

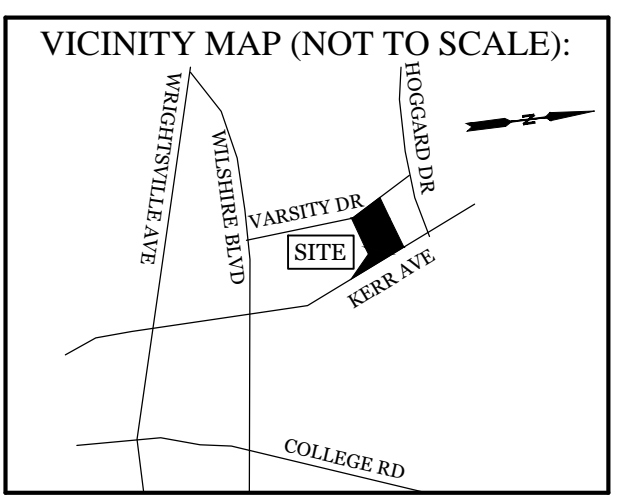
**Approved Construction Plan**  
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning: \_\_\_\_\_  
Public Utilities: \_\_\_\_\_  
Traffic: \_\_\_\_\_  
Fire: \_\_\_\_\_

**WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

**RECEIVED**  
By waltonj at 1:15 pm, Jul 24, 2020

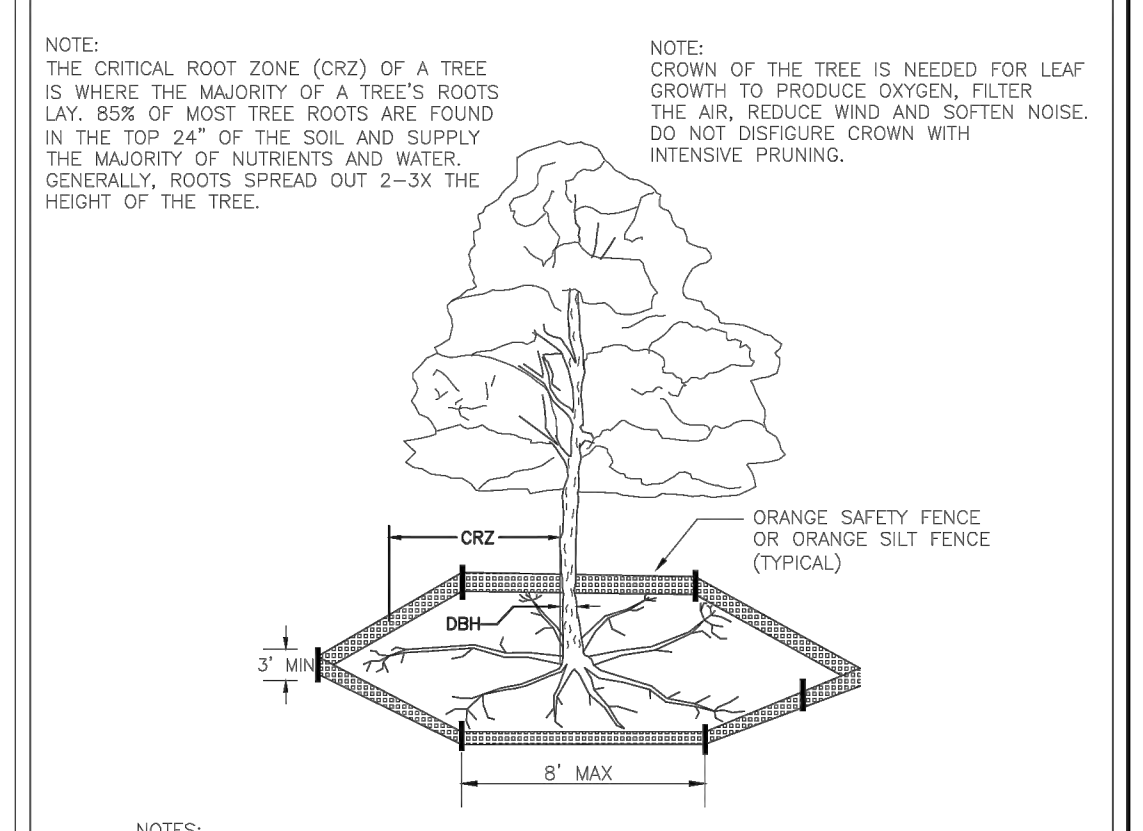
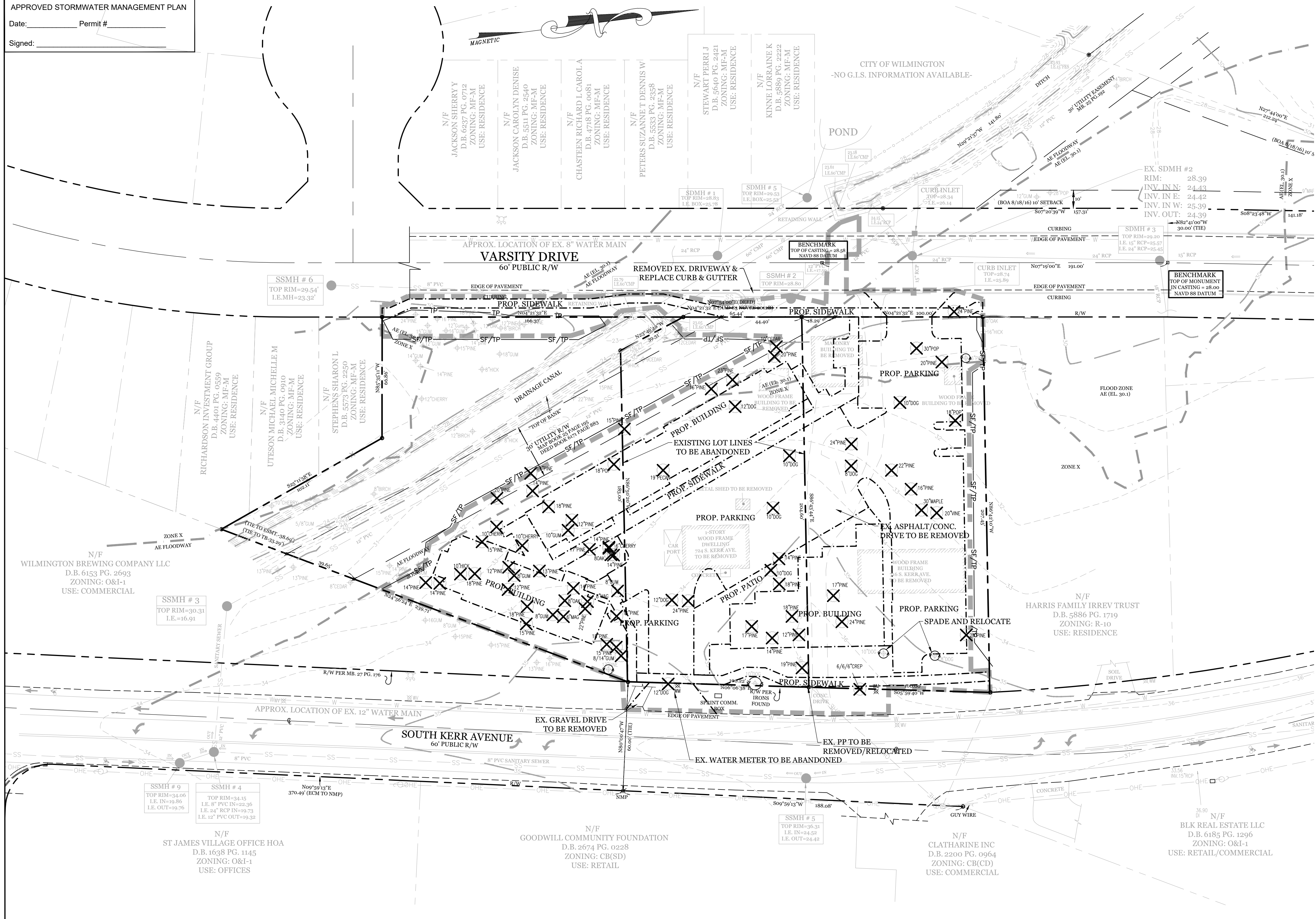
**SITE DATA**  
PARCEL ID: R05511-001-004-002, R05511-001-000, R05511-001-002-000  
CURRENT ZONING: O&I-1 (CD)  
CAMA LAND USE CLASSIFICATION: URBAN & CONSERVATION AREA  
PROJECT ADDRESS: 611 VARSITY DR, 724 & 716 SOUTH KERR AVE, WILMINGTON, NC 28403  
CURRENT OWNER: REAL PROPERTIES LLC, 1319 MILITARY CUTOFF RDSUITECC, WILMINGTON, NC 28405  
TOTAL ACREAGE IN PROJECT BOUNDARY: 68.115 S.F. (± 1.56 ac.)  
EXISTING ONSITE IMPERVIOUS AREAS (ALL TO BE REMOVED):  
BUILDINGS: 3,683 S.F.  
PAVEMENT: 3,176 S.F.  
SOIL TYPE: To (Torhunta loamy fine sand) 63.1%  
Be (Baymeade fine sand) 36.8%  
JO (Johnston soils) 0.0%  
(Per the USDA websoil survey map)



**REVISIONS**

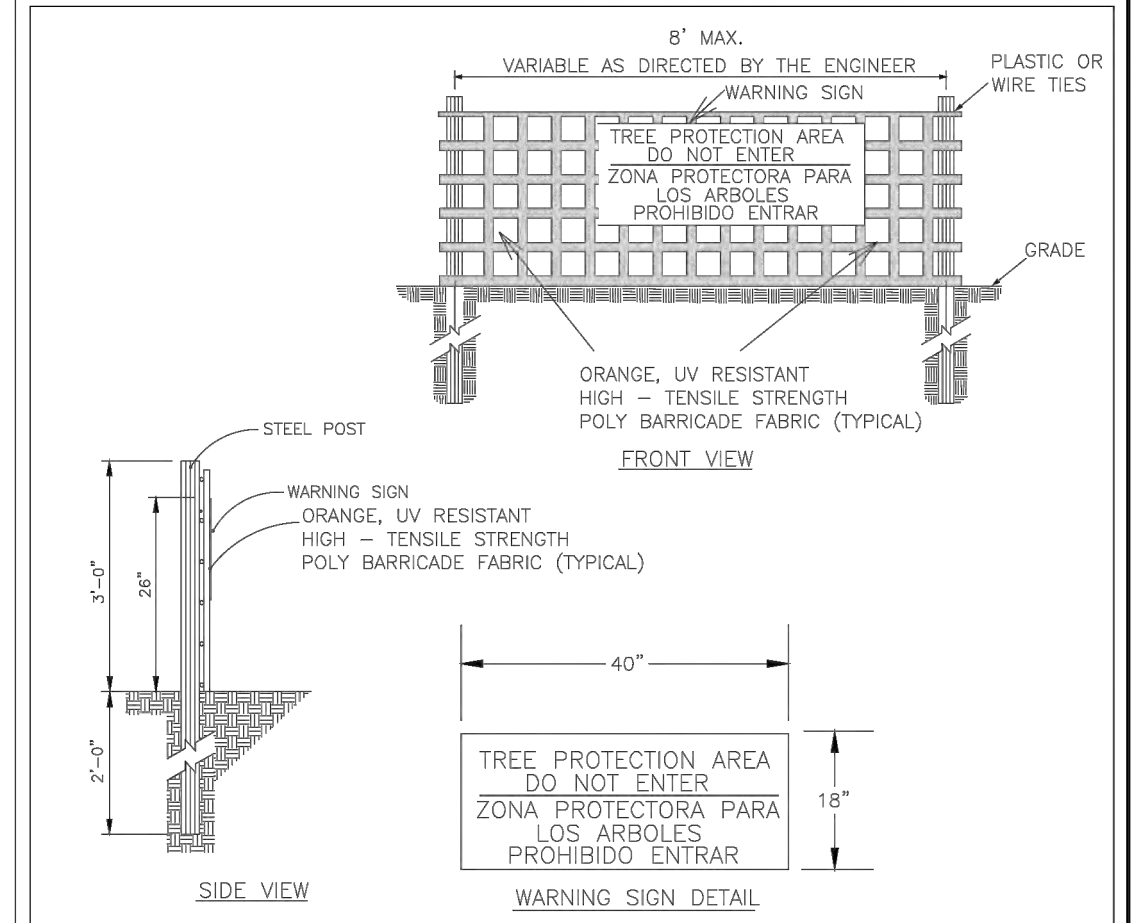
NO.	DATE	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**  
5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charlie@intracoastalengineering.com  
License Number: P-0662



**NOTES:**

- PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- CRZ RADIUS IS 4 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
- IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
- WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
- FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO MATERIALS OR EQUIPMENT SHALL BE STORED BENEATH TREES, DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED.
- FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

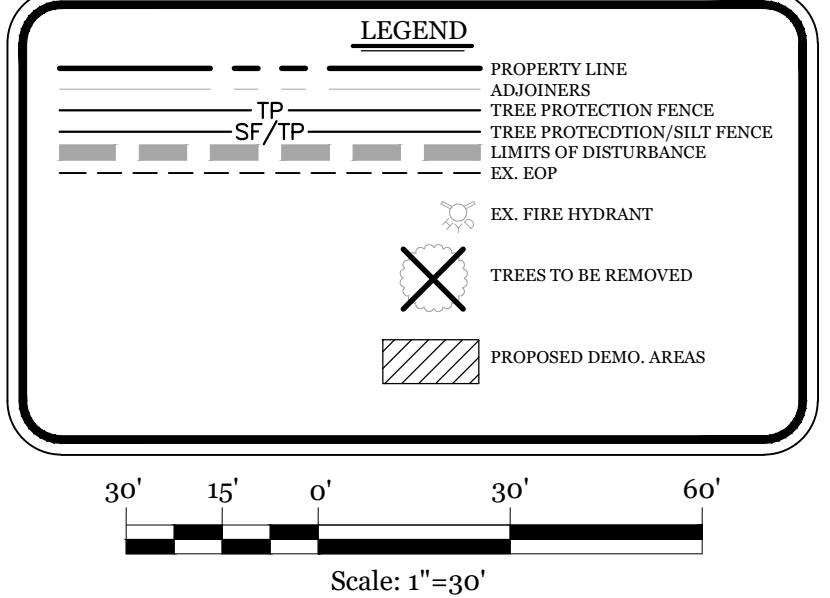


**NOTES:**

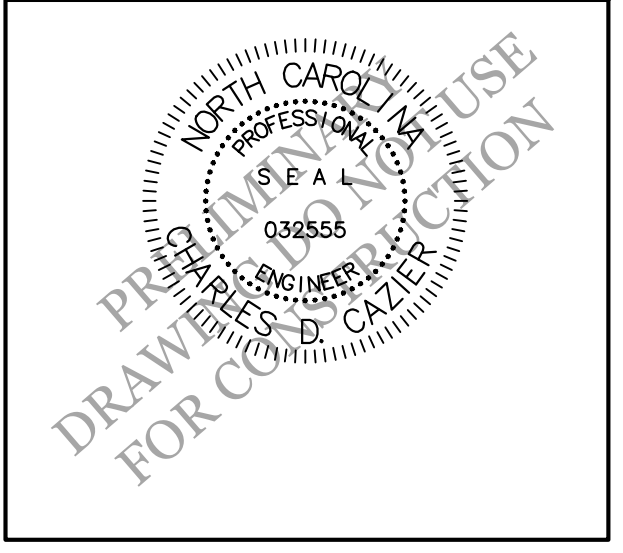
- THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
- WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAIL.
- SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 100' IN PERIMETER, PROVIDE NO LESS THAN TWO SIGNS PER PROTECTION AREA.
- ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
- TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

**STANDARD DETAIL**  
**TREE PROTECTION DURING CONSTRUCTION**  
SHEET 2 of 2 SD 15-09

- NOTES:**
- EXISTING SURVEY DATA PROVIDED BY VERNON DEREK DANFORD, N.C. PLS No. L-4528.
  - NO WETLANDS EXIST ON SITE.
  - THE DRAINAGE FEATURE RUNNING THROUGH THE PROPERTY HAS BEEN DETERMINED TO NOT BE CONSIDERED A STREAM BY NC DEQ REPRESENTATIVE CHAD COBURN.
  - THIS PROPERTY IS NOT AFFECTED BY AN ABC.
  - NO CONSERVATION RESOURCES EXIST ON SITE.
  - THIS PROPERTY IS NOT AFFECTED BY ANY HISTORIC OR ARCHAEOLOGICAL SITES.
  - PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, A CONSTRUCTION ENTRANCE AND SILT FENCING SHALL BE INSTALLED.
  - PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
  - NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
  - TREE PROTECTION SIGNAGE SHALL BE ADDED ALONG THE LIMITS OF DISTURBANCE ADJACENT TO TREES EVERY 100' TO PROTECT TREES ADJACENT TO THE CONSTRUCTION SITE.



**EXISTING CONDITIONS / TREE REMOVAL & PROTECTION PLAN FOR THE VARSITY**  
611 VARSITY DR, 724 & 716 SOUTH KERR AVE.  
CITY OF WILMINGTON  
NEW HANOVER COUNTY, NC



**CLIENT INFORMATION:**  
Real Properties, LLC.  
Matt Scharf  
1319-CC Military Cutoff Rd #172  
Wilmington, NC 28405  
Ph. 910-538-9901

DRAWN: JAE SHEET SIZE: 24x36  
CHECKED: CDC DATE: 7/23/2020  
APPROVED: CDC SCALE: 1" = 30'  
PROJECT NUMBER: 2019-021  
DRAWING NUMBER: C-0



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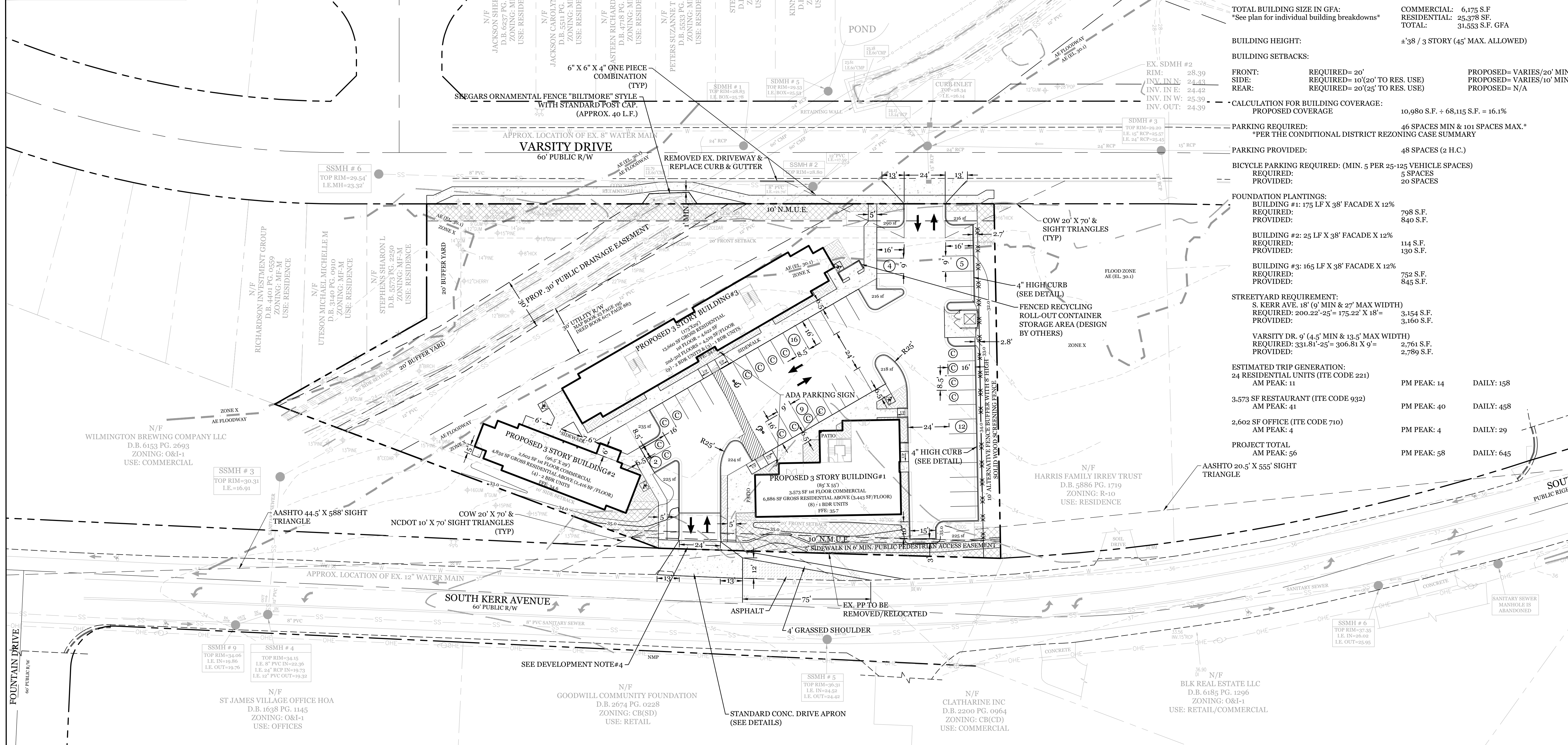
**WILMINGTON**  
NORTH CAROLINA

Public Services • Engineering Division

**APPROVED STORMWATER MANAGEMENT PLAN**

Date: \_\_\_\_\_ Permit # \_\_\_\_\_

Signed: \_\_\_\_\_



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CURRENT ZONING: O&I-1 (CD)

CAMA LAND USE CLASSIFICATION: URBAN & CONSERVATION AREA

PROJECT ADDRESS: 611 VARSITY DR, 724 & 716 SOUTH KERR AVE. WILMINGTON, NC 28403

CURRENT OWNER: REAL PROPERTIES LLC  
1319 MILITARY CUTOFF RD SUITE CC  
WILMINGTON, NC 28405

TOTAL ACREAGE IN PROJECT BOUNDARY: 68,115 S.F. (± 1.56 ac.)

TOTAL DISTURBED AREA: 1.2 ACRES

NUMBER OF BUILDINGS: 3

NUMBER OF RESIDENTIAL UNITS: 24 TOTAL (13 @ 2BDR & 11 @ 1 BDR)

TOTAL BUILDING SIZE IN GFA: COMMERCIAL: 6,175 S.F.  
RESIDENTIAL: 25,378 SF.  
TOTAL: 31,553 S.F. GFA

BUILDING HEIGHT: ±38' / 3 STORY (45' MAX. ALLOWED)

BUILDING SETBACKS: PROPOSED= VARIES/20' MIN  
PROPOSED= VARIES/10' MIN  
PROPOSED= N/A

FRONT: REQUIRED= 20'  
SIDE: REQUIRED= 10'(20' TO RES. USE)  
REAR: REQUIRED= 20'(25' TO RES. USE)

CALCULATION FOR BUILDING COVERAGE: PROPOSED COVERAGE: 10,980 S.F. ÷ 68,115 S.F. = 16.1%

PARKING REQUIRED: 46 SPACES MIN & 101 SPACES MAX.\*  
\*PER THE CONDITIONAL DISTRICT REZONING CASE SUMMARY

PARKING PROVIDED: 48 SPACES (2 H.C.)

BICYCLE PARKING REQUIRED: (MIN. 5 PER 25-125 VEHICLE SPACES)  
REQUIRED: 5 SPACES  
PROVIDED: 20 SPACES

FOUNDATION PLANTINGS:  
BUILDING #1: 175 LF X 38' FAÇADE X 12%  
REQUIRED: 798 S.F.  
PROVIDED: 840 S.F.

BUILDING #2: 25 LF X 38' FAÇADE X 12%  
REQUIRED: 114 S.F.  
PROVIDED: 130 S.F.

BUILDING #3: 165 LF X 38' FAÇADE X 12%  
REQUIRED: 752 S.F.  
PROVIDED: 845 S.F.

STREET YARD REQUIREMENT:  
S. KERR AVE. 18' (4.5' MIN & 27' MAX WIDTH)  
REQUIRED: 200.22' x 25' = 5,005.5 S.F.  
PROVIDED: 3,154 S.F.

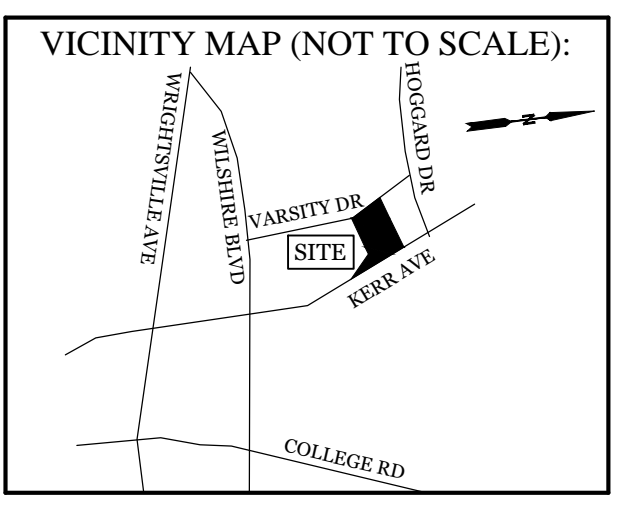
Varsity Dr. 9' (4.5' MIN & 13.5' MAX WIDTH)  
REQUIRED: 331.81' x 25' = 8,295.25 S.F.  
PROVIDED: 2,761 S.F.

ESTIMATED TRIP GENERATION:  
24 RESIDENTIAL UNITS (ITE CODE 221)  
AM PEAK: 11 PM PEAK: 14 DAILY: 158

3,573 SF RESTAURANT (ITE CODE 932)  
AM PEAK: 41 PM PEAK: 40 DAILY: 458

2,602 SF OFFICE (ITE CODE 710)  
AM PEAK: 4 PM PEAK: 4 DAILY: 29

PROJECT TOTAL  
AM PEAK: 56 PM PEAK: 58 DAILY: 645



**REVISIONS**

NO.	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**

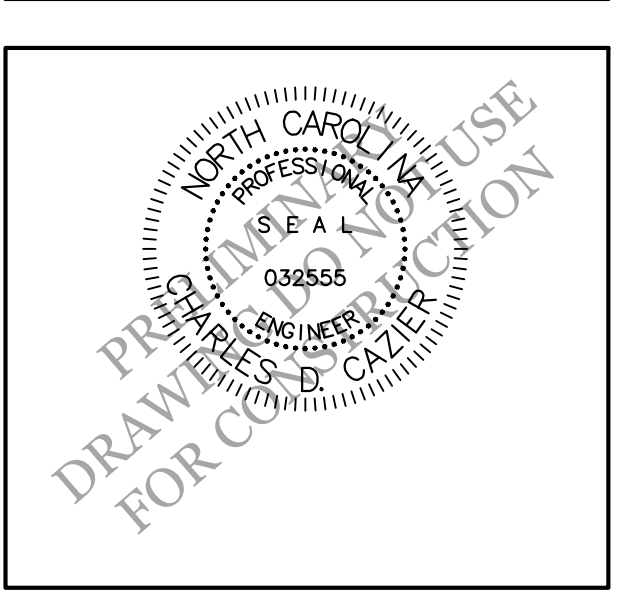
5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charlie@intracoastalengineering.com  
License Number: P-0662

**SITE PLAN**

FOR

**THE VARSITY**

611 VARSITY DR, 724 & 716 SOUTH KERR AVE.  
CITY OF WILMINGTON  
NEW HANOVER COUNTY, NC



- DEVELOPMENT NOTES:**
- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
  - PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE & NEW HANOVER COUNTY REGULATIONS.
  - ALL ROOF RUNOFF TO BE DIRECTED TO INFILTRATION SYSTEM. ROOF DOWNSPOUTS TO BE COORDINATED WITH ENGINEER FOR APPROPRIATE DIRECTION TO DESIGNED SYSTEM.
  - THE SECTION OF SIDEWALK AT THE REAR OF THE SOUTH KERR DRIVEWAY APRON MUST STILL BE CONSTRUCTED WITH A THICKNESS OF 6 INCHES PER THE CITY STANDARD DETAIL SD 3-03.3/4.
- GENERAL TRAFFIC NOTES:**
- ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS OFF THE R/W TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
  - ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD 15-13 & SD 11-3 CDFW TECH STDS)
  - ALL SIGNS AND PAVEMENT MARKINGS OFF RIGHT OF WAY ARE TO MEET/BE MAINTAINED TO MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD 15-13 & SD 11-3 CDFW TECH STDS)
  - A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5969 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
  - ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED. CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING (341-7888) REGARDING THE UTILITIES IN ROW.
  - ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' TO 10'.

- CD-14-119 CONDITIONS:**
- THE USE AND DEVELOPMENT OF THE SUBJECT PROPERTY SHALL COMPLY WITH ALL REGULATIONS AND REQUIREMENTS IMPOSED BY THE LAND DEVELOPMENT CODE, THE CITY OF WILMINGTON TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL AND ANY OTHER APPLICABLE FEDERAL, STATE, OR LOCAL LAW, ORDINANCE OR REGULATION, AS WELL AS ANY CONDITION STATED BELOW. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENT OR HIGHER STANDARD SHALL APPLY.
  - APPROVAL OF THIS CONDITIONAL DISTRICT REZONING DOES NOT CONSTITUTE TECHNICAL APPROVAL OF THE SITE PLAN. FINAL APPROVAL BY THE TECHNICAL REVIEW COMMITTEE AND THE ISSUANCE OF ALL REQUIRED PERMITS MUST OCCUR PRIOR TO THE RELEASE OF THE PROJECT FOR CONSTRUCTION.
  - IF, FOR ANY REASON, ANY CONDITION FOR APPROVAL IS FOUND TO BE ILLEGAL OR INVALID OR IF THE APPLICANT SHOULD FAIL TO ACCEPT ANY CONDITION FOLLOWING APPROVAL, THE APPROVAL OF THE SITE PLAN FOR THE DISTRICT SHALL BE NULL AND VOID AND OF NO EFFECT AND PROCEEDINGS SHALL BE INSTITUTED TO REZONE THE PROPERTY TO ITS PREVIOUS ZONING CLASSIFICATION.
  - THE USE AND DEVELOPMENT OF THE SUBJECT PROPERTY SHALL BE IN ACCORDANCE WITH THE PLAN AND ELEVATIONS APPROVED BY CITY COUNCIL.
  - THE PROPOSED USE SHALL BE LIMITED TO A MAXIMUM OF THREE (3) BUILDINGS, CONTAINING NO MORE THAN 30 APARTMENT UNITS AND NO LESS THAN TWO DIFFERENT NON-RESIDENTIAL USES OCCUPYING AT LEAST 5,200 SQUARE FEET OF GROUND-FLOOR COMMERCIAL SPACE.
  - NO BUILDING SHALL EXCEED 45 FEET IN HEIGHT.
  - BUILDING ELEVATIONS SHALL BE GENERALLY CONSISTENT WITH THE SUBMITTED CONCEPTUAL ELEVATIONS.
  - THE GROUND FLOOR FAÇADE OF THE MIXED-USE BUILDING FRONTING SOUTH KERR AVENUE SHALL BE CONSISTENT WITH A MORE COMMERCIAL APPEARANCE. THIS FAÇADE SHALL CONSIST PREDOMINANTLY OF A STOREFRONT WINDOW SYSTEM.
  - AN EIGHT-FOOT TALL WOODEN FENCE IN CONJUNCTION WITH A 10-FOOT LANDSCAPED BUFFER SHALL BE LOCATED ALONG THE NORTHERN PROJECT BOUNDARY.
  - A 20-FOOT WIDE LANDSCAPED BUFFER SHALL BE LOCATED ALONG THE SOUTHERN PROJECT BOUNDARY.
  - THE APPLICANT SHALL CONSTRUCT A FIVE-FOOT WIDE SIDEWALK INSIDE THE PROPERTY BOUNDARY ADJACENT TO SOUTH KERR AVENUE. A SIX-FOOT WIDE PUBLIC PEDESTRIAN ACCESS EASEMENT SHALL BE PROVIDED.
  - ALL EXISTING PROTECTED TREES NOT LOCATED WITHIN THE BUILDING FOOT PRINT OR IMPACTED BY ESSENTIAL SITE IMPROVEMENTS SHALL BE PRESERVED OR MITIGATED.
  - THE APPLICANT SHALL PLACE A HANDRAIL BETWEEN THE SIDEWALK ALONG VARSITY DRIVE AND THE EXISTING EXPOSED PORTIONS OF BURNT MILL CREEK LOCATED ON THE SITE. THE HANDRAIL WILL PROVIDE PROTECTION SO THAT IN NO INSTANCE SHALL THERE BE SIDEWALK WITHIN FIVE (5) FEET OF THE EXPOSED DRAINAGE DITCH WITH NO HANDRAIL AS A BARRIER.
  - EXTERIOR SITE LIGHTING SHALL BE INSTALLED SO AS NOT TO SHINE DIRECTLY ONTO ADJACENT RESIDENTIAL PARCELS.
  - ANY FREESTANDING SIGN(S) ON THE SITE SHALL BE MONUMENT STYLE WITH LANDSCAPING AROUND THE BASE OF THE SIGN; NO POLE SIGNS SHALL BE PERMITTED.
  - THE CREATIVE STANDARD SHALL NOT BE USED TO SATISFY THE STREET YARD LANDSCAPING REQUIREMENTS.
  - ALL CITY, STATE, AND FEDERAL REGULATIONS SHALL BE FOLLOWED.

**LEGEND**

- PROPERTY LINE
- ADJACENT
- RUNOFF DIRECTION
- EX. BOP
- PROP. WATER LINE
- PROP. SS LINE
- EXISTING FIRE HYDRANT
- BIKE RACK (5 SPACES)
- STREET YARD
- FOUNDATION PLANTINGS
- COMMERCIAL PARKING SPACES

Scale: 1"=30'

**CLIENT INFORMATION:**

Real Properties, LLC.  
Matt Scharf  
1319-CC Military Cutoff Rd #172  
Wilmington, NC 28405  
Ph. 910-538-9901

DRAWN: JAE SHEET SIZE: 24x36

CHECKED: CDC DATE: 7/23/2020

APPROVED: CDC SCALE: 1" = 30'

PROJECT NUMBER: 2019-021

DRAWING NUMBER: **C-1**

2 OF 8



**Approved Construction Plan**  
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning \_\_\_\_\_  
Public Utilities \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire / \_\_\_\_\_

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

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CURRENT OWNER: REAL PROPERTIES LLC  
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TOTAL ACREAGE IN PROJECT BOUNDARY: 68,115 S.F. (± 1.56 ac.)

TOTAL DISTURBED AREA: 1.3 ACRES

CALCULATION FOR BUILDING COVERAGE:  
PROPOSED COVERAGE: 10,980 S.F. + 68,115 S.F. = 16.1%

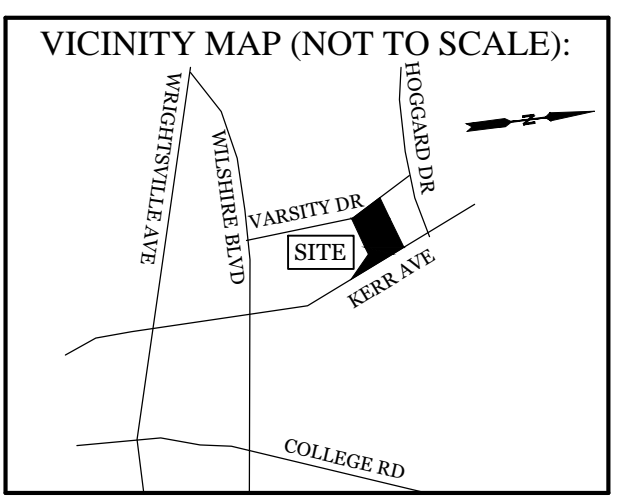
PROPOSED ON-SITE IMPERVIOUS AREAS:  
BUILDING ROOF: 10,980 S.F.  
CONCRETE SIDEWALK: 4,368 S.F.  
CONCRETE PARKING AND C&G: 8,403 S.F.  
TOTAL: 23,751 S.F. (34.9%)

PROPOSED ON-SITE PERVIOUS AREA:  
PERVIOUS CONCRETE PARKING: 8,785 S.F.

PROPOSED OFF-SITE IMPERVIOUS AREAS:  
CONC. SIDEWALK /DRIVEWAY APRON: 3,677 S.F.

EXISTING SEWER AND WATER DEMAND: 480 GPD

PROPOSED SEWER AND WATER DEMAND: 7,320 GPD



**REVISIONS**

NO.	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**

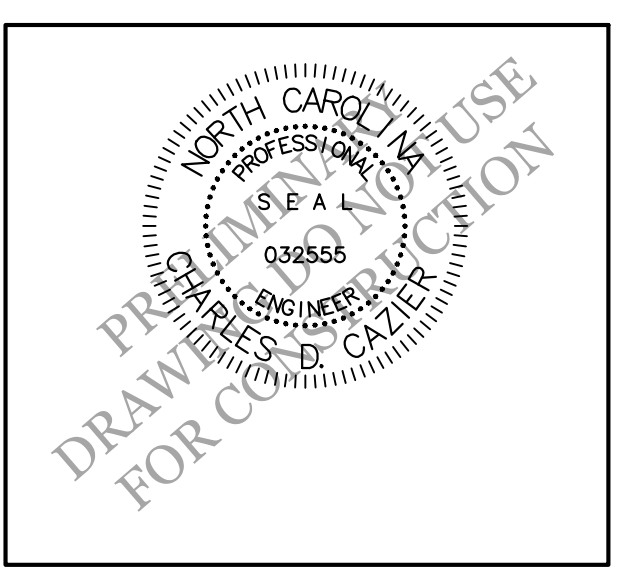
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**GRADING, DRAINAGE, & UTILITIES PLAN**

FOR

**THE VARSITY**

611 VARSITY DR, 724 & 716 SOUTH KERR AVE.  
CITY OF WILMINGTON  
NEW HANOVER COUNTY, NC

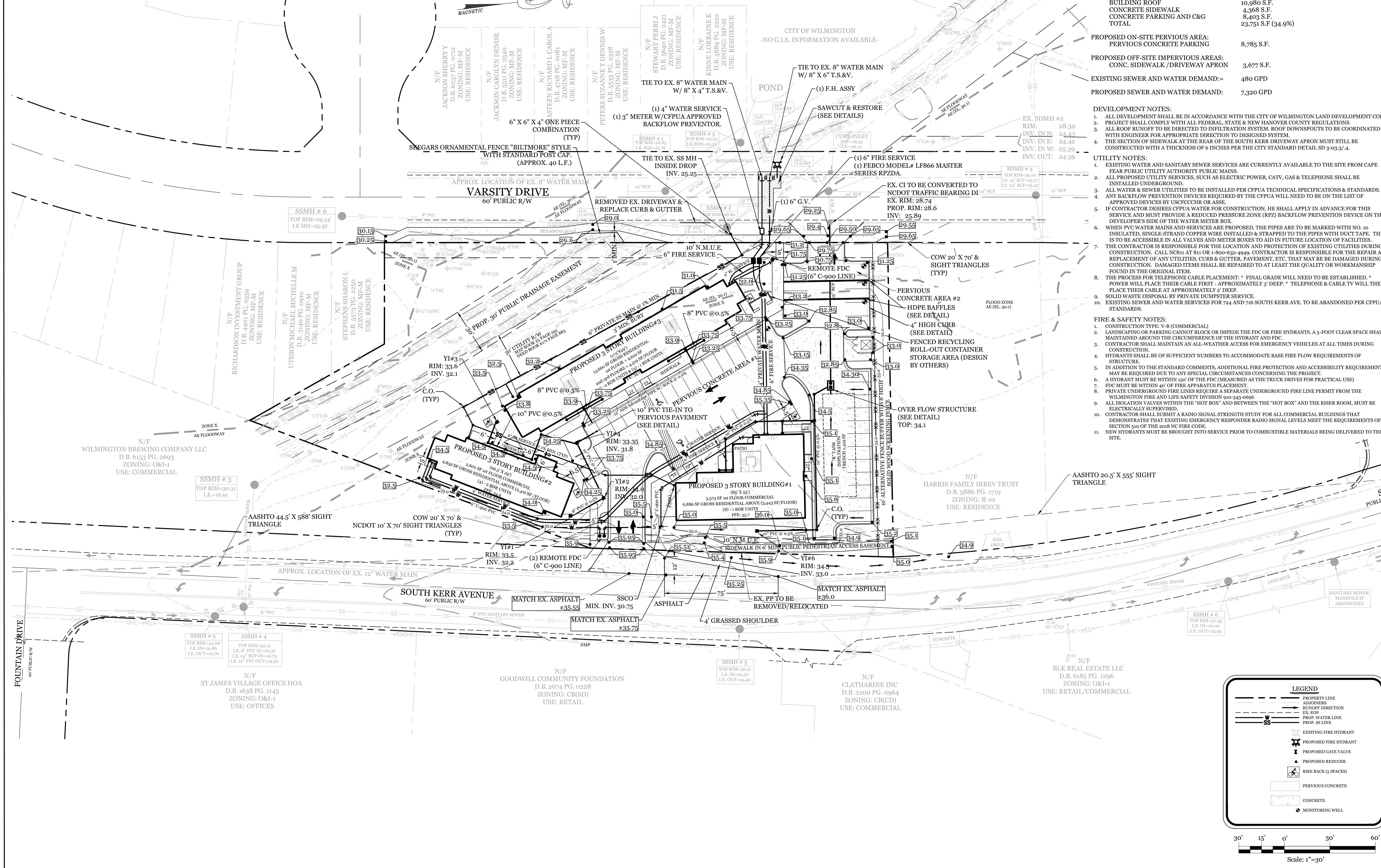


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DRAWING NUMBER: **C-2**



**LEGEND**

- PROPERTY LINE
- ADJOINERS
- RUNOFF DIRECTION
- EX. EOP
- PROP. WATER LINE
- PROP. SEW LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- PROPOSED REDUCER
- BIKE RACK (5 SPACES)
- PERVIOUS CONCRETE
- CONCRETE
- MONITORING WELL

Scale: 1" = 30'



**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning: \_\_\_\_\_

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Traffic: \_\_\_\_\_

Fire: \_\_\_\_\_

**WILMINGTON**  
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: \_\_\_\_\_ Permit #: \_\_\_\_\_

Signed: \_\_\_\_\_

- MAINTENANCE PLAN:**
- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF INCH RAINFALL.
  - ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2 INCHES OF 2-3 INCH STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT DAMS OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED, WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
  - SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION, SEDIMENT TRAP Baffles, AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
  - DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED. SWALES MUST BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY ASSOCIATED WITH A SWALE.
  - SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 FEET MAX. WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL BE 8 FEET MAX WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE IN THE SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.

- CONSTRUCTION SEQUENCE:**
- CONSTRUCTION OF SITE TO START WITH INSTALLATION OF CONSTRUCTION ENTRANCE AND SILT FENCE ALONG ALL LOCATIONS PER PLANS. UPON INSTALLATION OF SILT FENCE, TREES SHOULD BE REMOVED IN LOCATIONS AS NECESSARY. ALL SLOPED AREAS SHOULD BE SEEDED IN ACCORDANCE TO SPECIFICATIONS. SLOPE STABILIZATION IS WITHIN 21 CALENDAR DAYS OF ANY PHASE OF CONSTRUCTION. ALL OTHER AREAS MUST BE STABILIZED WITHIN 15 WORKING DAYS. CONTRACTOR TO FOLLOW NPDES STABILIZATION REQUIREMENTS PER TABLE ON THIS SHEET AS WELL. MOST STRINGENT REQUIREMENT TO BE MET.
- GENERAL CLEARING AND GRADING OF THIS SITE WILL NOT BE DONE UNTIL THE TEMPORARY SILT FENCE & CONSTRUCTION ENTRANCE HAS BEEN INSTALLED.
  - NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (1 VERTICAL TO 3 HORIZONTAL).
  - NO SEDIMENT WILL BE ALLOWED TO EXIT THE SITE. ALL EROSION SHALL BE CONTROLLED INCLUDING SIDE SLOPES DURING AND AFTER CONSTRUCTION.
  - INSTALL PRIMARY EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING BUT NOT LIMITED TO GRAVELED CONSTRUCTION ENTRANCE, SILT FENCE, TREE PROTECTION FENCE & SEDIMENT BASINS. CONTRACTOR TO BE FAMILIAR WITH USACE GENERAL PERMIT CONDITIONS FOR ROAD CROSSINGS. SPECIFIC CONSTRUCTION METHODS MAY BE REQUIRED ABOVE AND BEYOND WHAT IS SPECIFIED IN THIS PLAN. INSTALL ALL SECONDARY EROSION CONTROL MEASURES, SUCH AS INLET PROTECTION AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION.
  - ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION TO BE CLEANED WHEN HALF FULL.
  - A 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.
  - MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.
  - MORE STRINGENT MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.
  - REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.
  - PERMEABLE CONCRETE SUBGRADE MUST BE EITHER SCARIFIED, RIPPED, OR TRENCHED TO MAINTAIN THE PRE-CONSTRUCTION SUBGRADE INFILTRATION RATE.
  - GRADING FOR PERMEABLE PAVEMENT TO BE COMPLETED DURING DRY WEATHER.
  - AFTER INSTALLATION, PERMEABLE PAVEMENT SHALL BE PROTECTED FROM SEDIMENT DEPOSITION UNTIL THE SITE IS COMPLETED AND STABILIZED. AN IN-SITU INFILTRATION PERMEABILITY TEST SHALL BE CONDUCTED AND CERTIFIED ON THE PAVEMENT AFTER SITE STABILIZATION.
  - FIELD TESTING OF PERVIOUS CONCRETE SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY PAID FOR BY THE OWNER. FURTHER TESTING REQUIRED DUE TO A FAILED TEST WILL BE PAID FOR BY THE CONTRACTOR.

**SITE DATA**

PARCEL ID: R05511-001-004-002, R05511-001-001-000, R05511-001-002-000

CURRENT ZONING: O&I-1 (CD)

CAMA LAND USE CLASSIFICATION: URBAN & CONSERVATION AREA

PROJECT ADDRESS: 611 VARSITY DR, 724 & 716 SOUTH KERR AVE, WILMINGTON, NC 28403

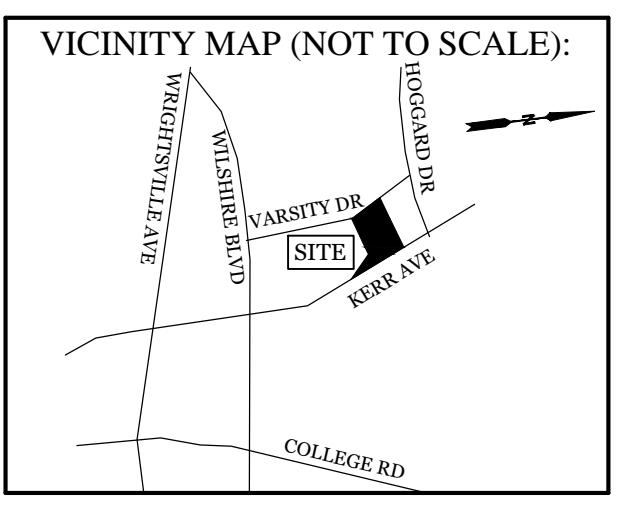
CURRENT OWNER: REAL PROPERTIES LLC  
1319 MILITARY CUTOFF RD SUITECC  
WILMINGTON, NC 28405

TOTAL ACREAGE IN PROJECT BOUNDARY: 68.115 S.F. (± 1.56 ac)

TOTAL DISTURBED AREA: ± 1.3 ac

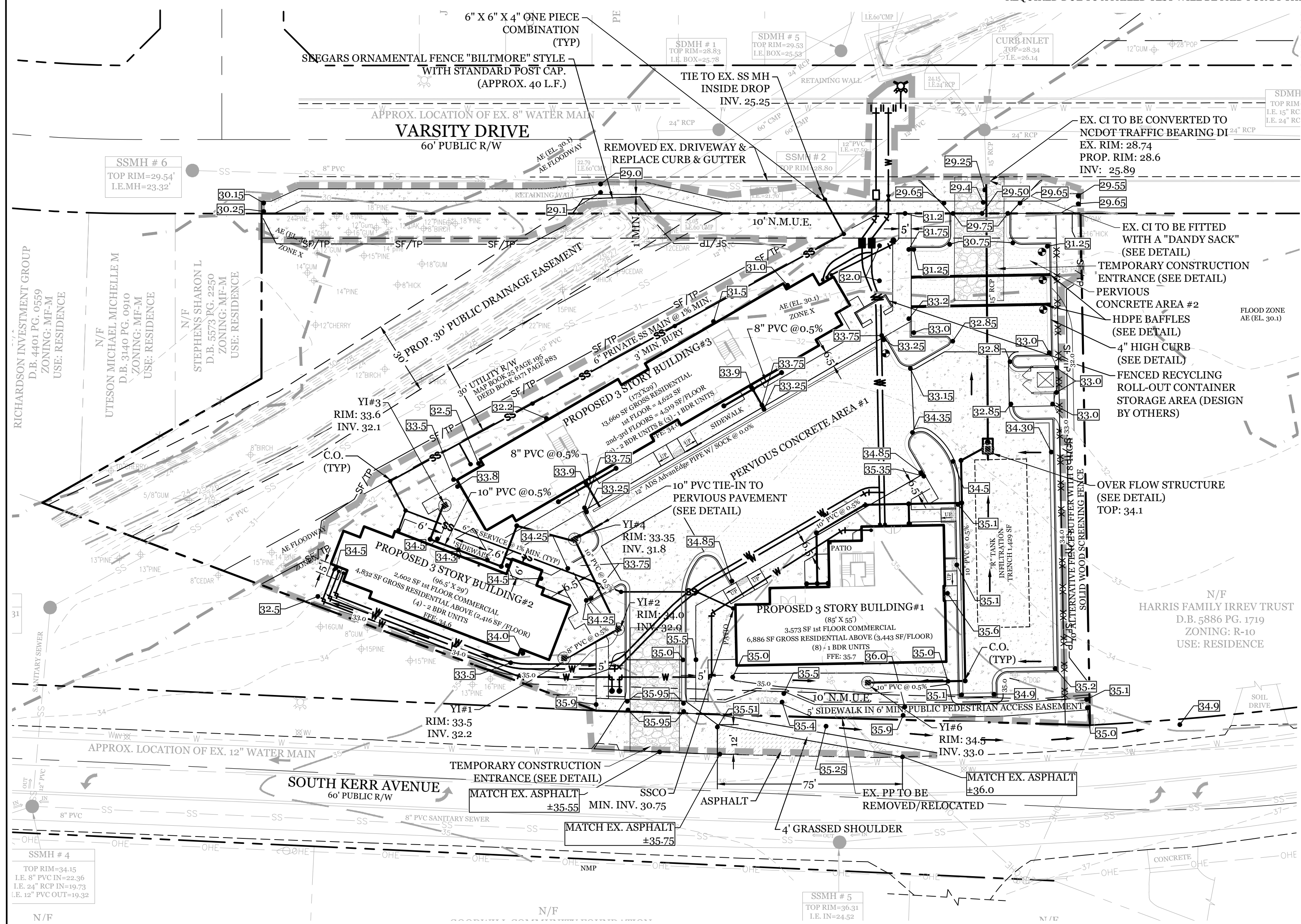
**DEVELOPMENT NOTES:**

- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
- PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE & NEW HANOVER COUNTY REGULATIONS.
- ALL ROOF DRAINS TO BE PIPED DIRECTLY INTO PERVIOUS CONCRETE BASE.



**REVISIONS**

NO.	DATE	DESCRIPTION



**NORTH CAROLINA TEMPORARY GRASSING DETAIL**

SEEDING MIXTURE SPECIES	APPLICATION RATE
<b>LATE WINTER &amp; EARLY SPRING:</b> Rye (grain) Annual Lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains) Omit annual Lespedeza when duration of temporary cover is not to extend beyond June	100 (lb/acre) 50 (lb/acre)
<b>SUMMER:</b> German Millet In the Piedmont and Mountains, a small-stemmed sudangrass may be substituted at a rate of 50 (lb/acre)	40 (lb/acre)
<b>FALL:</b> Rye (grain)	120 (lb/acre)

**SEEDING DATES**

**LATE WINTER & EARLY SPRING:**  
Mountains - Above 2500 ft. Feb. 15-May 15  
Piedmont - Jan. 1-May 1  
Coastal Plain - Dec. 1-Apr. 15

**SUMMER:**  
Mountains - May 15-Aug. 15  
Piedmont - May 1-Aug. 15  
Coastal Plain - Apr. 15-Aug. 15

**FALL:**  
Mountains - Aug. 15-Dec. 15  
Coastal Plain and Piedmont - Aug. 15-Dec. 30

**SOIL AMENDMENTS:**  
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

**MULCH:**  
apply 4,000 lb/acre straw, anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**MAINTENANCE:**  
Re-fertilize if growth is not fully adequate, reseed, re-fertilize and mulch immediately following erosion or other damage.

**NORTH CAROLINA PERMANENT GRASSING DETAIL**

SEEDING MIXTURE SPECIES	APPLICATION RATE
<b>FALL &amp; WINTER:</b> Tall Fescue (two or three improved varieties) Rye (grain)	200 (lb/acre) 25 (lb/acre)
<b>SPRING &amp; SUMMER:</b> Pensacola Bahiagrass Sericea Lespedeza Common Bermudagrass German Millet Tall Fescue	50 (lb/acre) 30 (lb/acre) 10 (lb/acre) 10 (lb/acre) 50 (lb/acre)

**SEEDING DATES**

**FALL & WINTER:**  
January - April  
August - December

**SOIL AMENDMENTS:**  
Apply lime and fertilizer according to soil tests, or apply 3,000-5,000 lb/acre ground agricultural limestone (use the lower rate on sandy soils) and 1,000 lb/acre 10-10-10 fertilizer.

**MAINTENANCE:**  
Fertilize according to soil tests or apply 40 lb/acre nitrogen in January or February, 40 lb in September and 60 lb in November, from a 12-4-8, 16-4-8, or similar turf fertilizer. Avoid fertilizer applications during warm weather, as this increases stand losses to disease. Reseed, fertilize, and mulch damaged areas immediately, mow to a height of 2.5-3.5 inches as needed.

**SPRING & SUMMER:**  
April 1 - July 15

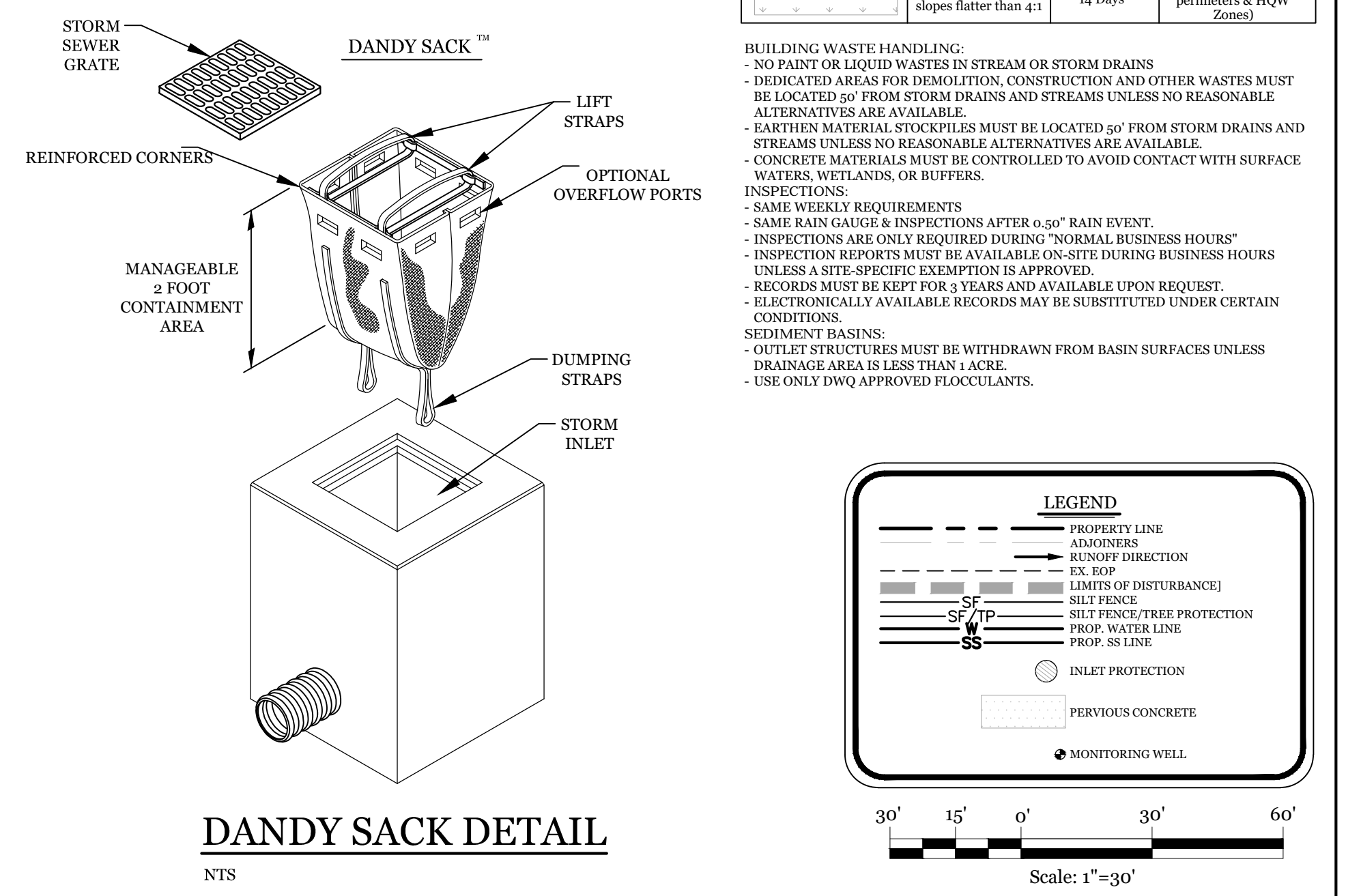
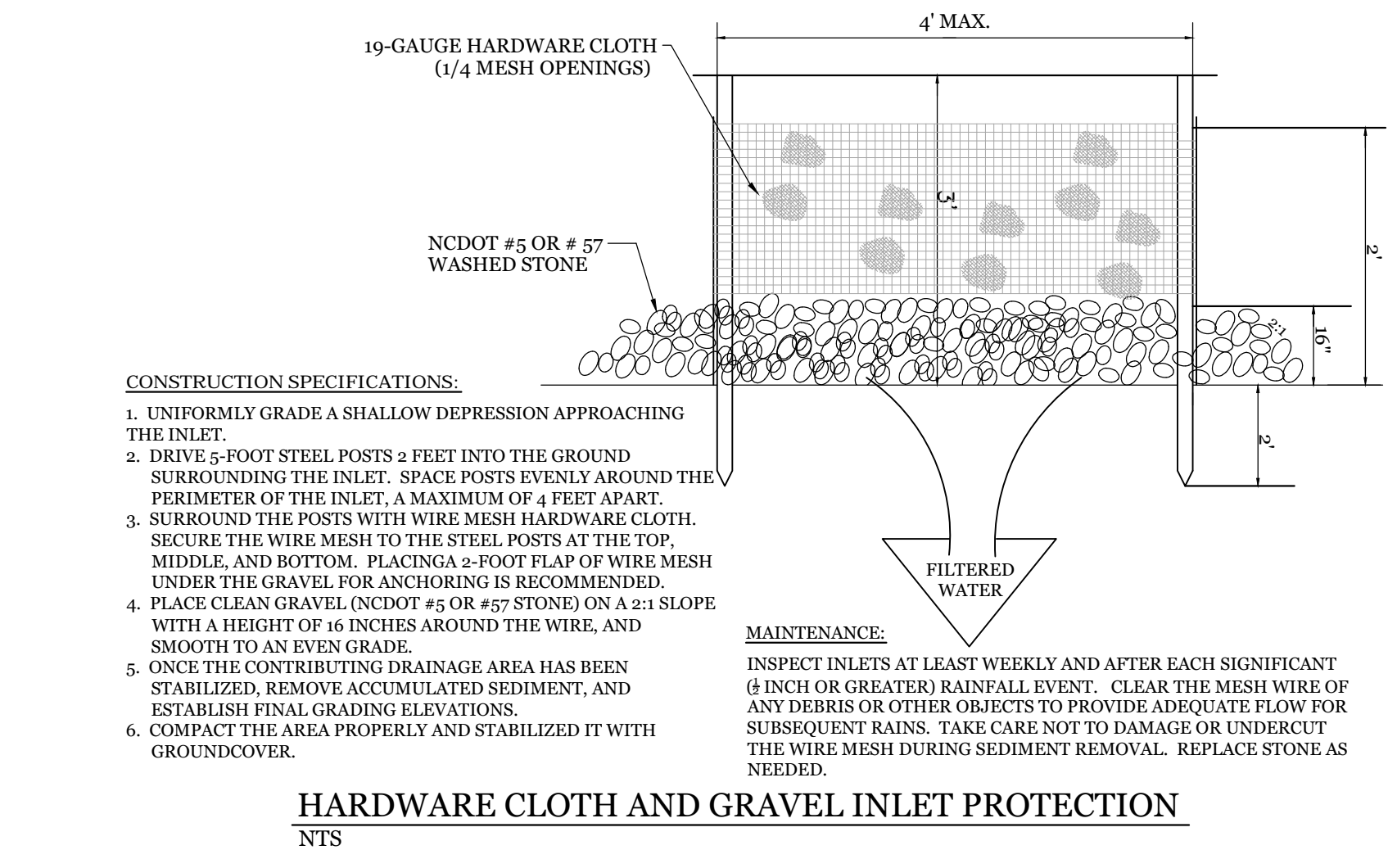
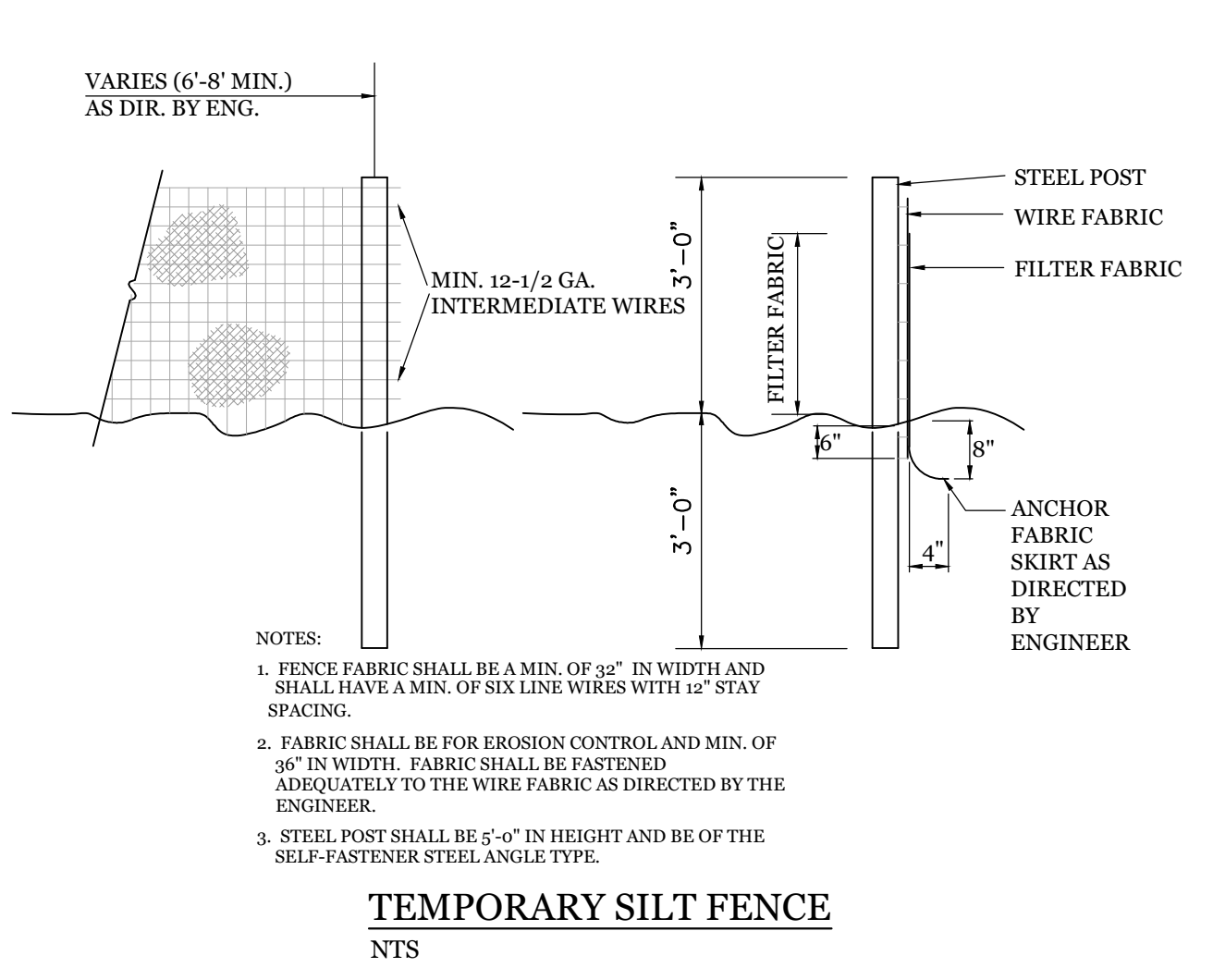
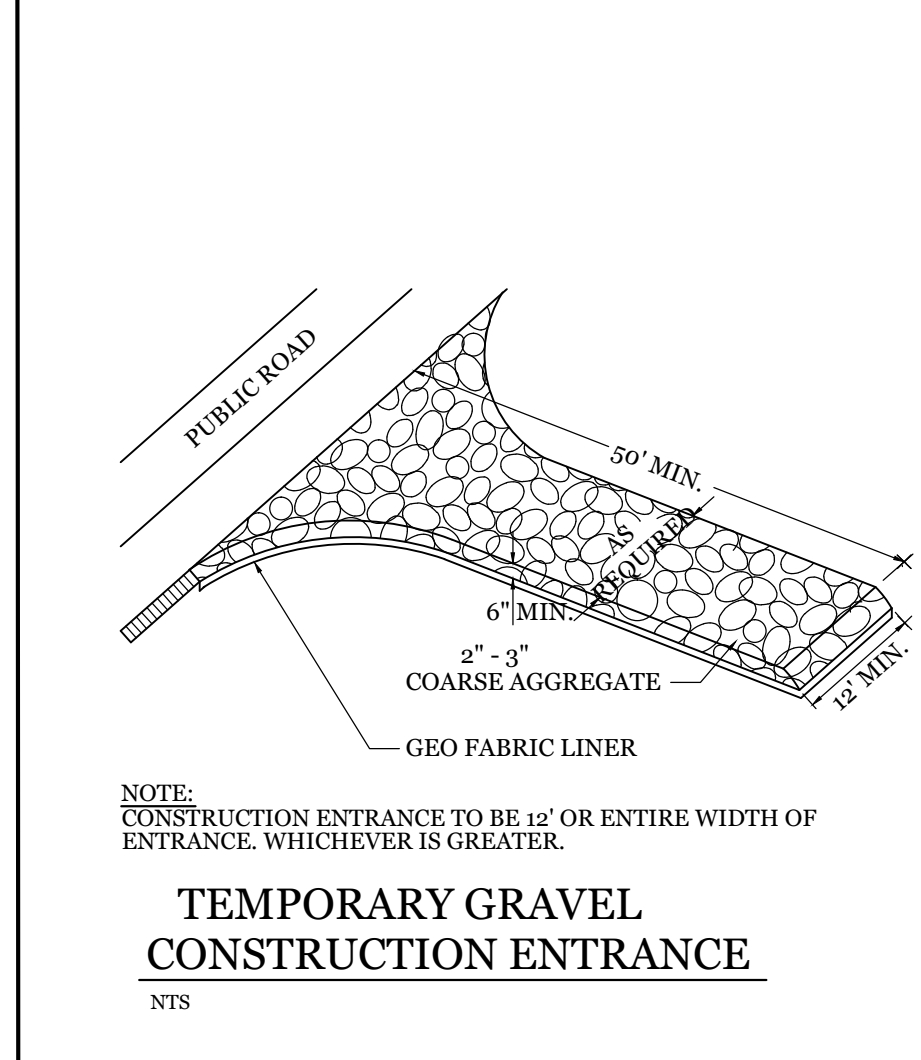
**SOIL AMENDMENTS:**  
Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agriculture limestone and 500 lb/acre 10-10-10 fertilizer.

**MAINTENANCE:**  
Re-fertilize following April with 50 lb/acre nitrogen. Repeat as growth requires, may be mowed only once a year. Where a neat appearance is desired, omit sericea and mow as often as needed.

**MULCH:**  
apply 4,000 lb/acre straw, anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**INTRACOASTAL ENGINEERING, PLLC**

5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charlie@intracoastalengineering.com  
License Number: P-0662

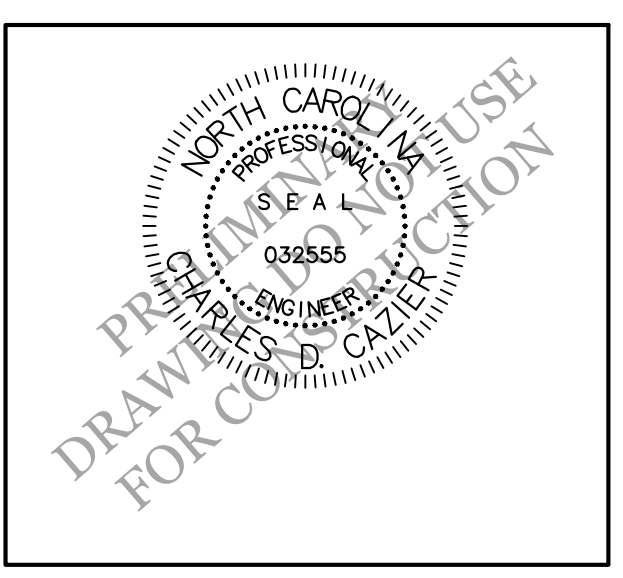


**SEDIMENTATION & EROSION CONTROL PLAN**

FOR

**THE VARSITY**

611 VARSITY DR, 724 & 716 SOUTH KERR AVE.  
CITY OF WILMINGTON  
NEW HANOVER COUNTY, NC



**CLIENT INFORMATION:**

Real Properties, LLC.  
Matt Scharf  
1319-CC Military Cutoff Rd #172  
Wilmington, NC 28405  
Ph. 910-538-9901

**DRAWN:** JAE **SHEET SIZE:** 24x36

**CHECKED:** CDC **DATE:** 7/23/2020

**APPROVED:** CDC **SCALE:** 1" = 30'

**PROJECT NUMBER:** 2019-021

**DRAWING NUMBER:** C-3

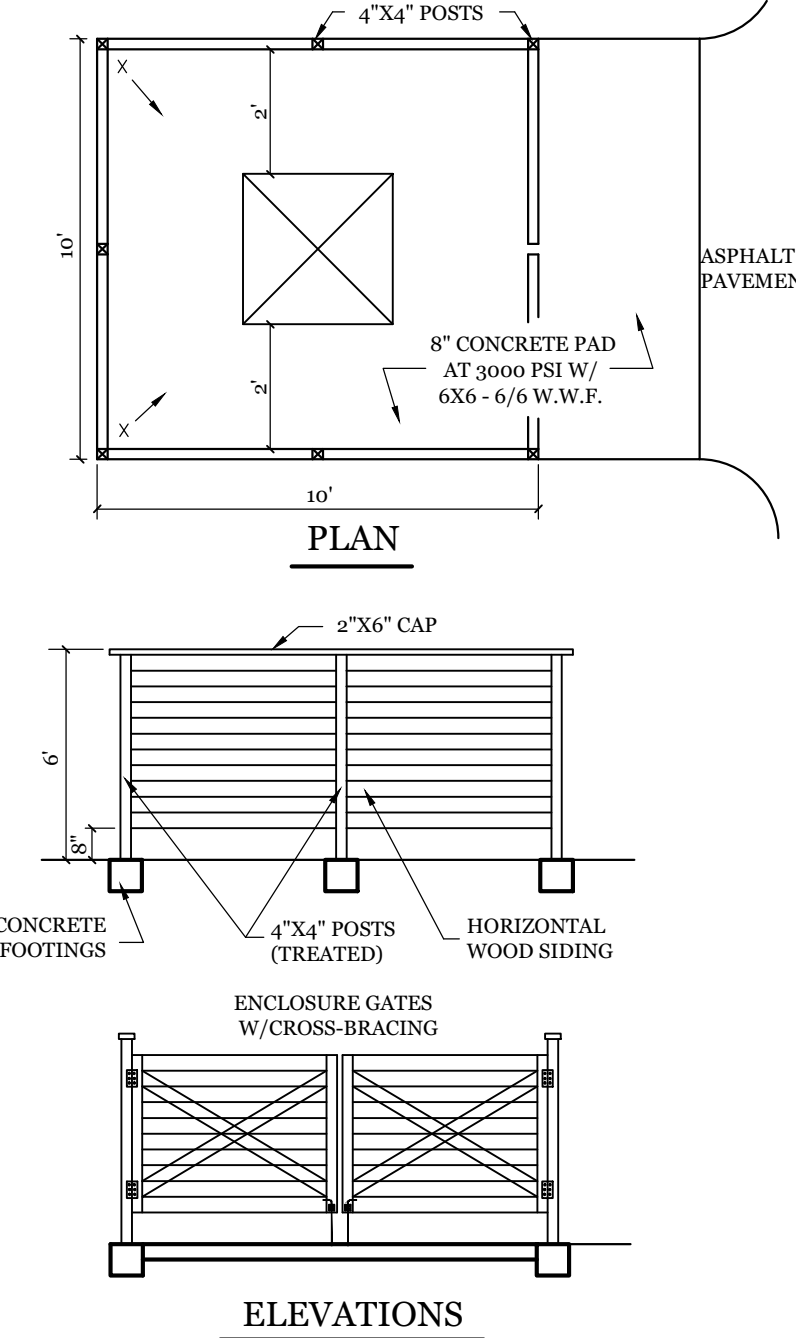
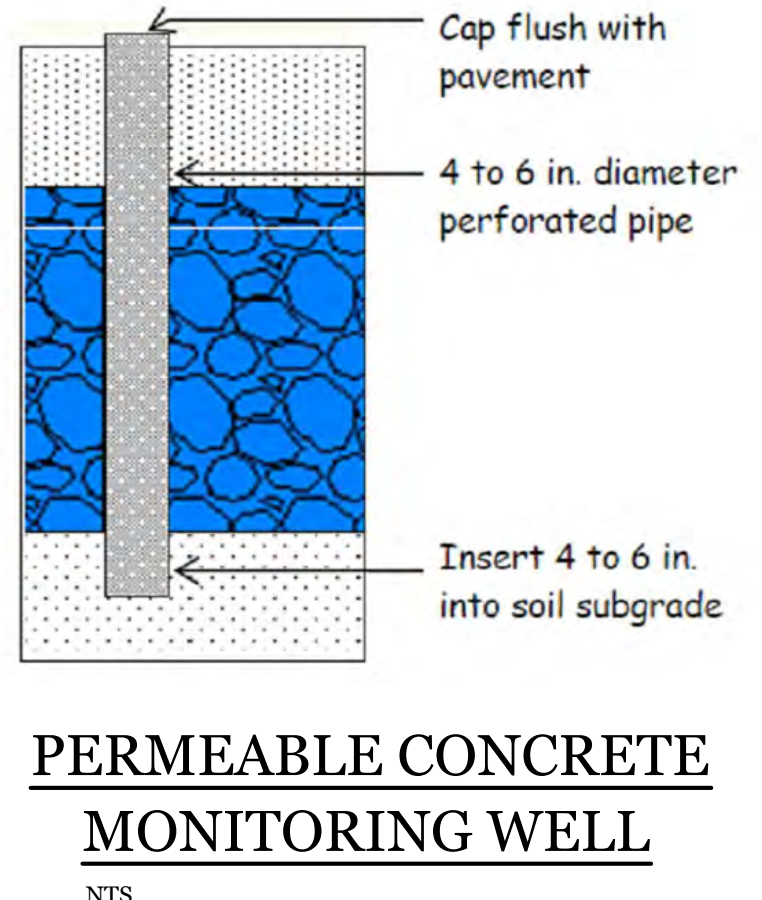
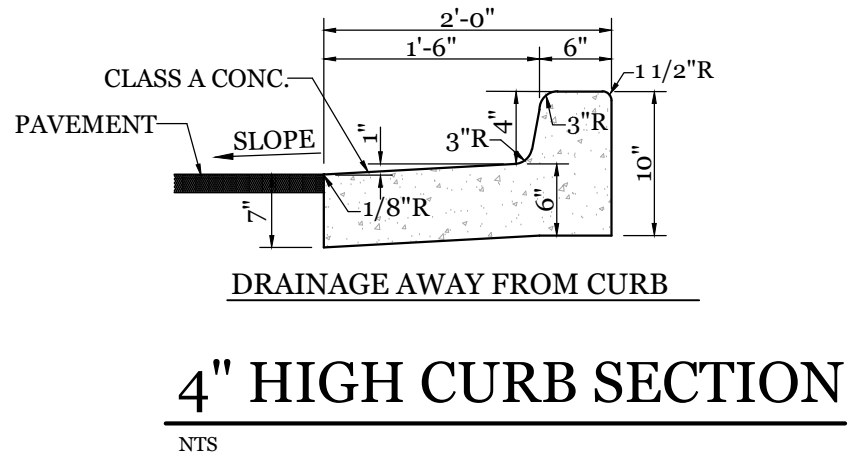
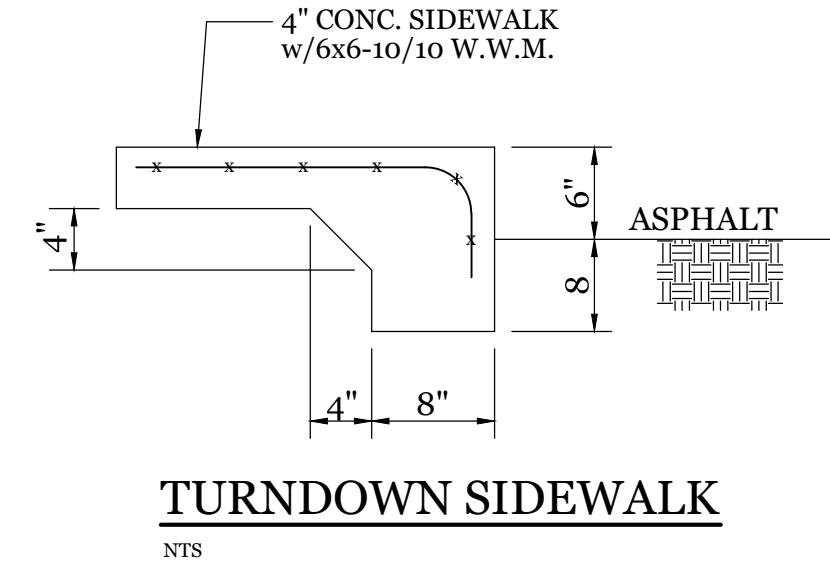
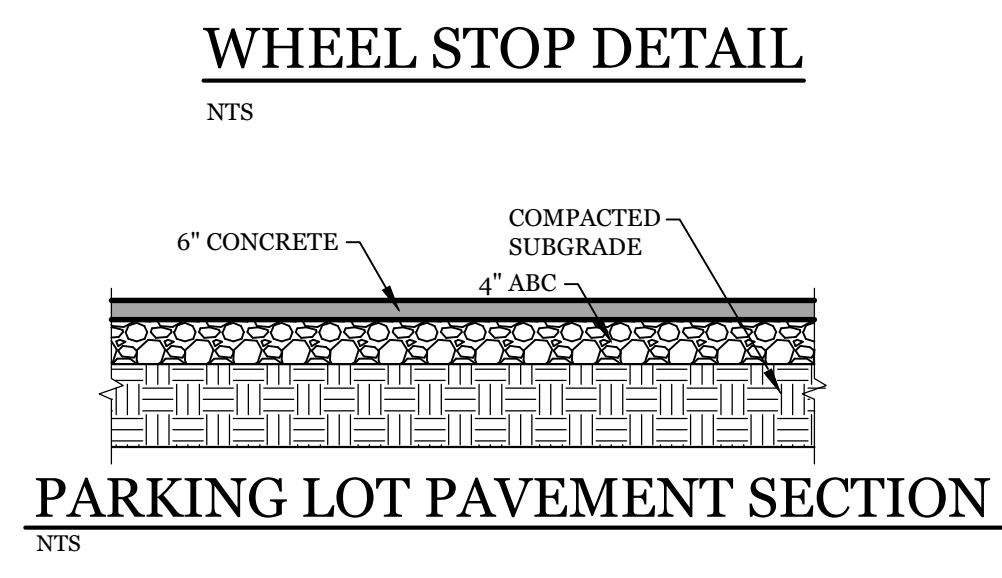
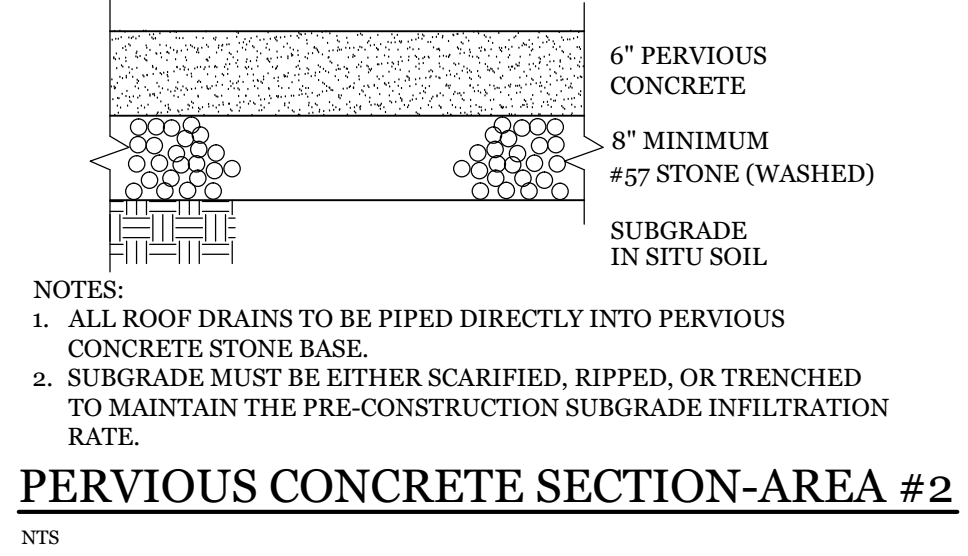
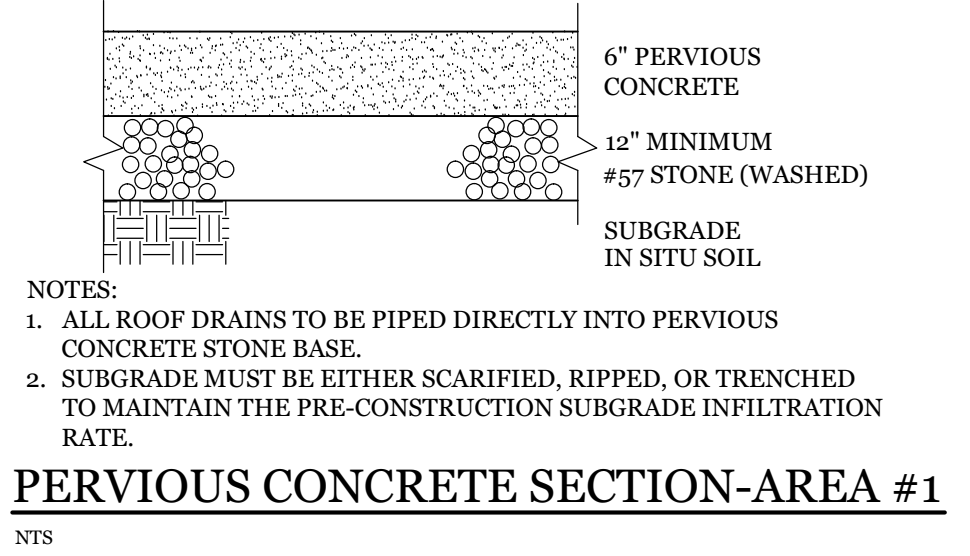
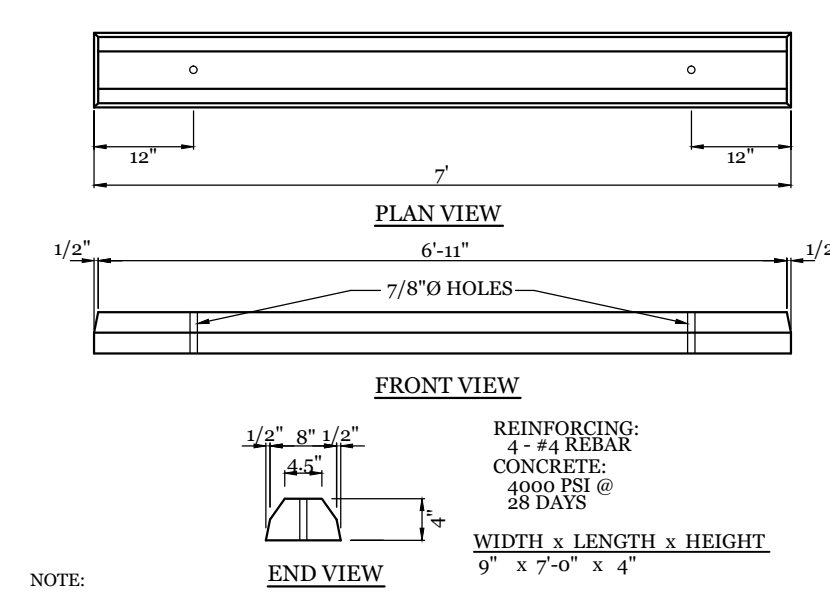
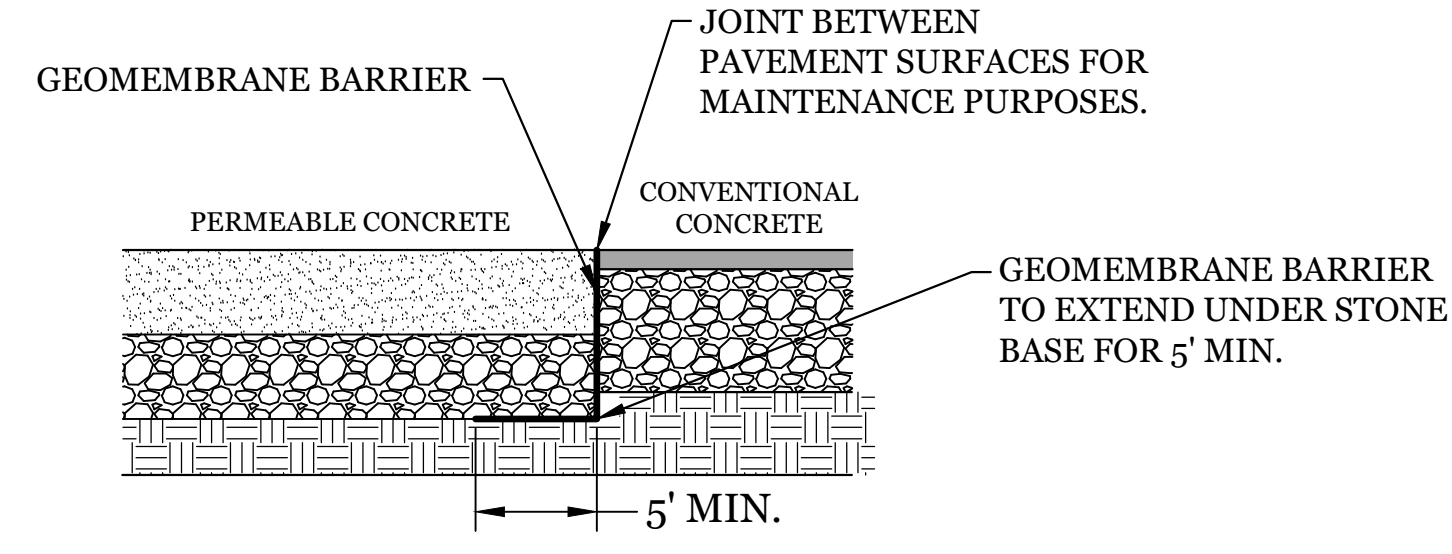
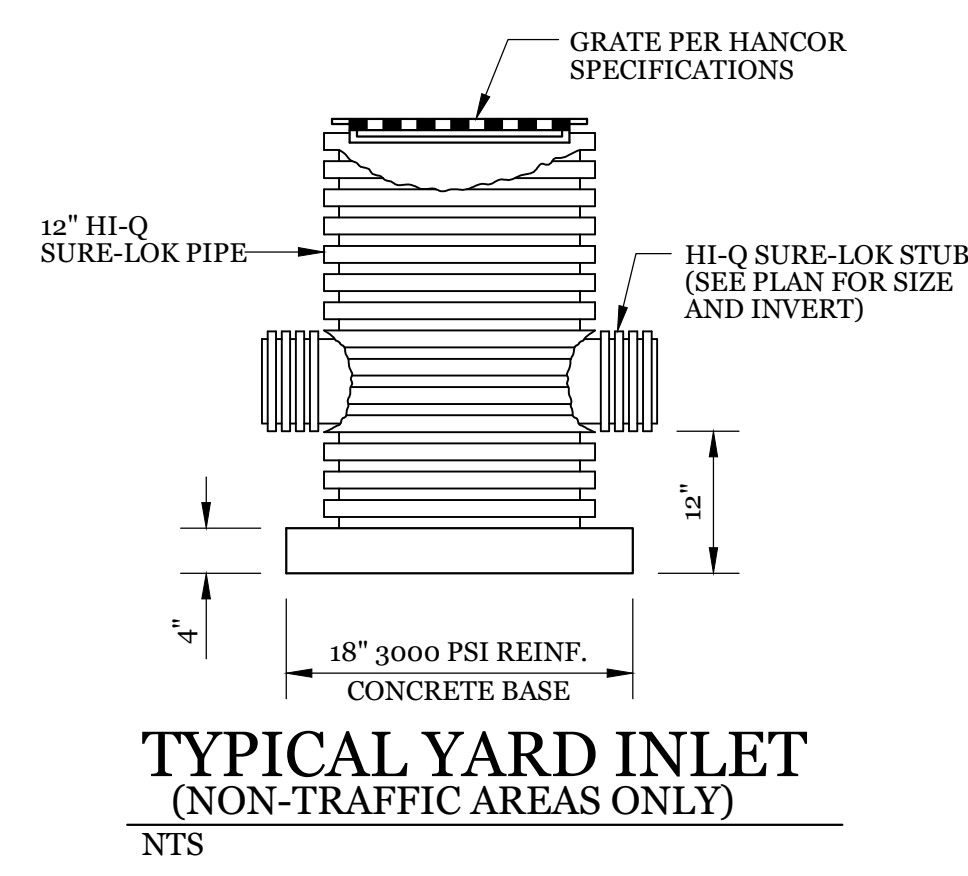
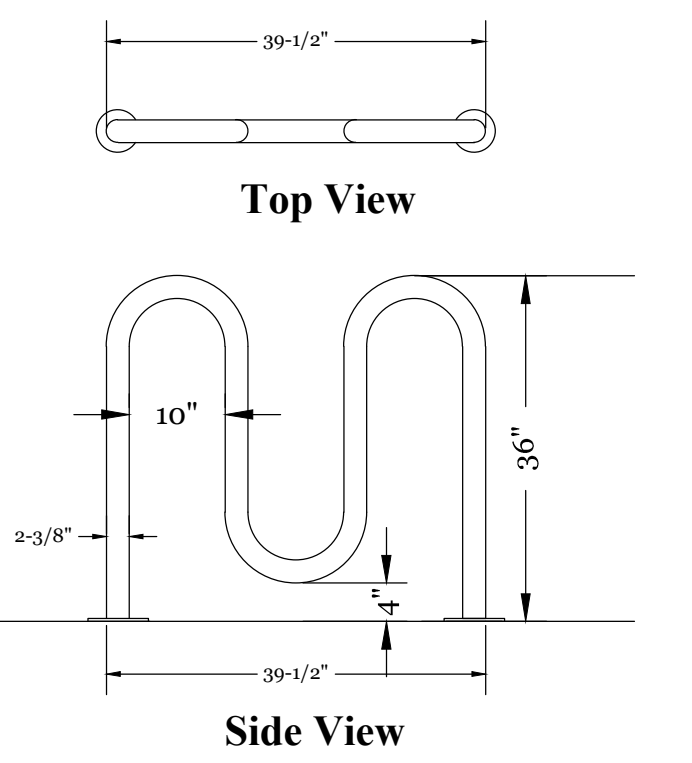
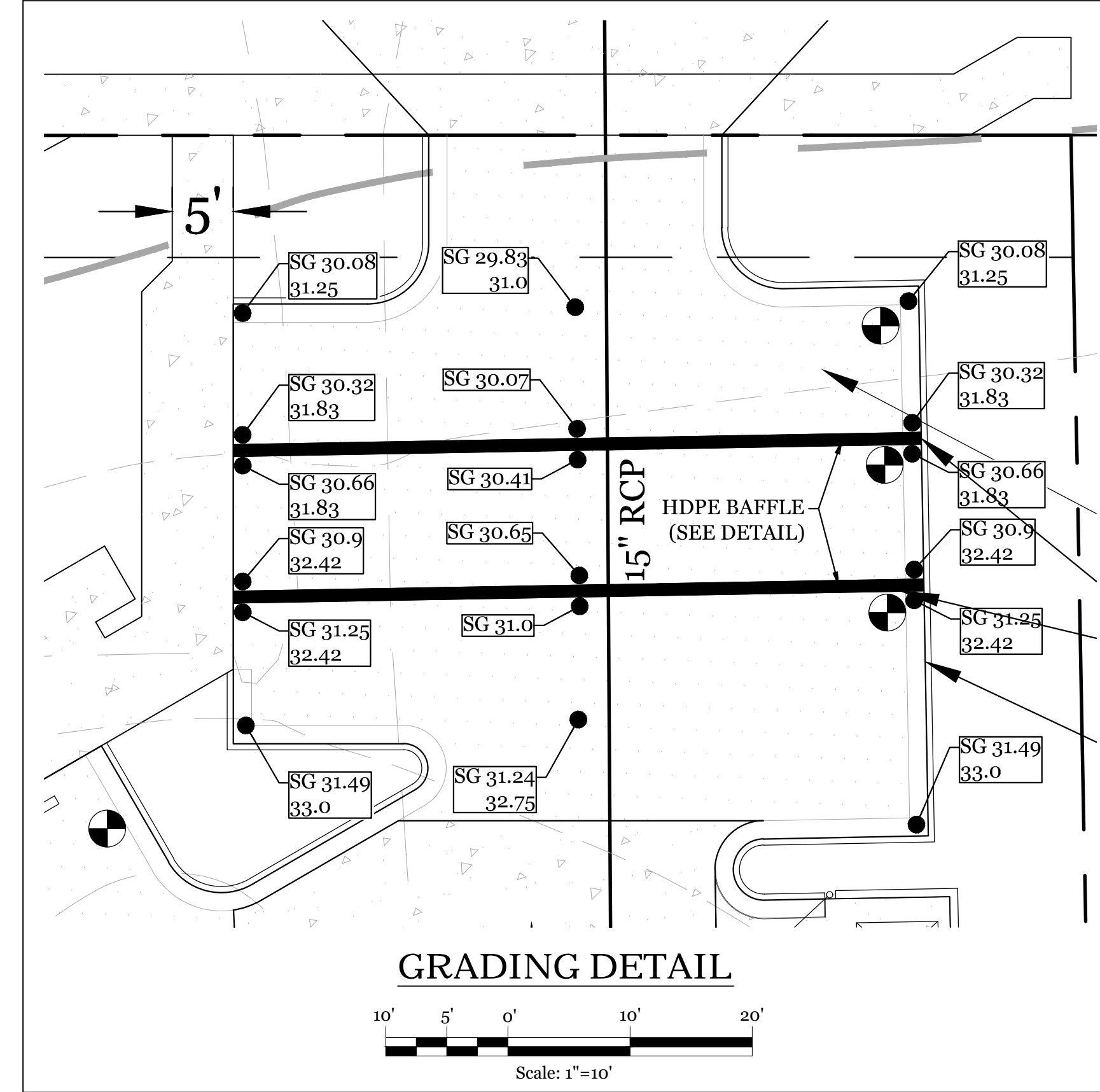
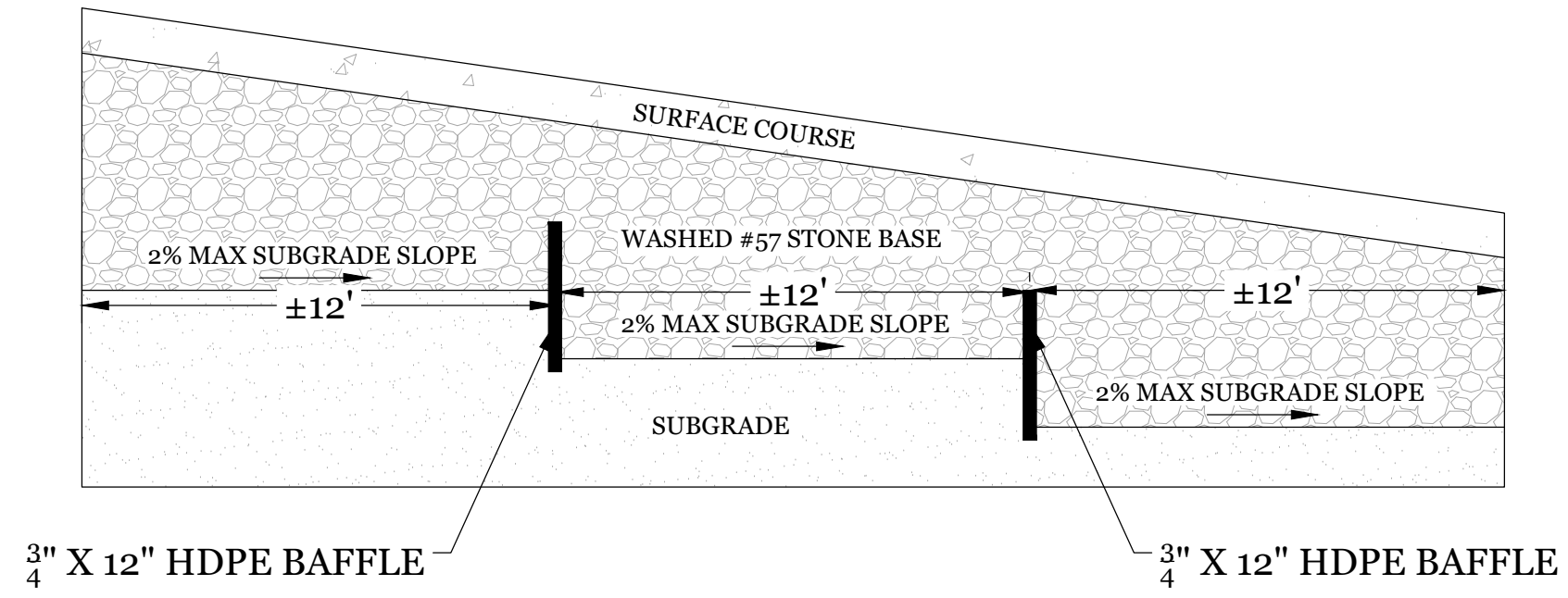
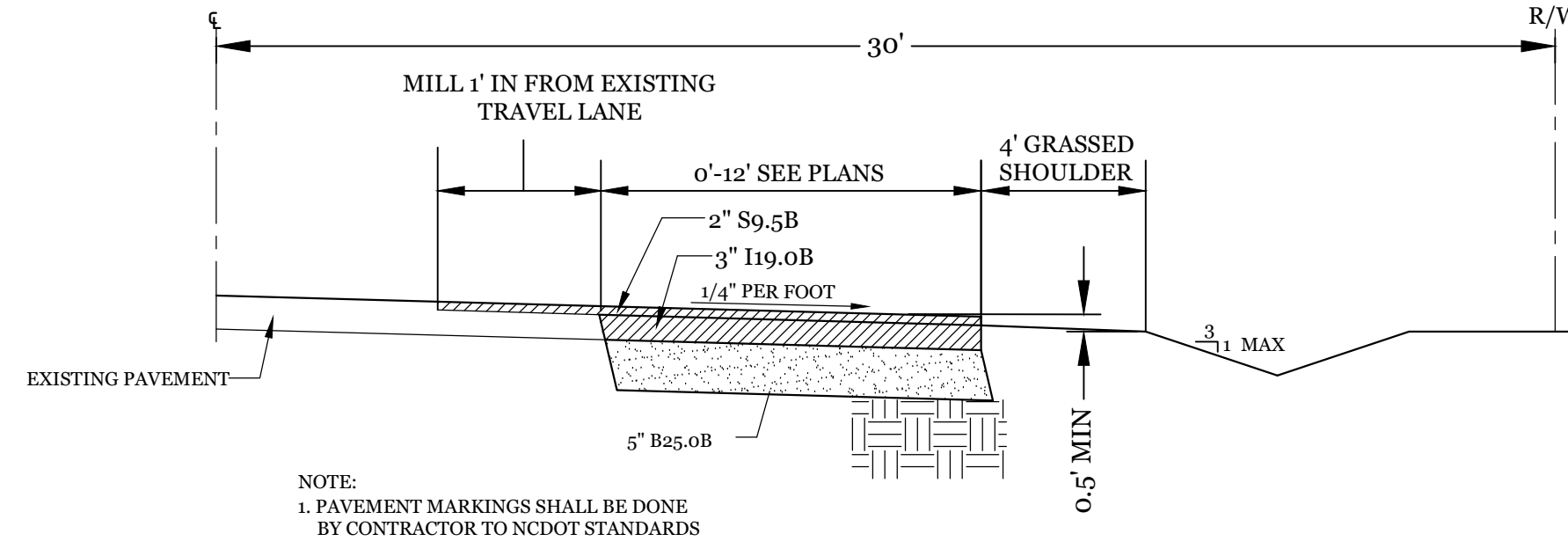
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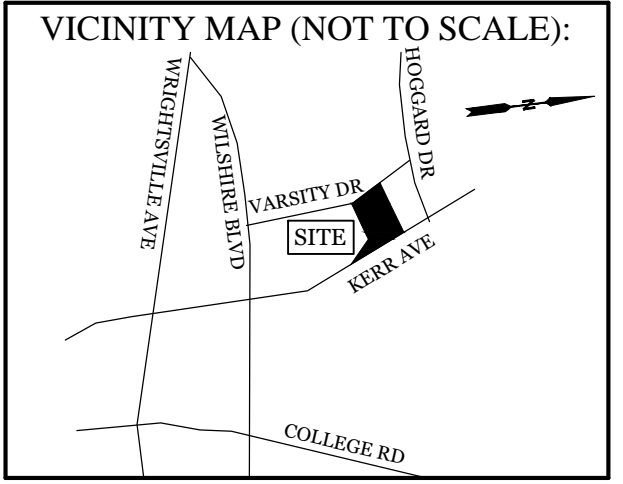
**Approved Construction Plan**  
Name \_\_\_\_\_ Date \_\_\_\_\_

Planning \_\_\_\_\_  
Public Utilities \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

**WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
**APPROVED STORMWATER MANAGEMENT PLAN**  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_



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



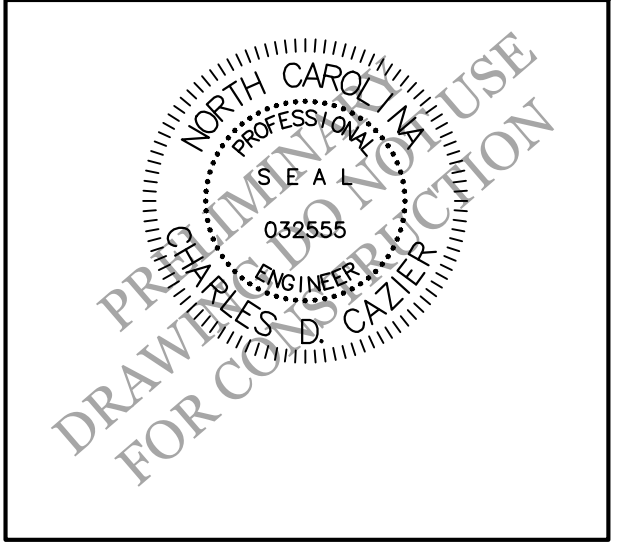
**REVISIONS**

NO.	DATE	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**  
5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charlie@intracoastalengineering.com  
License Number: P-0662

**DETAILS FOR THE VARSITY CITY OF WILMINGTON NEW HANOVER COUNTY, NC**

611 VARSITY DR, 724 & 716 SOUTH KERR AVE.

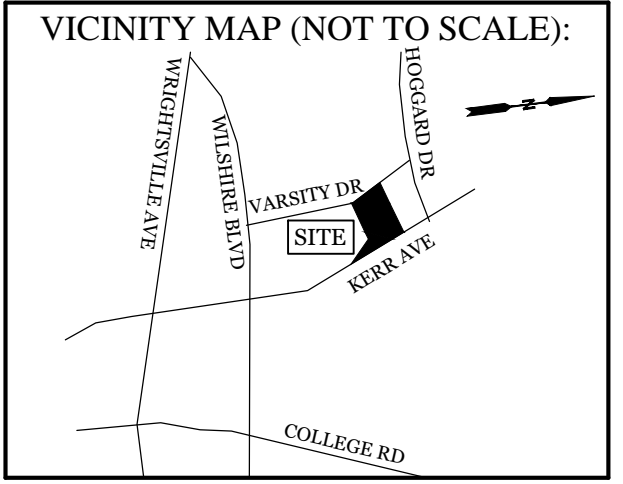
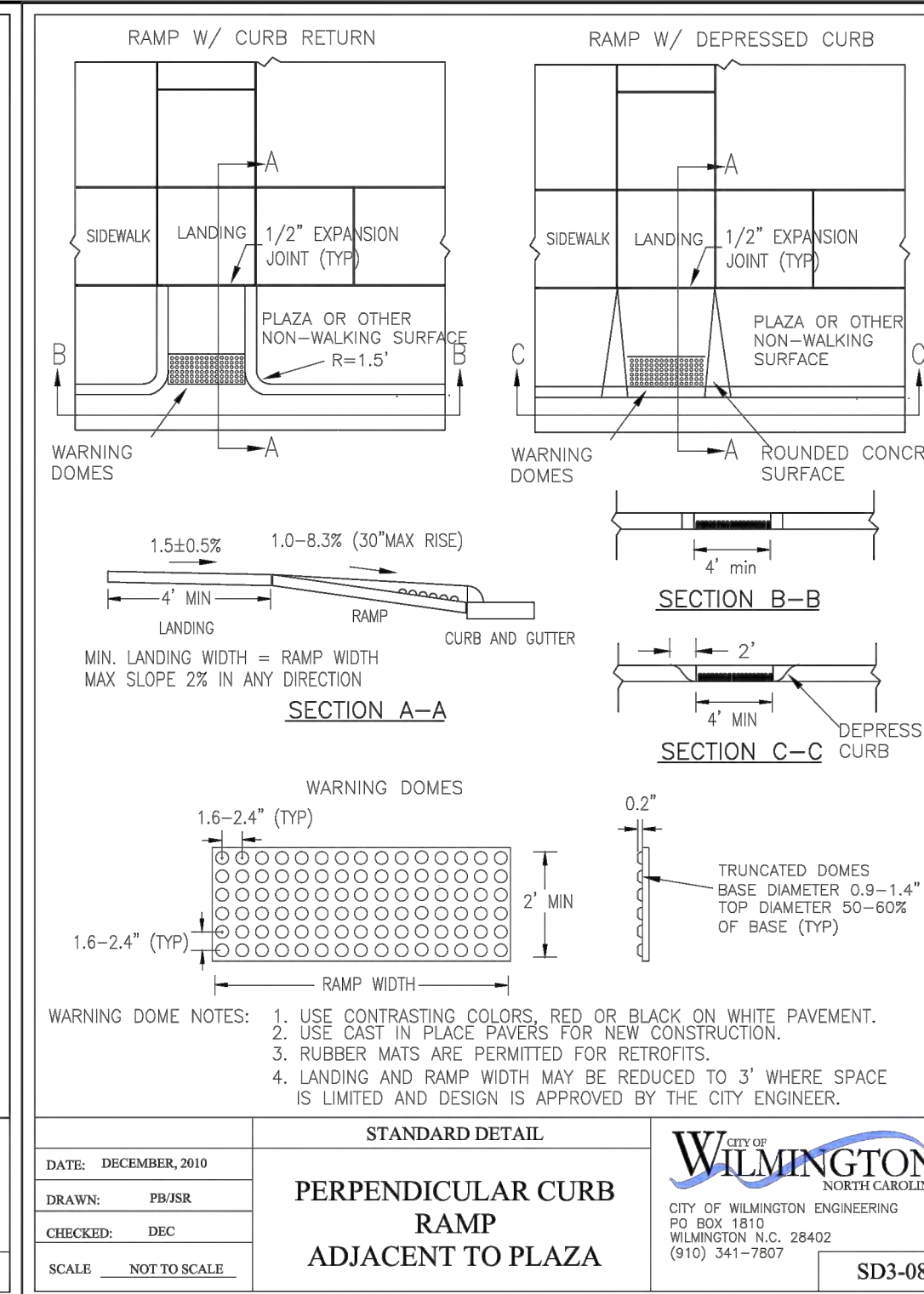
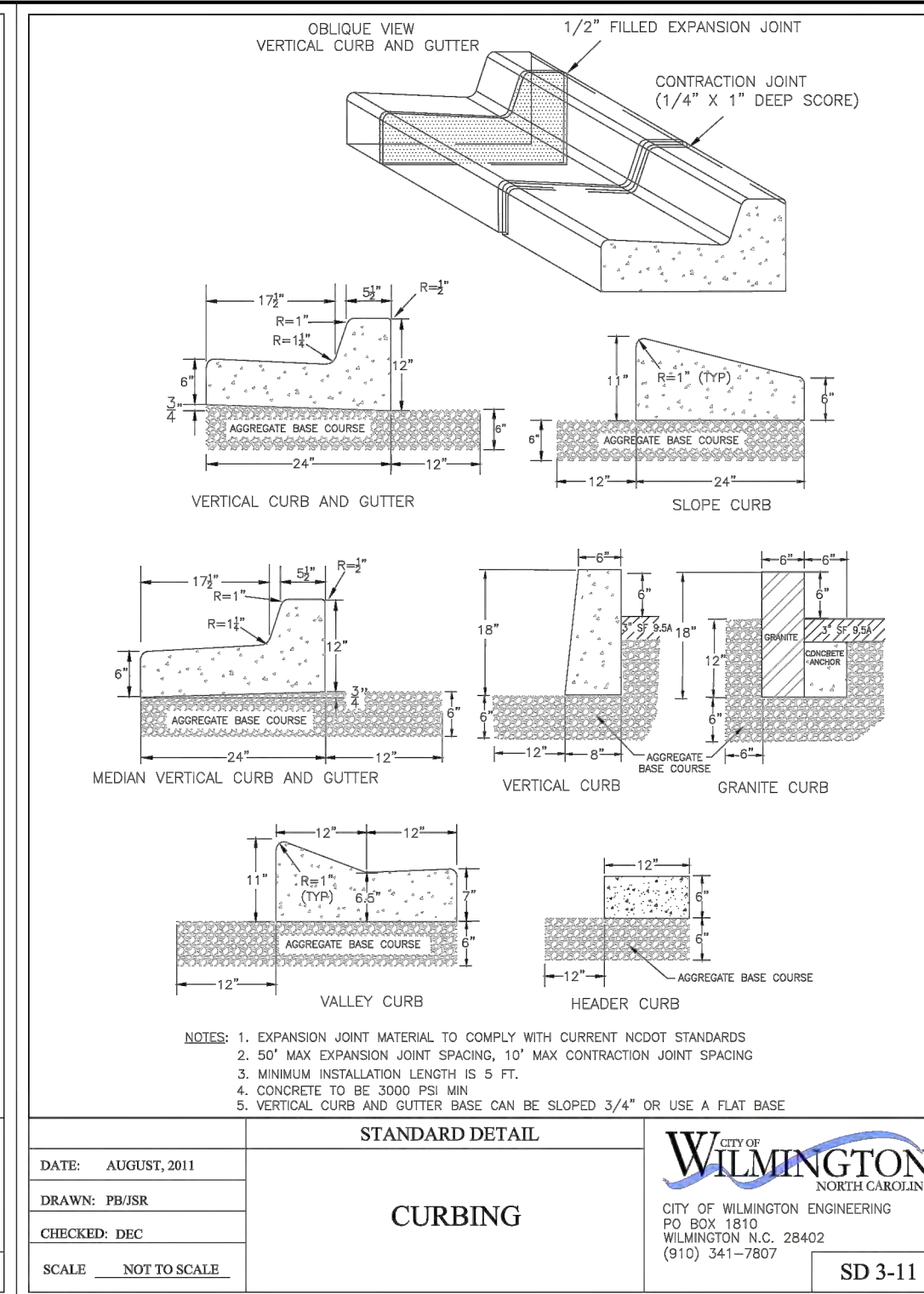
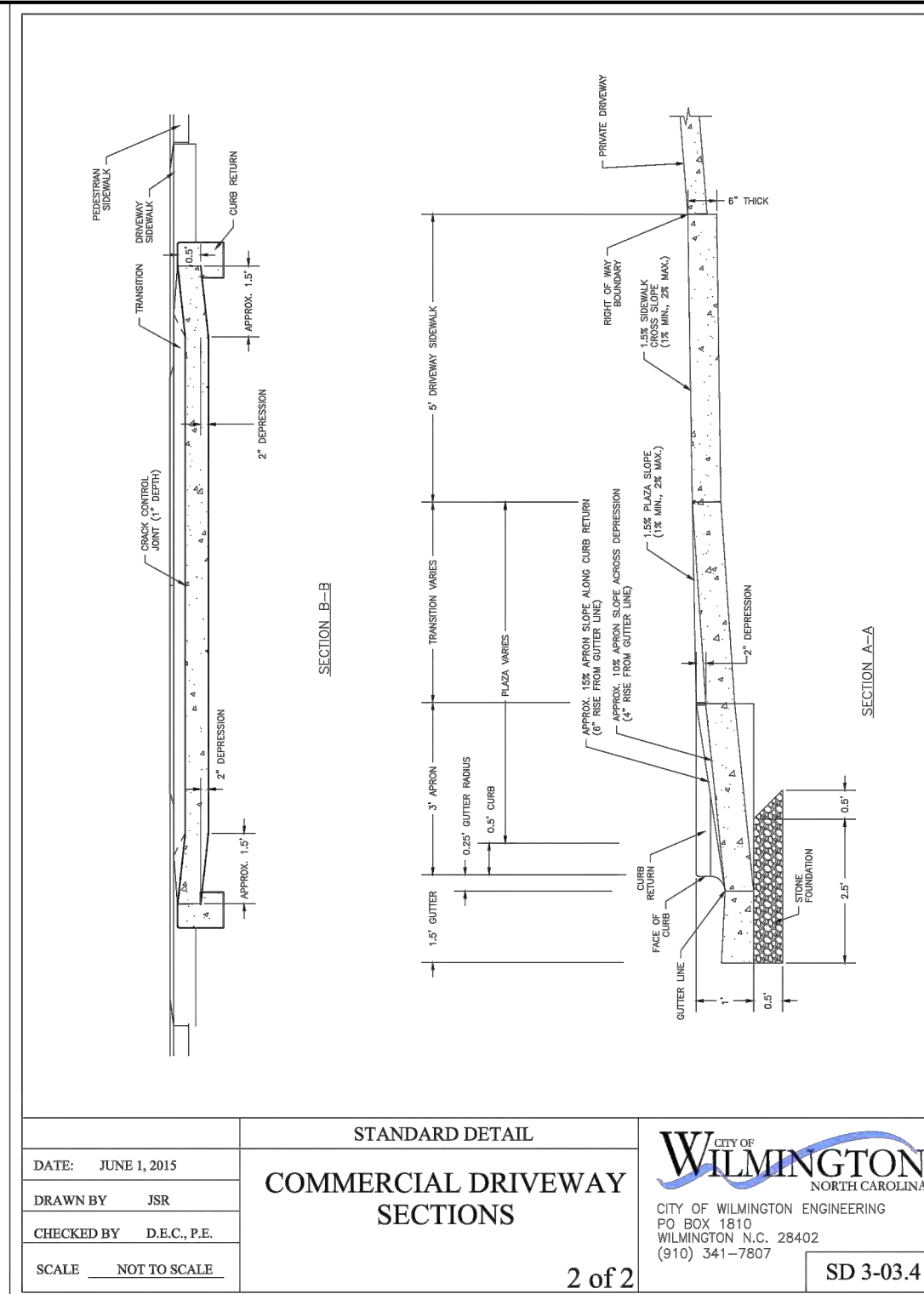
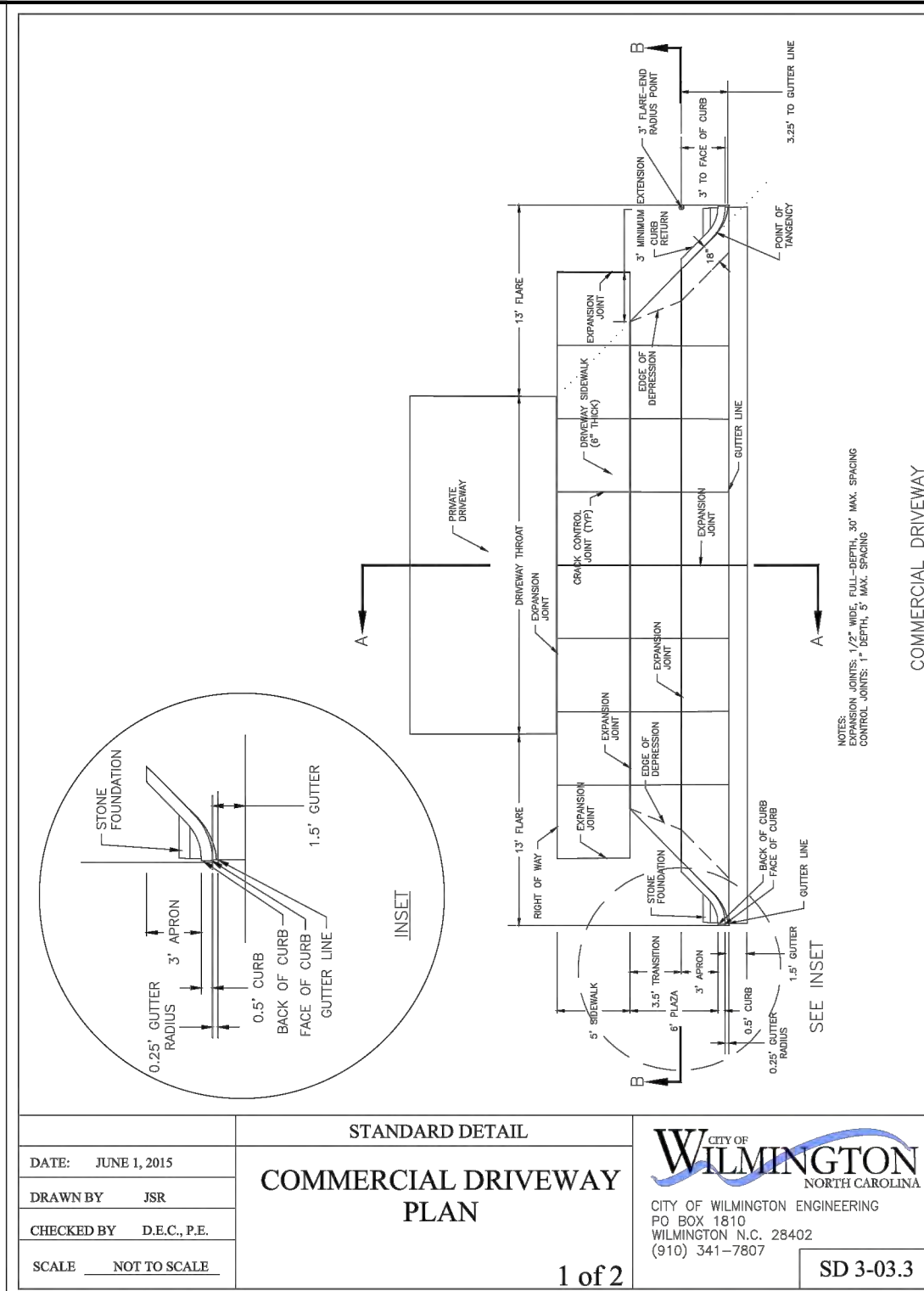
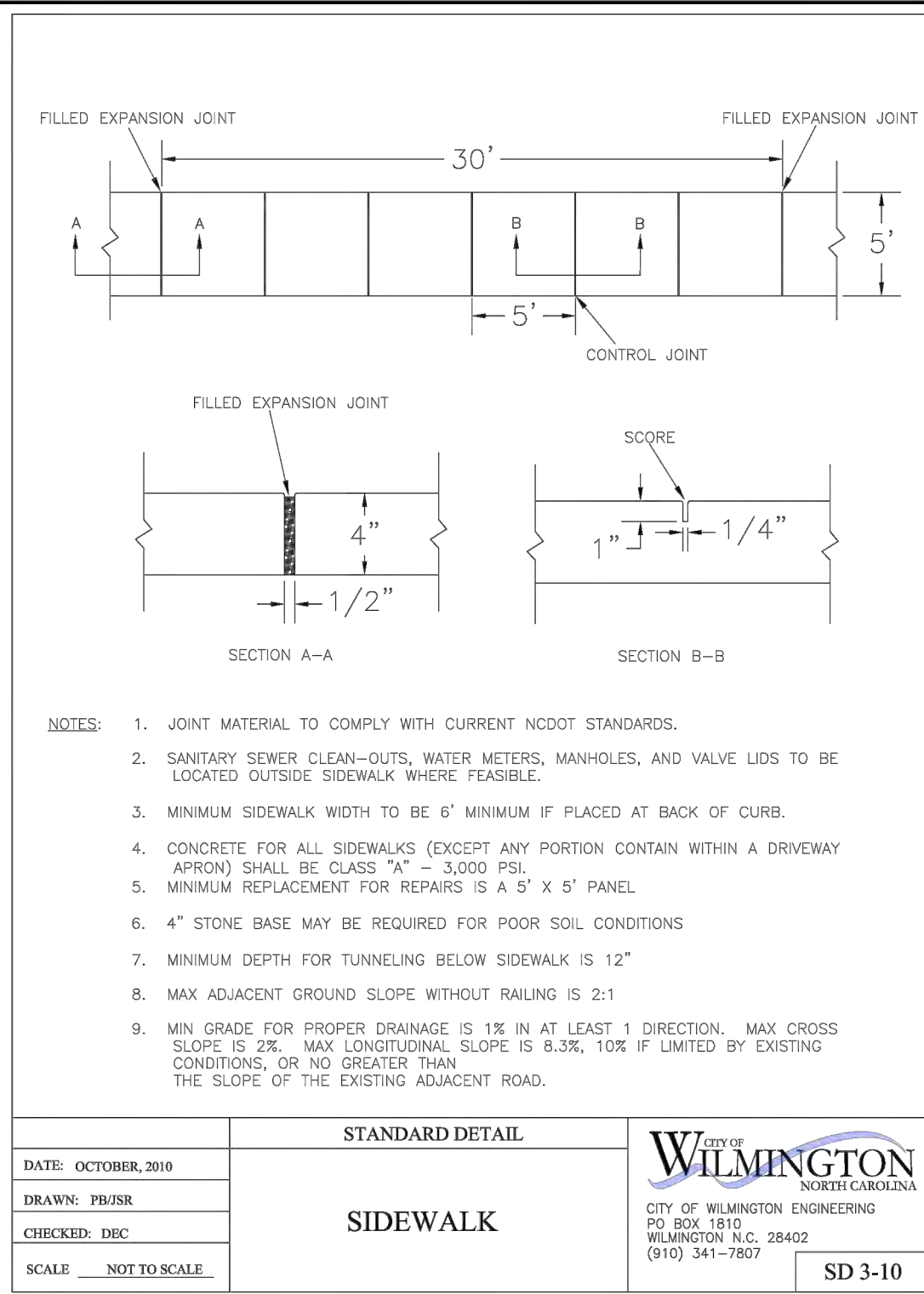


**CLIENT INFORMATION:**  
Real Properties, LLC.  
Matt Scharf  
1319-CC Military Cutoff Rd #172  
Wilmington, NC 28405  
Ph. 910-538-9901

DRAWN: JAE	SHEET SIZE: 24x36
CHECKED: CDC	DATE: 7/23/2020
APPROVED: CDC	SCALE: NTS
PROJECT NUMBER: 2019-021	

DRAWING NUMBER: **C-4**  
5 OF 8

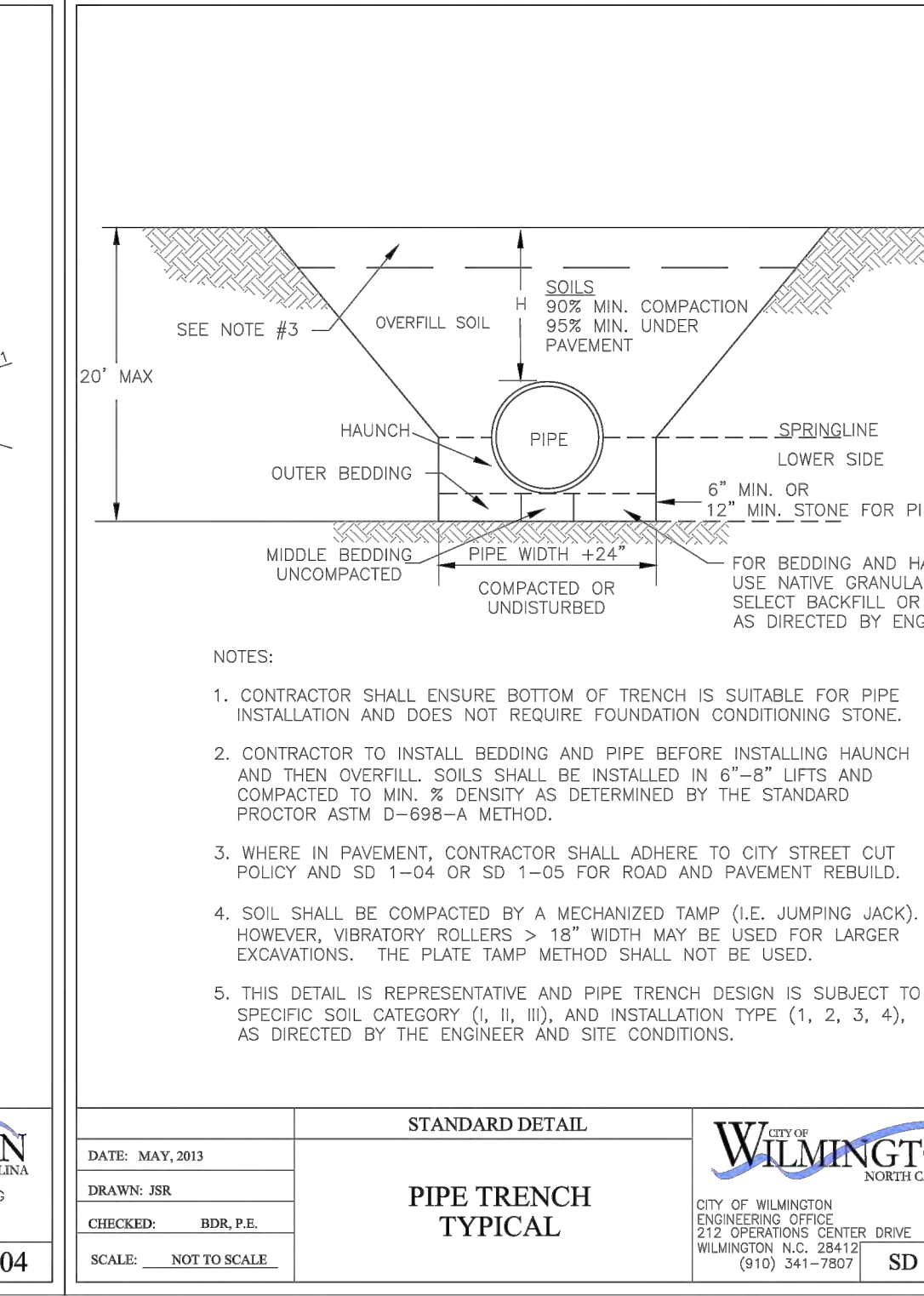
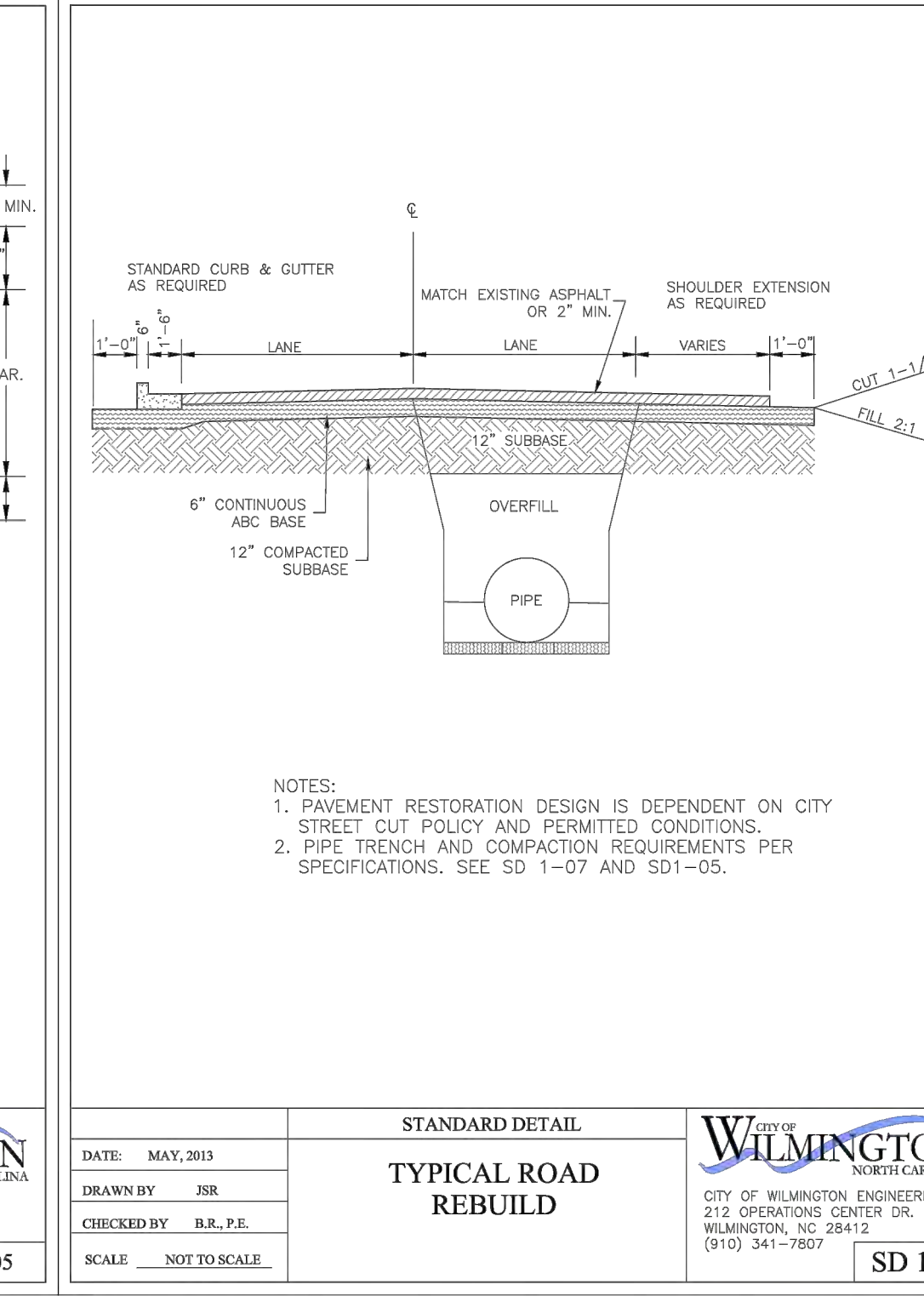
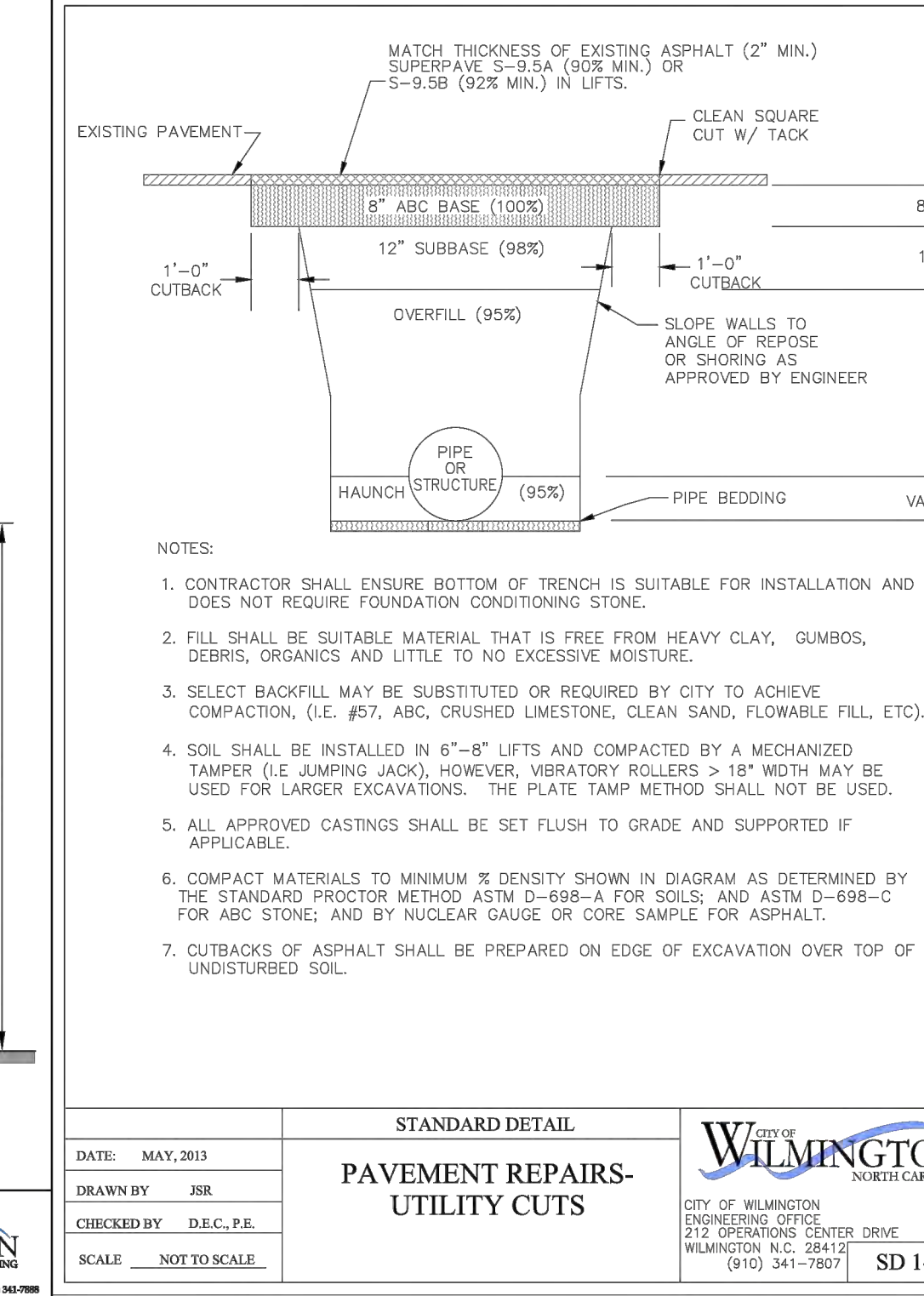
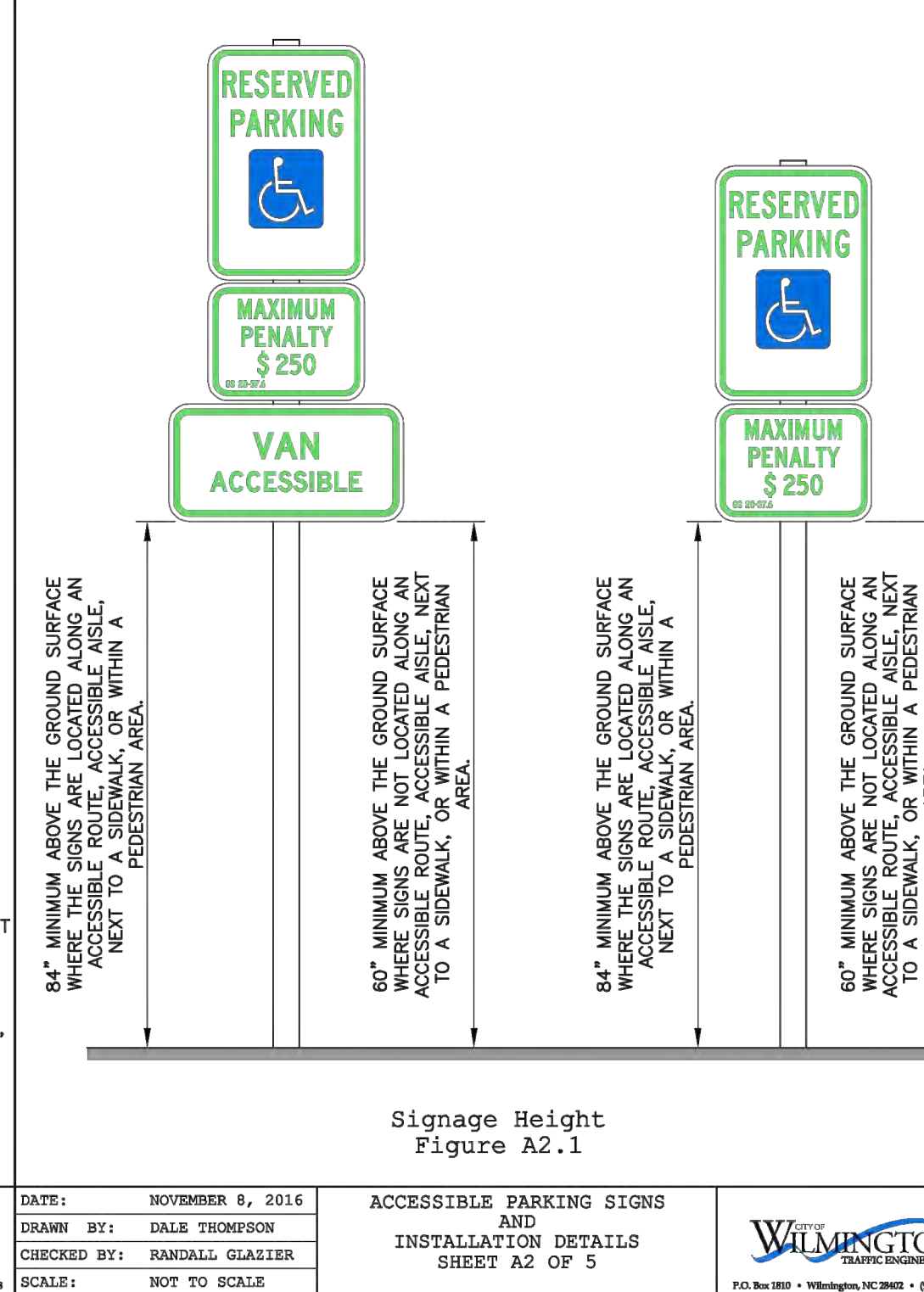
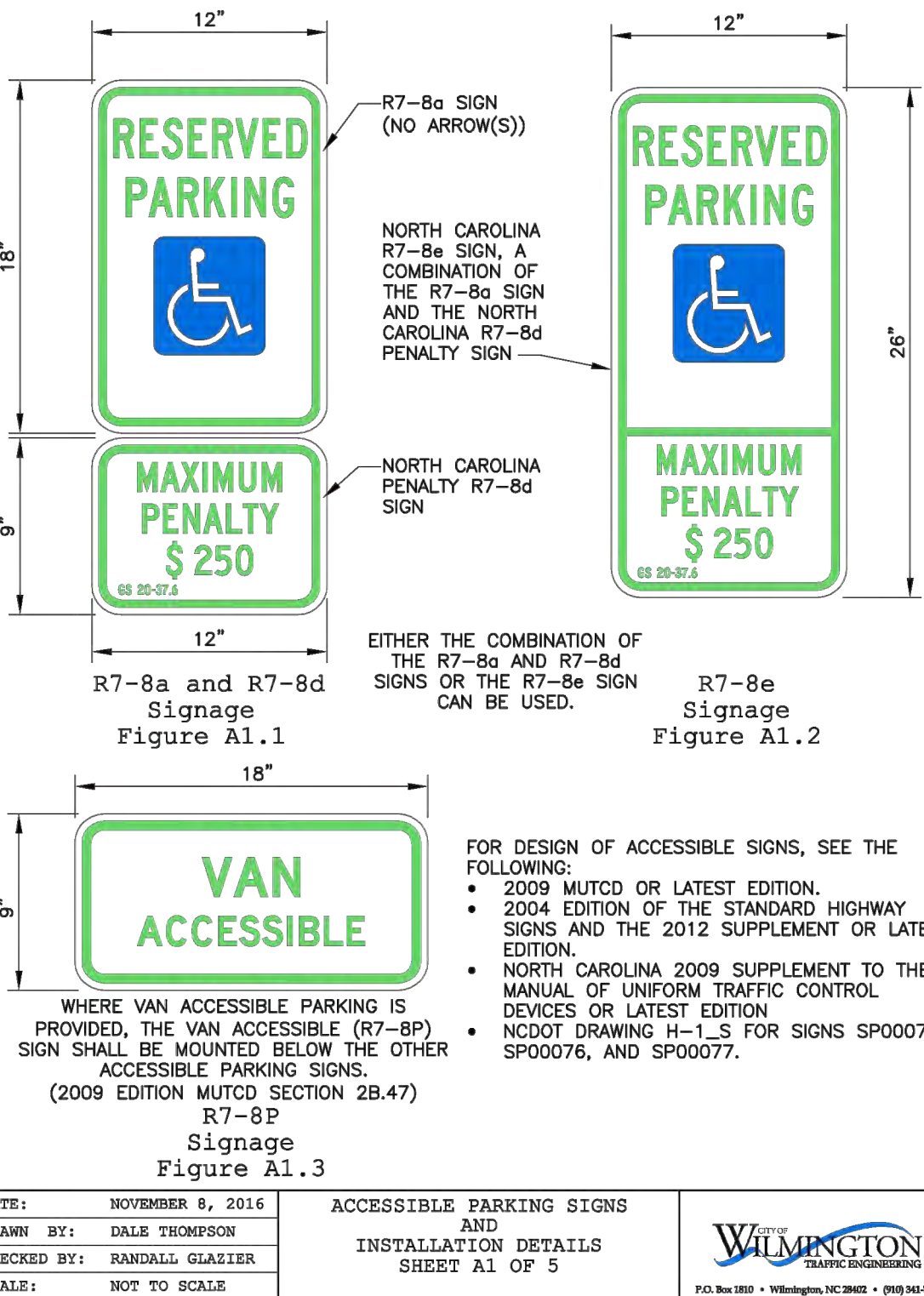




**REVISIONS**

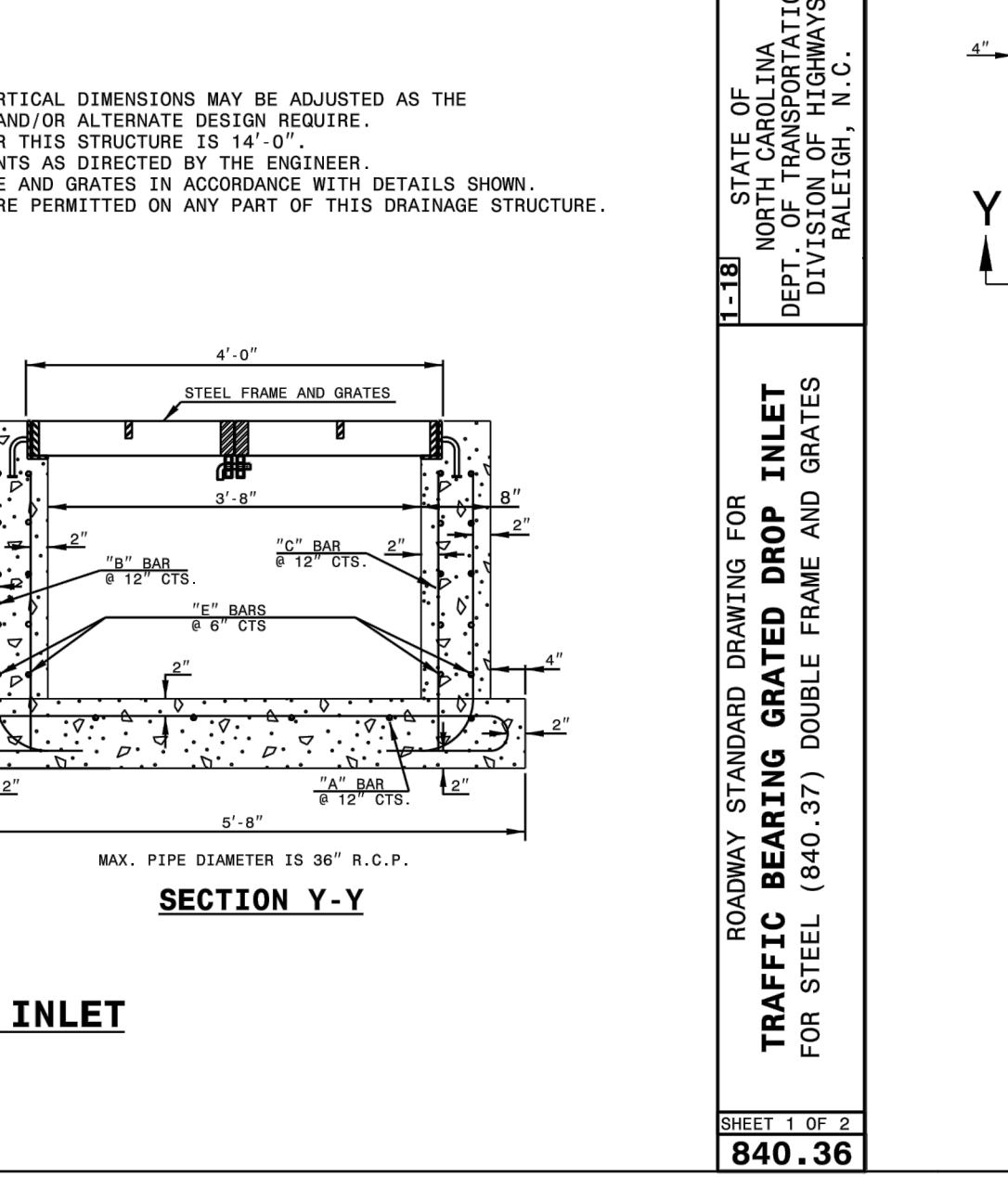
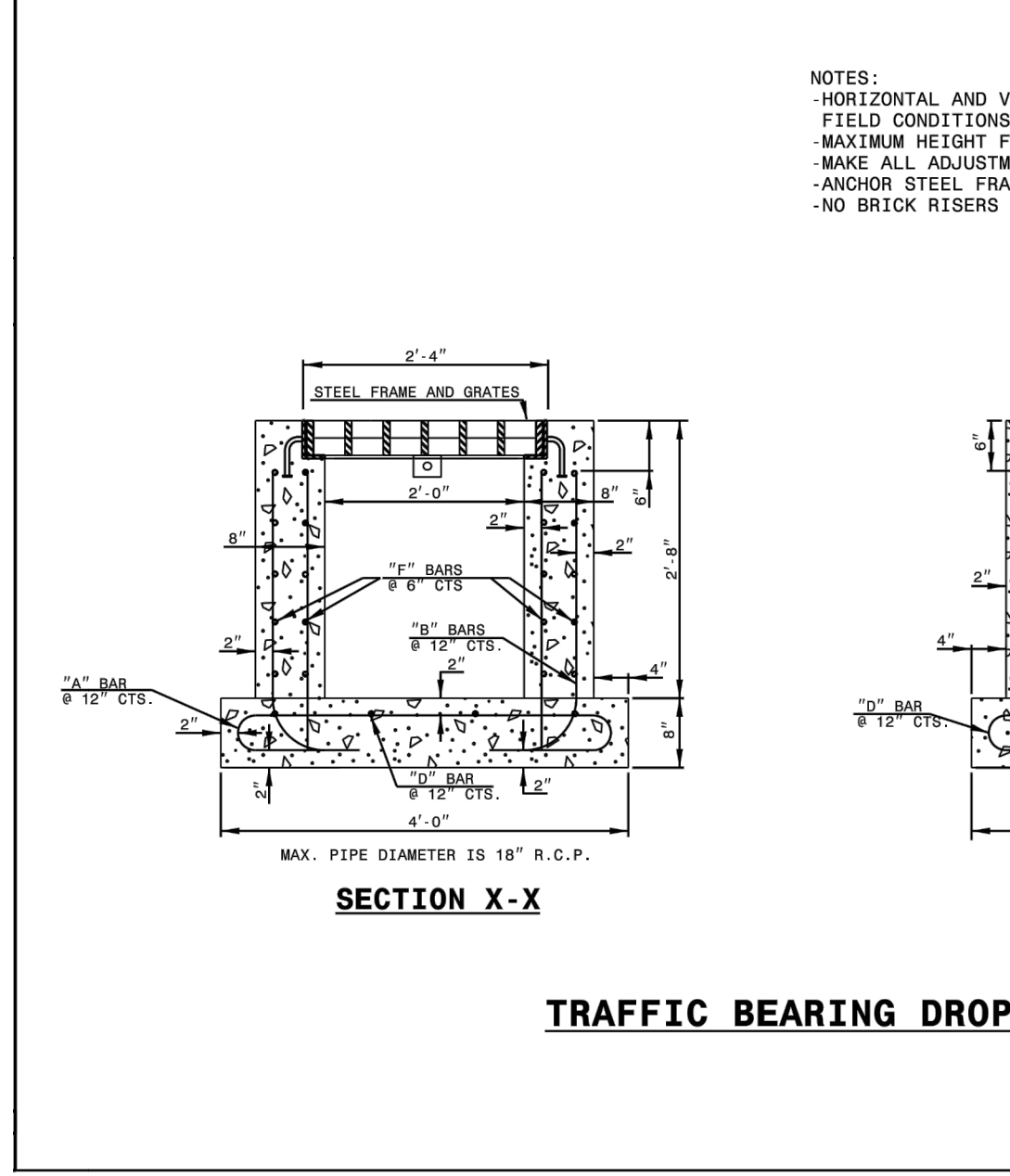
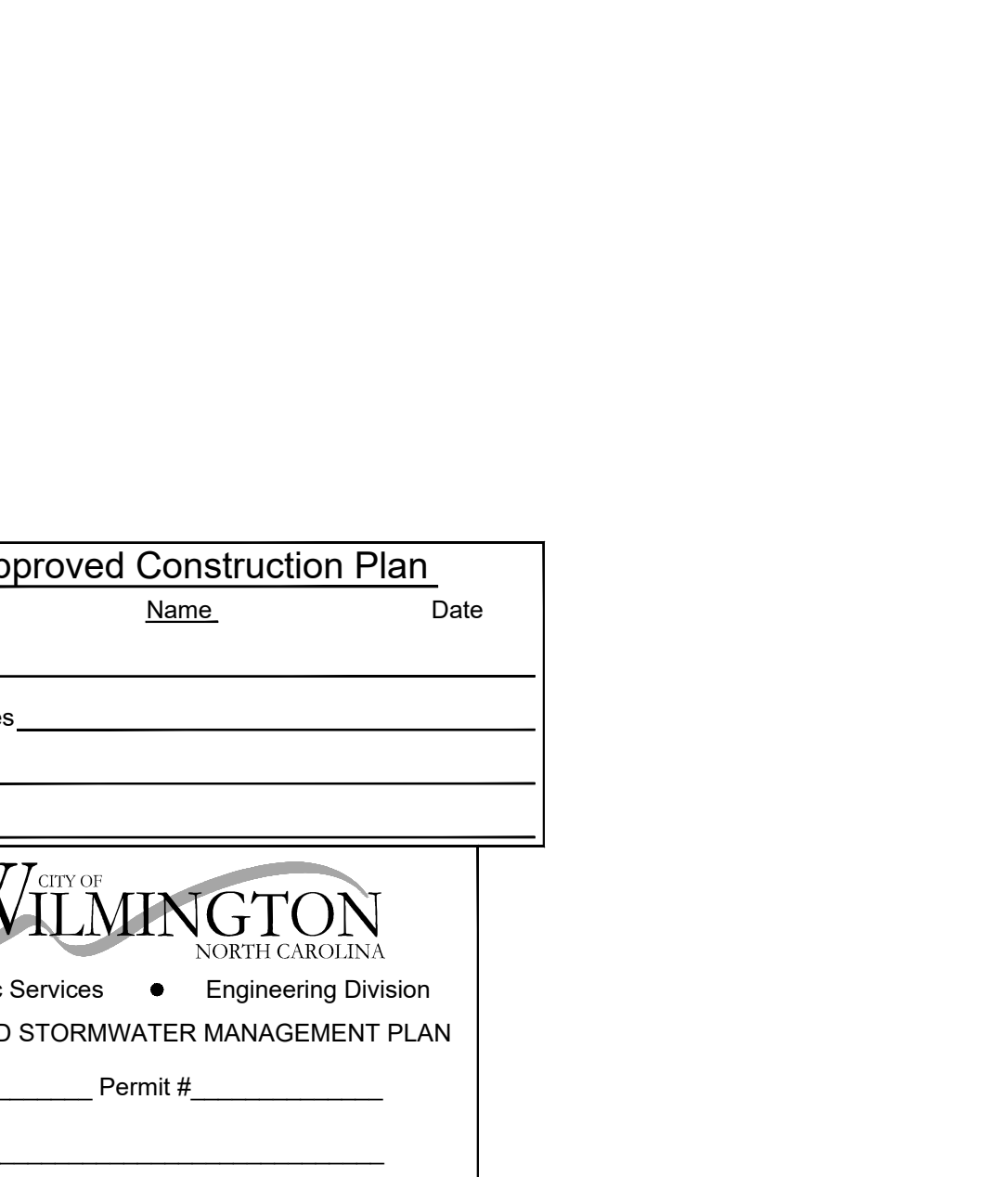
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 License Number: P-0662



**DETAILS FOR THE VARSITY CITY OF WILMINGTON NEW HANOVER COUNTY, NC**

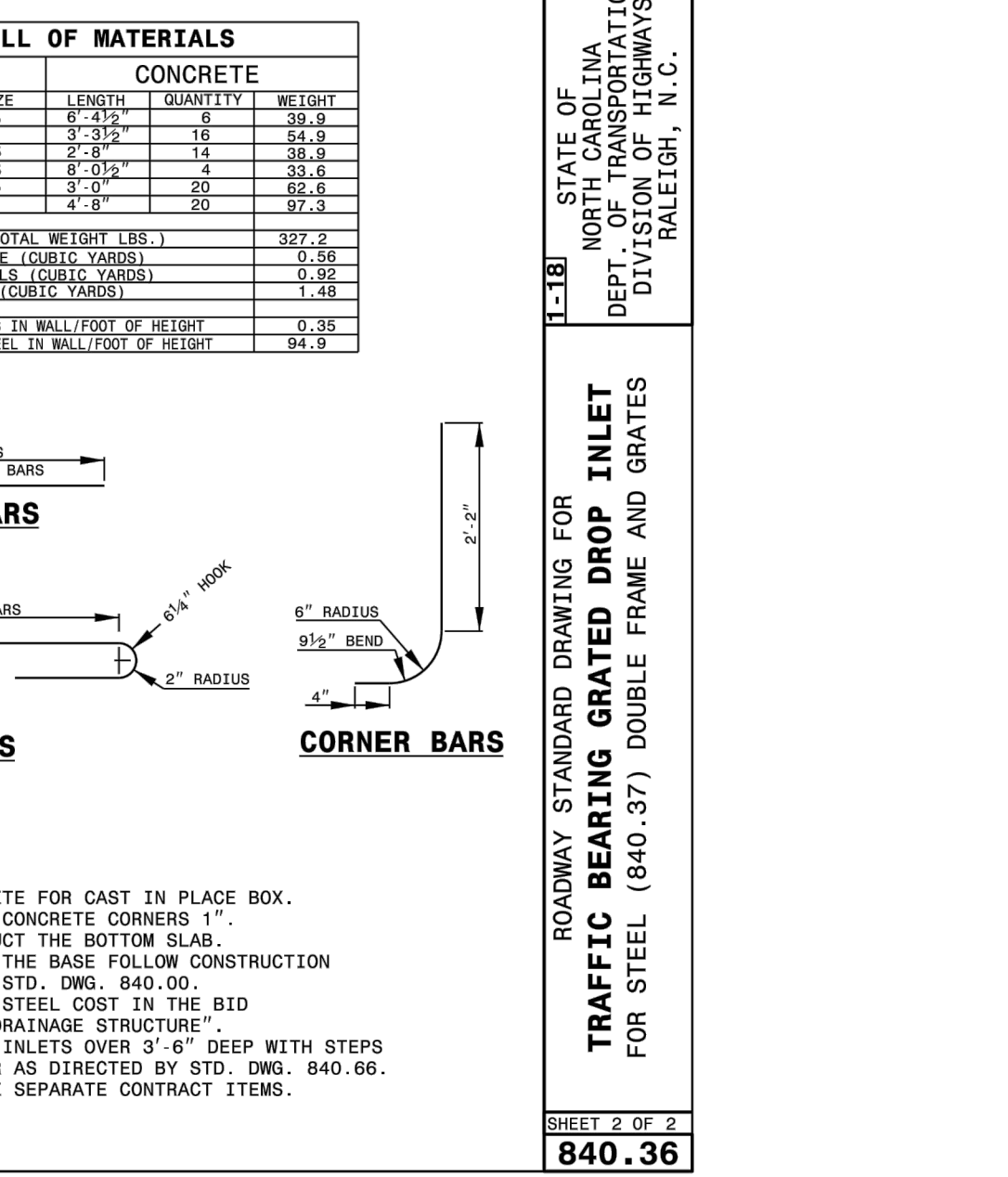
611 VARSITY DR, 724 & 716 SOUTH KERR AVE.



**BILL OF MATERIALS**

BAR	SIZE	LENGTH	QUANTITY	WEIGHT
1	#4	3'-0"	8	56.0
2	#4	3'-3 1/2"	18	64.9
3	#4	3'-0"	14	39.2
4	#4	8'-0"	20	62.6
5	#4	3'-0"	20	62.6
6	#4	3'-0"	20	62.6
7	#4	3'-0"	20	62.6
8	#4	3'-0"	20	62.6
9	#4	3'-0"	20	62.6
10	#4	3'-0"	20	62.6
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12	#4	3'-0"	20	62.6
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96	#4	3'-0"	20	62.6
97	#4	3'-0"	20	62.6
98	#4	3'-0"	20	62.6
99	#4	3'-0"	20	62.6
100	#4	3'-0"	20	62.6

GENERAL NOTES:  
 -USE CLASS 'AA' CONCRETE FOR CAST IN PLACE BOX.  
 -CHAMFER ALL EXPOSED CONCRETE CORNERS 1".  
 -USE FORMS TO CONSTRUCT THE BOTTOM SLAB.  
 -IF PIPES ARE SET IN THE BASE FOLLOW CONSTRUCTION PROCEDURES SHOWN BY STD. DWG. 840.00.  
 -INCLUDE REINFORCING STEEL COST IN THE BID PRICE FOR "MASONRY DRAINAGE STRUCTURE".  
 -PROVIDE GRATED DROP INLETS OVER 9'-6" DEEP WITH STEPS SPACED 12" ON CENTER AS DIRECTED BY STD. DWG. 840.06.  
 -FRAME AND GRATES ARE SEPARATE CONTRACT ITEMS.



**PREPARED FOR USE DRAWING FOR CONTRACTOR**

CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 212 OPERATIONS CENTER DRIVE  
 WILMINGTON, N.C. 28402  
 (910) 341-7807

**CLIENT INFORMATION:**

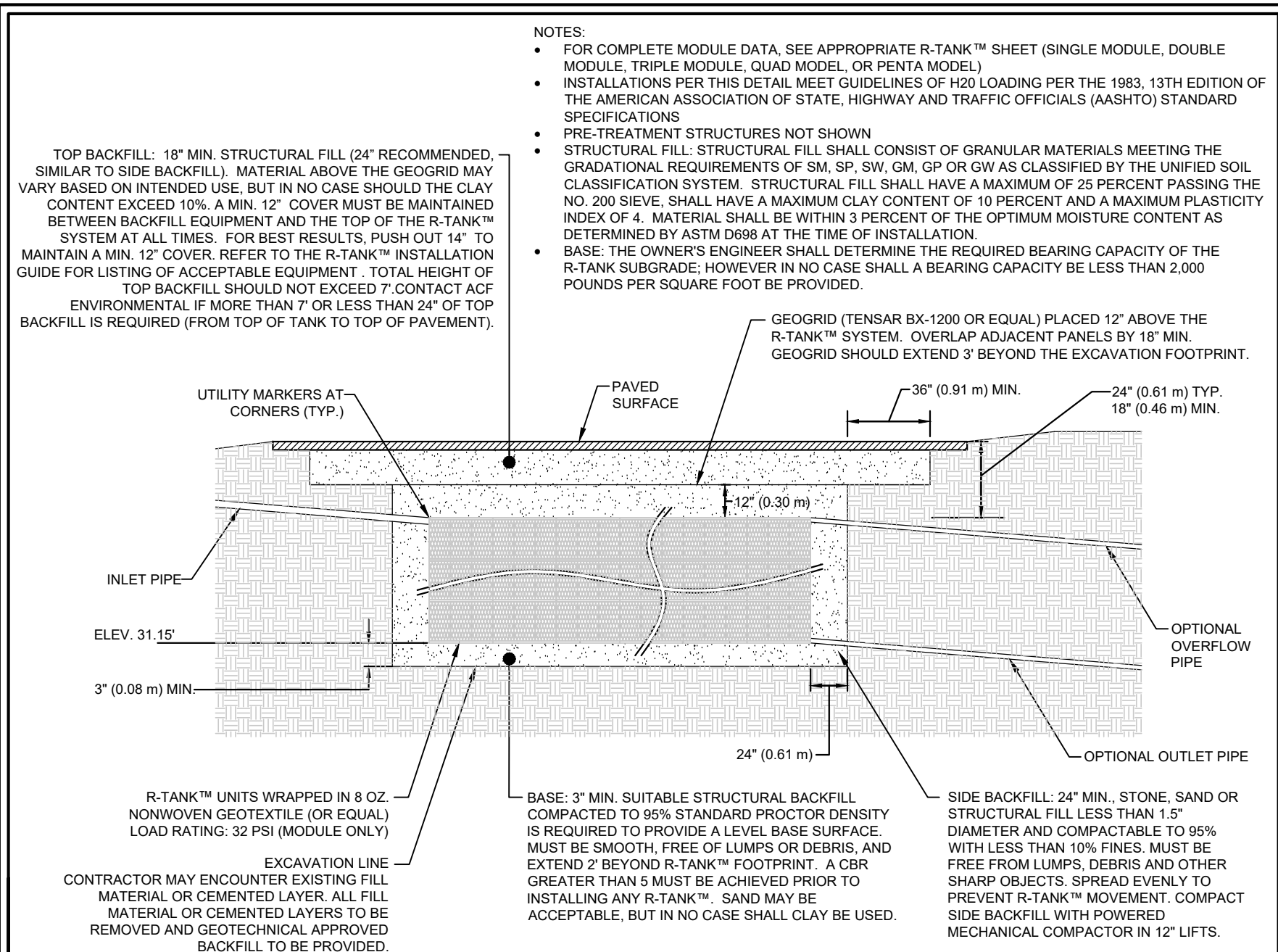
Real Properties, LLC.  
 Matt Scharf  
 1319-CC Military Cutoff Rd #172  
 Wilmington, NC 28405  
 Ph. 910-538-9901

DRAWN: JAE SHEET SIZE: 24X36  
 CHECKED: CDC DATE: 7/23/2020  
 APPROVED: CDC SCALE: NTS  
 PROJECT NUMBER: 2019-021

DRAWING NUMBER: **C-5**

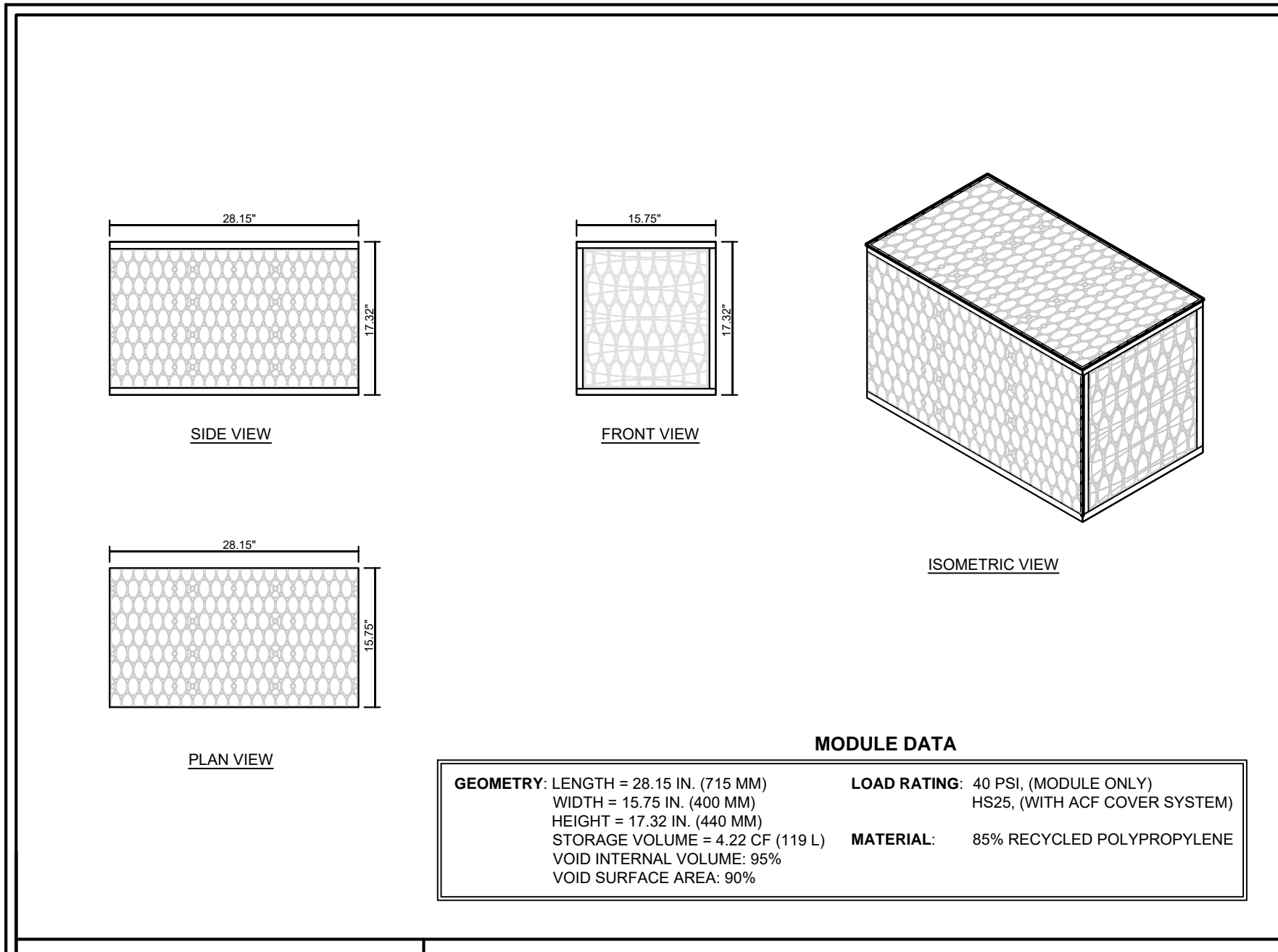
6 OF 8





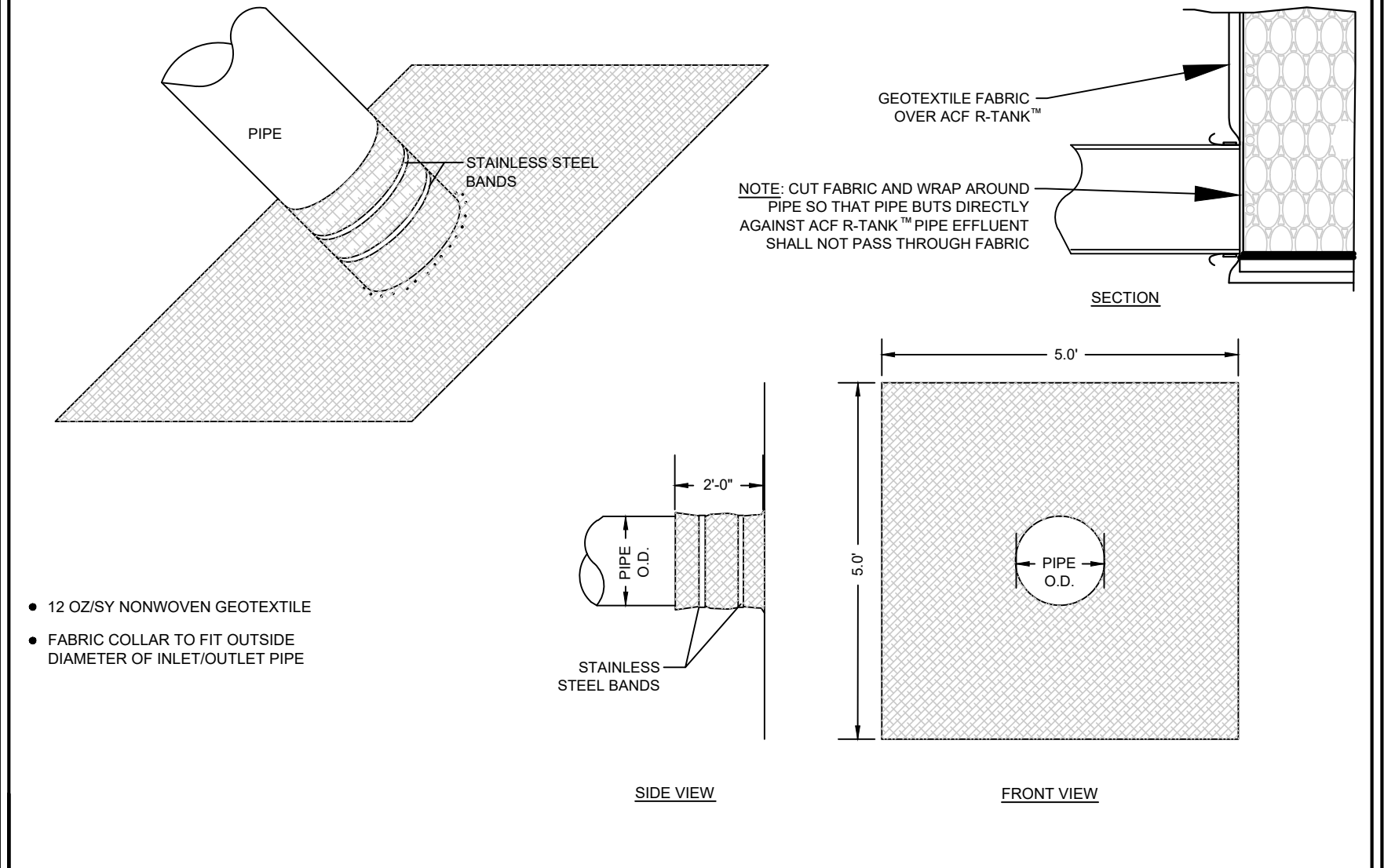
**R-TANK™ - H2O LOADS**

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



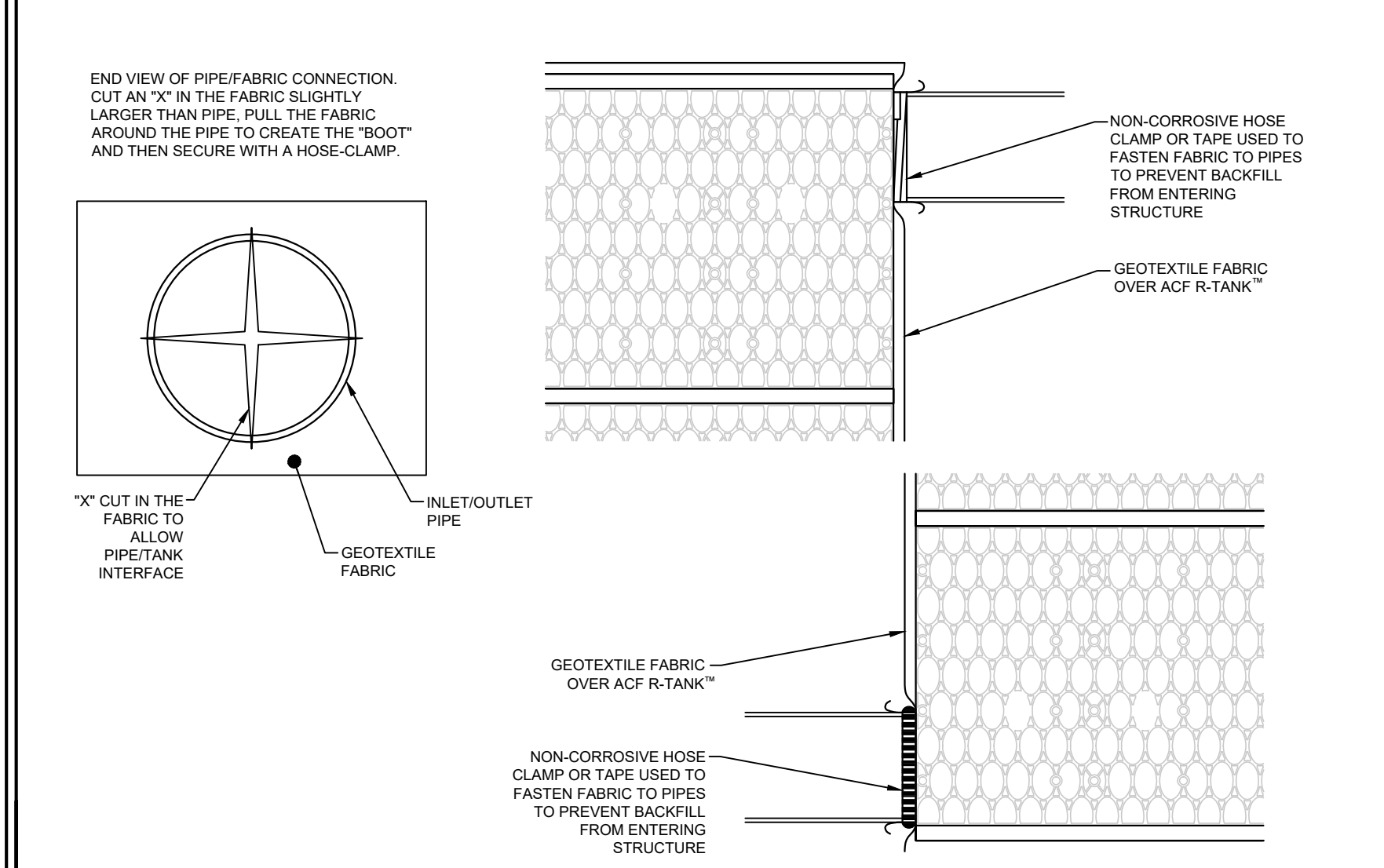
**R-TANK™ - SINGLE MODULE**

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



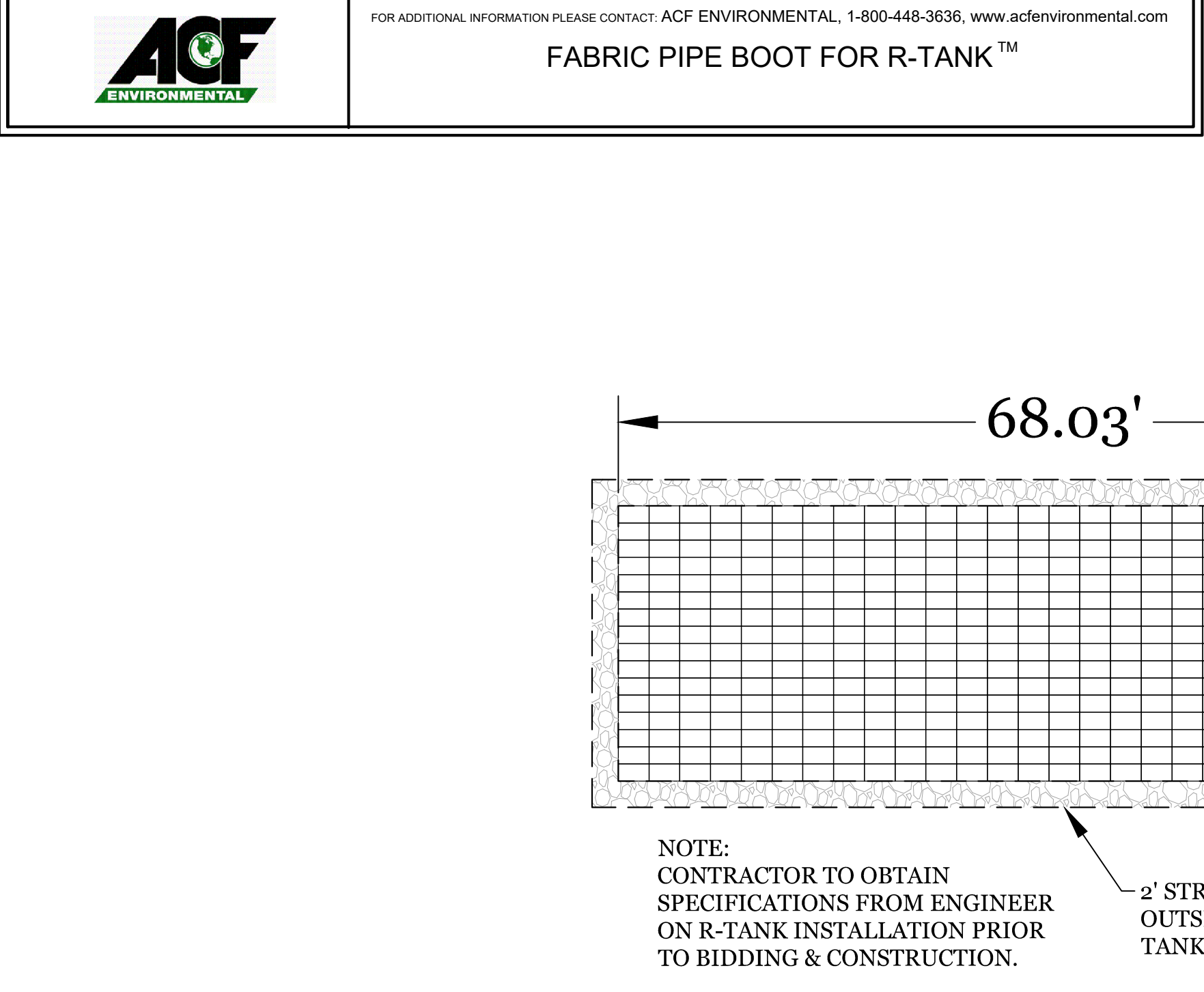
**FABRIC PIPE BOOT FOR R-TANK™**

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

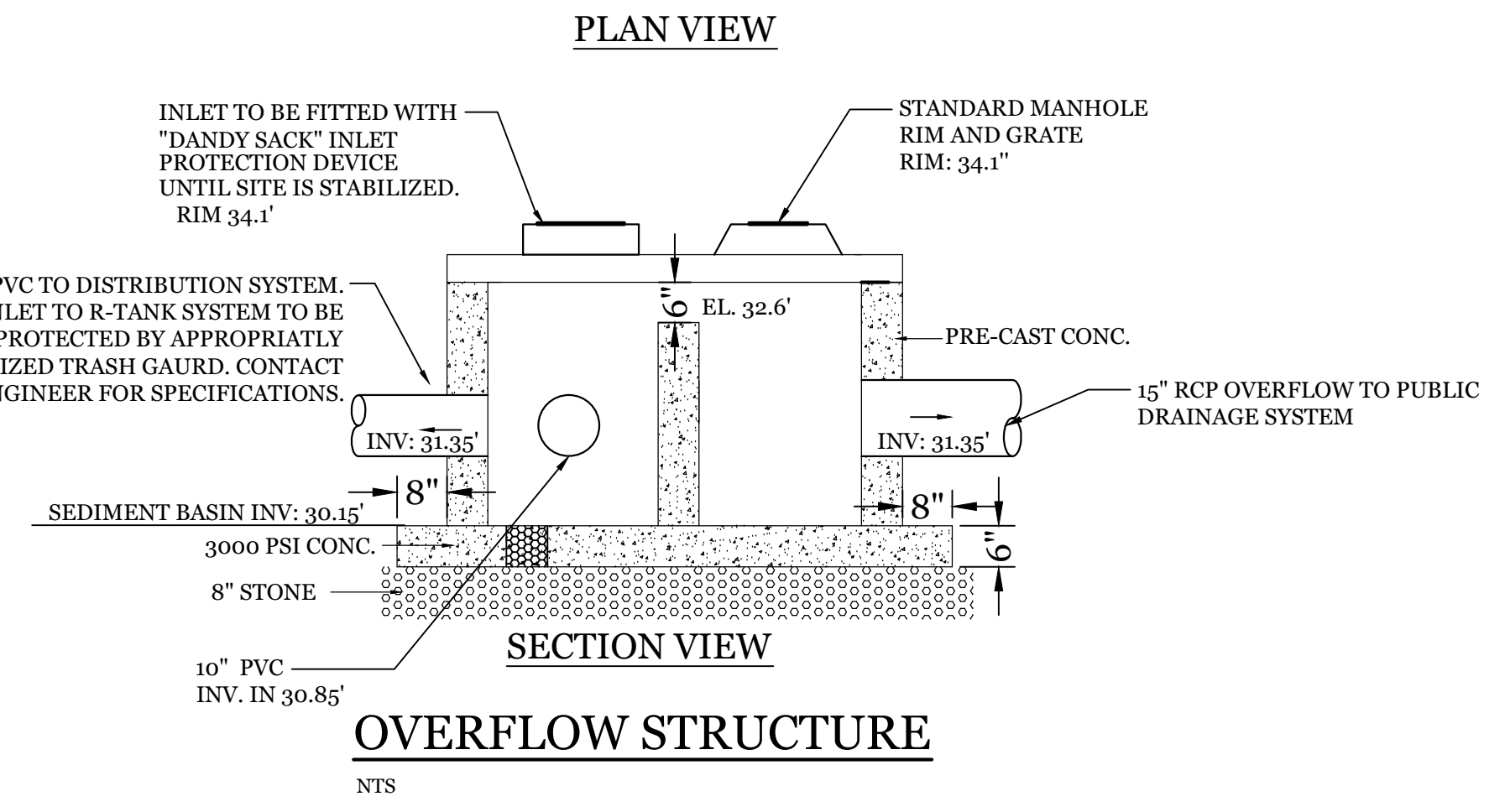
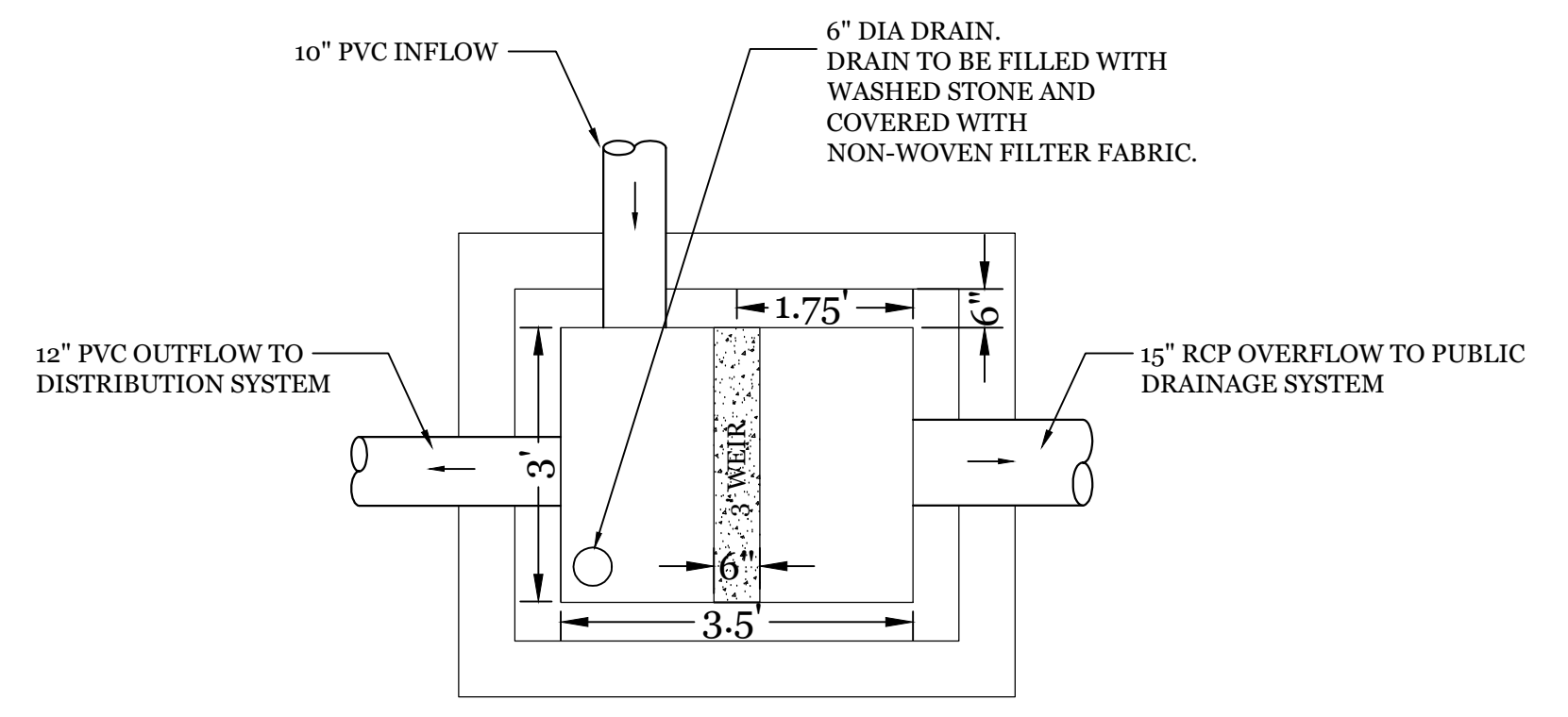


**R-TANK™ TYPICAL TANK INLET/OUTLET DETAIL**

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



**R-TANK - LAYOUT PLAN (464 TANKS TOTAL)**  
SCALE: 1" = 10'



**OVERFLOW STRUCTURE**

NTS

**Approved Construction Plan**

Name \_\_\_\_\_ Date \_\_\_\_\_

Planning \_\_\_\_\_

Public Utilities \_\_\_\_\_

Traffic \_\_\_\_\_

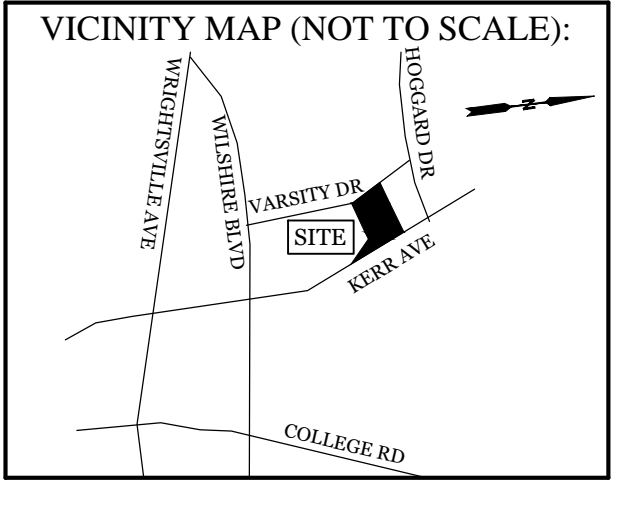
Fire \_\_\_\_\_

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: \_\_\_\_\_ Permit # \_\_\_\_\_

Signed: \_\_\_\_\_



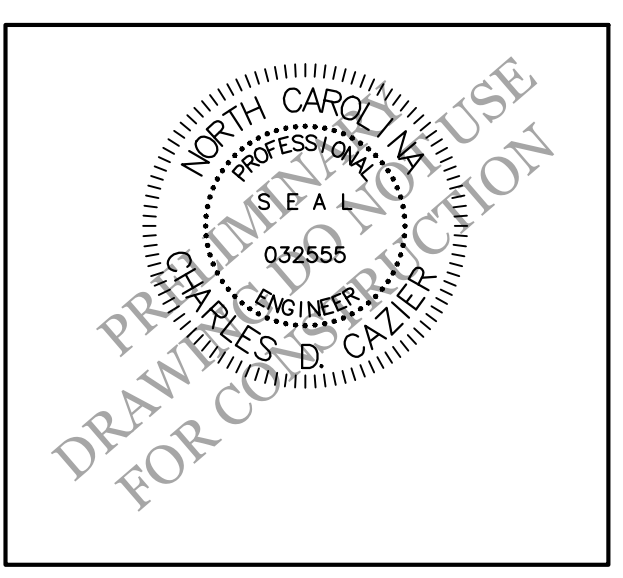
**REVISIONS**


**INTRACOASTAL ENGINEERING, PLLC**

5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charlie@intracoastalengineering.com  
License Number: P-0662

**DETAILS FOR THE VARSITY**

611 VARSITY DR, 724 & 716 SOUTH KERR AVE.  
CITY OF WILMINGTON  
NEW HANOVER COUNTY, NC



**CLIENT INFORMATION:**

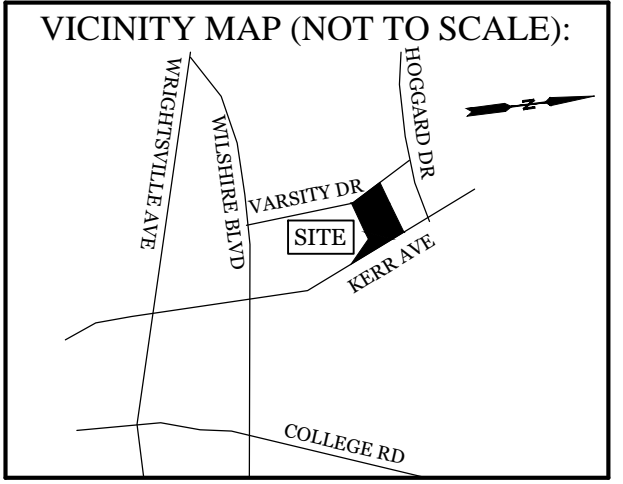
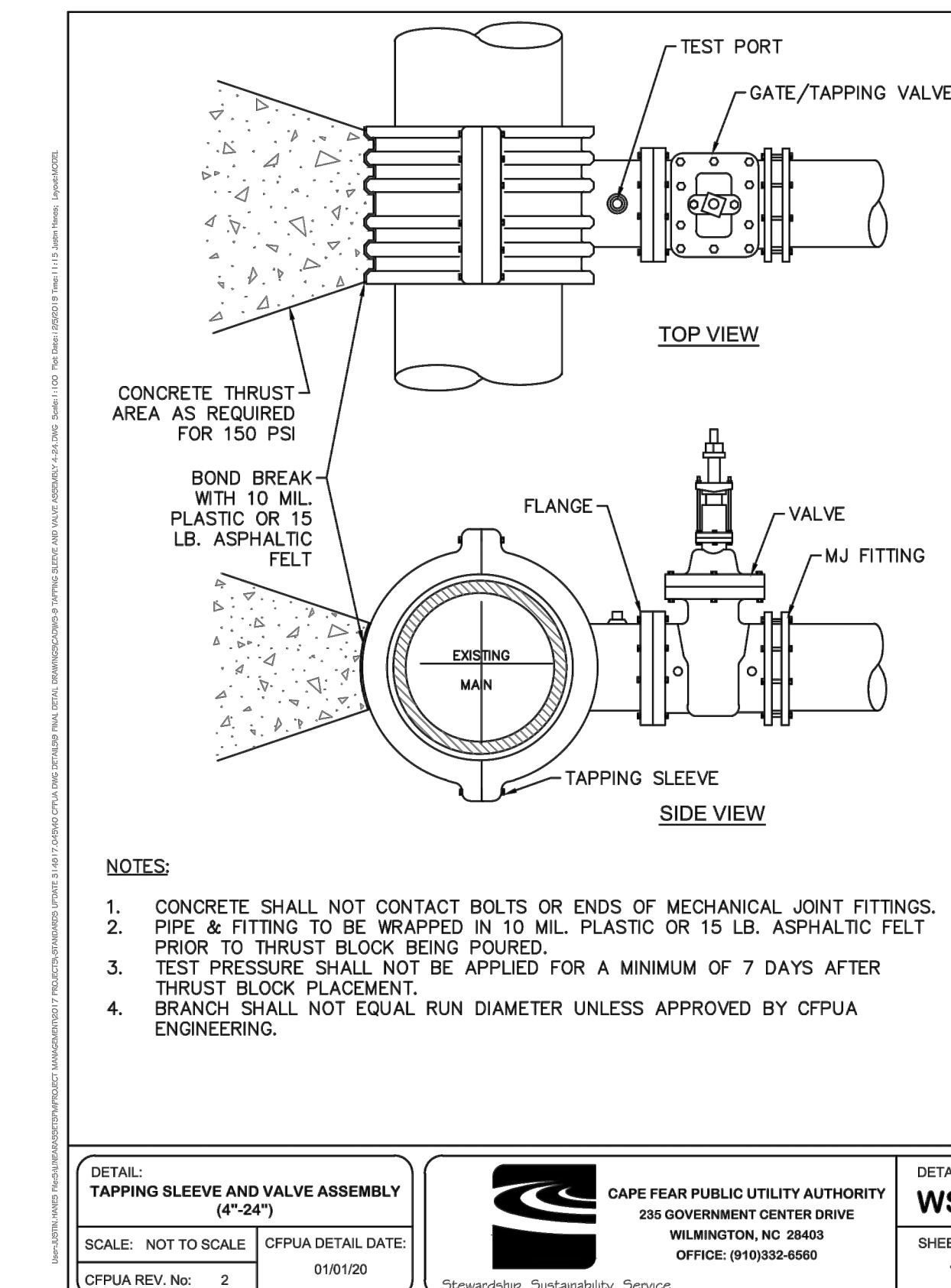
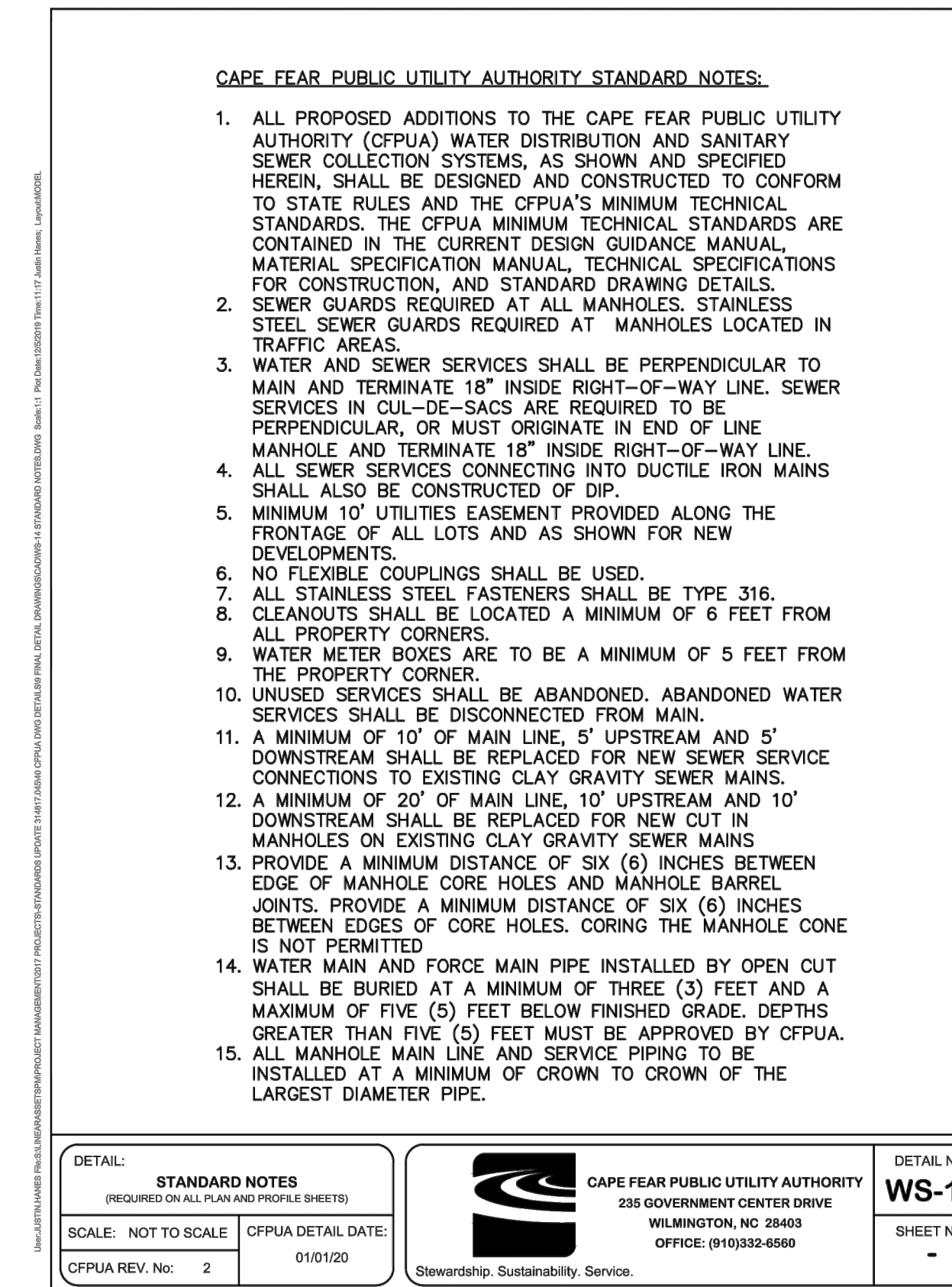
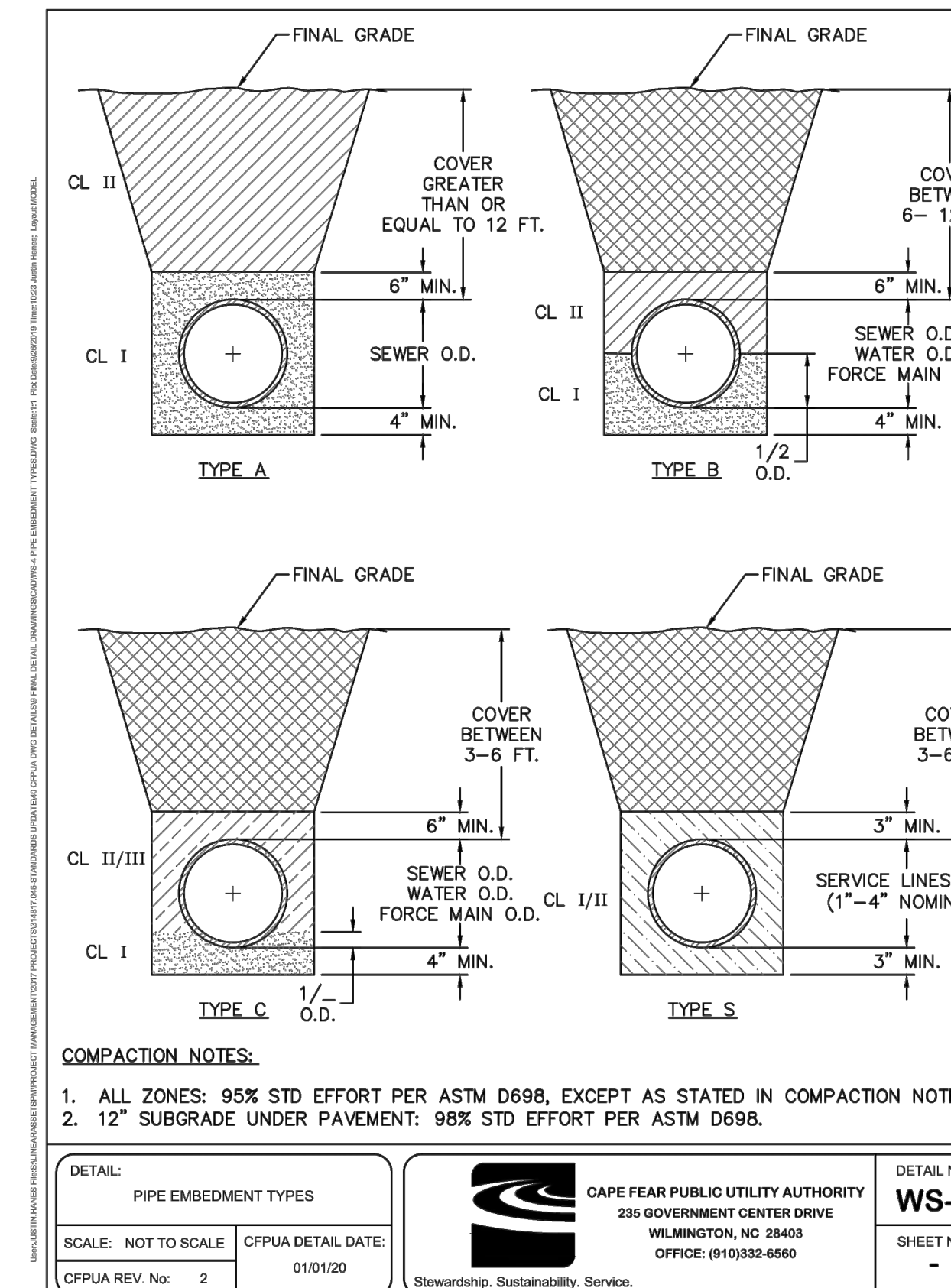
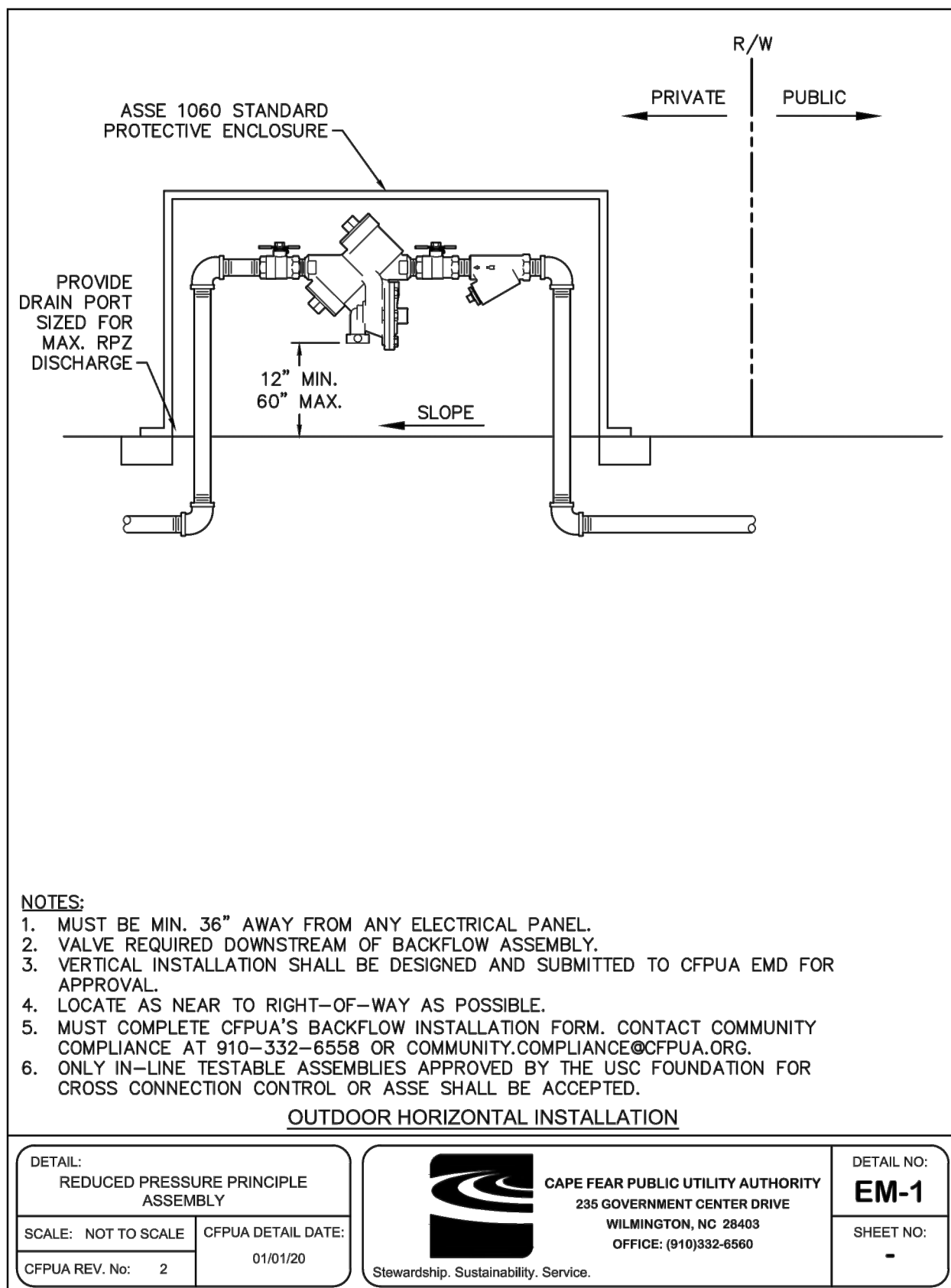
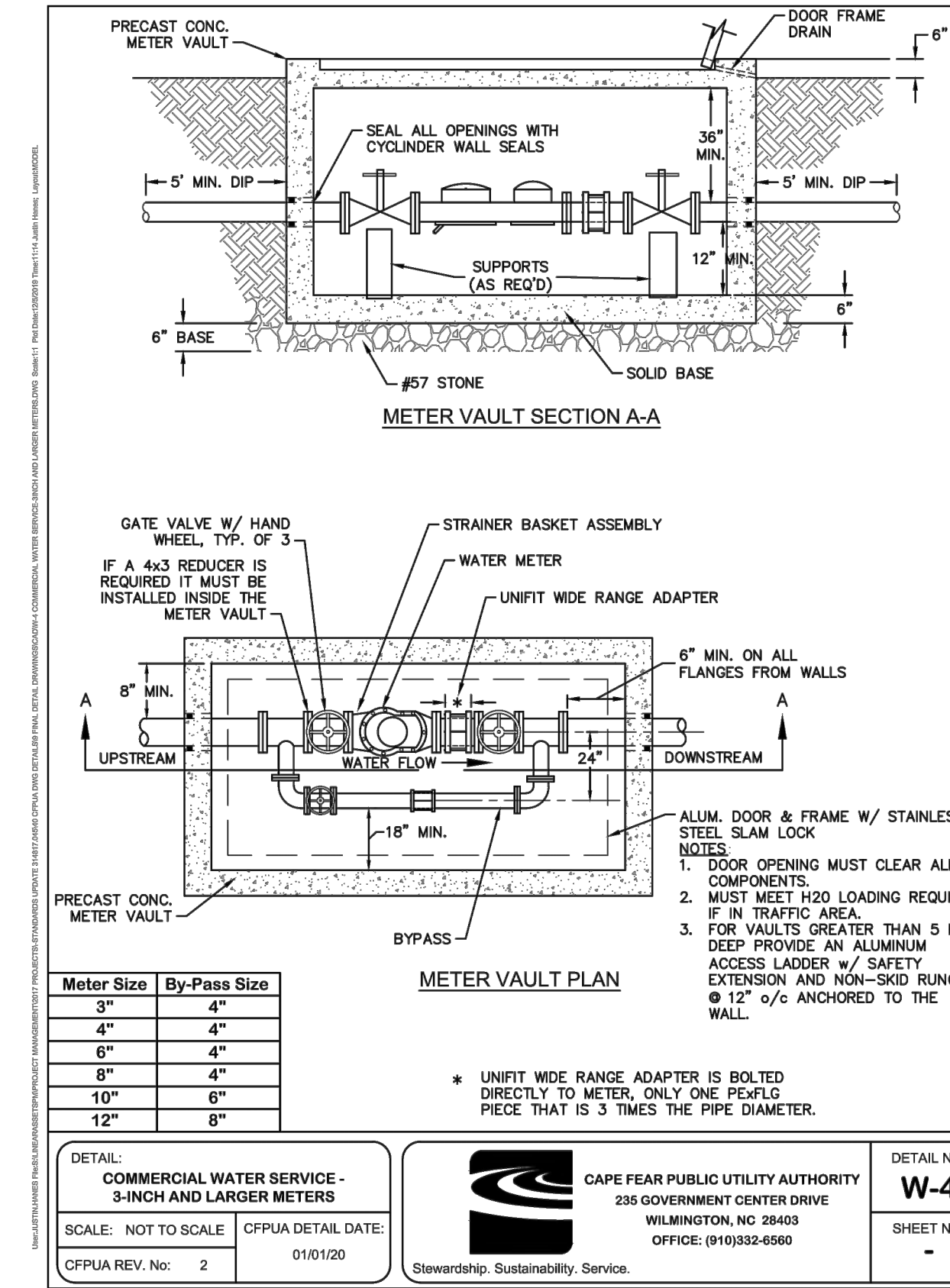
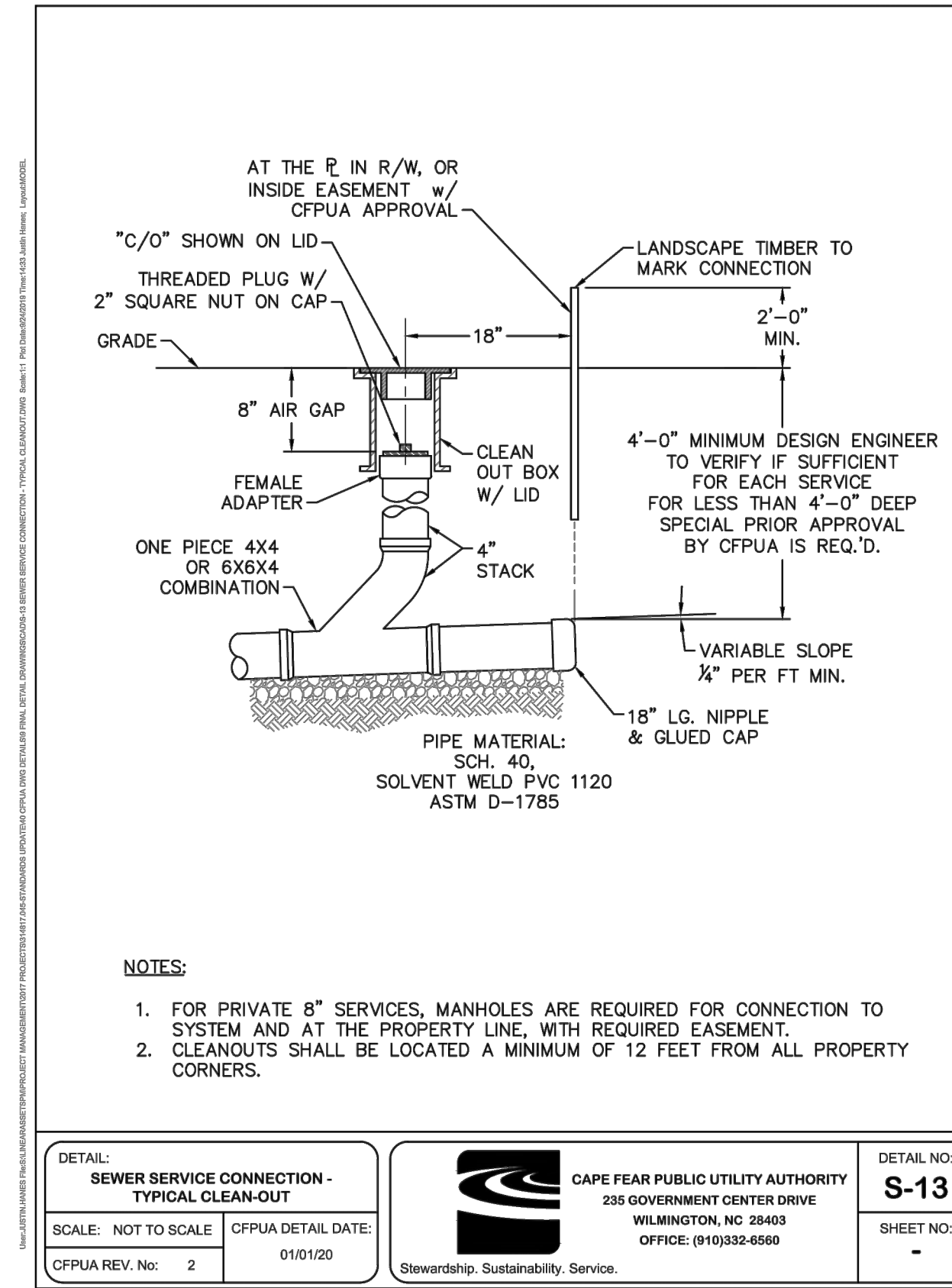
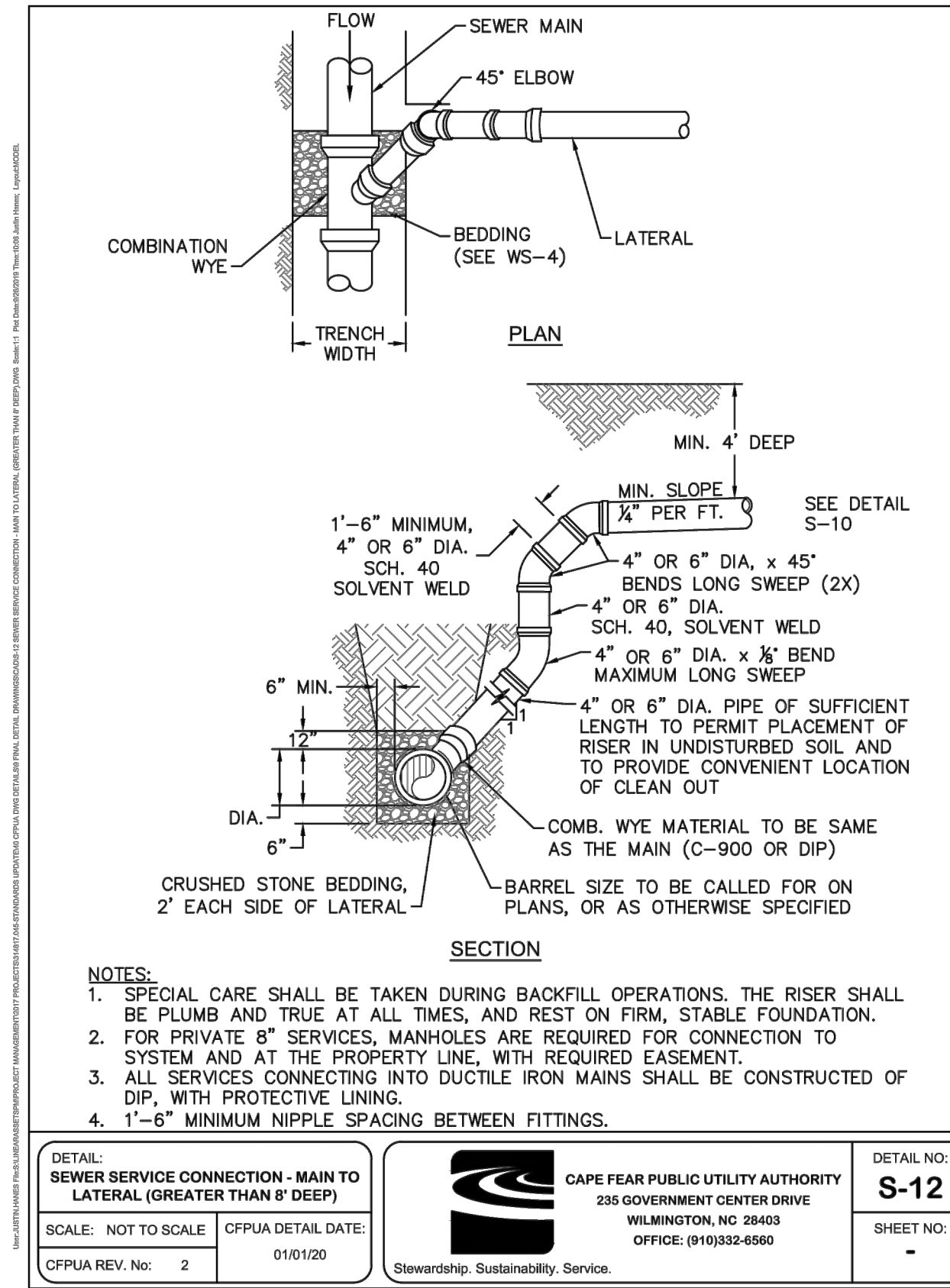
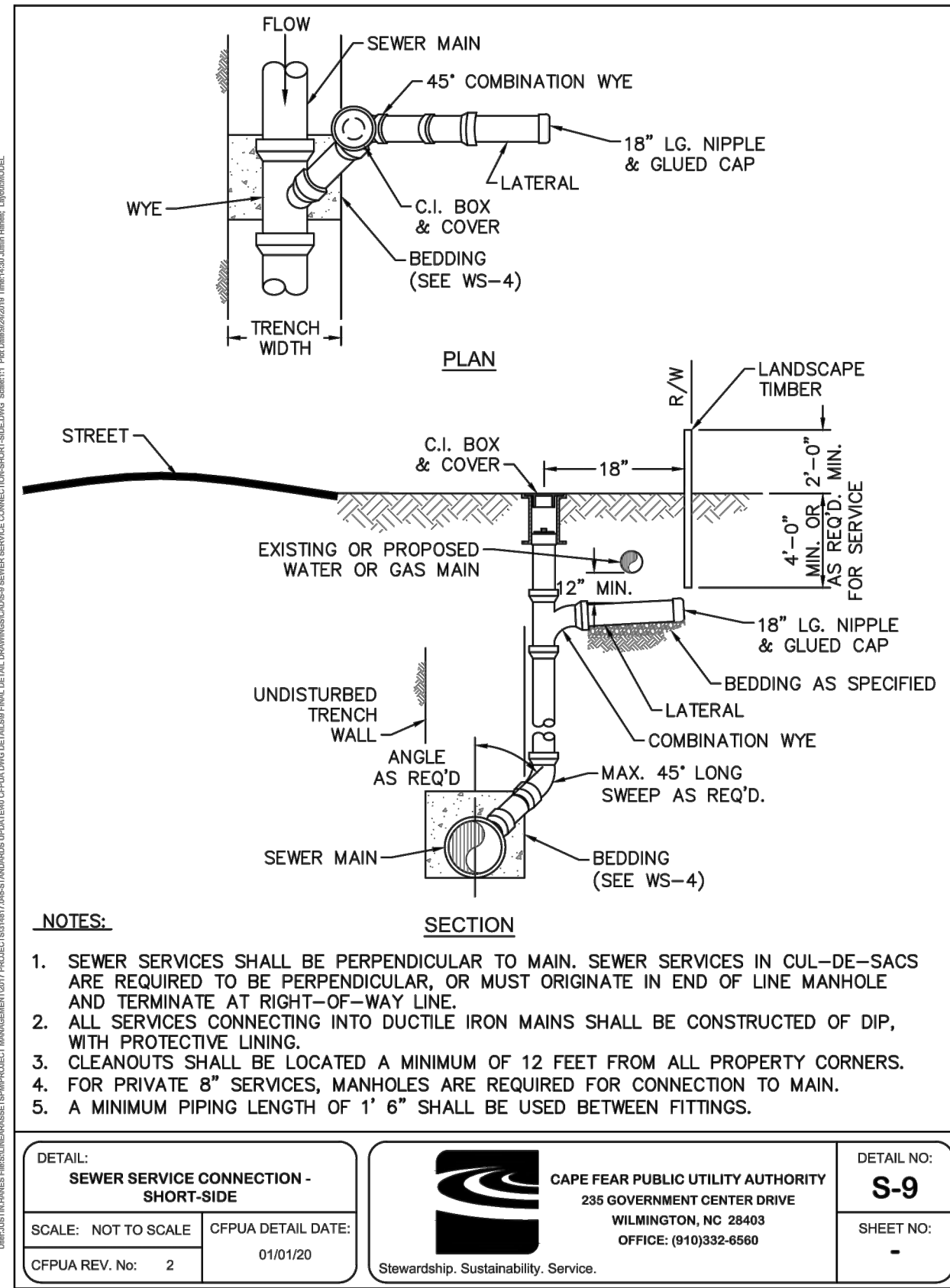
Real Properties, LLC.  
Matt Scharf  
1319-CC Military Cutoff Rd #172  
Wilmington, NC 28405  
Ph. 910-538-9901

DRAWN: JAE	SHEET SIZE: 24x36
CHECKED: CDC	DATE: 7/23/2020
APPROVED: CDC	SCALE: NTS
PROJECT NUMBER: 2019-021	

DRAWING NUMBER: **C-6**

7 OF 8





**REVISIONS**

NO.	DATE	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**

5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charlie@intracoastalengineering.com  
License Number: P-0662

**DETAILS FOR THE VARSITY CITY OF WILMINGTON, NC**

611 VARSITY DR, 724 & 716 SOUTH KERR AVE.  
NEW HANOVER COUNTY, NC

**PROFESSIONAL SEAL**

CHARLES D. CALZIERI  
Professional Engineer  
No. 03258  
State of North Carolina

**CLIENT INFORMATION:**

Real Properties, LLC.  
Matt Scharf  
1319-CC Military Cutoff Rd #172  
Wilmington, NC 28405  
Ph. 910-538-9901

DRAWN: JAE	SHEET SIZE: 24x36
CHECKED: CDC	DATE: 7/23/2020
APPROVED: CDC	SCALE: NTS
PROJECT NUMBER: 2019-021	



SITE DATA	
ADDRESS	611 VARSITY DR., 724 & 716 SOUTH KERR AVE.
PARCEL ID	R05511-001-004-002; R05511-001-001-000, R05511-001-002-000
PROPOSED USE	APARTMENTS
EXISTING ZONING	O&I-1 (CD)
PARCEL AREA	1.56 AC (66,115 SF)
DISTURBED AREA	1.20 AC (52,272 SF)
CAMA LAND USE	URBAN & CONSERVATION AREA
NUMBER OF BUILDINGS	3
NUMBER OF UNITS	24 UNITS
BUILDING HEIGHT	+/- 38'

LANDSCAPE REQUIREMENTS	
REQUIRED	PROVIDED
<b>PARKING LOT CANOPY COVERAGE</b> (16,399 SF X 30%)	4,920 SF, 7 TREES (1 SHADE TREE = 707 SF)
<b>TREE (4,929 SF)</b>	7 LARGE SHADE
<b>STREET YARD PLANTING</b>	
<b>PRIMARY STREET YARD</b> S. KERR AVE TREES REQUIRED	3,154 SF (175.22 LF x 18') 6 (1/600 SF)
SHRUBS REQUIRED	32 (6/600 SF)
<b>SECONDARY STREET YARD</b> VARSITY DRIVE TREES REQUIRED	2,761 SF (306.81 LF x 9') 5 (1/600 SF)
SHRUBS REQUIRED	28 (6/600 SF)

RETAINED TREES COUNTED TOWARD MITIGATION			
QUANTITY	SIZE	COMMON NAME	% MITIGATION
1	12"	PINE	100
1	14"	PINE	100
2	16"	PINE	100
1	17"	PINE	100
1	18"	PINE	100
2	24"	PINE	100
1	12"	GUM	75
1	13"	GUM	100
1	14"	GUM	100
1	15"	GUM	100
1	16"	GUM	100
1	8"	DOG	100
2	10"	DOG	100
1	10"	OAK	100
1	12"	OAK	100
1	8"	BIRCH	100
<b>263' / 6 = 44 TOTAL TREE CREDITS</b>			

REMOVED SIGNIFICANT TREES			
QUANTITY	SIZE	COMMON NAME	% MITIGATION
1	8"	MAGNOLIA	100
1	8"	DOG	100
3	10"	DOG	100
3	12"	DOG	100
1	30"	POPLAR	100
2	10"	CHERRY	75
1	30"	CHERRY	50
<b>112' x (2) x (1) = 224' / 3 = 75 TREES</b>			
<b>20' x (2) x (.75) = 30' / 3 = 10 TREES</b>			
<b>30' x (2) x (.50) = 30' / 3 = 10 TREES</b>			
<b>TOTAL: 95 TREES REQUIRED FOR MITIGATION</b>			

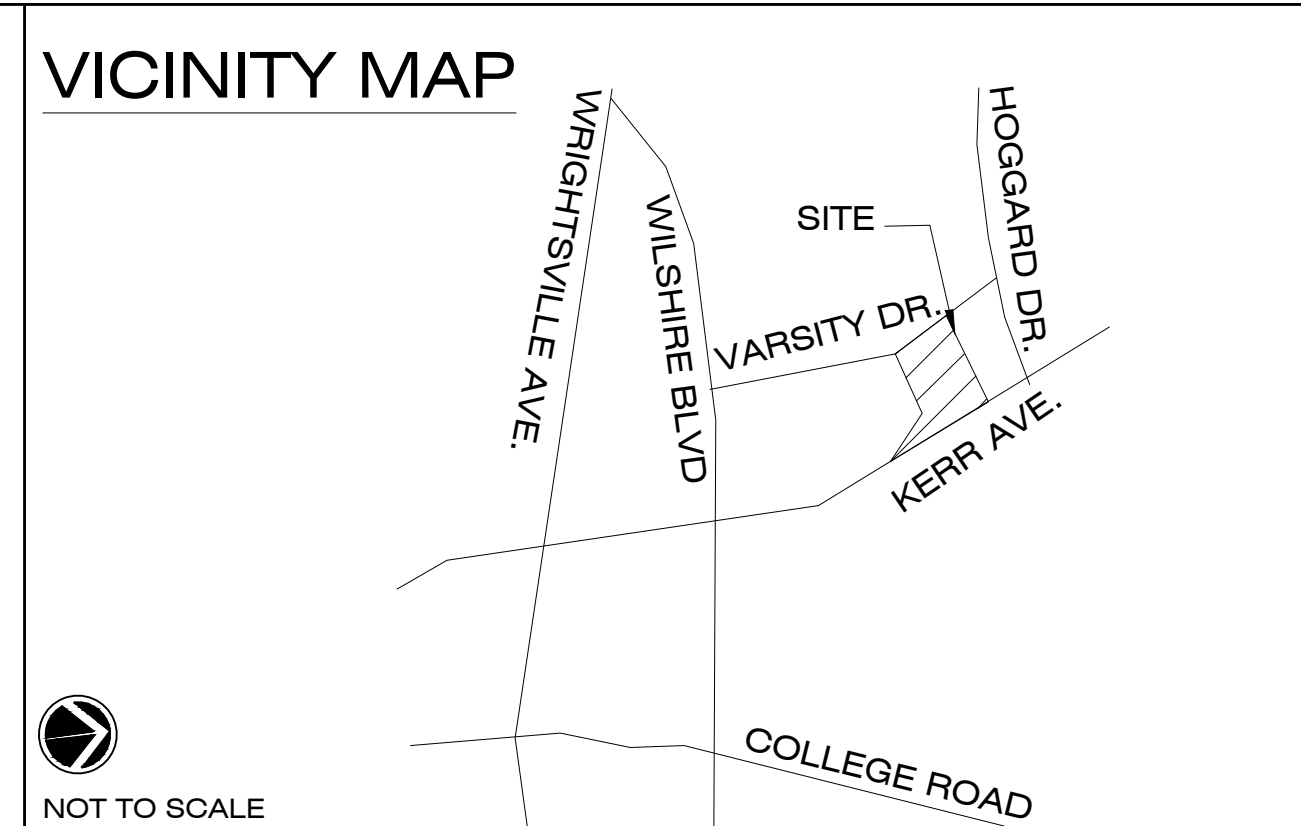
REMOVED REGULATED TREES TO BE MITIGATED			
QUANTITY	SIZE	COMMON NAME	% MITIGATION
1	14"	PINE	100
1	15"	PINE	100
1	17"	PINE	100
1	19"	PINE	100
1	24"	PINE	100
1	6/6"	CRAPPE	100
1	6"	CHERRY	75
<b>101' / 3 = 34 TREES REQUIRED FOR MITIGATION</b>			

TOTAL TREE CREDITS TOWARD MITIGATION: 44  
(129 REQUIRED FOR MITIGATION - 44 CREDITS = 85)  
TOTAL TREES REQUIRED TO BE MITIGATED: 85 TREES

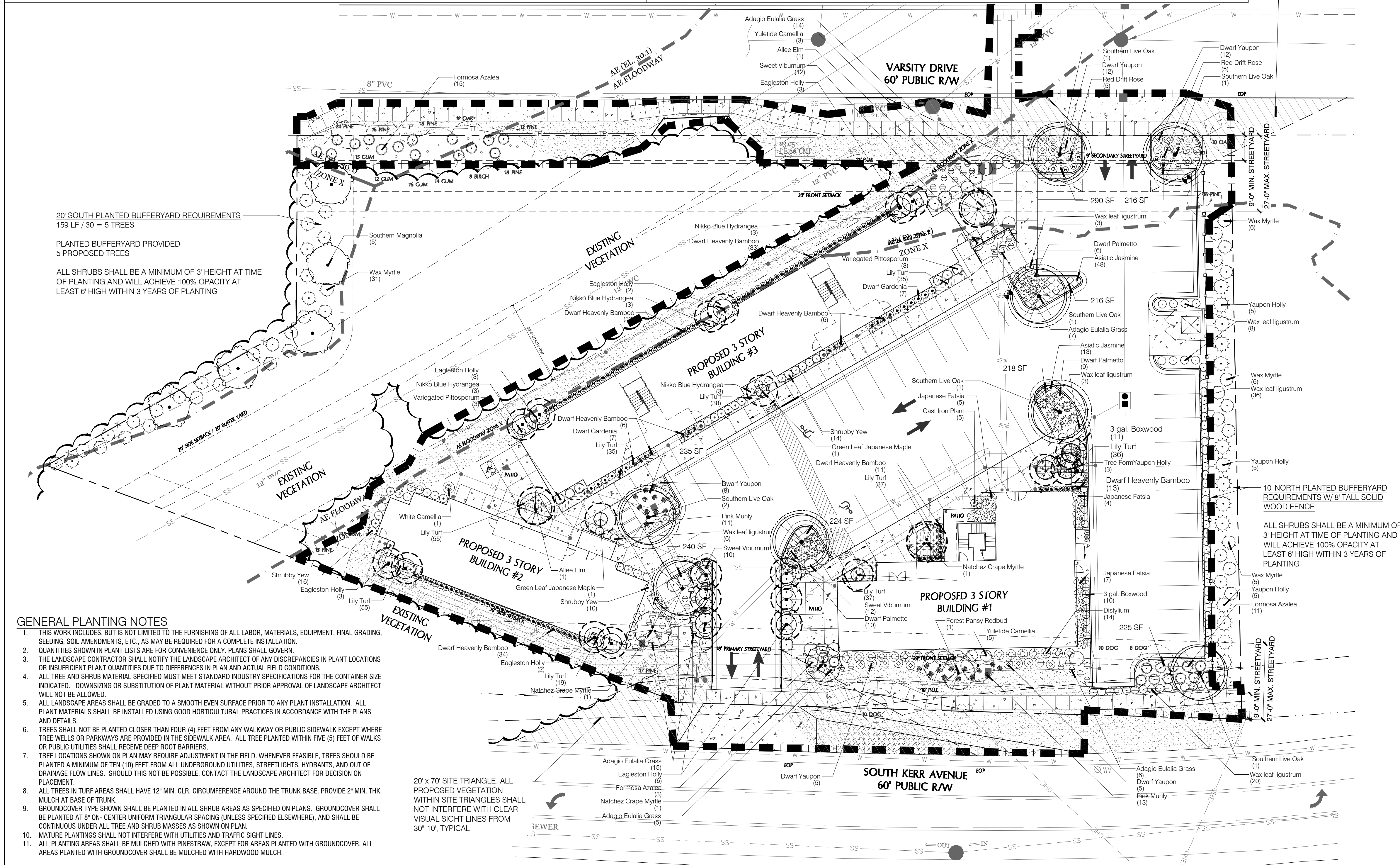
PROPOSED TREES TO MEET MITIGATION COUNT: 25 TREES

EXISTING NON-REGULATED TREES WILL BE USED TO OFFSET TREE MITIGATION REQUIREMENTS. ADDITIONAL FIELD WORK WILL BE REQUIRED TO LOCATE THOSE TREES. ANY ADDITIONAL TREES REQUIRED ON SITE WILL BE PROVIDED IN PAYMENT IN LIEU OF.

TREE REQUIREMENTS PER DISTURBED ACRE	
REQUIRED:	PROVIDED:
1.2 ACRES DISTURBED x 15 TREES = 18 TREES REQUIRED	35 TREES PLANTED - REFER TO PLANTING LEGEND, THIS SHEET**
<b>TOTAL:</b>	<b>35 TREES PROVIDED</b>



PLANT SCHEDULE						
TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	MIN. REQ. SIZE	QTY
○	Acer palmatum / Green Leaf Japanese Maple	15 gal	1.5' CAL	8'-10' HT	8'-10' HT	3
○	Cercis c. Forest Pansy™ / Forest Pansy Redbud	25 GAL		8'-10' HT	8'-10' HT	3
○	Ilex vomitoria / Tree Form Yaupon Holly	B & B		8'-10' HT	8'-10' HT	3
○	Ilex x. 'Eagleston' / Eagleston Holly	B&B		8' HT	8'-10' HT	16
○	Lagerstroemia x 'Natchez' / Natchez Crape Myrtle	B & B	2' CAL		2-2.5' CAL	3
○	Magnolia g. D.D. Blanchard™ / Southern Magnolia	B & B	3' CAL	8'-10' HT	2-2.5' CAL	5
○	Quercus virginiana / Southern Live Oak	B & B	3' CAL		2-2.5' CAL	8
○	Ulmus p. 'Emer II' / Allee Elm	B&B	3' CAL	12-14' HT	2-2.5' CAL	2
○	SHRUBS	BOTANICAL / COMMON NAME	SIZE	RANGE	MIN. REQ. SIZE	QTY
○	Aspidistra elatior / Cast Iron Plant	1 gal	15-18" HT			5
○	Azalea l. 'Formosa' / Formosa Azalea	3 gal	18-24" HT			29
○	Buxus m. 'Wintergreen' / 3 gal. Boxwood	3 gal	12-18" HT			21
○	Camellia s. 'Hana Jiman' / White Camellia	7 gal	24-36" HT		12" HT	1
○	Camellia s. 'Yuletide' / Yuletide Camellia	7 gal	36" HT		3' HT	8
○	Distylium myricoides 'Cinnamon Girl' / Distylium	3 gal	15-24" HT			14
○	Fatsia japonica / Japanese Fatsia	7 gal	24-30" HT			16
○	Gardenia radicans / Dwarf Gardenia	7 gal	12-16" HT			14
○	Hydrangea m. 'Nikko Blue' / Nikko Blue Hydrangea	3 gal	12-15" HT			12
○	Ilex vomitoria / Yaupon Holly	7 gal	3-4' HT	3' HT		15
○	Ilex vomitoria 'Nana' / Dwarf Yaupon	3 gal	15-18" HT			42
○	Ligustrum j. 'Recurvatum' / Wax leaf ligustrum	7 gal	36" HT	3' HT		71
○	Miscanthus s. 'Adagio' / Adagio Eulalia Grass	3 gal	15-18" HT			56
○	Muhlenbergia capillaris / Pink Muhly	3 gal	15-18" HT	12" HT		24
○	Myrica cerifera / Wax Myrtle	7 gal	3-4' HT	3' HT		46
○	Nandina domestica 'Harbour Dwarf' / Dwarf Heavenly Bamboo	7 gal	18-24" HT			136
○	Pittosporum t. 'Variegata' / Variegated Pittosporum	3 gal	18-24" HT			6
○	Podocarpus macrophyllum maki / Shrubby Yew	10 gal	4-5' HT			39
○	Rosa x 'Meigappo' / Red Drift Rose	3 gal	12-15" HT			10
○	Sabal minor / Dwarf Palmetto	3 gal	18-24" HT			25
○	Viburnum odoratissimum / Sweet Viburnum	7 gal	5-6' HT			34
○	GROUND COVERS	BOTANICAL / COMMON NAME	SIZE	RANGE	SPACING	QTY
○	Liriope muscari / Lily Turf	1 qt	6-12" HT		18" o.c.	270
○	Trachelospermum a. 'Asiatic' / Asiatic Jasmine	1 qt	6-12" HT		18" o.c.	78
○	SOD SEED	BOTANICAL / COMMON NAME	SIZE	RANGE	SPACING	QTY
○	Zoysia japonica 'Crown' / Korean Grass	sod				



- GENERAL PLANTING NOTES**
- THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC., AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.
  - QUANTITIES SHOWN IN PLANT LISTS ARE FOR CONVENIENCE ONLY. PLANS SHALL GOVERN.
  - THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANT LOCATIONS OR INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
  - ALL TREE AND SHRUB MATERIAL SPECIFIED MUST MEET STANDARD INDUSTRY SPECIFICATIONS FOR THE CONTAINER SIZE INDICATED. DOWNIZING OR SUBSTITUTION OF PLANT MATERIAL WITHOUT PRIOR APPROVAL OF LANDSCAPE ARCHITECT WILL NOT BE ALLOWED.
  - ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.
  - TREES SHALL NOT BE PLANTED CLOSER THAN FOUR (4) FEET FROM ANY WALKWAY OR PUBLIC SIDEWALK EXCEPT WHERE TREE WELLS OR PARKWAYS ARE PROVIDED IN THE SIDEWALK AREA. ALL TREE PLANTED WITHIN FIVE (5) FEET OF WALKS OR PUBLIC UTILITIES SHALL RECEIVE DEEP ROOT BARRIERS.
  - TREE LOCATIONS SHOWN ON PLAN MAY REQUIRE ADJUSTMENT IN THE FIELD. WHENEVER FEASIBLE, TREES SHOULD BE PLANTED AT A MINIMUM OF TEN (10) FEET FROM ALL UNDERGROUND UTILITIES, STREETLIGHTS, HYDRANTS, AND OUT OF DRAINAGE FLOW LINES. SHOULD THIS NOT BE POSSIBLE, CONTACT THE LANDSCAPE ARCHITECT FOR DECISION ON PLACEMENT.
  - ALL TREES IN TURF AREAS SHALL HAVE 12" MIN. CLR. CIRCUMFERENCE AROUND THE TRUNK BASE. PROVIDE 2" MIN. THK. MULCH AT BASE OF TRUNK.
  - GROUND COVER TYPE SHOWN SHALL BE PLANTED IN ALL SHRUB AREAS AS SPECIFIED ON PLANS. GROUND COVER SHALL BE PLANTED AT 8" ON-CENTER UNIFORM TRIANGULAR SPACING (UNLESS SPECIFIED ELSEWHERE), AND SHALL BE CONTINUOUS UNDER ALL TREE AND SHRUB MASSES AS SHOWN ON PLAN.
  - MATURE PLANTINGS SHALL NOT INTERFERE WITH UTILITIES AND TRAFFIC SIGHT LINES.
  - ALL PLANTING AREAS SHALL BE MULCHED WITH PINESTRAW, EXCEPT FOR AREAS PLANTED WITH GROUND COVER. ALL AREAS PLANTED WITH GROUND COVER SHALL BE MULCHED WITH HARDWOOD MULCH.

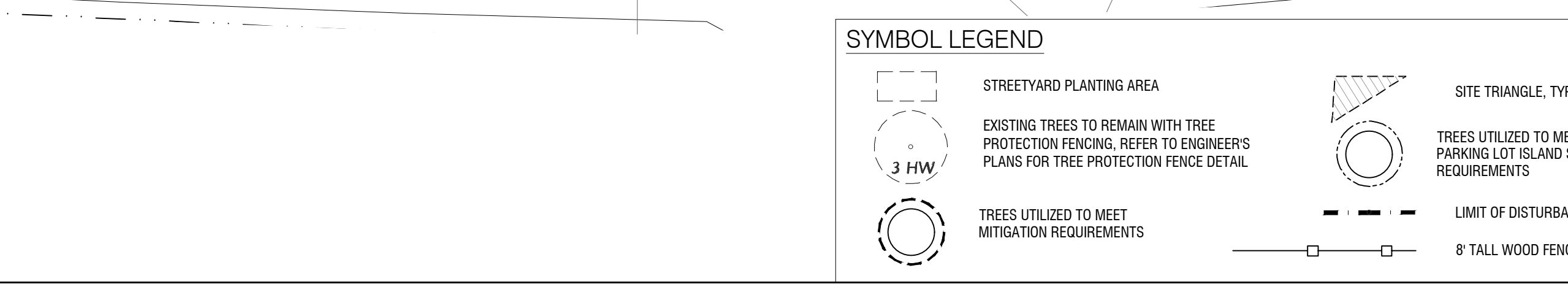
20' x 70' SITE TRIANGLE. ALL PROPOSED VEGETATION WITHIN SITE TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10', TYPICAL

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

**WILMINGTON**  
NORTH CAROLINA  
Public Services Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN

Date: \_\_\_\_\_ Permit #: \_\_\_\_\_  
Signed: \_\_\_\_\_

Approved Construction Plan	
Name	Date
Planning	
Public Utilities	
Traffic	
Fire	



TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	MIN. REQ. SIZE	QTY
○	Acer palmatum / Green Leaf Japanese Maple	15 gal	1.5' CAL	8'-10' HT	8'-10' HT	3
○	Cercis c. Forest Pansy™ / Forest Pansy Redbud	25 GAL		8'-10' HT	8'-10' HT	3
○	Ilex vomitoria / Tree Form Yaupon Holly	B & B		8'-10' HT	8'-10' HT	3
○	Ilex x. 'Eagleston' / Eagleston Holly	B&B		8' HT	8'-10' HT	16
○	Lagerstroemia x 'Natchez' / Natchez Crape Myrtle	B & B	2' CAL		2-2.5' CAL	3
○	Magnolia g. D.D. Blanchard™ / Southern Magnolia	B & B	3' CAL	8'-10' HT	2-2.5' CAL	5
○	Quercus virginiana / Southern Live Oak	B & B	3' CAL		2-2.5' CAL	8
○	Ulmus p. 'Emer II' / Allee Elm	B&B	3' CAL	12-14' HT	2-2.5' CAL	2
○	SHRUBS	BOTANICAL / COMMON NAME	SIZE	RANGE	MIN. REQ. SIZE	QTY
○	Aspidistra elatior / Cast Iron Plant	1 gal	15-18" HT			5
○	Azalea l. 'Formosa' / Formosa Azalea	3 gal	18-24" HT			29
○	Buxus m. 'Wintergreen' / 3 gal. Boxwood	3 gal	12-18" HT			21
○	Camellia s. 'Hana Jiman' / White Camellia	7 gal	24-36" HT		12" HT	1
○	Camellia s. 'Yuletide' / Yuletide Camellia	7 gal	36" HT		3' HT	8
○	Distylium myricoides 'Cinnamon Girl' / Distylium	3 gal	15-24" HT			14
○	Fatsia japonica / Japanese Fatsia	7 gal	24-30" HT			16
○	Gardenia radicans / Dwarf Gardenia	7 gal	12-16" HT			14
○	Hydrangea m. 'Nikko Blue' / Nikko Blue Hydrangea	3 gal	12-15" HT			12
○	Ilex vomitoria / Yaupon Holly	7 gal	3-4' HT	3' HT		15
○	Ilex vomitoria 'Nana' / Dwarf Yaupon	3 gal	15-18" HT			42
○	Ligustrum j. 'Recurvatum' / Wax leaf ligustrum	7 gal	36" HT	3' HT		71
○	Miscanthus s. 'Adagio' / Adagio Eulalia Grass	3 gal	15-18" HT			56
○	Muhlenbergia capillaris / Pink Muhly	3 gal	15-18" HT	12" HT		24
○	Myrica cerifera / Wax Myrtle	7 gal	3-4' HT	3' HT		46
○	Nandina domestica 'Harbour Dwarf' / Dwarf Heavenly Bamboo	7 gal	18-24" HT			136
○	Pittosporum t. 'Variegata' / Variegated Pittosporum	3 gal	18-24" HT			6
○	Podocarpus macrophyllum maki / Shrubby Yew	10 gal	4-5' HT			39
○	Rosa x 'Meigappo' / Red Drift Rose	3 gal	12-15" HT			10
○	Sabal minor / Dwarf Palmetto	3 gal	18-24" HT			25
○	Viburnum odoratissimum / Sweet Viburnum	7 gal	5-6' HT			34
○	GROUND COVERS	BOTANICAL / COMMON NAME	SIZE	RANGE	SPACING	QTY
○	Liriope muscari / Lily Turf	1 qt	6-12" HT		18" o.c.	270
○	Trachelospermum a. 'Asiatic' / Asiatic Jasmine	1 qt	6-12" HT		18" o.c.	78
○	SOD SEED	BOTANICAL / COMMON NAME	SIZE	RANGE	SPACING	QTY
○	Zoysia japonica 'Crown' / Korean Grass	sod				

**NOT TO SCALE**

**PLANT SCHEDULE**

DATE: 2020-03-25  
PHASE:  
JOB NUMBER: 101-600

DESIGNED BY: MLD  
DRAWN BY: MAS  
CHECKED BY: JWM

SHEET TITLE: PLANTING PLAN

SHEET NUMBER: L1.0  
OF 1 SHEETS

**MIHALY**  
LAND DESIGN  
PLANNING - LANDSCAPE ARCHITECTURE  
330 MILITARY CUTOFF RD., Suite A3  
WILMINGTON, NC 28405 910.392.4355

Revisions  
2020-05-12: Revise per COW comments  
2020-07-20: Revise per COW comments

CLIENT  
**REAL PROPERTIES, LLC.**  
1319-CC MILITARY CUTOFF RD. #172  
WILMINGTON, NC 28405  
CONTACT: MATT SCHARF - 910-538-9901

PROJECT  
**THE VARSITY**  
611 VARSITY DR. 724 & 716 S. KERR AVE.  
WILMINGTON, NC 28403  
LANDSCAPE PLAN

CONSTRUCTION DOCUMENT REVIEW SET

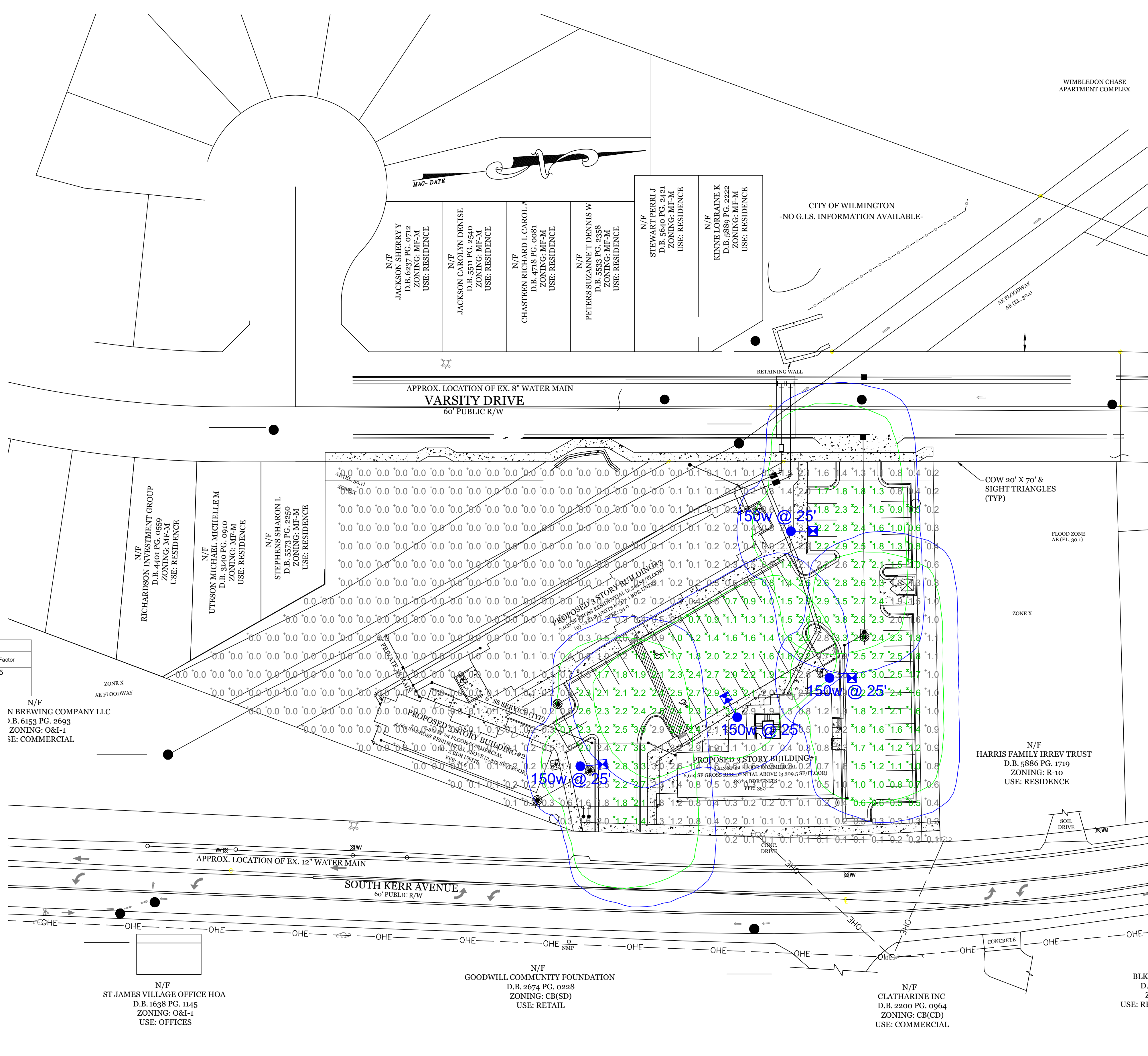
Date: 2020-03-25  
Phase:  
Job Number: 101-600

Designed by: MLD  
Drawn by: MAS  
Checked by: JWM

Sheet Title: PLANTING PLAN

Sheet Number: L1.0  
of 1 sheets





**Statistics**

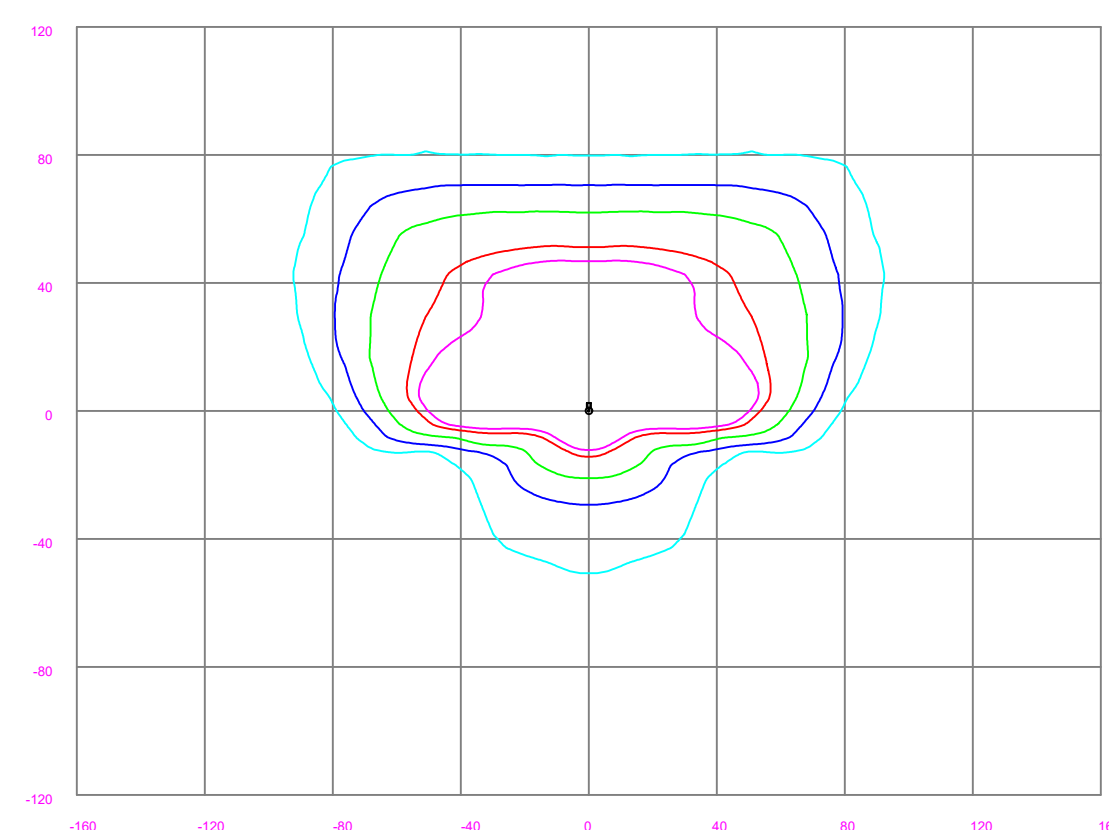
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Overall Grid	+	0.8 fc	3.8 fc	0.0 fc	N/A	N/A
Parking	X	1.9 fc	3.8 fc	0.5 fc	7.6:1	3.8:1

**Schedule**

Symbol	Label	Quantity	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
150w	150w	4	LED 150w Shoebox - Type IV - 4000K	48	385	0.85

**ISOFOOTCANDLE CURVES**

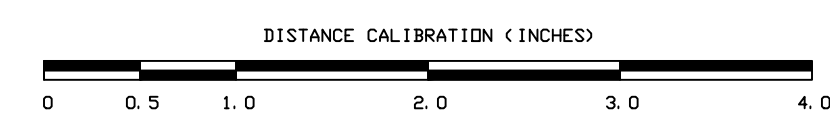
FIXTURE: LED150, EATON  
 MOUNTING HEIGHT: 25 FT  
 LIGHT SOURCE: LED'S, 4000K, 70 CRI  
 LUMENS - 18459  
 PATTERN: TYPE IV B3-U0-G4 (zero light at or above 90 degrees)  
 NOTE: THE FOOTCANDLE READINGS BELOW ARE MAINTAINED AND HAVE BEEN DEPRECIATED FOR LED LUMEN DEPRECIATION AND LUMINAIRE DIRT DEPRECIATION. FOR INITIAL FOOTCANDLES, DIVIDE THE READINGS BELOW BY .85.



LEGEND (OUTER to INNER): 0.10, 0.25, 0.50, 1.00, 1.25

**LIGHTING DESIGN TOLERANCE**  
 The calculated footcandle light levels in this lighting design are predicted values and are based on specific information that has been supplied to Duke Energy Progress. Any inaccuracies in the supplied information, differences in luminaire installation, lighted area geometry including elevation differences, reflective properties of surrounding surfaces, obstructions (foliage or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect results.

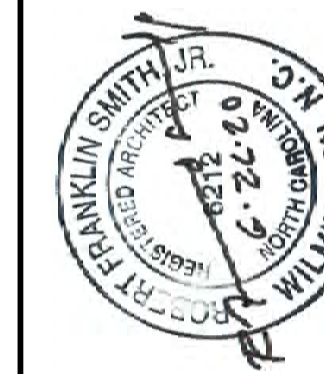
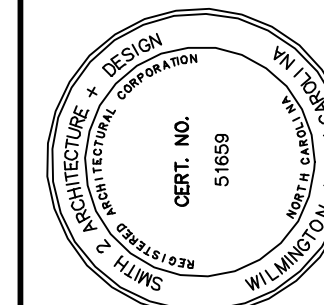
Customer approval \_\_\_\_\_ Date \_\_\_\_\_



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THE VARSITY	
WILMINGTON, NC	
SITE LIGHTING PLAN	
Designed by	DEP LIGHTING SOLUTIONS
Reviewed by	N. Johnson Scale 1" = 20'
Date	04/07/2020 Size "Arch D"
Description	LED 150w Shoebox
Drawing No.	20-0123A Sht. 1 OF 1





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**THE VARSITY**  
724 SOUTH KERR AVENUE  
WILMINGTON, NORTH CAROLINA 28405

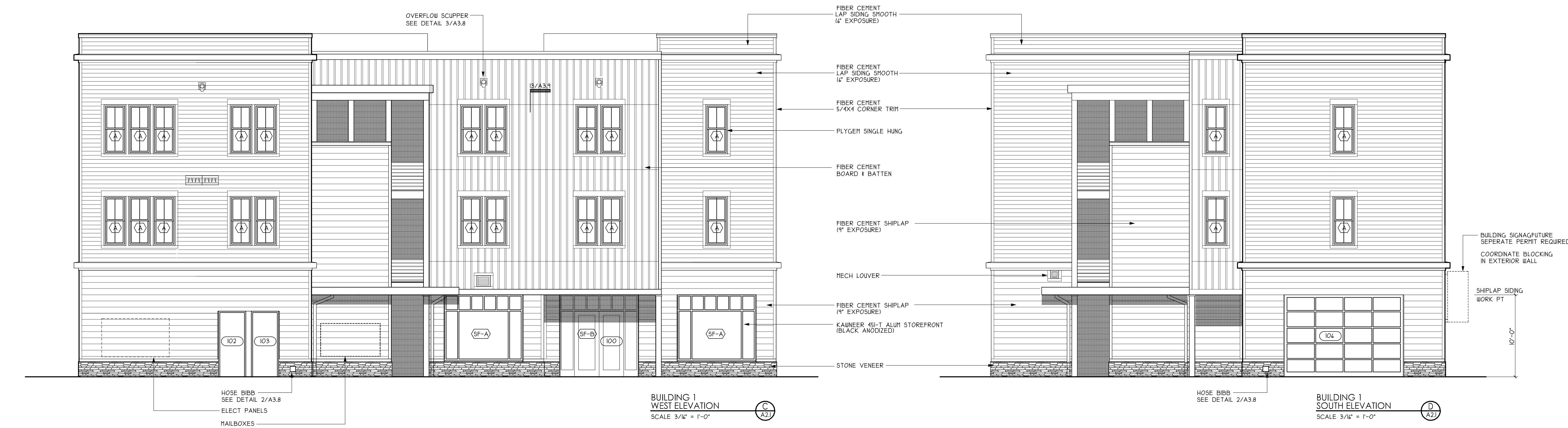
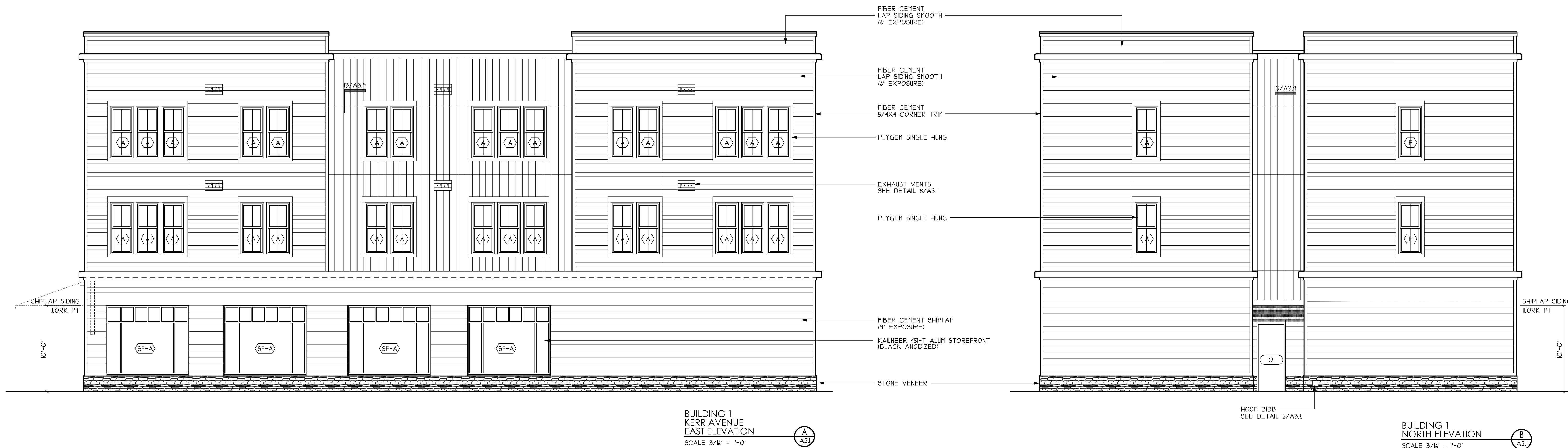
CONSTRUCTION DOCUMENTS

6-26-20

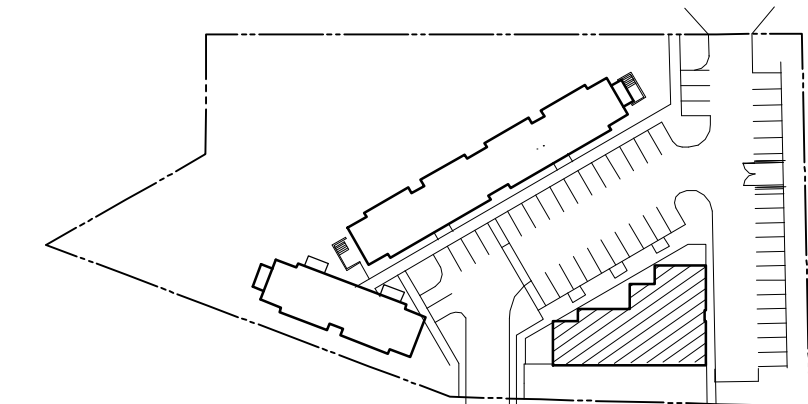
REV DATE REVISION  
R-1 1/23/20 SIGNAGE NOTE

**A2.1**  
BUILDING 1  
ELEVATIONS

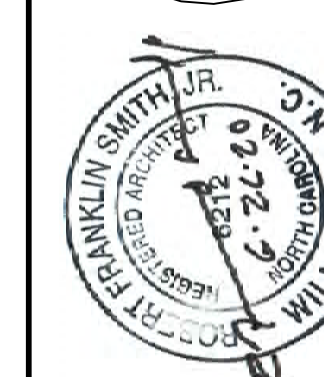
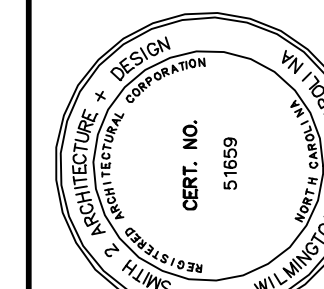
18-107 A201



EXTERIOR MATERIAL SCHEDULE				LEGEND		KEY NOTES		SITE KEY PLAN	
HATCH/KEY	MATERIAL	BASIS OF DESIGN/PRODUCT/MANUFACTURER	COLOR					NOT TO SCALE	
[Hatch]	FIBER CEMENT LAP SIDING	JAMES HARDI ARTISAN LAP SIDING, 6" EXPOSURE	XXX	[Symbol]	2X4 STUD WALL	[Symbol]	WH WATER HEATER	[Symbol]	[Symbol]
[Hatch]	FIBER CEMENT PANELS WITH 1/2" BATTEN STRIPS AT 1'-0" OC			[Symbol]	2X4 STUD WALL	[Symbol]	REF REFRIGERATOR	[Symbol]	[Symbol]
[Hatch]	HORIZONTAL SHIPLAP SIDING	JAMES HARDI ARTISAN SHIPLAP SIDING, 9" EXPOSURE		[Symbol]	1 HR RATED WALL	[Symbol]	DS DOWNSPOUT	[Symbol]	[Symbol]
[Hatch]	STONE VENEER	PLY-GEN STONE LEDGESTONE		[Symbol]	1 HR INTERIOR BEARING WALL	[Symbol]	[Symbol]	INDICATES 30" X 48" CLEAR FLOOR SPACE	[Symbol]
				[Symbol]	INDICATES WALL TYPE SEE DETAILS SHEET G15	[Symbol]	[Symbol]	INDICATES REQUIRED CLEAR FLOOR SPACE PER ANSI ITU CODE (2009)	[Symbol]
				[Symbol]	WT-X	[Symbol]	[Symbol]	EXHAUST WALL CAP FINISH TO MATCH EXTERIOR WALL FINISH	[Symbol]
				[Symbol]	(FE) FIRE EXTINGUISHER, MIN 2-A10-B-C (WALL TYPE)	[Symbol]	[Symbol]		[Symbol]
				[Symbol]	(102) INDICATES DOOR NUMBER, SEE SCHEDULE SHEET A41	[Symbol]	[Symbol]		[Symbol]
				[Symbol]	(A) INDICATES WINDOW MARK, SEE SCHEDULE SHEET A41	[Symbol]	[Symbol]		[Symbol]







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**THE VARSITY**  
724 SOUTH KERR AVENUE  
WILMINGTON, NORTH CAROLINA 28405

CONSTRUCTION DOCUMENTS

6-26-20

REV DATE REVISION  
R-1 1-23-20 SIGNAGE NOTE

**A2.2**  
BUILDING 2 ELEVATIONS

18-107 A202



EXTERIOR MATERIAL SCHEDULE				LEGEND		KEY NOTES		SITE KEY PLAN	
HATCH/KEY	MATERIAL	BASIS OF DESIGN/PRODUCT/MANUFACTURER	COLOR	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	NOT TO SCALE	
[Hatch]	FIBER CEMENT LAP SIDING	JAMES HARDI ARTISAN LAP SIDING, 4\"/>							



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

**SECTION E: GROUND STABILIZATION**

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

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

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

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Roller erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Roller erosion control products with grass seed</li> </ul>

**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 offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- 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.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

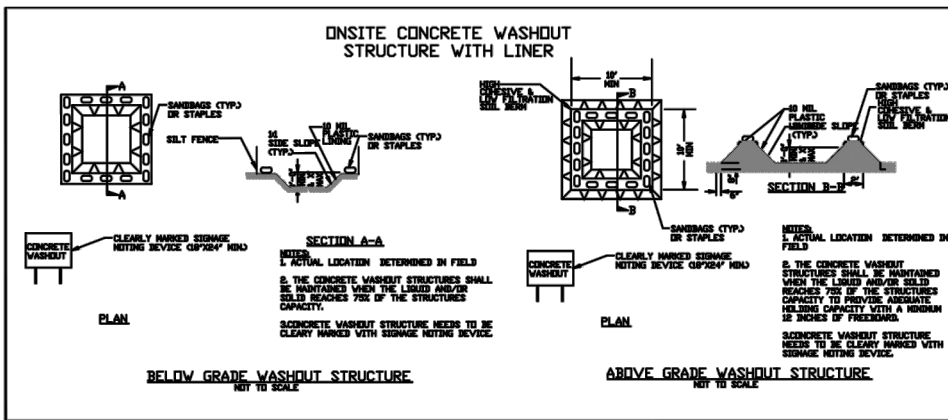
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled,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

**PORTABLE TOILETS**

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

**EARTHEN STOCKPILE MANAGEMENT**

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



**CONCRETE WASHOUTS**

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state 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 an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- 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.
- 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 washout.

**HERBICIDES, PESTICIDES AND RODENTICIDES**

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

**HAZARDOUS AND TOXIC WASTE**

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING**

EFFECTIVE: 04/01/19

**PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION A: SELF-INSPECTION**  
Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those unattended days (note 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&S Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfall inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Record of the required reports to the appropriate Division Regional Office per Part III, Section C, Item 2(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&S measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopement, permanent ground cover), 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

**PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION B: RECORDKEEPING**

**1. E&S Plan Documentation**  
The approved E&S plan as well as any approved deviation shall be kept on the site. The approved E&S plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&S plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&S measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&S plan.	Initial and date each E&S measure on a copy of the approved E&S plan or complete, date and sign an inspection report that lists each E&S measure shown on the approved E&S plan. This documentation is required upon the initial installation of the E&S measures or if the E&S measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&S 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&S plan.	Initial and date a copy of the approved E&S 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&S measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&S measures.	Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

**2. Additional Documentation to be Kept on Site**  
In addition to the E&S plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

**3. Documentation to be Retained for Three Years**  
All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

**PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION C: REPORTING**

**1. Occurrences that Must be Reported**  
Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
  - They are 25 gallons or more,
  - They are less than 25 gallons but cannot be cleaned up within 24 hours,
  - They cause sheen on surface waters (regardless of volume), or
  - They are within 100 feet of surface waters (regardless of volume).
- 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.
- Anticipated bypasses and unanticipated bypasses.
- Noncompliance with the conditions of this permit that may endanger health or the environment.

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

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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.</li> <li>If the stream is named on the <i>NC 303(d) list</i> 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.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
(c) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <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>
(d) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(i)(7)]	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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 recurrence of the noncompliance. [40 CFR 122.41(i)(6).</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>

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

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

- The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&S plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item 2(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

EFFECTIVE: 04/01/19

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING**

