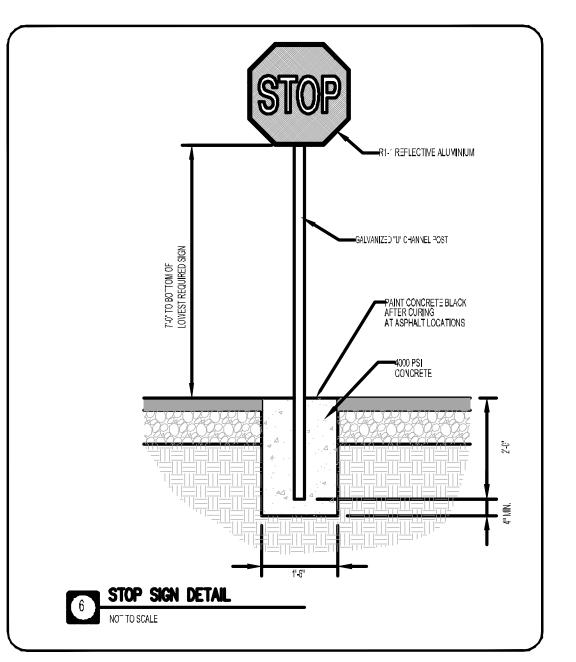


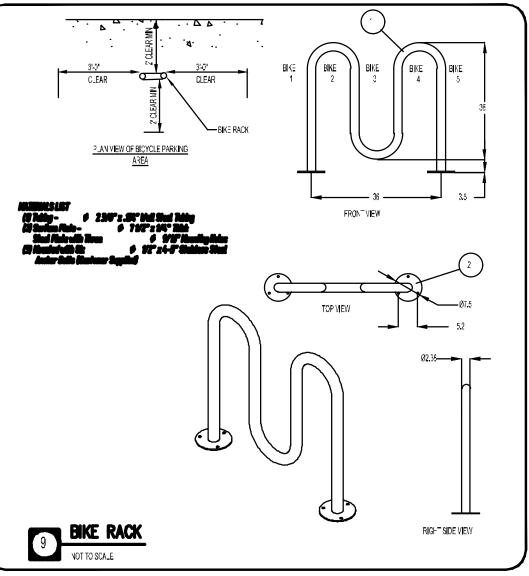


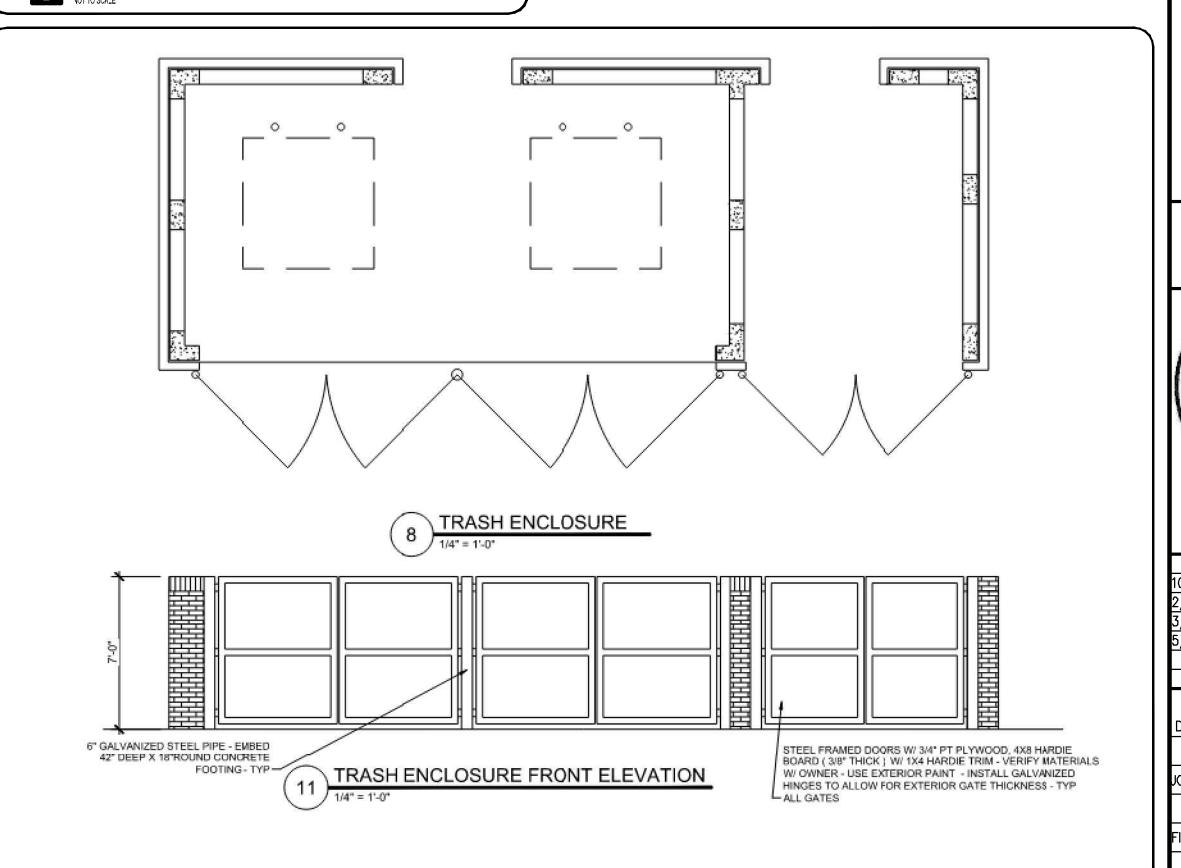














TION DETAILS urrington ny Road The Car CONSTRUC

PRELIMINARY DO NOT USE FOR

CONSTRUCTION

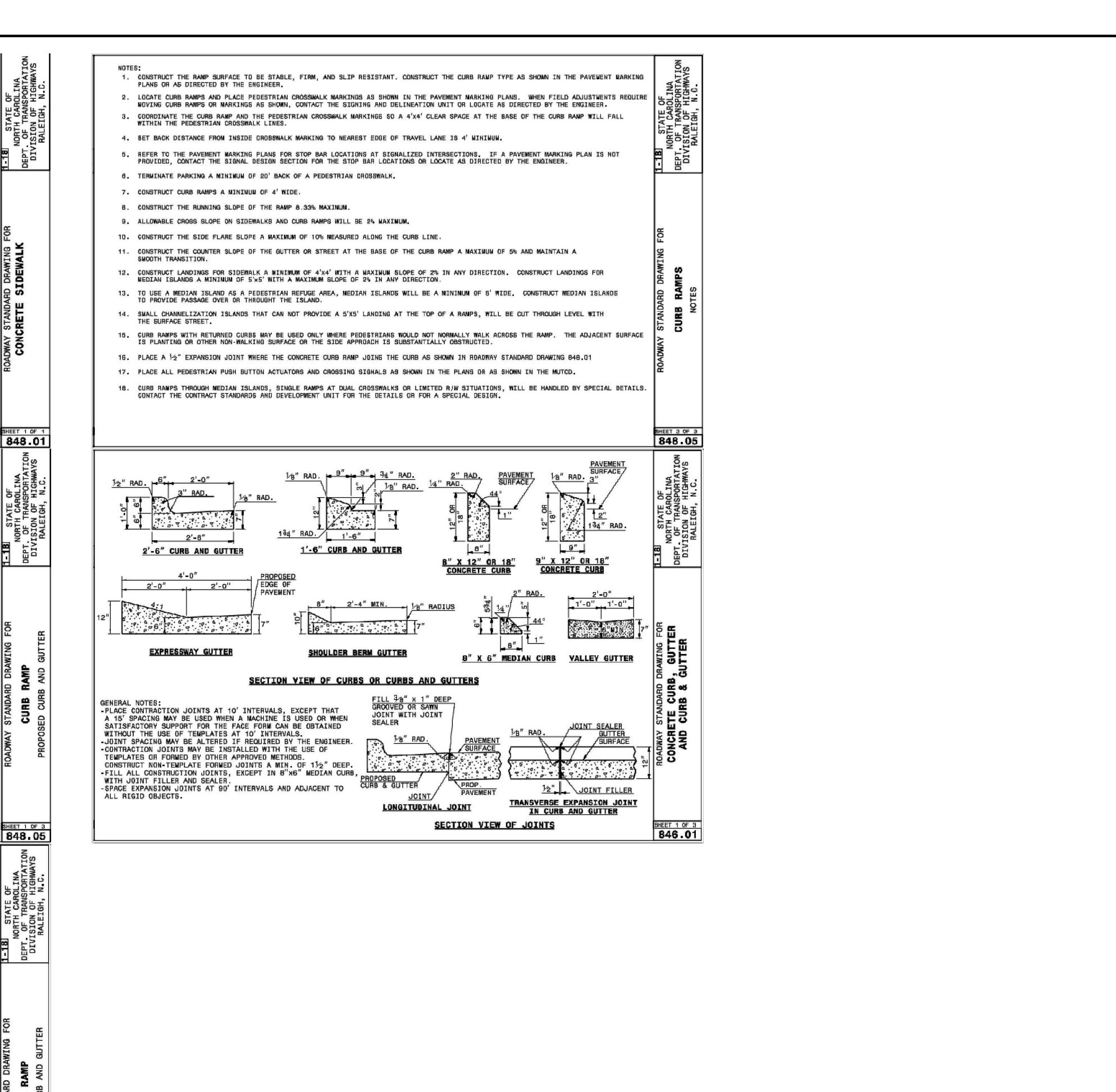
PLAN STATUS 10/29/21 1ST SUBMISSION
2/9/22 PER TOWN REVIEW
3/18/22 PER TOWN REVIEW
5/2/22 PER TOWN REVIEW DATE DESCRIPTION

MEL XXX DESIGN | DRAWN | CHKD SCALE | H: 1" = 40' V: 1" = XXX'

JOB No. 000000-00-000 DATE October 29, 2021 FILE No. 000000-D-CP-000

C6.2

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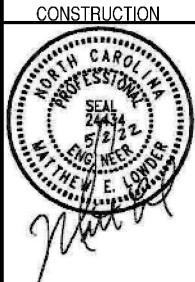


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PLAN STATUS 10/29/21|1ST SUBMISSION 2/9/22 PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 5/2/22 | PER TOWN REVIEW

DATE DESCRIPTION MEL DESIGN | DRAWN | CHKD SCALE H: 1" = 40' V: 1" = XXX' JOB No. 000000-00-000 DATE October 29, 202

FILE No. 000000-D-CP-00

C6.3 SHEET

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DETAIL SHOWING TYPICAL LOCATION OF CURB RAWPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS

PLAN SYMBOL

CR

FOR PROPOSED
CURB RAMP

NOTES:

BUILDING,

WALL, ETC:

CONSTRUCT STANDARD SIDEWALK 5' WIDE AND

4" THICK UNLESS OTHERWISE DENOTED ON PLANS.

PLACE A GROOVE JOINT 1" DEEP WITH 18" RADII

ONE 12" EXPANSION JOINT WILL BE REQUIRED AT 50'

WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

SEE STD. DWG. 848.05 FOR GURB RAMP LOCATION

REQUIREMENTS AND CONSTRUCTION GUIDELINES.

ISOMETRIC VIEW

NOTES!
1. DETECTABLE MARKING DOMES WILL DOWER 2'-6" LENGTH AND FULL WIDTH OF THE FAMP FLODE AS SHOWN ON THE DETAILS.
2. DETECTABLE MARKING DOMES WILL DOWTRAST VISIBILITY WITH ADJUDINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RANP.

PAY LIMITS FOR CURB RAMP

RAMP MISTH AREA IS VARIABLE

DETECTABLE WARNING DOMES

STOP LINE

----

INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED

1/2" EXPANSION JOINT

CONCRET

SIDEWALK

DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK

 $B = K - (A+\theta^{\prime\prime})$ 

,=====

B - K-(ATT)
B - DISTANCE FROM FRONT EDSE OF SIDEMALK
TO BACK POINT OF 13:1 |8.35%| SLOPE.
\* BACK OF SIDEMALK ORDP SEQUIRED FOR ALL
SIDEMALK BLOPES.
\*\* SACK OF SIDEMALK DROP REQUIRED FOR
SIDEMALK BLOPES 0.04.

PROPOSED CURB RAMP W/ LANDING

PROPOSED OR FUTURE SIDEWALK

IN THE CONCRETE SIDEWALK AT 5' INTERVALS.

1/8" RAD

JOINT SEALER

1/2" JOINT WIDTH

T = SIDEWALK THICKNESS

FILL 3/8" WIDE x 1" DEEP GROOVED OR

CONC. PAVEMENT

SECTION B-B

SECTION A-A

4' K 4' CLEAR SPACE MUST FALL MITHIN CROSBAALH LIMITS. (SEE NOTE 10)

====7

STOP LINE

SIDEMALK

SEE NOTE 4 -

SEE NOTE 10-

2' MIN. CURB BETWEEK RAMPS

DETAIL SHOWING TYPICAL LOCATION OF CURB RAMPS, PEDESTRIAN GROSSMALKS AND STOP LINES

ALLOWABLE LOCATIONS

DUAL RAMP RADII.....ANY

848.05

SAWN JOINT WITH JOINT SEALING COMPOUND

TRANSVERSE EXPANSION JOINT

IN SIDEWALK

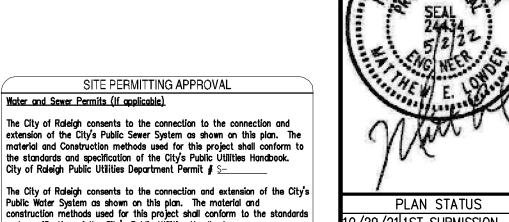
SIDEWALK

SIDEMALK (5' STD.)

BEE NOTE 1

PLAN VIEW

UTILITY



PLAN STATUS /29/21|1ST SUBMISSION 9/22 PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 2/22 PER TOWN REVIEW

DATE DESCRIPTION MEL XXX DESIGN | DRAWN | CHKD H: 1" = XXX' SCALE V: 1" = XXX'

C6.4

The Construction Contractor responsible for the extension of water, sower, and/or rouse, as approved in those plans, is responsible for contacting the Public Utilities Department at (919)996-4540 JOB No. 000000-00-000 DATE October 29, 202 FILE No. 000000-D-CP-00(

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure. FailUre to call for Inspection, Install a Downstream Plug, have Permitted Planson the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion

ATTENTION CONTRACTORS

SITE PERMITTING APPROVAL

The City of Raleigh consents to the connection to the connection and extension of the City's Public Sewer System as shown on this plan. The

and specification of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-\_\_

material and Construction methods used for this project shall conform to the standards and specification of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #  $\S$ -

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and constructions methods used for this project shall

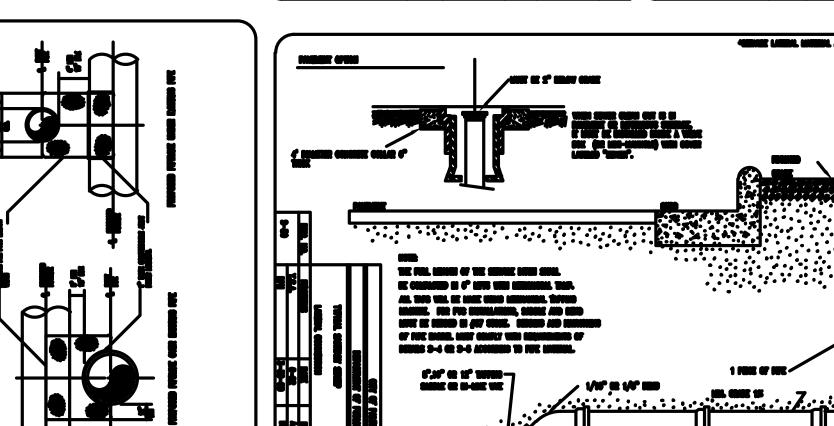
conform to the standards and specifications of the City's Public Utilities

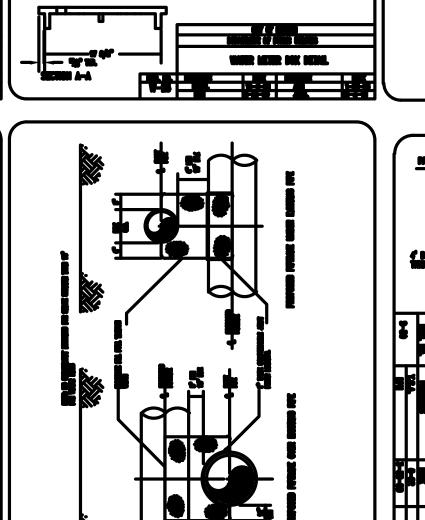
City of Raleigh Public Utilities Department Permit # S-

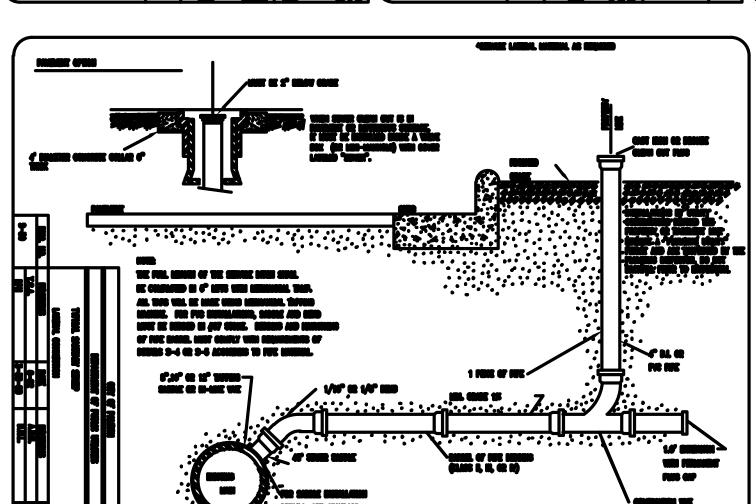
from future work in the City of Raleigh

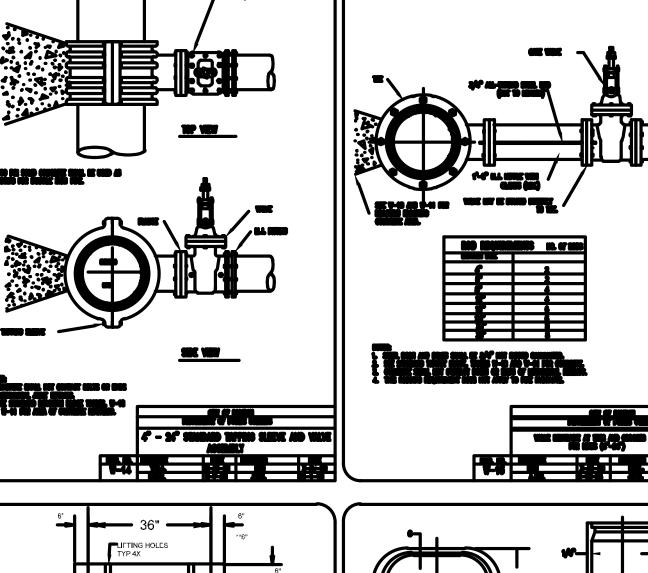
<u>Water and Sewer Permits (If applicable)</u>

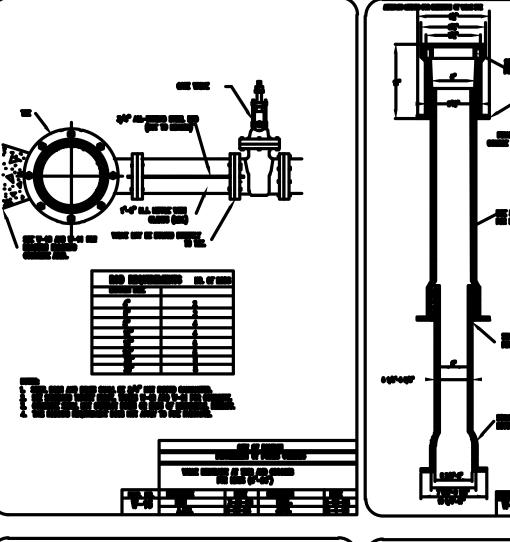
APPROVED RPDA ASSEMBLIES: FEBCO: 826YD,909RPD APOLLO/CONBRACO: 4070CE3 WILKINS: 375ADA

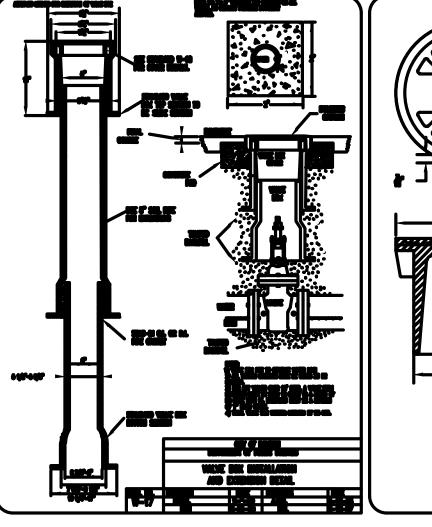












NOTES:

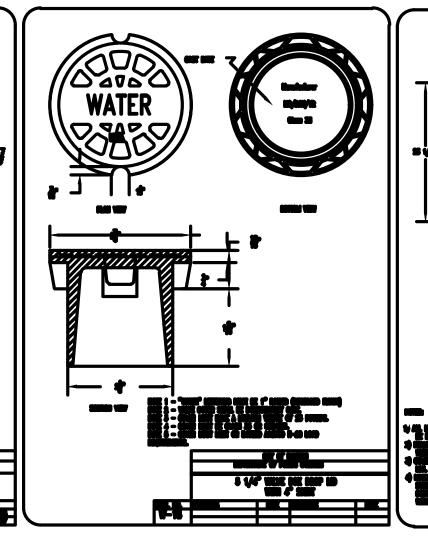
1. ALL PUBLIC FIRE HYDRANTS IN THE CITY OF RALEIGH AND THE MERGER TOWNS OF GARNER,
ROLESYBLE, WAKE FOREST, KNIGHTDALE, WENDELL AND ZEBULON SHALL BE PAINTED CHROME
YELLOW WITH HIGH REFLECTIVE ALUMINUM SILVER CAPS, BONNETS AND OPERATING NUTS.

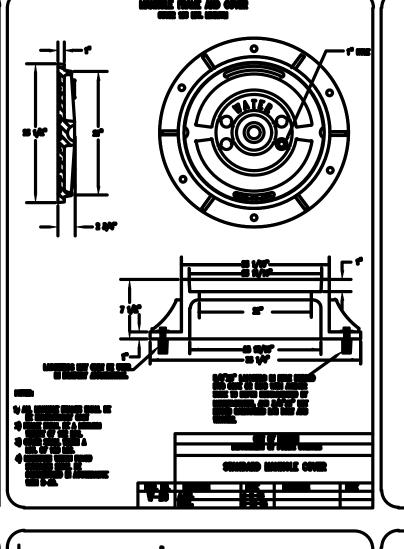
2. ALL PRIVATE FIRE HYDRANTS SHALL BE RED.

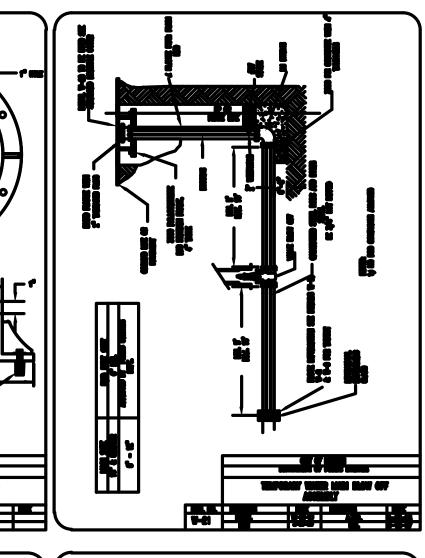
PRIVATE FIRE HYDRANTS TO BE PAINTED RED PER

STANDARDS

STANDARD FIRE HYDRANT WITH 5" STORZ PUMPER NOZZIE







APPROVED RPZ ASSEMBLIES:
APPROVED 1" RPZ BACKFLOW PREVENTERS:

APPROVED RPZ ASSEMBLIES:

APPROVED 2" RPZ BACKFLOW PREVENTERS:

AMES 400B, U400B WATTS 009M1QT, 009QT

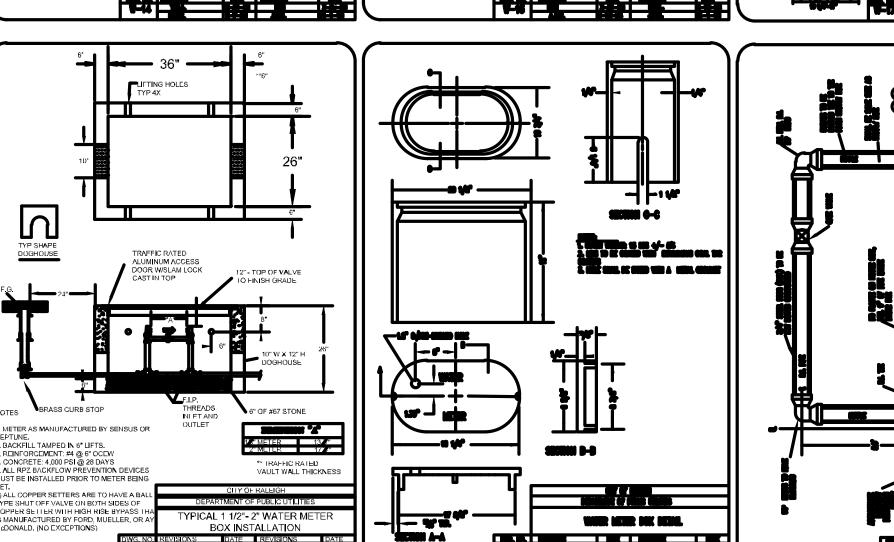
APOLLO 4020802, RP40 FEBCO 860, 825YAR

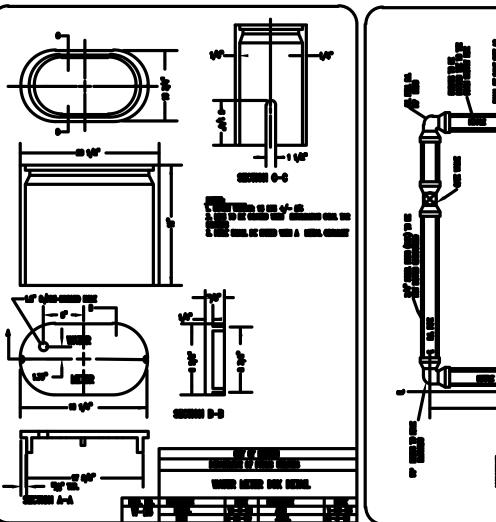
AMES 4000B

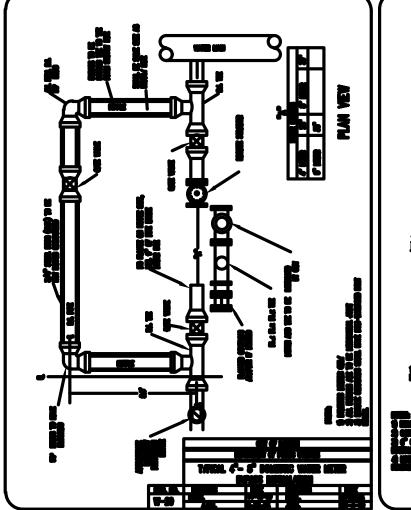
FEBCO 825 Y & YA WATTS DO9M2QT

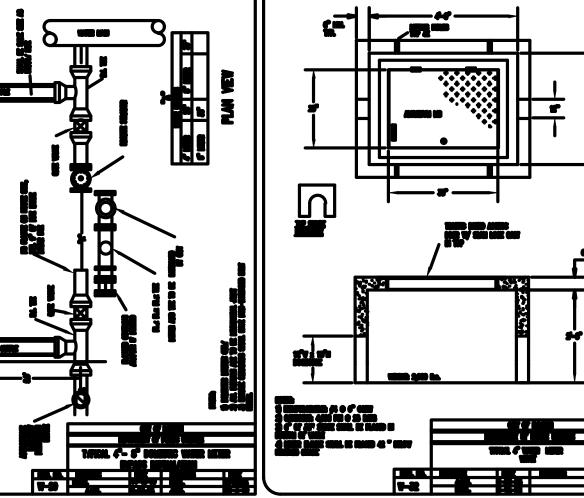
WILKINS 375, 375B

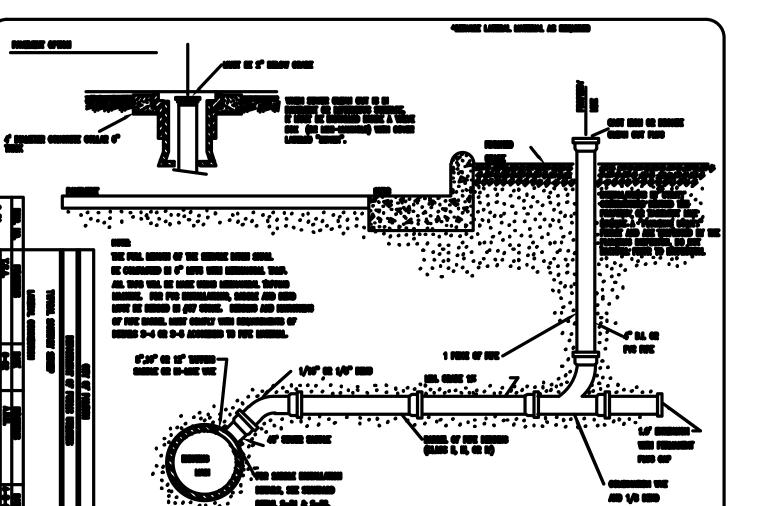
IDAM COMPANY AND THE MARKET WITH THE COMP

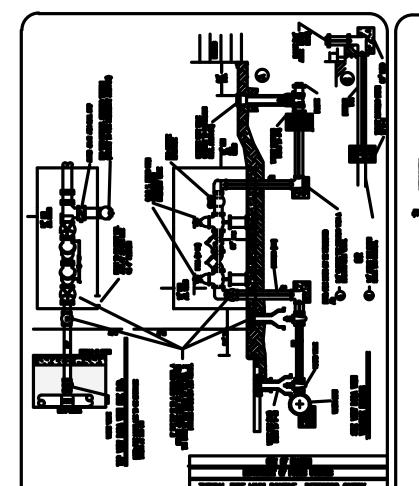


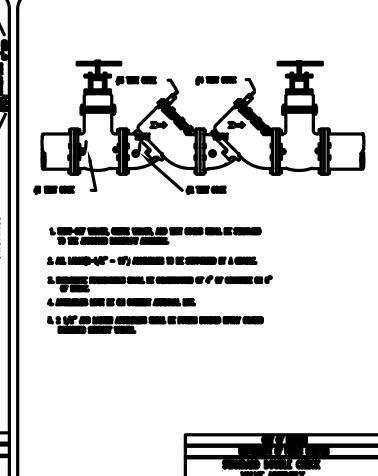


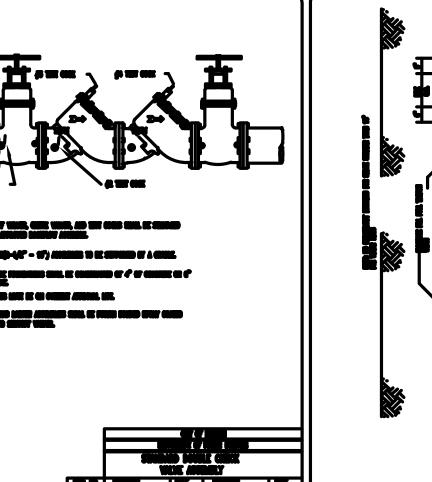




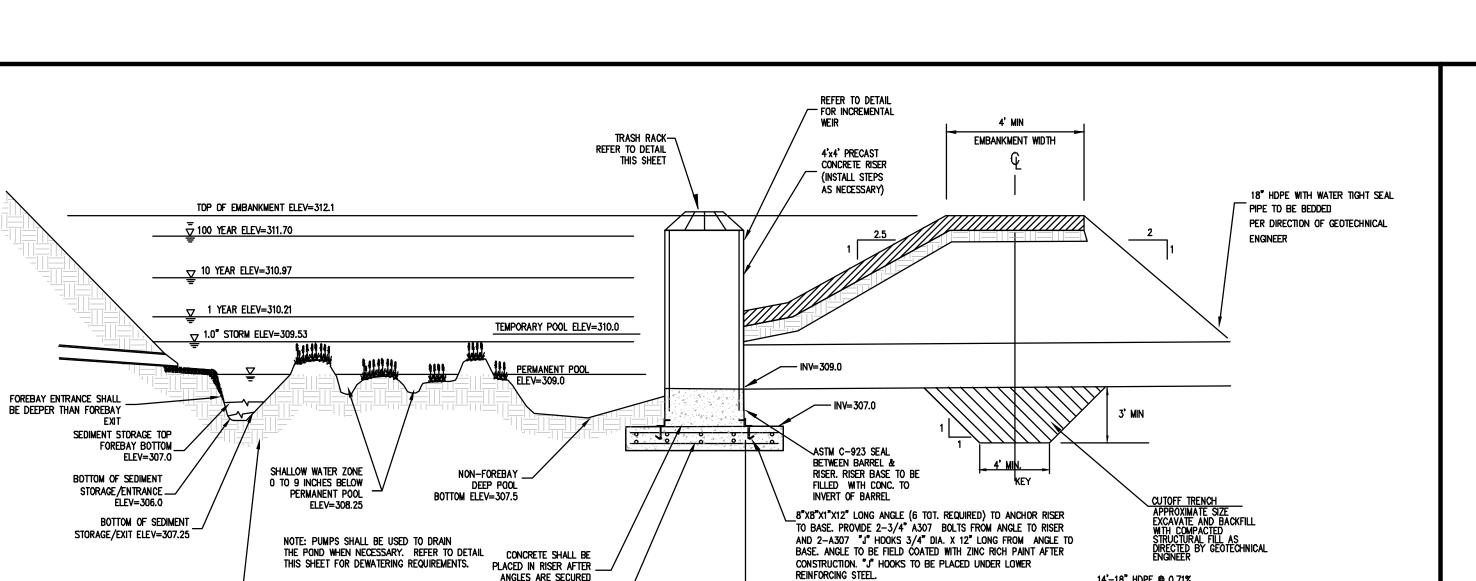




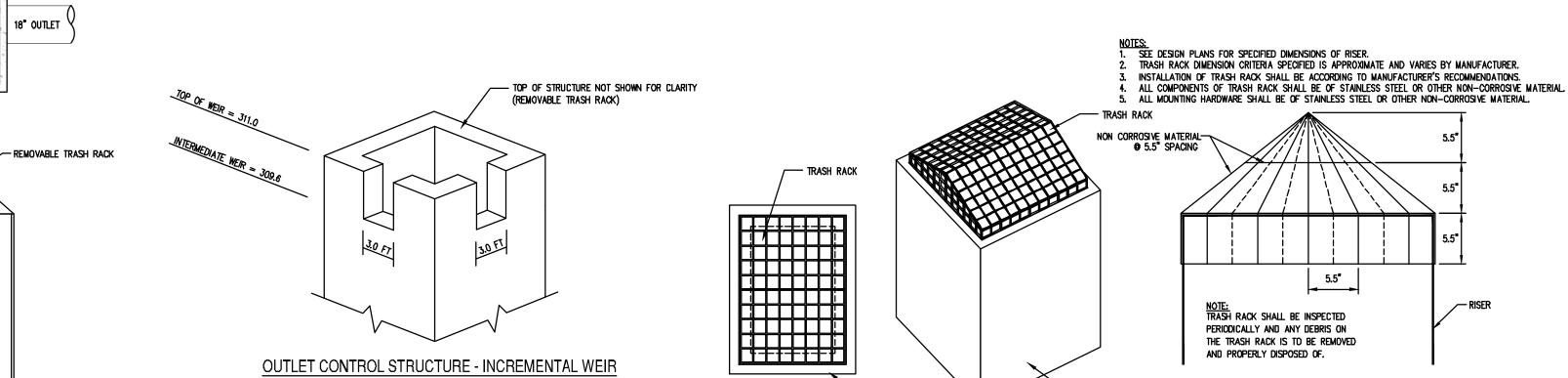




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PROFILE OF STORMWATER WETLAND DETENTION SYSTEM-OCS#1



ANGLES ARE SECURED

5'x5'x1.5' CONC. BASE REINFORCE WITH #4 BARS AT 12" O.C. TOP \_\_ AND BOTTOM OF EACH DIRECTION PROVIDE 3" MIN. CLEARANCE BETWEEN EDGE OF CONC. AND STEEL REINFORCING.

	STAGE/	STORAGE	TABLE	
STAGE (FT)	ELEVATION (FT)	CONTOUR AREA (SF)	INCREMENTAL STORAGE (CF)	TOTAL STORAGE (CF)
0.0	390.0	4745	0	0
0.5	309.5	5375	2530	2530
1.0	310.0	5905	2820	5350 (WQV)
1.25	310.25	6580	1561	6911
2.0	311.0	7405	5244	12155
3.0	312.0	8545	7975	20130
31	312 1	8655	860	20990

SCALE: N.T.S.

ADJUST THE PH, COMPACTION, -

PLANT ESTABLISHMENT AND

AND OTHER ATTRIBUTES OF THE

SOIL IF NECESSARY TO PROMOTI

RIVER BASIN:	NEUSE						
RECEIMNG STREAM:	LITTLE RIVER (TARPLEYS POND)						
STREAM INDEX: 27-57-(8.5)							
STREAM CLASS; WS-V; NSW							
HUC:	0302020115						
PROJECT COORDINATES:	35.818308N, -78.328950W						
POND DESIGN SUMMARY							
DRAINAGE AREA TO PON	<del></del>	2.46	ACRES				
SITE IMPERVIOUS AREA 1			ACRES				
OFF-SITE DESIGN IMPERY		0.0 A					
TOTAL DESIGN IMPERVIOL	IC ADEA TO DOND.		ACRES				

TRASH RACK DETAIL

14'-18" HDPE @ 0.71%

\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	0.0	330.0	5775	v	, v	DOND DECION CHARADY					
1		0.5	309.5	5375	2530	2530	POND DESIGN SUMMARY DRAINAGE AREA TO POND:		2.46	ACRES		
$\overline{\uparrow}$		1.0	310.0	5905	2820	5350 (WQV)	SITE IMPERVIOUS AREA TO POND:		∠. <del>4</del> 0 1	ACRES		
		1.25	310.25	6580	1561	6911	OFF-SITE DESIGN IMPERMOUS AREA	TO POND:		ACRES		
		2.0	311.0	7405	5244	12155	TOTAL DESIGN IMPERVIOUS AREA TO			ACRES		
		3.0	312.0	8545	7975	20130						
		3.1	312.1	8655	860	20990		PRE-DEVELOPED				
							DRAINAGE AREA: CURVE NUMBER: TIME OF CONCENTRATION:	TO POND 2.87 AC 77.0 11.7 MIN	2.46 AC 90.6 5 MIN		80.4 0.41 AC 80.4 10 MIN	COMBINED
	∠—LOW POINT						1.0" STORM EVENT: 1-YEAR STORM EVENT: 10-YEAR STORM EVENT: 100-YEAR STORM EVENT:	3.943 CFS 11.39 CFS 21.65 CFS	7.712 CFS	0.018 CFS 2.930 CFS 7.910 CFS 11.86 CFS	0.685 CFS 1.808 CFS 3.292 CFS	3.615 CFS 9.718 CFS 15.15 CFS
	INLET PIPE WITH-RIP-RAP APRON  625 SF FOREBAY-AREA	000										

SCM element:	Potential problems:	How to remediate the problem:		
The entire wetland		Remove the trash/debris.		
The entire wetland	Trash/debris is present.	Regrade the soil if necessary to		
The perimeter of wedland	Areas of bare soil and/or erosive gullies have formed.	remove the gully, and then plant a ground cover and water until it is established. Provide lime and a one-time fertilizer application.		
inlet device	The inlet pipe is diagged (if applicable).	Unclog the pipe. Dispose of the sediment in a location where it will no cause impacts to streams or the 9CM		
	The Inlet pipe is cracked or otherwise damaged (if applicable).	Repair or replace the pipe.		
	Erosion is occurring in the swale (if applicable).	Regrade the swale if necessary and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.		
Forebay	Sediment has accumulated in the forebay to a depth of less than 15' or that inhibits the forebay from functioning well.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.		
	Erosion has occurred.	Provide additional erosion protection such as reinforced turf		
		matting or riprap if needed to prevent future erosion problems.		
	Weeds are present.	Remove the weeds, preferably by hand. If a peeticide is used, wipe on the plants rather than spreying.		
Deep pool, shallow water and shallow land areas	Algal growth covers over 30% of the deep pool and shallow water areas.	Consult a professional to remove and control the algal growth.		
	Cattails, phragmites or other invesive plants cover 30% of the deep pool and shallow water areas.	Remove the invasive plants by han- or by wiping them with pesticide (do not spray) – consult a professional.		
	The temporary inundation zone remains flooded more than 5 days after a storm event.	Unclog the autlet device immediately.		
	Plants are dead, diseased or dying.	Determine the source of the problem: soils, hydrology, disease etc. Remedy the problem and replace plants. Provide a one-time fertilizer application to establish the ground cover if necessary.		
	Sediment has accumulated and reduced the depth to 75% of the original design depth of the deep pools.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.		
	A tree has started to grow on the embankment.	If tree is <6" in diameter, remove the tree. If the tree is >6" in diameter, consult a dam safety specialist to remove the tree.		
Embankment	An annual inspection by an appropriate professional shows that the embankment needs repair.	Make all needed repairs.		
	Evidence of muskrat or beaver activity is present.	Consult a professional to remove muskrats or beavers and repair any holes or erosion.		
Micropool	Sediment has accumulated and reduced the depth to 75% of the original design depth.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a location where it will not cause impacts to streams or the SCM.		
Outlet Structure	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.		
Sant. Su ablufu	The outlet device is damaged	Repair or replace the outlet device		
Receiving water	Erosion or other signs of damage have occurred at the outlet.	Repair the damage and improve the flow dissipation structure.		
1.156414.11.M MOTEL	Discharges from the wetland are causing erosion or sedimentation in the receiving water.	Contact the local NCDQ Regional Office.		

in the receiving water.

- PLANT DELIGHTS NURSERY

SEEDBED PREPARATION: CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
RIP THE ENTIRE AREA TO SIX INCHES DEEP.

REMOVE ALL LODSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND

REMOVE ALL LODSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE SEEDING CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RE-SEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES. CONSULT S&EC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED. <u>LANDSCAPING NOTES:</u> ALL LANDSCAPING SHALL BE IN COMPLIANCE WITH THE NCDEQ BMP REQUIREMENTS. LANDSCAPE CONTRACTOR SHALL PROVIDE A TWO-YEAR WARRANTY FOR BMP PLANTING SURVIVAL/REPLACEMENT. SURVIVE MUST BE REPLACED. ESTABLISHMENT PROCEDURES, SUCH AS CONTROL OF INVASIVE WEEDS, ANIMAL AND VANDAL DAMAGE, MULCHING, RE-STAKING, WATERING, AND MESH OR TUBE PROTECTION REPLACEMENT, SHALL BE IMPLEMENTED TO THE EXTEND NEEDED TO ENSURE PLANT SURVIVAL. STAKING MUST BE REMOVED AFTER ESTABLISHMENT (APPROXIMATELY 12

AT THE END OF THE FIRST YEAR AND AT THE END OF THE TWO-YEAR WARRANTY PERIOD, ALL PLANTS THAT DO NOT

MONTHS), TO PREVENT GIRDLING (STRANGLING) OF ALL WOODY PLANTS. SOD TO BE BERMUDA OR CENTIPEDE GRASS. REFER TO LANDSCAPE PLAN FOR LOCATION OF AREAS TO BE SODDED.

GRASS OR WILDFLOWER SEED MUST BE APPLIED AT THE RATES SPECIFIED BY THE SUPPLIERS. IF PLANT ESTABLISHMENT CANNOT BE ACHIEVED WITH SEEDING BY THE TIME OF SUBSTANTIAL COMPLETION OF THE STORMWATER FACILITY PORTION OF THE PROJECT, THEN THE CONTRACTOR SHALL PLANT THE AREA WITH WILDFLOWER SOD, PLUGS, CONTAINER PLANTS, OR OTHER MEANS TO COMPLETE THE SPECIFIED PLANTING AND PROTECT AGAINST EROSION BEFORE WATER IS ALLOWED TO ENTER THE STORMWATER BMP FACILITY.

ALL MATERIALS SHALL BE ACQUIRED FROM AN APPROVED NCDEQ PLANT VENDOR. PLANT MATERIAL SHOULD BE PURCHASED FROM A LOCAL SOURCE TO ENSURE SURVIVABILITY. LOCAL VENDORS FOR THIS SITE INCLUDE: CILL IDE NATIVE PLANT NURSERY 919-662-5566 - Growing Wild Nursery 910-259-636 919-731-7988 - NC FOREST SERVICE

919-772-4794

REFER TO PLANTINGS ON THIS SHEET FOR TYPE AND LOCATION OF SHALLOW WATER AND TEMPORARY INUNDATION

IMMEDIATELY AFTER THE STORMWATER WETLAND DETENTION POND IS ESTABLISHED, THE PLANTS ABOVE THE PERMANENT POOL ELEVATION AND PERIMETER OF THE BASIN SHOULD BE WATERED TWICE WEEKLY IF NEEDED UNTIL THE PLANTS BECOME ESTABLISHED (COMMONLY SIX WEEKS)

919-553-5927

# NO PORTION OF THE STORMWATER WETLAND DETENTION POND SHOULD BE FERTILIZED AFTER THE FIRST INITIAL FERTILIZATION THAT IS REQUIRED TO ESTABLISH THE PLANTS.

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A HEALTHY STAND OF GRASS ON ALL SEEDED

CONTRACTOR SHALL PROVIDE NATURAL TOPSOIL THAT IS FERTILE, FRIABLE, WITHOUT MIXTURE OF SUBSOIL MATERIALS, AND OBTAINED FROM A WELL DRAINED, AVAILABLE SITE. IT SHALL NOT CONTAIN SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. TOPSOIL SHALL BE SCREENED AND FREE FROM CLAY, LUMPS, STONES, ROOTS, PLANTS, OR SIMILAR SUBSTANCES 1" OR MORE IN DIAMETER, DEBRIS, OR OTHER OBJECTS WHICH MIGHT BE A HINDERANCE TO PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN AT LEAST 4-6% ORGANIC

MATTER BY WEIGHT AND HAVE A PH RANGE OF 5.5 TO 7.0. CONTRACTOR SHALL BE RESPONSIBLE FOR THE WATERING AND THE MAINTENANCE OF ALL LANDSCAPED AREAS UNTIL THE LATER OF; (a) THIRTY (30) DAYS FOLLOWING THE PLANTING OF THE GRASS AND SHRUBS, OR (b) THE DATE THAT STORE OPENS FOR BUSINESS TO THE PUBLIC. CONTRACTOR SHALL ALSO BE RESPONSIBILITY FOR THE SURVIVAL OF THE BMP PLANTING MATERIALS DURING THE TWO-YEAR WARRANTY PERIOD AND SHALL REPLACE ALL PLANTS THAT DO NOT SURVIVE AT THE END OF THE FIRST YEAR AND AT THE END OF THE

SECOND YEAR OF THE WARRANTY PERIOD.
CONTRACTOR TO VERIFY QUANTITIES PRIOR TO COMMENCING WORK. ANY DISTURBED AREAS NOT SCHEDULED FOR HARDSCAPE, PLANTINGS, OR MULCH SHALL BE SEEDED LAWN.

REFER TO LANDSCAPE PLAN FOR LOCATION OF AREAS TO BE SODDED. NO PLANT SUBSTITUTIONS ARE PERMITTED WITHOUT WRITTEN APPROVAL OF THE OWNERS REPRESENTATIVE. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE

TOPSOIL/PLANTING MIX STANDARDS FOR TREES. ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLANT 15' FROM ALL UNDERGROUND

COMPACTED SOIL AND ADD 18" NEW TOPSOIL, OR TILL AND AMEND THE TOP 18" OF EXISTING SOIL TO MEET (TWO SIDES) UTILITIES (SEWER AND STORM DRAINAGE, GAS, WATER, PHONE, AND ELECTRICAL LINES.) —FILTER MEDIA (SEE NOTE 2) SECTION B-B -WATER LEVEL PRIOR TO INSTALLATION, MANUFACTURER SPECIFICATIONS OF FILTER MEDIA SHALL BE REVIEWED TO ENSURE THAT DISCHARGE FROM FILTER MEDIA SHALL MEET OR EXCEED THE PROVISIONS OF THE CLEAN WATER ACT. 2. ENSURE THAT PUMP PRESSURE DOES NOT EXCEED FILTER MEDIA PRESSURE RATING. 3. FILTER MEDIA MAY BE, BUT NOT LIMITED TO, SAND MEDIA FILTRATION DEVICES, RATED FILTER FABRIC BAGS OR POLYMER BASED DEWATERING PRACTICES. 4. PUMP STRAINER SHALL NOT BE IN CONTACT WITH BOTTOM OF POND.

BMP POND DEWATERING

STORMWATER MANAGEMENT NOTES:

BMPs/CONTROL STRUCTURES.

DIRECTION OF NCDEQ.

STORMWATER MANAGEMENT PLANS AND DESIGNS.

THE DEVELOPER OR HIS AGENT SHALL CONTACT THE DESIGN ENGINEER WHEN

THE BEST MANAGEMENT PRACTICE(S) ARE CONSTRUCTED AND ABOUT TO

BECOME OPERATIONAL SO A FINAL INSPECTION CAN BE PERFORMED TO

DETERMINE COMPLIANCE WITH THE APPROVED PLAN CAN BE PERFORMED.

A PERMITTED STRUCTURAL STORMWATER BMP/CONTROL SHALL ANNUALLY

SUBMIT A MAINTENANCE AND INSPECTION REPORT FOR EACH BMP TO THE

STORMWATER ADMINISTRATOR. ANNUAL INSPECTIONS SHALL BEGIN WITHIN

ONE YEAR OF THE RECORDATION OF ANY DEED(S) SHOWING STORMWATER

UPON COMPLETION OF THE PROJECT, AND BEFORE A CERTIFICATE OF OCCUPANCY SHALL BE GRANTED, THE ENGINEER OF RECORD SHALL CERTIFY THAT THE COMPLETED PROJECT IS IN ACCORDANCE WITH THE APPROVED

A FINAL INSPECTION OF THE SITE AND STORMWATER MANAGEMENT BMP/CONTROLS TO BE SCHEDULED WITH AND COMPLETED BY THE PROJECT

NCDEQ AND THEIR ASSIGNS HAVE RIGHT TO ACCESS THE STORMWATER

AND HAS FULL DESIGN VOLUME PRIOR TO ISSUANCE OF THE FINAL

THE ENGINEER'S CERTIFICATION OF COMPLETION WILL BE REQUIRED PRIOR TO

THE FINAL PLAT OR CERTIFICATE OF OCCUPANCY. THE STORMWATER CONTROL IS TO BE INSPECTED TO ENSURE IT IS FUNCTIONING AS DESIGNED

THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING THE STORMWATER

EMERGENCY WEIR -

INTERMEDIATE WEIR -

ELEV=311.0

PRE-CAST

<u>PLAN VIEW</u>

CONCRETE RISER

CONTROLS(s) ACCORDING TO THE APPROVED MAINTENANCE PLAN AND

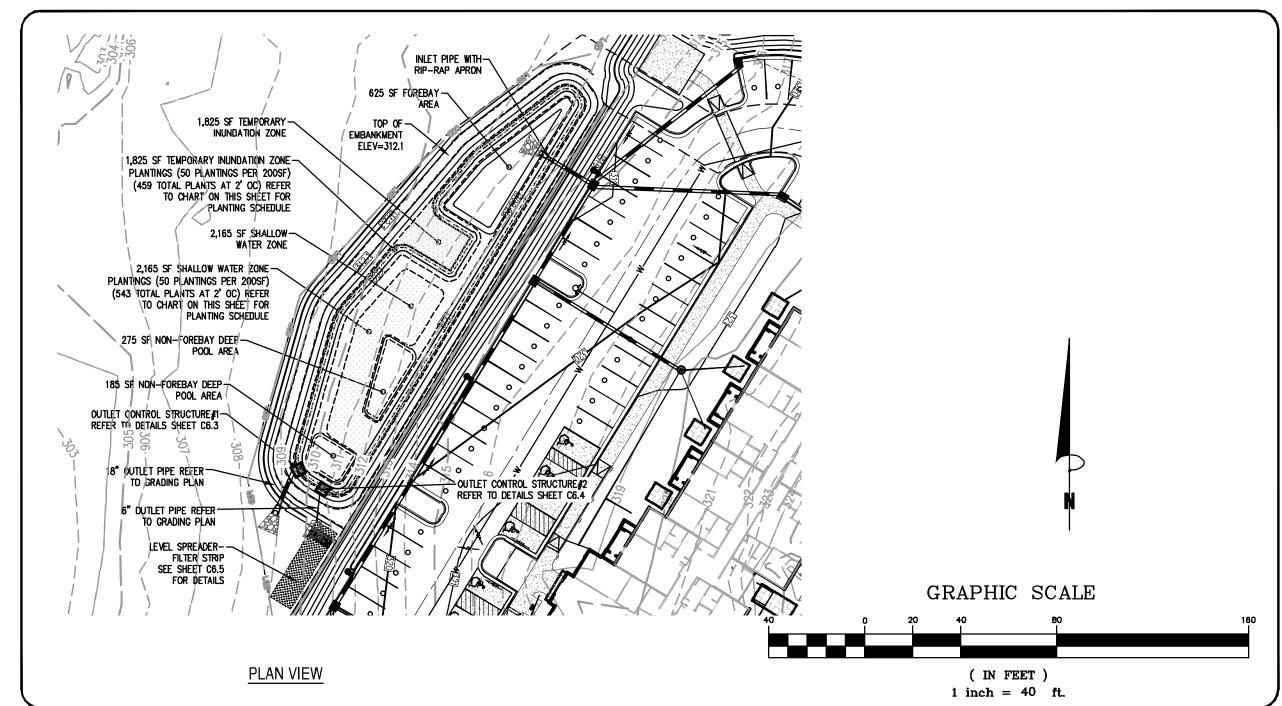
CONTROL(s) FOR INSPECTIONS OR MAINTENANCE AS NECESSARY.

ANNUAL MAINTENANCE INSPECTION AND REPORT REQUIRED - THE OWNER OF

	TYPICAL SHALLOW WATER PLANTING SCHEDULE								
+ + +	SCIENTIFIC NAME	COMMON NAME	PLANTING ZONE	QUANTITY	HEIGHT	IDEAL DEPTH	NURSERY CONTAINER TYPE	SPACING	PLANTING SEASON
+ + + +	Juncus effusus	Common Rush	SHALLOW WATER	181	9" FOLIAGE HEIGHT	0-2"	4" TEA POT	2° O.C.	SPRING/SUMMER
+ + +	Lil aeopsis carolinensis	Carolina Grasswort	SHALLOW WATER	181	9" FOLIAGE HEIGHT	0-9"	4" TEA POT	2° 0.C.	SPRING/SUMMER
+ + +	Schoenoplectus tabernaemontani	Softstern Bulrush	SHALLOW WATER	181	9" FOLIAGE HEIGHT	0-6"	4" TEA POT	2° O.C.	SPRING/SUMMER

TYPICAL TEMPORARY INUNDATION ZONE PLANTING SCHEDULE								
	SCIENTIFIC NAME	COMMON NAME	PLANTING ZONE	QUANTITY	HEIGHT	NURSERY CONTAINER TYPE	SPACING	PLANTING SEASON
	Eutrochium dubium	Coastal Joy Pye Weed	SHALLOW LAND	153	9" FOLIAGE HEIGHT	4" TEA POT	2' O.C.	SPRING/SUMMER
	Eupatorium erfoliatum	Boneset	SHALLOW LAND	153	9° FOLIAGE HEIGHT	4" TEA POT	2' O.C.	SPRING/SUMMER
	Rhynchospora colorata	Starrush Whitetop	SHALLOW LAND	153	9° FOLIAGE HEIGHT	4" TEA POT	2' O.C.	SPRING/SUMMER

<u>PLANTINGS</u>



STORMWATER MANAGEMENT SYSTEM DETAILS NOT TO SCALE

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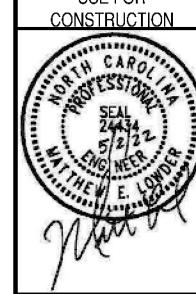
trrington ny Road Cal

DETAIL

VAGEMENT

STORMWATER MAI

PRELIMINARY DO NOT USE FOR



PLAN STATUS 10/29/21|1ST SUBMISSION 2/9/22 | PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 5/2/22 | PER TOWN REVIEW DATE DESCRIPTION

MEL XXX DESIGN | DRAWN | CHKD H: 1" = 40' SCALE JOB No. 000000-00-000 DATE October 29, 202

FILE No. 000000-D-CP-00

C6.5

6" HDPE WITH WATER TIGHT SEAL

PER DIRECTION OF GEOTECHNICAL

PIPE TO BE BEDDED

		STAT		
0/29/21	1ST	SUBMIS	SSION	
2/9/22	PER	TOWN	REVIEW	
/18/22				
/2/22	PER	TOWN	REVIEW	

DATE DESCRIPTION MEL MEL XXX DESIGN DRAWN CHKD

SCALE H: 1" = 40'
V: JOB No. 000000-00-000

DATE October 29, 2021 FILE No. 000000-D-CP-000

C6.5

REMOVABLE TRASH RACK TOP OF STRUCTURE -ELEV=311.8 PRE-CAST CONCRETE RISER 6" OUTLET PLAN VIEW B PVC DRAIN OUTLET

SECTION B-B

(REMOVABLE TRASH RACK)

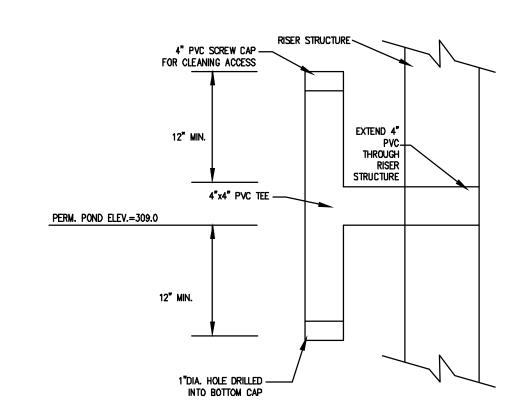
OUTLET CONTROL STRUCTURE #2 - INCREMENTAL WEIR

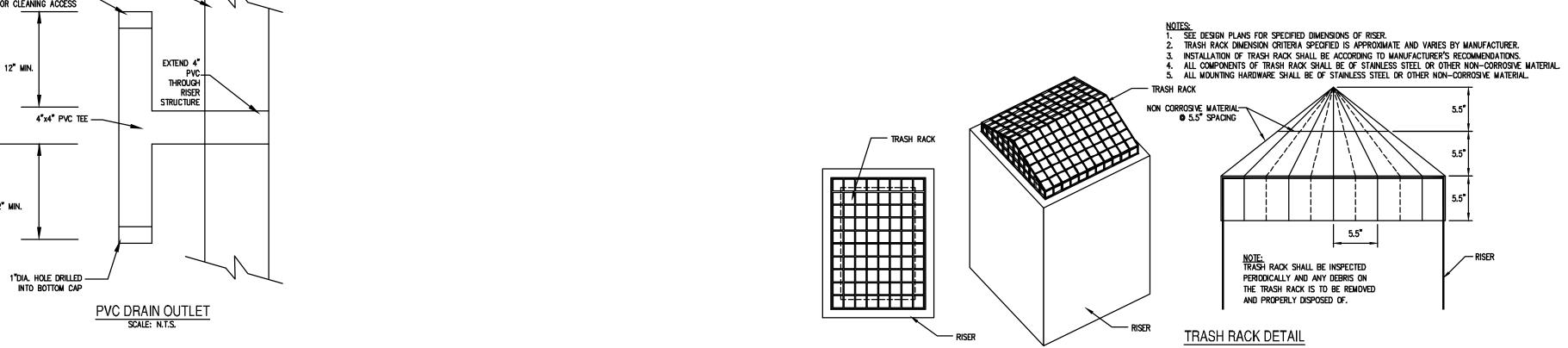
SCALE: N.T.S.

CONTRACTOR SHALL FABRICATE

THE TRASH TRAP FROM # MESH, GALVANIZED WRE. ATTACHED TO CONCRETE STRUCTURE TO BE MADE USING 8-#8 STAINLESS STEEL CONCRETE SCREWS AND WASHERS.

1" WIDE — Flanges





FOREBAY ENTRANCE SHALL BE DEEPER THAN FOREBAY

SEDIMENT STORAGE TOP FOREBAY BOTTOM\_

BOTTOM OF SEDIMENT

STORAGE/ENTRANCE \_\_/

ELEV=306.0

BOTTOM OF SEDIMENT STORAGE/EXIT ELEV=307.25

ADJUST THE PH, COMPACTION, —
AND OTHER ATTRIBUTES OF THE
SOIL IF NECESSARY TO PROMOTE
PLANT ESTABLISHMENT AND

ELEV=307.0

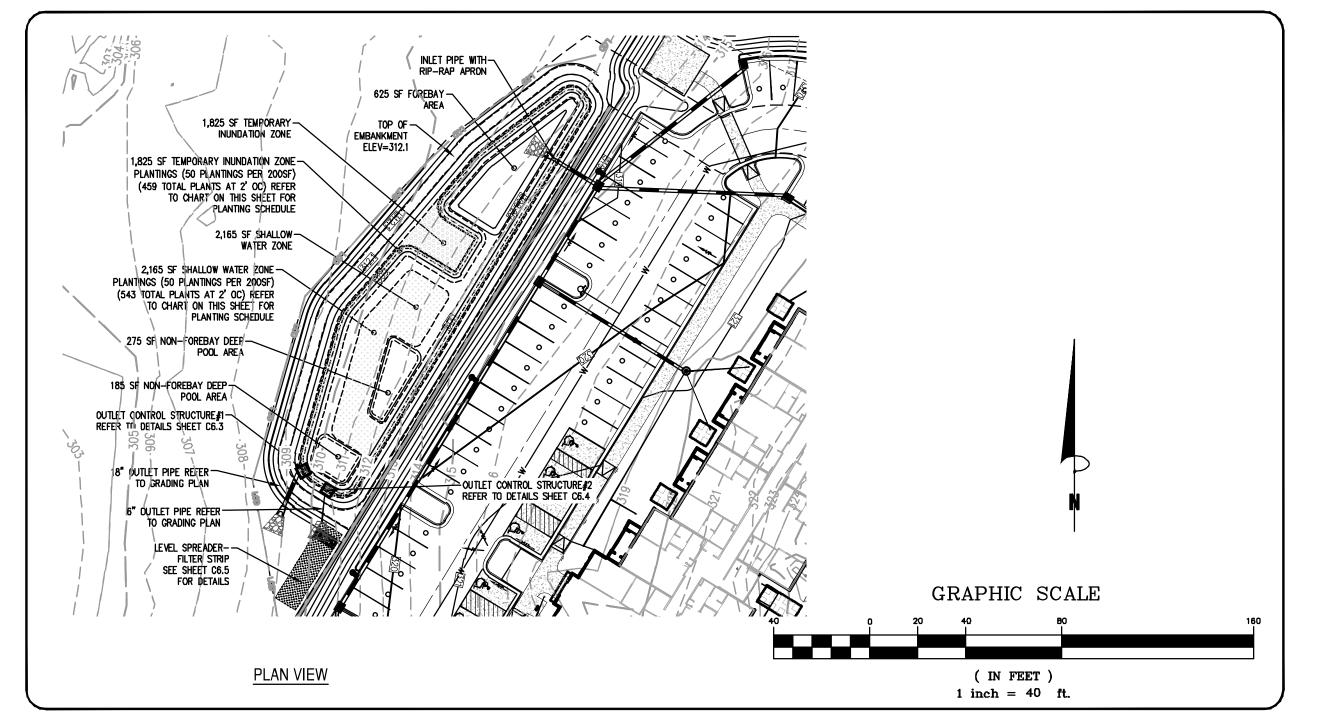
TOP OF EMBANKMENT ELEV=312.1

1 YEAR ELEV=310.21

\_\_\_\_\_\_\_ 10 YEAR ELEV=310.97

√ 1.0° STORM ELEV=309.53

SHALLOW WATER ZONE 0 TO 9 INCHES BELOW PERMANENT POOL ELEV=308.25



REFER TO DETAIL FOR INCREMENTAL

CONCRETE RISER (INSTALL STEPS AS NECESSARY)

// INV=307.0

BETWEEN BARREL &
RISER. RISER BASE TO BE
FILLED WITH CONC. TO

8"X8"X1"X12" LONG ANGLE (6 TOT. REQUIRED) TO ANCHOR RISER
TO BASE. PROVIDE 2-3/4" A307 BOLTS FROM ANGLE TO RISER
AND 2-A307 "J" HOOKS 3/4" DIA. X 12" LONG FROM ANGLE TO
BASE. ANGLE TO BE FIELD COATED WITH ZINC RICH PAINT AFTER

12'-6" HDPE @ 0.83%

CONSTRUCTION. "J" HOOKS TO BE PLACED UNDER LOWER

INVERT OF BARREL

REINFORCING STEEL.

"PROFILE OF STORMWATER WETLAND DETENTION SYSTEM-OCS#2 SCALE: N.T.S.

EMBANKMENT WIDTH

Trash rack— refer to detail

TEMPORARY POOL ELEV=310.0

NON-FOREBAY \_

DEEP POOL BOTTOM ELEV=307.5

5'x5'x1.5' CONC. BASE REINFORCE WITH #4 BARS AT 12" O.C. TOP \_\_\_ AND BOTTOM OF EACH DIRECTION PROVIDE 3" MIN. CLEARANCE BETWEEN EDGE OF CONC. AND STEEL REINFORCING.

NOTE: PUMPS SHALL BE USED TO DRAIN
THE POND WHEN NECESSARY. REFER TO DETAIL
THIS SHEET FOR DEWATERING REQUIREMENTS.

CONCRETE SHALL BE
PLACED IN RISER AFTER
ANGLES ARE SECURED
TO BASE AND RISER.

THIS SHEET

low to remediate the problem

Undlog the conveyance and dispose of

Make any necessary repairs or replace if damage is too large for repair.

Remove the sediment and dispose of it

if the swale has become silted in.

ground cover and water until it is

established. Provide lime and a one-time

Regrade the soil if necessary to remove

the gully, and then reestablish proper

Study the site to see if a larger bypass channel is needed (enlarge if necessary).

approximately three to six inches.

After this, reestablish the erosion control

Regrade the soil if necessary to remove the gully, and then plant a ground cover and water until it is established. Provide lime and a one-time fertilizer application.

Remove the sediment and restabilize the soil with vegetation if necessary. Provide

lime and a one-time fertilizer application.

Determine the source of the problem:

soils, hydrology, disease, etc. Remedy the problem and replace plants. Provide a one-time fertilizer application.

Remove vegetation by hand if possible.

Into the receiving water.

Contact the NC Division of Water Resources.

If pesticide is used, do not allow it to get

Remove the trash/debris

any sediment off-site.

The swale is overgrown with Mow vegetation. Re-grade and vegetate

There is erosion around the Regrade the soil to create a berm that is end of the level spreader that higher than the level lip, and then plant a

fertilizer application.

erosion control.

material.

Grass is too short or too long Maintain grass at a height of

The level lip is cracked. settled, undercut, eroded or otherwise damaged.

shows stormwater has

to grow on the swale or just

downslope of the level lip.

Areas of bare soil and/or

Areas of bare soil and/or

erosive guilles have formed.

Sediment is building up on

Grees is dead, diseased or

choking out grass.

Erosion or other signs of damage have occurred.

1. Inspect the SCM after every runoff-producing rainfall event.

OPERATION & MAINTENANCE North Carolina storm water rules require annual inspections by the regulating agency of level spreader-filter strip areas as a minimum. More frequent inspections by the land owner or system

operator are strongly encouraged to ensure the proper operation of level spreader-filter strip areas.

. Monthly Inspection
1. Inspect the SCM monthly
2. Check the level spreader—filter strip area side slopes; remove trash and repair eroded

erosive guilles have formed.

Trees or shrubs have begun Remove them.

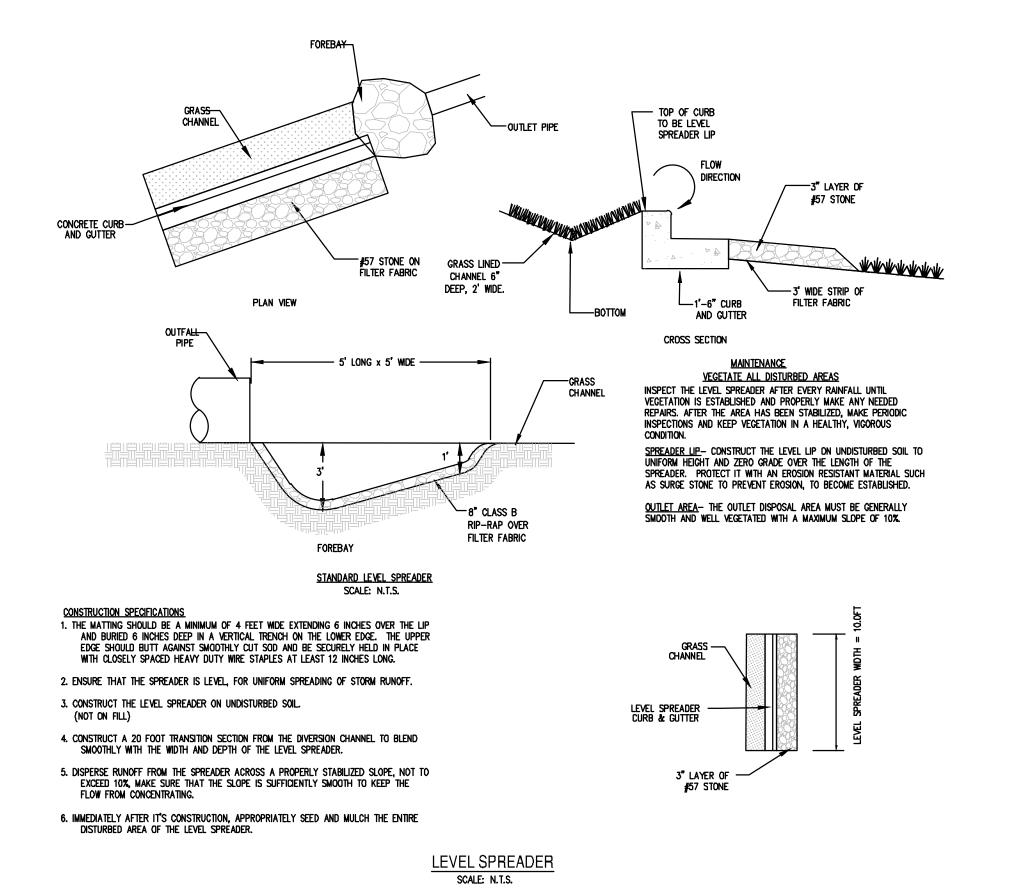
The entire LS-FS

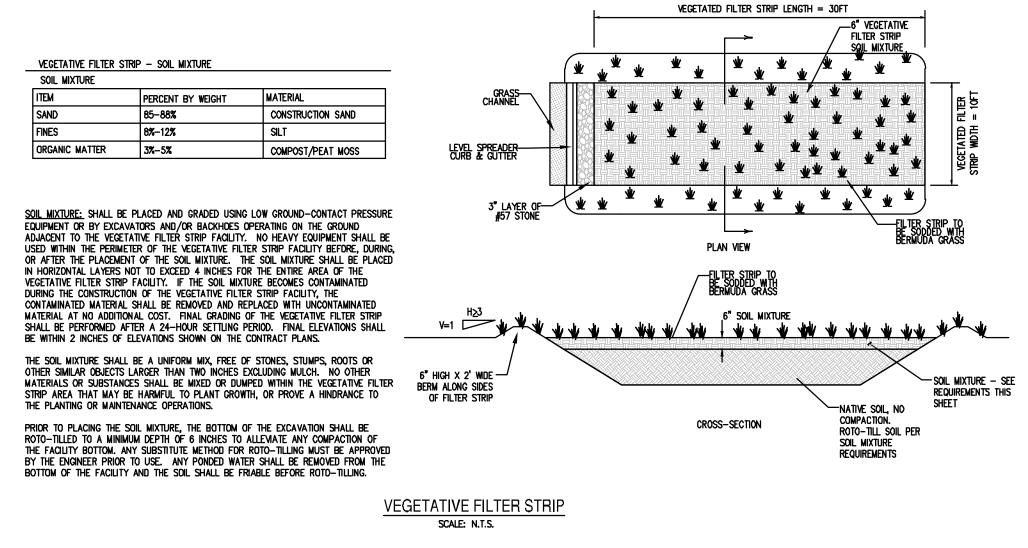
The bypass channel

A. Rainfall Event

GRASS NOTE: GRASS SHALL BE EITHER HYBRID BERMUDA GRASS OR CENTIPEDE STORMWATER MANAGEMENT SYSTEM DETAILS

NOT TO SCALE





DETAIL

NAGEMENT

MAN

STORMWATER

trrington ny Road

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The (

PRELIMINARY

DO NOT

USE FOR CONSTRUCTION

PLAN STATUS 10/29/21|1ST SUBMISSION 2/9/22 PER TOWN REVIEW 3/18/22 PER TOWN REVIEW 5/2/22 PER TOWN REVIEW

DATE DESCRIPTION

DESIGN | DRAWN | CHKD H: 1" = 40'

JOB No. 000000-00-000

DATE October 29, 2021 FILE No. 000000-D-CP-000

C6.7

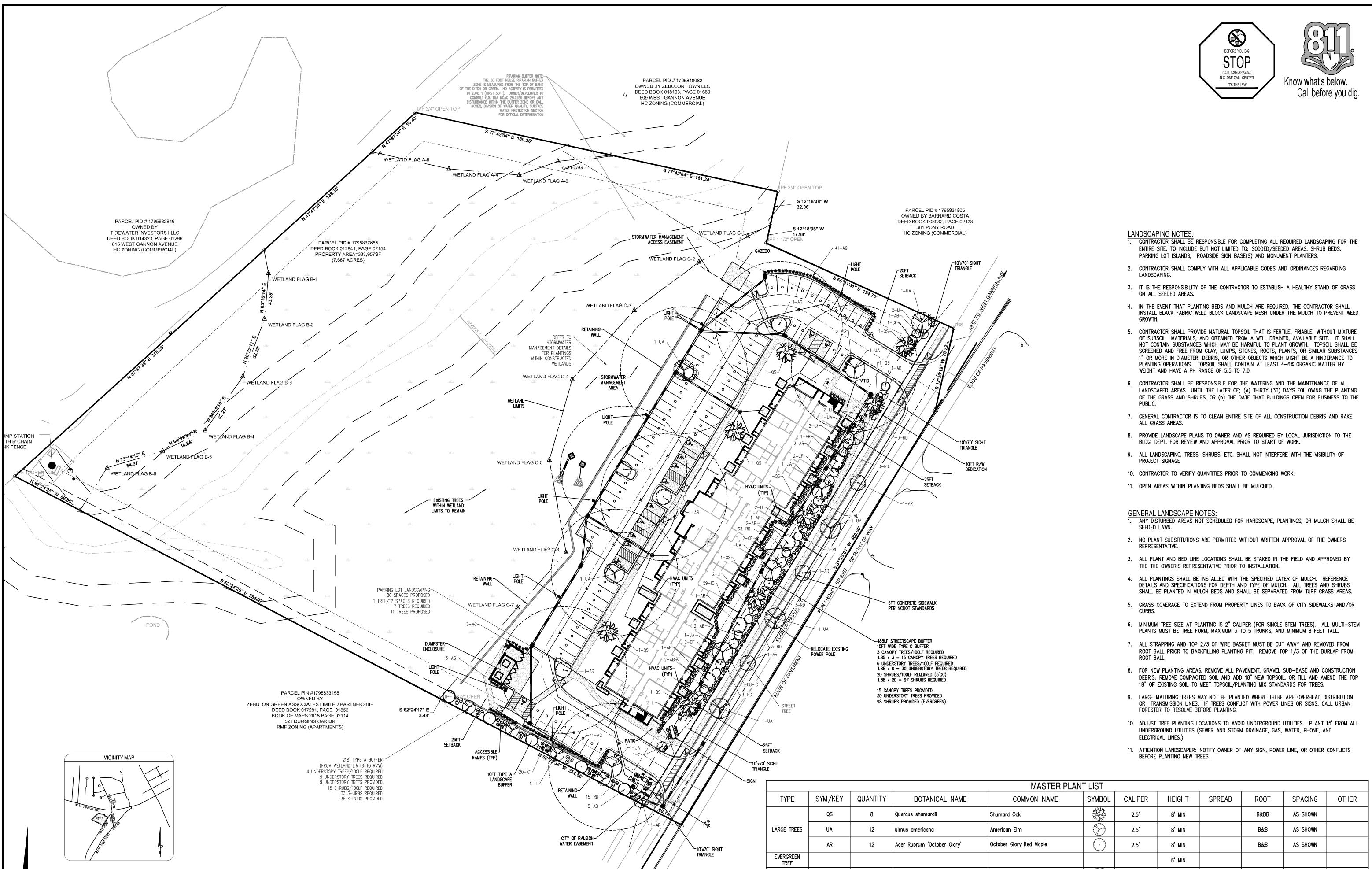
MEL XXX

MEL

SCALE

SHEET

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GRAPHIC SCALE

( IN FEET )

1 inch = 40 ft.

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Acer buergeranum

Camus florida

Abelia grandiflora

10

Lagerstroemia indica

Rhaphiolepis x delacourii

llex cornuta 'Dwarf Burford'

UNDERSTORY

SHRUBS

Trident Maple

Crepe Myrtle

Glossy Abelia

Flowering Dogwood

Dwarf Burford Holly

Indian Hawthorn, Yeddo Hawthorn

1.5"

1.5"

4' MIN

4'MIN

18" MIN

 $\otimes$ 

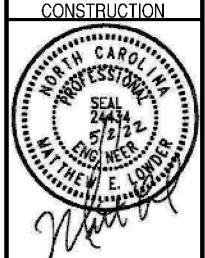
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APE PLAN

LAND

PRELIMINARY DO NOT USE FOR



PLAN STATUS					
10/29/21 IST SUBMISSION					
2/9/22	PER TOWN	REVIEW			
, ,	PER TOWN	REVIEW			
5/2/22	PER TOWN	REVIEW			
DATE	DESCRIPTION				
MEL	MEL	XXX			
DESIGN	DRAWN	CHKD			
SCALE H: 1" = 40' V: 1" = XXX'					
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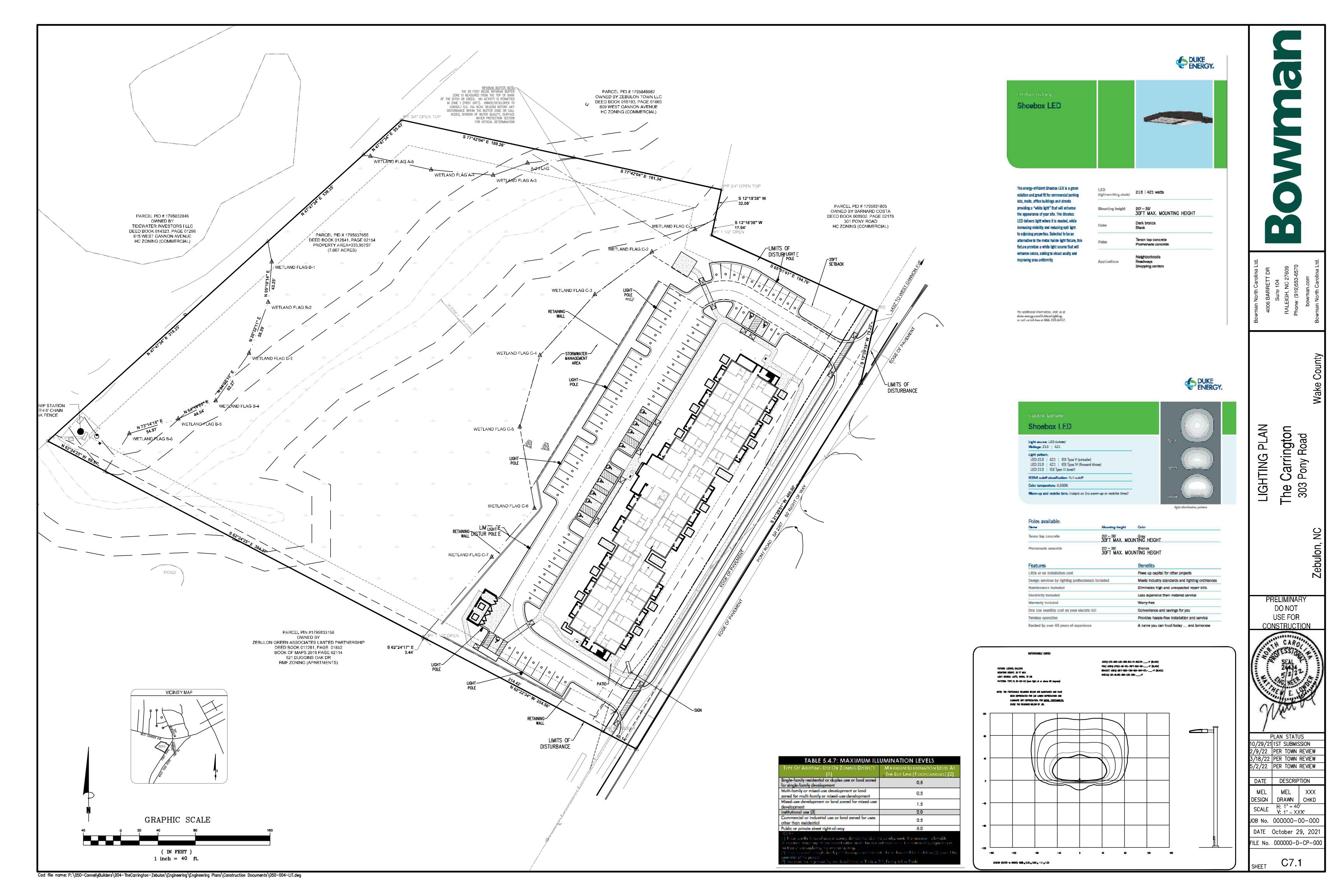
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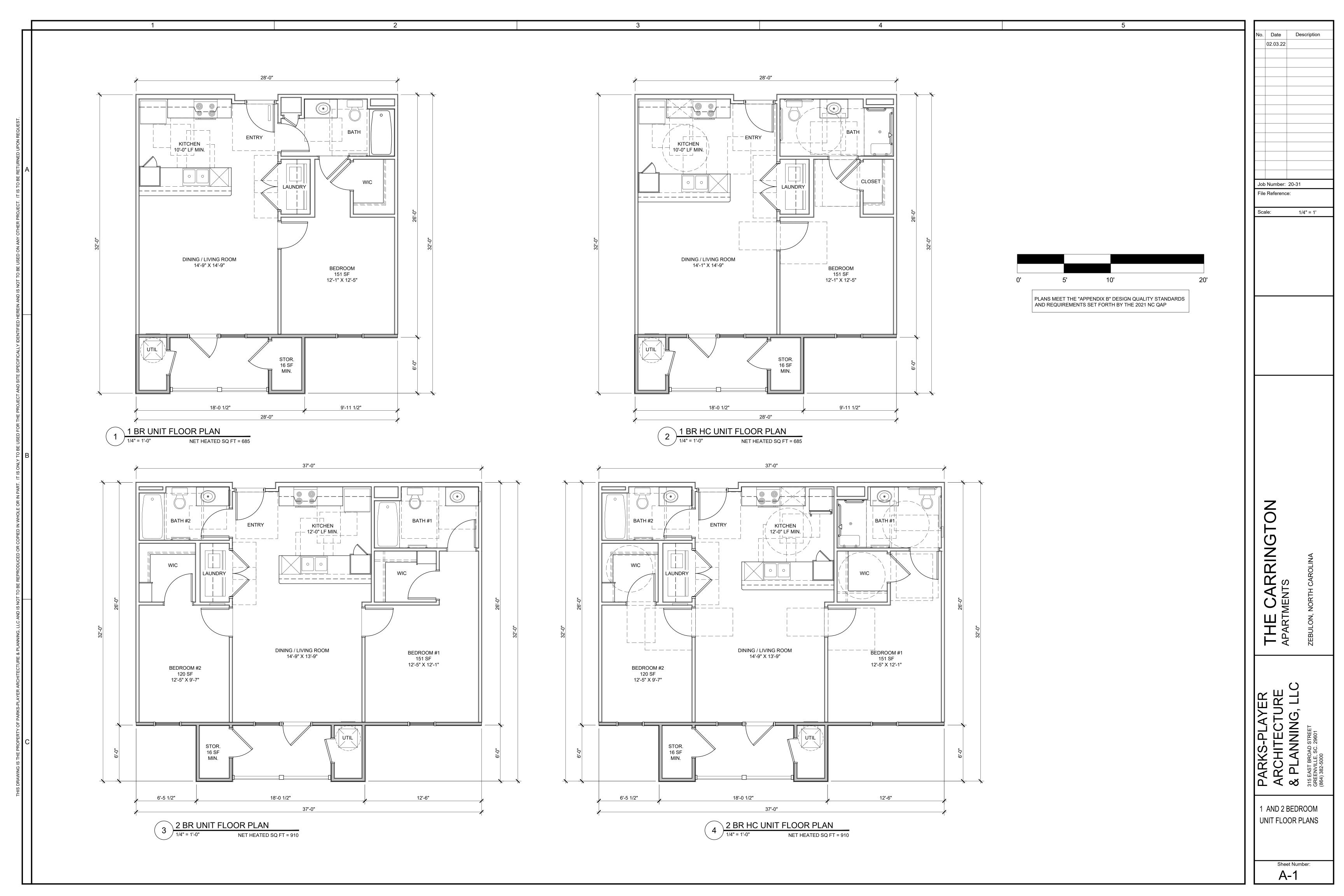
3 GAL

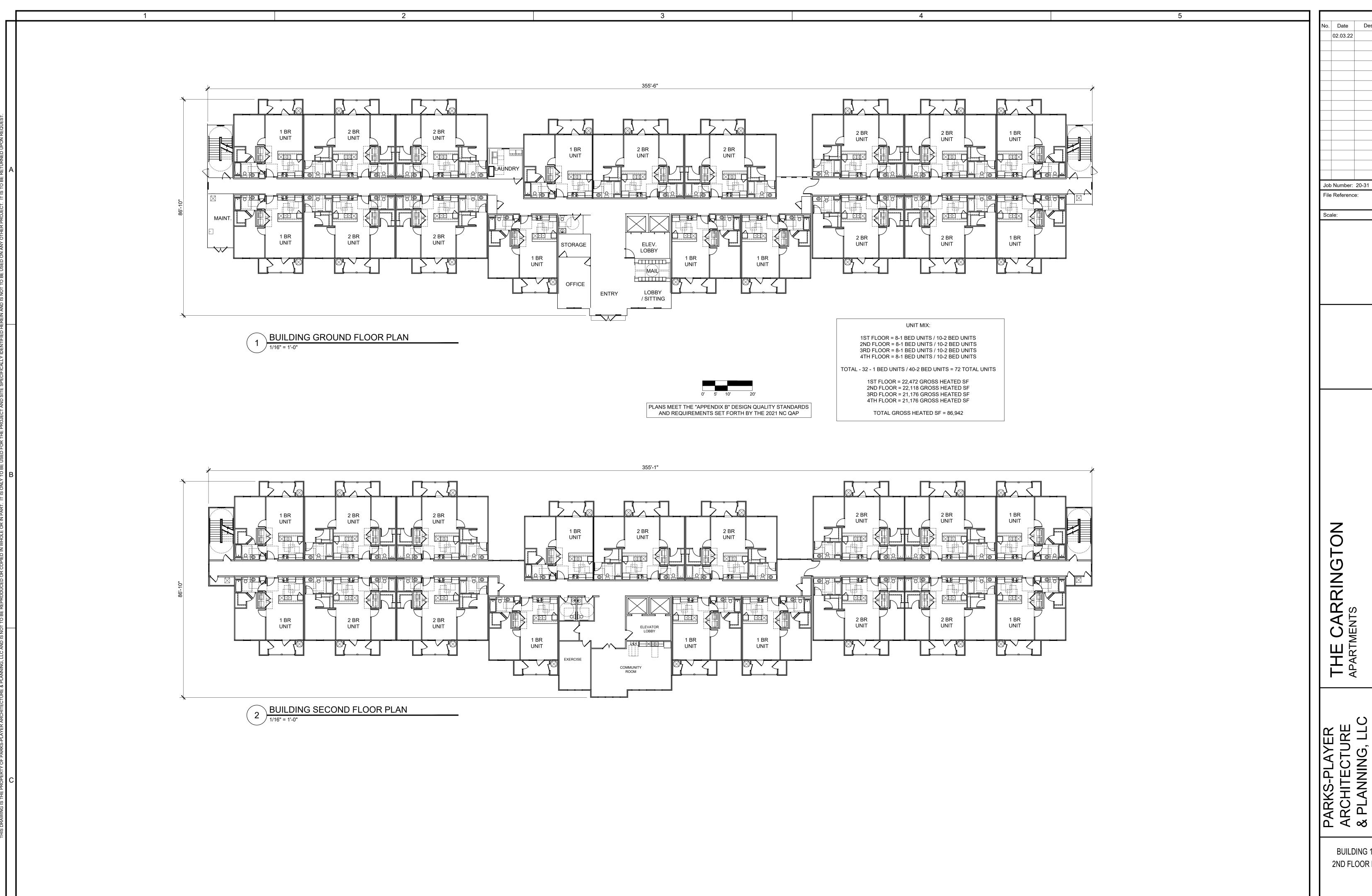
3 GAL

DATE October 29, 2021 FILE No. 000000-D-CP-00

C7.0







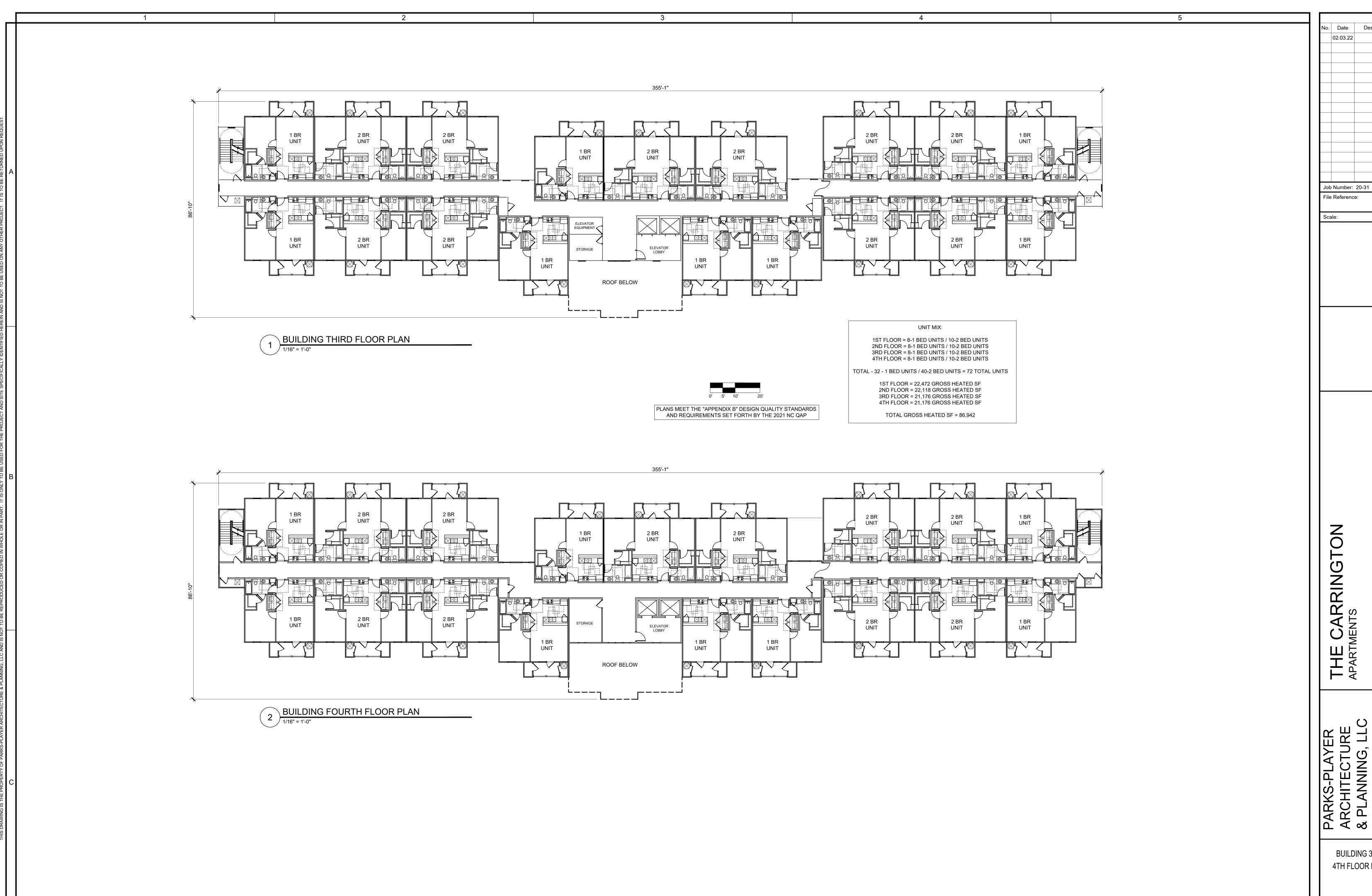
THE CARRINGTON
APARTMENTS

Description

1/8" = 1'

**BUILDING 1ST &** 2ND FLOOR PLANS

A-2



THE CARRINGTON
APARTMENTS

Description

1/8" = 1'

PARKS-PLAYER
ARCHITECTURE
& PLANNING, LLC
315 EAST BROAD STREET
GREENVILLE, SC. 29601
(864) 382-5000

BUILDING 3RD & 4TH FLOOR PLANS

> Sheet Number: **A-3**



CARRINGTON

No. Date

04.26.22

Job Number: 20-31

1/8" = 1'

File Reference:

Description

BUILDING **ELEVATIONS** 

A-4