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

CONSTRUCTION INFRASTRUCTURE DRAWING

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

CID-23-04 V1

REVISIONS: CROSLAND SOUTHEAST

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ME

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0

1758-46-7822 224130 GC-CZ 5.42 AC 5.04 AC 0.32 AC 5.04 AC 138 LF

Lower Neuse VACANT / WOODED

0% EXIST., 0% PROPOSED TOTAL SQ. FEET OF PROP. IMPERVIOUS AREA:

D.B. 12634, PG. 2473 M.B. 1996, PG. 187

TITLE **COVER - OVERALL PLAN**

EROSION CONTROL PLAN - PH. 1

EROSION CONTROL PLAN - PH. 2

ACCESS DRIVE - PLAN-PROFILE

SURVEY - JOHNSON, MIRMIRAN & THOMPSON (1 SHEET)

Engineer

Ark Consulting Group, PLLC 2755 Charles Blvd - Suite B Greenville, NC 27858 (252) 558-0888

Contact: Bryan Fagundus, PE bryan@arkconsultinggroup.com

Wallbrook Landco, LLC 3 Keel St, Ste 2 Wrightsville Beach, NC 28480

awilliams@csere.com

General Notes:

Legend

= FOUND MONUMENT AS NOTED

= DIMENSION POINT (NOTHING SET)

O = SET IRON PIN Δ = NCGS MONUMENT

= PROPERTY LINE

= DROP INLET

F/O = FIBER OPTIC

= HAND BOX ∠ LP = LIGHT POLE

FH = FIRE HYDRANT

づ PP = POWER POLE

—— G —— = GAS LINE

------ = OVERHEAD ELECTRIC LINE

= FIRE LINE = 8"ø WATER LINE

= SPILL CURB = FENCE

= SILT FENCE

---- RIP- = RIPARIAN BUFFER

— 50 — = MAJOR CONTOUR (5') ----- = MINOR CONTOUR (1')

- TREELINE

= 12"ø WATER LINE

= TREE PROTECTION FENCE

= ACCESS AND UTILITY EASEMENT

= TREE PRESERVATION AREA

= OPEN SPACE AREA

= CONCRETE SIDEWALK

---s-- = SANITARY SEWER LINE — T — = TELEPHONE LINE —— TV —— = CABLE TV LINE — w — = WATER LINE

= ELECTRIC BOX

= ELECTRIC METER

RCP = REINFORCED CONCRETE PIPE

= TRAFFIC SIGNAL POLE

= TELEPHONE PEDESTAL

= SANITARY SEWER MANHOLE

= STORM DRAIN CATCH BASIN

= SANITARY SEWER FORCE MAIN VALVE

S.F. = SQUARE FEET (AREA)

- CONTACT NORTH CAROLINA ONE-CALL CENTER, INC. (NC ONE-CALL) AT 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
- ALL REQUIRED IMPROVEMENTS SHALL CONFORM TO THE TOWN OF ROLESVILLE LAND DEVELOPMENT ORDINANCE AND THE TOWN OF ROLESVILLE DEVELOPMENT STANDARDS.

PROPOSED

8"W —

_____ 12"W _____

~~~

+ + + + +

+ + + + +

+ + + + +

- CONTRACTOR SHALL NOTIFY NCDOT AND TOWN OF ROLESVILLE PUBLIC WORKS, STREET MAINTENANCE DIVISION 48 HOURS PRIOR TO MAKING CONNECTIONS TO EXISTING STORM DRAINS LOCATED WITHIN PUBLIC STORM DRAINAGE EASEMENTS OR RIGHT-OF-WAY. 4. A PORTION OF THE PROPERTY IS LOCATED WITHIN ZONE 'X', AREA OF MINIMAL FLOODING, AS
- SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM) 3720175800J, EFFECTIVE DATE: 05/02/2006. 5. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND MAY NOT INCLUDE ALL MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS
- THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- ELECTRIC AND TELEPHONE UTILITIES SHALL BE INSTALLED UNDERGROUND.
- REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS. REFER TO M.E.P. PLANS FOR COORDINATION OF BUILDING UTILITY SERVICES
- THIS PROJECT DISTURBS MORE THAN  $\frac{1}{2}$  ACRE FOR PURPOSES OF A COMMERCIAL DEVELOPMENT PROJECT IS SUBJECT TO THE TOWN OF ROLESVILLE STORMWATER MANAGEMENT ORDINANCE. STORMWATER MANAGEMENT PLAN APPROVAL BY THE TOWN OF ROLESVILLE IS REQUIRED.
- 10. THIS PROJECT DISTURBS MORE THAN 1 ACRE. EROSION & SEDIMENTATION CONTROL PLAN APPROVAL IS REQUIRED.

- 11. NCDOT DRIVEWAY PERMIT APPROVAL IS COMPLETED FOR THIS PROJECT. REFERENCE NCDOT
- 12. REFUSE COLLECTION SHALL BE PROVIDED BY PRIVATE SERVICE FOR COMMERCIAL DEVELOPMENT.
- 13. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED. 14. SITE SHALL MEET ALL RELATED ACCESSIBILITY CODE REQUIREMENTS.
- 15. BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN HEREON WAS PREPARED BY JOHNSON, MIRMIRAN & THOMPSON. REFERENCE IS MADE TO THE SURVEY ENTITLED ALTA/NSPS LAND TITLE SURVEY PREPARED FOR WALLBROOK LANDCO, LLC DATED 3/28/2020, AND ATTACHED TO THIS DRAWING SET FOR REFERENCE.
- 16. UNDERGROUND UTILITIES PLOTTED IN PART FROM ACTUAL FIELD LOCATION OF ABOVE GROUND FEATURES AND IN PART FROM MAPS ON RECORD. ACTUAL LOCATIONS MAY VARY. SURVEYOR AND ENGINEER CANNOT PROVIDE ACCURACY OF INFORMATION TAKEN FROM RECORD DATA. OTHER UTILITIES MAY EXIST. CONTRACTOR SHOULD CONTACT NORTH CAROLINA ONE-CALL CENTER (NC ONE-CALL) BY DIALING 811 TO HAVE UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
- 17. THE ENGINEER MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE ENGINEER DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES.

## Special Use Plan (SUP 20-02) Conditions:

DEVELOPED WITH STRUCTURES OR IMPROVEMENTS.

- 1. USES AND MAXIMUM DENSITIES ARE LIMITED TO THOSE SHOWN ON EACH SITE OF THE CONCEPT PLAN. ANY RESIDENTIAL UNITS NOT DESIGNATED ON THE RESIDENTIAL - TOWNHOMES TRACT MAY BE USED ON ANY OF THE TRACTS LABELED FOR NON-RESIDENTIAL USE.
- 2. PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR THE FIRST RESIDENTIAL UNIT IN THE EAST SITE AS SHOWN ON THE CONCEPT PLAN, DEVELOPER WILL COMPLETE THE EXTENSION OF WALL CREEK DRIVE TO
- 3. IF APPLICANT SEEKS A CERTIFICATE OF OCCUPANCY PRIOR TO THE COMMENCEMENT OF WORK ON THE LAPP GRANT PROJECT IMPROVEMENTS, THEN PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY OF THE FIRST RESIDENTIAL UNIT IN THE EAST SITE AND IN ACCORDANCE WITH THE "WALLBROOK DEVELOPMENT TIA ADDENDUM - RESIDENTIAL-ONLY PHASE" DATED FEBRUARY 13, 2020, DEVELOPER WILL CONSTRUCT A 100' NORTHBOUND RIGHT TURN LANE AND A 100' SOUTHBOUND LEFT TURN LANE AT THE INTERSECTION OF WALL CREEK DRIVE (AS EXTENDED) AND MAIN STREET. IF WORK ON THE LAPP GRANT PROJECT IMPROVEMENTS IS COMMENCED BEFORE THE FIRST CERTIFICATE OF OCCUPANCY IS REQUESTED, DEVELOPER IS NOT REQUIRED TO CONSTRUCT THE AFOREMENTIONED IMPROVEMENTS.
- 4. NO LATER THAN SIX MONTHS FOLLOWING THE COMPLETION OF THE LAPP GRANT PROJECT IMPROVEMENTS, DEVELOPER WILL COMPLETE BOTH 1) THE EXTENSION OF VIRGINIA WATER DRIVE TO MAIN STREET AND 2) THE EXTENSION OF BURLINGTON MILLS ROAD (AS REALIGNED) FROM MAIN STREET TO VIRGINIA WATER DRIVE.
- SURVEYS AND SITE PLAN REVIEW AND APPROVAL. 7. AS SHOWN ON THE CONCEPT PLAN, AREAS OF THE SITE EAST OF THE RIPARIAN STREAM AND ADJACENT TO WAKE COUNTY PINS 1758676836, 1758674619, 1758674416, 1758674204, 1758674100, AND 1758663984 SHALL NOT BE

5. DEVELOPER WILL COMPLETE TRAFFIC IMPROVEMENTS AS SET FORTH IN OCTOBER 13, 2020 MEMO BY STANTEC

FINAL ACREAGE OF SITES ARE SUBJECT TO CHANGE AT SITE PLAN AND CONSTRUCTION PLAN BASED ON FINAL

## SITE PERMITTING APPROVAL

PIN# 1758-47-5494

Water and Sewer Permits (if applicable) The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan he material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #\_\_\_\_

SCALE 1 inch = 60 ft

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #\_\_\_ The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection

system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local,

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 Review Officer

## **EROSION CONTROL, STORMWATER** AND FLOODPLAIN MANAGEMENT **APPROVED**

EROSION CONTROL 
S-STORMWATER MGMT. 

S-

FLOOD STUDY S-

ENVIRONMENTAL CONSULTANT SIGNATURE

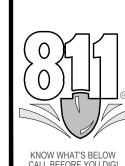


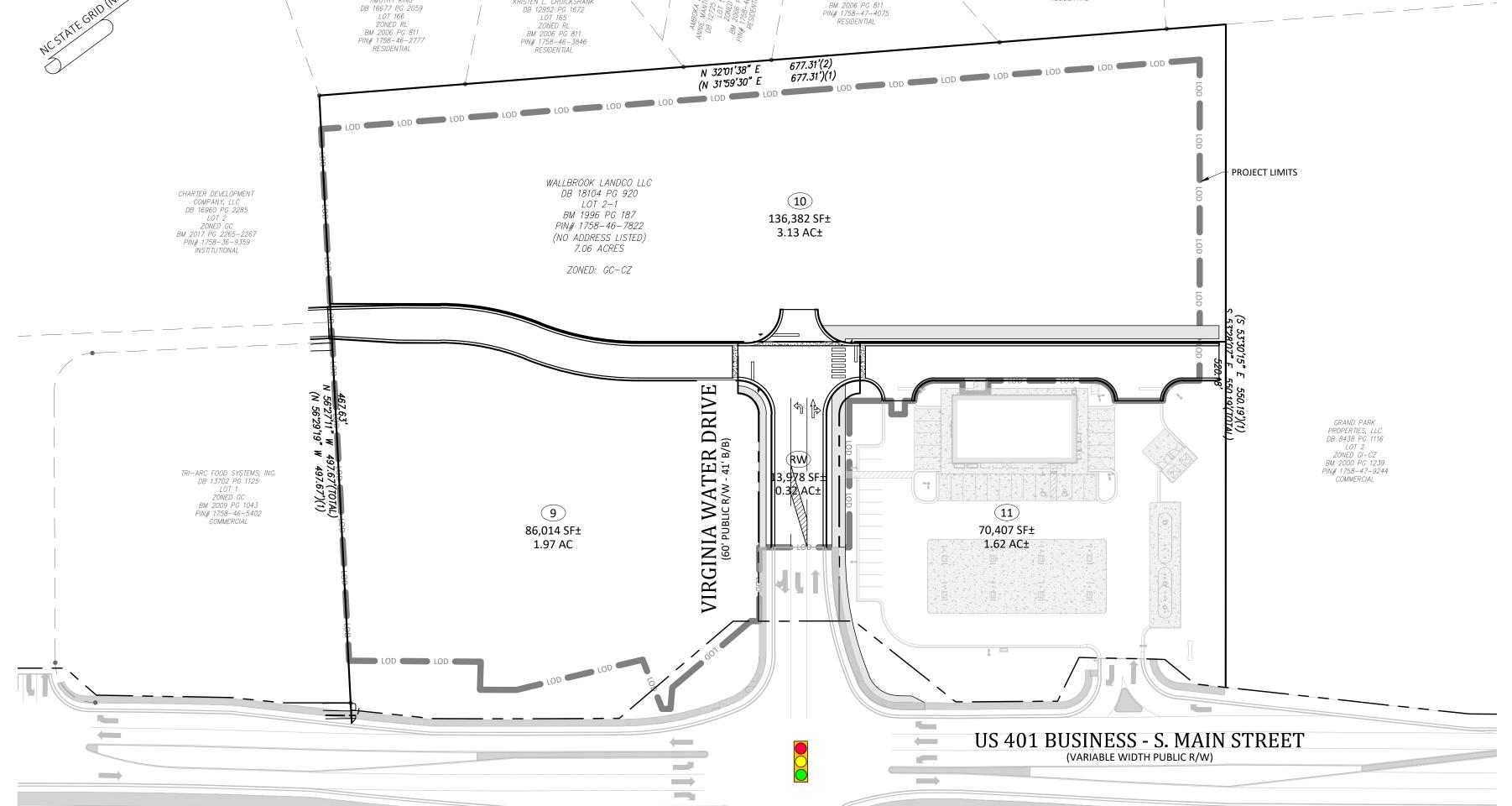
**APPROVED FOR COMPLIANCE** 

These plans have been approved for compliance with the Town Code of Ordinance, LDO, and Standard Specifications and Construction Details, subject to statements & conditions

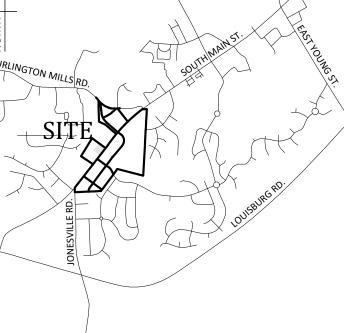
hereby incorporated by reference.







MICHELLE STEWART DB 16766 PG 1232



Vicinity Map

Site Data WAKE COUNTY PIN REAL ESTATE ID: **CURRENT ZONING:** 

TOTAL ACREAGE IN SITE: ACREAGE IN PROJECT LIMIT ACREAGE IN PUBLIC R/W: TOTAL DISTURBED ACREAGE

WATERSHED: RIVER BASIN: **CURRENT USE:** 

PROPOSED USE: **BUILDING LOT COVERAGE:** TOTAL SQ. FEET OF EXIST. IMPERVIOUS AREA

**DEVELOPMENT STANDARDS:** LDO REFERENCES:

SHEET INDEX

**EROSION CONTROL NOTES** 

**EROSION CONTROL DETAILS** 

LAYOUT & SIGNAGE-STRIPING PLAN

/IRGINIA WATER DRIVE EXT - PLAN-PROFILE

C4.0 DETAILS

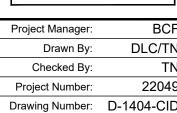
DETAILS

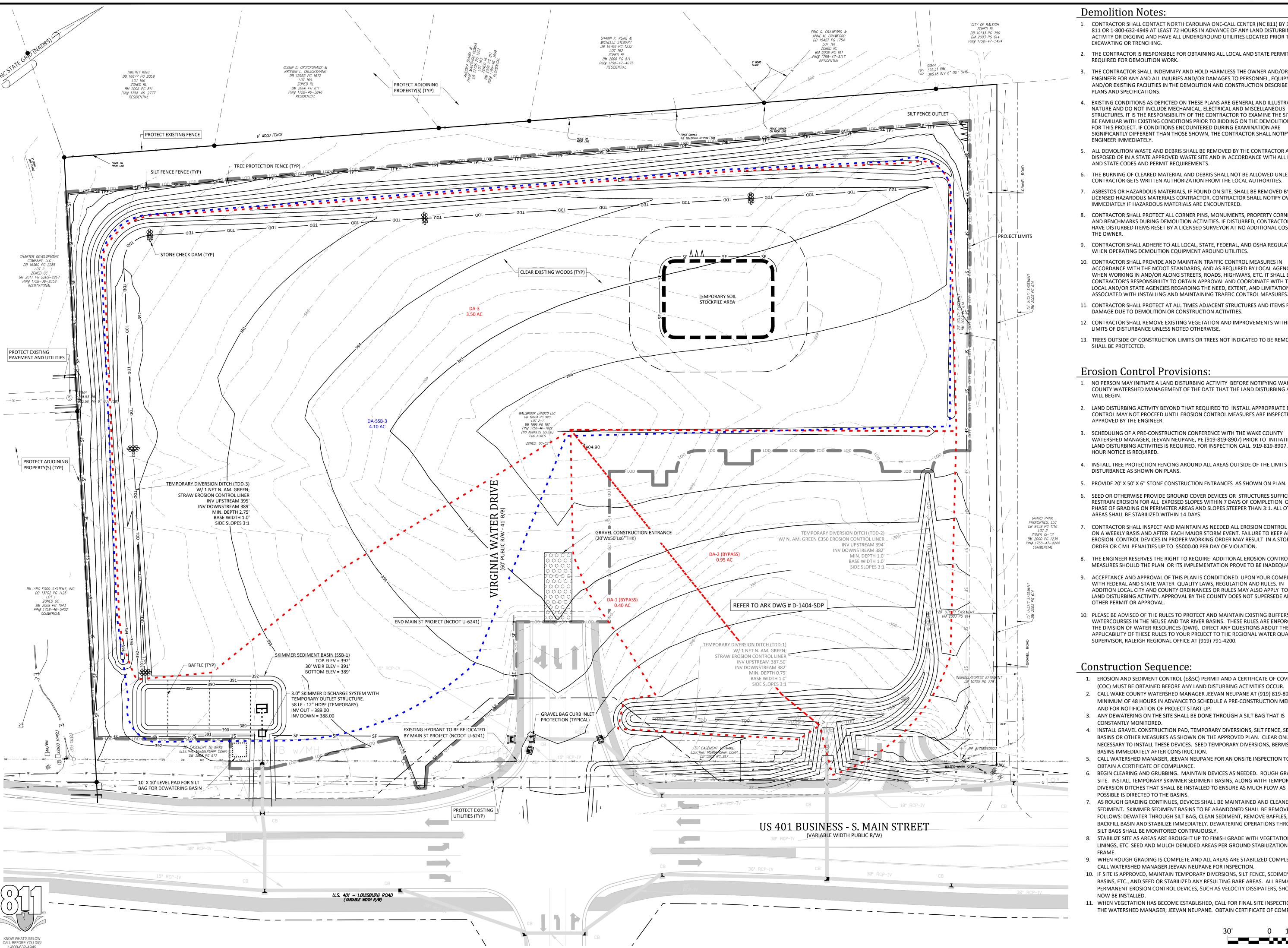
Owner/Developer:

(704) 621-6430 Contact: Austin Williams









#### **Demolition Notes:**

- 1. CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE-CALL CENTER (NC 811) BY DIALING 811 OR 1-800-632-4949 AT LEAST 72 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY OR DIGGING AND HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
  - 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
  - 3. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
  - 4. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
  - 5. ALL DEMOLITION WASTE AND DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
  - 6. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.
  - ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
  - 8. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO
  - 9. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL, AND OSHA REGULATIONS WHEN OPERATING DEMOLITION EQUIPMENT AROUND UTILITIES.
  - CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE NCDOT STANDARDS, AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH THE LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT, AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
  - 11. CONTRACTOR SHALL PROTECT AT ALL TIMES ADJACENT STRUCTURES AND ITEMS FROM DAMAGE DUE TO DEMOLITION OR CONSTRUCTION ACTIVITIES.
  - 12. CONTRACTOR SHALL REMOVE EXISTING VEGETATION AND IMPROVEMENTS WITHIN LIMITS OF DISTURBANCE UNLESS NOTED OTHERWISE.
  - 13. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED.

#### **Erosion Control Provisions:**

- 1. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING WAKE COUNTY WATERSHED MANAGEMENT OF THE DATE THAT THE LAND DISTURBING ACTIVITY
- 2. LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MAY NOT PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED AND APPROVED BY THE ENGINEER.
- 3. SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE WITH THE WAKE COUNTY WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) PRIOR TO INITIATING LAND DISTURBING ACTIVITIES IS REQUIRED. FOR INSPECTION CALL 919-819-8907. 48 HOUR NOTICE IS REQUIRED.
- 4. INSTALL TREE PROTECTION FENCING AROUND ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS SHOWN ON PLANS.
- 5. PROVIDE 20' X 50' X 6" STONE CONSTRUCTION ENTRANCES AS SHOWN ON PLAN.
- 6. SEED OR OTHERWISE PROVIDE GROUND COVER DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION FOR ALL EXPOSED SLOPES WITHIN 7 DAYS OF COMPLETION OF ANY PHASE OF GRADING ON PERIMETER AREAS AND SLOPES STEEPER THAN 3:1. ALL OTHER AREAS SHALL BE STABILIZED WITHIN 14 DAYS.
- 7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP ALL EROSION CONTROL DEVICES IN PROPER WORKING ORDER MAY RESULT IN A STOP WORK ORDER OR CIVIL PENALTIES UP TO \$5000.00 PER DAY OF VIOLATION.
- 8. THE ENGINEER RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES SHOULD THE PLAN OR ITS IMPLEMENTATION PROVE TO BE INADEQUATE.
- 2. ACCEPTANCE AND APPROVAL OF THIS PLAN IS CONDITIONED UPON YOUR COMPLIANCE WITH FEDERAL AND STATE WATER QUALITY LAWS, REGULATION AND RULES. IN ADDITION LOCAL CITY AND COUNTY ORDINANCES OR RULES MAY ALSO APPLY TO THIS LAND DISTURBING ACTIVITY. APPROVAL BY THE COUNTY DOES NOT SUPERSEDE ANY OTHER PERMIT OR APPROVAL.
- PLEASE BE ADVISED OF THE RULES TO PROTECT AND MAINTAIN EXISTING BUFFERS ALONG WATERCOURSES IN THE NEUSE AND TAR RIVER BASINS. THESE RULES ARE ENFORCED BY THE DIVISION OF WATER RESOURCES (DWR). DIRECT ANY QUESTIONS ABOUT THE APPLICABILITY OF THESE RULES TO YOUR PROJECT TO THE REGIONAL WATER QUALITY SUPERVISOR, RALEIGH REGIONAL OFFICE AT (919) 791-4200.

#### **Construction Sequence:**

- 1. EROSION AND SEDIMENT CONTROL (E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR. 2. CALL WAKE COUNTY WATERSHED MANAGER JEEVAN NEUPANE AT (919) 819-8907 A
- MINIMUM OF 48 HOURS IN ADVANCE TO SCHEDULE A PRE-CONSTRUCTION MEETING AND FOR NOTIFICATION OF PROJECT START UP. 3. ANY DEWATERING ON THE SITE SHALL BE DONE THROUGH A SILT BAG THAT IS
- 4. INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND
- CALL WATERSHED MANAGER, JEEVAN NEUPANE FOR AN ONSITE INSPECTION TO
- OBTAIN A CERTIFICATE OF COMPLIANCE. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE. INSTALL TEMPORARY SKIMMER SEDIMENT BASINS, ALONG WITH TEMPORARY
- POSSIBLE IS DIRECTED TO THE BASINS. 7. AS ROUGH GRADING CONTINUES, DEVICES SHALL BE MAINTAINED AND CLEANED OF SEDIMENT. SKIMMER SEDIMENT BASINS TO BE ABANDONED SHALL BE REMOVED AS FOLLOWS: DEWATER THROUGH SILT BAG, CLEAN SEDIMENT, REMOVE BAFFLES, BACKFILL BASIN AND STABILIZE IMMEDIATELY. DEWATERING OPERATIONS THROUGH
- SILT BAGS SHALL BE MONITORED CONTINUOUSLY. 8. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME
- WHEN ROUGH GRADING IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY,
- CALL WATERSHED MANAGER JEEVAN NEUPANE FOR INSPECTION.
- 10. IF SITE IS APPROVED, MAINTAIN TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZED ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATERS, SHOULD NOW BE INSTALLED.
- 11. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR FINAL SITE INSPECTION BY THE WATERSHED MANAGER, JEEVAN NEUPANE. OBTAIN CERTIFICATE OF COMPLETION.

0 15' 30' SCALE 1 inch = 30 ft

Drawing Number: D-1404-CID

Project Manager:

Drawn Bv:

Checked By:

**REVISIONS:** 

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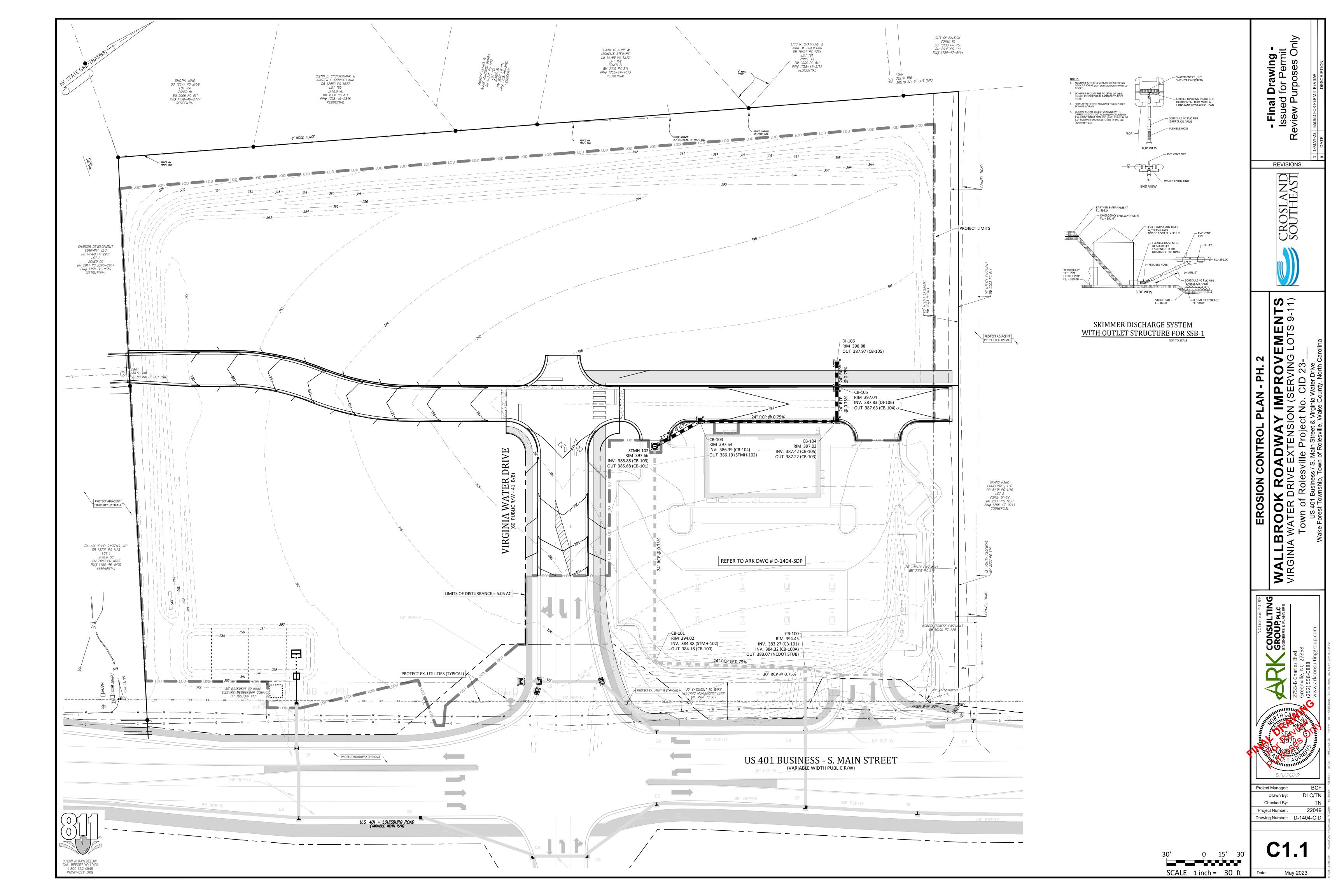
ONTROL

**EROSION** 

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

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

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

ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

#### **GROUND STABILIZATION SPECIFICATION**

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

| Temporary Stabilzation                                                     | Permanent Stabilzation                                                  |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Temporary grass seed covered with straw<br>or other mulches and tackifiers | Permanent grass seed covered with straw or other mulches and tackifiers |
| Hydroseeding     Rolled erosion control products with or                   | Geotextile fabrics such as permanent soil reinforcement matting         |
| without temporary grass seed                                               | Hydroseeding                                                            |
| Appropriately applied straw or other mulch     plastic sheeting            | Shrubs or other permanent plantings covered with mulch                  |

 Uniform and evenleyh distributed ground cover sufficient to restrain erosion

Structural methods such as concrete, asphalt,

#### or retaining walls Rolled erosion control products with grass seed

- POLYACRYLAMIDES (PAMS) AND FLOCCULANTS Select flocculants that are appropriate for the soils being exposed during construction, selecting 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 area for containment of treated Stormwater before discharging
- 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
- 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
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

#### LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- 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 secondary 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 overflow.
- B. Dispose waste off-site at an approved disposal facility. 9. On business days, clean up and dispose of waste in designated waste containers.

#### PAINT AND OTHER LIQUID WASTE

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

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot
- offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags. Provide staking or anchoring of portable toilets during periods of high winds or in high
- 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
- 4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

## 3.CONCRETE WASHOUT STRUCTURE NEEDS T BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE ABOVE GRADE WASHOUT STRUCTURE BELOW GRADE WASHOUT STRUCTURE

#### **CONCRETE WASHOUTS**

- Do not discharge concrete or cement slurry from the site.
- 2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If a alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two
- types of temporary concrete washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must
- be pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum,
- install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow. 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. Post 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 washout

#### HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label
- 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 inspection were delayed shall be noted in the Inspection Record.

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

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

#### SELF-INSPECTION, RECORDKEEPING AND REPORTING

#### SECTION B: RECORDKEEPING 1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

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

#### 2. Additional Documentation

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

- and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:
- (a) This general permit as well as the certificate of coverage, after it is received.
- (b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

#### SELF-INSPECTION, RECORDKEEPING AND REPORTING

#### SECTION C: REPORTING 1. Occurrences that must be reported

- Permittees shall report the following occurrences:
- (a) Visible sediment deposition in a stream or wetland.

#### (b) Oil spills if:

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

• They are within 100 feet of surface waters (regardless of volume).

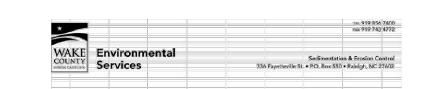
#### 2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

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

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

**EFFECTIVE: 04/01/19** 



Soil stockpiles shall be located on the approved plan and shall adhere to the

approved BMP.

- a. A 25-foot temporary maintenance and access easement shall be shown around all proposed stockpiles (erosion control measures surrounding the stockpile shall be shown at the outer limit of this easement) b. Stockpile footprints shall be setback a minimum of 25' from adjacent
- c. A note shall be provided on the approved plan that stockpile height shall
- d. Stockpile slopes shall be 2:1 or flatter.
- e. Approved BMPs shall be shown on a plan to control any potential sediment loss from a stockpile Stockpiling materials adjacent to a ditch, drainageway, watercourse
- wetland, stream buffer, or other body of water shall be avoided unless an alternative location is demonstrated to be unavailable g. Any concentrated flow likely to affect the stockpile shall be diverted to an
- h. Off-site spoil or borrow areas must be in compliance with Wake County UDO and State Regulations. All spoil areas over an acre are required to Wake County of any offsite disposal of soil, prior to disposal. Fill of FEMA Floodways and Non-encroachment Areas are prohibited except as otherwise provided by subsection 14-19-2 of the Wake County Unified Development Ordinance (certifications and permits required).

#### Maintenance Requirements to be Noted on the Plan i. Seeding or covering stockpiles with tarps or mulch is required and will

- reduce erosion problems. Tarps should be keyed in at the top of the slope to keep water from running underneath the plastic j. If a stockpile is to remain for future use after the project is complete (builders, etc.), the financial responsible party must notify Wake County
- of a new responsible party for that stockpile. k. The approved plan shall provide for the use of staged seeding and mulching on a continual basis while the stockpile is in use. 1. Establish and maintain a vegetative buffer at the toe of the slope (where

#### Seeding Specifications

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1 - 4/1/19) NCDEQ/Division of Energy, Mineral and Land Resources

|                                                                                                                                                                                                                   | equired Ground Stabil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | lization Timeframes                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site Area Description                                                                                                                                                                                             | Stabilize within this<br>many calendar<br>days after ceasing<br>land disturbance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Timeframe variations                                                                                                                                                                                                             |
| (a) Perimeter dikes,<br>swales, ditches, and<br>perimeter slopes                                                                                                                                                  | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | None                                                                                                                                                                                                                             |
| (b) High Quality Water<br>(HQW) Zones                                                                                                                                                                             | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | None                                                                                                                                                                                                                             |
| (c) Slopes steeper than<br>3:1                                                                                                                                                                                    | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | If slopes are 10' or less in length<br>not steeper than 2:1, 14 days ar<br>allowed                                                                                                                                               |
| (d) Slopes 3:1 to 4:1                                                                                                                                                                                             | 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -7 days for slopes greater than slength and with slopes steeper to reduce the says for perimeter dikes, swa ditches, perimeter slopes and H Zones:     -10 days for Falls Lake Watershe                                          |
| (e) Areas with slopes-<br>flatter than 4:1                                                                                                                                                                        | 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -7 days for perimeter dikes, swa<br>ditches, perimeter slopes and H<br>-10 days for Falls Lake Watershe<br>there is zero slope.                                                                                                  |
|                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  |
| ground stabilization shall to<br>practicable but in no case I<br>activity. Temporary groun<br>surface stable against acce<br>GROUND STABILIZATION :<br>Stabilize the ground suffici<br>techniques in the table be | e converted to permit onger than 90 calend of stabilization shall be derated erosion until specification will ow:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ction activities, any areas with tea-<br>ament ground stabilization as soon<br>ar days after the last land disturble<br>maintained in a manner to rend<br>permanent ground stabilization is<br>not dislodge the soil. Use one of |
| yound stabilization shall b<br>practicable but in no case I<br>schrify. Temporary groun<br>surface stable against acce<br>GROUND STABILIZATION:<br>Stabilize the ground suffici                                   | e converted to permit on the converted to permit on shall be derated erosion until specific permit of the control of the contr | enent ground stabilization as soon<br>ar days after the last land disturb<br>e maintained in a manner to rend<br>permanent ground stabilization is                                                                               |

- 1. Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available.
- Rip the entire area to six inches deep. 3. Remove all loose rock, roots and other obstructions, leaving surface
- reasonably smooth and uniform 4. Apply agricultural lime, fertilizer and superphosphate uniformly and mix with soil (see mixture below)
- 5. Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared four to six inches deep.
- 6. Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding. 7. Mulch immediately after seeding and anchor mulch.

8. Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be more than 60% damaged, reestablish following the original lime, fertilizer and seeding rates.

Asphalt emulsion at 400 gals/acre

9. Consult Wake County Soil & Water or NC State Cooperative Extension on

maintenance treatment and fertilization after permanent cover is established. Agricultural Limestone 2 tons/acre (3 tons/acre in clay soils) 1,000 lbs/acre - 10-10-10 500 lbs/acre – 20% analysis 2 tons/acre – small grain straw

## For Shoulders, Side Ditches, Slopes (Max 3:1)

| Date             | Туре                            | Planting Rate |
|------------------|---------------------------------|---------------|
| Aug 15<br>Nov 1  | Tall Fescue                     | 300 lbs/acre  |
| Nov 1–<br>Mar 1  | Tall Fescue & Abruzzi Rye       | 300 lbs/acre  |
| Mar 1–<br>Apr 15 | Tall Fescue                     | 300 lbs/acre  |
|                  | - Hulled Common<br>Bermudagrass | 25 lbs/acre   |

Tall Fescue AND Browntop 125 lbs/acre (Tall Fescue); 35 Aug 15 Millet or Sorghum-Sudan Ibs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)

#### For Shoulders, Side Ditches, Slopes (3:1 to 2:1):

| Date             | Туре                                                              | Planting Rate                |  |  |
|------------------|-------------------------------------------------------------------|------------------------------|--|--|
| Mar 1–<br>Jun 1  | Sericea Lespedeza (scarified) and use the following combinations: | 50 lbs/acre (Sericea Lespede |  |  |
| Mar 1–<br>Apr 15 | Add Tall Fescue                                                   | 120 lbs/acre                 |  |  |
| Mar 1–<br>Jun 30 | Or add Weeping Love grass                                         | 10 lbs/acre                  |  |  |
|                  | Or add Hulled Common<br>Bermudagrass                              | 25 lbs/acre                  |  |  |

Mullet or Sorghum-Sudan (Browntop Mullet); 30 lbs/acre (Sorghum-Sudan Hybrids) 70 lbs/acre (Sericea Lespedeza); 120 unscarified) AND Tall lbs/acre (Tall Fescue)

Tall Fescue AND Browntop 120 lbs/acre (Tall Fescue); 35 lbs/acre

25 lbs/acre

Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those that do well under local conditions; other seeding rate combinations

\*\*\* TEMPORARY: Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow more than 12" in height before mowing; otherwise, fescue

**REVISIONS:** 

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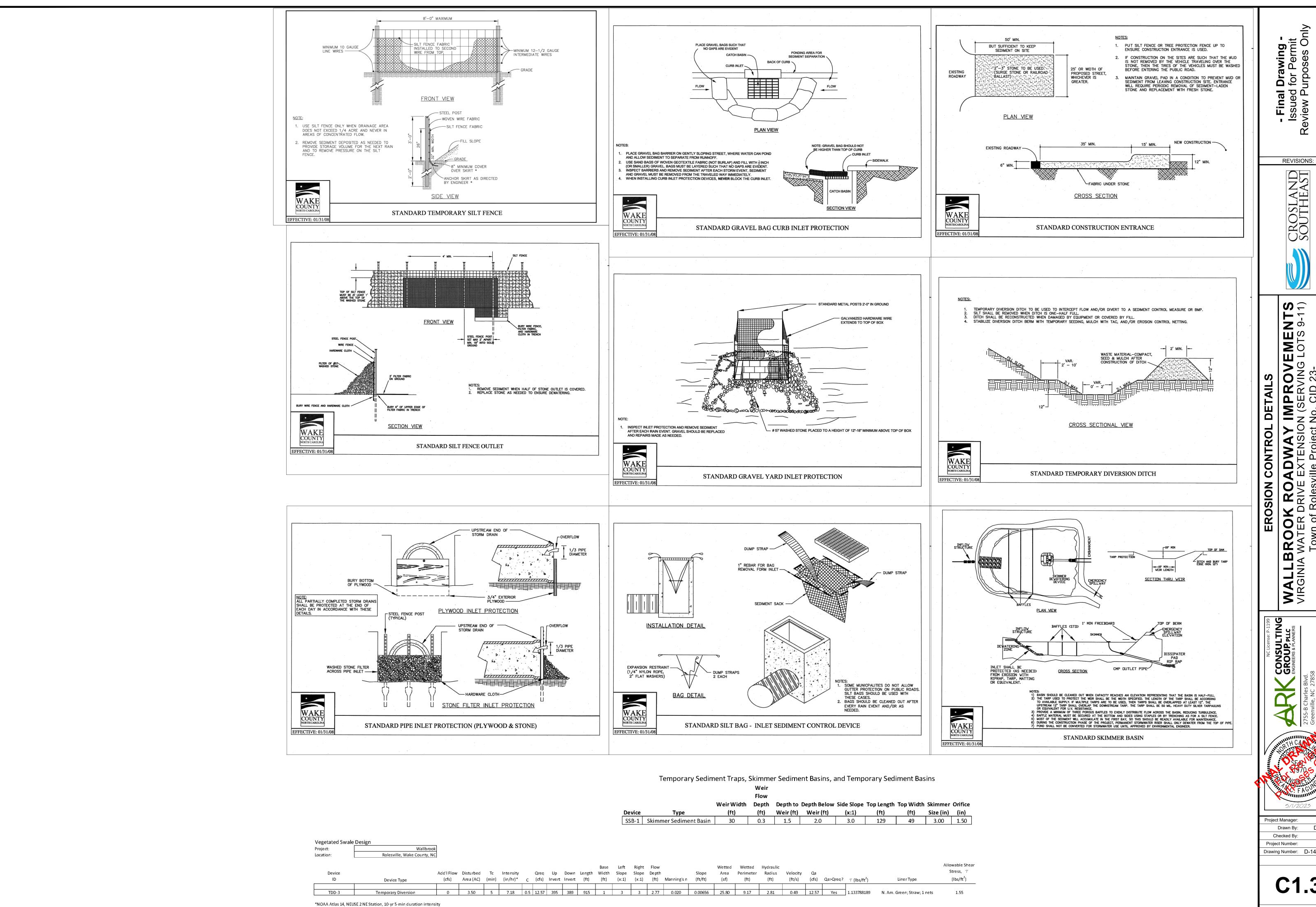
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Project Manager:

Checked By: 22049 Drawing Number: D-1404-CID

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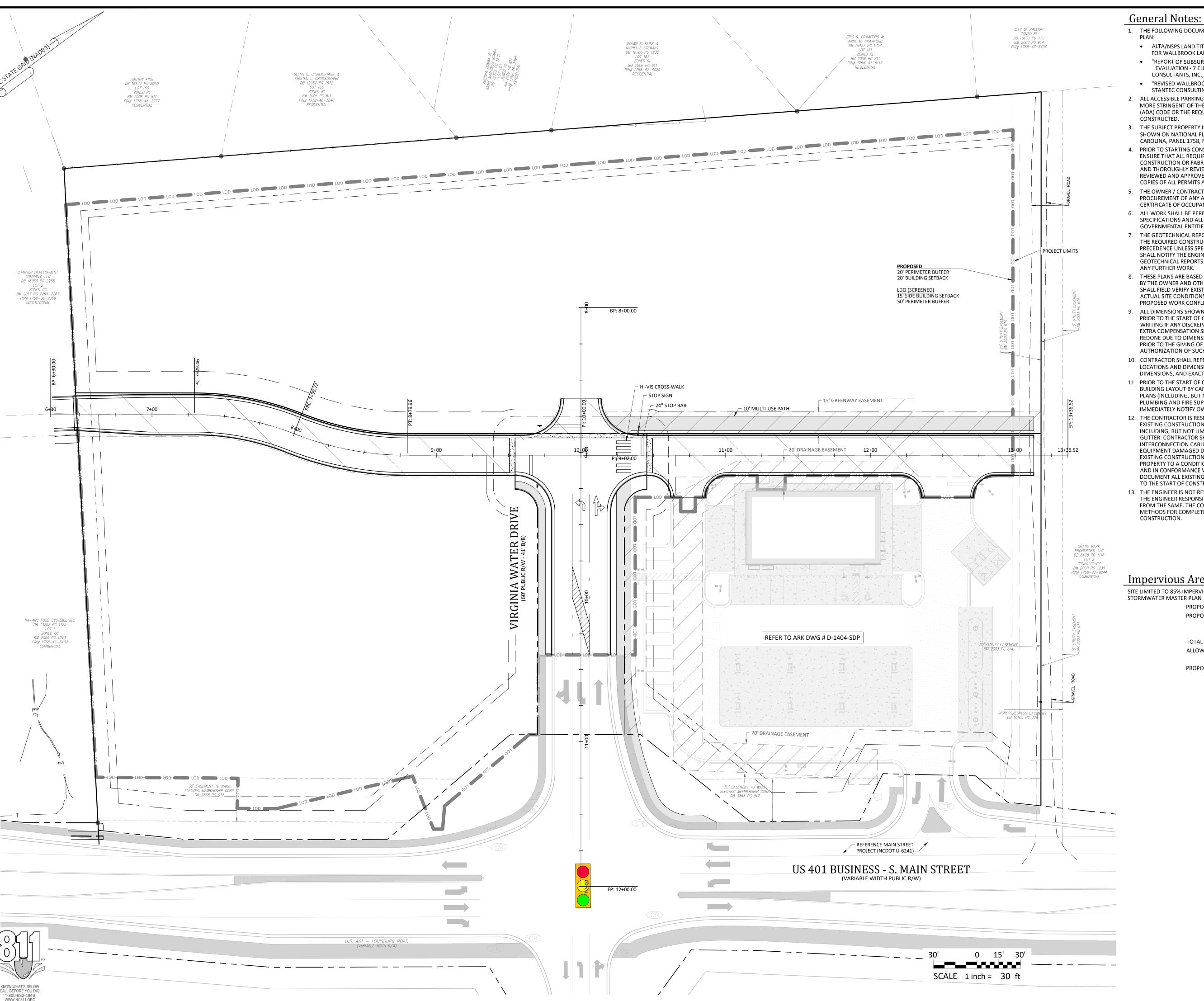
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GROUP, PLLC
FINGHERS & PLANNERS

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



#### General Notes:

- 1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE
  - ALTA/NSPS LAND TITLE SURVEY, PREPARED BY JOHNSON, MIRMIRAN & THOMPSON FOR WALLBROOK LANDCO, LLC, DATED REVISED MARCH 28, 2020
  - "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION - 7 ELEVEN AT WALLBROOK" PREPARED BY NV5 ENGINEERS AND CONSULTANTS, INC., DATED JULY 11, 2022
  - "REVISED WALLBROOK DEVELOPMENT TRAFFIC IMPACT ANALYSIS" PREPARED BY STANTEC CONSULTING SERVICES, INC., DATED AUGUST 11, 2020
  - 2. ALL ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE OR THE REQUIREMENTS OF THE JURISDICTION WHERE THIS PROJECT IS TO BE
  - 3. THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X, AREA OF MINIMAL FLOODING, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM), WAKE COUNTY, NORTH CAROLINA, PANEL 1758, MAP NO. 3720175800J, EFFECTIVE DATE: MAY 2, 2006.
  - 4. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
  - 5. THE OWNER / CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
  - 6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THIS PROJECT.
  - 7. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE PART OF THE REQUIRED CONSTRUCTION DOCUMENTS, AND, IN CASE OF CONFLICT, SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
  - 8. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO ARK CONSULTING GROUP, PLLC BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARK CONSULTING GROUP, PLLC IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER ONSITE FEATURES.
  - 9. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS AND GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO THE GIVING OF SUCH NOTIFICATION AND THE ENGINEER'S WRITTEN AUTHORIZATION OF SUCH ADDITIONAL WORK.
  - 10. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL / BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY / EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
  - 11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER OF ANY DISCREPANCIES
  - 12. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB & GUTTER. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY SHALL RESTORE SUCH CONNECTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
  - 13. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, NOR IS THE ENGINEER RESPONSIBLE FOR ANY CONFLICTS OR SCOPE REVISIONS WHICH RESULT FROM THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

## Impervious Area Calculations

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

PROPOSED IMPERVIOUS PERCENTAGE:

9583 SF PROPOSED TRANSPORTATION IMPERVIOUS AREA: PROPOSED TOTAL IMPERVIOUS AREA: 9583 SF

> TOTAL SITE AREA: 13939 SF

ALLOWABLE IMPERVIOUS AREA (85%): 11848 SF

68.75 %

**REVISIONS:** 

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ME

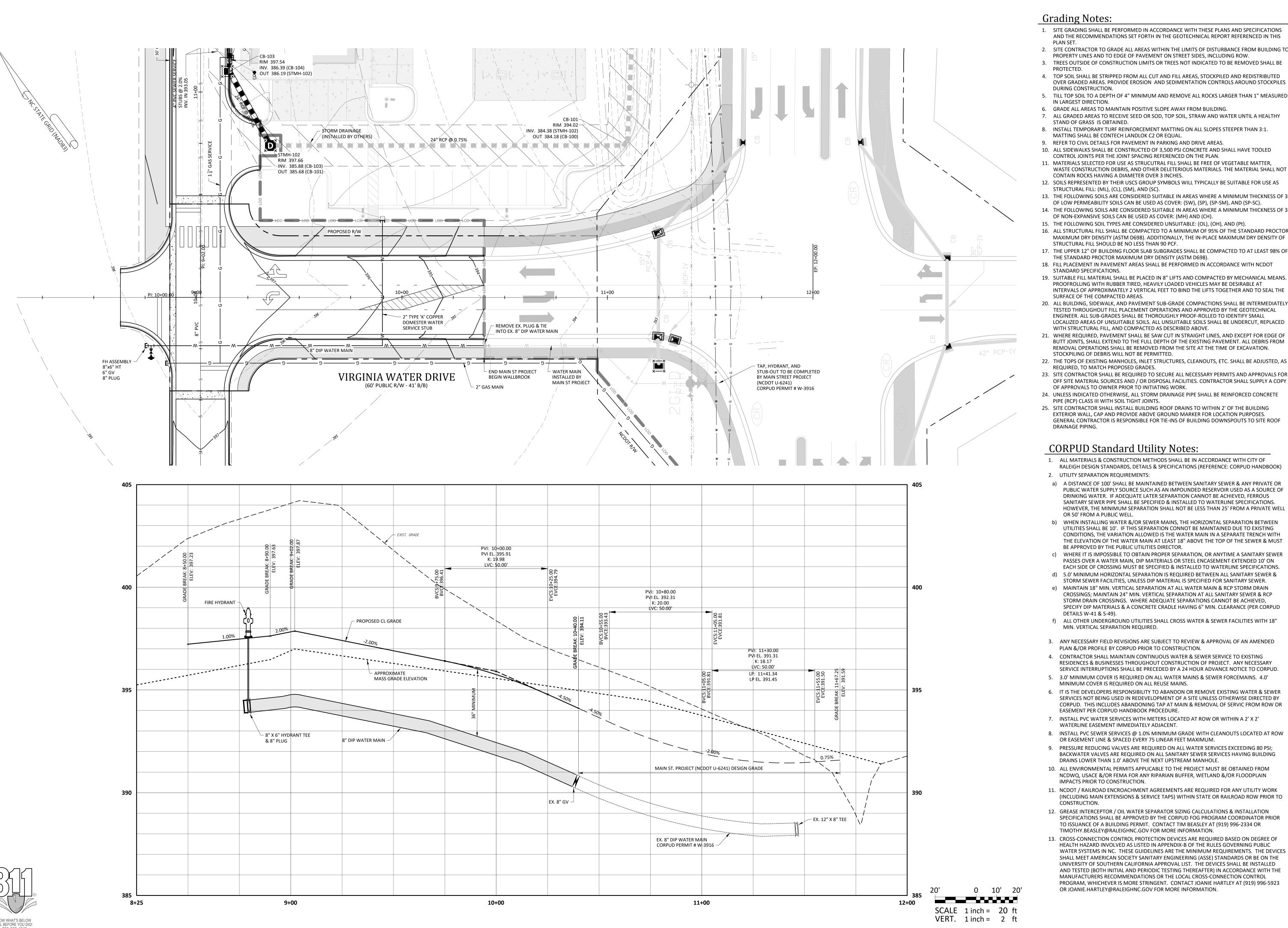
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Project Manager Drawn Bv: Checked By: Drawing Number: D-1404-CID



#### **Grading Notes:**

- 1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS
- 2. SITE CONTRACTOR TO GRADE ALL AREAS WITHIN THE LIMITS OF DISTURBANCE FROM BUILDING TO
- PROPERTY LINES AND TO EDGE OF PAVEMENT ON STREET SIDES, INCLUDING ROW. 3. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE
- 4. TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES
- DURING CONSTRUCTION. 5. TILL TOP SOIL TO A DEPTH OF 4" MINIMUM AND REMOVE ALL ROCKS LARGER THAN 1" MEASURED
- IN LARGEST DIRECTION.
- 6. GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
- STAND OF GRASS IS OBTAINED.
- 8. INSTALL TEMPORARY TURF REINFORCEMENT MATTING ON ALL SLOPES STEEPER THAN 3:1.
- MATTING SHALL BE CONTECH LANDLOK C2 OR EQUAL. 9. REFER TO CIVIL DETAILS FOR PAVEMENT IN PARKING AND DRIVE AREAS.
- 10. ALL SIDEWALKS SHALL BE CONSTRUCTED OF 3,500 PSI CONCRETE AND SHALL HAVE TOOLED
- CONTROL JOINTS PER THE JOINT SPACING REFERENCED ON THE PLAN. 11. MATERIALS SELECTED FOR USE AS STRUCUTRAL FILL SHALL BE FREE OF VEGETABLE MATTER,
- WASTE CONSTRUCTION DEBRIS, AND OTHER DELETERIOUS MATERIALS. THE MATERIAL SHALL NOT CONTAIN ROCKS HAVING A DIAMETER OVER 3 INCHES.
- 12. SOILS REPRESENTED BY THEIR USCS GROUP SYMBOLS WILL TYPICALLY BE SUITABLE FOR USE AS STRUCTURAL FILL: (ML), (CL), (SM), AND (SC). 13. THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3'
- OF LOW PERMEABILITY SOILS CAN BE USED AS COVER: (SW), (SP), (SP-SM), AND (SP-SC). 14. THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3'
- OF NON-EXPANSIVE SOILS CAN BE USED AS COVER: (MH) AND (CH). 15. THE FOLLOWING SOIL TYPES ARE CONSIDERED UNSUITABLE: (OL), (OH), AND (Pt).
- 16. ALL STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). ADDITIONALLY, THE IN-PLACE MAXIMUM DRY DENSITY OF
- STRUCTURAL FILL SHOULD BE NO LESS THAN 90 PCF. 17. THE UPPER 12" OF BUILDING FLOOR SLAB SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF
- THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). 18. FILL PLACEMENT IN PAVEMENT AREAS SHALL BE PERFORMED IN ACCORDANCE WITH NCDOT
- 19. SUITABLE FILL MATERIAL SHALL BE PLACED IN 8" LIFTS AND COMPACTED BY MECHANICAL MEANS. PROOFROLLING WITH RUBBER TIRED, HEAVILY LOADED VEHICLES MAY BE DESIRABLE AT INTERVALS OF APPROXIMATELY 2 VERTICAL FEET TO BIND THE LIFTS TOGETHER AND TO SEAL THE SURFACE OF THE COMPACTED AREAS.
- TESTED THROUGHOUT FILL PLACEMENT OPERATIONS AND APPROVED BY THE GEOTECHNICAL ENGINEER. ALL SUB-GRADES SHALL BE THOROUGHLY PROOF-ROLLED TO IDENTIFY SMALL LOCALIZED AREAS OF UNSUITABLE SOILS. ALL UNSUITABLE SOILS SHALL BE UNDERCUT, REPLACED WITH STRUCTURAL FILL, AND COMPACTED AS DESCRIBED ABOVE.
- 21. WHERE REQUIRED, PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, SHALL EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- 22. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, CLEANOUTS, ETC. SHALL BE ADJUSTED, AS REQUIRED, TO MATCH PROPOSED GRADES.
- 23. SITE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE MATERIAL SOURCES AND / OR DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER PRIOR TO INITIATING WORK.
- 24. UNLESS INDICATED OTHERWISE, ALL STORM DRAINAGE PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SOIL TIGHT JOINTS.
- 25. SITE CONTRACTOR SHALL INSTALL BUILDING ROOF DRAINS TO WITHIN 2' OF THE BUILDING EXTERIOR WALL, CAP AND PROVIDE ABOVE GROUND MARKER FOR LOCATION PURPOSES. GENERAL CONTRACTOR IS RESPONSIBLE FOR TIE-INS OF BUILDING DOWNSPOUTS TO SITE ROOF

## **CORPUD Standard Utility Notes:**

- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK)
- 2. UTILITY SEPARATION REQUIREMENTS: 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 LATER SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
- OR 50' FROM A PUBLIC WELL. b) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CONNOT 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. c) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATER MAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON
- EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. 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 WATER MAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD
- DETAILS W-41 & S-49). f) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- 3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED
- PLAN &/OR PROFILE BY CORPUD PRIOR TO CONSTRUCTION. 4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY
- 5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- 6. IT IS THE DEVELOPERS RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY CORPUD. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVIC FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- 7. INSTALL PVC WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' X 2' WATERLINE EASEMENT IMMEDIATELY ADJACENT.
- 8. INSTALL PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- 9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- 10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS PRIOR TO CONSTRUCTION.
- 11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO
- 12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
- 13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NC. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.



**REVISIONS:** 

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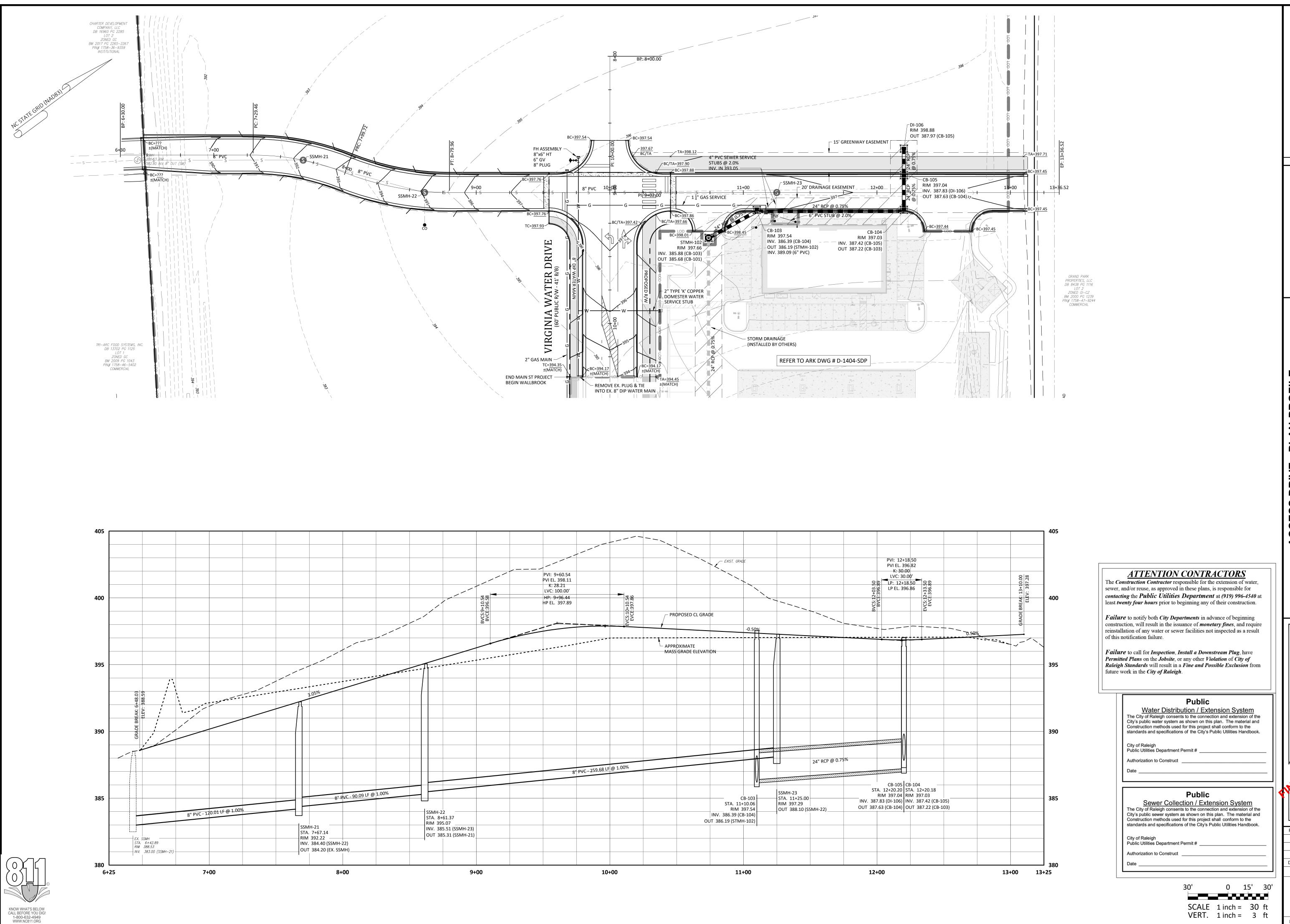
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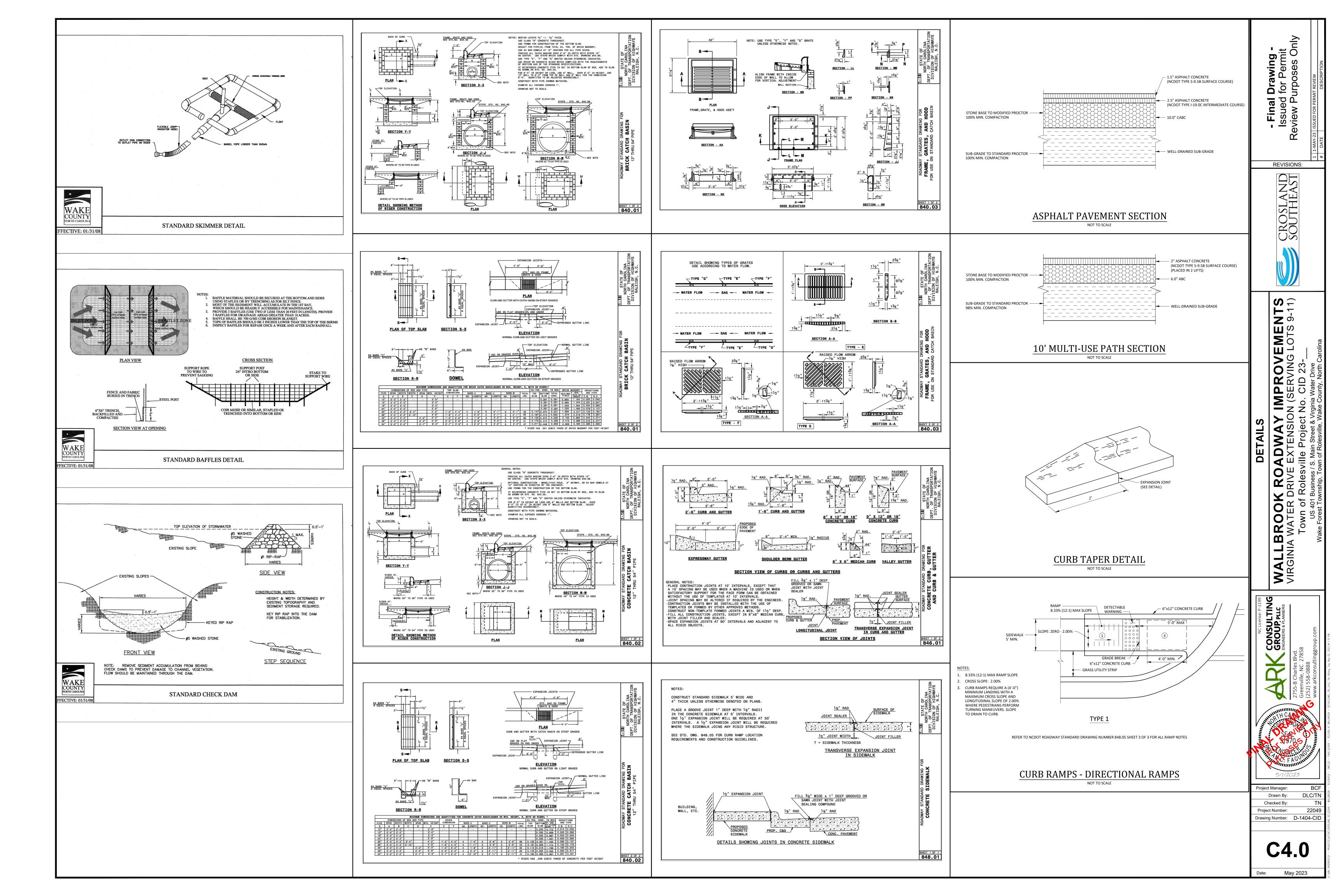
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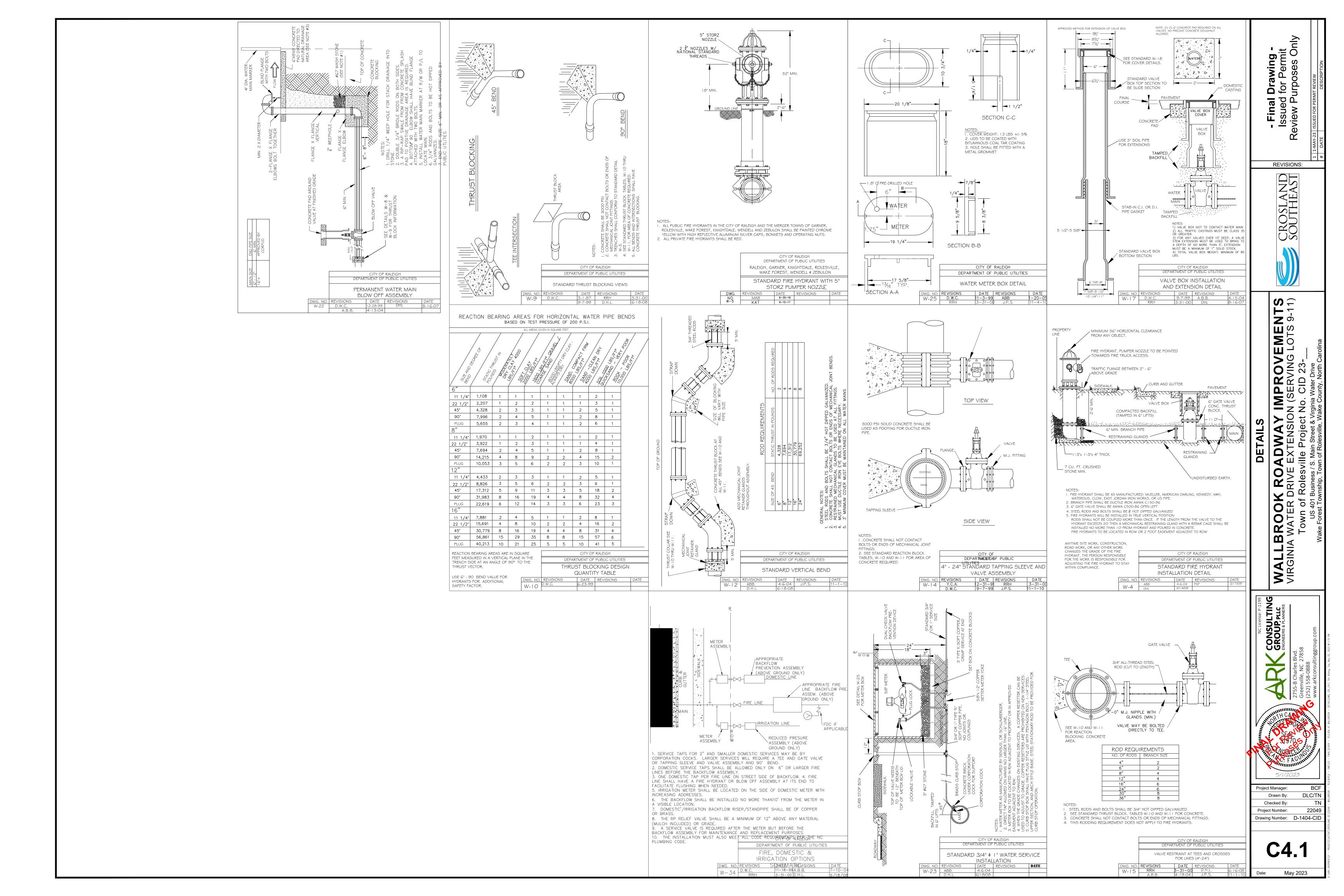
IMPROVEMENTS
ON (SERVING LOTS 9-11)
t No. CID 23-WALLBROOK ROADW
VIRGINIA WATER DRIVE EXTEI

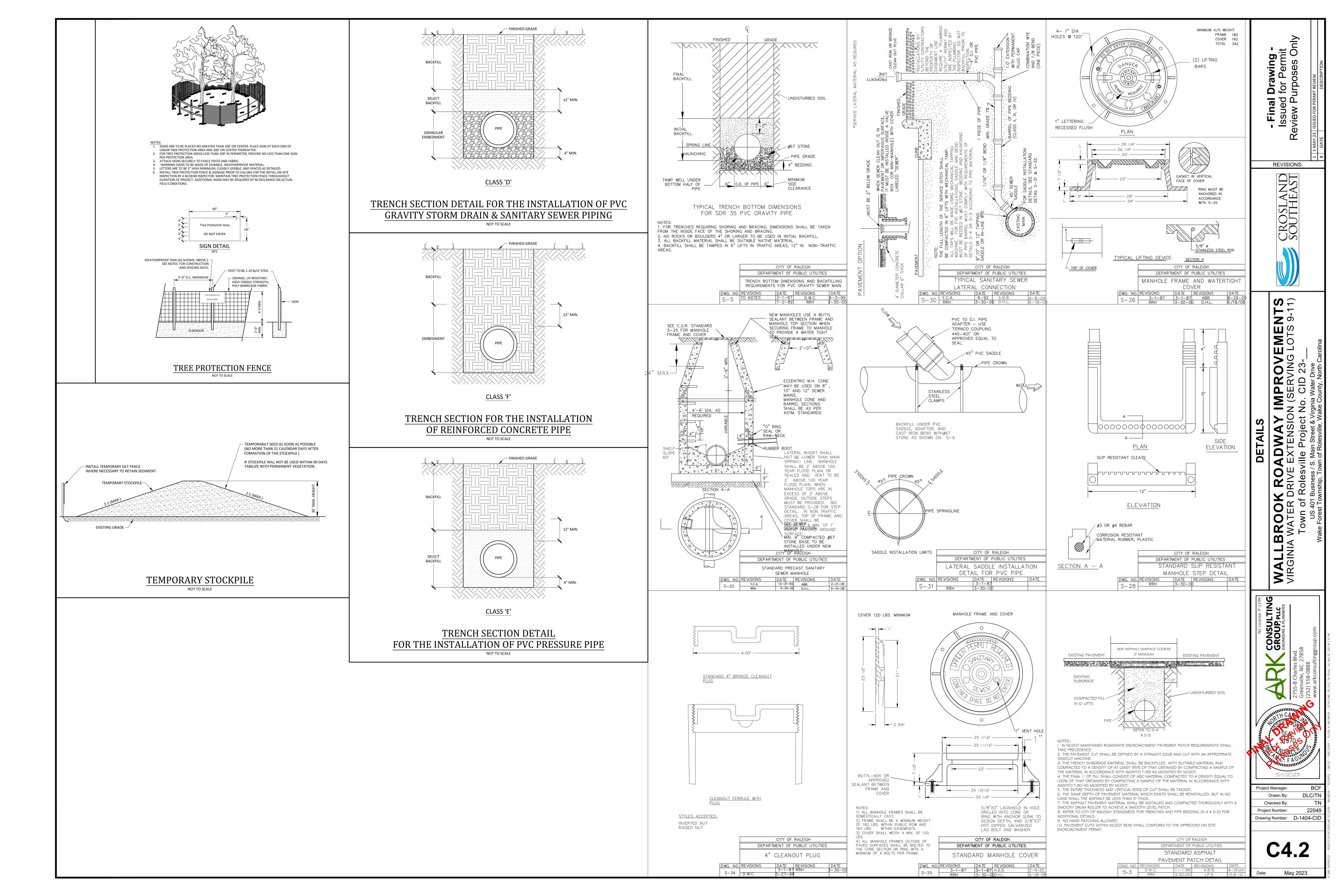
Town of Rolesville Pro
US 401 Business / S. Main Str

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

GROUP, PLLC ENGINEERS & PLANNERS







#### CITY OF RALEIGH DB 10133 PG 750 **GENERAL NOTES:** BM 2003 PG 614 PIN# 1758-47-5494 1. THIS ALTA/NSPS LAND TITLE SURVEY WAS PREPARED FOR THE BENEFIT OF WALLBROOK LANDCO, LLC, ITS SUCCESSORS AND/OR ASSIGNS AS THEIR INTERESTS MAY APPEAR, AND INVESTORS TITLE BURLINGTON INSURANCE COMPANY. 2. THE PROPERTY AS SHOWN HEREON IS BASED ON A FIELD-RUN BOUNDARY SURVEY WITH A RAW CLOSURE OF 1:35,900. 3. THE IMPROVEMENTS SHOWN HEREON ARE BASED ON A FIELD-RUN PLANIMETRIC SURVEY PERFORMED BY JOHNSON, MIRMIRAN & THOMPSON FROM MARCH 16 THROUGH MARCH 19, 2020 AND ERIC G. CRAWFORD & REFLECTS SITE CONDITIONS AS OF THAT DATE. ANNE M. CRAWFORD LONNIE DR 15' UTILITY EASEMENT DB 15427 PG 1754 4. ELEVATIONS ARE BASED ON NAVD88 DATUM. BM 2003 PG 614 LOT 161 BM 2006 PG 811 5. THE SURVEY IS REFERENCED TO THE NORTH CAROLINA STATE PIN# 1758-47-5117 PLANE COORDINATE SYSTEM (NCSPCS), NORTH AMERICAN DATUM, GRAND PARK PROPERTIES, LLC GRAPHIC SCALE 1983, 2001 ADJUSTMENT, NAD83(2001). DB 8438 PG 1116 6' WOOD 1"=50" LOT 2 FENCE 20' UTILITY EASEMENT BM 2000 PG 1239 6. THE USE OF THE WORD CERTIFY OR CERTIFICATION CONSTITUTES AN BM 2003 PG 614 PIN# 1758-47-9244 EXPRESSION OF PROFESSIONAL OPINION REGARDING THOSE FACTS FENCE CORNER OR FINDINGS WHICH ARE THE SUBJECT OF THE UNDERSIGNED ON PROP. LINE PROFESSIONAL'S KNOWLEDGE, INFORMATION AND BELIEF, AND IN SHAWN K. KLINE & ACCORDANCE WITH THE COMMONLY ACCEPTED PROCEDURE MICHELLE STEWART CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE AND DB 16766 PG 1232 DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE EITHER LOT 162 EXPRESSED OR IMPLIED. BM 2006 PG 811 - FÉNÇÉ CÓRNER PIN# 1758-47-4075 /2.31/ SOUTHEAST 7. THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X. AREA OF OF PROP. LINE MINIMAL FLOODING, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM), WAKE COUNTY, NORTH CAROLINA, PANEL 1758, - GRAVEL ROAD MAP NO. 3720175800J, EFFECTIVE DATE: MAY 2, 2006. AMBOKA BUMBA & TREE LINE -ANNIE MANTINGU BUMBA 8. AT THE TIME OF THE SURVEY, THERE WERE NO PARKING SPACES. DB 12725 PG 1212 LOT 163 INGRESS/EGRESS EASEMENT -BM 2006 PG 811 9. AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE DB 10105 PG 778-EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, PIN# 1758-46-3999 FÉNCE ON WATER MAIN\_SIGN = PROP. LINE SUMP OR LANDFILL. (1) = RECORD DATA PER BM 1996 PG 187 (2) = RECORD DATA PER BM 2006 PG 811 10. AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE = FOUND IRON PIPE EVIDENCE OF A CEMETERY. O = SET IRON PIN $\triangle$ = NGS MONUMENT 11. AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE PL = PROPERTY LINE EVIDENCE OF BUILDING CONSTRUCTION OR BUILDING ADDITIONS. R/W = RIGHT OF WAYGLENN E. CRUICKSHANK & KRISTEN L. CRUICKSHANK 12. CURRENT ZONING: I-SUD (INDUSTRIAL SPECIAL USE DISTRICT) CB = CATCH BASINDB 12952 PG 1672 C&G = CURB AND GUTTERLOT 165 SETBACK REQUIREMENTS: = CENTERLINE BM 2006 PG 811 = DROP INLET PIN# 1758-46-3846 FRONT: 30' GARY R. PARIS, TRUSTEE & ANNE T. PARIS, TRUSTEE SIDE: 15' CORNER: 25' DB 12634 PG 2473/ Ø PP = POWER POLE LOT 2-1 REAR: 35' RCP = REINFORCED CONCRETE PIPE BM 1996 PG 187 = SIGN PIN# 1758-46-7822 TIMOTHY KING = SANITARY SEWER MANHOLE (ZONING INFORMATION BASED ON INFORMATION AS SUPPLIED BY (NO ADDRESS LISTED) DB 16677 PG 2059 = TELEPHONE PEDESTAL CURRENT COUNTY ZONING DEPARTMENT, NO ZONING REPORT OR LOT 166 WM WM = WATER METER LETTER WAS PROVIDED TO SURVEYOR AT TIME OF SURVEY. 7.968 ACRES (GROSS) BM 2006 PG 811 W WV = WATER VALVE 7,521 ACRES (NET) PIN# 1758-46-2777 - = ELECTRIC LINE --- = GAS LINE - OVERHEAD ELECTRIC LINE ----- = SANITARY SEWER LINE - TELEPHONE LINE ---- = WATER LINE RECORD LEGAL DESCRIPTION PER INVESTORS TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. 202000244CA2, WITH AN EFFECTIVE DATE OF MARCH 6, 2020 AT 5:00 IN THE STATE OF NC, COUNTY OF WAKE, 6' CHAIN 1 SURVEYOR'S CERTIFICATION: BEING ALL OF LOT 2-1 OF THAT PLAT ENTITLED "PRELIMINARY LINK FENCE 30' EASEMENT TO WAKE - ELECTRIC MEMBERSHIP CORP. SUBDIVISION PLAT AND RECOMBINATION SURVEY FOR TOMMY TWITTY," A COPY OF WHICH IS RECORDED IN BOOK OF MAPS 1996, PAGE 187. TO WALLBROOK LANDCO, LLC, ITS SUCCESSORS AND/OR ASSIGNS AS THEIR DB 3868 PG 917 --WAKE COUNTY REGISTRY. INTERESTS MAY APPEAR, AND INVESTORS TITLE INSURANCE COMPANY: **ASPHALT** THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND CHARTER DEVELOPMENT ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6A, 7A, 7B1, 8, 9, 11, 13, 16 AND 17 OF TABLE "A" THEREOF. THE FIELDWORK WAS COMPLETED COMPANY, LLC DB 16960 PG 2285 ON MARCH 19, 2020. LOT 2 SCHEDULE B. PART II EXCEPTIONS: BM 2017 PG 2265-2267 PER INVESTORS TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. PIN# 1758-36-9359 202000244CA2, WITH AN EFFECTIVE DATE OF MARCH 6, 2020 AT 5:00 3/28/2020 WILLIAM T. ROBBINS, II 1. (ITEM 3) EASEMENT(S) AND/OR RIGHT(S) OF WAY TO CITY OF P.L.S. #L-4192 RALEIGH RECORDED IN BOOK 10105 AT PAGE 778. [PLOTTED NGS MONUMENT "SCARBORO" TRI-ARC FOOD SYSTEMS, INC. $\triangle$ N = 785,290.77 2. (ITEM 4) EASEMENT(S) AND/OR RIGHT(S) OF WAY TO WAKE DB 13702 PG 1125 E = 2,153,833.19ELECTRIC MEMBERSHIP CORPORATION RECORDED IN BOOK 3868 AT C.F. = 0.99992552PAGE 917. [PLOTTED HEREON] BM 2009 PG 1043 PIN# 1758-46-5402 3. (ITEM 5) TITLE TO THAT PORTION OF THE LAND WITHIN THE RIGHT-OF-WAY OF U.S. HIGHWAY 401 (LOUISBURG ROAD). [PLOTTED PHONE: (804)-323-9900 FAX: (804)-323-0596 EMAIL: jmtva@jmt-engineering.com 4. (ITEM 6) MATTERS SHOWN ON RECORDED BOOK OF MAPS 1996 AT REVISION # PAGE 187 SHOWS THE FOLLOWING LOCATED ON THE LAND: (a) OVERHEAD LINE [PLOTTED HEREON] (b) POWER POLE [PLOTTED HEREON] ALTA/NSPS LAND TITLE SURVEY

HAMPTON POINTE ASSOCIATES, LLC

DB 10051 PG 530 LOT 3 BM 2017 PG 2265-2267 PIN# 1758-46-1097

(c) RIGHT OF WAY FOR U.S. HIGHWAY 401 (LOUISBURG ROAD)

[PLOTTED HEREON]

→ BENDEMEER

VICINITY MAP

SCALE: 1"=2000"

Engineering A Brighter Future®

PREPARED FOR

WALLBROOK LANDCO, LLC

WAKE FOREST TOWNSHIP TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

DRAWN BY: JSZ PROJECT#: CHECKED BY: WTR CONTRACT#

DATE: 03/28/2020 | SCALE: 1"=50'

9201 Arboretum Parkway Suite 310 Richmond, Virginia 23236

REASON FOR REVISION

JMT#: 20-00915-001

SHEET 1 OF 1