

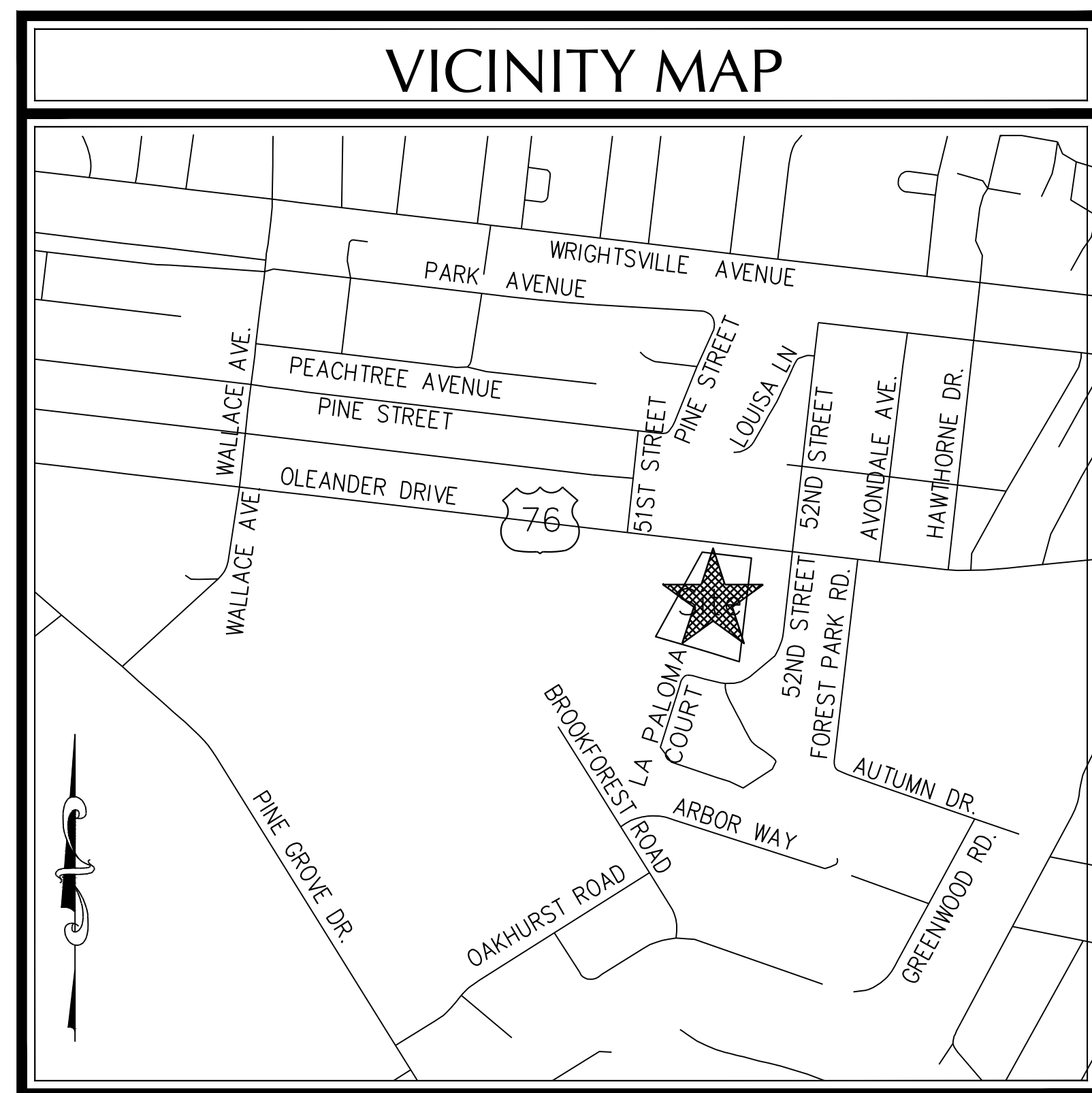
SITE DEVELOPMENT PLAN

FOR

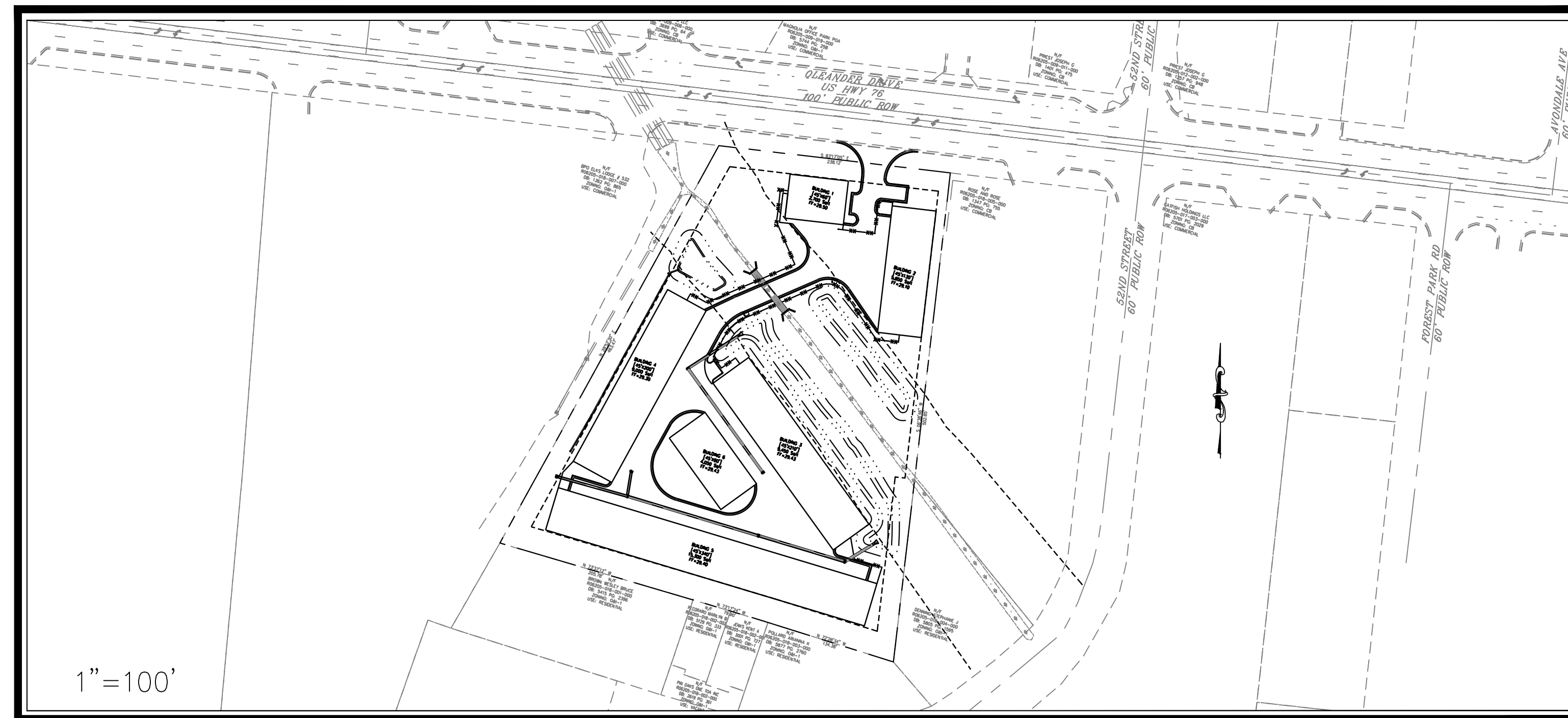
5122 OLEANDER DRIVE

WILMINGTON, NORTH CAROLINA

FEBRUARY 2016



VICINITY MAP
(NTS)



DESCRIPTION	EXISTING	PROPOSED
1' CONTOUR INTERVAL	---	---
5' CONTOUR INTERVAL	----	----
PROPERTY LINE	---	---
ROADWAY CENTERLINE	---	---
RIGHT OF WAY LIMITS	---	---
EASEMENT LINE	---	---
CURB & GUTTER	---	---
SANITARY SEWER FACILITIES	---	---
STORM SEWER FACILITIES	---	---
WATERLINE	---	---
FIRE HYDRANT ASSEMBLY	---	---
WATERWAYS	---	N/A
PROPOSED LOT AND S.F.	---	---
OPEN SPACE LABEL	---	---
OPEN SPACE	---	---
BUILDING SET BACKS	---	---
PRIVATE SANITARY SET BACKS	---	---
SKIMMER	---	---
	PROPOSED x 5,000 s.f. (A)	
	STREET SIGN	---
	404 WETLANDS	---
	FLOW DIRECTION	---
	LEVEL SPREADER	---

DEVELOPER/OWNER

Penton Storage, LLC.
6105 Oleander Drive, Suite 201
WILMINGTON, NC 28403
PHONE: (910) 452-1410

PREPARED BY:

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road, Unit C, Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659 License # P-0718

INDEX OF SHEETS	
SHT C-0	COVER SHEET
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SHT C-3	SITE PLAN
SHT C-4	UTILITY PLAN
SHT C-5	GRADING, DRAINAGE & EROSION & SEDIMENT CONTROL PLAN
SHT C-6.1	INFILTRATION BASIN DETAILS
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SHT C-8	STANDARD DETAILS

SITE DATA TABLE	
GENERAL NOTES:	
1. NEW HANOVER COUNTY PARCEL NOS: PIN# R06205-018-006-000 SITE ADDRESS: 5122 OLEANDER DRIVE	
2. TOTAL AREA: 154,656 SF± = 3.55 AC.±	
3. EXISTING ZONING: CB PROPOSED ZONING: CB SETBACKS - REQUIRED PROPOSED 20' FRONT 20' FRONT 10' REAR* 10' REAR* 0' SIDE** 10' SIDE** *(25' WHERE ABUTTING A RESIDENTIAL DISTRICT) **(20' WHERE ABUTTING A RESIDENTIAL DISTRICT)	
4. CAMA LAND CLASSIFICATION: WATER RESOURCE PROTECTION	
5. THIS PROPERTY IS <u>NOT</u> WITHIN A SPECIAL FLOOD HAZARD ZONE PER FEMA DFIRM 3720314600J EFFECTIVE DATE 04/03/06.	
DEVELOPMENT DATA:	
TOTAL TRACT AREA = 154,656 SF± = 3.55 AC.±	
PROPOSED USE: MINI-WAREHOUSING	
NUMBER OF BUILDINGS: 6 (1-STORY)	
STORAGE UNITS PROPOSED: 46,350 SF	
CONSTRUCTION TYPE: S1	
	REQUIRED PROPOSED
MAX BUILDING HEIGHT	12' 12'
MAX BUILDING COVERAGE	30% 46,350/154,656=(29.97%)
PARKING	1SP/1,000 SF 2,700/1000=3 SPACES PROV'D
IMPERVIOUS SURFACES -	
BUILDINGS -	46,350 S.F.
PAVEMENT -	29,250 S.F.
SIDEWALKS -	164 S.F.
TOTAL -	75,764 S.F. (48.99%)
UTILITY CAPACITY REQUESTS:	
SEWER (125 GAL/PLUMBING FIXTURE) - ±375 GPD	
WATER (125 GAL/PLUMBING FIXTURE) - ±375 GPD	
Approved Construction Plan	
Name _____ Date _____	
Planning _____	For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.
Traffic _____	
Fire _____	
 Public Services • Engineering Division APPROVED STORMWATER MANAGEMENT PLAN Date: _____ Permit # _____ Signed: _____	
NOTE: ALL DESIGN AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE, TECHNICAL STANDARDS MANUAL & THE STATE OF NORTH CAROLINA.	

COORDINATION NOTES

- 1. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.
2. ALL WORK IS TO BE IN ACCORDANCE WITH CITY OF WILMINGTON, NEW HANOVER COUNTY, THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) AND THE STATE OF NORTH CAROLINA.
3. THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT.
4. ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK...

GENERAL NOTES:

- 1. EXISTING TOPOGRAPHY, BOUNDARY AND UTILITIES, HAVE BEEN PREPARED BY FIELD SURVEYS BY JOHNNY J. WILLIAMS LAND SURVEYING, P.C., PENTON DEVELOPMENT, INC. AND OTHER AVAILABLE INFORMATION.
2. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES.
3. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
4. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC.
5. ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
6. ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.
7. CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 1 (800) 632-4949 AND ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.
8. CONTRACTOR SHALL REMOVE ASPHALT, AGGREGATE BASE COURSE, AND CONCRETE CURB & GUTTER WITHIN LIMITS OF DEMOLITION AS SHOWN ON PLAN.

DEMOLITION NOTES

- 1. CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
2. CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.
3. DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES; ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE SOILS ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.
4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED.
5. ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
6. EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION.
7. ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM THE PROPERTY AND PROPER DISPOSAL.
8. CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVER HEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.
9. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.
10. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.
11. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND.
12. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL NOTES:

- 1. CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.
2. PLANT GRASS OVER ALL GRADED AREAS AS SHOWN IN THE TABLE ON THIS SHEET OF CEASE OF ANY GRADING ACTIVITY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES.
4. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY NEW HANOVER COUNTY.
5. WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SOODED AND PLANTED AREAS UNTIL FINAL APPROVAL BY NEW HANOVER COUNTY.
6. ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.
7. ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.

MAINTENANCE PLAN

ALL EROSION AND SEDIMENT CONTROL MEASURES 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 #4 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, BLOCK AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION 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 SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.

SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAPS WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. THE ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR WHEN THE ROCK IS DISLODGED. BAFFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE.

SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE DESIGN STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR IF THE ROCK IS DISLODGED. BAFFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED FROM BAFFLES WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED WEEKLY AND WILL BE KEPT CLEAN.

ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS.

FLOCCULANTS WILL BE USED TO ADDRESS TURBIDITY ISSUES. THE PUMPS, TANKS, HOSES AND INJECTION SYSTEMS WILL BE CHECKED FOR PROBLEMS OR TURBID DISCHARGES DAILY.

COMPOST FILTER SOCKS SHOULD BE INSPECTED REGULARLY, AS WELL AS AFTER EACH RAINFALL EVENT, TO ENSURE THAT THEY ARE INTACT AND THE AREA BEHIND THE SOCK IS NOT FILLED WITH SEDIMENT. IF THERE IS EXCESSIVE PONDING BEHIND THE FILTER SOCK OR ACCUMULATED SEDIMENTS REACH THE TOP OF THE SOCK, AN ADDITIONAL SOCK SHOULD BE ADDED ON TOP OR IN FRONT OF THE EXISTING FILTER SOCK IN THESE AREAS, WITHOUT DISTURBING THE SOIL OR ACCUMULATED SEDIMENT. IF THE FILTER SOCK WAS OVERTOPPED DURING A STORM EVENT, THE OPERATOR SHOULD CONSIDER INSTALLING AN ADDITIONAL FILTER SOCK ON TOP OF THE ORIGINAL, PLACING AN ADDITIONAL FILTER SOCK FURTHER UP THE SLOPE, OR USING AN ADDITIONAL BMP, SUCH AS A COMPOST BLANKET IN CONJUNCTION WITH THE SOCK(S).

STABILIZATION NOTES

- 1. ALL DISTURBED AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY AND SLOPES WITHIN 21 CALENDAR DAYS.

PERMANENT SEEDING SCHEDULE - MIXTURE 5CP

Table with 2 columns: SPECIES, RATE (LB/ACRE). Row 1: CENTIPEDE GRASS, 10-20

Seeding Dates
MARCH - JUNE

Soil Amendments
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

Mulch
DO NOT MULCH.

Maintenance
FERTILIZE VERY SPARINGLY LB/ACRE NITROGEN IN SPRING WITH NO PHOSPHORUS. CENTIPEDE GRASS CANNOT TOLERATE HIGH PH OR EXCESS FERTILIZER.

TEMPORARY SEEDING-LATE WINTER/EARLY SPRING

WINTER AND EARLY SPRING

Table with 2 columns: SPECIES, RATE (LB/ACRE). Row 1: Rye (GRAIN), 120. Row 2: *ANNUAL LESPEDEZA (KORE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS), 50

*OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SUMMER

Table with 2 columns: SPECIES, RATE (LB/ACRE). Row 1: GERMAN MILLET, 40

FALL

Table with 2 columns: SPECIES, RATE (LB/ACRE). Row 1: RYE (GRAIN), 120

Seeding dates

COASTAL PLAIN - DEC.1-APR. 15 - LATE WINTER AND EARLY SPRING
APRIL 15 - AUG. 15 - SUMMER
AUG. 15 - DEC. 30 - FALL

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.

GENERAL GRADING NOTES

- 1. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF SUCH UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF THE DITCHING OPERATION BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF THE TRENCHING OPERATIONS SO AS TO AVOID AND PREVENT DAMAGE TO THE EXISTING UTILITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO REPAIRS AND LOSS SERVICE REVENUE.
3. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC.
4. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
5. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC.
6. ALL MATERIAL CLEARED AND GRUBBED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK, SUCH AS TREES, VEGETATION, FENCING, ETC., SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE OR BURIED IF PROPER PERMITS ARE RECEIVED.

SITE NOTES:

- 1. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND R.O.W.'S PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
3. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
4. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.
5. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
6. THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
7. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
8. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT.
9. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE GIVEN TO THE OWNER FOR REVIEW.
10. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES.
11. ALL PERMITS RELATIVE TO PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION
12. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY, AND LOCAL CODES.
13. FOR BUILDING DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
14. ALL DIMENSIONS AND RADII ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
16. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.

GENERAL STORM SEWER NOTES

- 1. ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WILMINGTON AND THE STATE OF NORTH CAROLINA REQUIREMENTS AS SPECIFIED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.
2. BEDDING FOR ALL STORM SEWER PIPE SHALL BE AS SPECIFIED ON THE DRAWINGS, PROJECT SPECIFICATIONS, AND MANUFACTURER SPECIFICATIONS.
3. ALL STORM SEWER PIPES TO BE HDPE ADS N-12 OR EQUIVALENT, UNLESS OTHERWISE SPECIFIED.
4. ALL STORM SEWER PIPES SHOWN AS RCP ON THE PLANS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, UNLESS INDICATED OTHERWISE ON PLANS.

Table with 3 columns: SITE AREA DESCRIPTION, STABILIZATION TIME FRAME, STABILIZATION TIME FRAME EXCEPTIONS. Rows include PERIMETER DIKES, SWALES, DITCHES AND SLOPES (7 DAYS), HIGH QUALITY WATER (HOW) ZONES (7 DAYS), SLOPES STEEPER THAN 3:1 (7 DAYS), SLOPES 3:1 OR FLATTER (14 DAYS), ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 (14 DAYS).

EXISTING UTILITY NOTES

- 1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
2. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION.

UTILITY CONTACTS:

- 1. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING AND DIGGING. 1-800-632-4949

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO ANY EXCAVATION OR DEMOLITION.

CONTACT "CAROLINA ONE CALL" AT 1-800-632-4949

EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

Table with 4 columns: No., Revision, Date, By. Multiple empty rows.

Table with 2 columns: Designer, Scale, Drawn By, Date, License #, Job No. Values include GSP, February 2016, P-0718, 2016-0002.

Address information: 5122 OLEANDER DRIVE, Wilmington, New Hanover County, North Carolina

GENERAL NOTES

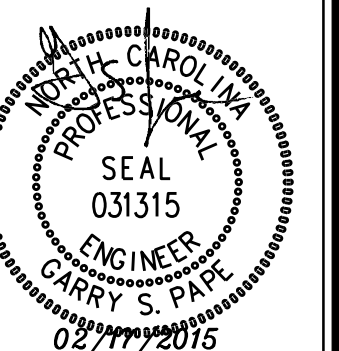
PREPARED FOR: Penton Storage, LLC 6105 Oleander Drive Suite 201 Wilmington, NC 28403

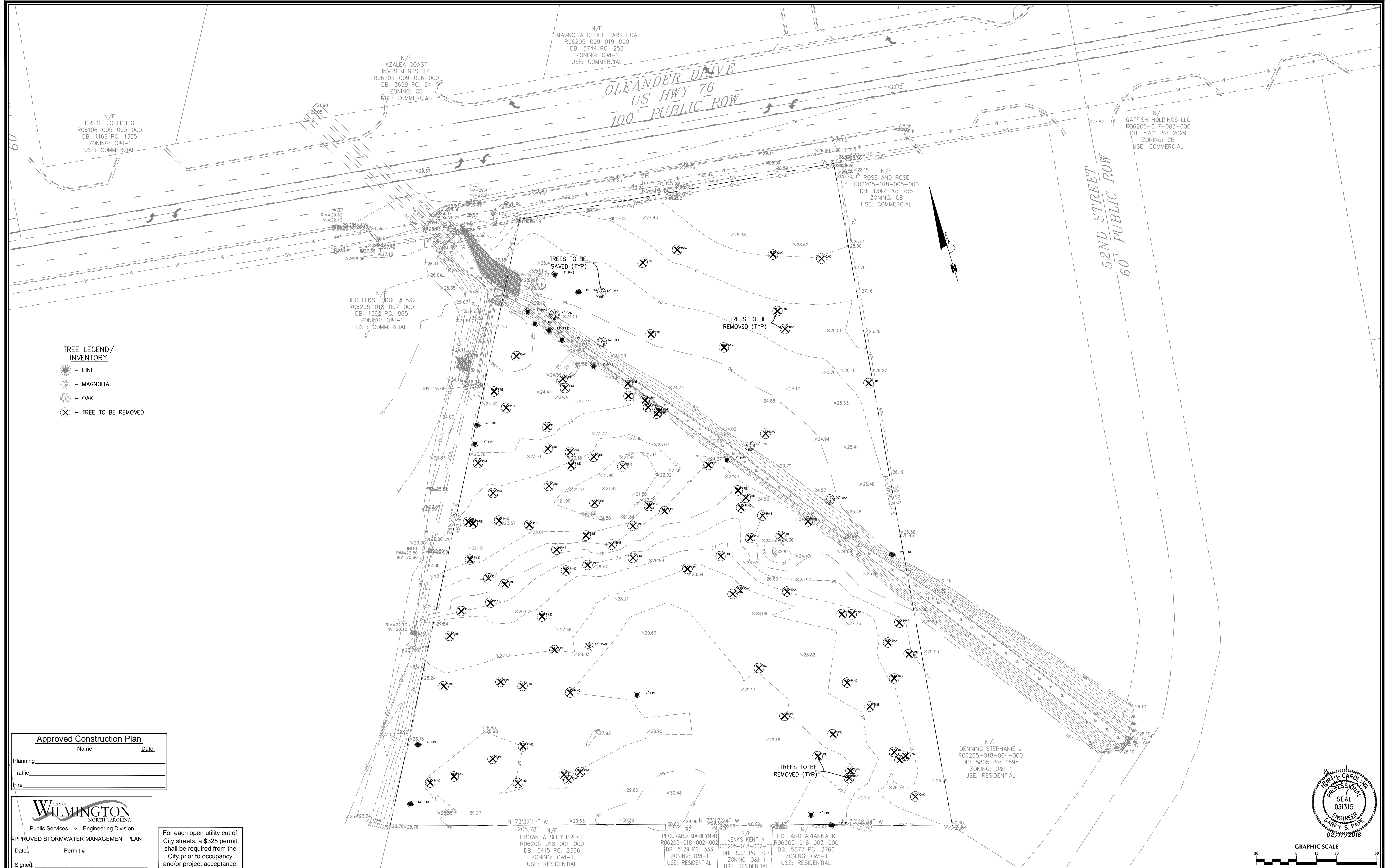
GSP CONSULTING, PLLC ENGINEERING 6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No. C-1

Approved Construction Plan form with fields for Name, Date, Planning, Traffic, Fire, and a signature line.

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





- TREE LEGEND/
INVENTORY**
- ☀ - PINE
 - ✪ - MAGNOLIA
 - ⊙ - OAK
 - ⊗ - TREE TO BE REMOVED

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

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

No.	Revision	Date	By

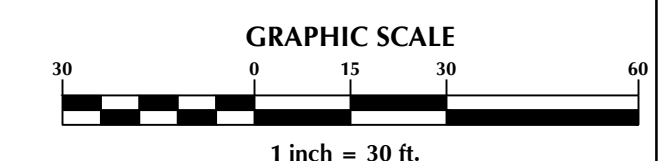
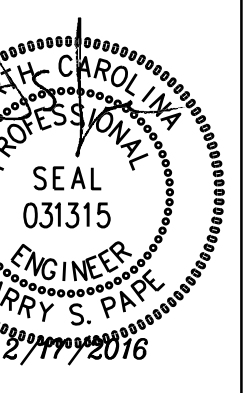
Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	February 2016
License #	P-0718	Job No.	2016-0002

5122 OLEANDER DRIVE
New Hanover County
North Carolina

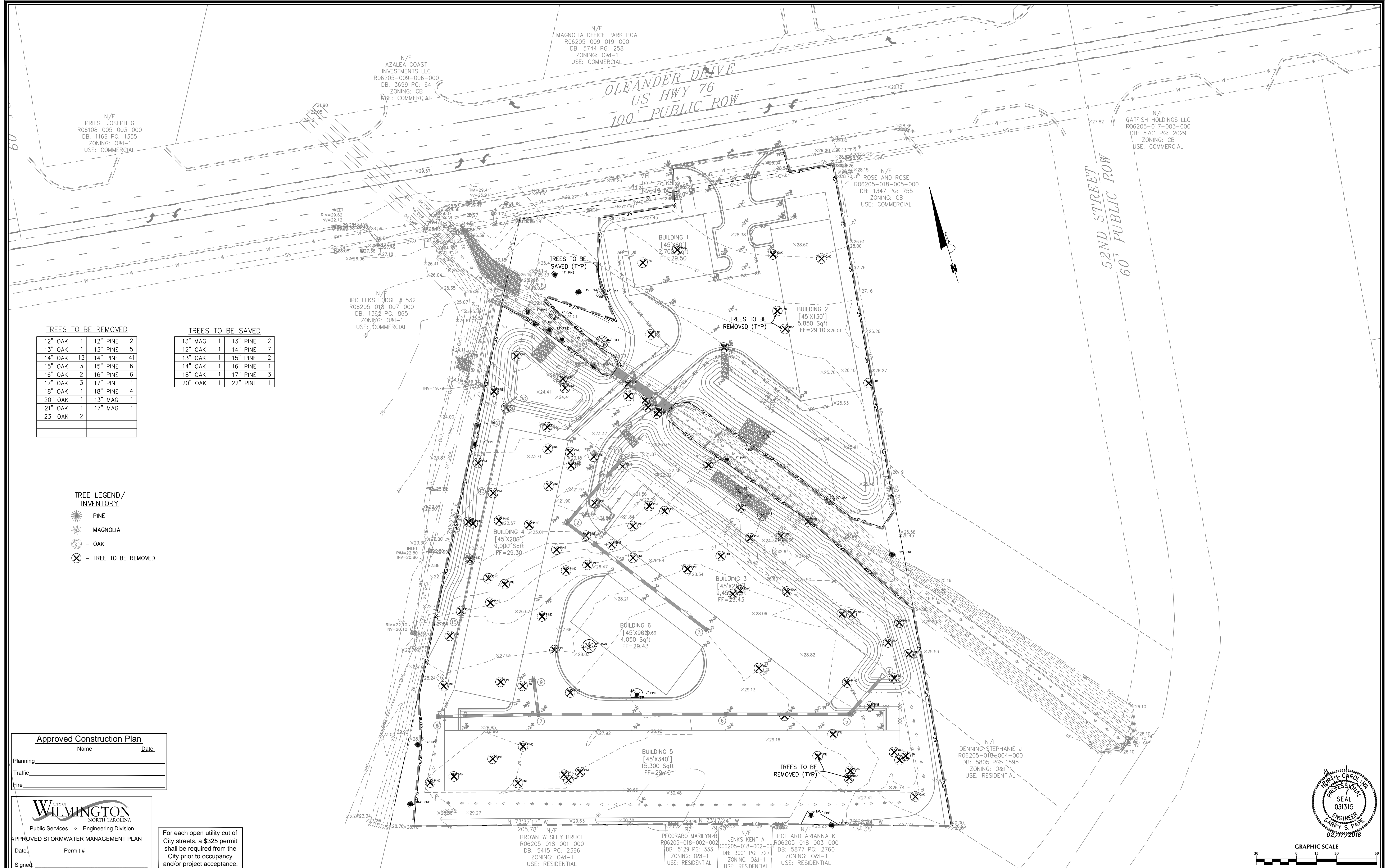
EXISTING CONDITIONS

PREPARED FOR:
Penton Storage, LLC
6105 Oleander Drive
Suite 201
Wilmington, NC 28403

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659



Sheet No.
C-2



TREES TO BE REMOVED

12" OAK	1	12" PINE	2
13" OAK	1	13" PINE	5
14" OAK	13	14" PINE	41
15" OAK	3	15" PINE	6
16" OAK	2	16" PINE	6
17" OAK	3	17" PINE	1
18" OAK	1	18" PINE	4
20" OAK	1	13" MAG	1
21" OAK	1	17" MAG	1
23" OAK	2		

TREES TO BE SAVED

13" MAG	1	13" PINE	2
12" OAK	1	14" PINE	7
13" OAK	1	15" PINE	2
14" OAK	1	16" PINE	1
18" OAK	1	17" PINE	3
20" OAK	1	22" PINE	1

- TREE LEGEND / INVENTORY**
- PINE
 - MAGNOLIA
 - OAK
 - TREE TO BE REMOVED

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date _____ Permit # _____

Signed: _____

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No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	February 2016
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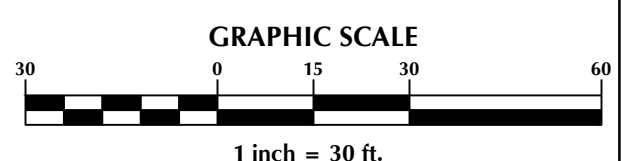
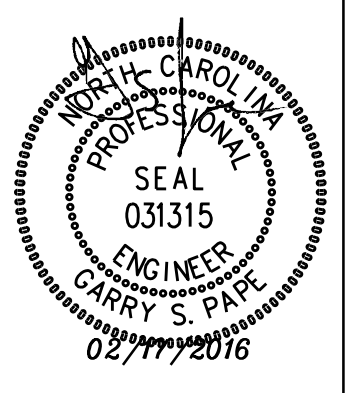
5122 OLEANDER DRIVE
Wilmington New Hanover County North Carolina

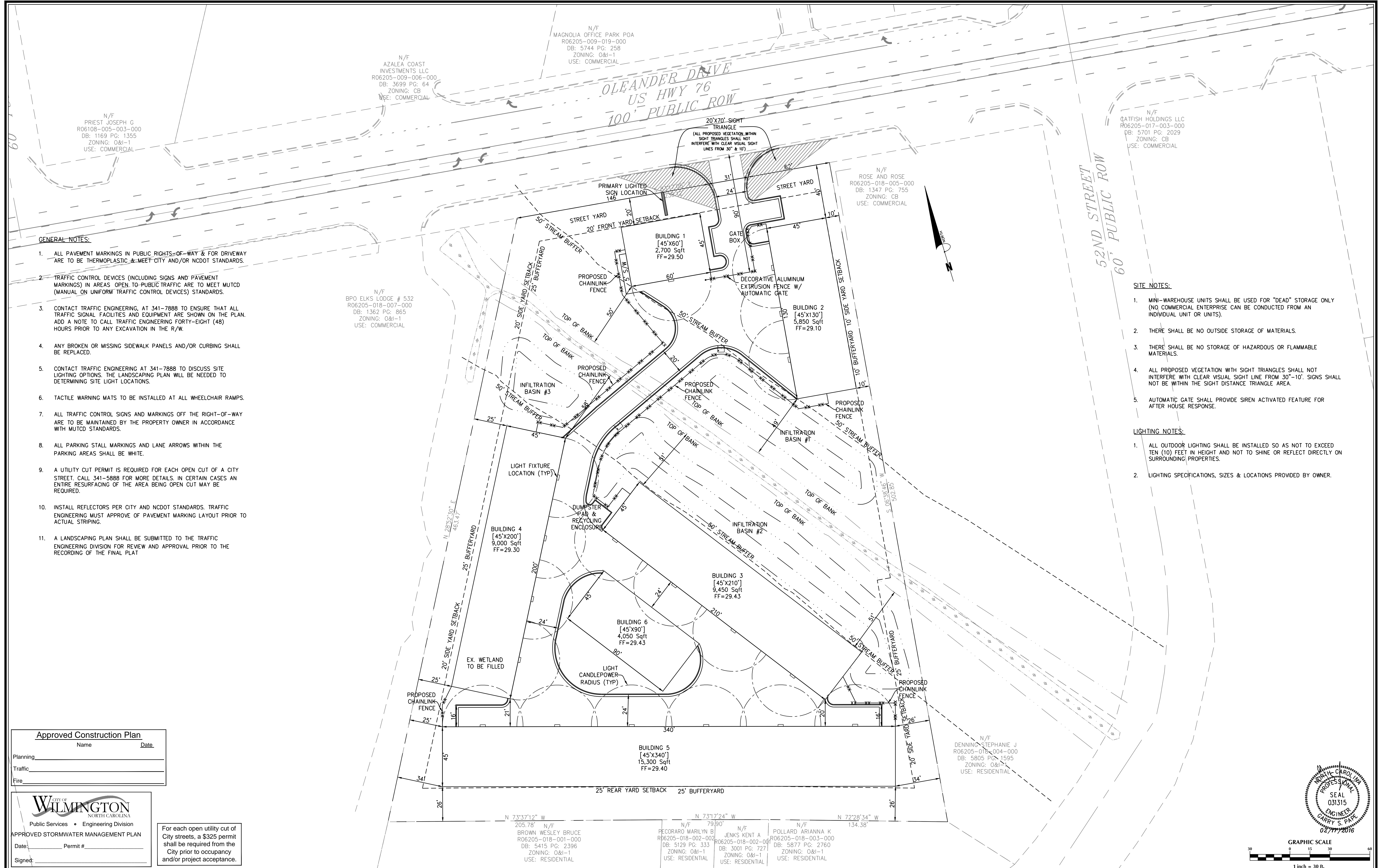
SITE INVENTORY PLAN

PREPARED FOR:
Penton Storage, LLC
6105 Oleander Drive
Suite 201
Wilmington, NC 28403

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-2.1





GENERAL NOTES:

1. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY & FOR DRIVEWAY ARE TO BE THERMOPLASTIC & MEET CITY AND/OR NCDOT STANDARDS.
2. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
3. CONTACT TRAFFIC ENGINEERING, AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. ADD A NOTE TO CALL TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE R/W.
4. ANY BROKEN OR MISSING SIDEWALK PANELS AND/OR CURBING SHALL BE REPLACED.
5. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS SITE LIGHTING OPTIONS. THE LANDSCAPING PLAN WILL BE NEEDED TO DETERMINING SITE LIGHT LOCATIONS.
6. TACTILE WARNING MATS TO BE INSTALLED AT ALL WHEELCHAIR RAMPS.
7. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
8. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
9. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CALL 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
10. INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
11. A LANDSCAPING PLAN SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT

SITE NOTES:

1. MINI-WAREHOUSE UNITS SHALL BE USED FOR "DEAD" STORAGE ONLY (NO COMMERCIAL ENTERPRISE CAN BE CONDUCTED FROM AN INDIVIDUAL UNIT OR UNITS).
2. THERE SHALL BE NO OUTSIDE STORAGE OF MATERIALS.
3. THERE SHALL BE NO STORAGE OF HAZARDOUS OR FLAMMABLE MATERIALS.
4. ALL PROPOSED VEGETATION WITH SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINE FROM 30'-10'. SIGNS SHALL NOT BE WITHIN THE SIGHT DISTANCE TRIANGLE AREA.
5. AUTOMATIC GATE SHALL PROVIDE SIREN ACTIVATED FEATURE FOR AFTER HOUSE RESPONSE.

LIGHTING NOTES:

1. ALL OUTDOOR LIGHTING SHALL BE INSTALLED SO AS NOT TO EXCEED TEN (10) FEET IN HEIGHT AND NOT TO SHINE OR REFLECT DIRECTLY ON SURROUNDING PROPERTIES.
2. LIGHTING SPECIFICATIONS, SIZES & LOCATIONS PROVIDED BY OWNER.

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Fire	

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit #: _____

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Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	February 2016
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5122 OLEANDER DRIVE
New Hanover County
North Carolina

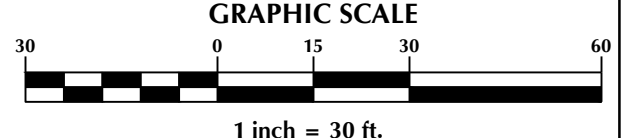
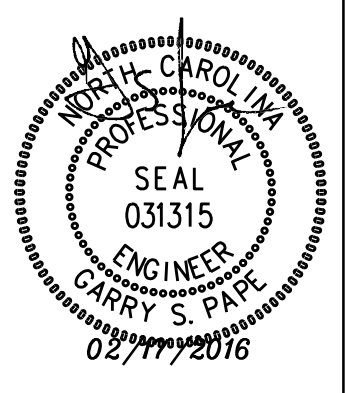
SITE PLAN

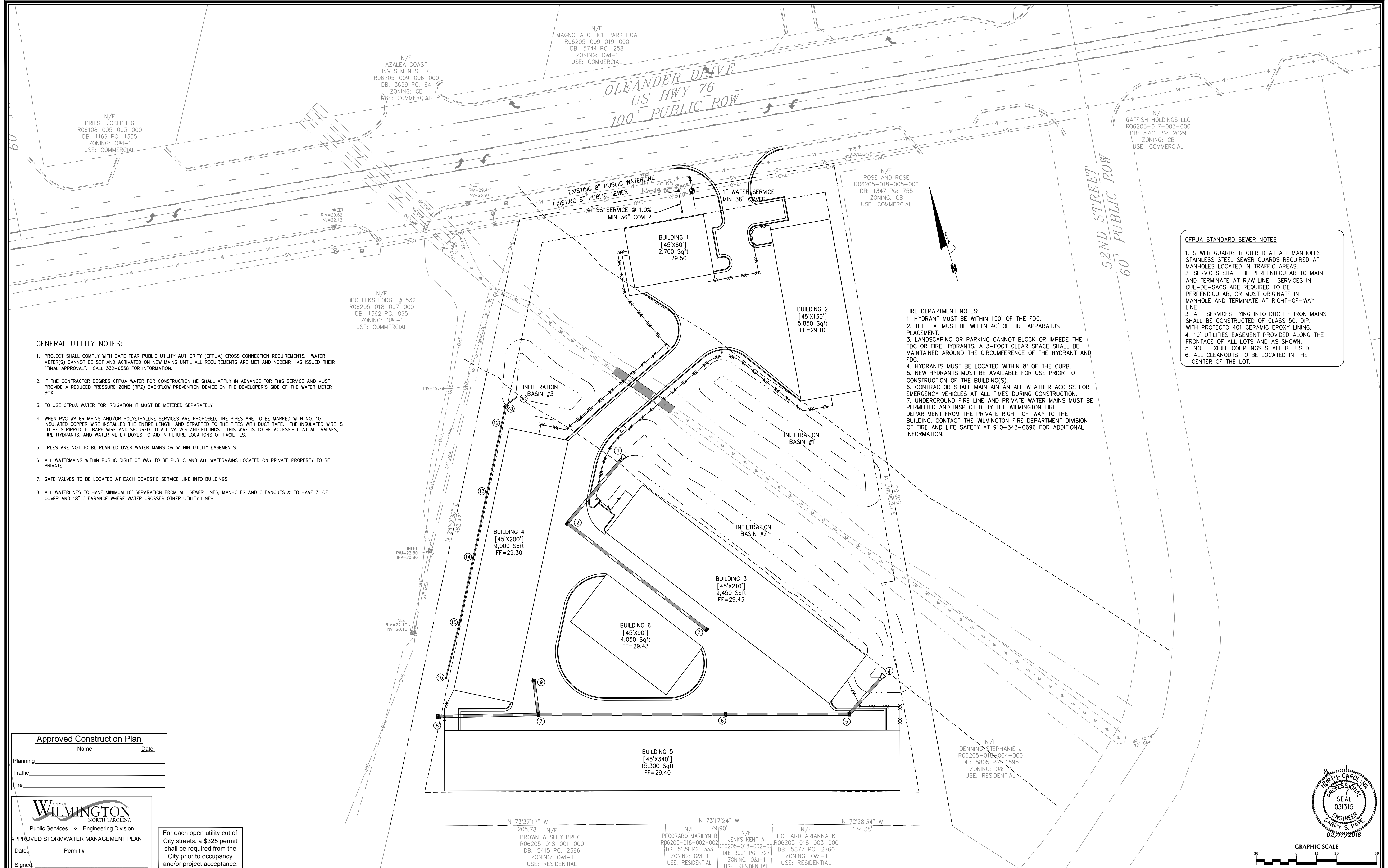
PREPARED FOR:
Penton Storage, LLC
6105 Oleander Drive
Suite 201
Wilmington, NC 28403

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ENGINEERING

6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-3





GENERAL UTILITY NOTES:

- PROJECT SHALL COMPLY WITH CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) CROSS CONNECTION REQUIREMENTS. WATER METER(S) CANNOT BE SET AND ACTIVATED ON NEW MAINS UNTIL ALL REQUIREMENTS ARE MET AND NCDENR HAS ISSUED THEIR "FINAL APPROVAL". CALL 332-6558 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CFPUA 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.
- TO USE CFPUA WATER FOR IRRIGATION IT MUST BE METERED SEPARATELY.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED COPPER WIRE INSTALLED THE ENTIRE LENGTH AND STRAPPED TO THE PIPES WITH DUCT TAPE. THE INSULATED WIRE IS TO BE STRIPPED TO BARE WIRE AND SECURED TO ALL VALVES AND FITTINGS. THIS WIRE IS TO BE ACCESSIBLE AT ALL VALVES, FIRE HYDRANTS, AND WATER METER BOXES TO AID IN FUTURE LOCATIONS OF FACILITIES.
- TREES ARE NOT TO BE PLANTED OVER WATER MAINS OR WITHIN UTILITY EASEMENTS.
- ALL WATERMANS WITHIN PUBLIC RIGHT OF WAY TO BE PUBLIC AND ALL WATERMANS LOCATED ON PRIVATE PROPERTY TO BE PRIVATE.
- GATE VALVES TO BE LOCATED AT EACH DOMESTIC SERVICE LINE INTO BUILDINGS
- ALL WATERLINES TO HAVE MINIMUM 10' SEPARATION FROM ALL SEWER LINES, MANHOLES AND CLEANOUTS & TO HAVE 3' OF COVER AND 18" CLEARANCE WHERE WATER CROSSES OTHER UTILITY LINES

FIRE DEPARTMENT NOTES:

- HYDRANT MUST BE WITHIN 150' OF THE FDC.
- THE FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
- NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDING(S).
- CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PRIVATE RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.

CFPUA STANDARD SEWER NOTES

- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
- SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT R/W LINE. SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
- ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 401 CERAMIC EPOXY LINING.
- 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN.
- NO FLEXIBLE COUPLINGS SHALL BE USED.
- ALL CLEANOUTS TO BE LOCATED IN THE CENTER OF THE LOT.

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Fire	

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

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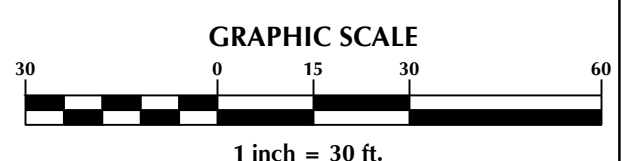
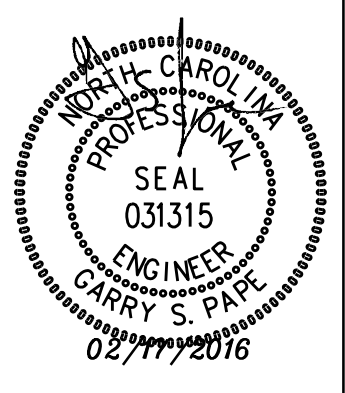
5122 OLEANDER DRIVE
New Hanover County
Wilmington North Carolina

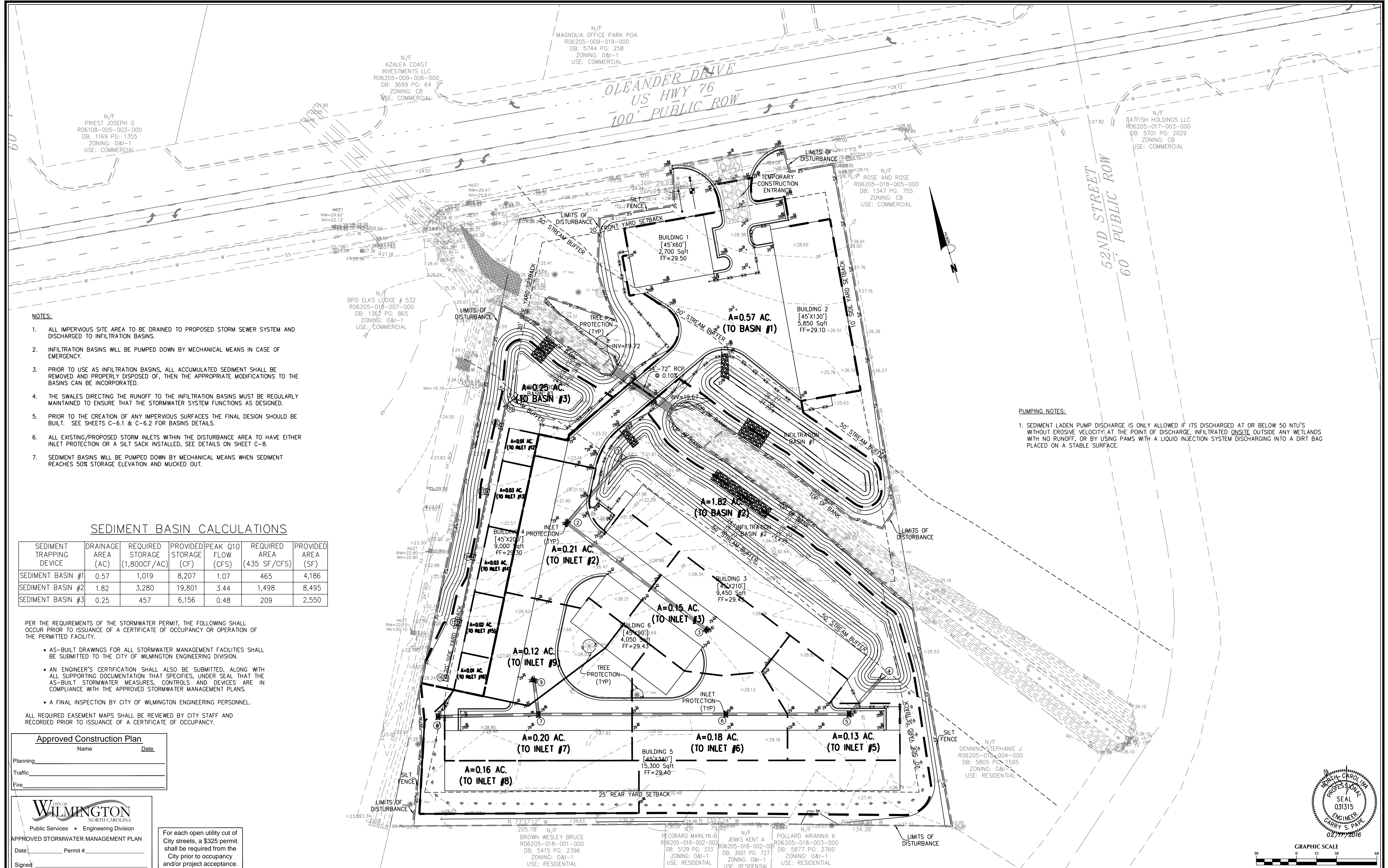
UTILITY PLAN

PREPARED FOR:
Penton Storage, LLC
6105 Oleander Drive
Suite 201
Wilmington, NC 28403

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-4





NOTES:

1. ALL IMPERVIOUS SITE AREA TO BE DRAINED TO PROPOSED STORM SEWER SYSTEM AND DISCHARGED TO INFILTRATION BASINS.
2. INFILTRATION BASINS WILL BE PUMPED DOWN BY MECHANICAL MEANS IN CASE OF EMERGENCY.
3. PRIOR TO USE AS INFILTRATION BASINS, ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF, THEN THE APPROPRIATE MODIFICATIONS TO THE BASINS CAN BE INCORPORATED.
4. THE SWALES DIRECTING THE RUNOFF TO THE INFILTRATION BASINS MUST BE REGULARLY MAINTAINED TO ENSURE THAT THE STORMWATER SYSTEM FUNCTIONS AS DESIGNED.
5. PRIOR TO THE CREATION OF ANY IMPERVIOUS SURFACES THE FINAL DESIGN SHOULD BE BUILT. SEE SHEETS C-6.1 & C-6.2 FOR BASINS DETAILS.
6. ALL EXISTING/PROPOSED STORM INLETS WITHIN THE DISTURBANCE AREA TO HAVE EITHER INLET PROTECTION OR A SILT SACK INSTALLED, SEE DETAILS ON SHEET C-8.
7. SEDIMENT BASINS WILL BE PUMPED DOWN BY MECHANICAL MEANS WHEN SEDIMENT REACHES 50% STORAGE ELEVATION AND MUCKED OUT.

PUMPING NOTES:

1. SEDIMENT LADEN PUMP DISCHARGE IS ONLY ALLOWED IF ITS DISCHARGED AT OR BELOW 50 NTU'S WITHOUT EROSION VELOCITY AT THE POINT OF DISCHARGE, INFILTRATED ONSITE OUTSIDE ANY WETLANDS WITH NO RUNOFF, OR BY USING PAMS WITH A LIQUID INJECTION SYSTEM DISCHARGING INTO A DIRT BAG PLACED ON A STABLE SURFACE.

SEDIMENT BASIN CALCULATIONS

SEDIMENT TRAPPING DEVICE	DRAINAGE AREA (AC)	REQUIRED STORAGE (1,800CF/AC)	PROVIDED STORAGE (CF)	PEAK Q10 FLOW (CFS)	REQUIRED AREA (435 SF/CFS)	PROVIDED AREA (SF)
SEDIMENT BASIN #1	0.57	1,019	8,207	1.07	465	4,186
SEDIMENT BASIN #2	1.82	3,280	19,801	3.44	1,498	8,495
SEDIMENT BASIN #3	0.25	457	6,156	0.48	209	2,550

PER THE REQUIREMENTS OF THE STORMWATER PERMIT, THE FOLLOWING SHALL OCCUR PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR OPERATION OF THE PERMITTED FACILITY.

- AS-BUILT DRAWINGS FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON ENGINEERING DIVISION.
- AN ENGINEER'S CERTIFICATION SHALL ALSO BE SUBMITTED, ALONG WITH ALL SUPPORTING DOCUMENTATION THAT SPECIFIES, UNDER SEAL THAT THE AS-BUILT STORMWATER MEASURES, CONTROLS AND DEVICES ARE IN COMPLIANCE WITH THE APPROVED STORMWATER MANAGEMENT PLANS.
- A FINAL INSPECTION BY CITY OF WILMINGTON ENGINEERING PERSONNEL.

ALL REQUIRED EASEMENT MAPS SHALL BE REVIEWED BY CITY STAFF AND RECORDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

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Name _____ Date _____

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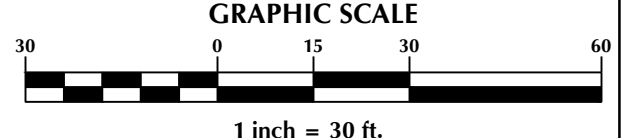
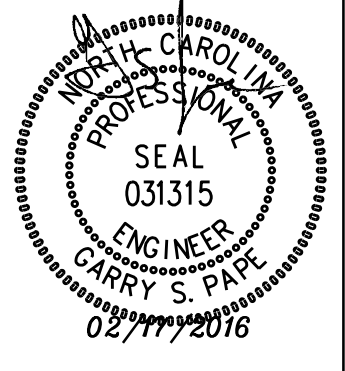
CITY OF WILMINGTON
NORTH CAROLINA
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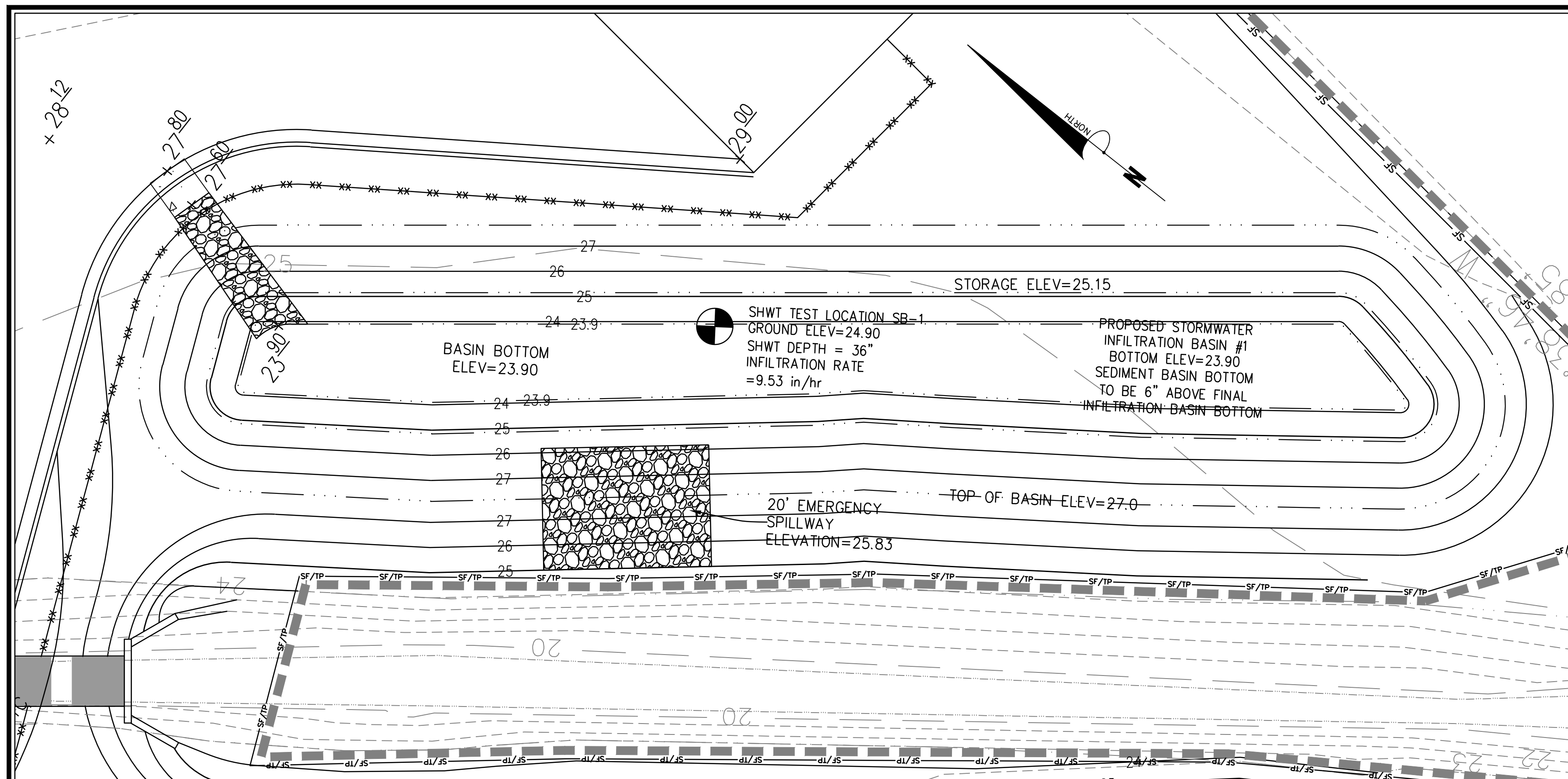
5122 OLEANDER DRIVE
Wilmington, New Hanover County, North Carolina

GRADING, DRAINAGE & EROSION & SEDIMENT CONTROL PLAN

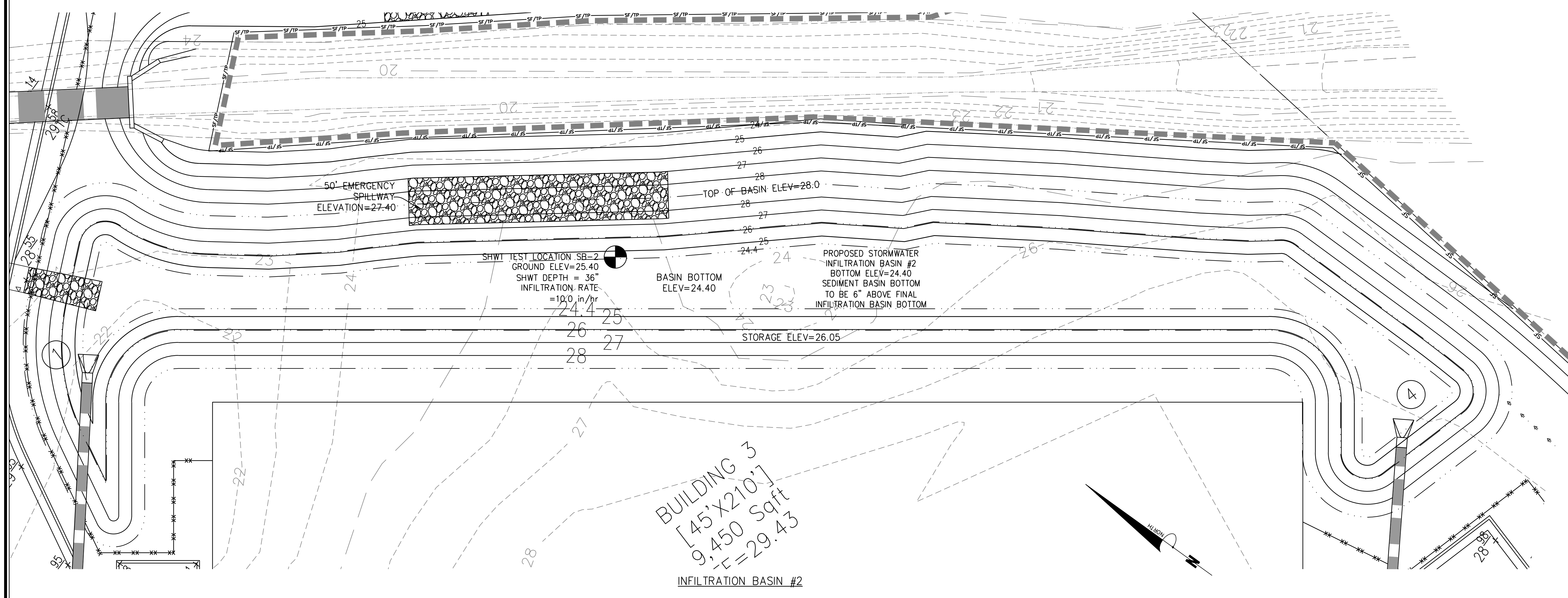
PREPARED FOR:
Penton Storage, LLC
6105 Oleander Drive
Suite 201
Wilmington, NC 28403

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

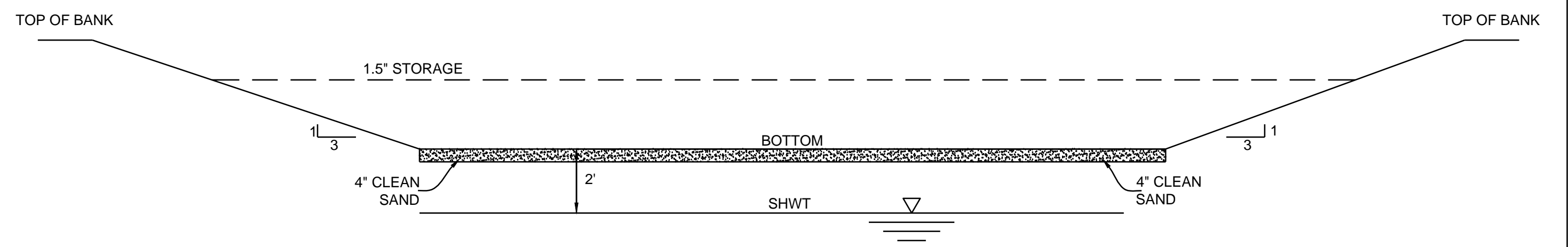
Sheet No.
C-5



INFILTRATION BASIN #1

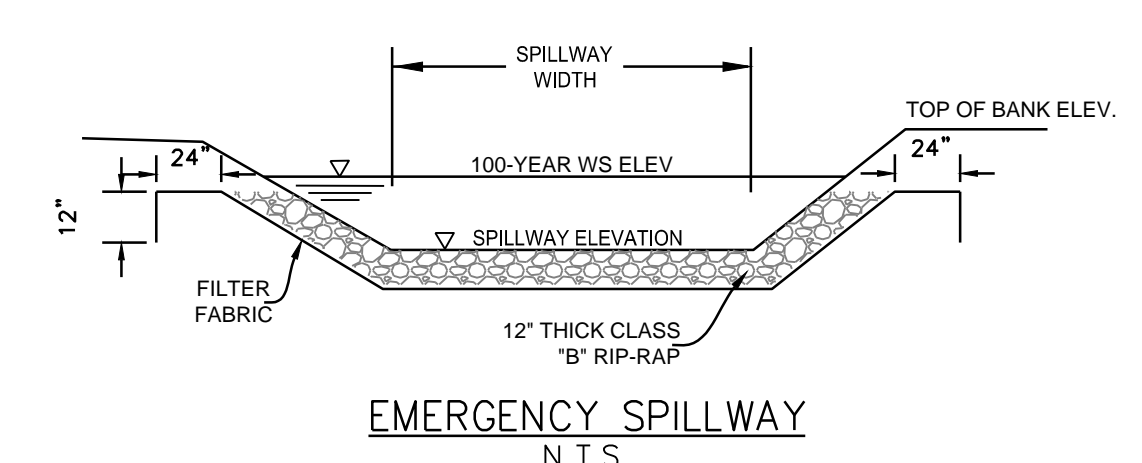


INFILTRATION BASIN #2



INFILTRATION BASIN	GROUND ELEVATION	SHWT DEPTH	SHWT ELEVATION	BASIN BOTTOM ELEVATION	BASIN DEPTH (FT)	1.5" STORAGE ELEVATION	1.5" STORAGE VOLUME REQ. (CF)	1.5" STORAGE VOLUME PROV. (CF)	EMERGENCY SPILLWAY ELEVATION	EMERGENCY SPILLWAY WIDTH (FT)	100-YEAR ELEVATION	TOP OF BANK ELEVATION
BASIN #1	24.90	36"	21.90	23.90	3.1	25.15	2,186	2,228	25.83	20	26.02	27.00
BASIN #2	25.40	36"	22.40	24.40	3.6	26.05	6,482	6,503	27.40	50	27.62	28.00
BASIN #3	24.50	24"	22.50	24.50	3.5	25.05	575	634	25.78	10	25.94	28.00

INFILTRATION BASIN CROSS-SECTION
N.T.S.



EMERGENCY SPILLWAY
N.T.S.

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Approved Construction Plan

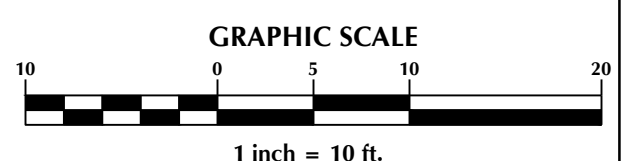
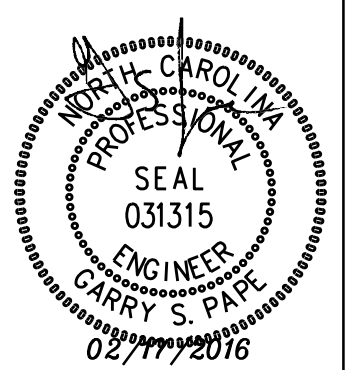
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Planning _____

Traffic _____

Fire _____

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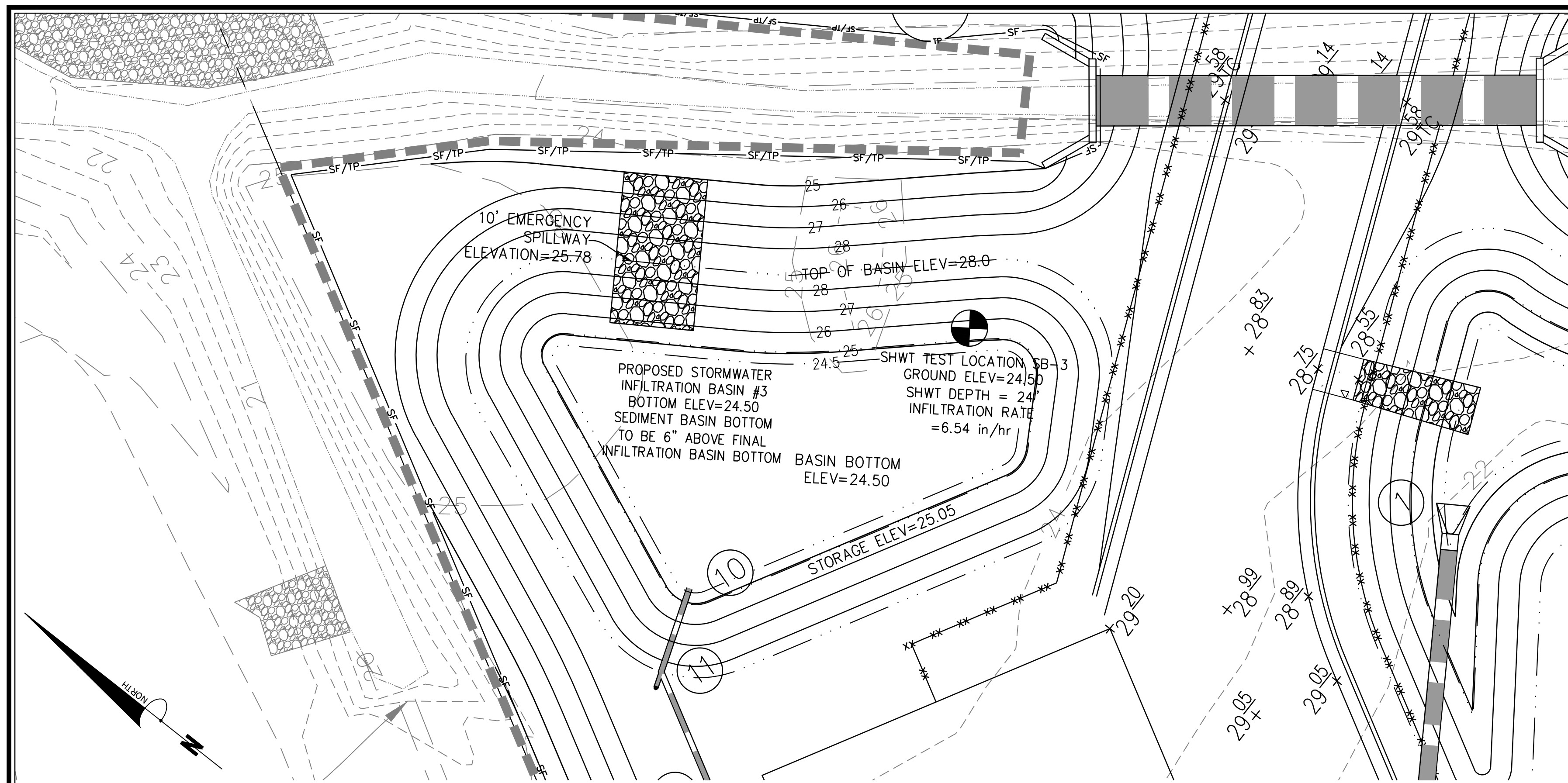
5122 OLEANDER DRIVE
New Hanover County North Carolina

INFILTRATION BASIN DETAILS

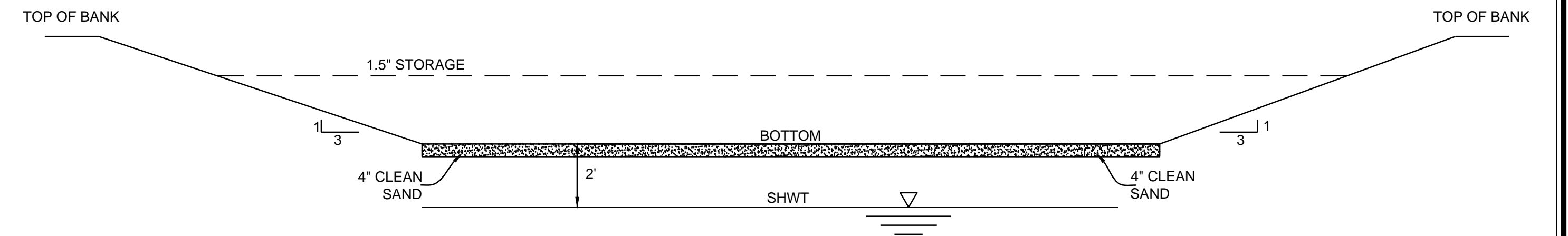
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Sheet No.
C-6.1

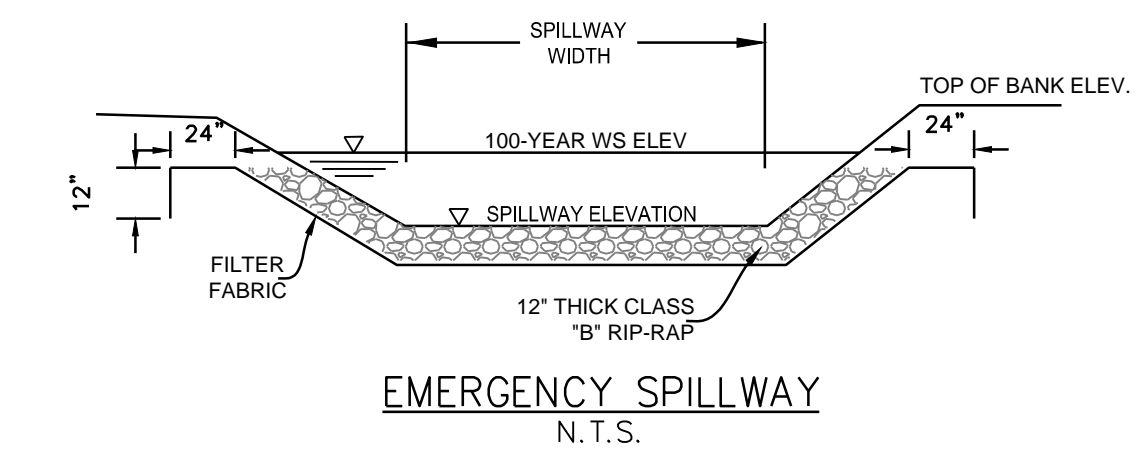


INFILTRATION BASIN #3



INFILTRATION BASIN	GROUND ELEVATION	SHWT DEPTH	SHWT ELEVATION	BASIN BOTTOM ELEVATION	BASIN DEPTH (FT)	1.5" STORAGE ELEVATION	1.5" STORAGE VOLUME REQ. (CF)	1.5" STORAGE VOLUME PROV. (CF)	EMERGENCY SPILLWAY ELEVATION	EMERGENCY SPILLWAY WIDTH (FT)	100-YEAR ELEVATION	TOP OF BANK ELEVATION
BASIN #1	24.90	36"	21.90	23.90	3.1	25.15	2,186	2,228	25.83	20	26.02	27.00
BASIN #2	25.40	36"	22.40	24.40	3.6	26.05	6,482	6,503	27.40	50	27.62	28.00
BASIN #3	24.50	24"	22.50	24.50	3.5	25.05	575	634	25.78	10	25.94	28.00

INFILTRATION BASIN CROSS-SECTION
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EMERGENCY SPILLWAY
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Traffic _____

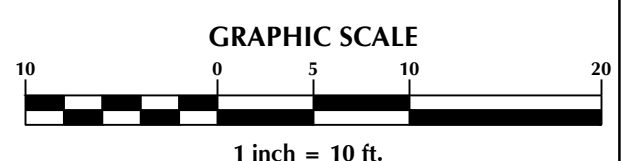
Fire _____

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NORTH CAROLINA
Public Services • Engineering Division

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5122 OLEANDER DRIVE
Wilmington New Hanover County North Carolina

INFILTRATION BASIN DETAILS

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Sheet No.
C-6.2

GENERAL NOTES

I. LOCATION OF WHEELCHAIR RAMPS:

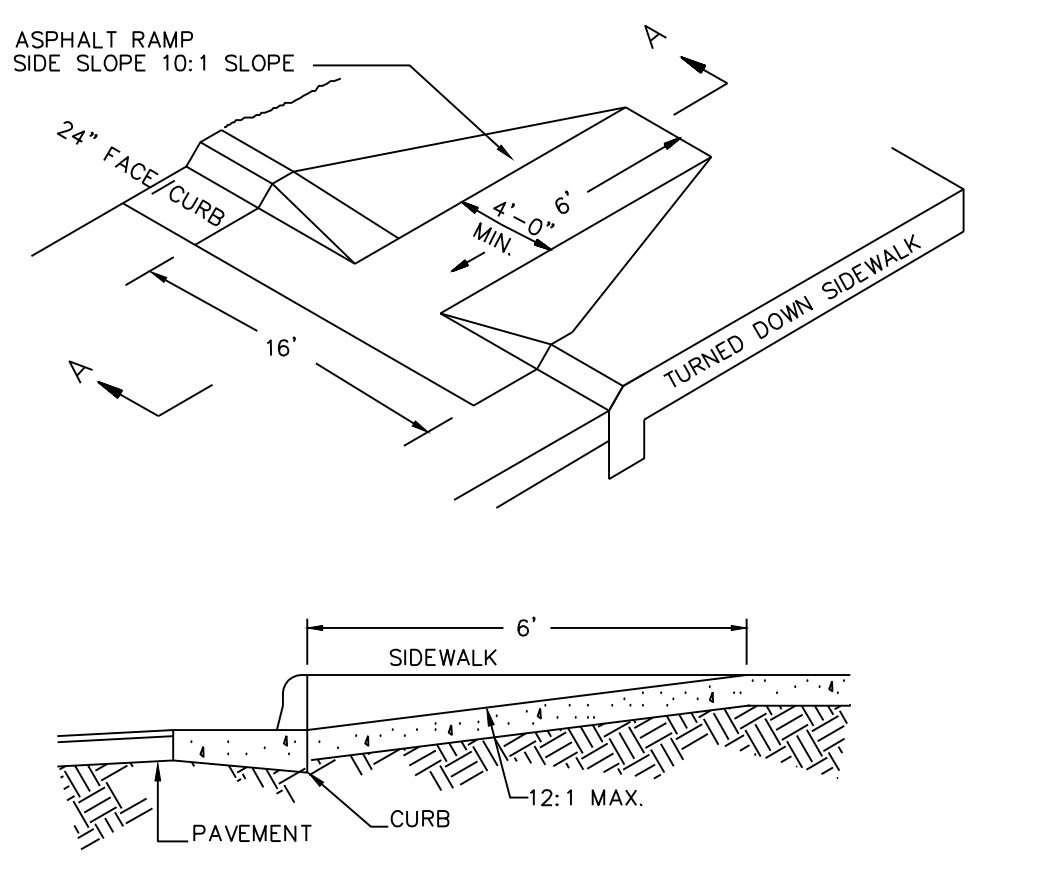
- IN ACCORDANCE WITH THE RATIFIED HOUSE BILL 1296, ALL STREET CURBS IN NORTH CAROLINA BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTERS AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR POINTS OF PEDESTRIAN FLOW.
- WHEELCHAIR RAMPS SHOULD BE LOCATED AS INDICATED IN DETAIL DRAWINGS, HOWEVER EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. MAY AFFECT PLACEMENT.

II. CONSTRUCTION NOTES:

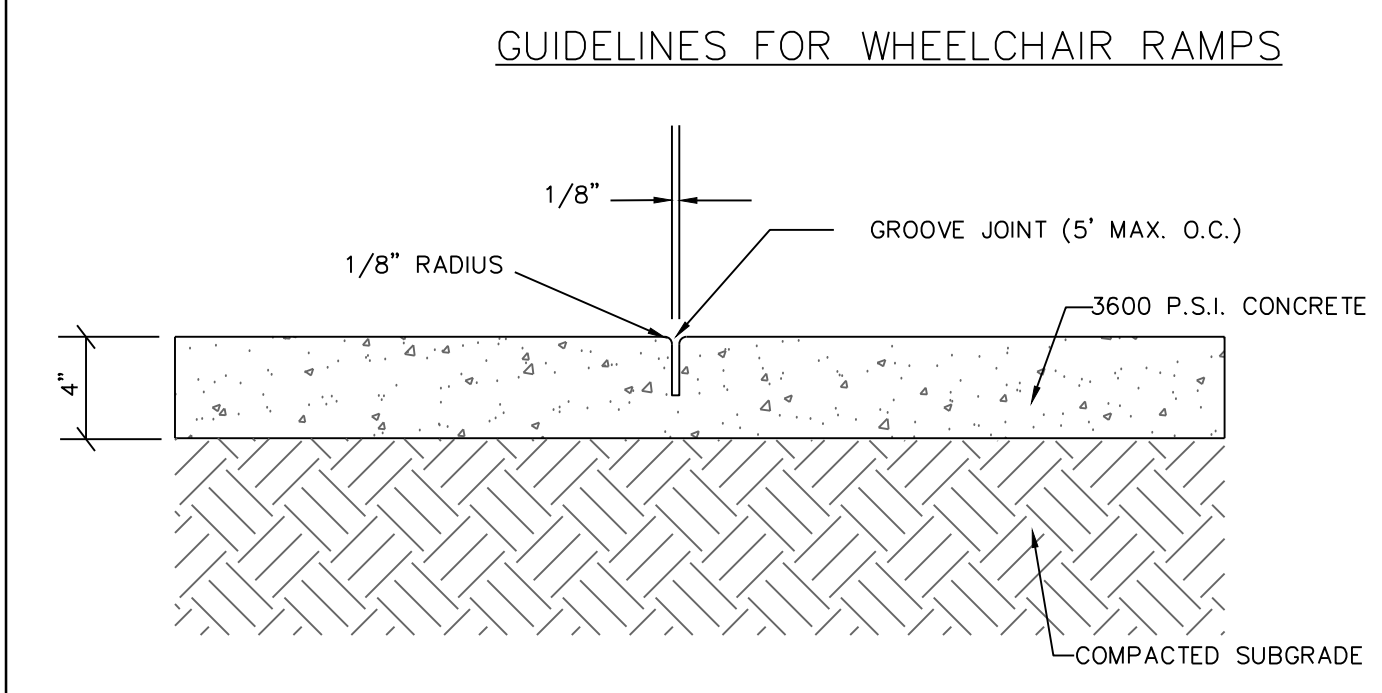
- NO SLOPE SHALL EXCEED 1"-1" (12:1) ON THE RAMP OR SIDEWALK.
- IN NO CASE SHALL THE WIDTH OF WHEELCHAIR RAMPS BE LESS THAN 40" (3'-4"), WIDTHS MAY EXCEED 40" IF NECESSARY.
- USE CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH.
- 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE WHEELCHAIR RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.
- CONSTRUCTION METHODS SHALL CONFORM WITH THOSE OF THE GOVERNING BODY WHICH HAS JURISDICTION OF THE PARTICULAR STREET.

III. ADDITIONAL NOTES:

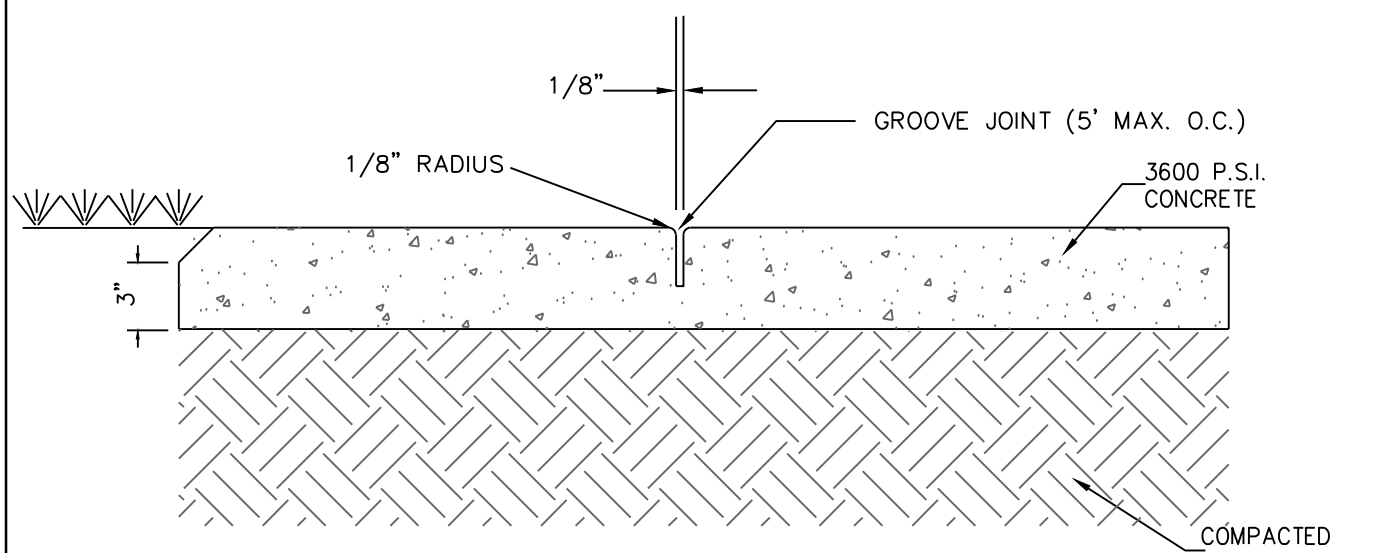
- THE INSIDE PEDESTRIAN CROSSWALK LINES SHALL BE ESTABLISHED BY BISECTING THE INTERSECTION RADII WHERE MARKED (SEE NOTE 6).
- THE WHEELCHAIR RAMP SHALL BE LOCATED SO THAT THE BEGINNING OF THE WHEEL CHAIR RAMP WILL BE TWO FEET FROM THE INSIDE PEDESTRIAN CROSSWALK LINE.
- THE WIDTH OF THE PEDESTRIAN CROSSWALK SHALL BE 10 FEET UNLESS A GREATER WIDTH IS REQUIRED TO ACCOMMODATE THE PEDESTRIAN TRAFFIC.
- STOP BARS SHALL BE USED WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN, OR OTHER LEGAL REQUIREMENTS.
- PARKING SHALL BE ELIMINATED A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
- ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THIS IS AVAILABLE FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402.



**SECTION A-A
WHEELCHAIR RAMP (DROP CURB)
N.T.S.**



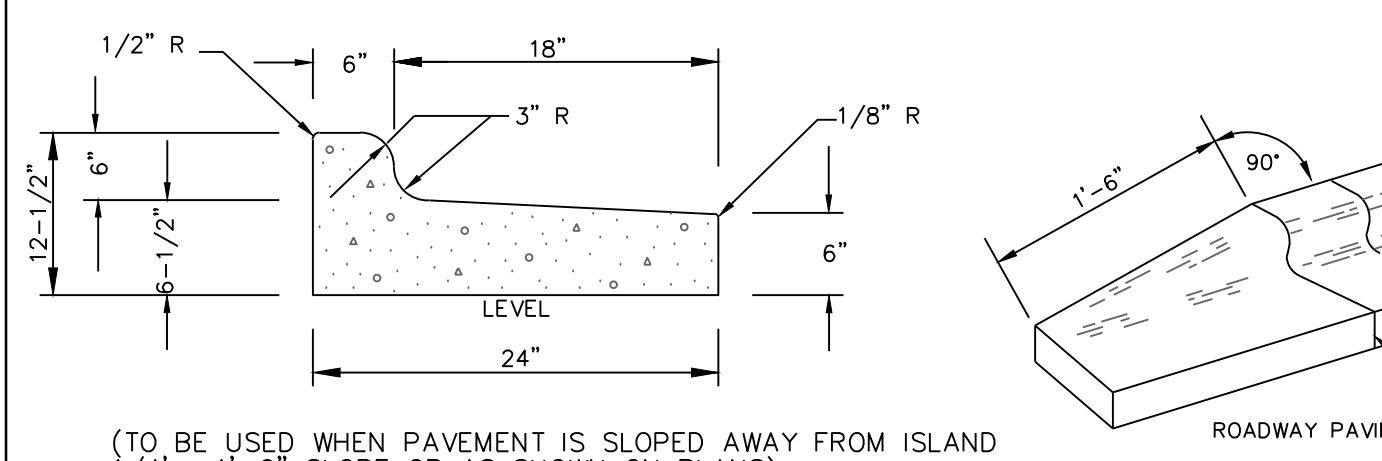
**CONCRETE SIDEWALK DETAIL
N.T.S.**



**SIDEWALK ADJACENT TO GRASSED AREAS AND PLANTERS
N.T.S.**

**CONCRETE SIDEWALK
N.T.S.**

GENERAL NOTES:
A GROOVE JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK ABUTS ANY CURB & GUTTER AND ANY RIGID STRUCTURES. IN SIDEWALKS & PLAZA AREAS EXPANSION JOINTS ARE REQUIRED AT NO GREATER THAN 30' INTERVALS CONCRETE SHALL BE 3600 PSI. IN 28 DAYS.

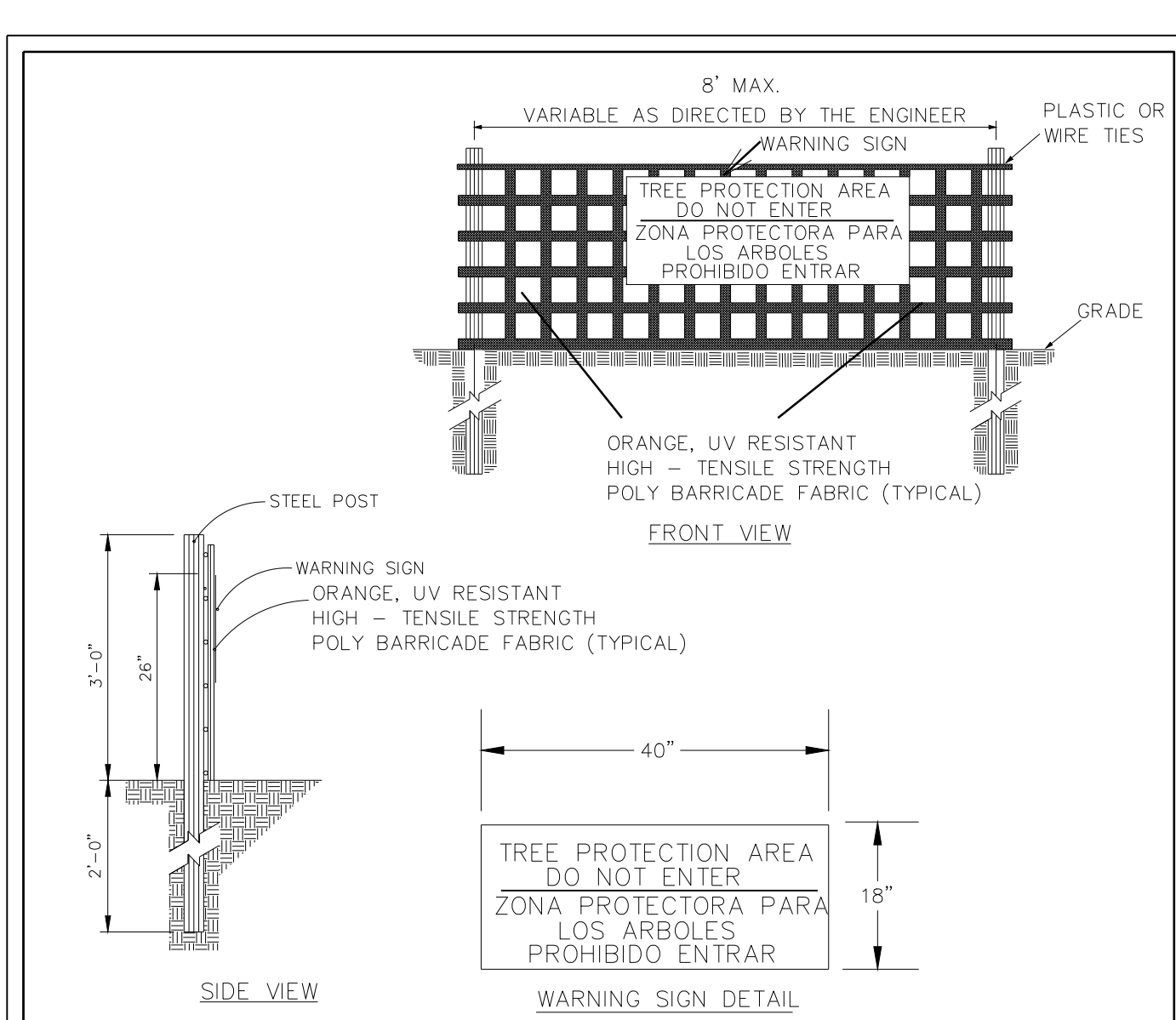


**24" CURB AND GUTTER (REVERSE SLOPE)
N.T.S.**

**24" CURB & GUTTER TERMINATION DETAIL
N.T.S.**

**CURB AND GUTTER
N.T.S.**

GENERAL NOTES:
CONTRACTION JOINTS SHALL BE SPACED AT MAX. 10' INTERVALS, EXCEPT THAT A 15 FOOT SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10 FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS, WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED. ALL CONTRACTION JOINTS EXCEPT IN 8" X 6" MEDIAN CURB SHALL BE FILLED WITH JOINT SEALER. EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



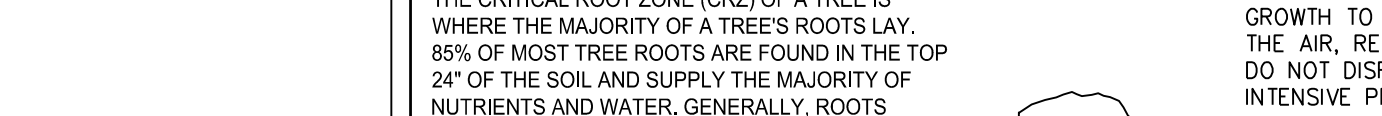
NOTES:

- 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 DETAILED.
- 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.

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

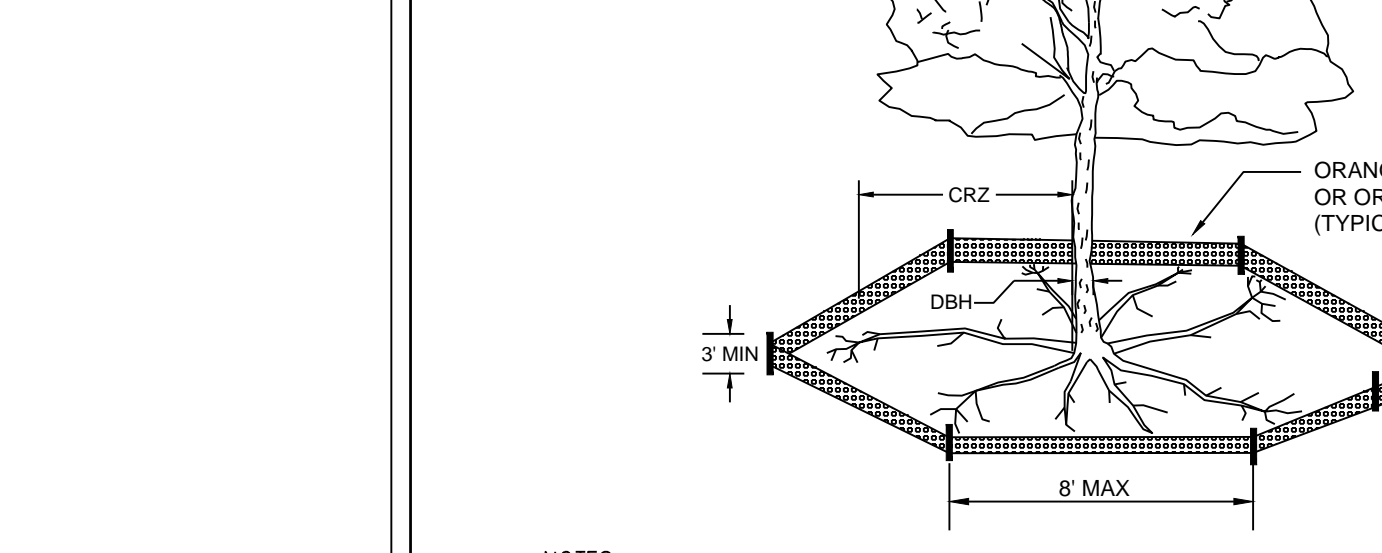


**CONSTRUCTION JOINT
N.T.S.**



**ASPHALT DETAIL FOR PARKING LOT
N.T.S.**

**PAVEMENT DETAIL
N.T.S.**



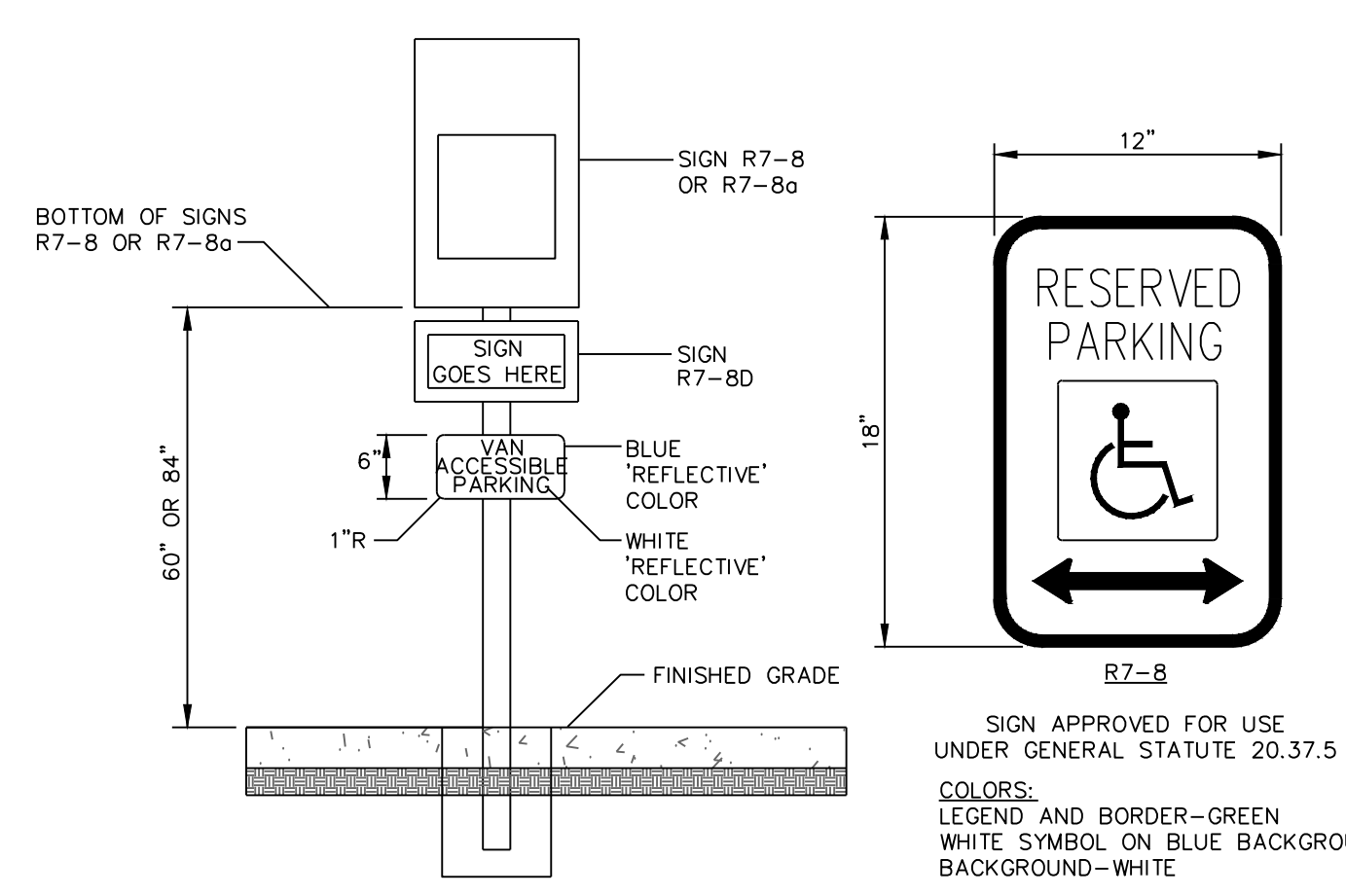
NOTE:
THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

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:

- 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 1 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. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
- 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.

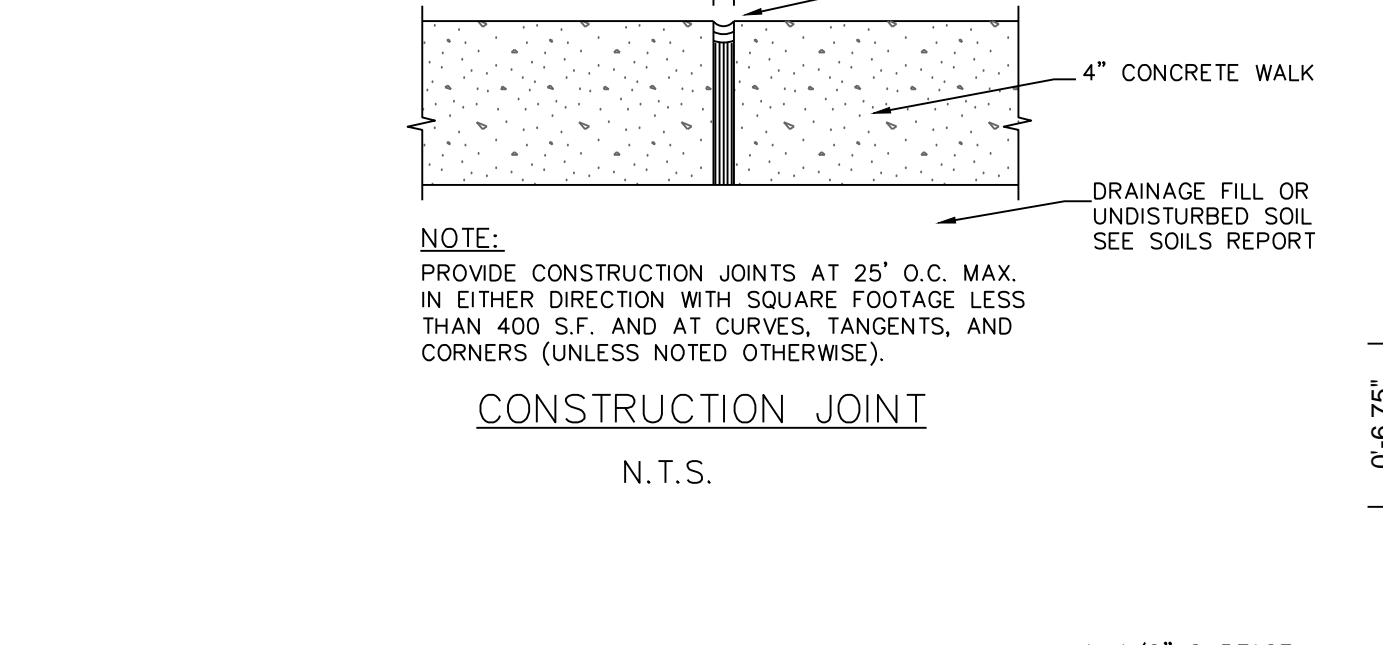
DATE: JAN, 2015	STANDARD DETAIL	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY: JSR	TREE PROTECTION DURING CONSTRUCTION	
CHECKED BY: RDG, P.E.	SHEET 1 of 2	
SCALE: NOT TO SCALE	SD 15-09	



**HANDICAP PARKING SIGNAGE
N.T.S.**



**DUMPSTER PAD & ENCLOSURE DETAIL
N.T.S.**



**STANDARD CURB SECTION TYPE "A"
SD 7-01
NOT TO SCALE**



APPROVED CONSTRUCTION PLAN

Name _____ Date _____
Planning _____
Traffic _____
Fire _____

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

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

Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

WILMINGTON
NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL
031315
CAREY S. PARR
12/28/2015

No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	February 2016
License #	P-0718	Job No.	2016-0002

5122 OLEANDER DRIVE
Wilmington New Hanover County North Carolina

STANDARD DETAILS

PREPARED FOR:
Penton Storage, LLC
6105 Oleander Drive
Suite 201
Wilmington, NC 28403

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-7

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR DROP INLET FRAME AND GRATES FOR USE WITH STD. DMS S 840.14 AND 840.15

SECTION G-G
1'-7 7/8" DEPRESSION
1'-7 7/8"

PLAN OF GRATING
CAST IRON

SECTION H-H
2'-3 1/4"

PLAN OF FRAME
CAST IRON

SECTION E-E
SECTION F-F

NC DOT DETAIL 840.14

SHEET 1 OF 1
840.16

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR CONCRETE DROP INLET 12" THRU 30" PIPE

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL DROP INLETS OVER 24" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR 2" KEYWAY OR #4 BARS DOMELS AT 12" CENTER AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CHAINS MATCHING.
SEE STANDARD DRAWING 840.20 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.
INSTALL STONE GRATING OF A MINIMUM OF 1 CURB FOOT OF NO. 7MM STONE IN A PAPER BAG OR BAG ON EACH SIDE OF EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER. CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

SECTION X-X
SECTION Y-Y
DOWEL

NC DOT DETAIL 840.14

DIMENSIONS AND QUANTITIES FOR DROP INLET (BASED ON MIN. HEIGHT, H)									
DIMENSIONS OF BOX & PIPE				DEDUCTIONS FOR ONE PIPE					
PIPE SPAN	WIDTH	MIN. HEIGHT	HEIGHT	BOTTOM SLAB	WALL	PERI-METER	CONC.	C.M.	R.C.
D	A	B	H	FT.	FT.	FT.	CU. YD.	CU. YD.	CU. YD.
12"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.592	0.015	0.026	
15"	3'-0"	2'-3"	2'-3"	0.449	0.023	0.036			
18"	3'-0"	2'-6"	2'-6"	0.703	0.033	0.049			
24"	3'-0"	3'-0"	3'-0"	0.814	0.039	0.085			
30"	3'-0"	3'-6"	3'-6"	0.222	0.222	0.925	0.092	0.127	

SHEET 1 OF 1
840.14

STORM TABLE

FROM	TO	LENGTH (ft)	DIAMETER (in)	SLOPE (%)	INV. DN (ft)	INV. UP (ft)	RIM (ft)	MATERIAL
2	1	66	15	0.30	24.50	24.70	28.83	HDPE
3	2	131	15	0.30	24.70	25.09	28.97	HDPE
5	4	39	18	0.30	24.50	24.62	28.85	HDPE
6	5	92	18	0.30	24.62	24.89	28.85	HDPE
7	6	140	18	0.30	24.89	25.31	28.85	HDPE
8	7	75	15	0.30	25.31	25.54	28.16	HDPE
9	7	26	15	0.30	25.54	25.62	28.83	HDPE
11	10	11	6	1.00	24.50	24.61	27.90	PVC
12	11	16	6	1.00	24.61	24.77	27.90	PVC
13	12	50	6	1.00	24.77	25.27	27.90	PVC
14	13	50	6	1.00	25.27	25.77	27.90	PVC
15	14	50	6	1.00	25.77	26.27	27.90	PVC
16	15	43	6	1.00	26.27	26.70	27.90	PVC

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR DROP INLET FRAME AND GRATES FOR USE WITH STD. DMS S 840.14 AND 840.15

PLAN VIEW
TOP OF RIPRAP NOT TO BE ABOVE CONCRETE

SECTION A-A
SECTION B-B
STORM DRAINAGE FLUME N.T.S.

SHEET 1 OF 1
840.16

SEQUENCE OF CONSTRUCTION

LIMITS OF CONSTRUCTION = 3.32 ACRES

1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON EROSION & SEDIMENT CONTROL PLAN.
2. INSTALL PERIMETER CONTROLS (TEMPORARY SILT FENCE, TREE PROTECTION FENCING, SEDIMENT BASIN) AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN. THIS STEP NEEDS TO BE COMPLETED PRIOR TO UPSLOPE LAND DISTURBING ACTIVITIES.
3. THE PROPOSED INFILTRATION BASINS WILL ACT AS A SEDIMENT BASINS DURING CONSTRUCTION ACTIVITIES.
4. ONCE PERIMETER CONTROLS AND SEDIMENT TRAPPING MEASURES ARE INSTALLED CLEAR AND GRUB SITE WITHIN LIMITS OF DISTURBANCE. THE SEDIMENT BASIN WILL BE PUMPED DOWN BY MECHANICAL MEANS AS NEEDED TO MUCK OUT SEDIMENT WHEN THE SEDIMENT REACHES 50% CAPACITY.
5. UPON BRINGING THE SITE TO ROUGH GRADE, STABILIZE ALL AREAS WITH TEMPORARY VEGETATION IF LEFT UNDISTURBED FOR 15 WORKING DAYS AND ALL SLOPES WITHIN 21 CALENDAR DAYS.
6. ONCE THE PAVEMENT AREAS AND STORM SEWERS ARE IN PLACE, INSTALL INLET PROTECTION AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN.
7. UPON BRINGING THE PAVEMENT AREAS TO SUBGRADE ELEVATIONS, STABILIZE THE AREAS BY PLACING STONE BASE AS EARLY AS POSSIBLE.
8. FOR TEMPORARY VEGETATIVE STABILIZATION OF ALL DENUDED AREAS SEE NOTE REFERENCING THE EROSION CONTROL PROGRAM AND SPECIFICATIONS ON SHEET C-1.
9. AFTER CONSTRUCTION OPERATIONS HAVE ENDED AND ALL DISTURBED AREAS HAVE BEEN STABILIZED, MECHANICAL SEDIMENT CONTROLS SHALL BE REMOVED. SEDIMENT FROM TEMPORARY SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR HAULING AWAY IF NOT SUITABLE FOR FILL. ALL DENUDED AREAS ARE TO BE PERMANENTLY STABILIZED WITH PERMANENT VEGETATION.

TEMPORARY INLET SEDIMENT FILTER
POLYPROPYLENE BOOT, GRATE, CATCH BASIN, OVERFLOW

SILT SACK DETAIL
NOT TO SCALE
DUMP STRAP, DUMP STRAP, SILT SACK, EXPANSION RESTRAINT (1/4" NYLON ROPE 2" FLAT WASHERS)

NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS.

RIP-RAP OUTLET PROTECTION
N.T.S.

RIPRAP LOCATIONS	LENGTH (FT.)	UPSTREAM WIDTH (FT.)	DOWNSTREAM WIDTH (FT.)
CONC FLUME	5	5	6
15" STORM	7.5	3.75	5
18" STORM	9	4.5	6

STANDARD INLET PROTECTION
NOT TO SCALE
STANDARD METAL POSTS 2 FT IN GROUND
(0.25" MESH OPENING) EXTENDS TO TOP OF BOX
NC DOT #5 OR #57 WASHED STONE PLACED TO A HEIGHT OF 16" MINIMUM ABOVE TOP OF BOX

- NOTES:
1. 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.
 2. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 1-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
 3. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A MIN HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.

SIDE VIEW
FRONT VIEW
WARNING SIGN DETAIL
N.T.S.

NOTES:
1. SYNTHETIC FILTER FABRIC SHOULD BE OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER PER ASTM D 6481 AND SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS PER ASTM D 4355.
2. WIRE FENCE SHALL BE MINIMUM 14 GAUGE WITH A MAXIMUM MESH OPENING OF 6-INCHES.
3. SEE THE NC EROSION AND SEDIMENTATION CONTROL MANUAL FOR OTHER SPECIFICATIONS.

SECTION
PLAN
COMPOST FILTER SOCK (OR OTHER COMPARABLE FLUME PROTECTION)
N.T.S.

EXCESS SOCK MATERIAL TO BE DRAWN IN AND TIED OFF TO STAKE AT BOTH ENDS
8"-12" SOCK
DRAINAGE DITCH/SWALE

TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.
PUBLIC ROAD
50' MIN.
6" MIN.
2'-3" COARSE AGGREGATE OR NC DOT #4 STONE
6" DIVERSION TO DIRECT RUNOFF FROM R/W

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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: _____

SEAL
031315
ENGINEER
CARY S. PIER
12/28/2015

No.	Revision	Date	By	Designer	Scale
				GSP	1" = 30'
				GSP	February 2016
				P-0718	2016-0002

5122 OLEANDER DRIVE
Wilmington New Hanover County North Carolina

STANDARD DETAILS

PREPARED FOR:
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6105 Oleander Drive
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Wilmington, NC 28403

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Sheet No.
C-8