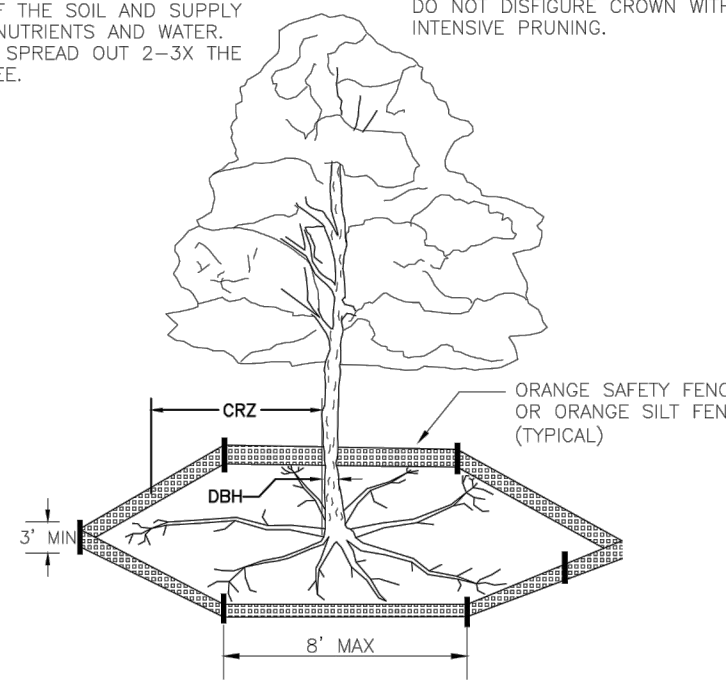


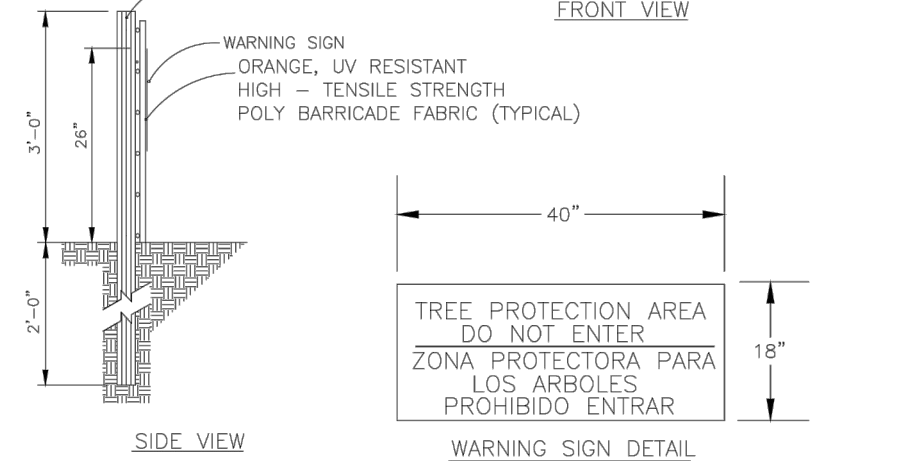
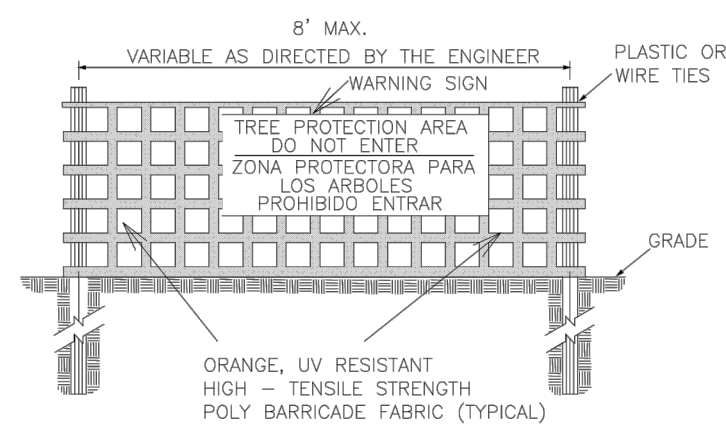
NOTE: THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

NOTE: CROWN OF THE TREE IS NEEDED FOR LEAF GROWTH TO PRODUCE OXYGEN, FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE. DO NOT DISFIGURE CROWN WITH INTENSIVE PRUNING.



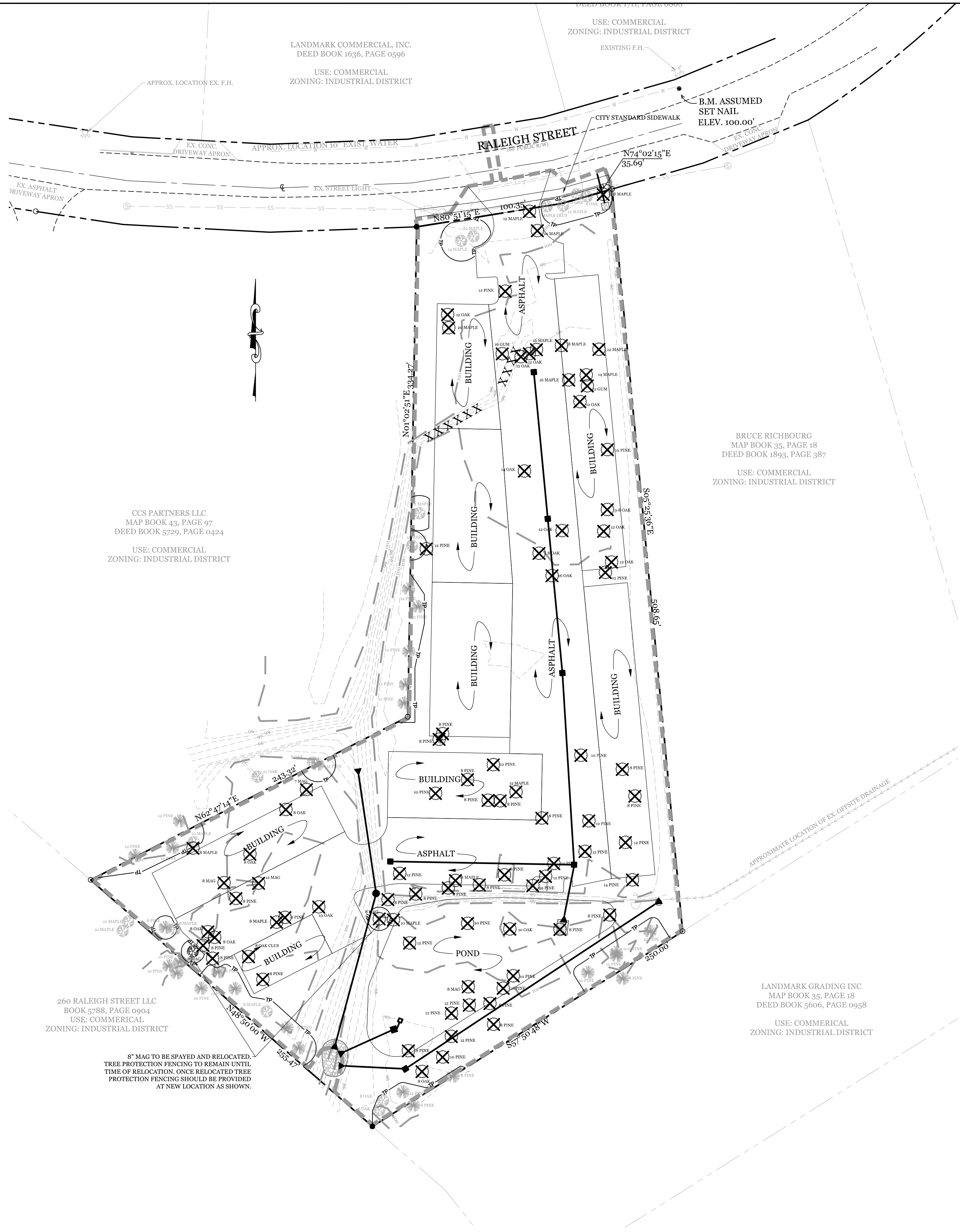
- NOTES:
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
  2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
  3. IF CONSTRUCTION OCCURS 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.
  4. 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.
  5. 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. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
  6. 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.

STANDARD DETAIL		<p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 15-09
DATE: JAN, 2015	<b>TREE PROTECTION DURING CONSTRUCTION</b>		
DRAWN BY: JSR	SHEET 1 of 2		
CHECKED BY: REX, P.E.	SCALE: NOT TO SCALE		



- NOTES:
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
  2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
  3. 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.
  4. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
  5. TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.
  6. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

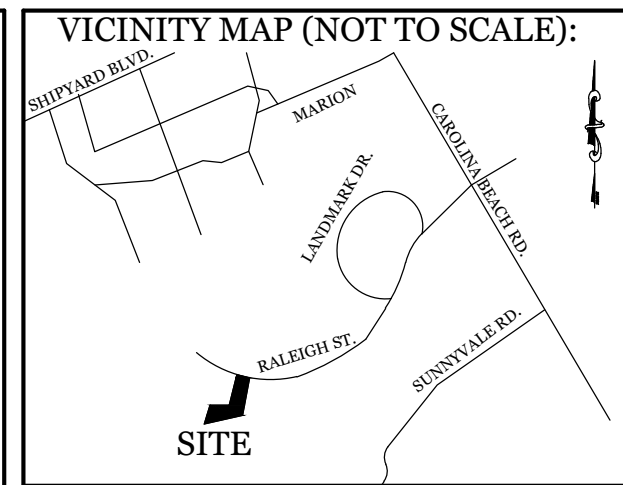
STANDARD DETAIL		<p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 15-09
DATE: JAN, 2015	<b>TREE PROTECTION DURING CONSTRUCTION</b>		
DRAWN BY: JSR	SHEET 2 of 2		
CHECKED BY: REX, P.E.	SCALE: NOT TO SCALE		



**SITE DATA**

PARCEL ID:	R06500-007-035-000
CURRENT ZONING:	IND (INDUSTRIAL)
CAMA LAND USE CLASSIFICATION:	URBAN
PROJECT ADDRESS:	304-A RALEIGH ST. WILMINGTON, NC 28412
CURRENT OWNER:	ROBERTS JAMES R KIONA P 6040 MOUNT CARMEL PARKE WILMINGTON, NC 28412
TOTAL ACREAGE IN PROJECT BOUNDARY:	122,843 S.F. (± 2.82 ac.)
TOTAL DISTURBED AREA:	±2.8 ACRES
EXISTING ONSITE IMPERVIOUS AREAS:	SITE IS VACANT
SOIL TYPES:	LE (LEON SAND) 74.9% MU (MURVILLE FINE SAND) 21.8% Ur (URBAN LAND) 3.3% (Per the USDA websoil survey map)

- NOTES:
1. EXISTING SURVEY DATA FROM SURVEY BY ARNALD CARSON SURVEYING, PC.
  2. THIS LOT IS LOCATED IN ZONE X AS PER FIRM COMMUNITY # 370171, MAP# 3720312500K, DATED: AUGUST 28, 2018.
  3. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
  4. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
  5. TREE PROTECTION SIGNAGE SHALL BE ADDED ALONG THE LIMITS OF DISTURBANCE ADJACENT TO TREES EVERY 100' TO PROTECT TREES ADJACENT TO THE CONSTRUCTION SITE.
  6. NO SIGNIFICANT TREES ARE PROPOSED TO BE REMOVED.
  7. NO WETLANDS EXIST ON SITE.



**REVISIONS**

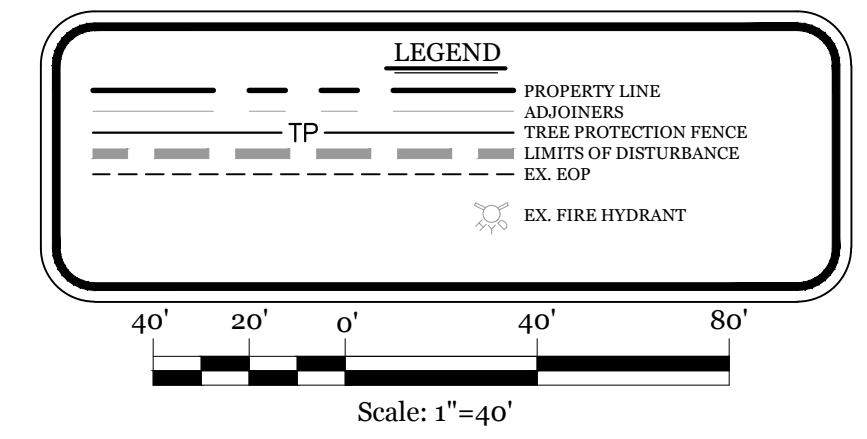

**INTRACOASTAL ENGINEERING, PLLC**  
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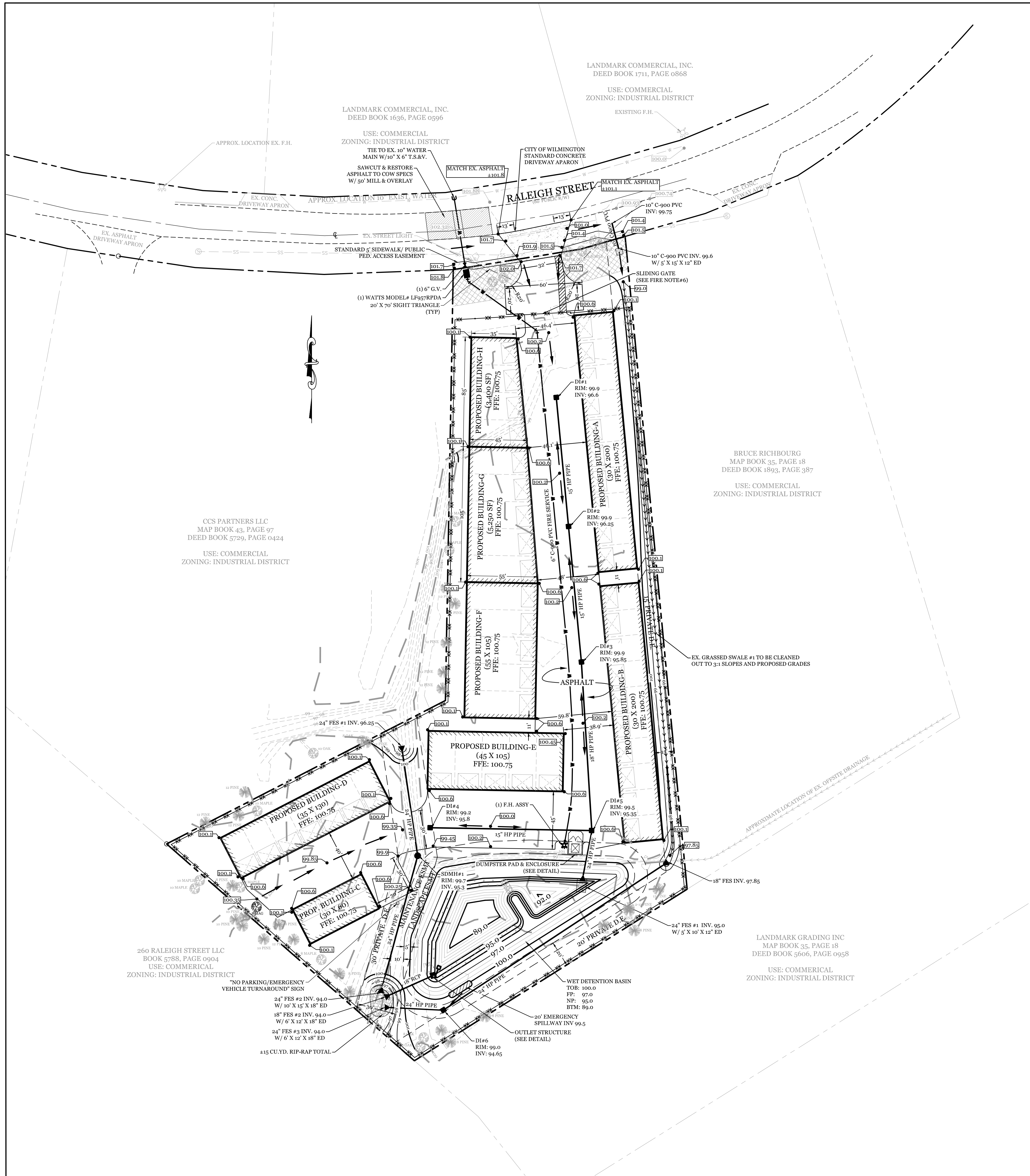
**EXISTING CONDITIONS, DEMOLITION, TREE REMOVAL & PROTECTION PLAN**  
 FOR  
**RALEIGH ST. STORAGE**  
 WILMINGTON, NORTH CAROLINA

**CLIENT INFORMATION:**  
 Stephen B Conway  
 6248 Towles Road  
 Wilmington, NC 28409  
 Phone: 910-538-9737

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	7/14/2021
APPROVED:	CDC	SCALE:	1" = 40'
PROJECT NUMBER:	2020-039		

DRAWING NUMBER: **C-0** 1 OF 7





**SITE DATA**

PARCEL ID: R06500-007-035-000  
 CURRENT ZONING: IND (INDUSTRIAL)  
 CAMA LAND USE CLASSIFICATION: URBAN  
 PROJECT ADDRESS: 304-A RALEIGH ST. WILMINGTON, NC 28412  
 CURRENT OWNER: ROBERTS JAMES R KIONA P 6040 MOUNT CARMEL PARKE WILMINGTON, NC 28412  
 TOTAL ACREAGE IN PROJECT BOUNDARY: 122,843 S.F. (± 2.82 ac.)  
 NUMBER OF BUILDINGS: 8  
 BUILDING SIZE: 37,500 GFA TOTAL (SEE PLAN FOR INDIVIDUAL BLDG. SIZES)  
 BUILDING HEIGHT: 14'  
 BUILDING SETBACKS:  
 FRONT: REQUIRED= 50' PROPOSED= 50'  
 SIDE: REQUIRED= 0' PROPOSED= 15'  
 REAR: REQUIRED= 0' PROPOSED= 15'  
 CALCULATION FOR BUILDING COVERAGE:  
 PROPOSED COVERAGE: 37,500 S.F. ÷ 122,843 S.F. = 30.5%  
 PROPOSED IMPERVIOUS AREAS:  
 BUILDINGS: 37,500 S.F.  
 ASPHALT DRIVES: 33,165 S.F.  
 TOTAL: 70,665 S.F. (57.5%)  
 PROPOSED OFFSITE IMPERVIOUS AREAS:  
 CONCRETE SIDEWALK/DRIVE APRON: 1,510 S.F.  
 PARKING REQUIRED: (37,500 SF WAREHOUSE):  
 MIN: 1 SPACE/1000 S.F. = 38 SPACES  
 MAX: 150% of Minimum = 57 SPACES  
 PARKING PROVIDED: 49 SPACES (1 Inside each unit)  
 BICYCLE PARKING REQUIRED: (MIN. 5 PER 25-125 VEHICLE SPACES)  
 REQUIRED: 5 SPACES  
 PROVIDED: 49 SPACES (1 Inside each unit)  
 FOUNDATION PLANTINGS: N/A (BUILDINGS HAVE ROLL-UP DOORS ALONG ALL FRONTAGES)  
 STREET YARD REQUIREMENT: 25' (12.5' MIN & 37.5' MAX WIDTH)  
 REQUIRED: 136' - 32' = 104 LF X 25' = 2,600 S.F.  
 PROVIDED: 2,634 S.F.  
 PROPOSED SEWER AND WATER DEMAND: N/A  
 ESTIMATED TRIP GENERATION: (Per Trip Generation Manual, 10th Edition:  
 37,500 SF WAREHOUSE (ITE CODE 150)  
 AM PEAK: 8 PM PEAK: 9 DAILY: 87

**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.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL NCS11 AT 811 OR 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB & GUTTER, PAVEMENT, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM.
- SOLID WASTE DISPOSAL BY PRIVATE DUMPSTER SERVICE.
- RUNOFF FROM ALL IMPERVIOUS SURFACES, INCLUDING ROOF DRAINAGE, TO BE DIRECTED TO STORMWATER POND. ROOF RUNOFF TO BE DIRECTED TO THE FRONT OF THE BUILDINGS OR ROOF DRAINAGE SYSTEM DESIGNED TO CONNECT TO PIPED SYSTEM TO POND.
- NO SITE LIGHTING IS PROPOSED AT THIS TIME.

**GENERAL TRAFFIC NOTES:**

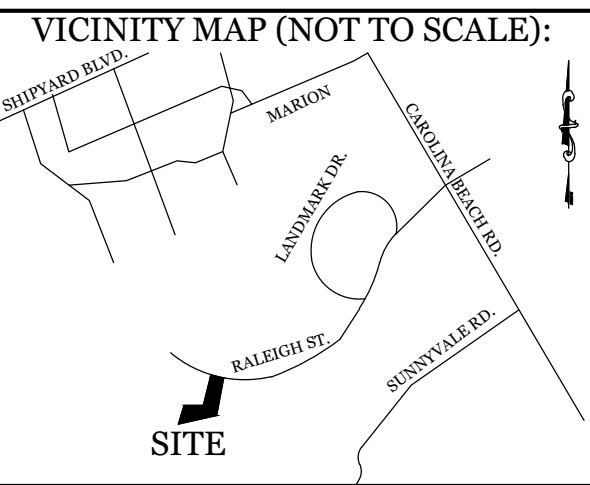
- ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS OFF THE R/W TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. [DETAIL SD 15-13 & SD 11-3 COFW TECH 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 COFW TECH STDS]
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5899 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
- ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' TO 10'
- CONTACT TRAFFIC ENGINEERING AT (910) 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.

**FIRE & SAFETY NOTES:**

- CONSTRUCTION TYPE: II-B (COMMERCIAL)
- BUILDINGS WILL NOT BE SPRINKLED
- PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS.
- ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
- HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF STRUCTURE.
- NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
- HYDRANTS MUST BE WITHIN 300' OF THE BUILDING(S), MEASURED AS THE TRUCK DRIVES.
- FIRE HYDRANTS TO BE INSTALLED PER CITY OF WILMINGTON ORDINANCE AND CPFA STANDARDS.
- CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.
- PROPOSED DRIVEWAY GATE TO BE SIREN ACTIVATED.

**UTILITY NOTES:**

- EXISTING WATER AND SANITARY SEWER SERVICES ARE CURRENTLY AVAILABLE TO THE SITE FROM CAPE FEAR PUBLIC UTILITY AUTHORITY PUBLIC MAINS.
- ALL PROPOSED UTILITY SERVICES, SUCH AS ELECTRIC POWER, CATV, GAS & TELEPHONE SHALL BE INSTALLED UNDERGROUND.
- ALL WATER & SEWER UTILITIES TO BE INSTALLED PER CPFA TECHNICAL SPECIFICATIONS & STANDARDS.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CPFA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCOHR OR ASSE.
- IF CONTRACTOR DESIRES CPFA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- WHEN PVC WATER MAINS AND SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED, SINGLE-STRAND COPPER WIRE INSTALLED & STRAPPED TO THE PIPES WITH DUCT TAPE. THIS IS TO BE ACCESSIBLE IN ALL VALVES AND METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL NCS11 AT 811 OR 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB & GUTTER, PAVEMENT, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM.



**REVISIONS**

NO.	DATE	DESCRIPTION

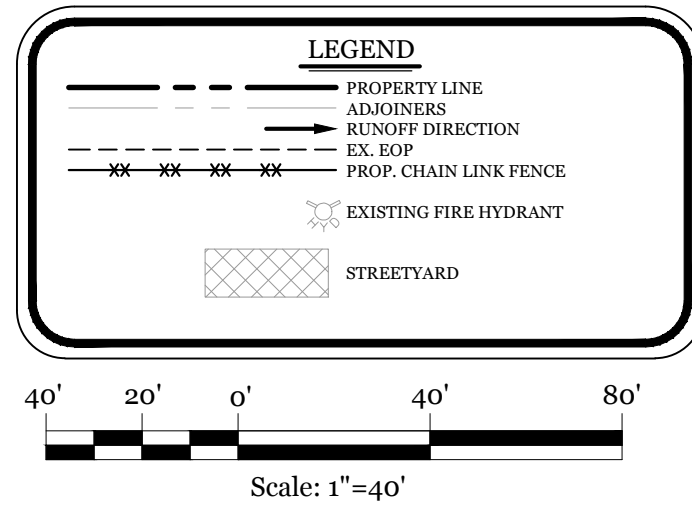
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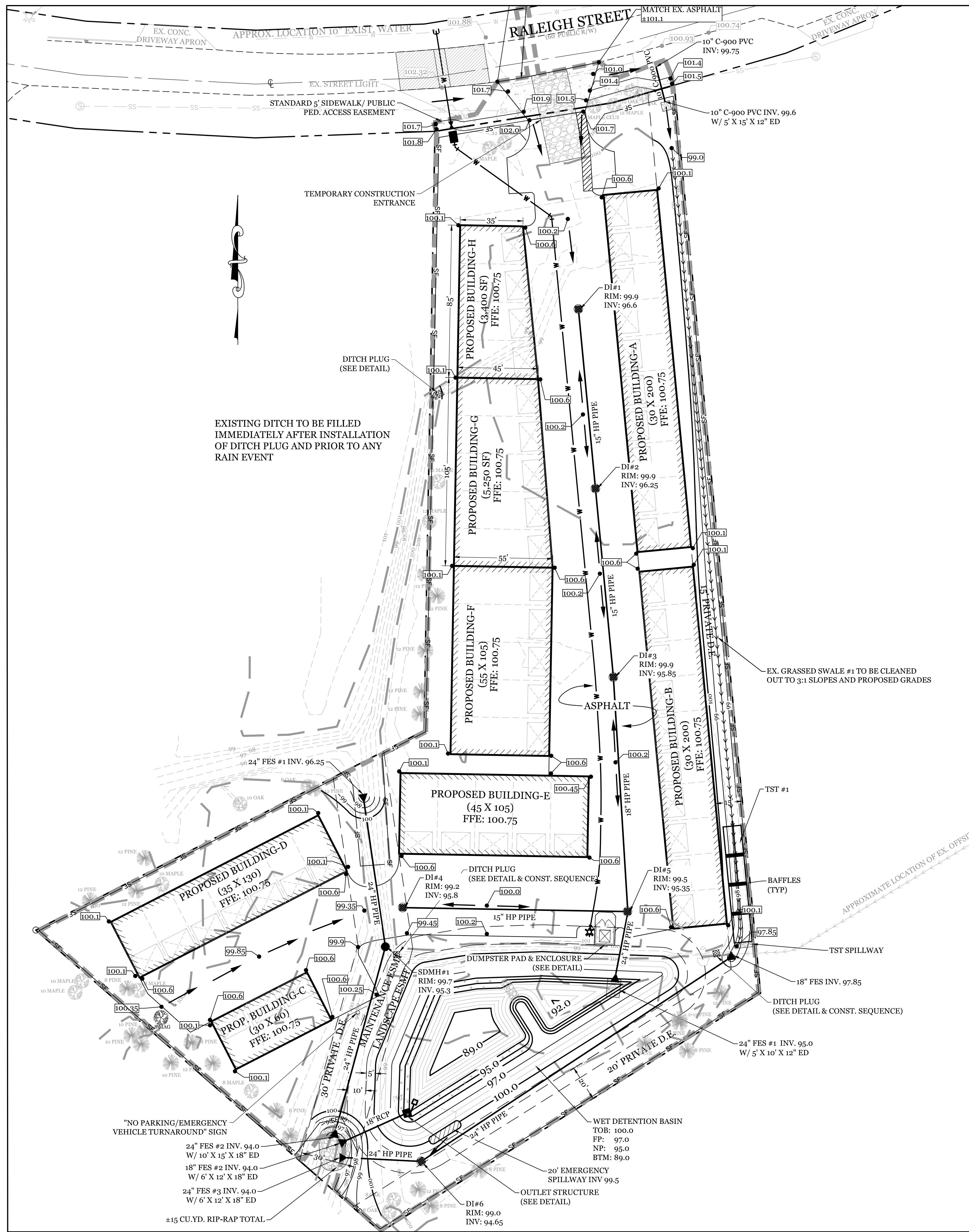
**SITE, GRADING, DRAINAGE & STORMWATER PLAN**  
 FOR  
**RALEIGH ST. STORAGE**  
 WILMINGTON, NORTH CAROLINA

**CLIENT INFORMATION:**  
 Stephen B Conway  
 6248 Towles Road  
 Wilmington, NC 28409  
 Phone: 910-538-9737

DRAWN: JAE	SHEET SIZE: 24 X 36
CHECKED: CDC	DATE: 7/14/2021
APPROVED: CDC	SCALE: 1" = 40'
PROJECT NUMBER: 2020-039	

DRAWING NUMBER: **C-1** 2 OF 7





### 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) <i>Omit annual Lespedeza when duration of temporary cover is not to extend beyond June</i>	100 (lb/acre) 50 (lb/acre)
<b>SUMMER:</b> German Millet In the Piedmont and Mountains, a small-stemmed sungrass 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:**  
 Refertilize if growth is not fully adequate, reseed, refertilize 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 (blend of 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 40 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.

**MAINTENANCE:**  
 Refertilize the following April with 50 lb/acre nitrogen. Repeat as growth requires, may be moved only once a year. Where a neat appearance is desired, omit sericea and mow as often 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 agricultural limestone and 500 lb/acre 10-10-10 fertilizer.

**MAINTENANCE:**  
 Refertilize the following April with 50 lb/acre nitrogen. Repeat as growth requires, may be moved 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.

SYMBOL	GROUND STABILIZATION CRITERIA		
	SITE AREA DESCRIPTION	STABILIZATION TIMEFRAME	STABILIZATION TIMEFRAME EXCEPTIONS
	* Perimeter dikes, ditches and slopes	7 Days	None
	* High Quality Water (HQW) Zones	7 Days	None
	* Slopes Steeper than 3:1	7 Days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
	* Slopes 3:1 or flatter	14 Days	7-days for slopes greater than 50 ft. in length
	* All other areas with slopes flatter than 4:1	14 Days	None (except for perimeters & HQW Zones)

**BUILDING WASTE HANDLING:**  
 - NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS  
 - DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE.

**INSPECTIONS:**  
 - EARTHEN MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE.  
 - CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.

**INSPECTIONS:**  
 - SAME WEEKLY REQUIREMENTS  
 - SAME RAIN GAUGE & INSPECTIONS AFTER 0.50" RAIN EVENT.  
 - INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS"  
 - INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.  
 - RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST.  
 - ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.

**SEDIMENT BASINS:**  
 - OUTLET STRUCTURES MUST BE WITHDRAWN FROM BASIN SURFACES UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.  
 - USE ONLY DWG APPROVED FLOCCULANTS.

### SITE DATA

PARCEL ID: R06500-007-035-000

CURRENT ZONING: IND (INDUSTRIAL)

CAMA LAND USE CLASSIFICATION: URBAN

PROJECT ADDRESS: 304-A RALEIGH ST. WILMINGTON, NC 28412

CURRENT OWNER: ROBERTS JAMES R KIONA P 6040 MOUNT CARMEL PARKE WILMINGTON, NC 28412

TOTAL ACREAGE IN PROJECT BOUNDARY: 122,843 S.F. (± 2.82 ac.)

TOTAL DISTURBED AREA: 2.8 ac.

**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 MUD 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.
- CHECK SEDIMENT BASIN AND BAFFLES WEEKLY & AFTER EACH RAINFALL EVENT. REMOVE SEDIMENT FROM TRAP & BAFFLES AND RESTORE TO ORIGINAL VOLUME WHEN SEDIMENT ACCUMULATES TO ABOUT 1/2 THE DESIGN VOLUME. REPAIR / REPLACE BAFFLES IF TORN, COLLAPSED, OR INEFFECTIVE.
- 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 SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.
- FAIRCLOTH SKIMMER TO BE ROUTINELY CHECKED FOR SEDIMENT ACCUMULATION, TRASH, AND DEBRIS CLOGGING THE WATER ENTRY ORIFICES. PULL SKIMMER TO SIDE OF BASIN AND HAND REMOVE SEDIMENT AND DEBRIS TO RESTORE FLOW TO ORIGINAL STATE.

**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. PROPOSED 24" PIPE AT EXISTING CHANNEL TO BE INSTALLED DURING REMOVAL OF TREES AND IN ORDER TO ACCESS THE REAR PORTION OF THE SITE. ALL EROSION CONTROL MEASURES CORRESPONDING TO PIPE INSTALLATION TO BE PROVIDED AT THIS TIME. ALL SLOPED AREAS SHOULD BE SEDED 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 USACOE 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 PROTECT 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.

**LEGEND**

- PROPERTY LINE
- ADJACENT
- RUNOFF DIRECTION
- WATERSHED
- SANITARY SEWER LINE
- SILT FENCE
- LIMITS OF DISTURBANCE
- SPOT ELEVATION (25.5)
- DROP INLET W/ INLET PROTECTION

Scale: 1"=30'

30' 15' 0' 30' 60'

**CLIENT INFORMATION:**  
 Stephen B Conway  
 6248 Towles Road  
 Wilmington, NC 28409  
 Phone: 910-538-9737

**DRAWN:** JAE **SHEET SIZE:** 24 X 36

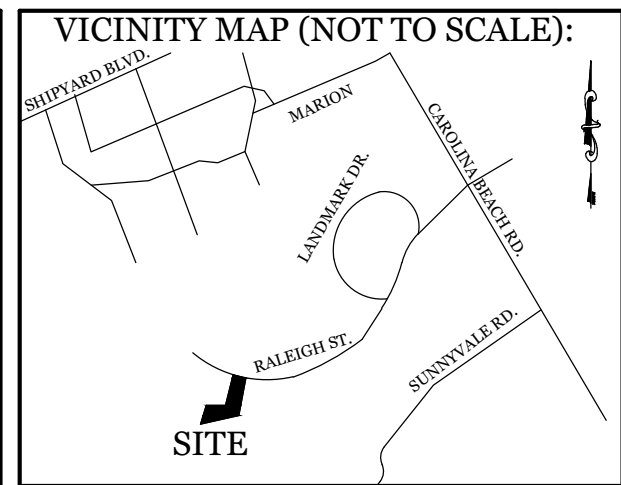
**CHECKED:** CDC **DATE:** 7/14/2021

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

**PROJECT NUMBER:** 2020-039

**DRAWING NUMBER:** C-2

3 OF 7



REVISIONS

NO.	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**

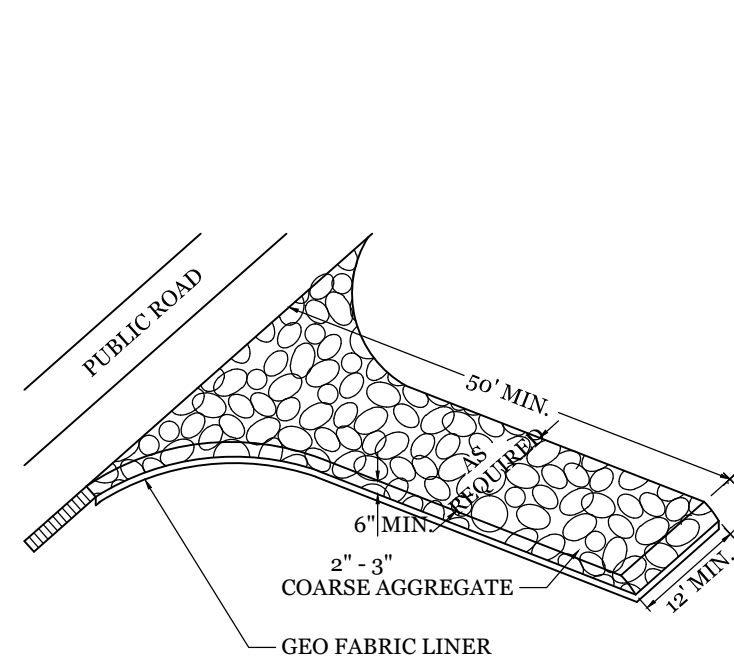
5725 Oleander Dr. Unit E-7  
 Wilmington, North Carolina 28403  
 Phone: 910.859.8983  
 Email: charlie@intracoastalengineering.com  
 License Number P-0662

SEDIMENTATION & EROSION CONTROL PLAN

FOR

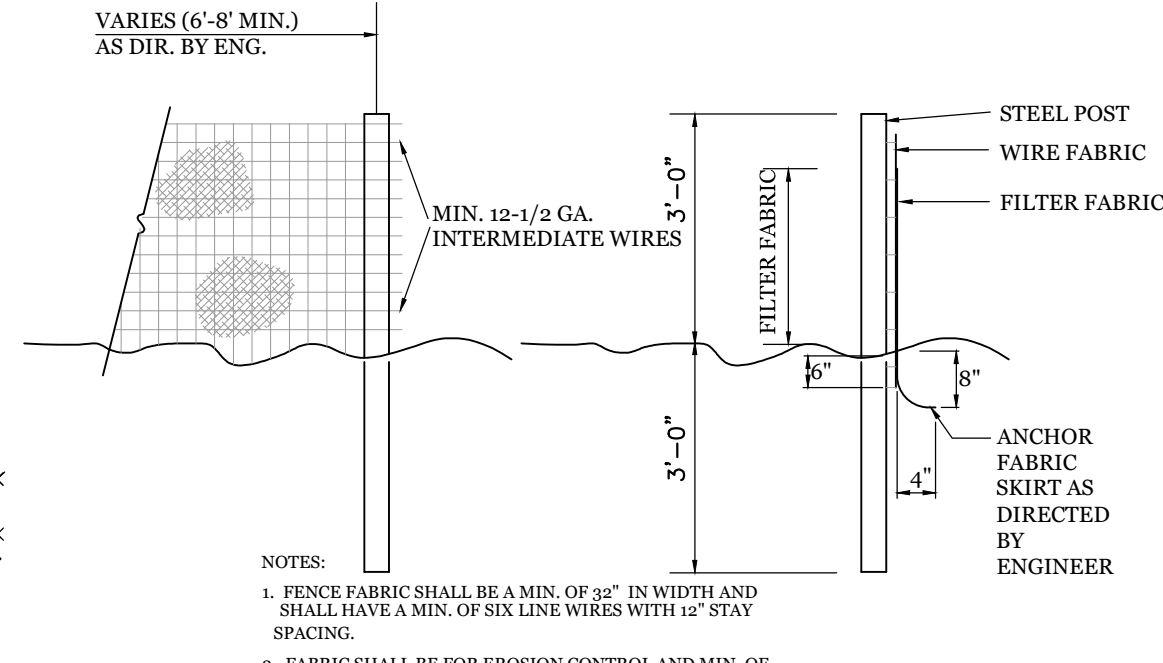
**RALEIGH ST. STORAGE**

WILMINGTON, NORTH CAROLINA



NOTE:  
CONSTRUCTION ENTRANCE TO BE 12" OR ENTIRE WIDTH OF ENTRANCE, WHICHEVER IS GREATER.

**TEMPORARY GRAVEL CONSTRUCTION ENTRANCE**  
NTS



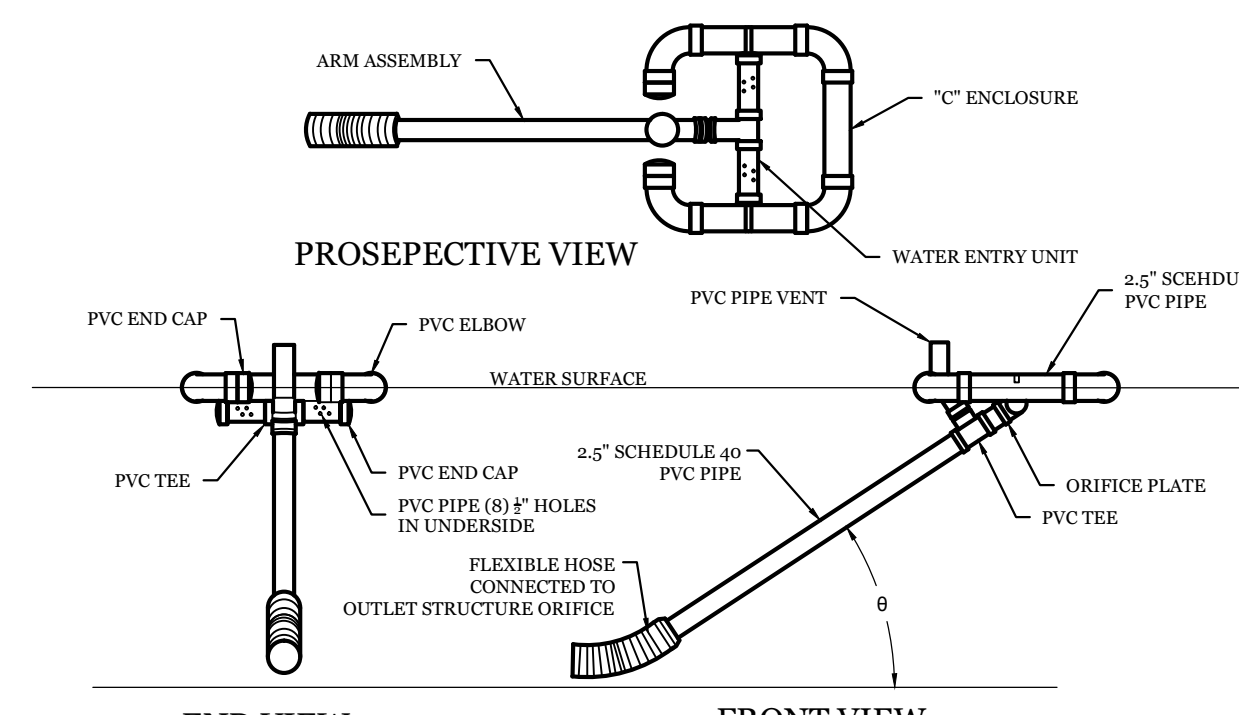
NOTES:  
1. FENCE FABRIC SHALL BE MIN. OF 32" IN WIDTH AND SHALL HAVE A MIN. OF SIX LINE WIRES WITH 12" STAY SPACING.  
2. FABRIC SHALL BE FOR EROSION CONTROL AND MIN. OF 36" IN WIDTH. FABRIC SHALL BE FASTENED ADEQUATELY TO THE WIRE FABRIC AS DIRECTED BY THE ENGINEER.  
3. STEEL POST SHALL BE 2"-Ø IN HEIGHT AND BE OF THE SELF-FASTENER STEEL ANGLE TYPE.

**TEMPORARY SILT FENCE**  
NTS

**CONSTRUCTION SPECIFICATIONS:**  
1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.  
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.  
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACE A 2-FOOT FLAP OF WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.  
4. PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.  
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.  
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUND COVER.

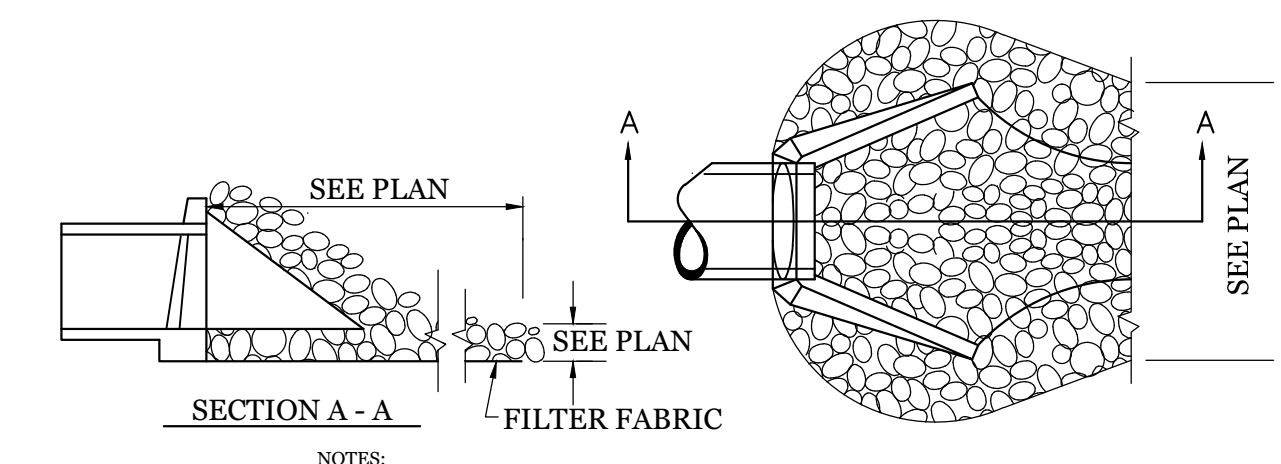
**MAINTENANCE:**  
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (½ INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

**HARDWARE CLOTH AND GRAVEL INLET PROTECTION**  
NTS



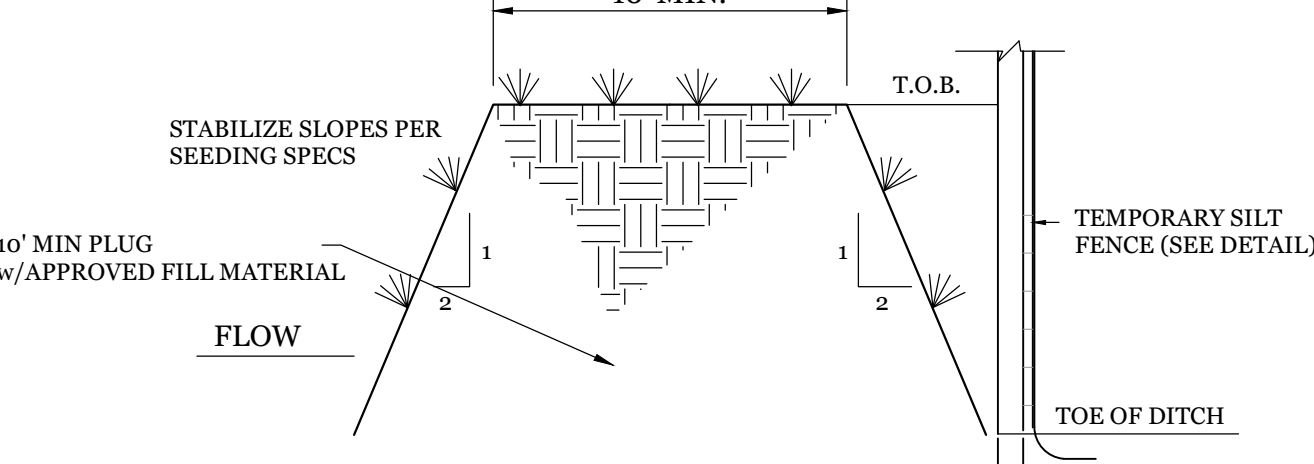
NOTES:  
1. SKIMMER TO BE USED IN WET PONDS AND REMOVED AFTER SITE IS PERMANENTLY STABLE.

**FAIRCLOTH SKIMMER DETAIL**  
NTS

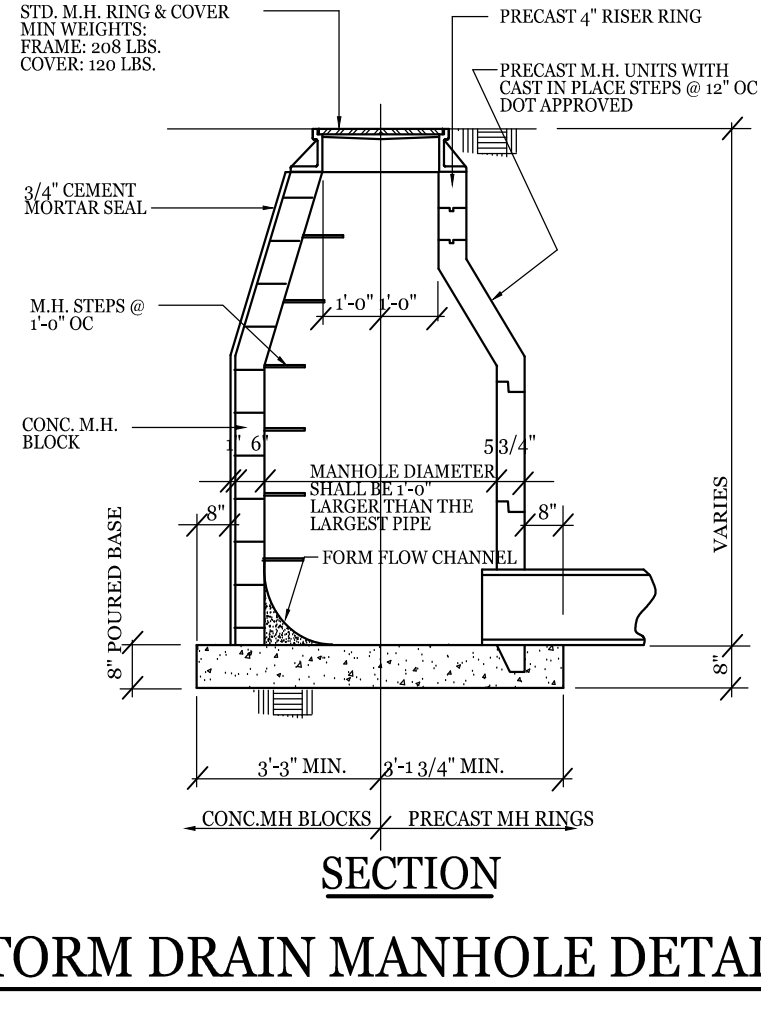
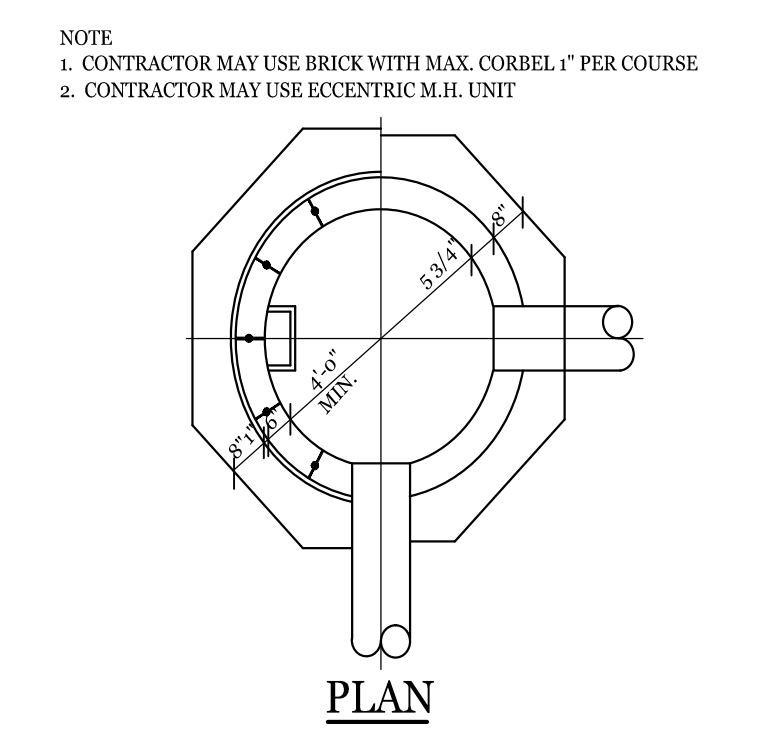


NOTES:  
1. CLASS "B" RIP RAP TO BE USED FOR ALL ENERGY DISSIPATOR AREAS.

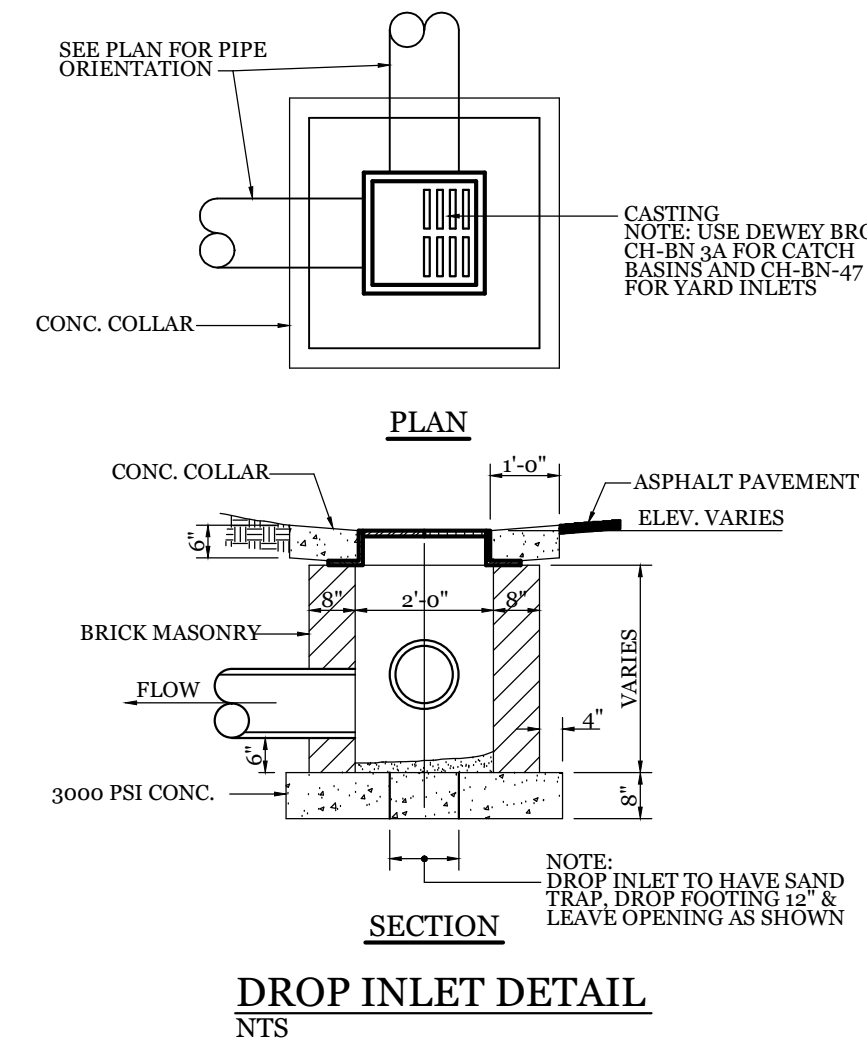
**ENERGY DISSIPATOR**  
NTS



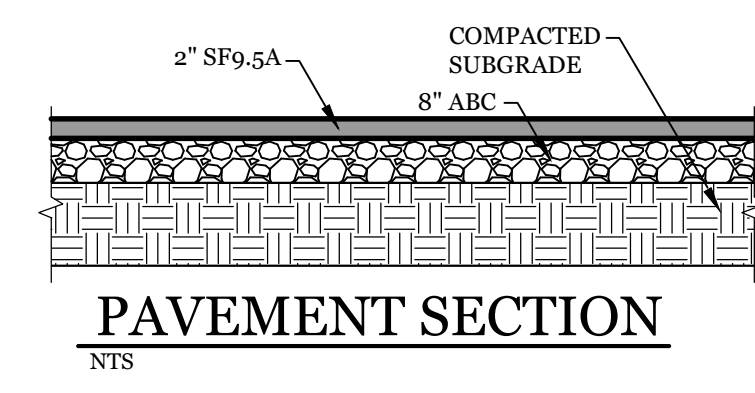
**DITCH PLUG DETAIL**  
NTS



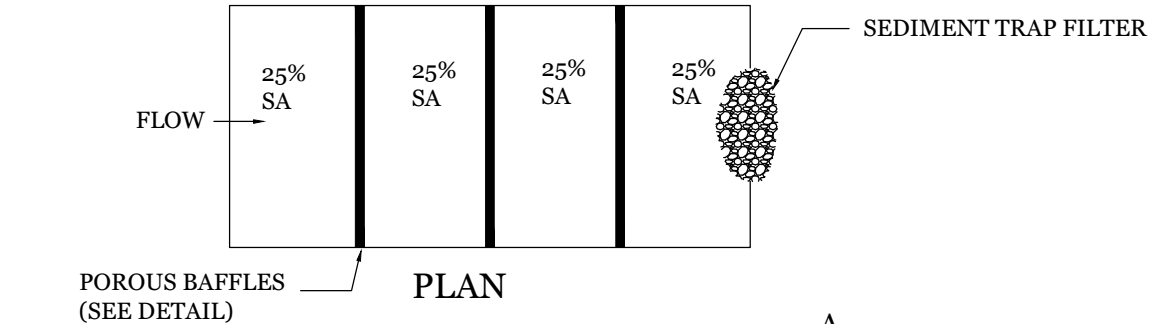
**STORM DRAIN MANHOLE DETAIL**  
NTS



**DROP INLET DETAIL**  
NTS

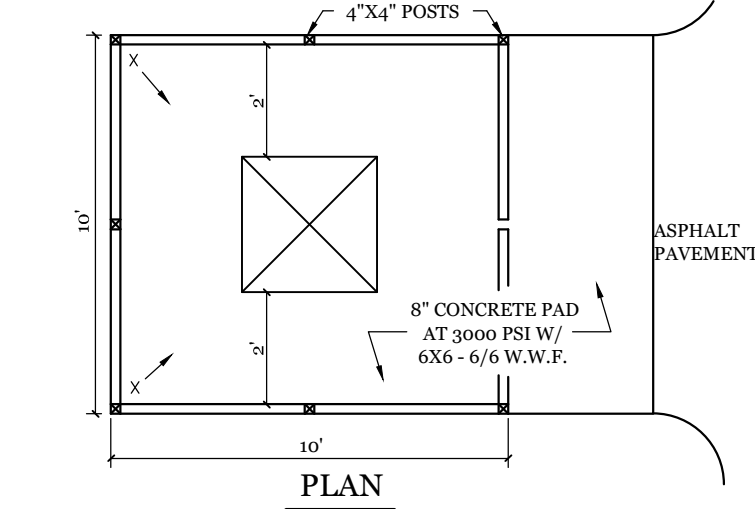


**PAVEMENT SECTION**  
NTS

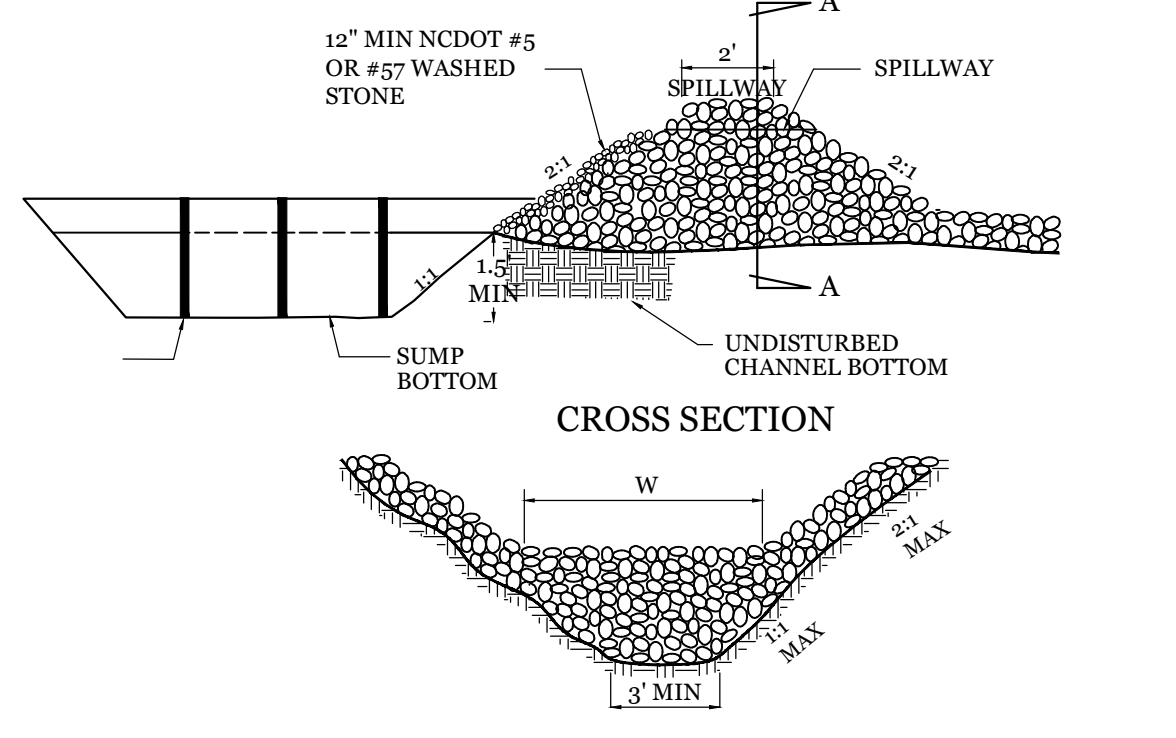


NOTES:  
1. ALL SWALES TO BE LINED WITH EXCELSIOR MAT AND SEEDED IN ACCORDANCE WITH SPECIFICATIONS IMMEDIATELY AFTER CONSTRUCTION.

**TYPICAL GRASS SWALE**  
NTS



**DUMPSTER PAD & ENCLOSURE DETAIL**  
NTS

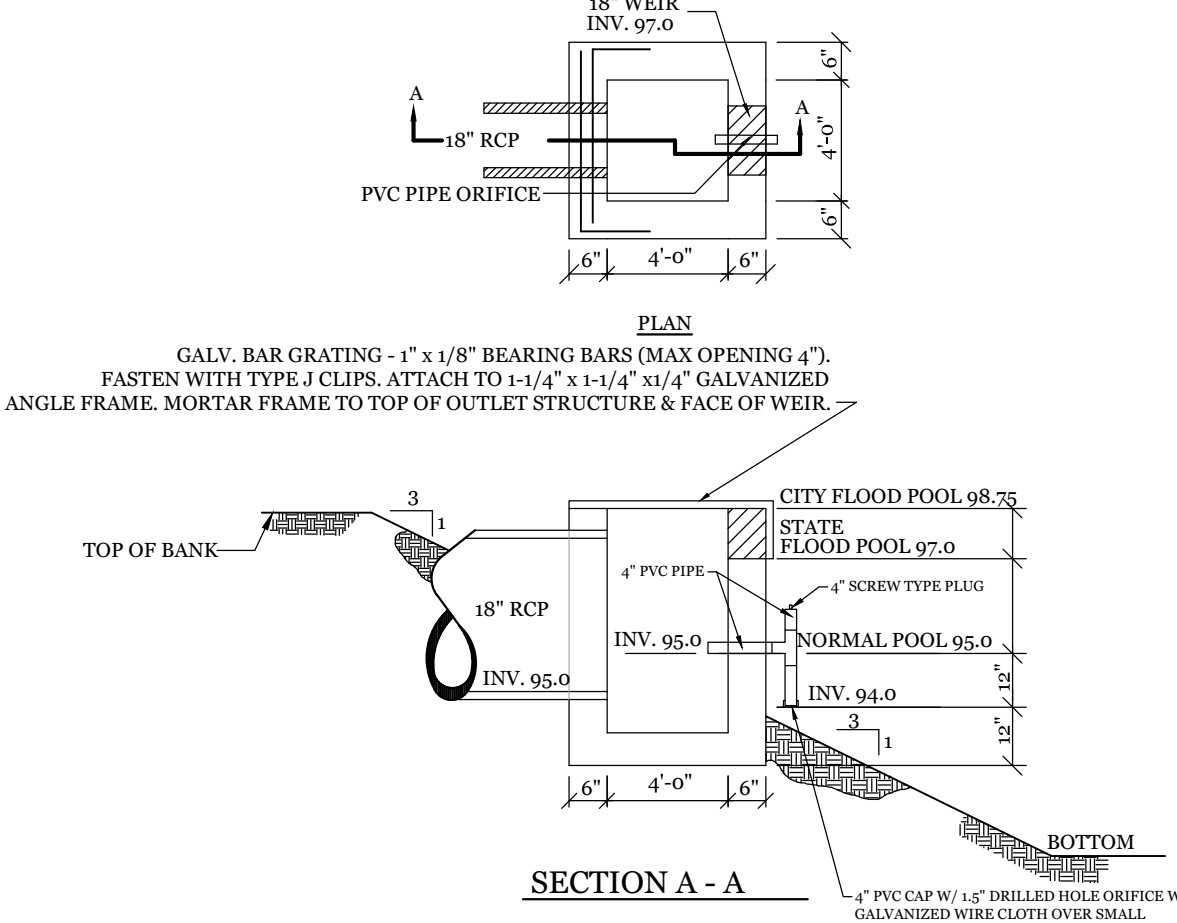


NO.	AREA (ACRES)	REQ'D (PROVIDED)	L	W	D	
1	0.36	1,296 CF	1,300 CF	65'	10'	2.0'

SEE PLAN SHEET FOR LOCATION

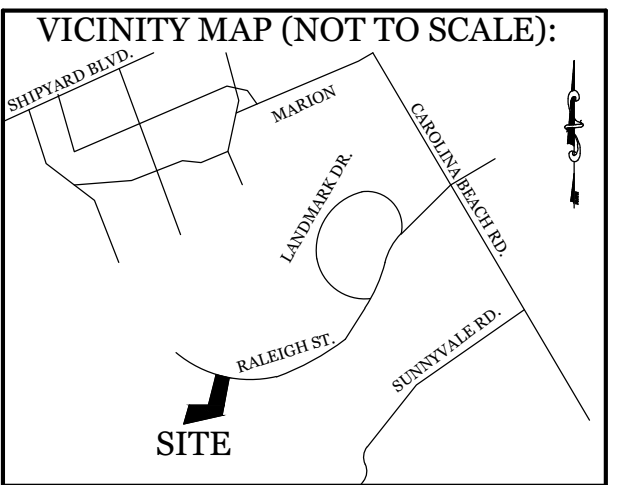
NOTES:  
1. SEDIMENT TRAP WILL BE CONSTRUCTED FIRST, SUMP SECONDLY.  
2. SEDIMENT TRAP HEIGHT TO BOTTOM OF SPILLWAY WILL BE NO LESS THAN TWO FEET.  
3. SPILLWAY DEPTH SHALL BE ONE FOOT.  
4. STONE FACE SHOULD BE NO LESS THAN 6 INCHES MEASURED PERPENDICULARLY FROM THE FACE OF THE LARGE STONE.  
5. SUMP DIMENSIONS SHOULD ALLOW FOR A MINIMUM OF 3600 CF/ACRE OF SEDIMENT STORAGE.  
6. DEPTH OF SEDIMENT IN SUMP WILL BE CHECKED AFTER EACH STORM AND CLEANED AS NECESSARY (MIN. ONCE EACH 6 MONTHS).  
7. REMOVAL OF SEDIMENT TRAP WILL BE DONE IN SUCH A WAY AS TO LIMIT SILTATION.  
8. SEDIMENT TRAP BACK SLOPES TO BE 3:1 MAX.

**TEMPORARY SEDIMENT TRAP DETAIL**  
NTS



**DETENTION POND OUTLET STRUCTURE**  
NTS

- SITE WORK NOTES:**
- THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BOTH ON AND ADJACENT TO THE SITE.
  - CLEARING: CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN LIMITS OF CONSTRUCTION UNLESS OTHERWISE DESIGNATED TO REMAIN.
  - 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.
  - MUCKING: CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY SOFT AREAS.
  - DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
  - FILL AND COMPACTION SHOULD COMPLY WITH GEOTECHNICAL RECOMMENDATIONS.
  - 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.
  - THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM AN OFF-SITE PROPERLY PERMITTED FACILITY AS REQUIRED.
  - 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. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NO ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
  - 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.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE DISCONNECTION/ RECONNECTION AND/OR THE RELOCATION OF ALL EXISTING UTILITIES WITH APPROPRIATE PERSONNEL.
  - 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.
  - 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.
  - THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE DIRECTED BY OWNER.
  - ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL, STATE, AND CPUSA CODES. METERS, TAPS, MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL REQUIREMENTS.
  - ALL BACKFILL FROM UTILITY INSTALLATION MUST BE COMPACTED OR AMENDED TO PROVIDE TRAFFIC BEARING CAPACITY. GEOTECHNICAL ENGINEER TO BE CONSULTED AT CONTRACTOR'S COST AS NECESSARY.
  - 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.
  - CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS - AIR ENTRAINED.
  - 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.
  - ALL SIDEWALKS SHALL BE FREE OF CRACKS, BREAKS, OR ANY OTHER DEFECT PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.



**REVISIONS**

NO.	DATE	DESCRIPTION

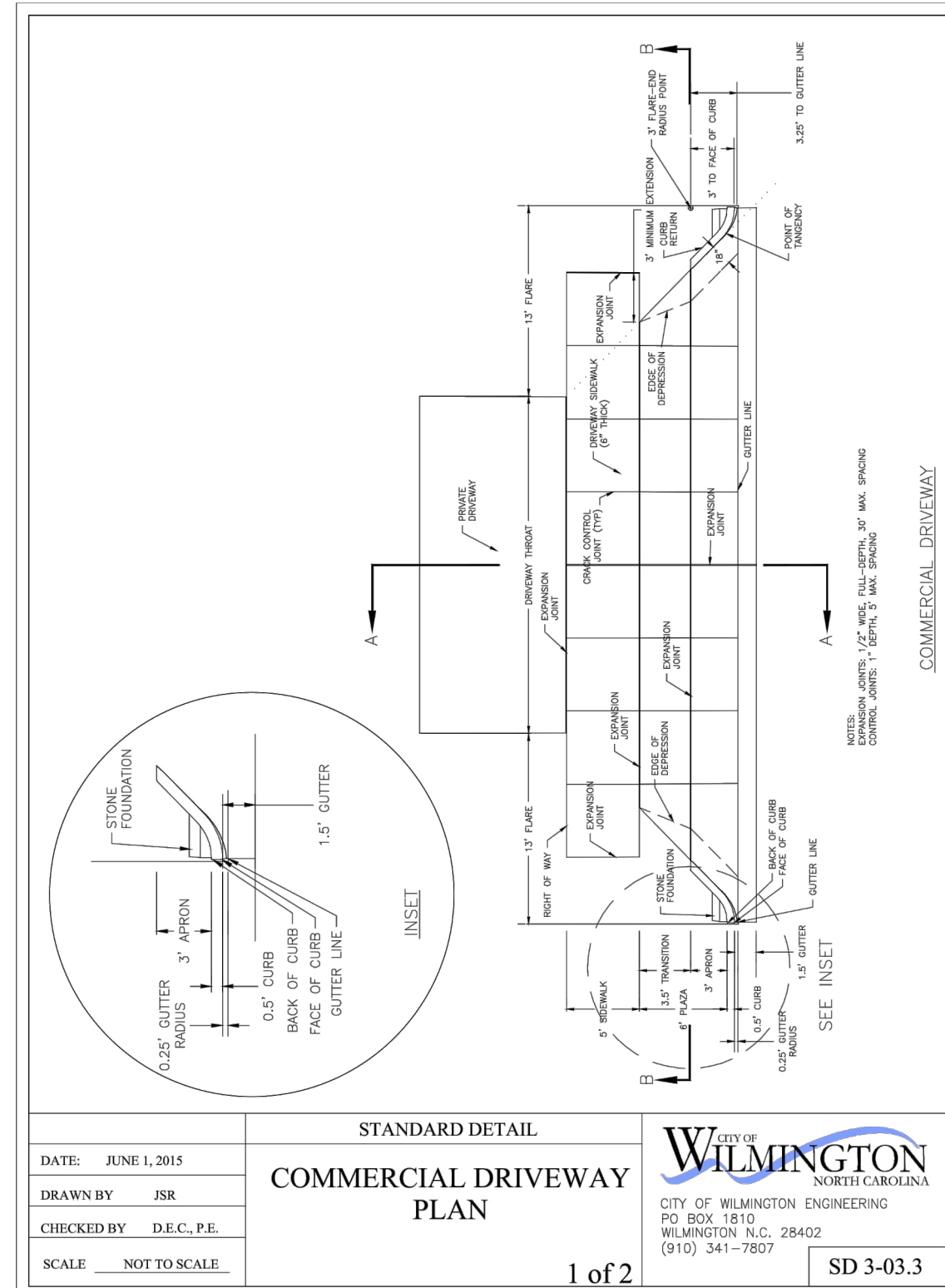
**INTRACOASTAL ENGINEERING, PLLC**  
5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: [charlie@intracoastalengineering.com](mailto:charlie@intracoastalengineering.com)  
License Number P-0662

**DETAILS**  
FOR  
**RALEIGH ST. STORAGE**  
WILMINGTON, NORTH CAROLINA

**CLIENT INFORMATION:**  
Stephen B Conway  
6248 Towles Road  
Wilmington, NC 28409  
Phone: 910-538-9737

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	7/14/2021
APPROVED:	CDC	SCALE:	NTS
PROJECT NUMBER:	2020-039		

DRAWING NUMBER:  
**C-3**  
4 OF 7



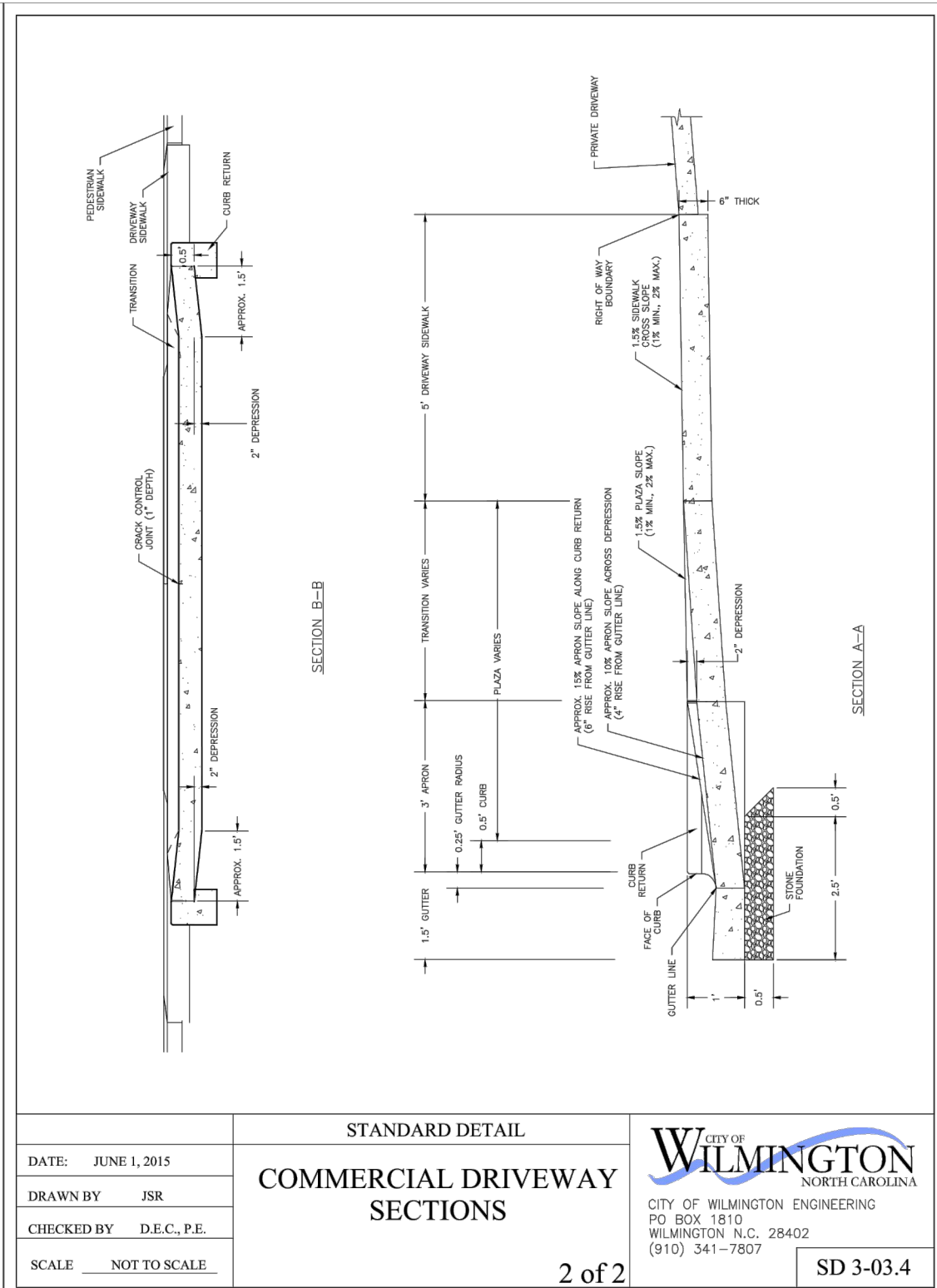
DATE: JUNE 1, 2015  
 DRAWN BY: JSR  
 CHECKED BY: D.E.C., P.E.  
 SCALE: NOT TO SCALE

STANDARD DETAIL  
**COMMERCIAL DRIVEWAY PLAN**

1 of 2

SD 3-03.3

CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 PO BOX 1810  
 WILMINGTON, N.C. 28402  
 (910) 341-7807



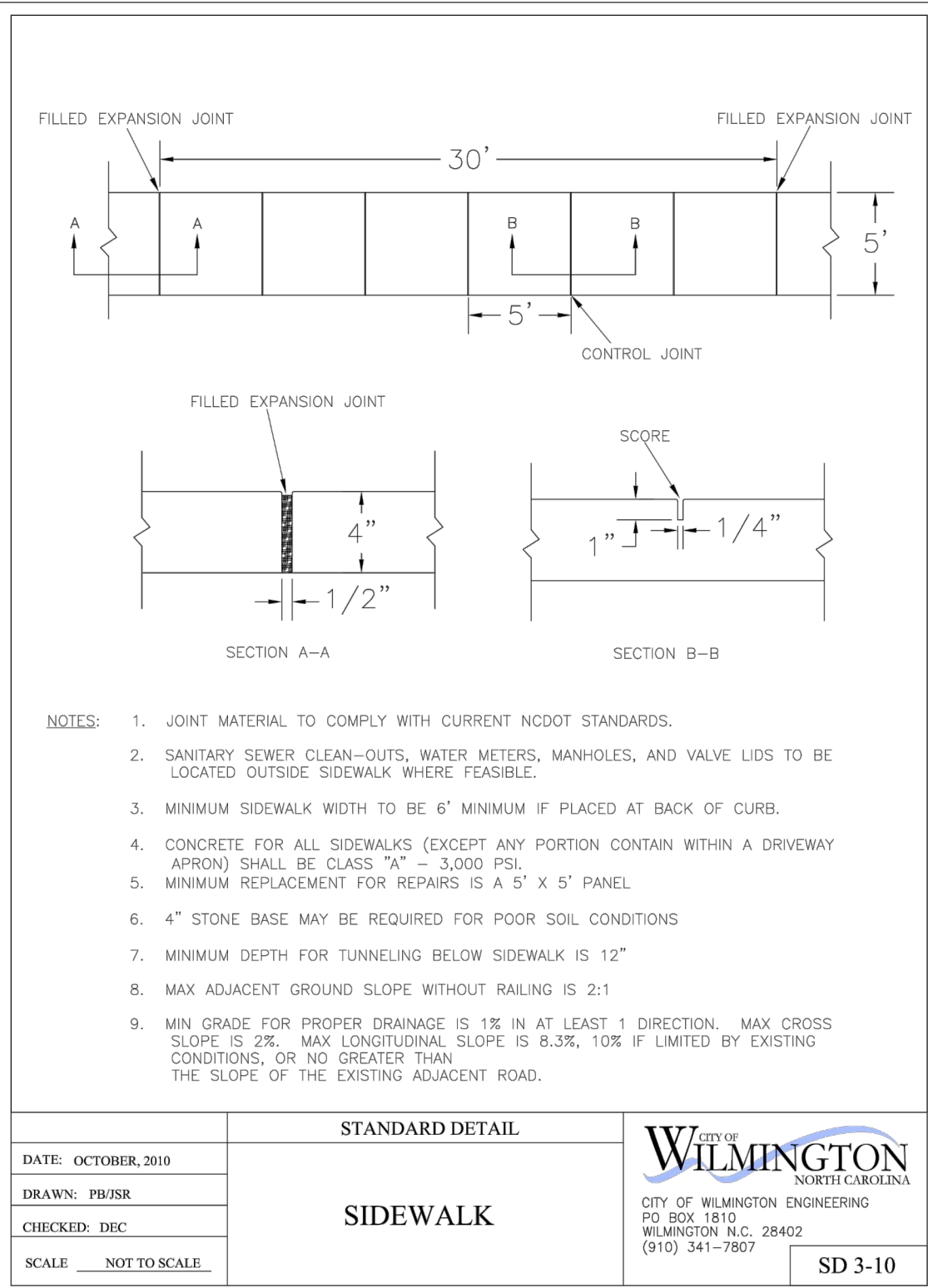
DATE: JUNE 1, 2015  
 DRAWN BY: JSR  
 CHECKED BY: D.E.C., P.E.  
 SCALE: NOT TO SCALE

STANDARD DETAIL  
**COMMERCIAL DRIVEWAY SECTIONS**

2 of 2

SD 3-03.4

CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 PO BOX 1810  
 WILMINGTON, N.C. 28402  
 (910) 341-7807

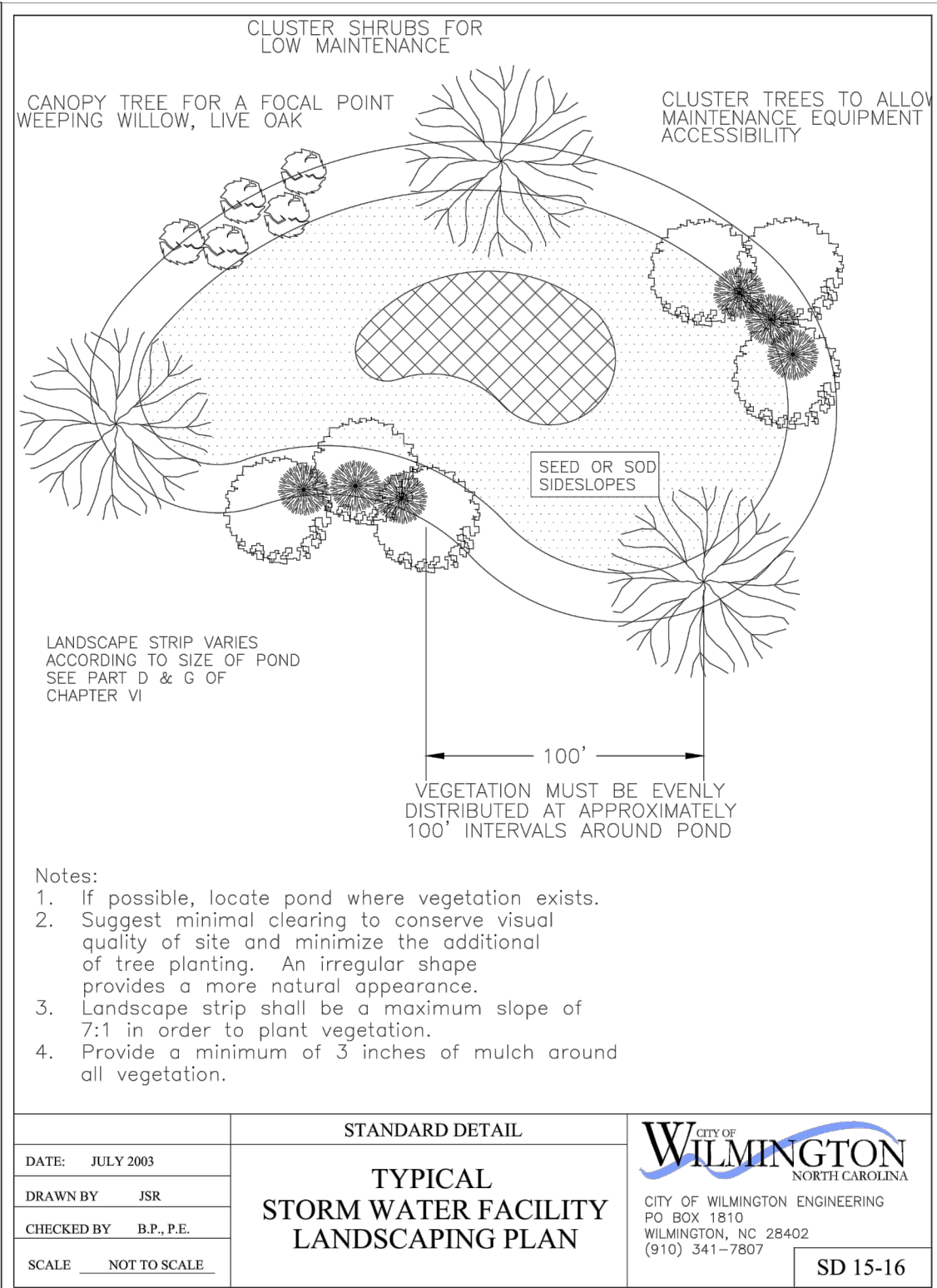


DATE: OCTOBER, 2010  
 DRAWN: PFRSR  
 CHECKED: DEC

STANDARD DETAIL  
**SIDEWALK**

SD 3-10

CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 PO BOX 1810  
 WILMINGTON, N.C. 28402  
 (910) 341-7807

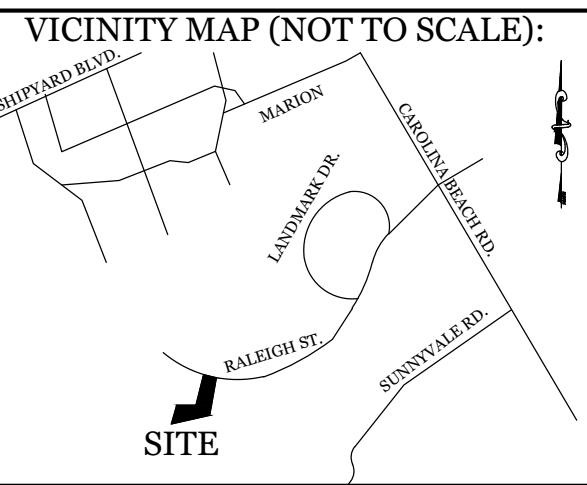


DATE: JULY 2003  
 DRAWN BY: JSR  
 CHECKED BY: B.P., P.E.

STANDARD DETAIL  
**TYPICAL STORM WATER FACILITY LANDSCAPING PLAN**

SD 15-16

CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 PO BOX 1810  
 WILMINGTON, N.C. 28402  
 (910) 341-7807

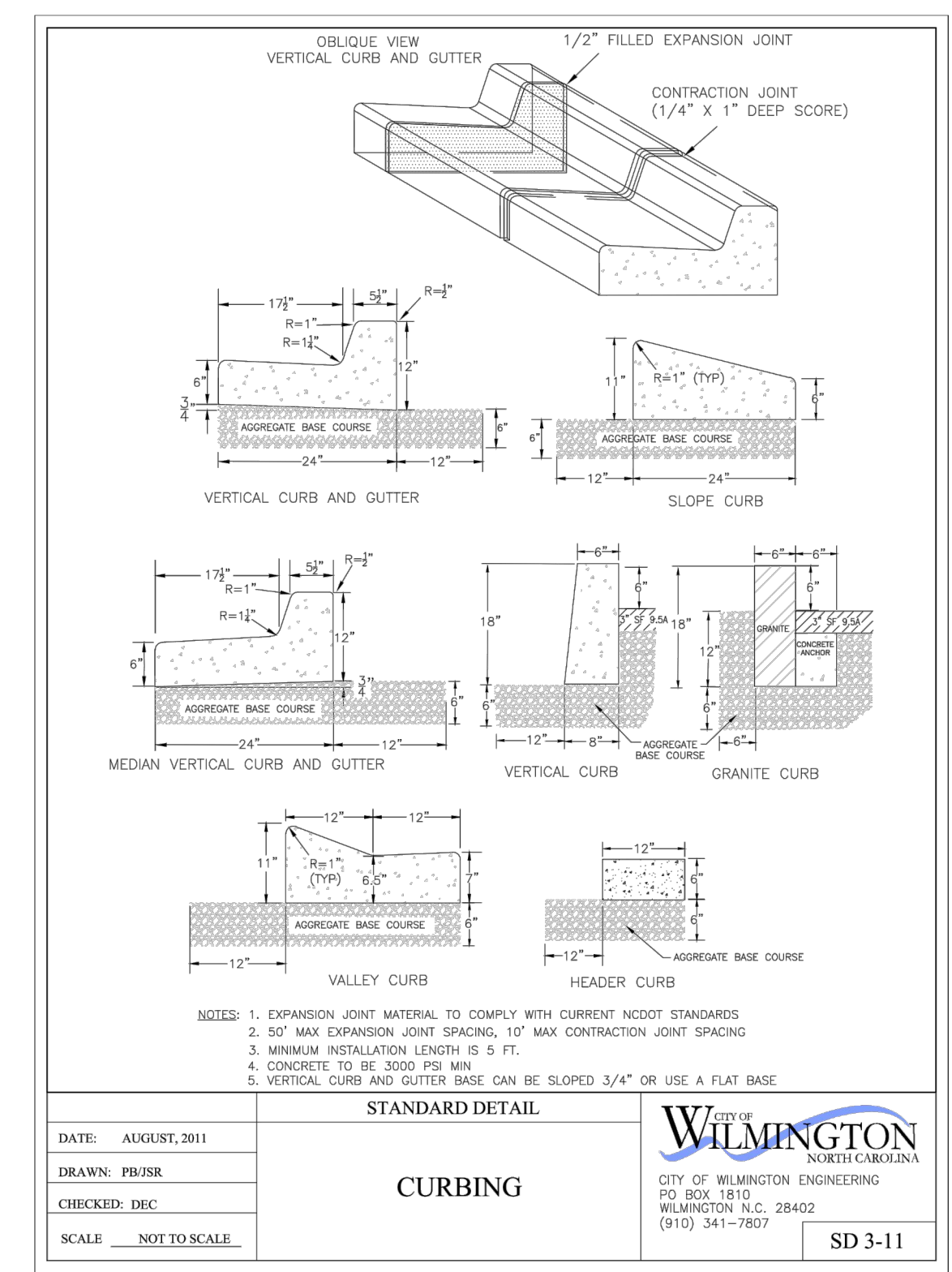


REVISIONS

NO.	DATE	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**

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

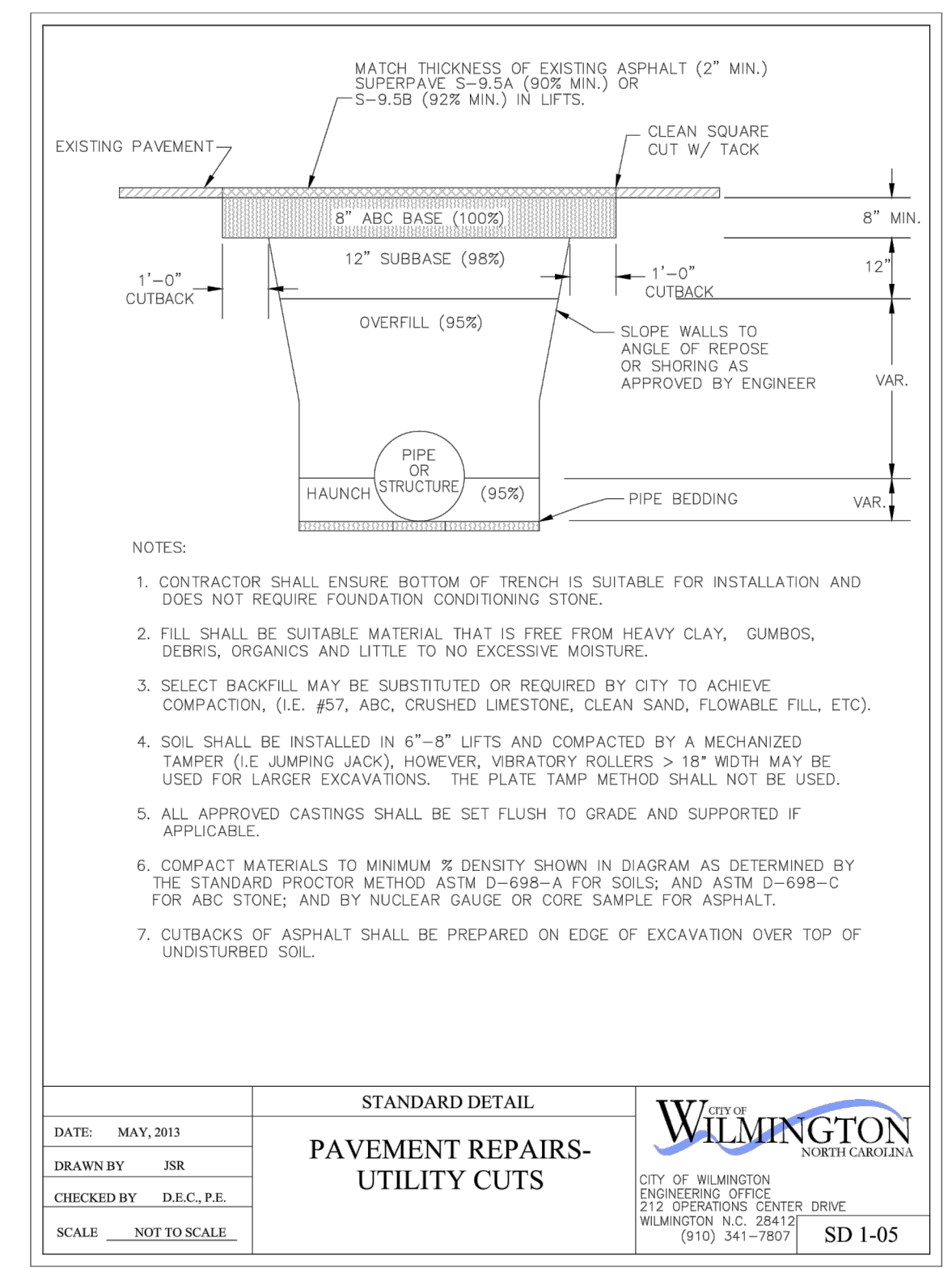


DATE: AUGUST, 2011  
 DRAWN: PFRSR  
 CHECKED: DEC

STANDARD DETAIL  
**CURBING**

SD 3-11

CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 PO BOX 1810  
 WILMINGTON, N.C. 28402  
 (910) 341-7807



DATE: MAY, 2003  
 DRAWN BY: JSR  
 CHECKED BY: D.E.C., P.E.

STANDARD DETAIL  
**PAVEMENT REPAIRS-UTILITY CUTS**

SD 1-05

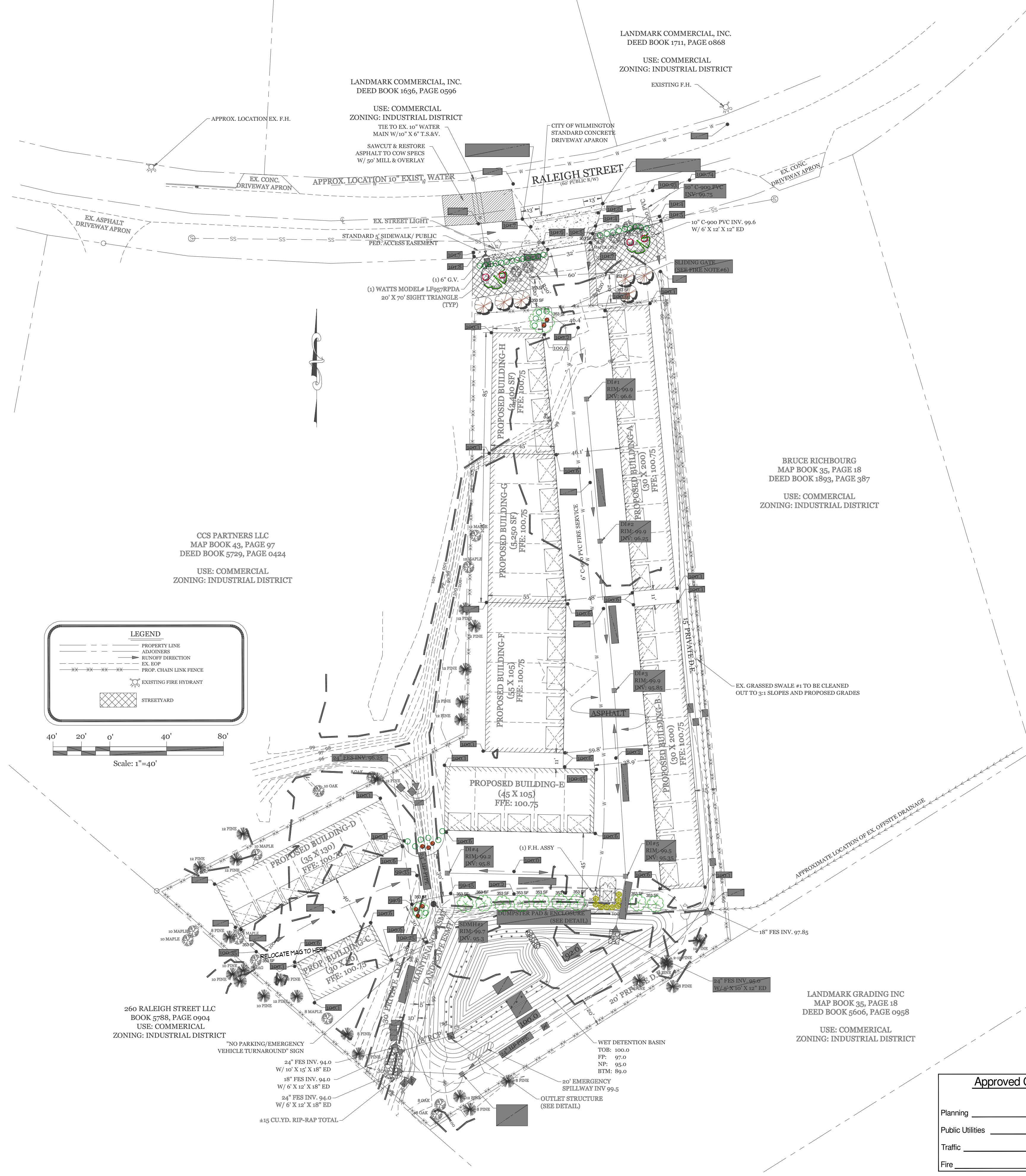
CITY OF WILMINGTON  
 NORTH CAROLINA  
 CITY OF WILMINGTON ENGINEERING  
 PO BOX 1810  
 WILMINGTON, N.C. 28402  
 (910) 341-7807

DETAILS FOR  
**RALEIGH ST. STORAGE**  
 WILMINGTON, NORTH CAROLINA

CLIENT INFORMATION:  
 Stephen B Conway  
 6248 Towles Road  
 Wilmington, NC 28409  
 Phone: 910-538-9737

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	7/14/2021
APPROVED:	CDC	SCALE:	NTS
PROJECT NUMBER:	2020-039		

DRAWING NUMBER:  
**C-4**  
 5 OF 7



**PARKING LOT SHADING LS REQUIREMENTS**

32,585 S.F. X 20% = 6,517 S.F. SHADING REQ'D  
 353 X 19 = 6,707 S.F.  
 TOTAL SHADING PROVD = 6,707 S.F.

**STREETYARD LS REQUIREMENTS**

2,634 S.F. / 600 = 4 TREES 2" CAL. REQ'D, 4 EX. & 2 NEW PROVD.  
 26 SHRUBS 12" HT REQ'D, 26 PROVD.

**LANDSCAPE NOTES:**  
 1. 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.  
 2. THE AREAS WITHIN THE TRIANGULAR SIGHT DISTANCE SHALL BE MAINTAINED FREE OF ALL OBSTRUCTIONS BETWEEN 30' AND 10'.  
 3. A TRANSPARENCY SENSOR SHALL BE USED IF THERE IS AN IRRIGATION SENSOR.  
 4. USING THE CREATIVE STANDARD OF THE CODE, 50% OF THE STREETYARD SHALL BE PLANTED AS CALLED OUT.  
 5. ALL PLANT BEDS ARE TO RECEIVE 3-4" OF PINESTRAW OR MULCH.  
 6. LANDSCAPING SHALL BE COMPLETE BEFORE ISSUANCE OF A CO.

**TREE MITIGATION REQUIREMENTS**

28" OF SIGNIFICANT TREES TO BE MITIGATED.  
 28" X 2 = 56" / 3 = 19 MITIGATION CAL. IN. REQ'D. OR  
 10 MITIGATION TREES (2" CAL.)  
 10 X \$350 = \$3,500 TO BE PAID IN LIEU OF PLANTING INTO THE COW TREE IMPROVEMENT FUND.

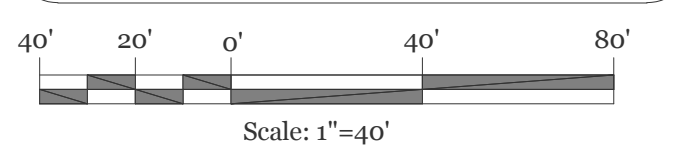
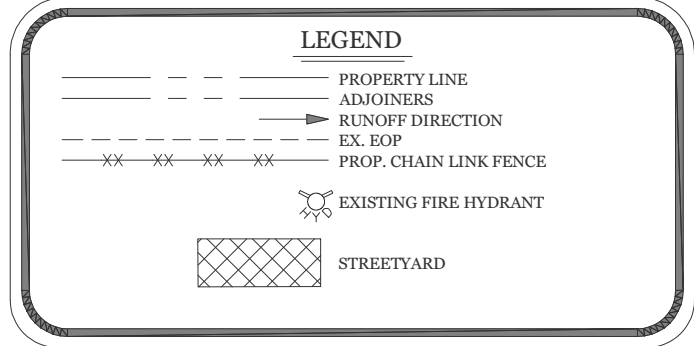
**SITE DATA**

PARCEL ID:	R06500-007-035-000
CURRENT ZONING:	IND (INDUSTRIAL)
CAMA LAND USE CLASSIFICATION:	URBAN
PROJECT ADDRESS:	304-A RALEIGH ST. WILMINGTON, NC 28412
CURRENT OWNER:	ROBERTS JAMES R KIONA P 6040 MOUNT CARMEL PARKE WILMINGTON, NC 28412
TOTAL ACREAGE IN PROJECT BOUNDARY:	122,843 S.F. (± 2.82 ac.)
NUMBER OF BUILDINGS:	8
BUILDING SIZE:	37,500 GFA TOTAL (SEE PLAN FOR INDIVIDUAL BLDG. SIZES)
BUILDING HEIGHT:	14'
BUILDING SETBACKS:	
FRONT:	REQUIRED= 50'
SIDE:	REQUIRED= 0'
REAR:	REQUIRED= 0'
	PROPOSED= 50'
	PROPOSED= 15'
	PROPOSED= 15'
CALCULATION FOR BUILDING COVERAGE:	
PROPOSED COVERAGE:	37,500 S.F. ÷ 122,843 S.F. = 30.5%
PROPOSED IMPERVIOUS AREAS:	
BUILDINGS:	37,500 S.F.
ASPHALT DRIVES:	32,585 S.F.
TOTAL:	70,085 S.F. (57.1%)
PROPOSED OFFSITE IMPERVIOUS AREAS:	
CONCRETE SIDEWALK/DRIVE APRON:	1,510 S.F.
PARKING REQUIRED: (37,500 SF WAREHOUSE):	
MIN:	1 SPACE/1000 S.F. = 38 SPACES
MAX:	150% of Minimum = 57 SPACES
PARKING PROVIDED:	49 SPACES (1 Inside each unit)
BICYCLE PARKING REQUIRED: (MIN. 5 PER 25-125 VEHICLE SPACES)	
REQUIRED:	5 SPACES
PROVIDED:	49 SPACES (1 Inside each unit)
FOUNDATION PLANTINGS: N/A (BUILDINGS HAVE ROLL-UP DOORS ALONG ALL FRONTAGES)	
STREETYARD REQUIREMENT: 25' (12.5' MIN & 37.5' MAX WIDTH)	
REQUIRED: 136' - 32' = 104 L.F. X 25' = 2,600 S.F.	
PROVIDED:	2,634 S.F.
PROPOSED SEWER AND WATER DEMAND: N/A	
ESTIMATED TRIP GENERATION: (Per Trip Generation Manual, 10th Edition)	
37,500 SF WAREHOUSE (ITE CODE 150)	
AM PEAK: 8	PM PEAK: 9 DAILY: 87

CCS PARTNERS LLC  
 MAP BOOK 43, PAGE 97  
 DEED BOOK 5729, PAGE 0424  
 USE: COMMERCIAL  
 ZONING: INDUSTRIAL DISTRICT

BRUCE RICHBOURG  
 MAP BOOK 35, PAGE 18  
 DEED BOOK 1893, PAGE 387  
 USE: COMMERCIAL  
 ZONING: INDUSTRIAL DISTRICT

LANDMARK GRADING INC  
 MAP BOOK 35, PAGE 18  
 DEED BOOK 5606, PAGE 0958  
 USE: COMMERCIAL  
 ZONING: INDUSTRIAL DISTRICT



# Legend

Common Name	Qty	Size	Height
<b>Shrub, Deciduous</b>			
Rose, Drift, Red	8	3 Gal.	
<b>Shrub, Evergreen Broadleaf</b>			
Azalea, Formosa	4	3 Gal.	12"
Holly, Yaupon, Dwarf	35	3 Gal.	12"
Yew, Podocarpus	8	3 Gal.	24"
<b>Tree</b>			
Allee Elm	6	2" Cal.	
Live Oak	2	2" Cal.	
Trident Maple	11	2" Cal.	

Canopy  
 Canopy  
 Canopy



**FREEMAN**  
**LANDSCAPE, INC.**  
 Landscape Installation Professionals  
 james@freemanlandscape.com  
 (910) 796-1166

**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: \_\_\_\_\_

**CLIENT INFORMATION:**  
 Stephen B Conway  
 6248 Towles Rd  
 Wilmington, NC 28409  
 Phone: 910-538-9737

Revision #: 1  
 Date: 6/11/2021

Scale:   
 1" = 40'

Landscape Plan:  
**Raleigh St. Storage**

Landscape Design by: Jim Freeman - NCLC# 0071  
**Freeman Landscape, Inc.**