

**EROSION CONTROL MAINTENANCE PLAN**

1. 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. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. INSPECT SEDIMENT TRAPS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT, AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN DESIGNATED DISPOSAL AREA, AND REPLACE THE PART OF THE GRAVEL FACING THAT IS IMPAIRED BY SEDIMENT.
3. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
4. ALL AREAS WILL BE FERTILIZED, RESEED, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
5. GRAVEL CONSTRUCTION ENTRANCE TO BE CLEANED WHEN SEDIMENT ACCUMULATIONS ARE VISIBLE OR SEDIMENT IS DEPOSITED ON THE ASPHALT AND STONE WILL BE PERIODICALLY TOP DRESSED WITH 2 INCHES OF #4 STONE TO MAINTAIN 6 INCH DEPTH.
6. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1 1/2" OR GREATER) RAINFALL EVENT. CLEAR THE 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.

**EROSION CONTROL NOTES**

1. ANY CONSTRUCTION ACTIVITY BEYOND THE 1.87 ACRE LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE STATE EROSION CONTROL ORDINANCE AND IS SUBJECT TO FINES.
2. CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN ROAD RIGHT OF WAYS UNLESS OTHERWISE DESIGNATED TO REMAIN.
3. CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITHIN THE LIMITS OF CONSTRUCTION.
4. CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY UNSUITABLE SOILS.
5. CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
6. THE CONTRACTOR SHALL FURNISH ANY REQUIRED BORROW MATERIALS FROM A PROPERLY PERMITTED OFF-SITE FACILITY.
7. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
8. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
9. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
10. CONDITIONS - IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:
11. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.
12. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE ARE STEEPER THAN 3:1, THE 7 DAY REQUIREMENT APPLIES.
13. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT.
14. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT.
15. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE BY CASE BASIS.
16. FOR PORTIONS OF PROJECTS WITHIN THE SEDIMENT CONTROL COMMISSION DEFINED "HIGH QUALITY WATER ZONE" (15A NCAC 04A.0105), STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACT.
17. PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&S PLAN OR ADDED BY THE PERMITTING AUTHORITY.
18. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE STATE ENGINEERING DEPARTMENT.
19. SLOPES SHALL BE GRADED NO STEEPER THAN 3:1.
20. ADDITIONAL DEVICES MAY BE REQUIRED AS AGREED UPON BY THE FIELD INSPECTOR, ENGINEER, AND OWNER.
21. IF ACTIVE CONSTRUCTION CEASES IN ANY AREA FOR MORE THAN 15 CALENDAR DAYS, ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, AND TACKED UNLESS WRITTEN APPROVAL IS GRANTED BY THE EROSION CONTROL OFFICER.
22. PRIOR TO CONSTRUCTING THE INFILTRATION BASIN BMP, ALL ACCUMULATED SEDIMENT IN THE SEDIMENT TRAP SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED TO A PERMITTED LOCATION.

**CONSTRUCTION SEQUENCE**

1. OBTAIN ALL NECESSARY PERMIT APPROVALS PRIOR TO ANY LAND DISTURBING ACTIVITY.
2. HOLD A PRE-CONSTRUCTION MEETING WITH THE EROSION CONTROL INSPECTOR.
3. INSTALL GRAVEL CONSTRUCTION ENTRANCE, INLET PROTECTION AND SILT FENCE, COMMENCE DEMOLITION, CLEARING AND ROUGH GRADING.
4. AREAS INDICATED TO HAVE PREAMBLE PAVERS ARE TO BE PROTECTED FROM HEAVY EQUIPMENT, MATERIAL STORAGE OR ANY ACTIVITY THAT COULD COMPACT THE NATIVE SOILS. PREAMBLE PAVERS ARE NOT TO BE INSTALLED UNTIL ALL UPSTREAM DRAINAGE AREAS ARE FULLY STABILIZED.
5. ROUGH GRADE SITE AND INSTALL UNDERGROUND UTILITIES.
6. INSTALL PAVEMENT BASE AND BEGIN BUILDING CONSTRUCTION.
7. ONCE BUILDING EXTERIOR WORK IS NEAR COMPLETE, PAVE ROADWAYS AND PARKING AREAS AND POUR CONC. WALKS.
8. PROVIDE TEMPORARY PROTECTION MEASURES AND DEVICES AS REQUIRED UNTIL UNDERGROUND UTILITIES AND PAVEMENT IS COMPLETE AND FINAL GRADES ARE STABILIZED WITH TEMPORARY VEGETATIVE COVER.
9. STABILIZE (FERTILIZE, SEED, AND MULCH) ALL DISTURBED AREAS AS SOON AS FINAL GRADES ARE ESTABLISHED.
10. ONCE CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED, OBTAIN NCDENR'S APPROVAL TO REMOVE TEMPORARY EROSION CONTROL MEASURES.

**GRADING NOTES**

1. INITIATE EROSION CONTROL SEQUENCE BEFORE BEGINNING CLEARING, GRUBBING AND GRADING OPERATIONS.
2. CLEAR AREAS TO BE GRADED OF ALL VEGETATION. PROTECT VEGETATION BEYOND GRADING LIMITS.
3. STRIP TOPSOIL TO FULL DEPTH IN AREAS TO BE GRADED AND STOCKPILE. INSTALL SILT FENCE AROUND STOCKPILED MATERIAL.
4. COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY.
5. ALL BANKS AND SWALE SIDE SLOPES SHALL BE GRADED WITH NO GREATER THAN 3:1 SLOPES.
6. ALL AREAS ARE TO BE GRADED SO THAT NO AREAS OF STANDING WATER OCCUR.
7. PROPOSED SPOT ELEVATIONS ARE SHOWN AT FINISHED GRADE.
8. OPERATOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY IN RELATION TO THE PROPOSED GRADES TO ENSURE DRAINAGE IN THE DIRECTIONS INDICATED ON THE PLAN.

**SEED SCHEDULE**

1. FOLLOW RECOMMENDATIONS OF SOIL TEST OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LBS/ACRE 10-10-10 FERTILIZER.
2. APPLY 4,000 LBS/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL.
3. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.
4. REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
5. RESEED AND MULCH AREAS WHERE SEEDING EMERGENCE IS POOR, OR WHEN EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE.

**STABILIZATION TIMEFRAMES**

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALE, DITCHES, 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' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH

**TEMPORARY SEEDING**

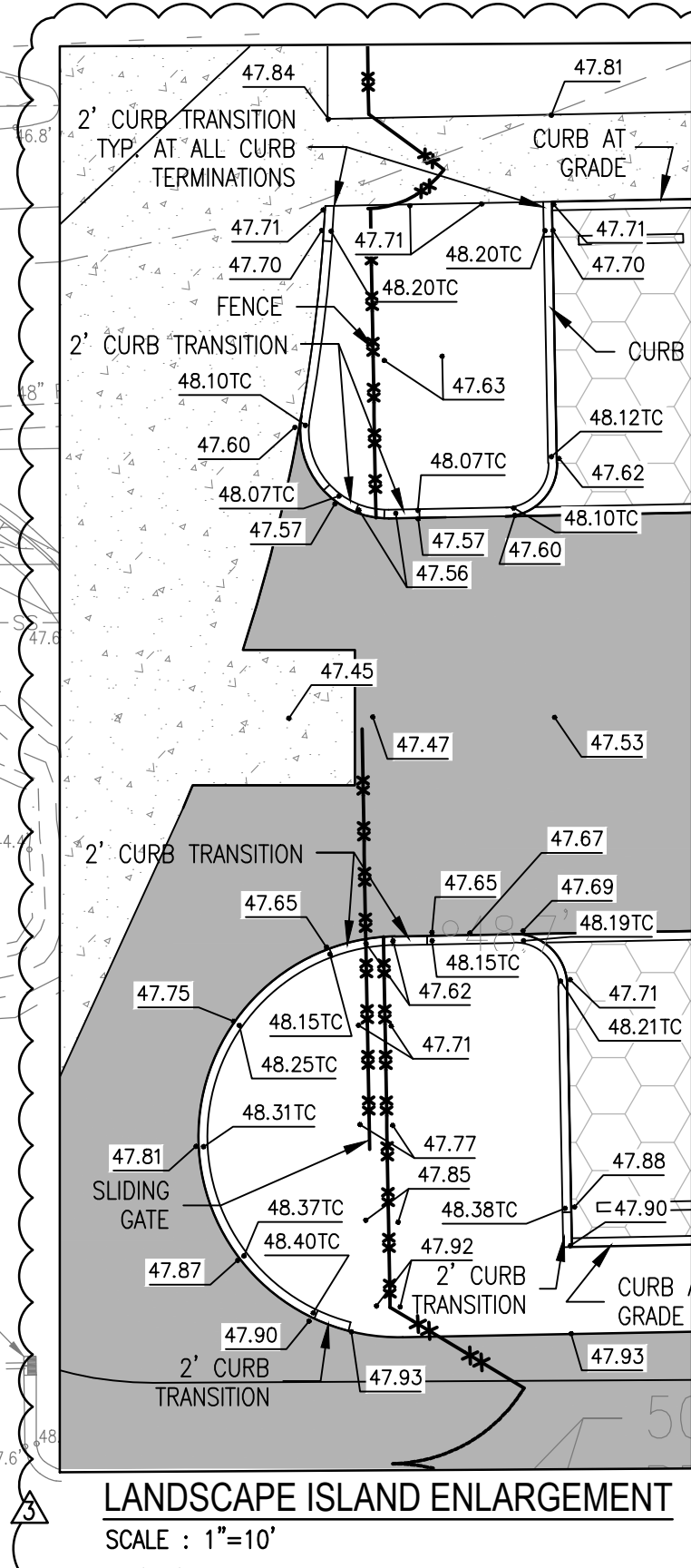
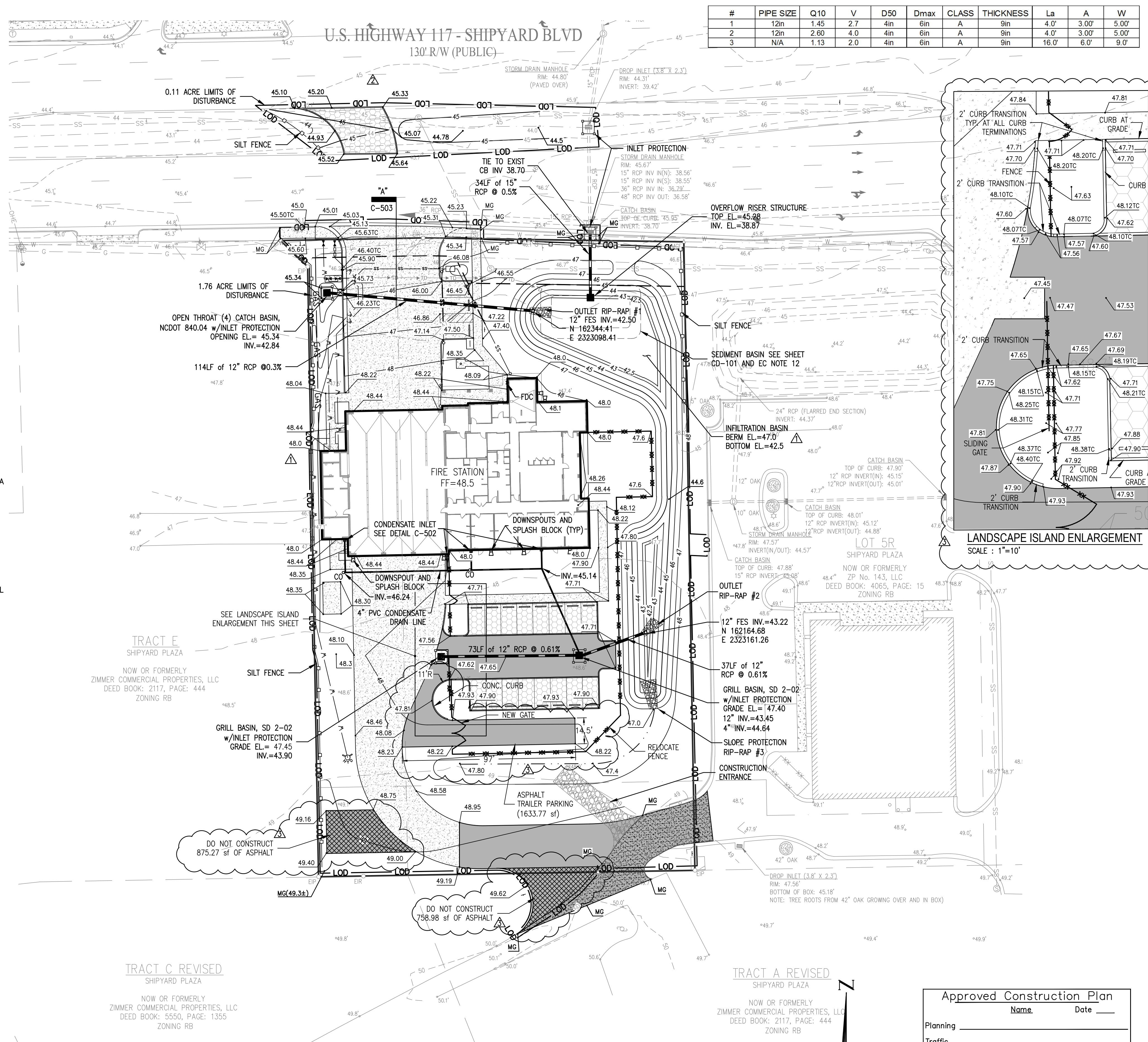
GRASS TYPE	AMOUNT/1000 S.F.	TIME OF SEEDING	INITIAL
RYE GRAIN	1-2 LBS.	AUG 15 - DEC 31	25 LBS. 10-10-10
GERMAN MILLET	1-2 LBS.	MAY 1 - AUG 14	25 LBS. 10-10-10
RYE GRAIN AND ANNUAL LESPEDEZA	2-3 LBS. 1-1.5 LBS	JAN 1 - APR 30	25 LBS. 10-10-10

**PERMANENT SEEDING**

GRASS TYPE	AMOUNT/1000 S.F.	TIME OF SEEDING	INITIAL
BERMUDA, COMMON	1-2 LBS.	APRIL THRU JUNE	25 LBS. 10-10-10
FESCUE, TALL (KENTUCKY 31)	5-7 LBS.	JUNE THRU AUG. FEB. THRU OCT.	25 LBS. 10-10-10
SERICEA LESPEDEZA (SLOPES)	1-2 LBS.	MARCH THRU APRIL	25 LBS. 10-10-10

**RIP-RAP SCHEDULE**

#	PIPE SIZE	Q10	V	D50	Dmax	CLASS	THICKNESS	La	A	W
1	12in	1.45	2.7	4in	6in	A	9in	4.0'	3.00'	5.00'
2	12in	2.60	4.0	4in	6in	A	9in	4.0'	3.00'	5.00'
3	N/A	1.13	2.0	4in	6in	A	9in	16.0'	6.0'	9.0'



**BECKER MORGAN GROUP**  
 ARCHITECTURE PLANNING  
 Wilmington, NC  
 3205 Randall Parkway, Suite 211  
 Wilmington, NC 28403  
 910.341.7600  
 Salisbury, MD  
 312 West Main St. Suite 300  
 Salisbury, MD 21801  
 410.546.9100  
 Dover, DE  
 309 S Governors Ave  
 Dover, DE 19904  
 302.734.7950  
 www.beckermorgan.com

**CATLIN**  
 Engineers and Scientists  
 229 Old Dairy Road  
 Wilmington, NC 28405  
 Corporate License No. for Engineering Services C-6585

**PROFESSIONAL SEAL**  
 NORTH CAROLINA  
 ENGINEER  
 ROBIN AUSTIN  
 6-15-2018

**CITY OF WILMINGTON**  
 FIRE DEPARTMENT

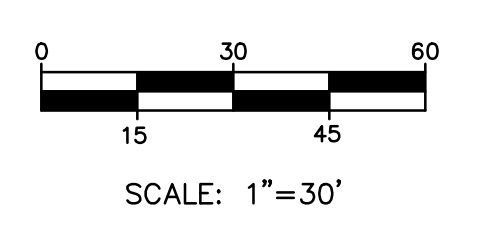
**FIRE STATION No. 5**  
 680 SHIPYARD BLVD.  
 WILMINGTON, NC

**GRADING, DRAINAGE & EROSION CONTROL PLAN**

**Approved Construction Plan**

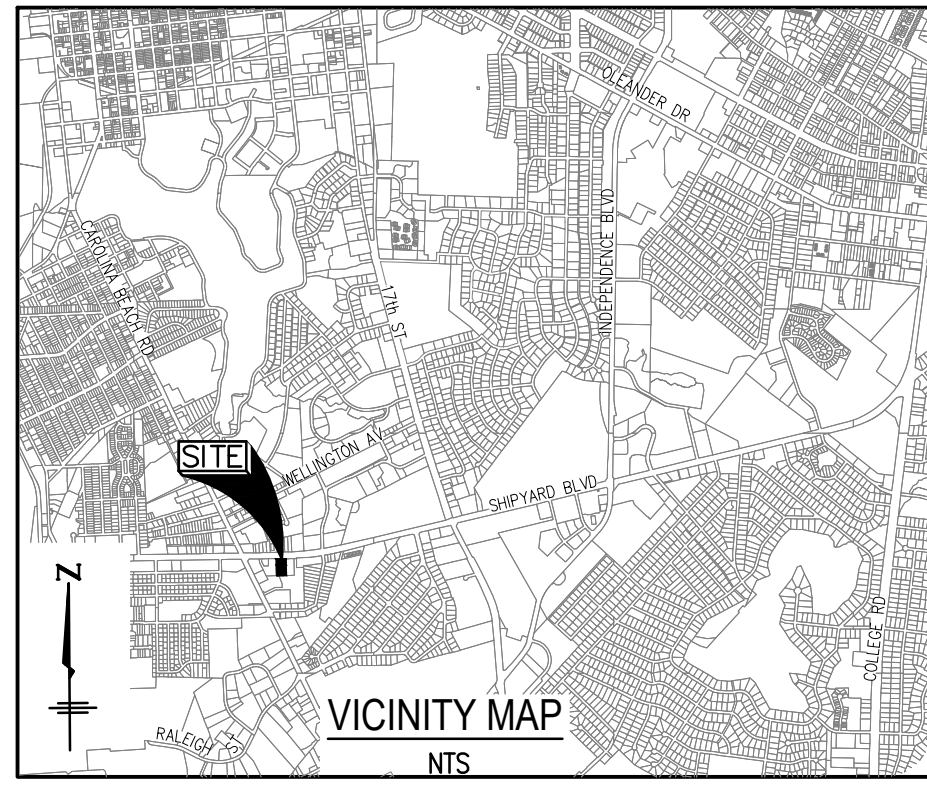
Name	Date
Planning	
Traffic	
Fire	

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



ISSUE BLOCK	DATE	DESCRIPTION
06/13/18	ADDED TRAILER PARKING	
09/15/17	REVISED PER NCDOT COMMENTS	
01/06/17	REVISED PER COW COMMENTS	

PROJECT NO: 2015028.00  
 DATE: 6/30/2016  
 SCALE:  
 DRAWN BY: EJS / NMY | PROJ MGR: LML

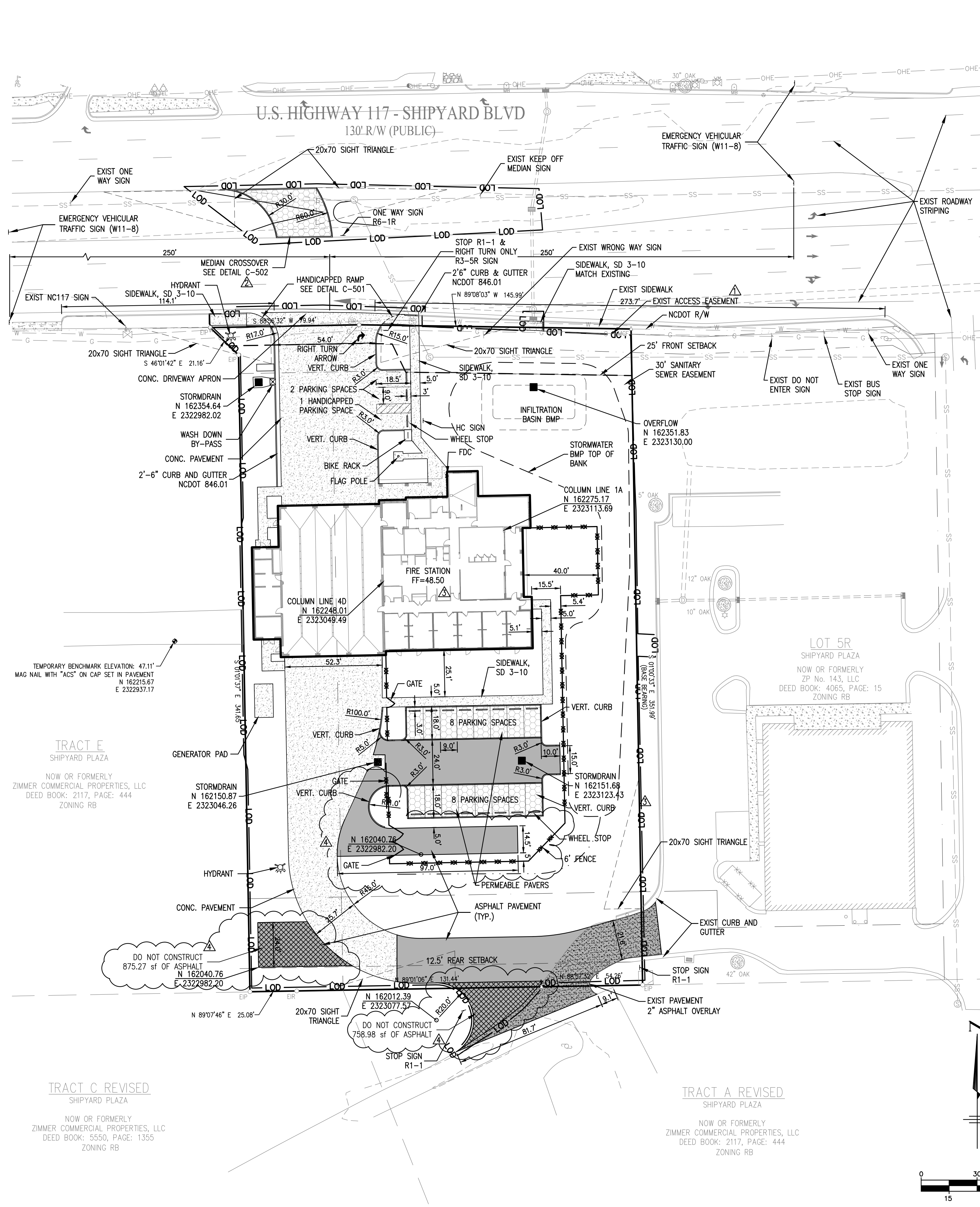


**GENERAL NOTES**

1. THE CITY HAS MADE ALL POSSIBLE ATTEMPTS TO LOCATE EXISTING UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD-VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION BY OBSERVATION, ELECTRONIC DEVICES, HAND DIGGING AND PERSONAL CONTACT WITH THE UTILITY COMPANIES. NOTIFY THE CITY OF ANY CONFLICTS. ANY DAMAGE TO UTILITIES INCURRED DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR IS RESPONSIBLE FOR FINES OR LOST SERVICE REVENUE. CONTACT "CAROLINA ONE CALL" (1-800-632-4949) AND AFFECTED UTILITY OWNERS.
2. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIARIZED WITH EXISTING CONDITIONS BOTH ON AND IMMEDIATELY ADJACENT TO THE SITE.
3. ALL MATERIALS AND CONSTRUCTION PRACTICES ARE TO BE IN ACCORDANCE WITH THE CURRENT CITY OF WILMINGTON DETAILS AND SPECIFICATIONS. WORK WITHIN THE NCDOT RIGHT OF WAY SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS.
4. REFER TO LANDSCAPE DRAWINGS FOR ADDITIONAL REQUIREMENTS.
5. MUCKING: CONTRACTOR SHALL COORDINATE WITH CITY REPRESENTATIVES AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY SOFT AREAS.
6. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
7. MAINTAIN EROSION AND SEDIMENT CONTROL PROCEDURES DURING THE ENTIRE CONSTRUCTION PERIOD. CONTROL DEBRIS AND LOOSE SOIL ON ADJACENT STREETS THROUGH DAILY CLEANING.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE CONNECTION/RECONNECTION AND/OR THE RELOCATION OF ALL EXISTING UTILITIES WITH UTILITY OWNER.
9. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AT THE SITE. FURTHERMORE THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES OR QUESTIONS TO THE CITY PRIOR TO INSTALLATION.
10. ALL PAVEMENT BASE AND SUBGRADE SHALL CONFORM TO NCDOT STANDARDS INCLUDING WORKMANSHIP, MATERIALS AND EQUIPMENT AND IN ACCORDANCE WITH THE SPECIFICATIONS. SITE DETAILS WITH REFERENCES SD X-XX SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF WILMINGTON TECHNICAL STANDARDS AND SPECIFICATION MANUAL. APPROPRIATE BARRICADES, SIGNS, LIGHTS OR OTHER TRAFFIC CONTROL DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH NCDOT, CITY OF WILMINGTON, AND MUTCD STANDARDS.
11. TOPSOIL SHALL BE STOCKPILED SEPARATE FROM EXCAVATED MATERIAL, ONSITE AND READY FOR REUSE.
12. EXISTING TOPOGRAPHY, STRUCTURES, UTILITIES AND SITE FEATURES ARE GENERALLY SHOWN SCREENED AND/OR LIGHT LINES. NEW FINISH GRADE, STRUCTURES, UTILITIES AND SITE FEATURES ARE GENERALLY SHOWN AS HEAVY LINES.
13. ALL RADIUS CALLOUTS ARE TO EDGE OF PAVEMENT.
14. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' TO 10'.
15. ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT OF WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND NCDOT STANDARDS.
16. ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
17. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT OF WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
18. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
19. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
20. CONTACT TRAFFIC ENGINEERING AT (910)341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
21. STABLE, PERMANENT VEGETATIVE COVER MUST BE EVIDENT IN ORDER TO PASS THE FINAL INSPECTION FOR C/O.
22. DIMENSIONS AND RADIIUSES AT CURBS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
23. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AND ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
24. INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
25. A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO RECORDING OF THE FINAL PLAT.
26. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINE FROM 30' TO 10'.
27. AN ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.

**GEOTECHNICAL NOTES**

1. GEOTECHNICAL SUBSURFACE CONDITIONS OF THIS PROJECT CAN BE FOUND IN THE GEOTECHNICAL REPORT PREPARED BY CATLIN ENGINEERS AND SCIENTISTS, DATED MARCH 2016.
2. INFORMATION CONTAINED IN THE GEOTECHNICAL REPORT DATED MARCH 2016 IS LIMITED, BASED ON DATA OBTAINED FROM BORING LOGS AND LABORATORY TESTING THAT SHOW SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATION AND TIME INVESTIGATED AND ONLY TO THE DEPTH PENETRATED. SUBSURFACE CONDITIONS AND GROUNDWATER LEVELS AT OTHER LOCATIONS OR DEPTHS MAY DIFFER FROM CONDITIONS OCCURRING AT INVESTIGATED LOCATIONS. THE PASSAGE OF TIME MAY ALSO RESULT IN CHANGED CONDITIONS AT THESE LOCATIONS. IF, DURING CONSTRUCTION, SUBSURFACE CONDITIONS ARE FOUND TO VARY FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT, GEOTECHNICAL RECOMMENDATIONS SHOULD BE RE-EVALUATED.
3. THE GEOTECHNICAL REPORT INCLUDES BOTH FACTUAL AND INTERPRETED INFORMATION. FACTUAL INFORMATION IS DEFINED AS OBJECTIVE DATA BASED ON DIRECT OBSERVATIONS, SUCH AS BORING LOGS AND LABORATORY TESTING RESULTS. INTERPRETED INFORMATION OR GEOTECHNICAL ENGINEERING INTERPRETATION IS BASED ON THE ENGINEERING JUDGMENT, CORRELATION OR EXTRAPOLATION FROM FACTUAL INFORMATION. NO WARRANTIES, EXPLICIT OR IMPLIED, ARE PROVIDED FOR INTERPRETED INFORMATION.



**SITE DATA**

AREA = 74,923.20 SF = 1.72 ACRES  
 PIN # R06018-010-016-000  
 ZONING = RB (REGIONAL BUSINESS)  
 PRINCIPAL USAGE = FIRE STATION  
 CAMA LAND USE CLASSIFICATION = URBAN  
 PROPOSED BUILDING AREA = 11,831 SF  
 TYPE OF CONSTRUCTION: II-B  
 BUILDING HEIGHT = 26'

**BUILDING SET BACK REQUIREMENTS**  
 FRONT YARD ..... 25' ..... 74.7' PROPOSED  
 REAR YARD ..... 12.5' ..... 157.1' PROPOSED  
 SIDE YARD ..... NONE ..... 6.7' & 70.5' PROPOSED

**OFF STREET PARKING REQUIREMENTS**  
 MIN. SPACE SIZE = 8.5' WIDE x 18' LONG  
 NUMBER OF SPACES REQUIRED  
 FIRE STATION CREW  
 1 SPACE PER 2 PERSONS  
 (36 / 2) = 18 SPACES

TOTAL PARKING SPACES REQUIRED = 18 (1 HANDICAPPED REQ'D)

SPACES PROVIDED: 18 - 9'x18' SPACES  
 ± 1 - HANDICAPPED SPACES  
 19 TOTAL SPACES

EXISTING SITE CONSISTS OF GRASS, NO TREES/WOODS

**EXISTING ONSITE COVERAGE**  
 ASPHALT ..... 902 SF  
 GRAVEL PATH ..... 0 SF (1763 SF REMOVED)  
 TOTAL EXIST ..... 902 SF

**PROPOSED ONSITE COVERAGE**  
 BUILDING ..... 11,831 SF = 15.79%  
 CONC. & ASPHALT PAVEMENT ..... 20,889 SF  
 PERVIOUS PAVERS ..... 2,596 SF  
 FUTURE IMPERVIOUS ..... 1,000 SF  
 TOTAL PROPOSED ..... 36,316 SF

TOTAL PROPERTY IMPERVIOUS ..... 37,218 SF = 49.67%  
 TOTAL PROPERTY PERVIOUS AREA ..... 37,705 SF

**PROPOSED OFFSITE COVERAGE**  
 ASPHALT PAVEMENT ..... 1,045 SF  
 TOTAL PROPOSED IMPERVIOUS ..... 38,263 SF

WATER SYSTEM OWNER = CAPE FEAR PUBLIC UTILITY AUTHORITY  
 CURRENT WATER USE = 0 GPD  
 PROPOSED WATER USE = 1,200 GPD

SANITARY SEWER OWNER = CAPE FEAR PUBLIC UTILITY AUTHORITY  
 CURRENT SEWER USE = 0 GPD  
 PROPOSED SEWER USE = 1,200 GPD

ROLL OUTS WILL BE USED FOR SOLID WASTE

NO WETLANDS HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA  
 NO HISTORIC OR ARCHAEOLOGICAL SITES HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA

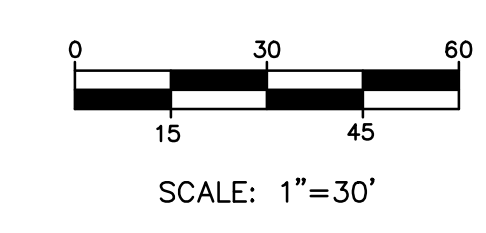
PROJECT SITE'S USGS SOIL TYPES = (W<sub>o</sub>) WAKULLA SAND  
 (K<sub>r</sub>) KUREB SAND

**NOTES**

1. PROJECT SITE IS NOT LOCATED WITHIN 100 YEAR FLOODPLAIN. REFER TO FEMA MAP 3720312600J, PANEL 37017
2. SEE CITY OF WILMINGTON DETAILS FOR DETAIL REFERENCES (SD X-X).
3. SEE FHWA MUTCD FOR SIGN REFERENCES (R1-X).
4. SEE PLANS C-501 TO C-510 FOR UN-REFERENCED DETAILS.

**SURVEY NOTES**

1. EXISTING TOPOGRAPHIC SURVEY DATA SHOWN WAS SURVEYED BY ATLANTIC COAST SURVEY, PLLC, WILMINGTON, N.C. HORIZONTAL REFERENCE DATUM NAD 83. VERTICAL DATUM NAVD 88.



Approved Construction Plan

Name	Date
Planning _____	_____
Traffic _____	_____
Fire _____	_____

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

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

**BECKER MORGAN GROUP**

ARCHITECTURE  
 PLANNING

Wilmington, NC  
 3205 Randall Parkway, Suite 211  
 Wilmington, NC 28403  
 910.341.7600

Salisbury, MD  
 312 West Main St. Suite 300  
 Salisbury, MD 21801  
 410.546.9100

Dover, DE  
 309 S Governors Ave  
 Dover, DE 19904  
 302.734.7950

www.beckermorgan.com

**CATLIN**  
 Engineers and Scientists  
 220 Old Dairy Road  
 Wilmington, NC 28405  
 Corporate License No. for Engineering Services C-6585

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 6-15-2016

CITY OF WILMINGTON FIRE DEPARTMENT

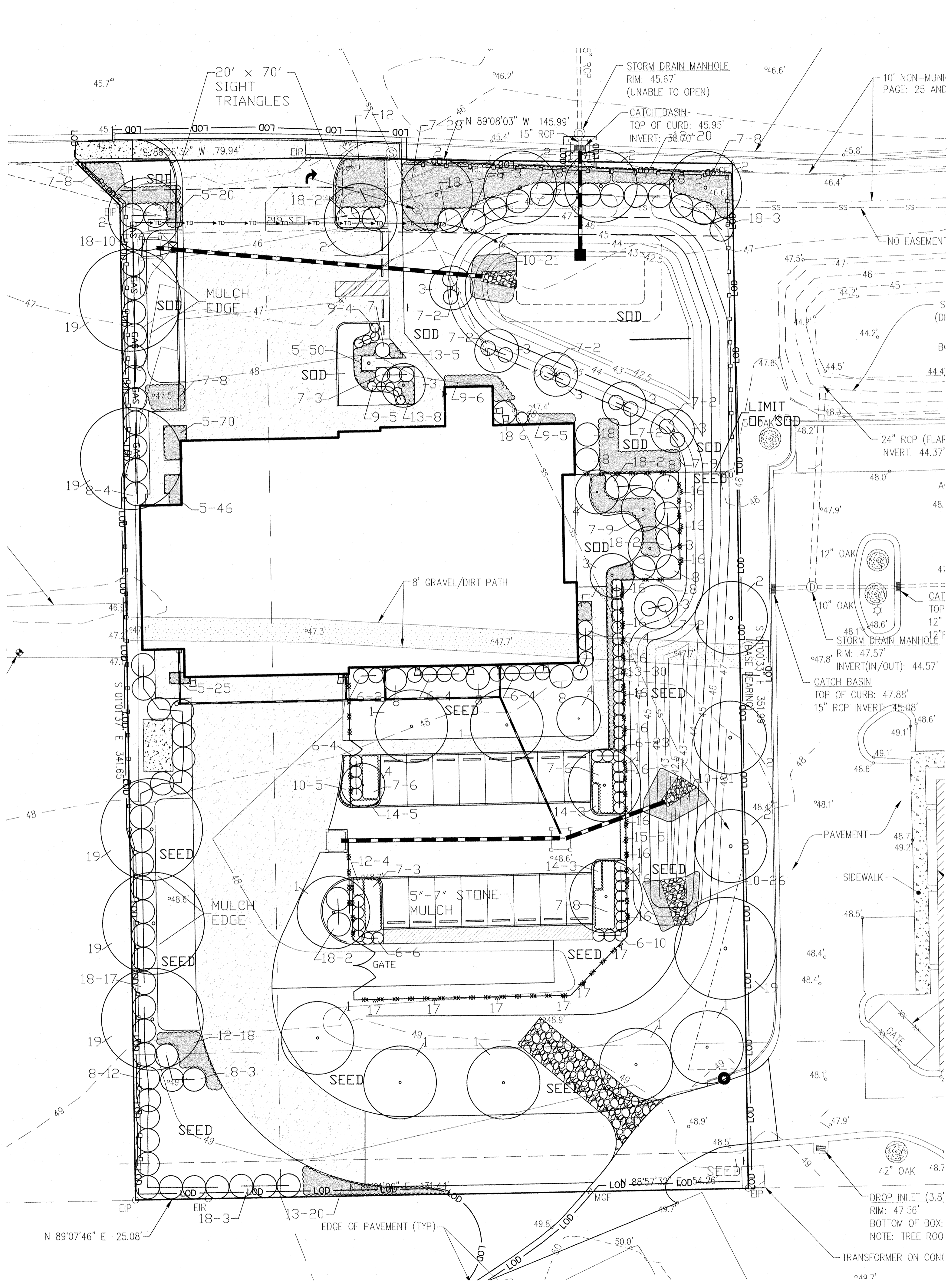
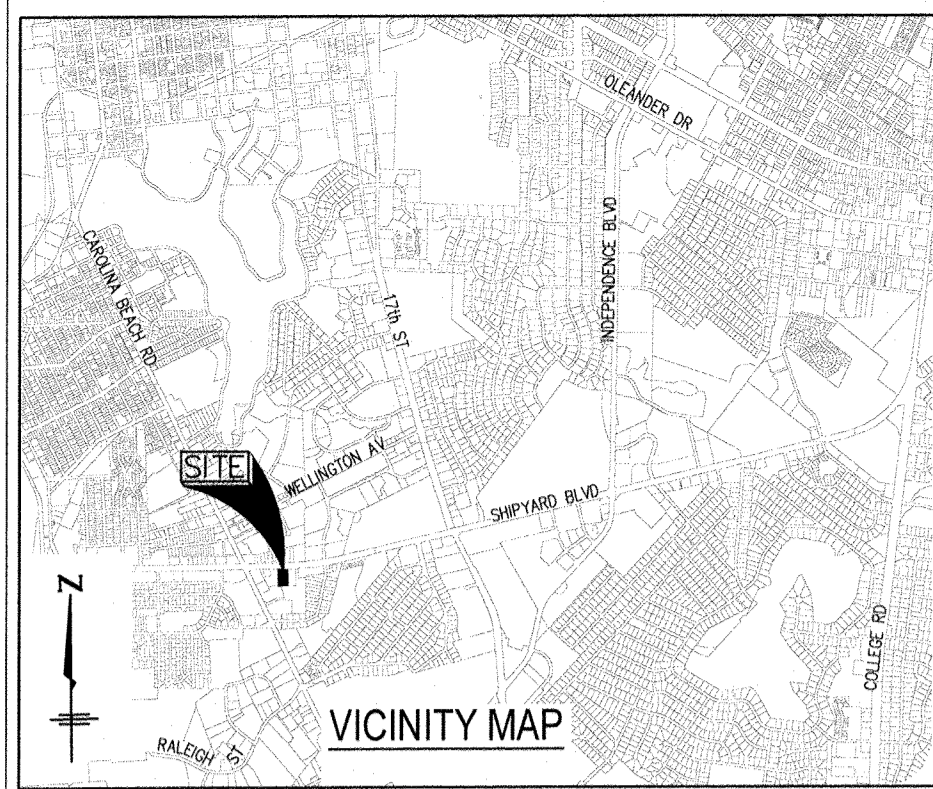
**FIRE STATION No. 5**  
 680 SHIPYARD BLVD.  
 WILMINGTON, NC

SHEET TITLE  
 SITE PLAN

MARK	DATE	DESCRIPTION
▲	06/13/18	ADDED TRAILER PARKING
▲	08/02/17	REVISED BUILDING F.F.
▲	06/26/17	REVISED CROSSOVER NOTE
▲	01/06/17	REVISED PER COW COMMENTS

PROJECT NO: 2015028.00  
 DATE: 6/30/2016  
 SCALE:  
 DRAWN BY: EJS / NMY PROJ MGR: LML

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**FIRE STATION #5 PLANT LIST**

KEY NO.	QUANTITY	BOTANICAL NAME	COMMON NAME	ROOT	GAL.	H.T.	REMARKS
1	10	PISTACIA CHINENSIS	PISTACHIO	WB	3'-3 1/2"	10'-12'	
2	4	PRUNUS SEROTINA	YOSHINO CHERRY	WB	2 1/2"-3"	10'-12'	
3	9	LAGERSTROEMIA INDICA	CREPE MYRTLE	WB	8'-10'		VAR. MUSKAGEE
4	3	ACER PALMATUM	JAPANESE MAPLE	25 GAL.	2 1/2"	8'-10'	VAR. REDDORADO
5	171	OPHIOPOGON JAPONICUS	MONDO GRASS	1 GAL.		1" O.C.	
6	55	ILEX VOMITORIA NANA	DWARF YALPOU	3 GAL.		4" O.C.	
7	127	JUNIPERUS DAURICA PARSONI	PARSONS JUNIPER	3 GAL.		5" O.C.	
8	36	PITTSPOURUM TORBIA	PITTSPOURUM	7 GAL.		8" O.C.	
9	20	PITTSPOURUM TORBIA NANA	WHEELER'S DWARF	3 GAL.		3" O.C.	
10	73	HEMEROCALLIS HYBRIDA	DAYLILY	1 GAL.		3" O.C.	'SUELLA
11	13	HEMEROCALLIS HYBRIDA	DAYLILY	1 GAL.		3" O.C.	HYPERION
12	30	MAHLENBERGIA CAPILLARIS	PINK MURLY GRASS	3 GAL.		2" O.C.	
13	50	CALAMAGROSTIS BRACHYTRICHA	KOREAN FEATHER REED GRASS	1 GAL.		2" O.C.	
14	11	PENNISETUM ALOPECUROIDES 'CASSANI'	DWARF FOUNTAIN GRASS	3 GAL.		3" O.C.	
15	5	PENNISETUM ALOPECUROIDES 'FOXTROT'	GIANT FOUNTAIN GRASS	3 GAL.		3" O.C.	
16	13	PIRACANTHA KODZUMAMI	FORMOSA FIRETHORN	5 GAL.			
17	6	ROSA BANKSAE	BANKS ROSE	5 GAL.			
18	51	AZALEA INDICA	INDIAN AZALEA	5 GAL.		1" O.C.	FORMOSA

NOTE: The key number refers to the Plant List. Where there is only one number, it is the key number and the Quantity is one. Where there are two numbers connected by a dash, the first is the key number and the second is the quantity required for the planting 'as indicated. (One year maintenance & warranty on all plant material from time of final inspection following planting.)

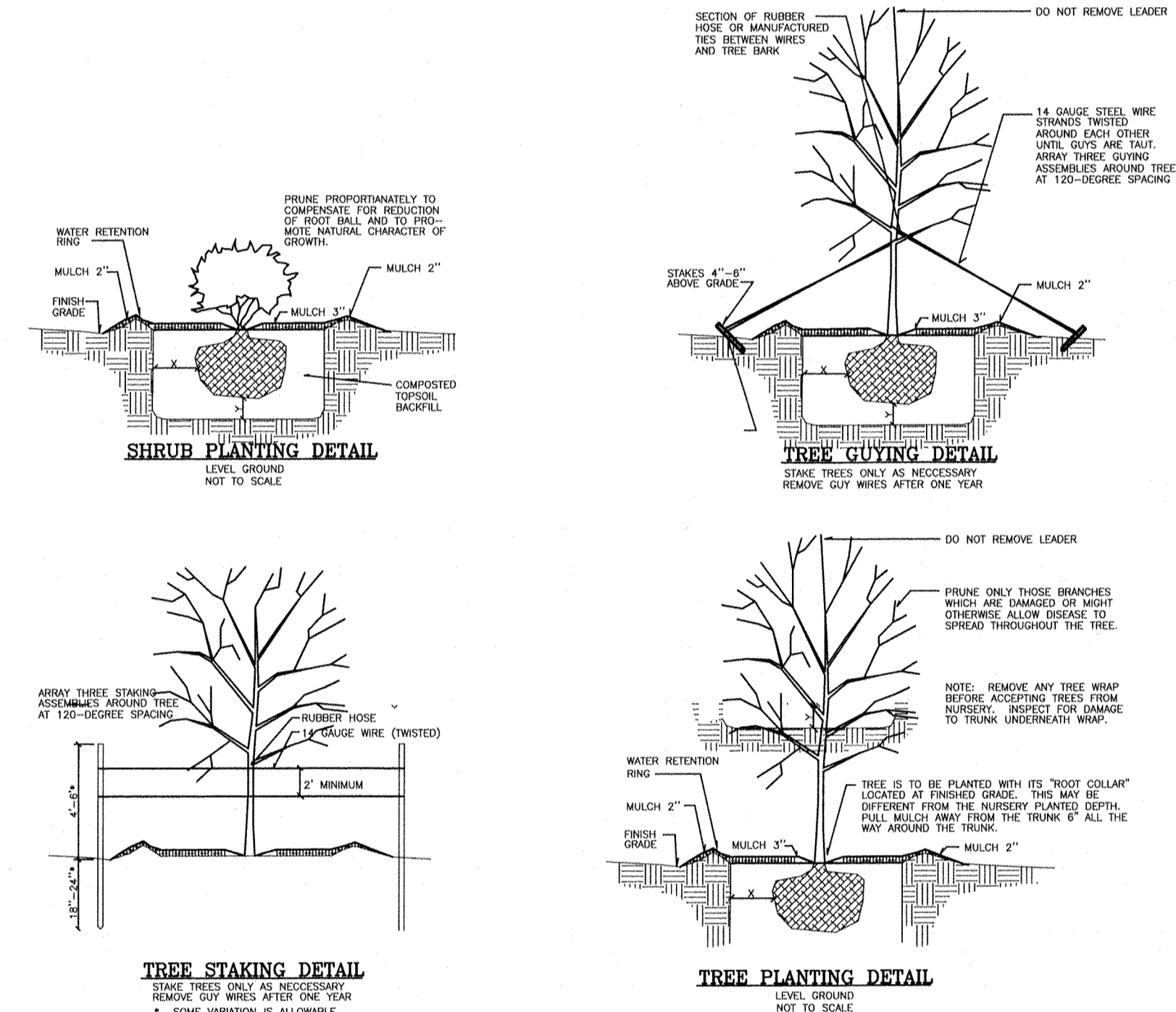
BAB = Ball and Burlap  
WB = Wire Basket  
Cult = Container grown

All plant bed areas shall be covered in a minimum of 5" to 7" of gray stone mulch. (Sample & source to be provided to landscape architect for approval.)

THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND FLAGGING ALL UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH ANY EXCAVATION WORK. IF ANY DAMAGE IS DONE TO EXISTING OR NEW UTILITIES, ALL NECESSARY REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO COST TO THE OWNER.

CALL 1-800-632-4648 TO LOCATE UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION. GAS LINES MAY BE LOCATED ON SITE. CONTRACTOR TO VERIFY WITH OWNER OR OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING WITH ANY EXCAVATION.

NOTE: THE PLANT QUANTITIES SHOWN ON THE PLANT LIST ARE PROVIDED AS A CONVENIENCE. IN THE EVENT THERE IS A DIFFERENCE IN QUANTITY BETWEEN PLANT QUANTITIES IN THE PLANT LIST AND PLANT QUANTITIES IN THE PLAN, THE CONTRACTOR SHALL USE THE QUANTITY SHOWN ON THE PLAN. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY QUANTITY DIFFERENCE.



**SCHEDULE FOR PLANTING HOLE SIZE**

BARE ROOT, BALL OR CONTAINER SIZE	W	D	D
5"-12"	6"	3"	
12"-36"	12"	6"	
36" AND UP	1/2W	1/2D	

- LEGEND**
- GROUND COVER
  - PROPOSED TREES
  - PROPOSED SHRUBS

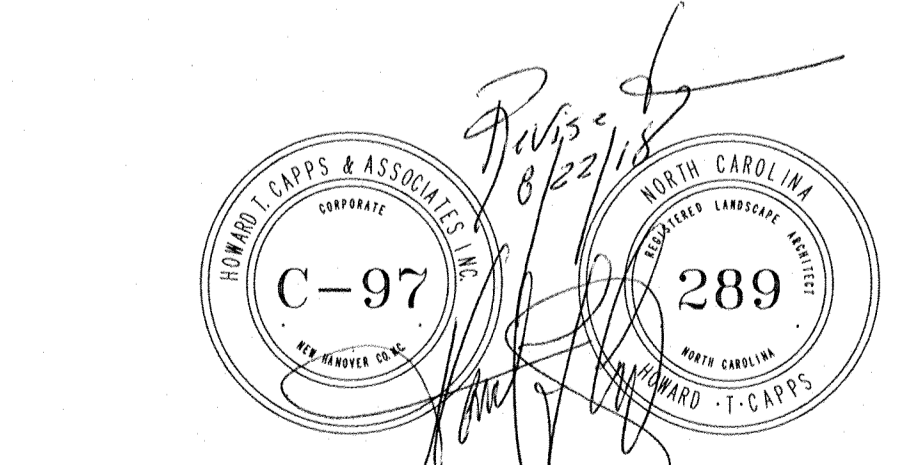
Approved Construction Plan

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

Planning \_\_\_\_\_

Traffic \_\_\_\_\_

Fire \_\_\_\_\_



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

**BECKER MORGAN GROUP**

ARCHITECTURE PLANNING  
Wilmington, NC  
3205 Randall Parkway, Suite 211  
910.341.7600  
Salisbury, MD  
312 West Main St, Suite 300  
Salisbury, MD 21801  
410.546.9100  
Dover, DE  
309 S Governors Ave  
Dover, DE 19804  
302.734.7950  
www.beckermorgan.com

**CATLIN**  
Engineers and Scientists  
220 Old Dairy Road  
Wilmington, NC 28405  
Corporate License No. for Engineering Services C-4885

**HTCA**  
Howard T. Capps & Associates, Inc.  
Land Planning Landscape Architecture  
404 Governor Drive, Suite 102  
Wilmington, North Carolina 28403  
Phone: (910) 264-1986

PROJECT TITLE  
**CITY OF WILMINGTON FIRE DEPARTMENT**  
FIRE STATION No. 5  
680 SHIPYARD BLVD.  
WILMINGTON, NC 28403

SHEET TITLE  
LANDSCAPE PLAN

ISSUE BLOCK

MARK	DATE	DESCRIPTION
1	8/22/18	REVISED REAR PARKING & NEW DRIVE WITH GATE

PROJ. NO.: xxx  
DATE: AUGUST 1, 2016  
SCALE: 1"=20'  
DRAWN BY: LML, KAG | PROJ MGR: LML