



VICINITY MAP (NTS)

SITE DATA

PROJECT: HOGGARD HIGH SCHOOL
 OWNER: NEW HANOVER COUNTY SCHOOLS
 OWNER CONTACT: NEW HANOVER COUNTY BOARD OF EDUCATION
 EDDIE ANDERSON
 6410 CAROLINA BEACH ROAD
 WILMINGTON, NC 28412
 910-234-4325
 DESIGNER: GLENN MEDLIN
 DESIGNER CONTACT: GJM DESIGN, PA
 400 REGENCY FOREST DR., STE. 120
 WILMINGTON, NC 28403
 PHONE: 919-319-6716
 FAX: 919-319-7516
 PROJECT ADDRESS: 4305 SHIPYARD BOULEVARD
 WILMINGTON, NC 28403
 P.N.: R06114-001-001-000
 ZONING: O&M
 EXISTING USE: INSTITUTIONAL/EDUCATIONAL
 PROPOSED USE: INSTITUTIONAL/EDUCATIONAL
 TRACT AREA: 62.74 ACRES
 FLOODPLAIN: SITE IS NOT WITHIN A FLOODPLAIN
 (REF: FIRM 3720313600L, APRIL 3, 2006)

A PORTION OF THE PROPERTY IS ENCOURAGED BY WETLANDS/CONSERVATION PERMITS TO BE REMOVED FOR ADDITIONAL INFORMATION. THERE ARE NO ENDANGERED SPECIES OR HABITATS ON THIS SITE.
 BUILDING SETBACK: 20'
 TYPE OF CONSTRUCTION: 1-9

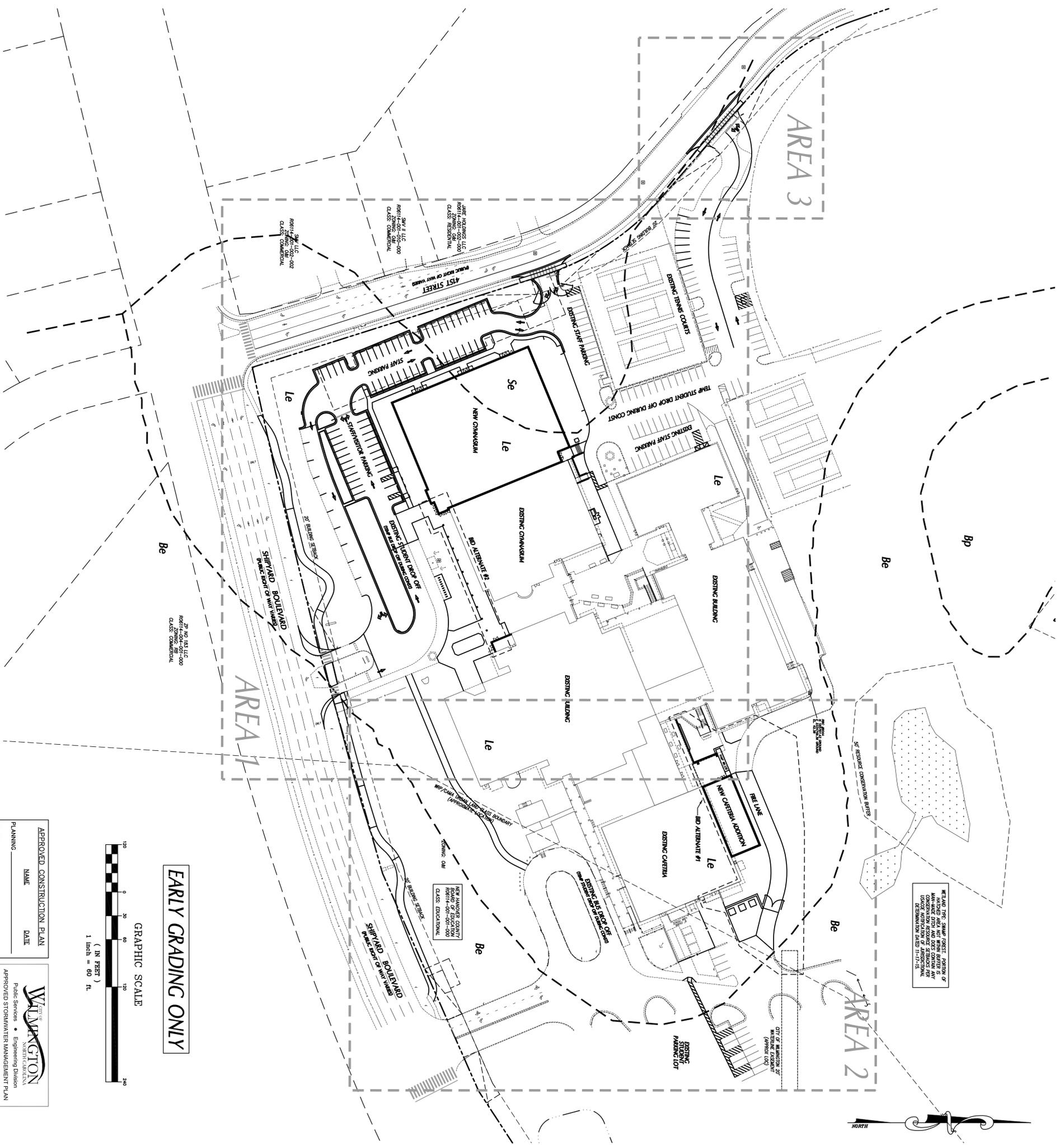
PARKING REQUIREMENTS:
 PARKING CODE: 1 SPACE PER 5 STUDENTS (OR 1 SPACE PER 3 STADIUM SEATS)
 NO. OF STUDENTS: 1900
 TOTAL SPACES REQ'D: 380 (500)
 EXISTING SPACES: 787
 NEW SPACES ADDED: 177
 TOTAL SPACES PROVIDED: 691

TOTAL H/C SPACES REMOVED: 14
 EXISTING H/C SPACES: 22
 NEW H/C SPACES ADDED: 4 (W/ 1 VAN ACCESSIBLE)
 TOTAL H/C SPACES PROVIDED: 20
 NO. BIKE SPACES REQ'D: 20
 NO. BIKE SPACES PROVIDED: 20
 GROSS FLOOR AREA:
 EXISTING: 115,165 SQ.FT.
 PROPOSED: 34,494 SQ.FT.
 TOTAL: 149,659 SQ.FT.
 PERCENT INCREASE: 30.0%
 PROPOSED G.W. ADJ'N FOOTPRINT: 30,598 SQ. FT.
 PROPOSED CAETERIA ADJ'N FOOTPRINT: 3,886 SQ. FT.
 BUILDING LOT COVERAGE-EXISTING: 4.3%
 BUILDING LOT COVERAGE-PROPOSED: 5.6%
 MAX. BUILDING HEIGHT PROPOSED: 45'
 EXISTING IMPERVIOUS (WITHIN PROJECT LIMITS): 8,923-AC (388,550-SQ)
 PROPOSED IMPERVIOUS (WITHIN PROJECT LIMITS): 8,714-AC (379,350-SQ)
 CANAL LAND USE CLASSIFICATION: URBAN
 CANAL AREAS OF CONCERN: C-5W (SWAMP WATERS); PERENNIAL
 A PORTION OF THE PROPERTY IS LOCATED IN THE CANAL LAND CLASSIFICATION WATERSHED RESERVE PROTECTION (WRP) AREA AND IMPERVIOUS AREAS WITHIN THE WRP SHALL BE LIMITED TO 25% UNLESS THE PROJECT MEETS ANGLE TO-DIRECTIONALLY REVERSED PROJECTS OF THE D.C. HEMMETT'S CREEK CLASSIFICATION:
 S.W. FROM 19-87-26

THE SITE HAS NO LOCAL, STATE OR FEDERALLY RECOGNIZED HISTORIC STRUCTURES OR ARCHITECTURAL RESOURCES.
 THE SITE HAS NO CEMETARIES, BURIAL SITES OR BURIAL GROUNDS.
REFER TO PLAN SHEET C12 FOR CITY OF WILMINGTON STANDARD NOTES

A TREE REMOVAL/PRESERVATION PERMIT IS REQUIRED PRIOR TO REMOVING ANY TREES. CONTRACTOR SHALL OBTAIN & COMPLETE PERMIT. CONTACT CITY OF WILMINGTON ZONING DEPARTMENT TO OBTAIN COPY OF PERMIT.

EXTERIOR BUILDING MATERIALS WILL BE ALUMINUM CURTAIN WALL, BRICK AND METAL PANEL SOFFIT & FASCIA AT THE ROOF. ROOFS THAT ARE NOT FLAT WILL BE STANDING SEAM METAL ALUMINUM CURTAIN WALL. IS GENERIC DESC. FOR A LARGE SPAN GLASS & CLASS RAMMING SYSTEM, WHICH ARE APPROVED MAT'L IN O&M DISTRICT.



EARLY GRADING ONLY

APPROVED CONSTRUCTION PLAN
 NAME _____ DATE _____
 PLANNING _____
 TRAFFIC _____
 FIRE _____

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

ARCHITECTS
BOWMAN MURRAY HEMMINGWAY
 514 Market Street
 Wilmington, NC 28401
 Tel. (910) 762-2821
 Fax. (910) 762-5806
 Project ID # 900-9005

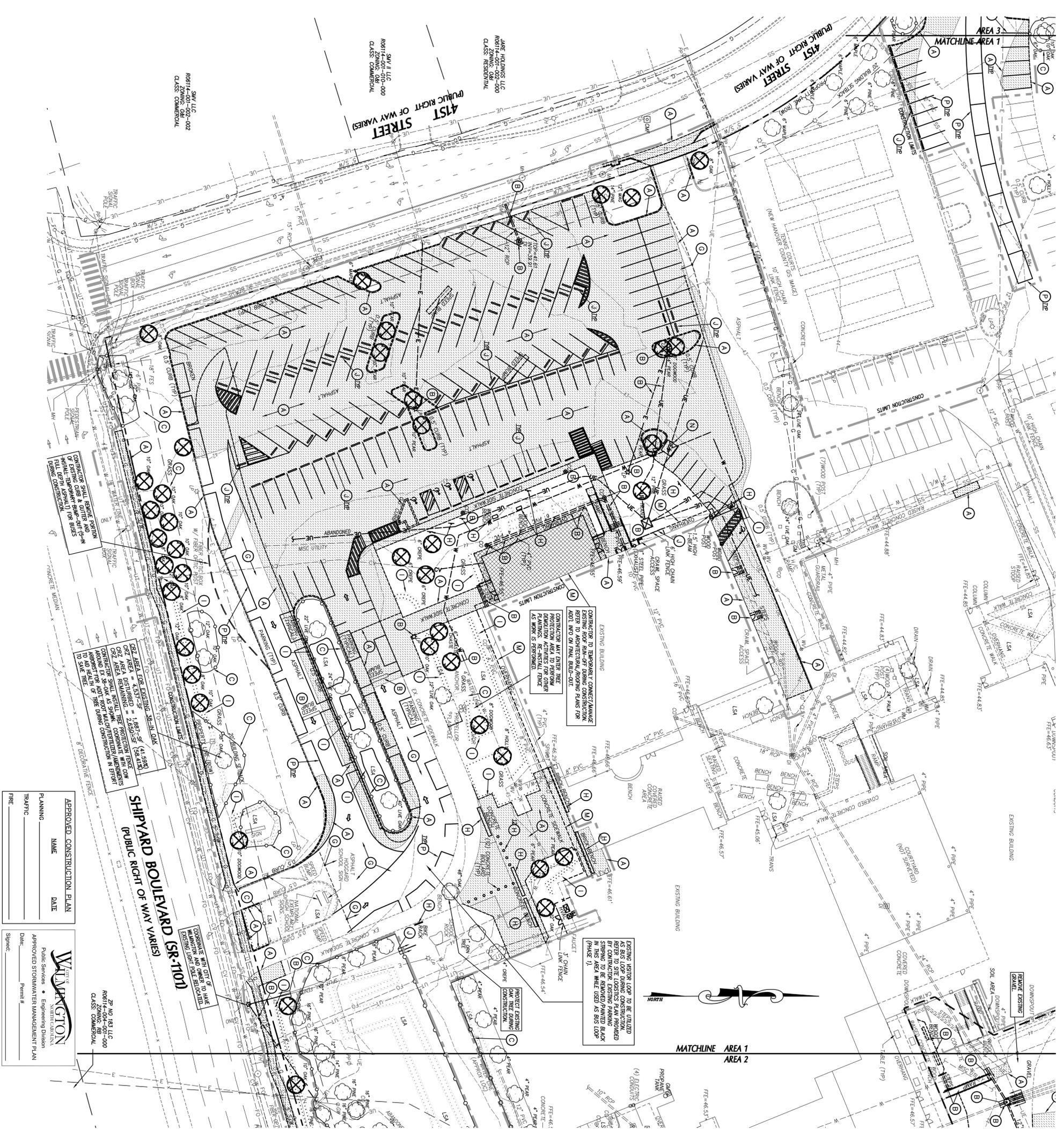
CLH DESIGN, PA
 1861
 GLENN MEDLIN
 5-21-16

WILMINGTON
 NORTH CAROLINA
 1861
 GLENN MEDLIN
 5-21-16

Phase One: Renovations and Additions to:
John T. Hoggard High School
 4305 Shipyard Blvd.
 Wilmington, North Carolina 28403

JOB NUMBER: 15-120
 DRAWN BY: JGM
 CHECKED BY: JGM
 DATE: MAY 27 2016
 REVISIONS: 5-19-16 MOD07 DRAWING 918

OVERALL SITE PLAN
 SHEET NUMBER
C-0.1



APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____

WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

LEGEND-STRUCTURES/UTILITIES TO REMAIN

OVERHEAD ELECTRICAL	---	E
UNDERGROUND ELECTRICAL	---	UE
FIRE PROTECTION	---	FP
GAS	---	G
SANITARY SEWER	---	SS
TELEPHONE	---	T
UNDERGROUND TELEPHONE	---	UT
FIBER OPTIC	---	FO
WATER	---	W
FORCE MAIN	---	FM
STORM DRAIN	---	SD
INDIVIDUAL TREE	---	IT

LEGEND-STRUCTURES/UTILITIES TO BE REMOVED

OVERHEAD ELECTRICAL	---	E
UNDERGROUND ELECTRICAL	---	UE
FIRE PROTECTION	---	FP
GAS	---	G
SANITARY SEWER	---	SS
TELEPHONE	---	T
UNDERGROUND TELEPHONE	---	UT
FIBER OPTIC	---	FO
WATER	---	W
FORCE MAIN	---	FM
STORM DRAIN	---	SD
INDIVIDUAL TREE	---	IT

KEY NOTES

- REMOVE AND RELOCATE CURB & GUTTER, AND SIDEWALK.
- STRUCTURES/UTILITIES TO BE REMOVED, COORDINATE W/ LOCAL UTILITY AGENCIES, AS REQUIRED. REFER TO REMOVAL DRAWING/ELECTRICAL NOTES FOR PROTECTION DETAILS. SEE DETAIL SHEET 02.1.
- CLEAR & GRUB WITHIN CONSTRUCTION LIMITS. SEE SPECIFICATIONS.
- EXISTING UTILITY TO BE RELOCATED/REMOVED/ADJUSTED BY UTILITY COMPANY. COORDINATE/SCHEDULE WORK WITH UTILITY COMPANY. SEE UTILITY PLAN FOR APPROPRIATE NEW LOCATIONS.
- EXISTING CONCRETE UNIT/STORAGE SHED TO BE RELOCATED BY OWNER. MILL AREA AS REQUIRED TO RECEIVE ASPHALT OVERLAY. REFER TO STAKING PLANS FOR ADDITIONAL INFORMATION.
- SITE ELEMENTS (TRASH CANS, BOLLARDS, BENCHES, SIGNS, ETC.) TO BE REMOVED.
- SHRUBS/LANDSCAPING TO BE REMOVED.
- CHAIN LINK FENCE TO BE REMOVED.
- CONCRETE WHEEL STOP TO BE REMOVED.
- PIPE GATE TO BE REMOVED.
- REFER TO ARCHITECTURAL PLANS FOR REMOVAL/DEMOLITION OF ITEMS.
- DISMISSTERS TO BE RELOCATED BY CONTRACTOR. COORDINATE W/ OWNER FOR TEMPORARY LOCATION DURING CONSTRUCTION. REFER TO STAKING PLAN FOR FINAL LOCATION.
- SCREEN WALL TO BE REMOVED.
- PARKING STRIPING TO BE REMOVED.

GENERAL NOTES

- ALL UTILITIES OR STRUCTURES NOT INDICATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED FROM DAMAGE.
- ALL WASTE MATERIAL GENERATED FROM CLEANING AND DEMOLITION ACTIVITIES SHALL BE RECYCLED OR SITE W/ APPROPRIATE RULES AND REGULATIONS.
- INSTALL TREE PROTECTION FENCING TO PREVENT DAMAGE TO EXISTING TREES, SHRUBS OR OTHER LANDSCAPE MATERIAL WHICH WILL REMAIN. CONSTRUCTION SHALL BE STOPPED (WHETHER OR NOT SHOWN ON THE DRAWINGS) IF ANY DAMAGE TO EXISTING TREES, SHRUBS OR OTHER LANDSCAPE MATERIAL IS OBSERVED THAT THE SITE HAS BEEN RESTRICTED TO DETERMINE TREE SIZE AND QUALITY OF CLEANING REQUIRED FOR CONSTRUCTION.
- LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL REMOVE ADEQUATE RESTRICTION ON TREE PROTECTION REQUIREMENTS AND METHODS (PER CODE SECT. 18-470(f)).
- NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SIGN FENCING HAS BEEN INSTALLED AND APPROVED (PER CODE SECT. 18-450).
- NO LAND DISTURBANCE, INCLUDING TREE REMOVAL, IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN (PER CODE SECT. 18-457 (b)).
- ALL PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM JOINT WITH NEW CONSTRUCTION. ANY EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER, ETC. THAT WILL BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED (WHETHER OR NOT SHOWN ON THE DRAWINGS) TO BE REMOVED. UTILITY INSTALLATIONS MAY UTILIZE OPEN CUT OR PAVEMENT UNLESS INDICATED OTHERWISE. TRENCH IN EXISTING ASPHALT SHALL BE PATCHED PER PAVEMENT REPAIR ON DETAIL SHEET.
- PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC AND ALL OF THE OWNERS FACILITIES. SHOULD DAMAGES OCCUR, NOTIFY ARCHITECT IMMEDIATELY.
- THE CONTRACTOR SHALL PROVIDE A QUALIFIED UTILITY LOCATOR SERVICE TO LOCATE ALL UNDERGROUND UTILITIES (INCLUDING BUT NOT LIMITED TO ELECTRICAL, TELEPHONE, GAS, CABLE, FIBER OPTIC) WITHIN THE LIMITS OF CONSTRUCTION.
- VERIFY ALL UTILITIES, INCLUDING UNDERGROUND ELEMENTS, EXPOSED RELOCATE/REMOVE TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. NOTIFY THE ARCHITECT IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE PROPOSED DESIGN.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
- EXISTING MANHOLES, VAULTS, CLEANOUTS, UTILITY PIPES ETC. TO REMAIN WITHIN THE PROPOSED PAVED ROADS (WHETHER OR NOT INDICATED TO BE REMOVED).
- GENERAL CONTRACTOR TO COORDINATE ALL PEDESTRIAN ACCESS PATHS, LOCATIONS, LIGHTING, HANDICAP PARKING, ETC. DURING CONSTRUCTION WITH OWNER.
- EXISTING SURVEY INFORMATION HAS BEEN TAKEN FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY MCKIN & CREED DATED 10-30-15. SURVEY PROVIDED BY OWNER.
- ANY AND ALL LANDSCAPING AND EXISTING TREES & SHRUBS TO REMAIN WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR UTILIZING A LICENSED LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE WITHIN THE CONSTRUCTION AREA AFTER FIELD WITH STRUCTURAL MATERIAL AS DIRECTED BY THE OWNER'S TESTING AGENCY AND COMPLETED PER SPECIFICATIONS.
- ANY ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION AT ALL TIMES.

GRAPHIC SCALE

1 inch = 30 ft

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

C-2.1

SHEET NUMBER

Phase One: Renovations and Additions to:
John T. Hoggard High School

4305 Shipyard Blvd.
Wilmington, North Carolina 28403

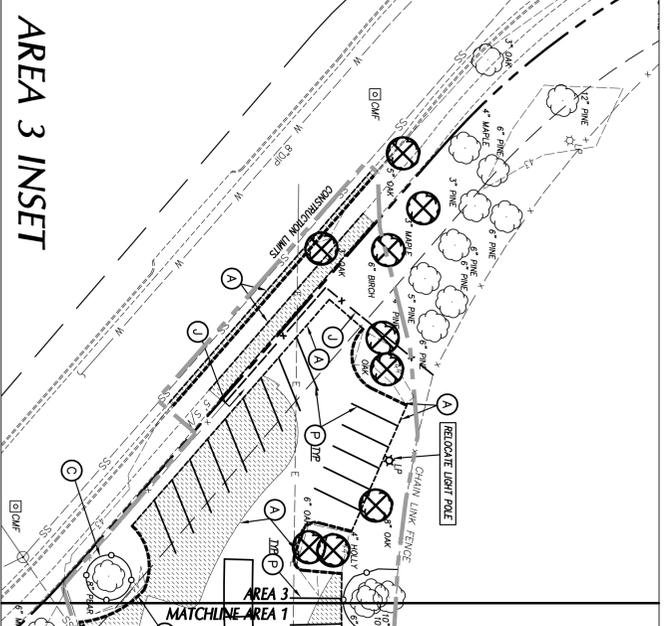
BOWMAN MURRAY HEMINGWAY
ARCHITECTS

1514 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-5506

Project ID # 900-9005

CLTH DESIGN/PA
Civil/Structural/MEP/Architectural/Interior Design/Construction Administration

1000 S. UNIVERSITY BLVD.
SUITE 100
WILMINGTON, NC 28401
TEL: 910.762.5506



AREA 3 INSET

A TREE REMOVAL/PRESERVATION PERMIT IS REQUIRED PRIOR TO REMOVING ANY TREES. CONTRACTOR SHALL OBTAIN & COMPLETE PERMIT. CONTACT CITY OF WILMINGTON ZONING DEPARTMENT TO OBTAIN COPY OF PERMIT. ENSURE TO PROVIDE COPY OF TREE REMOVAL CHART WITH PERMIT.

TEMPORARY CONSTRUCTION FENCING IS RESPONSIBILITY OF CONTRACTOR. COORDINATE WITH OWNER FOR EXACT LOCATION BASED ON SITE CONSTRUCTION LOGISTICS PLAN (TO BE DEVELOPED BY THE CONTRACTOR).

APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

DATE _____

APPROVED STORMWATER MANAGEMENT PLAN

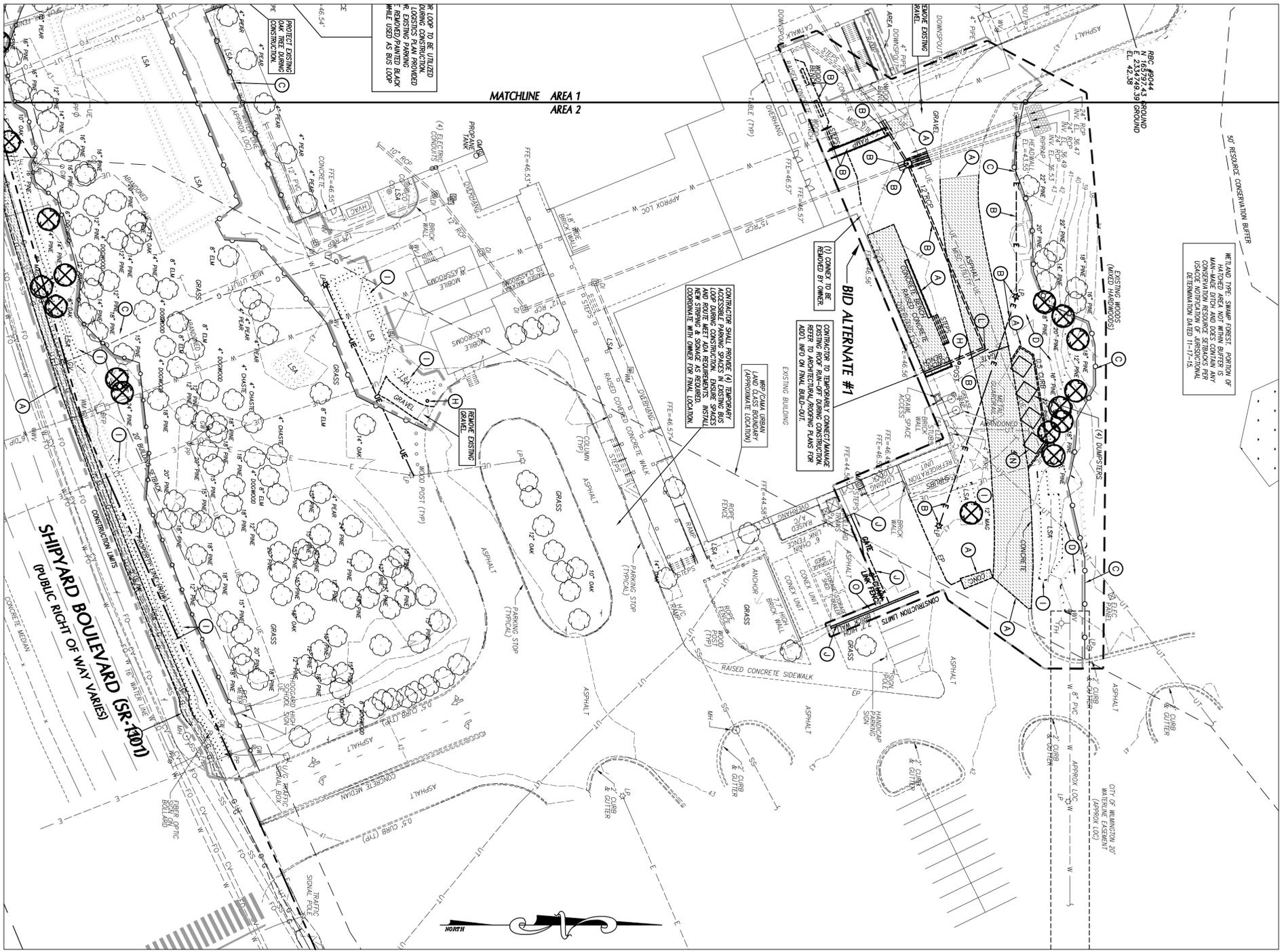
Permit # _____

Public Services • Engineering Division

WILMINGTON

City of Wilmington

Street: _____



WETLAND TREE SWAMP FOREST: PORTION OF MAIN-WADE DITCH AND DEEP CONTAIN ANY CONSERVATION RESOURCE STRIBES PER USFS DETERMINATION DATED 11-17-15.

BID ALTERNATE #1

CONTRACTOR TO TEMPORARILY CONNECT/MANAGE REEBS TO ARCHITECTURAL/WORKING PLANS FOR ADJ. INFO ON FINAL BUILD-OUT.

CONTRACTOR SHALL PROVIDE (4) TEMPORARY LOOP DRIVING CONSTRUCTION. ENSURE SPACES AND ROUTE MEET ADA REQUIREMENTS. INSTALL CONSPICUOUS SIGN ON FINAL LOCATION.

MATCHLINE AREA 1
AREA 2

LOOP TO BE UTILIZED DURING CONSTRUCTION. EXISTING PARKING BLANK WHITE USED AS BUS LOOP.

LEGEND-STRUCTURES/UTILITIES TO REMAIN

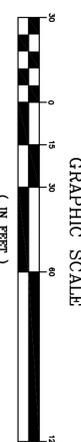
UP	LIGHT POLE
PP	UTILITY POLE
HH	MANHOLE
CO	CLEAN OUT
OB	DROP INLET/CATCH BASIN
FH	FIRE HYDRANT
WV	WATER VALVE
W	WATER
FO	FIBER OPTIC
FW	FORCE MAIN
SD	STORM DRAIN
TR	INDIVIDUAL TREE TO REMAIN

LEGEND-STRUCTURES/UTILITIES TO BE REMOVED

LP	LIGHT POLE
UP	UTILITY POLE
HH	MANHOLE
CO	CLEAN OUT
OB	DROP INLET/CATCH BASIN
FH	FIRE HYDRANT
WV	WATER VALVE
W	WATER
FO	FIBER OPTIC
FW	FORCE MAIN
SD	STORM DRAIN
TR	INDIVIDUAL TREE TO BE REMOVED

- KEY NOTES**
- SAWCUT AND REMOVE PAVEMENT, CURB & GUTTER, AND SIDEWALK.
 - STRUCTURES/UTILITIES TO BE REMOVED, COORDINATE W/ LOCAL UTILITY PROVIDERS, AS REQUIRED, FROM TO REMOVAL DRAIN/ELECTRICAL.
 - TREE PROTECTION FENCING, SEE DETAIL SHEET C21.
 - CLEAR & GRUB WITHIN CONSTRUCTION LIMITS. SEE SPECIFICATIONS.
 - EXISTING UTILITY TO BE RELOCATED/REMOVED/ADJUSTED BY UTILITY COMPANY. COORDINATE/SCHEDULE WORK WITH UTILITY COMPANY. SET UTILITY PLAN FOR APPROPRIATE NEW LOCATIONS.
 - EXISTING CONVEY UNIT/STORAGE SHED TO BE RELOCATED BY OWNER. WILL AREA AS REQUIRED TO RECEIVE ASPHALT OVERLAY. REFER TO STAKING PLANS FOR ADDITIONAL INFORMATION.
 - SITE ELEMENTS (TRASH CANS, BOLLARDS, BENCHES, SIGNS, ETC.) TO BE REMOVED.
 - SHRUBS/LANDSCAPING TO BE REMOVED.
 - CHAIN LINK FENCE TO BE REMOVED.
 - CONCRETE WHEEL STOP TO BE REMOVED.
 - PRE GATE TO BE REMOVED.
 - REFER TO ARCHITECTURAL PLANS FOR REMOVAL/DEMOLITION OF ITEMS.
 - DUMPSTERS TO BE RELOCATED BY CONTRACTOR. COORDINATE W/ OWNER FOR TEMPORARY LOCATION DURING CONSTRUCTION. REFER TO STAKING PLAN FOR FINAL LOCATION.
 - SCREEN WALL TO BE REMOVED.
 - PARKING STRIPING TO BE REMOVED.

- GENERAL NOTES**
- ALL UTILITIES OR STRUCTURES NOT INDICATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED FROM DAMAGE.
 - ALL WASTE MATERIAL GENERATED FROM CLEANING AND DEMOLITION ACTIVITIES SHALL BE RECYCLED OR REUSED AT OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS.
 - INSTALL TREE PROTECTION FENCING PRIOR TO BEGINNING CLEANING OPERATIONS. STAKE AND GRUB AS NEEDED WITHIN CONSTRUCTION LIMITS PER SPECIFICATIONS AND DRAWINGS. EXISTING TREES, SHRUBS OR OTHER LANDSCAPE MATERIAL WHICH WILL CONFLICT WITH NEW CONSTRUCTION SHALL BE REMOVED (WHETHER OR NOT SHOWN ON THE DRAWINGS) UNLESS INDICATED OTHERWISE. TREE REMOVAL SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON TREE REMOVAL PERMITTING REGULATIONS. TREE REMOVAL SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON TREE REMOVAL PERMITTING REGULATIONS.
 - LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE INSPECTION ON THE PROTECTION REQUIREMENTS AND METHODS (PER CODE SECT. 18-47(D)).
 - NO EQUIPMENT IS ALLOWED ON SITE WITH ALL TREE PROTECTION FENCING AND SIGN FENCING HAS BEEN INSTALLED AND APPROVED (PER CODE SECT. 18-48B).
 - NO LAND DISTURBANCE INCLUDING TREE REMOVAL, IS TO OCCUR OUTSIDE THE LIMITS OF DISTURBANCE SHOWN (PER CODE SECT. 18-457 (B)).
 - ALL PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM JOINT WITH NEW CONSTRUCTION. ANY EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER ETC. THAT MUST BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED (WHETHER OR NOT SHOWN ON THE DRAWINGS) TO BE REMOVED. UTILITY INSTALLATIONS MAY UTILIZE OPEN CUT OR PAVEMENTS UNLESS INDICATED OTHERWISE. TRENCH IN EXISTING ASPHALT SHALL BE PATCHED PER PAVEMENT REPAIR ON DETAIL SHEET.
 - PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC AND ALL OF THE OWNER'S FACILITIES. SHOULD DAMAGES OCCUR, NOTIFY ARCHITECT IMMEDIATELY.
 - THE CONTRACTOR SHALL EMPLOY A QUALIFIED UTILITY LOCATOR SERVICE TO LOCATE ALL UNDERGROUND UTILITIES (INCLUDING BUT NOT LIMITED TO ELECTRICAL, TELEPHONE, GAS, CABLE, FIBER OPTIC) WITHIN THE LIMITS OF CONSTRUCTION.
 - VERIFY ALL UTILITIES FROM UNDERGROUND ELEMENTS. EXPOSE RESOURCE ELEMENTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. NOTIFY THE ARCHITECT IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE PROPOSED DESIGN.
 - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND OSHA REGULATIONS.
 - EXISTING MANHOLES, VALVE BOXES, WALLS, CEANINGS, UTILITY POLES ETC. TO REMAIN WITHIN THE CONSTRUCTION LIMITS SHALL BE ADJUSTED AS NEEDED TO ADJUST PROPERTY WITH THE PROPOSED FINISHED GRADES (WHETHER OR NOT INDICATED TO BE MODIFIED).
 - GENERAL CONTRACTOR TO COORDINATE ALL PEDESTRIAN ACCESS PATHS, LOCATIONS, LIGHTING, HANDICAP PARKING, ETC. DURING CONSTRUCTION WITH OWNER.
 - EXISTING SURVEY INFORMATION WAS TAKEN FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY MOORE & CREED DATED 01-30-15. SURVEY PROVIDED BY OWNER.
 - ANY AND ALL LANDSCAPING AND EXISTING TREES & SHRUBS TO REMAIN WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR UTILIZING A DENSED LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE WITHIN THE CONSTRUCTION AREA AFTER ALL CONSTRUCTION IS COMPLETE. ALL DRAINAGE SHALL BE DESIGNED PER SPECIFICATIONS AND COMPACTED PER SPECIFICATIONS.
 - AV ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION AT ALL TIMES.



ARCHITECTS

BOWMAN MURRAY HEMINGWAY

514 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-8306

Project ID # 900-9005

Phase One: Renovations and Additions to:

John T. Hoggard High School

4305 Shipyard Blvd.
Wilmington, North Carolina 28403

PROFESSIONAL SEAL

SEAL OF THE STATE OF NORTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER

23953

5-27-16

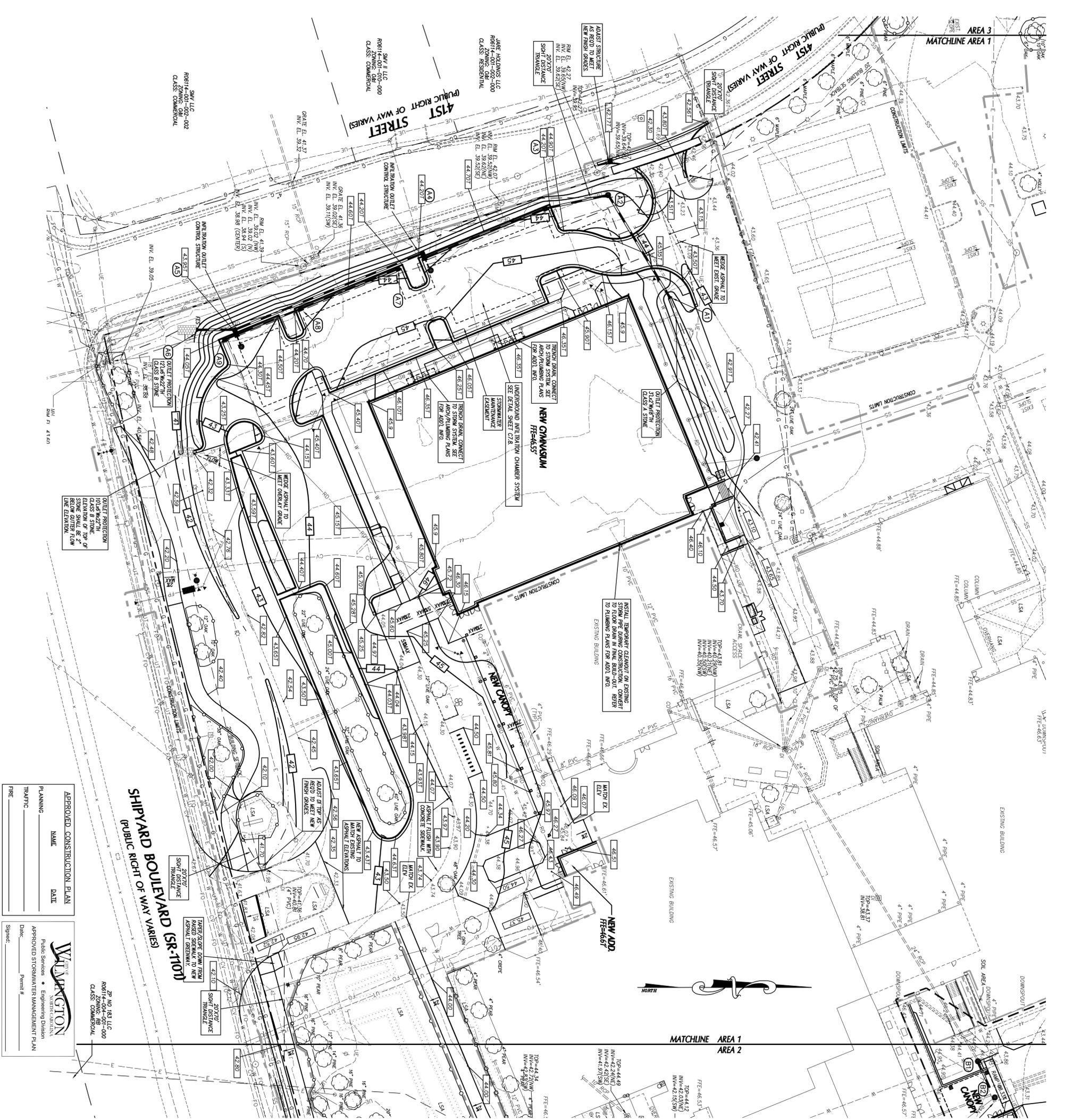
CLTH DESIGN, PA

1000 S. WILMINGTON BLVD.
SUITE 200
WILMINGTON, NC 28403
TEL: (910) 762-2821
FAX: (910) 762-8306

SITE EXISTING CONDITIONS & DEMO PLAN

SHEET NUMBER **C-2.2**

JOB NUMBER	15-120
DRAWN BY	JGM
CHECKED BY	JGM
DATE	MAY 27 2016
REVISIONS	5-19-16 MOODY DREWERY SUB



APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

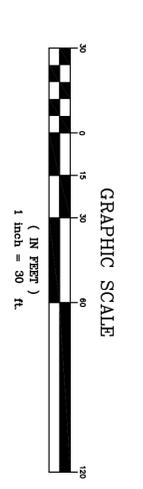
TRAFFIC _____

FIRE _____

WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signature: _____



PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NO.	PIPE SIZE	PIPE SLOPE	INVERT ELEV.	CONCRETE	VERTICAL STRUCTURE DATA	NOTES			
SPR	STR	DN	DN	FT	FT	FT			
A1	A3	0.7%	11	40	41.0	41.0	3.0	7.5	
A2	A3	0.6%	24	40	40.3	40.3	4.0	4.0	
A3	A4	0.1%	24	80	39.5	39.5	4.0	4.25	CS
A4	A6	0.8%	24	50	38.0	38.2	4.0	4.0	CS
A5	A6	0.5%	24	50	38.1	38.0	4.0	4.0	CS
A7	A6	0.9%	12	60	40.0	40.0	3.75	3.75	CS
A8	A5	1.0%	12	60	40.0	39.75	4.0	4.25	CS
A9	A5	1.2%	12	60	39.75	39.75	4.0	4.25	CS
B1	B2	1.4%	24	22	39.25	37.10	44.0	0.71	MAN

NOTES:
 1. TOP ELEVATION IS TOP OF CURB FOR CATCH BASIN. TOP OF PIPE FOR MANHOLE, TOP OF MANHOLE FOR MET AND FINISH GRADE.
 2. ALL FTS METS & OUTLETS SHALL BE ROP.

- GRADING NOTES**
1. ALL SPOT ELEVATIONS INDICATED AT CURB AND CUTTER ARE TO TOP OF CURB, UNLESS OTHERWISE SHOWN.
 2. TOTAL DENuded AREA = 5 AC.
 3. CONTRACTOR SHALL ADJUST ALL EXISTING VALUETS, MANHOLES MATCH FINISH GRADE, CLEANOUTS, ETC. AS NEEDED TO ALL PERFORMED BY THE OWNERS INDEPENDENT TESTING LABORATORY. (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION)
 4. ALL STORM DRAIN PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER STOPPAGE OF WORK EACH DAY.
 5. EXISTING VEGETATION WITHIN TREE PROTECTION AREAS SHALL REMAIN UNDISTURBED, UNLESS NOTED OTHERWISE.
 6. THE GRADING CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL REGULATIONS AND FOR OBTAINING ALL APPLICABLE PERMITS FOR OFF-SITE STOCKPILES AND/OR WASTE AREAS.
 7. ALL ROOF DRAINS SHALL BE 6" PVC (SCH 40) @ 1.0% MIN. SLOPE UNLESS NOTED OTHERWISE. ROOF DRAINS SHALL BE COP WHEN PROTECTION AFTER INSTALLATION.
 8. THE GRADING CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES ON EACH ARCHITECTURAL EVENT OR AS DIRECTED BY STATE AGENCIES OR THE ARCHITECT.
 9. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR OFF-SITE EROSION CONTROL MEASURES AND FOR OBTAINING ALL APPLICABLE PERMITS FOR OFF-SITE STOCKPILES AND/OR WASTE AREAS.
 10. ALL ROOF DRAINS SHALL BE 6" PVC (SCH 40) @ 1.0% MIN. SLOPE UNLESS NOTED OTHERWISE. ROOF DRAINS SHALL BE COP WHEN PROTECTION AFTER INSTALLATION.

- GRADING LEGEND**
- EXISTING CONTOURS
 - FINAL CONTOURS
 - EXISTING SURVEY SPOT ELEVATION
 - PROPOSED TOP OF CURB SPOT ELEVATION
 - PROPOSED GROUND/PAVEMENT ELEVATION
 - STORM STRUCTURE NUMBER
 - EXISTING STORM DRAIN PIPE
 - PROPOSED STORM DRAIN PIPE
 - SEE PROTECTION ENGINE DETAIL SHEET E-1
 - CONSTRUCTION LIMITS

ARCHITECTS

BOWMAN MURRAY HEMINGWAY

114 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-5366

Project ID # 900-9005

CLTH DESIGN/PA

114 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-5366

PROFESSIONAL SEAL

KEVIN M. HARRIS
REGISTERED PROFESSIONAL ENGINEER
23953
5-21-16

C-3.1

SITE GRADING PLAN

SHEET NUMBER

DATE: MAY 27 2016

REVISIONS: 5-19-16 MODOT DRAWING SUB

CHECKED BY: JGM

DRAWN BY: JGM

JOB NUMBER: 15-120

Phase One: Renovations and Additions to:
John T. Hoggard High School
 4305 Shipyard Blvd.
 Wilmington, North Carolina 28403

bmm

BOWMAN MURRAY HEMINGWAY

ARCHITECTS

114 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-5366

Project ID # 900-9005

CLTH DESIGN/PA

114 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-5366

PROFESSIONAL SEAL

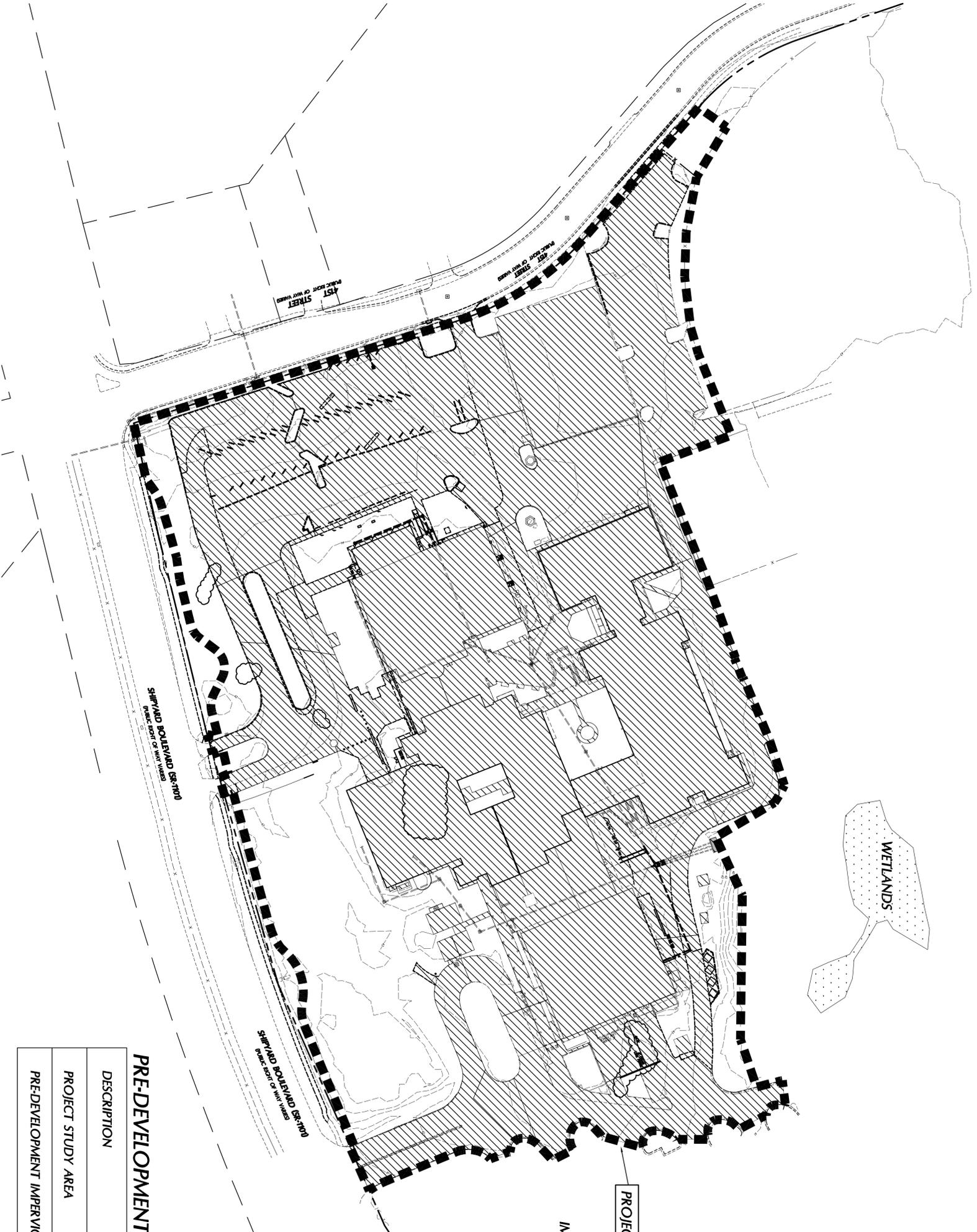
KEVIN M. HARRIS
REGISTERED PROFESSIONAL ENGINEER
23953
5-21-16

Phase One: Renovations and Additions to:
John T. Hoggard High School
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

JOB NUMBER	15-120
DRAWN BY	JGM
CHECKED BY	JGM
DATE	MAY 27 2016
REVISIONS	

**PRE-DEV
IMPERVIOUS
AREAS PLAN**

SHEET NUMBER
C-3.3

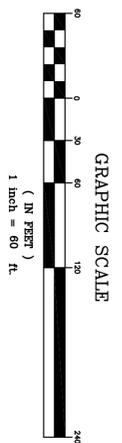


PRE-DEVELOPMENT AREAS

DESCRIPTION	AREA (SF)	AREA (AC)
PROJECT STUDY AREA	545,770	12.53
PRE-DEVELOPMENT IMPERVIOUS AREA	389,550	8.92

LEGEND
IMPERVIOUS AREAS

PROJECT STUDY AREA

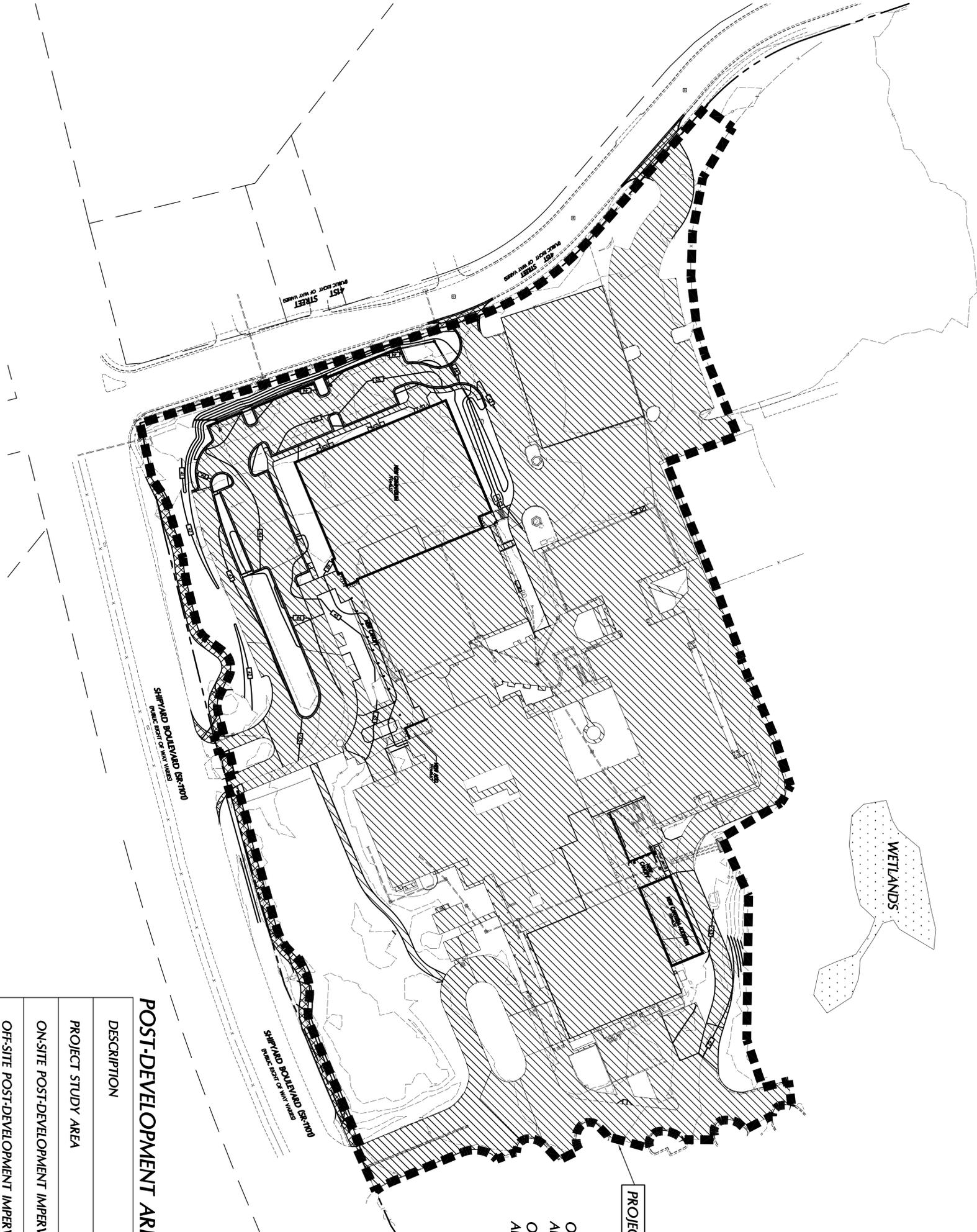


APPROVED CONSTRUCTION PLAN

NAME	DATE
PLANNING	
TRAFFIC	
FIRE	

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

Date: _____ Permit #: _____
Signed: _____



LEGEND

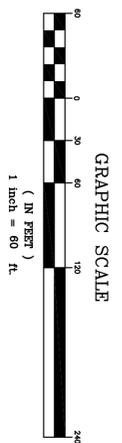
ON-SITE IMPERVIOUS AREAS

OFF-SITE IMPERVIOUS AREAS

PROJECT STUDY AREA

POST-DEVELOPMENT AREAS

DESCRIPTION	AREA (SF)	AREA (AC)
PROJECT STUDY AREA	545,770	12.53
ON-SITE POST-DEVELOPMENT IMPERVIOUS AREA	379,350	8.71
OFF-SITE POST-DEVELOPMENT IMPERVIOUS AREA	9,890	0.23



APPROVED CONSTRUCTION PLAN

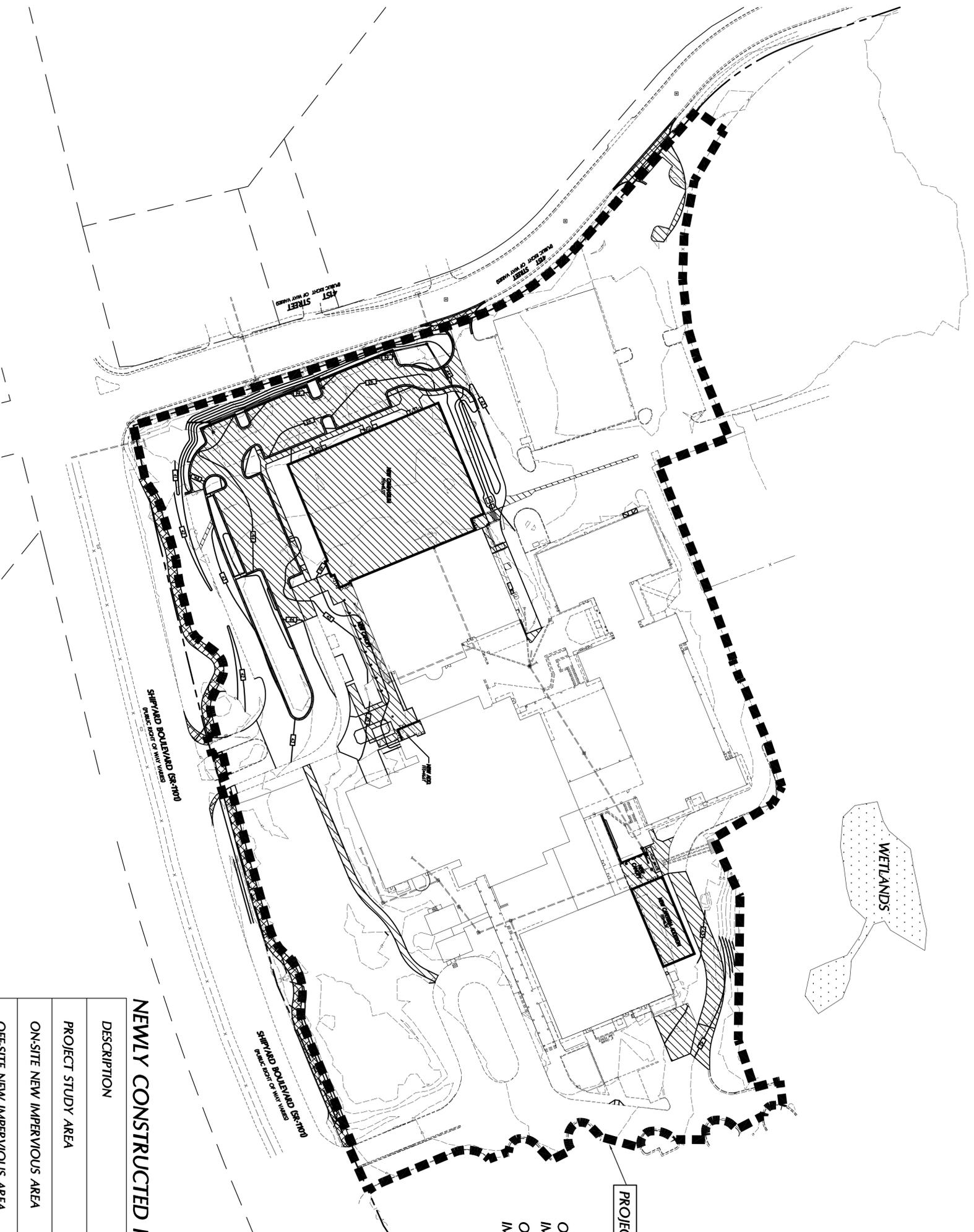
NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____

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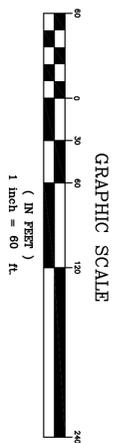


PROJECT STUDY AREA

- LEGEND
- ON-SITE NEW IMPERVIOUS AREAS
 - OFF-SITE NEW IMPERVIOUS AREAS

NEWLY CONSTRUCTED IMPERVIOUS AREAS

DESCRIPTION	AREA (SF)	AREA (AC)
PROJECT STUDY AREA	545,770	12.53
ON-SITE NEW IMPERVIOUS AREA	83,002	1.91
OFF-SITE NEW IMPERVIOUS AREA	9,890	0.23



APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____

WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit #: _____
Signed: _____

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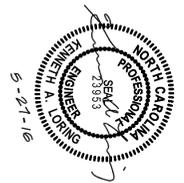
BOWMAN MURRAY HEMMINGWAY

ARCHITECTS

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CLH DESIGN, PA

Site Design & Planning
1000 S. College Road
Wilmington, NC 28403
Tel - (910) 762-2821
Fax - (910) 762-8386



Phase One: Renovations and Additions to:
John T. Hoggard High School
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

JOB NUMBER: 15-120
DRAWN BY: JGM
CHECKED BY: JGM
DATE: MAY 27 2016
REVISIONS:

POST-DEV
NEW
IMPERVIOUS
AREAS PLAN

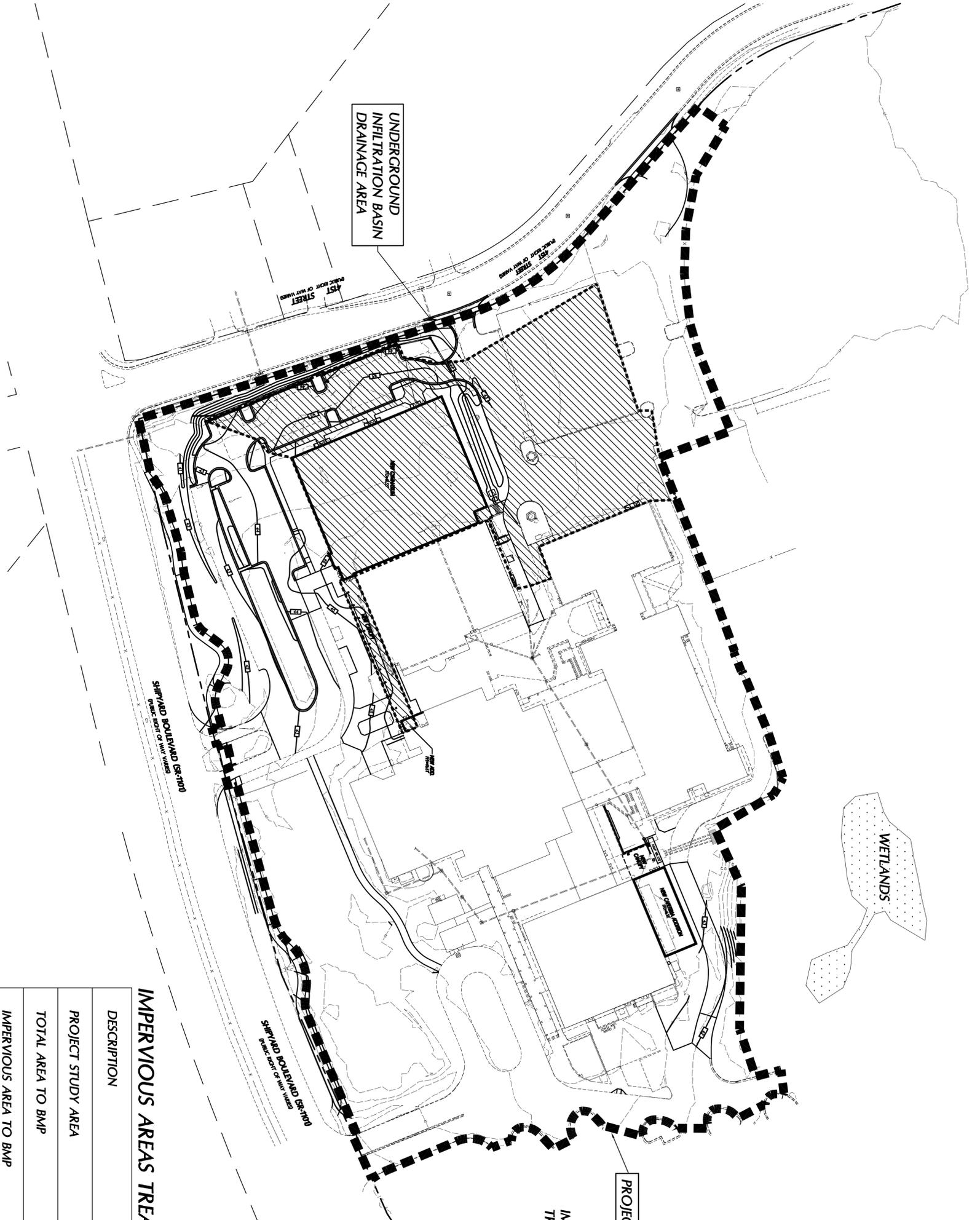
SHEET NUMBER:
C-3.5

Phase One: Renovations and Additions to:
John T. Hoggard High School
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

JOB NUMBER: 15-120
DRAWN BY: JGM
CHECKED BY: JGM
DATE: MAY 27, 2016
REVISIONS:

**BMP
DRAINAGE
AREAS PLAN**
SHEET NUMBER

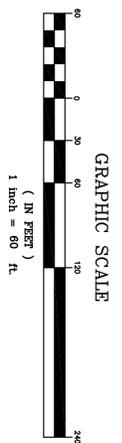
C-3.6



LEGEND
IMPERVIOUS AREAS TREATED BY BMP

IMPERVIOUS AREAS TREATED BY BMP

DESCRIPTION	AREA (SF)	AREA (AC)
PROJECT STUDY AREA	545,770	12.53
TOTAL AREA TO BMP	100,350	2.30
IMPERVIOUS AREA TO BMP	89,680	2.06



APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____

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

Date: _____ Permit #: _____
Signed: _____

Phase One: Renovations and Additions to:
John T. Hoggard High School
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

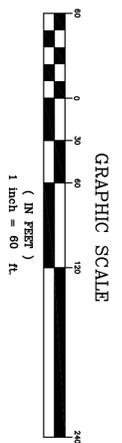
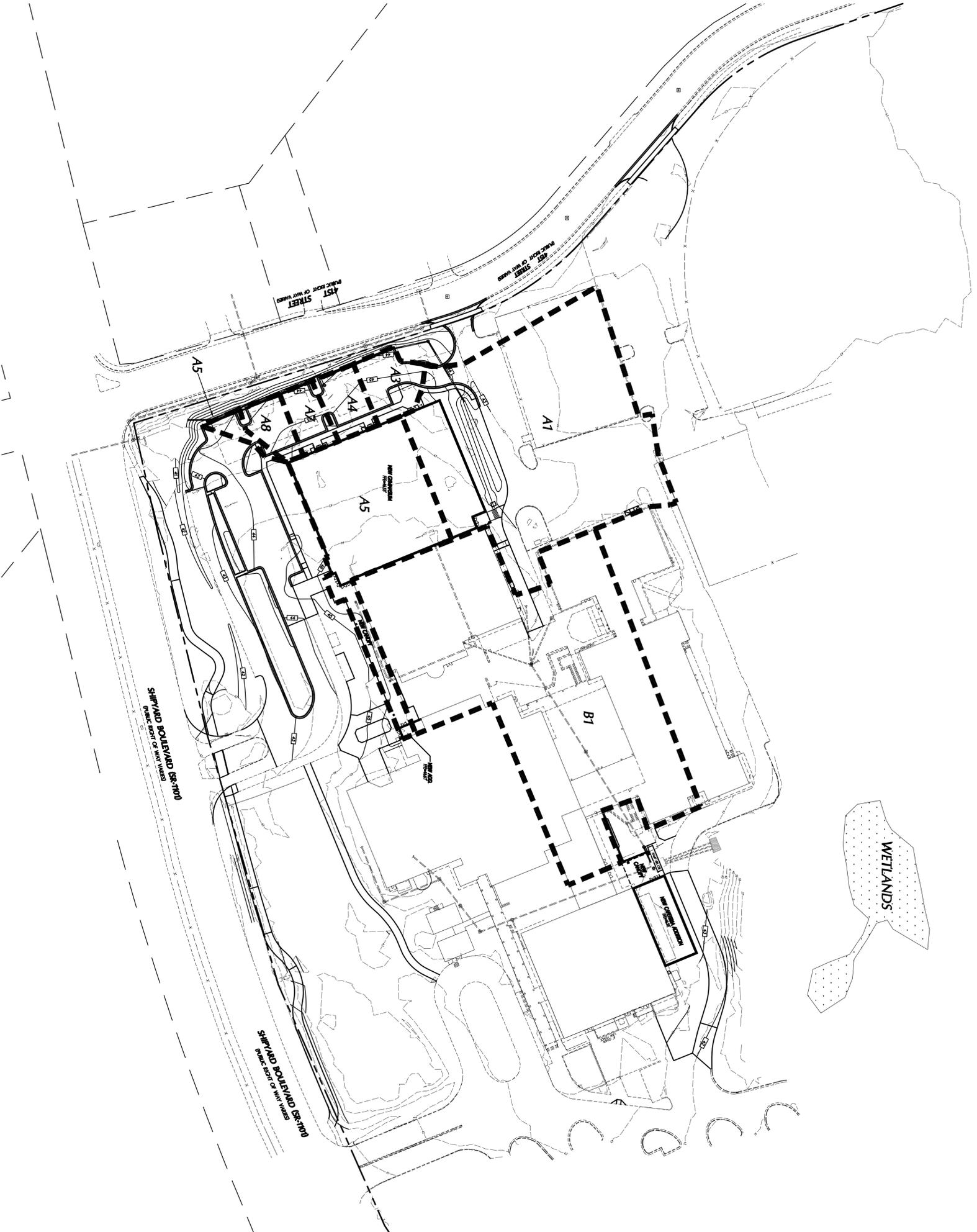
JOB NUMBER	15-120
DRAWN BY	JGM
CHECKED BY	JGM
DATE	MAY 27 2016
REVISIONS	

**STORM
DRAINAGE
AREAS PLAN**

C-3.7

DRAINAGE AREAS TO INLETS

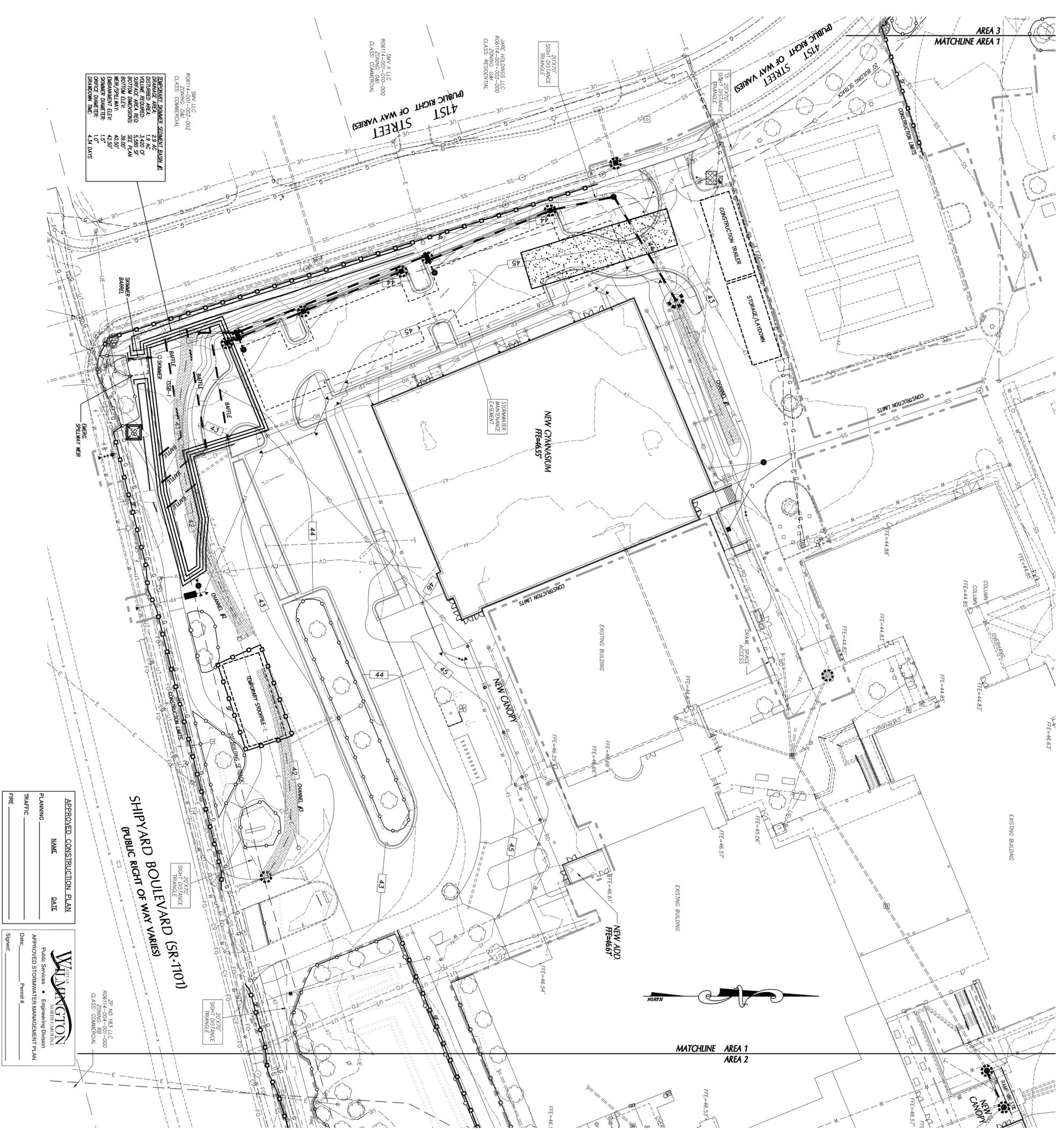
INLET NO.	AREA (SF)	AREA (AC)
A1	59,930	1.38
A3	4,480	0.10
A4	3,790	0.09
A7	3,100	0.07
A8	3,030	0.07
A5	25,960	0.60
B1	80,050	1.84



APPROVED CONSTRUCTION PLAN

NAME	DATE
PLANNING	
TRAFFIC	
FIRE	

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



SHIPYARD BOULEVARD (SR-1101)
 ZONING: OAR
 CLASS: COMMERCIAL

SHIPYARD BOULEVARD (SR-1101)
 ZONING: OAR
 CLASS: COMMERCIAL

SHIPYARD BOULEVARD (SR-1101)
 ZONING: OAR
 CLASS: COMMERCIAL

APPROVED CONSTRUCTION PLAN

NAME: _____ DATE: _____

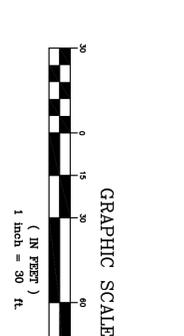
PLANNING: _____

TRAFFIC: _____

FIRE: _____

WILMINGTON
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit #: _____
 Signed: _____



PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

C-4.1

SHEET NUMBER

SITE EROSION CONTROL PLAN

DATE: MAY 27 2016

REVISIONS:

CHECKED BY: JGM

DRAWN BY: JGM

JOB NUMBER: 15-120

Phase One: Renovations and Additions to:
John T. Hoggard High School
 4305 Shipyard Blvd.
 Wilmington, North Carolina 28403

LEGEND

- GRAVEL CONSTR. ENTRANCE (SEE DETAIL SHEET C71)
- TEMP. MET PROTECTION DEVICE (SEE DETAIL SHEET C71)
- TEMPORARY SILT FENCE (SEE DETAIL SHEET C71)
- REINFORCED SILT FENCE OUTLET (SEE DETAIL SHEET C71)
- PERMANENT GULCH PROTECTION (SEE DETAIL SHEET C71)
- CONSTRUCTION LIMITS (DASHED LINE)
- EXISTING STORM SEWER PIPES (DASHED LINE)
- PROPOSED STORM SEWER PIPES (DASHED LINE)
- EXISTING CONTOUR (DOTTED LINE)
- FINISHED CONTOUR (DOTTED LINE)
- TEMPORARY CONTOUR (TEMP. GRADES DURING CONSTR.) (DOTTED LINE)
- TEMPORARY DEMOLITION SET BACK (SEE DETAIL SHEET C72)
- FINISHED CONTOUR (SEE DETAIL SHEET C71)
- TEMPORARY ROCK PILE MET PROTECTION (SEE DETAIL SHEET C71)
- TEMPORARY CONCRETE WASTEWATER AREA (SEE DETAIL SHEET C71)
- TEMPORARY SEDIMENT SWAMPER BASIN (SEE DETAIL SHEET C79)
- TEMPORARY ROCK PILE MET PROTECTION (SEE DETAIL SHEET C71)
- SHIELDING LIMITS (SEE DETAIL SHEET C71)

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND NCDDO STANDARDS.
- THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF SITE. ALL OF THESE MEASURES AND METHODS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT OR AS DIRECTED BY THE TOTAL DISTURBED AREA. 5 AC.
- ALL OPEN STORM PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER WORK STOPPAGE EACH DAY.
- ALL STORM DRAINAGE PIPES SHALL BE THOROUGHLY FLOUSED OR AS NEEDED TO MAINTAIN PROPER FLOWING OF THE INDICATED STORMING AREA IS INTENDED FOR VEHICLES AND NON-EROSIVE MATERIALS ONLY. NO SOIL, SAND OR OTHER EROSION PRONE MATERIAL SHALL BE STORED OUTSIDE OF THE LIMITS OF THE SITE PROTECTED BY SOIL AND OTHER MATERIALS SHALL ONLY BE TEMPORARILY STOCKPILED WITHIN THE CONSTRUCTION LIMITS PROTECTED BY PROTECTION DEVICES. THESE STOCKPILES SHALL BE COVERED WITH EROSION CONTROL MATS AND SHALL BE PROTECTED FROM EROSION CONTROL REPAIRS. THESE STOCKPILES SHALL BE COVERED WITH EROSION CONTROL MATS AND SHALL BE PROTECTED FROM EROSION CONTROL REPAIRS.
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MAINTENANCE PLAN

- DURING ALL PHASES OF CONSTRUCTION, CONDUCTIONS ON EXPOSED SLOPES SHALL BE PROVIDED ACCORDING TO THE FOLLOWING SCHEDULE:
- FINAL PERMANENT GROUNDCOVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED ON ALL DISTURBED AREAS ACCORDING TO THE FOLLOWING SCHEDULE:
- THE ABOVE REQUIREMENTS ARE THE MINIMUM NECESSARY TO MEET EROSION AND SEDIMENT CONTROL REGULATIONS. THE CONTRACT DOCUMENTS INCLUDE ADDITIONAL SEEDING AND STABILIZATION REQUIREMENTS AND SCHEDULES WHICH MAY EXCEED THESE ABOVE.
- ALL OTHER SEEDING AREAS SHALL BE MATCHED WITH STRAW AND TACKED WITH ASPHALT.

SELF-INSPECTION RULES

- SELF-INSPECTION SHALL BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS IN PLACE.
- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT OR AS DIRECTED BY THE TOTAL DISTURBED AREA. 5 AC.
- ALL STORM DRAINAGE PIPES SHALL BE THOROUGHLY FLOUSED OR AS NEEDED TO MAINTAIN PROPER FLOWING OF THE INDICATED STORMING AREA IS INTENDED FOR VEHICLES AND NON-EROSIVE MATERIALS ONLY. NO SOIL, SAND OR OTHER EROSION PRONE MATERIAL SHALL BE STORED OUTSIDE OF THE LIMITS OF THE SITE PROTECTED BY SOIL AND OTHER MATERIALS SHALL ONLY BE TEMPORARILY STOCKPILED WITHIN THE CONSTRUCTION LIMITS PROTECTED BY PROTECTION DEVICES. THESE STOCKPILES SHALL BE COVERED WITH EROSION CONTROL MATS AND SHALL BE PROTECTED FROM EROSION CONTROL REPAIRS.
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SLOPE & SURFACE STABILIZATION

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
ROADWAYS, DRIVEWAYS, SIDEWALKS, AND STAIRS	7 DAYS	NONE
HIGH QUALITY WATER (HAW)	7 DAYS	NONE
SCALES STEEPER THAN 3:1 OR FLATTER THAN 4:1	7 DAYS	7-DAYS FOR SCALES STEEPER THAN 3:1 OR FLATTER THAN 4:1
ALL OTHER AREAS	14 DAYS	NONE (EXCEPT FOR REINFORCED FLATTER THAN 4:1 AND HAW ZONES)

BOWMAN MURRAY HEMINGWAY ARCHITECTS

514 Market Street
 Wilmington, NC 28401
 Tel - (910) 762-2821
 Fax - (910) 762-2806

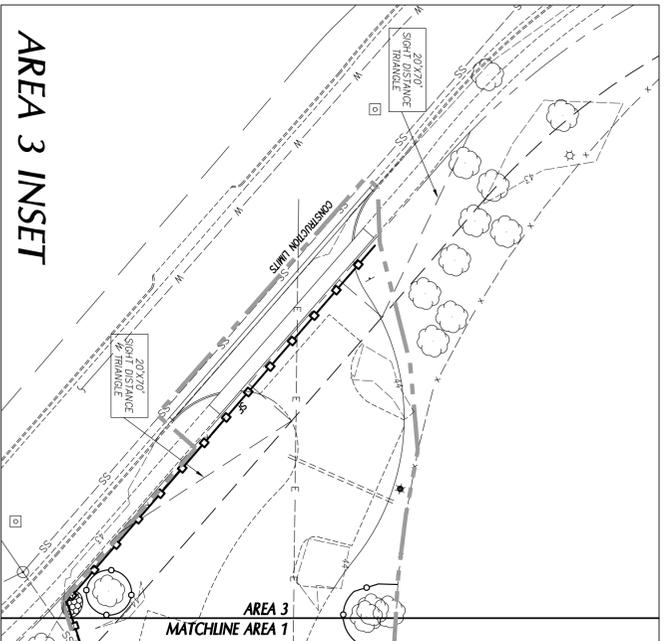
Project ID #: 900-9005

CLTH DESIGN, PA

1000 N. WILMINGTON BLVD.
 WILMINGTON, NC 28401
 TEL: (910) 762-2806

PROFESSIONAL SEAL

WILMINGTON, NORTH CAROLINA
 2016
 5-27-16



CONSTRUCTION SEQUENCE

1. INSTALL TREE PROTECTION BEFORE CONTACT CITY OF WILMINGTON-REQD FOR INSPECTION PRIOR TO STARTING ANY OTHER WORK.
 2. OBTAIN APPROVED PLAN AND APPROVAL PLACARD. A COPY OF THE APPROVED PLAN MUST BE ON SITE AT ALL TIMES. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DATE OF LAND DISTURBING ACTIVITIES.
 3. CONDUCT PRE-CONSTRUCTION CONFERENCE.
 4. INSTALL PERIMETER SILT FENCES, TEMPORARY SUMMER SEDIMENT BASIN, CONSTRUCTION ENTRANCES AND INLET PROTECTION DEVICES ON EXISTING INLETS.
 5. INSTALL STORM DRAINAGE SYSTEM AS GRADING PROGRESS. INSTALL INLET AND OUTLET PROTECTION DEVICES AT NEW STRUCTURES AS THEY ARE CONSTRUCTED.
 6. CALL FOR INSPECTION OF INSTALLED DEVICES.
 7. PERFORM CLEANING OPERATIONS.
 8. STOP TOPSOIL STOCKPILE TOPSOIL WITHIN CONSTRUCTION LIMITS.
 9. MAINTAIN ALL INSTALLED MEASURES.
 10. BEGIN ROUGH GRADING OPERATIONS.
 11. INSTALL STORM DRAINAGE SYSTEM AS GRADING OPERATIONS PROGRESS. INSTALL INLET AND OUTLET PROTECTION DEVICES AT NEW STRUCTURES AS THEY ARE CONSTRUCTED.
 12. STOPPAGE OF WORK EACH DAY AT THE END OF EACH DAY, INSTALL AND ADJUST SILT FENCE AND INLET AND OUTLET PROTECTION DEVICES.
 13. REGRADE TOPSOIL, INSTALL SLOPE PROTECTION BLANKETS AND VEGETATE STEEP SLOPES AS THEY ARE ESTABLISHED.
 14. GRADE, VEGETATE AND INSTALL TEMPORARY BANKS OF CHANNELS AFTER STABILIZATION. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION. MAINTAINED BY ALL DISTURBED AREAS WHERE GRADING ACTIVITIES HAVE STOPPED AND WILL NOT CONTINUE FOR MORE THAN 14-DAYS.
 15. MAINTAIN ALL EROSION & SEDIMENT CONTROL MEASURES THROUGHOUT CONSTRUCTION.
 16. INSTALL UNDERGROUND INFILTRATION BASIN, TEMPORARY BLOCK/PILE PILES THAT INTER UNDERGROUND INFILTRATION BASIN UNTIL SITE IS STABILIZED.
 17. PUMP WATER FROM TEMPORARY SUMMER SEDIMENT BASIN THROUGH SILT BAG, REMOVE SUMMER BARREL AND OTHER BASIN APPURTENANCES AND GRADE TO FINISH CONDITIONS.
 18. COMPLETE REMAINING CURB & GUTTER AND PAVEMENT INSTALLATION.
 19. REGRADE TOPSOIL, INSTALL SLOPE PROTECTION BLANKETS AND VEGETATE REMAINING DISTURBED AREAS.
 20. REMOVE TEMPORARY BLOCK/PILE FROM UNDERGROUND INFILTRATION BASIN.
 21. REMOVE ROCK INLET PROTECTION AND REMAINING TEMPORARY EROSION CONTROL MEASURES.
- ## ENSURE PERMEABLE PAVERS ARE INSTALLED DURING FINAL STAGES OF CONSTRUCTION AND THAT ALL AREAS UPSTREAM ARE STABILIZED PRIOR TO INSTALLATION OF PERMEABLE PAVERS. INSTALL ADDITIONAL SILT FENCE AROUND PERMEABLE PAVERS AS REQUIRED TO PREVENT SEDIMENT-RUN-OFF.

APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

DATE: _____

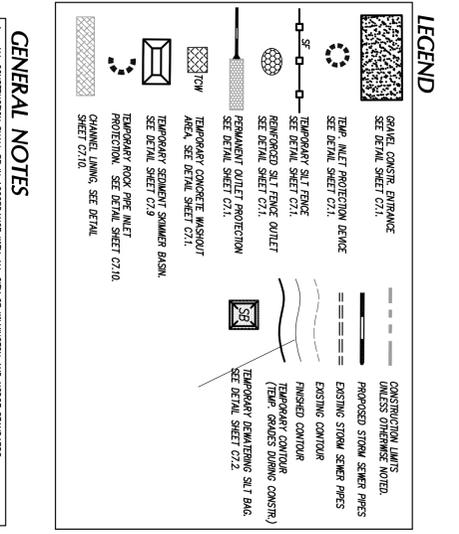
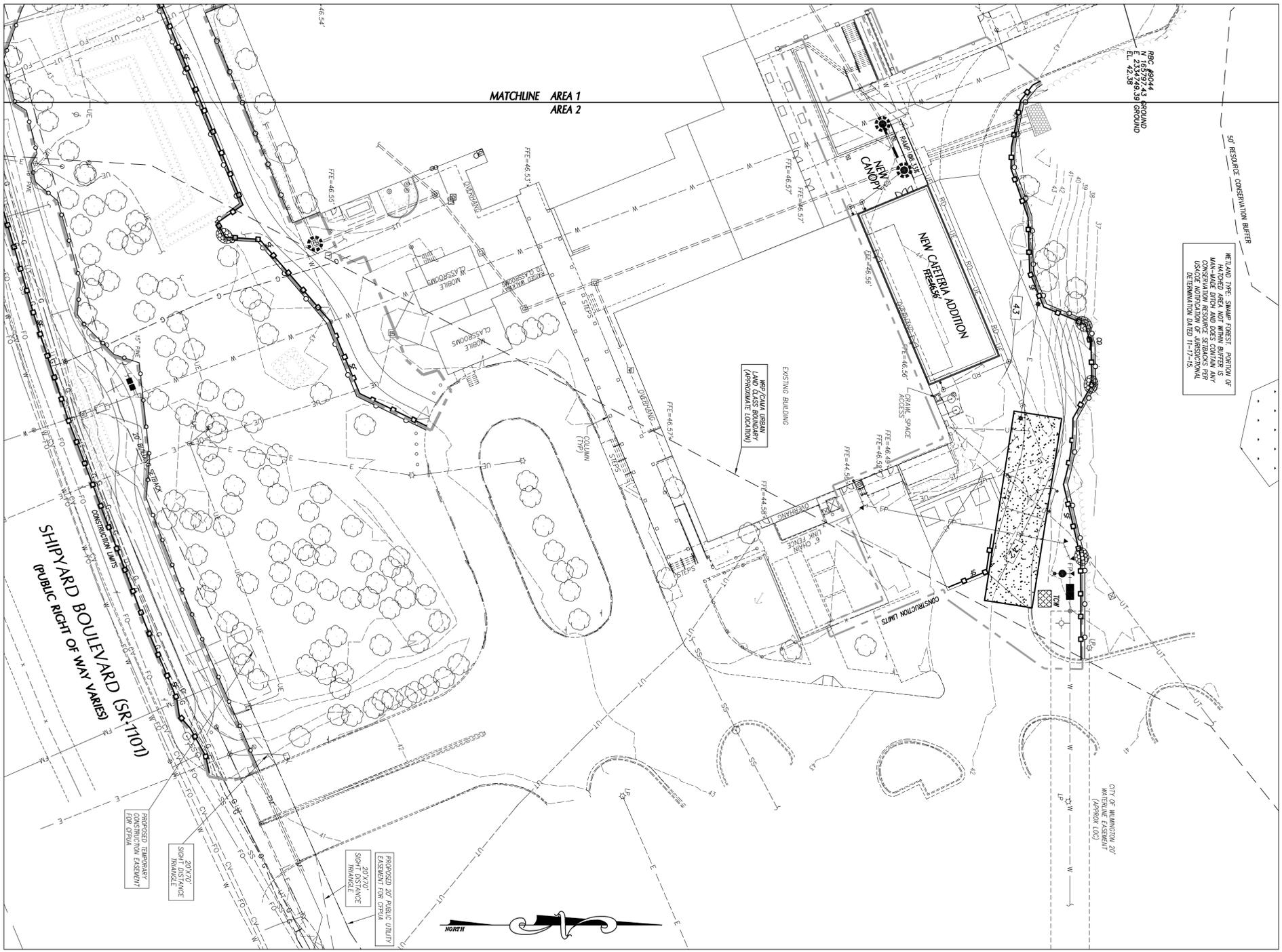
APPROVED STORMWATER MANAGEMENT PLAN

Public Services • Engineering Division

WILMINGTON

Permit # _____

Signer: _____



- GENERAL NOTES**
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND NCDOT STANDARDS.
 2. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES.
 3. ALL CONSTRUCTION SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES.
 4. ALL CONSTRUCTION SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES.
 5. ALL CONSTRUCTION SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES.
 6. ALL CONSTRUCTION SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES.
 7. THE INDICATED STAGING AREA IS INTENDED FOR VEHICLES AND NON-PROTECTIVE MATERIALS ONLY. NO SOIL, SAND OR OTHER MATERIAL SHALL BE STORED OUTSIDE OF THE LIMITS OF THE SITE PROTECTED BY THE EROSION CONTROL MEASURES.
 8. SOIL AND OTHER MATERIALS SHALL ONLY BE TEMPORARILY STOCKPILED WITHIN THE CONSTRUCTION LIMITS PROTECTED AS DESCRIBED IN THE CONSTRUCTION PLAN.
 9. THESE PROTECTION DEVICES MUST BE SUBMITTED TO THE CITY OF WILMINGTON PLANNING DEPARTMENT AND TREE PROTECTION INSPECTOR FOR APPROVAL PRIOR TO CONSTRUCTION.
 10. ALL OTHER SEEDING AREAS SHALL BE MATCHED WITH STAIN AND TAGGED WITH ASPHALT.

SLOPE & SURFACE STABILIZATION

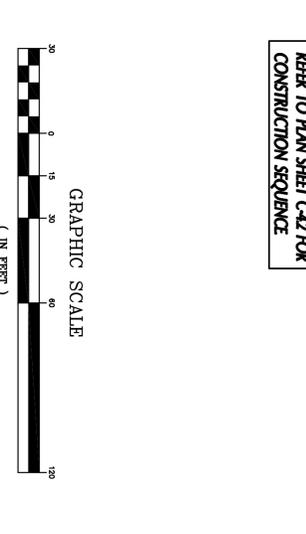
GROUND STABILIZATION SHALL BE REQUIRED OF ALL DISTURBED AREAS ACCORDING TO FOLLOWING SCHEDULE:

SITE AREA DESCRIPTION	STABILIZATION METHOD	STABILIZATION TIME FRAME	PERMITS/EXEMPTIONS
PREPARING AREAS, SWALES, DITCHES AND SLOPES	NONE	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	NONE	7 DAYS	NONE
CLAYS STREETS THIN 3"	7-DAY TOP SOIL RESTORATION	7 DAYS	7-DAY TOP SOIL RESTORATION PERMITS ARE ALLOWED. THIN 3" ARE ALLOWED.
CLAYS STREETS THIN 3" OR LESS	7-DAY TOP SOIL RESTORATION	14 DAYS	7-DAY TOP SOIL RESTORATION PERMITS ARE ALLOWED. THIN 3" ARE ALLOWED.
ALL OTHER AREAS	NONE (EXCEPT FOR ROWS/ETC)	14 DAYS	NONE (EXCEPT FOR ROWS/ETC)

CONDITIONS OF THE DATE BE APPROVED BY THE ENGINEERING DEPARTMENT BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.

- MAINTENANCE PLAN**
1. DURING ALL PHASES OF CONSTRUCTION, GROUNDWATER ON EXPOSED SLOPES SHALL BE PROTECTED ACCORDING TO THE FOLLOWING SCHEDULE:
 2. FINAL STABILIZATION SHALL BE COMPLETED BY THE END OF CONSTRUCTION.
 3. THE ABOVE REQUIREMENTS ARE THE MINIMUM NECESSARY TO MEET EROSION AND SEDIMENT CONTROL REGULATIONS. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
 4. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
 5. ALL OTHER SEEDING AREAS SHALL BE MATCHED WITH STAIN AND TAGGED WITH ASPHALT.

- SELF-INSPECTION RULES**
1. SELF-INSPECTION SHALL BE CONDUCTED AFTER EACH PHASE OF THE PROJECT AND COMPLETED UNTIL PERMANENT GROUND COVER IS INSTALLED.
 2. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
 3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
 4. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
 5. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
- NOTE: EROSION CONTROL PLANS WILL BE REVIEWED, PERMITTED & INSPECTED BY NCDOT, NOT CITY OF WILMINGTON**
- REFER TO PLAN SHEET C-42 FOR CONSTRUCTION SEQUENCE**



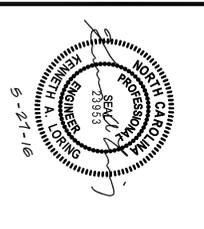
BOWMAN MURRAY HEMMINGWAY ARCHITECTS

514 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-2806

Project ID # 900-9005

CLTH DESIGN, PA

1000 S. WILMINGTON AVENUE
WILMINGTON, NC 28401
TEL: (910) 762-2806



Phase One: Renovations and Additions to
John T. Hoggard High School
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

C-4.2

SITE EROSION CONTROL PLAN

SHEET NUMBER

DATE: MAY 27 2016

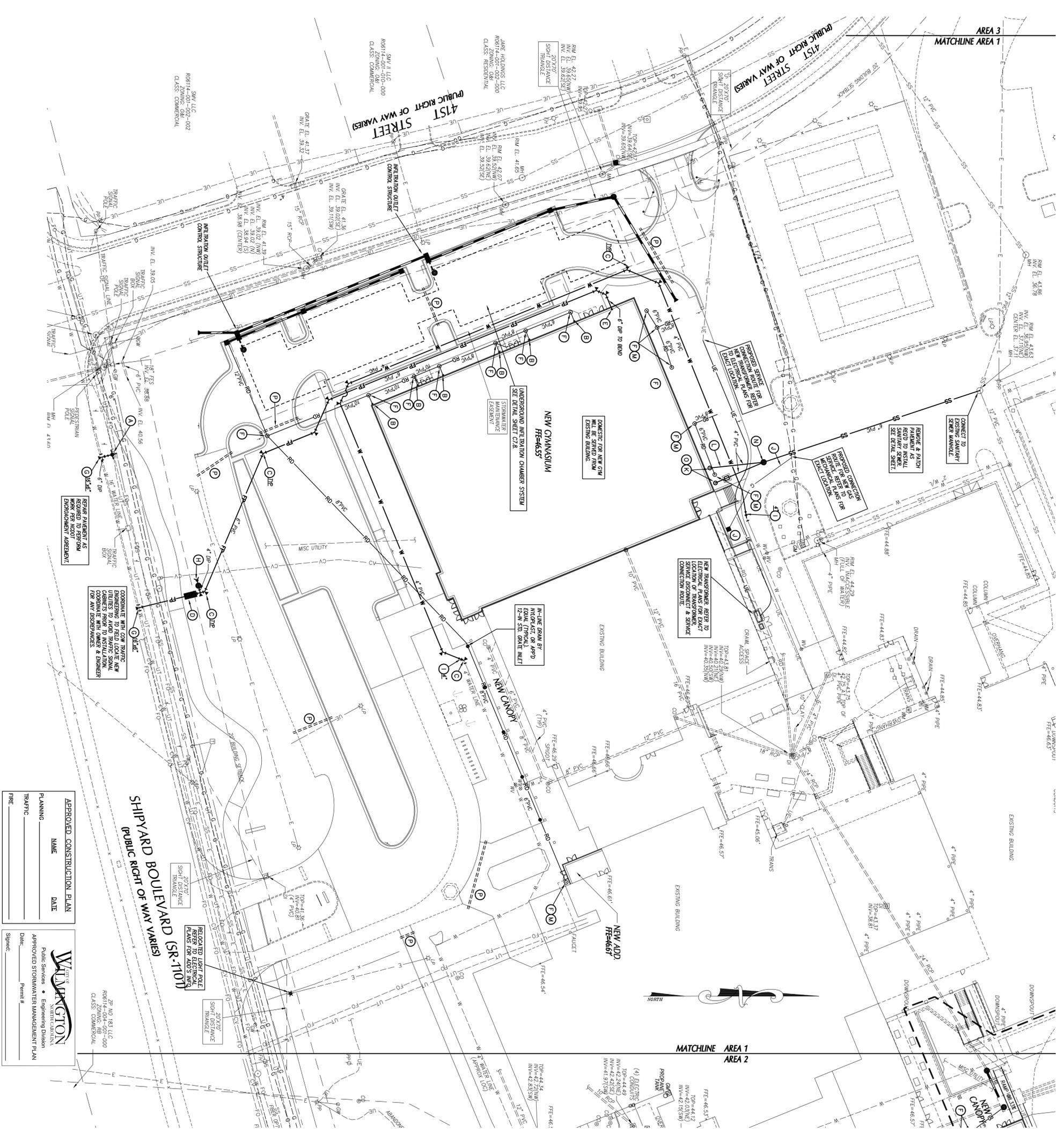
REVISIONS

CHECKED BY: JGM

DRAWN BY: JGM

DESIGNED BY: JGM

JOB NUMBER: 15-120



APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____

WILMINGTON
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

KEY NOTES

1. FIRE HYDRANT ASSEMBLY, SEE DETAIL SHEET C7.1.
2. DOWNSPOUT CONNECTION, SEE DETAIL SHEET C7.3.
3. THURST BLOTTING, TYP. SEE DETAIL SHEET C7.3.
4. DOUBLE CHECK VALVE ASSEMBLY (DCVA) IN ABOVE GROUND HEATED ENCLOSURE, SEE DETAIL SHEET C7.8. SEE ELEC. PLANS FOR ADJUT. INT.
5. EXTEND WATER MAIN TO 12" IN ABOVE FINISH FLOOR FOR FIRE PROTECTION CONNECTION, SEE DETAIL SHEET.
6. ROOF DRAIN CLEANOUT, SEE DETAIL SHEET C7.3.
7. TAPPING KEELE AND VALVE ASSEMBLY AND BLOTTING, SEE DETAIL SHEET C7.3.
8. FIRE DEPARTMENT CONNECTION, SEE DETAIL SHEET C7.3.
9. GATE VALVE AND VALVE BOX, SEE DETAIL SHEET C7.3.
10. GAS METERS & GAS SERVICE LINES, SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION.
11. EXTEND UTILITY TO WITHIN 5'-0" OF BUILDING WALL OR AS INDICATED ON PLUMBING PLANS. REFER TO PLUMBING PLANS FOR LOCATION & INVERT.
12. NEW GREASE TRAP, REFER TO PLUMBING PLANS FOR LOCATION & INVERT.
13. MANHOLE, SEE DETAIL SHEET C7.4.
14. SANITARY SEWER CLEAN OUT, SEE DETAIL SHEET C7.8.
15. FIRE CONTROL, SIGNAL, IN PRESSURE-TYPE, OBTAINING ONLY, PROGRAMME SEE WATT & LOCATION WITH SITE ELEC. PLANS & LOCAL UTILITY PROVIDER.

UTILITY LEGEND

EXISTING	PROPOSED	
OVERHEAD ELECTRICAL	—E—	—E—
UNDERGROUND ELECTRICAL	—E—	—E—
GAS	—G—	—G—
SANITARY SEWER	—SS—	—SS—
TELEPHONE	—T—	—T—
UNDERGROUND TELEPHONE	—UT—	—UT—
WATER	—W—	—W—
FIRE PROTECTION	—FP—	—FP—
FORCE MAIN	—FM—	—FM—
CHILLED WATER	—CW—	—CW—
FOUNDATION DRAIN	—FD—	—FD—
FIBER OPTIC	—FO—	—FO—
ROOF DRAIN	—RD—	—RD—
STORM DRAIN	—SD—	—SD—
LIGHT POLE	⊙	⊙
UTILITY POLE	⊙	⊙
MANHOLE	⊙	⊙
CLEAN OUT	⊙	⊙
DROP MULTI-CATCH BASIN	⊙	⊙
FIRE HYDRANT	⊙	⊙
WATER VALVE	⊙	⊙
TELEPHONE REGISTRY	⊙	⊙
COMMUNICATION BOX	⊙	⊙
SANITARY SEWER STRUCTURE 10A	⊙	⊙
STORM SEWER STRUCTURE 10B	⊙	⊙

UTILITY NOTES

1. INSTALL WATERMANS WITH A COVER OF NO LESS THAN 4'-FT. INSTALL WATER SERVICES WITH NO LESS THAN 18"-IN OF COVER TO SUBGRADE.
2. INSTALL SEWER MAINS WITH A COVER OF NO LESS THAN 3'-FT TO SERVICES WITH NO LESS THAN 18"-IN OF COVER TO SUBGRADE. INDICATED IN THE SPECIFICATIONS.
3. INSTALL ALL UTILITIES TO PROVIDE REQUIRED CLEARANCES AS INDICATED IN THE SPECIFICATIONS.
4. WATERMANS AND SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL CLEARANCE OF 10'-FT.
5. WATER AND SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM VERTICAL CLEARANCE OF 12"-IN TO STORM DRAINAGE PRESS. OTHER FRAME CONTRACTORS UTILITY COMPANIES AND OTHER TRADES TELEPHONE AND CABLE.
6. COORDINATE AND SCHEDULE INSTALLATION OF ALL UTILITIES WITH OTHER FRAME CONTRACTORS UTILITY COMPANIES AND OTHER TRADES TELEPHONE AND CABLE.
7. VERIFY EXISTING CONDITIONS AND CONNECTIONS TO EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT IF ANY DISCREPANCIES ARE DISCOVERED.
8. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES DURING CONSTRUCTION AND SHALL MAKE REPAIRS AT NO EXPENSE TO THE OWNER.
9. ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE NCSBC AND OSHA REQUIREMENTS.
10. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF ALL UTILITY AND STORM DRAINAGE IMPROVEMENTS FOLLOWING CONSTRUCTION.
11. CONTRACTOR SHALL PHASE DEVIATION AND NEW CONSTRUCTION TO FACILITIES. COORDINATE SHORT-TERM, 24-HOUR, TEMPORARY SHUT-DOWNS WITH THE OWNER.
12. SEE GENERAL NOTES ON EXISTING CONDITIONS AND DEVIATION PLAN FOR REQUIREMENTS FOR REMOVAL AND PATCHING OF PARALLEL FOR UTILITY DEVIATIONS.
13. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.
14. ALL ROOF DRAINS SHALL BE 6" PVC @ 1.04% MIN. SLOPE UNLESS INDICATED OTHERWISE. USE DUCTILE IRON WHEN COVER IS LESS THAN 24"-IN.
15. ALL SANITARY SEWER SERVICES SHALL BE 4" PVC (SCH 40) @ 1.04% COVER IS LESS THAN 24"-IN.
16. THE FOLLOWING "PERMITS" ARE REQUIRED TO BE OBTAINED FROM THE CITY OF WILMINGTON FIRE SERVICES ADMINISTRATION BY EACH RESPONSIBLE CONTRACTOR PRIOR TO THE START OF WORK: THE "GENERAL CONTRACTOR" PERMIT, THE "WATER MAIN" PERMIT, THE "SEWER SERVICE" PERMIT, THE "SPRINKLER PERMIT" PERMIT (FIRE LINE (S)).
17. THE ALARM PERMIT PROTECTION PERMIT.
18. THE GENERAL CONTRACTOR SHALL ALSO MAKE SURE THAT ALL HIS SIDS PROPERLY COORDINATE THE INSPECTION PROCESS WITH THE WILMINGTON FIRE SERVICES ADMINISTRATION OFFICE.
19. PROJECT SHALL COMPLY WITH CITY OF WILMINGTON CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL APPROVED BY THE CITY OF WILMINGTON. SEE DETAIL SHEET C7.8 FOR INFORMATION.
20. ANY PARALLEL PERCENTAGE DEVICES REQUIRED BY THE CITY WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USDOCCORR OR ASSE.

GRAPHIC SCALE

1 inch = 30 feet

(IN FEET)

0 15 30 45 60 75 90 105 120

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

Phase One: Renovations and Additions to:
John T. Hoggard High School
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

JOB NUMBER: 15-120
DRAWN BY: JGM
CHECKED BY: JGM
DATE: MAY 27 2016
REVISIONS: 5-19-16 MOODY DREWRY SUB

UTILITY LEGEND

UTILITY NOTES

KEY NOTES

GRAPHIC SCALE

1 inch = 30 feet

(IN FEET)

0 15 30 45 60 75 90 105 120

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UTILITY NOTES

KEY NOTES

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1 inch = 30 feet

(IN FEET)

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ARCHITECTS

BOWMAN MURRAY HEMINGWAY

514 Market Street
Wilmington, NC 28401
Tel: (910) 762-2821
Fax: (910) 762-5586

Project ID #: 900-9005

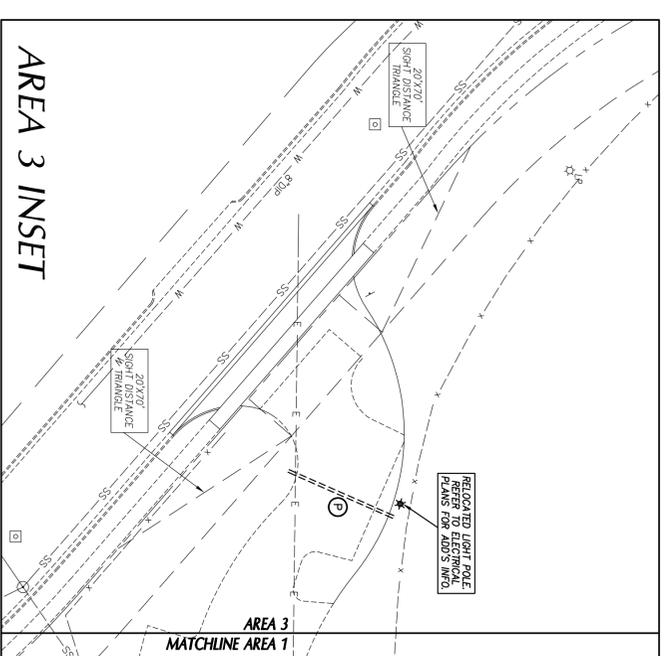
CLTH DESIGN, P.A.

3000 SOUTHWEST CORNER
FLOOR 2000
1700 W. 17TH AVENUE
DENVER, CO 80202

PROFESSIONAL SEAL

WILMINGTON, NORTH CAROLINA

5-21-16



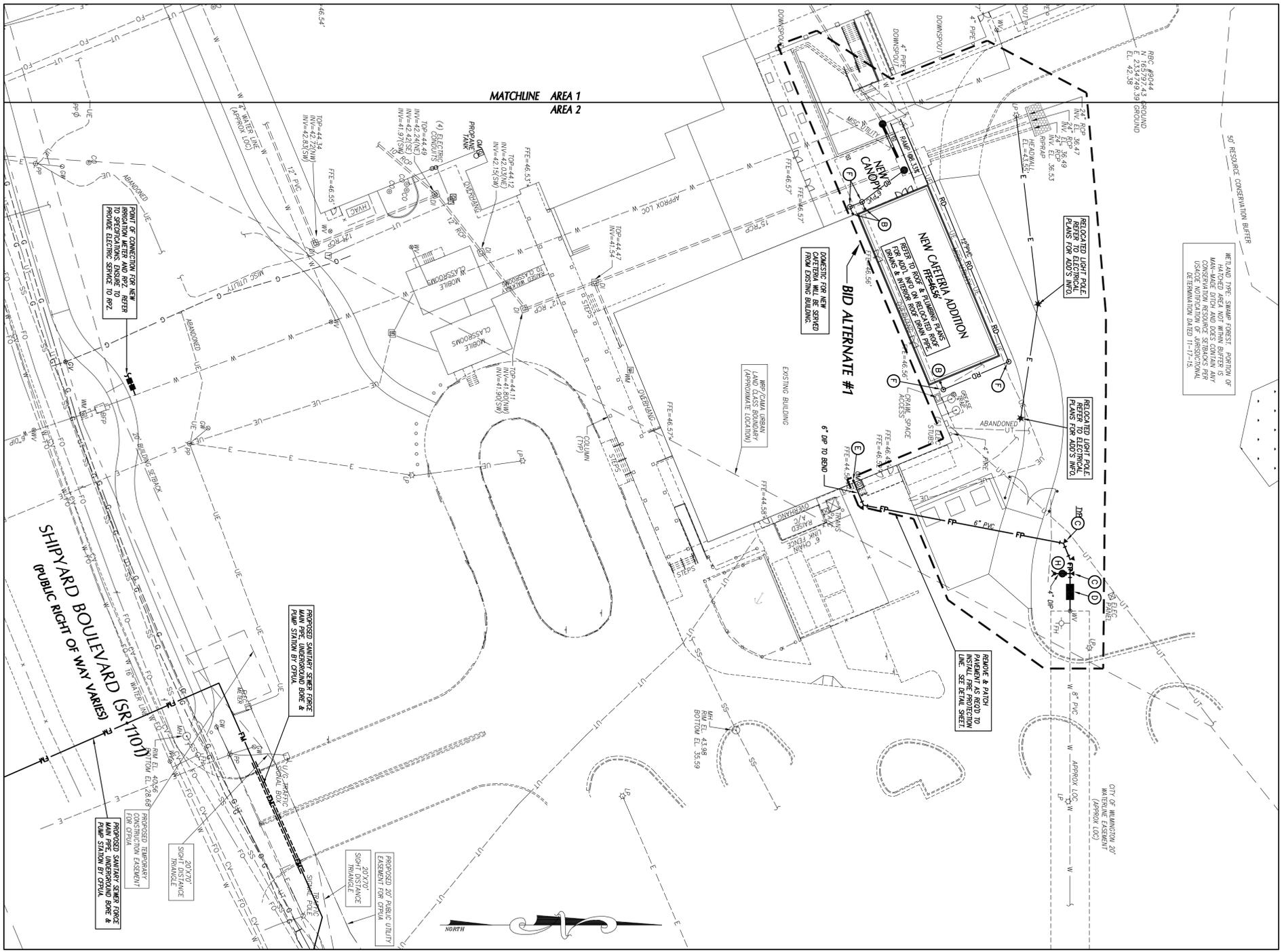
NEW FIRE HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE COORDINATE WITH COM FIRE DEPARTMENT.

CONTRACTOR SHALL OBTAIN PRIVATE UNDERGROUND FIRE LINE PERMIT PRIOR TO INSTALLING THE FIRE PROTECTION LINE COORDINATE WITH COM FIRE & LIFE SAFETY DIVISION.

APPROVED CONSTRUCTION PLAN
NAME _____ DATE _____

PLANNING _____
TRAFFIC _____

APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

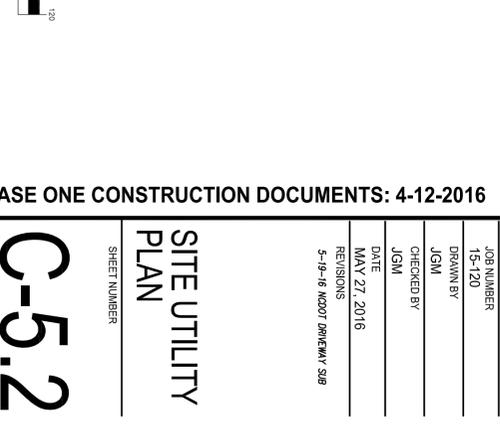


UTILITY LEGEND

EXISTING	PROPOSED
OVERHEAD ELECTRICAL	---
ELECTRICAL UNDERGROUND	---
GAS	---
SANITARY SEWER	---
TELEPHONE	---
UNDERGROUND TELEPHONE	---
FIRE PROTECTION	---
FORCE MAIN	---
CHILLED WATER	---
FOUNDATION DRAIN	---
FIBER OPTIC	---
ROOF DRAIN	---
STORM DRAIN	---
LIGHT POLE	---
UTILITY POLE	---
MANHOLE	---
CLEAN OUT	---
DEEP METACATCH BASIN	---
FIRE HYDRANT	---
WATER VALVE	---
TELEPHONE PREFIXAL COMMUNICATION BOX	---
SANITARY SEWER STRUCTURE I.D.	---
STORM SEWER STRUCTURE I.D.	---

- ### UTILITY NOTES
1. INSTALL WATERMANS WITH A COVER OF NO LESS THAN 4'-FT. INSTALL WATER SERVICES WITH NO LESS THAN 18-IN. OF COVER TO SUBGRADE.
 2. INSTALL SEWER MAINS WITH A COVER OF NO LESS THAN 3'-FT TO SERVICES WITH NO LESS THAN 18-IN. OF COVER TO SUBGRADE. INDICATED IN THE SPECIFICATIONS.
 3. INSTALL ALL UTILITIES TO PROVIDE REQUIRED CLEARANCES AS INDICATED IN THE SPECIFICATIONS.
 4. WATERMANS AND SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL CLEARANCE OF 10'-FT.
 5. WATER AND SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM VERTICAL CLEARANCE OF 12-IN. TO STORM DRAINAGE PRES.
 6. COORDINATE AND SCHEDULE INSTALLATION OF ALL UTILITIES WITH OTHER TRADE CONTRACTORS, UTILITY COMPANIES AND OTHER TRADERS TELEPHONE AND CITY.
 7. VERIFY EXISTING CONDITIONS AND CONNECTIONS TO EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT IF ANY DISCREPANCIES ARE DISCOVERED.
 8. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES DURING CONSTRUCTION AND SHALL MAKE REPAIRS AT NO EXPENSE TO THE OWNER.
 9. ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE MISC AND OSHA REQUIREMENTS.
 10. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF ALL UTILITY AND STORM DRAINAGE IMPROVEMENTS FOLLOWING CONSTRUCTION.
 11. CONTRACTOR SHALL PHASE DEMOLITION AND NEW CONSTRUCTION TO FACILITIES TO BE DEMOLISHED AND NEW CONSTRUCTION TO REMAIN. COORDINATE SHORT-TERM, OFF-HOURS, TEMPORARY SHUT-DOWNS WITH THE OWNER.
 12. SEE GENERAL NOTES ON EXISTING CONDITIONS AND DEMOLITION PLAN FOR UTILITY RESTRICTIONS FOR REMOVAL AND PAVING OF PAVEMENT FOR NEW CONSTRUCTION.
 13. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.
 14. ALL ROOF PAVES SHALL BE 4" P/C @ 1:4% MIN. SLOPE UNLESS INDICATED OTHERWISE. USE DUCTILE IRON WHEN COVER IS LESS THAN 24-IN.
 15. ALL SANITARY SEWER SERVICES SHALL BE 4" P/C (S/S) @ 1:4% COVER IS LESS THAN 24-IN. OTHERWISE, USE DUCTILE IRON WHEN THE FOLLOWING "REMARKS" ARE REQUIRED TO BE OBTAINED FROM THE CITY OF WILMINGTON FIRE SERVICES ADMINISTRATION BY EACH RESPONSIBLE CONTRACTOR PRIOR TO THE START OF WORK OF THE GENERAL CONTRACTOR THIS PROCEDURE. THE PERMITS REQUIRED ARE AS FOLLOWS:
 - a. SPRINKLER PERMIT
 - b. FIRE ALARM PERMIT
 - c. FIRE LINE PROTECTION PERMIT
 - d. "GENERAL CONTRACTOR" SHALL ALSO MAKE SURE THAT ALL HIS SUBS PROPERLY COORDINATE THE INSPECTION PROCESS WITH THE WILMINGTON FIRE DEPARTMENT ADMINISTRATION OFFICE.
 16. PROJECT SHALL COMPLY WITH CITY OF WILMINGTON CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL APPROVAL OF THE CITY OF WILMINGTON. APPROVAL OF THE CITY OF WILMINGTON IS REQUIRED FOR ALL SANITARY SEWER CONNECTIONS TO BE MADE TO THE CITY OF WILMINGTON. APPROVAL OF THE CITY OF WILMINGTON IS REQUIRED TO BE ON THE LIST OF APPROVED DEVICES BY DISFRODOCH OR ASSE.

- ### KEY NOTES
- a. PRE HYDRANT ASSEMBLY, SEE DETAIL SHEET C7.2.
 - b. DOWNSPOUT CONNECTION, SEE DETAIL SHEET C7.3.
 - c. THURST BLOCKING, TYP. SEE DETAIL SHEET C7.3.
 - d. 6" DOUBLE CHECK VALVE ASSEMBLY (DCVA) IN ABOVE GROUND HEATED ENCLOSURE, SEE DETAIL SHEET C7.8. SEE ELEC. PLANS FOR ADULT INFO.
 - e. EXTEND WATER MAIN TO 12-IN. ABOVE FINISH FLOOR FOR FIRE PROTECTION CONNECTION, SEE DETAIL SHEET.
 - f. ROOF DRAIN CLEANOUT, SEE DETAIL SHEET C7.3.
 - g. TAPPING SELECT AND VALVE ASSEMBLY AND BLOCKING, SEE DETAIL SHEET C7.3.
 - h. FIRE DEPARTMENT CONNECTION, SEE DETAIL SHEET C7.3.
 - i. GATE VALVE AND VALVE BOX, SEE DETAIL SHEET C7.5.
 - j. GAS METER & GAS SERVICE LINES, SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION.
 - k. EXTEND UTILITY TO WITHIN 5'-0" OF BUILDING WALL OR AS INDICATED ON PLUMBING PLANS. REFER TO PLUMBING PLANS FOR LOCATION & INVERT.
 - l. NEW GREASE TRAP, REFER TO PLUMBING PLANS FOR LOCATION & INVERT.
 - m. CONNECT TO ROOF DRAIN, SEE PLUMBING PLANS.
 - n. MANHOLE, SEE DETAIL SHEET C7.4.
 - o. SANITARY SEWER CLEAN OUT, SEE DETAIL SHEET C7.8.
 - p. PIPE CONNECT SIGN IN W/ PRESIDENTIAL LOCKING PLATE. COORDINATE SIZE, MATERIAL & LOCATION WITH SITE ELEC. PLANS & LOCAL UTILITY PROVIDER.



PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

Phase One: Renovations and Additions to: John T. Hoggard High School
4305 Shipyards Blvd.
Wilmington, North Carolina 28403

ARCHITECTS
BOWMAN MURRAY HEMMINGWAY
514 Market Street
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Tel - (910) 762-2821
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Project ID # 900-9005

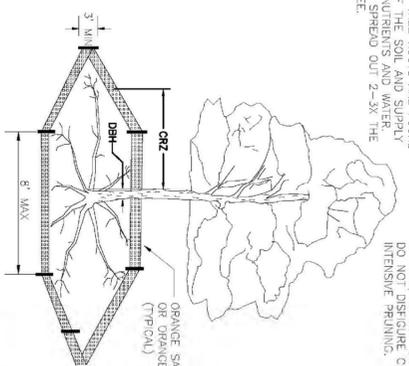
CLTH DESIGN, PA
3000 SOUTHWEST CORNER
1000 W. MARKET STREET
WILMINGTON, NC 28401
TEL: (910) 762-2821
FAX: (910) 762-2806

SEAL
REGISTERED PROFESSIONAL ENGINEER
NO. 23993
STATE OF NORTH CAROLINA
S-27-16

JOB NUMBER 15-120
DRAWN BY JGM
CHECKED BY JGM
DATE MAY 27 2016
REVISIONS 5-19-16 MOODY DWENIGY SUB

SITE UTILITY PLAN
SHEET NUMBER
C-5.2

NOTE: OF THE TREE IS NEEDED FOR LEAN GROWTH TO PRODUCE OXYGEN, FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE. DO NOT DISCHARGE WIND AND SOFTEN NOISE. THE MAJORITY OF NUTRIENTS AND WATER, GENERALLY, SHOULD SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

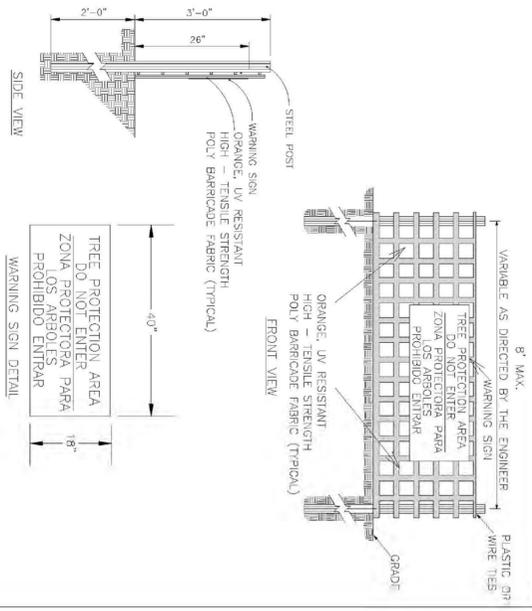


- NOTES:
1. INSPECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
 2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 3. IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 1 1/2" OF MULCH AND/OR COMPOSTION IN THIS ZONE SHOULD BE PLACED WHERE MACHINERY OPERATES TO REDUCE SOIL COMPACTION TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS 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 TO REDUCE SOIL COMPACTION IN THIS ZONE.
 5. THE TRUNK IS PROHIBITED TO BE CUT OR DAMAGED. NO MATERIALS OR EQUIPMENT SHALL BE ALLOWED TO PARK UNDER TREES. DAMAGING THE BARK WITH CHAINSAWS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED.
 6. FALLING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$300/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
DRAWN BY: NSR
CHECKED BY: ROO P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION
SHEET 1 OF 2

WILMINGTON
CITY OF WILMINGTON ENGINEERING
P.O. BOX 1819
WILMINGTON, NC 28402
(910) 341-7807
SID 15-019

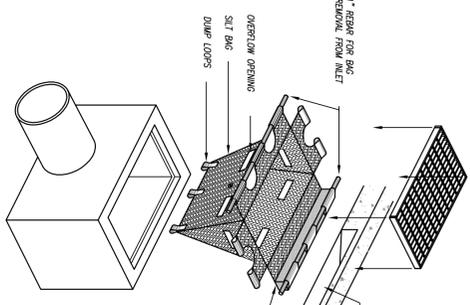


- NOTES:
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
 2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAIL.
 3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
 4. PROTECTIVE FENCING SHALL BE PERIMETER, PROVIDE NO LESS THAN 4" CLEARANCE FROM TREE TRUNK AND 6" CLEARANCE FROM BRANCHES.
 5. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCING AND SIGNS THROUGHOUT DURATION OF PROJECT.
 6. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

DATE: JAN 2015
DRAWN BY: NSR
CHECKED BY: ROO P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION
SHEET 2 OF 2

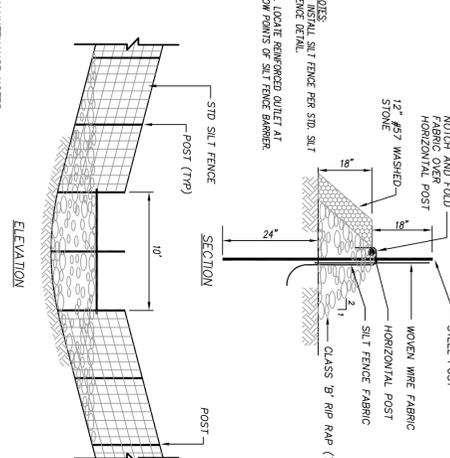
WILMINGTON
CITY OF WILMINGTON ENGINEERING
P.O. BOX 1819
WILMINGTON, NC 28402
(910) 341-7807
SID 15-019



- NOTES:
1. CONTRACTOR TO INSPECT SILT BAG EVERY TWO WEEKS OR AFTER EVERY SUBSTANTIAL RAIN EVENT.
 2. CONTRACTOR TO REMOVE AND DISPOSE OF COLLECTED SILT AT AN ACCEPTABLE OFF SITE LOCATION.
 3. COLLECTED SEDIMENT TO BE REMOVED ROUTINELY TO ENSURE FLOW THROUGH SILT BAG.
 4. SILT BAG SHALL BE MANUFACTURED FROM WORKER PROTECTIVE FABRIC (WPPF) OR A CATCH BASIN OR POUCH INLET TO FILTER SEDIMENT FROM RAINFALL ENTERING THE INLET. DEVICE SHALL BE PROVIDED WITH AN ANCHOR SYSTEM TO SECURE BAG TO A VERTICAL SURFACE ADJACENT TO A HORIZONTAL GRADE.
 5. THE DEVICE SHALL BE A HIGH FLOW "SILT-SACK" AS MANUFACTURED BY ACE ENVIRONMENTAL, INC. OR APPROVED EQUIVALENT.
 6. INSTALL RANGE IN ACCORDANCE WITH MANUFACTURER'S APPROVED AND INSTALLED AS SHOWN ON SECTION B.
 7. INSPECT DEVICE AFTER EACH RAIN EVENT AND AT INTERVALS NOT EXCEEDING TWO WEEKS DURING CONSTRUCTION. REMOVE COLLECTED SEDIMENT AND DISPOSE OF IT IN AN APPROVED PROTECTED LOCATION. REMOVE AND REINSTALL DEVICE FOLLOWING RAIN AND REPAIR AND STABILIZATION OF THE UNDERLYING SURFACE. R.E.

SILT BAG INLET PROTECTION

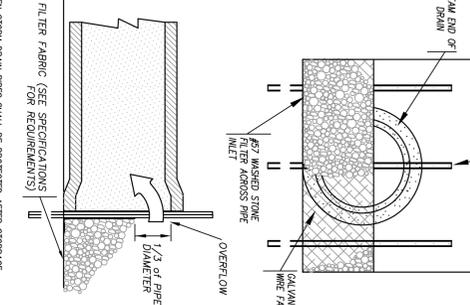
N.T.S.



- NOTES:
1. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE/FABRIC. THE FENCE/FABRIC SHOULD BE REINFORCED WITH STEEL POSTS AND WIRE. REMOVE ALL FENCING MATERIALS AND RESTORE ORIGINAL AREA AS SOON AS POSSIBLE.
 2. GRADE AND STABILIZE IT AFTER THE CORRESPONDING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TEMPORARY REINFORCED SILT FENCE OUTLET

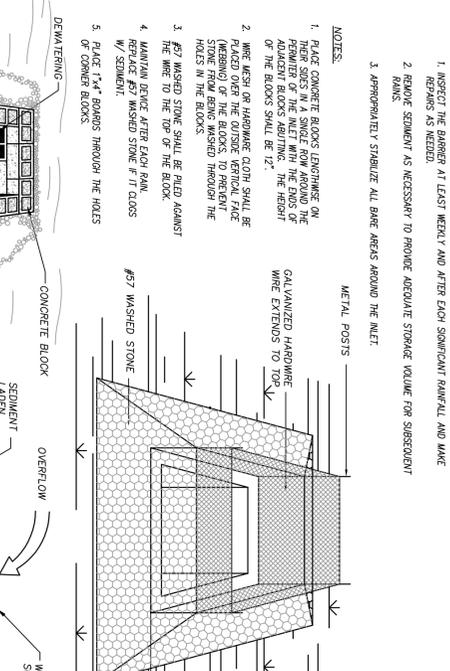
N.T.S.



- NOTES:
1. ALL OPEN STORM DRAIN PIPES SHALL BE PROTECTED AFTER STORAGE OF WORK EACH DAY AS ILLUSTRATED.
 2. ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF AND THE TRENCH BOTTOM REGRADED AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS PRIOR TO COMMENCEMENT OF LAYING PPE.

STONE FILTER INLET PROTECTION FOR STORM DRAIN UNDER CONSTRUCTION

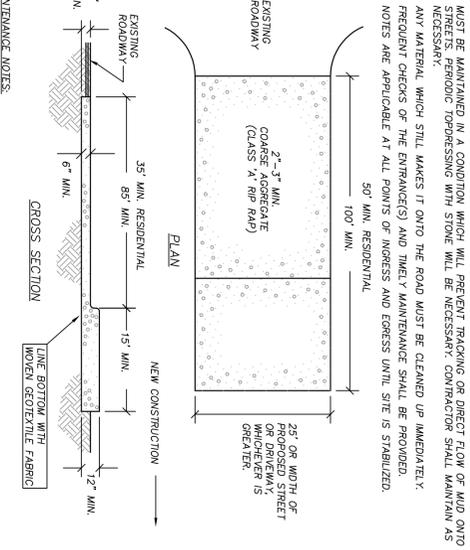
N.T.S.



- NOTES:
1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE MET WITH THE ENDS OF THE BLOCKS SHALL BE 12" APART.
 2. WIRE MESH OR HARDWARE CLOTH SHALL BE STAPLED TO THE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS.
 3. #37 WASHED STONE SHALL BE PAILED AGAINST THE WIRE TO THE TOP OF THE BLOCK.
 4. MAINTAIN DEVICE AFTER EACH RAIN W/ SEDIMENT.
 5. PLACE 1"x4" BOARDS THROUGH THE HOLES OF CONCRETE BLOCKS.

TEMPORARY CATCH BASIN AND YARD INLET PROTECTION

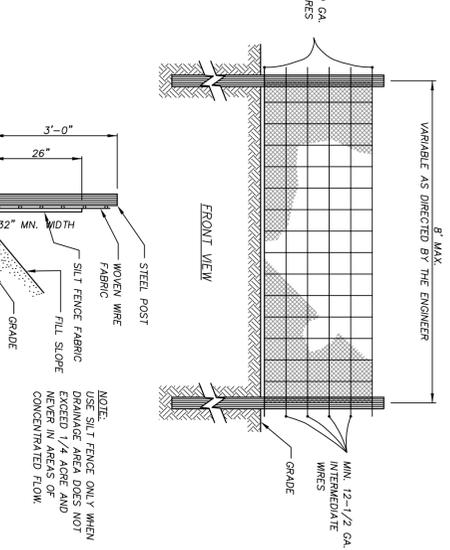
N.T.S.



- NOTES:
1. MAINTAIN THE GRASSY PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE.
 2. MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE.
 3. IMMEDIATELY REMOVE ALL QUESTIONABLE MATERIALS SHOULD, WASHED OR TRACKED ONTO PAVEMENT.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

N.T.S.



- NOTES:
1. SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW.

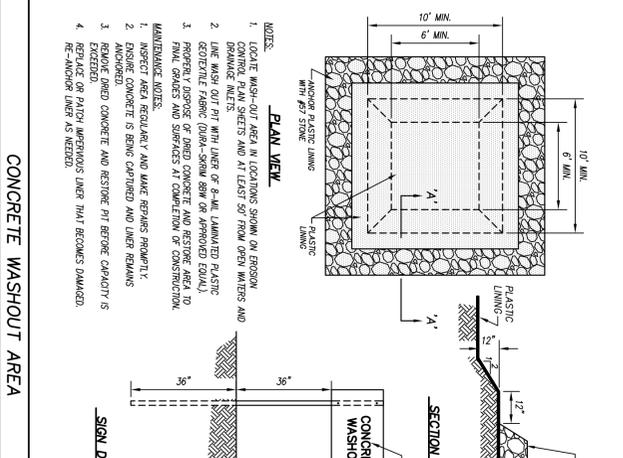
STANDARD TEMPORARY SILT FENCE

N.T.S.

DATE: JAN 2015
DRAWN BY: NSR
CHECKED BY: ROO P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION
SHEET 2 OF 2

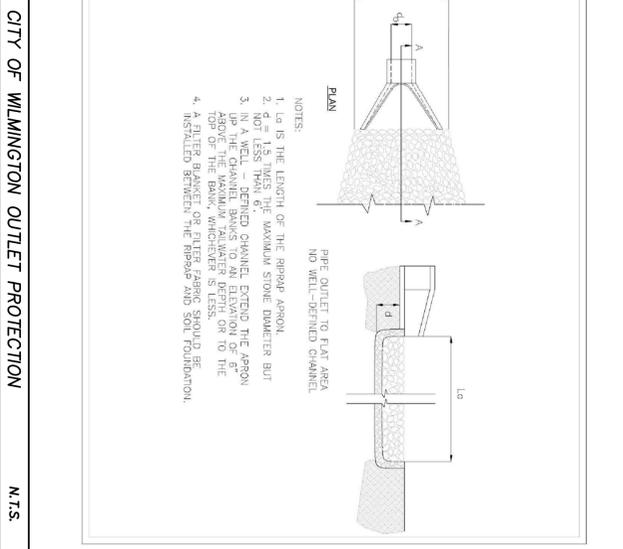
WILMINGTON
CITY OF WILMINGTON ENGINEERING
P.O. BOX 1819
WILMINGTON, NC 28402
(910) 341-7807
SID 15-019



- NOTES:
1. CONCRETE WASH-OUT AREA IN LOCATIONS SHOWN ON REGION CONCRETE PLAN SHEETS AND AT LEAST 50' FROM OPEN WATERS AND DRAINAGE INLETS.
 2. LINE WASH OUT PIT WITH LAYER OF 8-MIL LAMINATED PLASTIC GEOTEXTILE FABRIC (DRAIN-SHIELD OR APPROVED EQUAL).
 3. FINE GRADES AND SURFACES AT CONSTRUCTION OF CONSTRUCTION.
 4. MAINTAINANCE NOTES:
 1. INSPECT AREA REGULARLY AND MAKE REPAIRS PROMPTLY.
 2. ENSURE CONCRETE IS BEING CAPTURED AND LAYER REMAINS AWAY.
 3. REMOVE ODED CONCRETE AND RESTORE PIT BEFORE CAPACITY IS RE-ACHIEVED.
 4. RESTORE OF PATCH MATERIALS LAYER THAT BECOMES DAMAGED.

CONCRETE WASHOUT AREA

N.T.S.



- NOTES:
1. LA IS THE LENGTH OF THE RIPRAP ZONE.
 2. NOT LESS THAN 6" WASHABLE STONE DIAMETER BUT UP TO THE CHANNEL BANKS TO AN ELEVATION OF 6" TOP OF THE BANK, WHICHEVER IS LESS.
 3. IN A WELL - DENIED CHANNEL, EXTEND THE RIPRAP TO THE TOP OF THE BANK, WHICHEVER IS LESS.
 4. A FILTER BRACKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

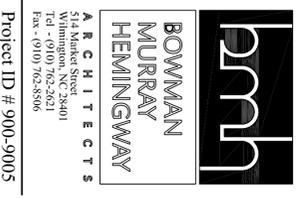
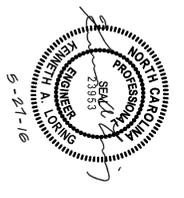
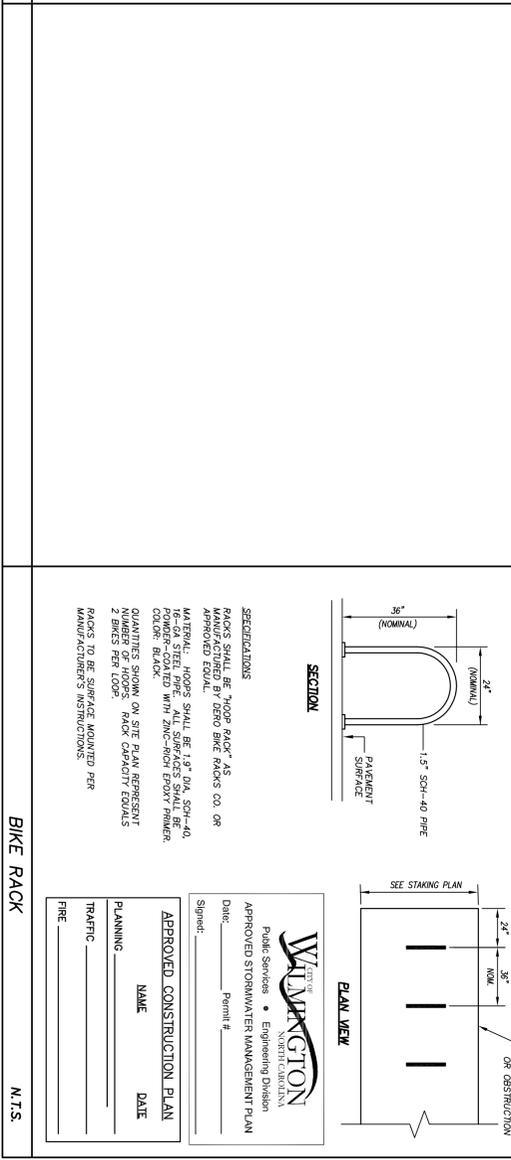
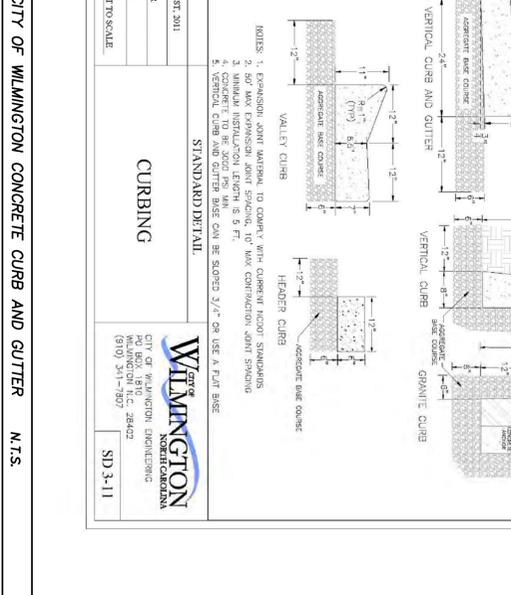
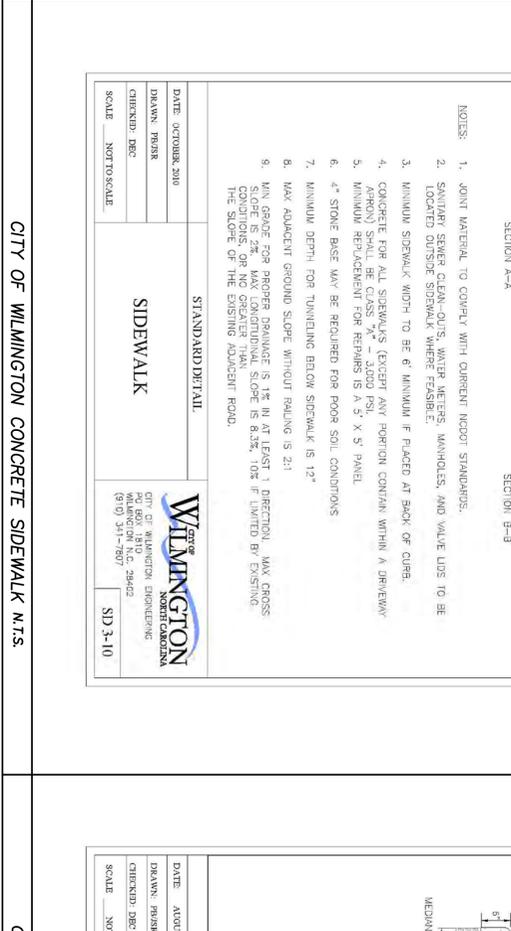
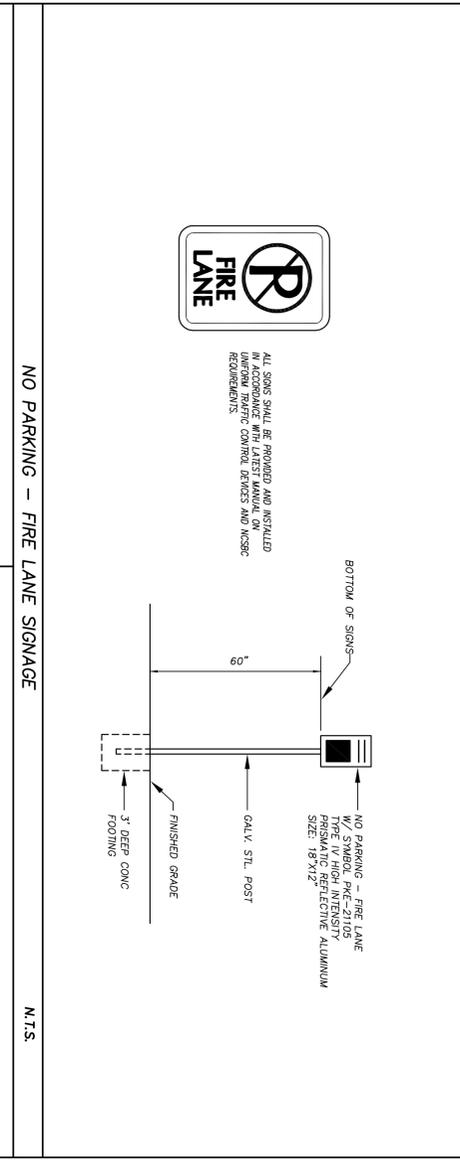
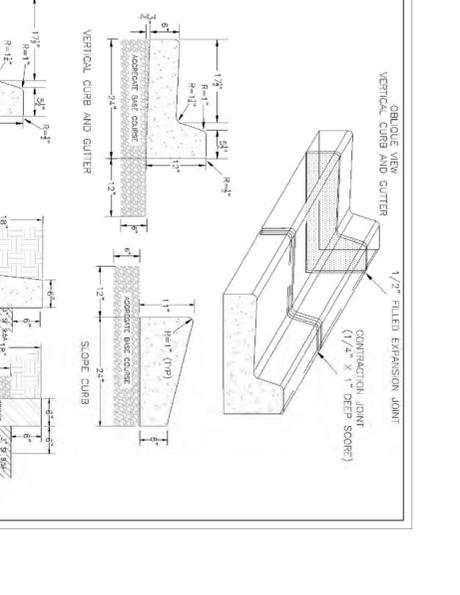
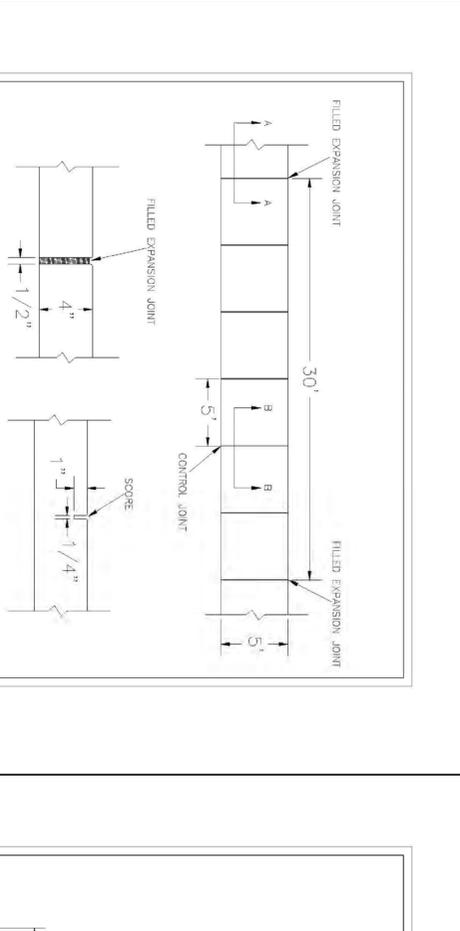
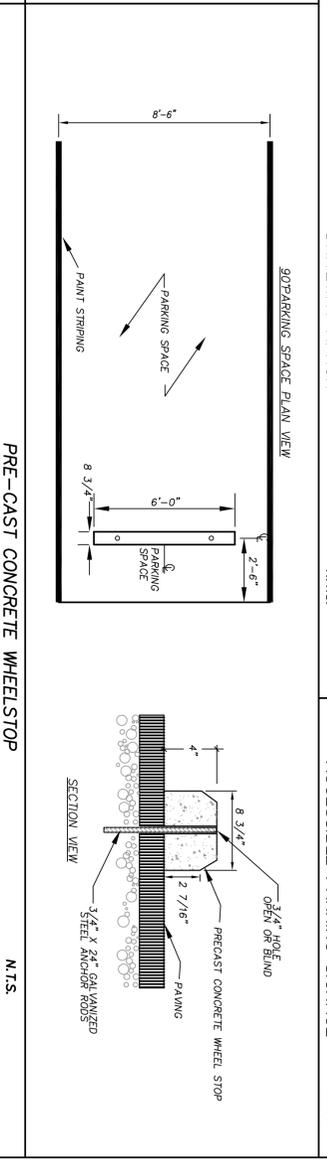
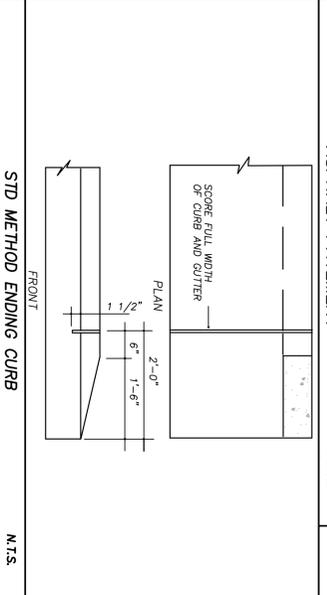
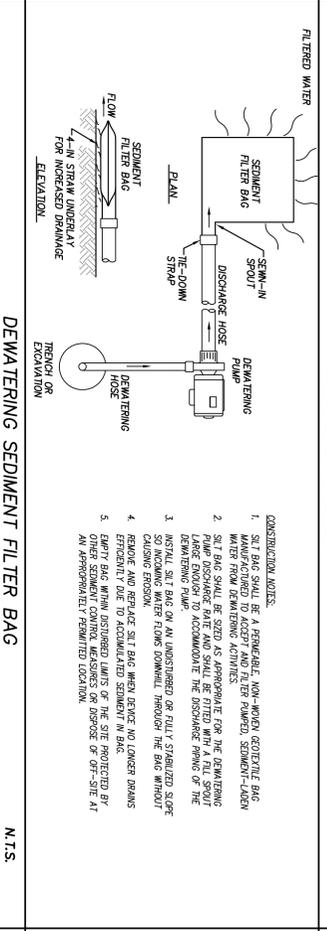
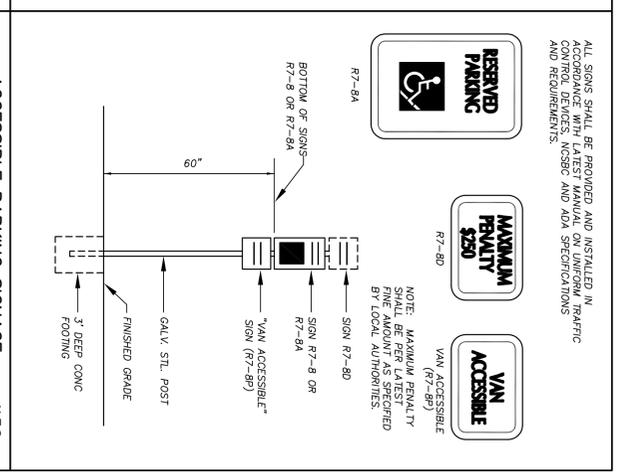
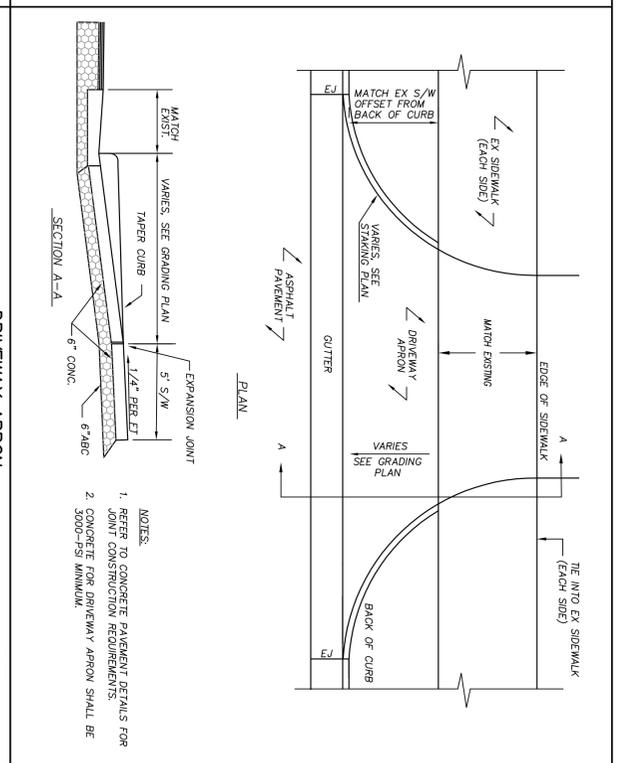
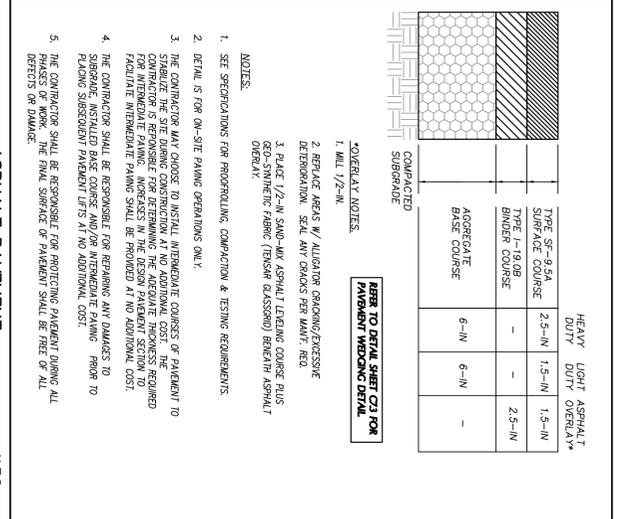
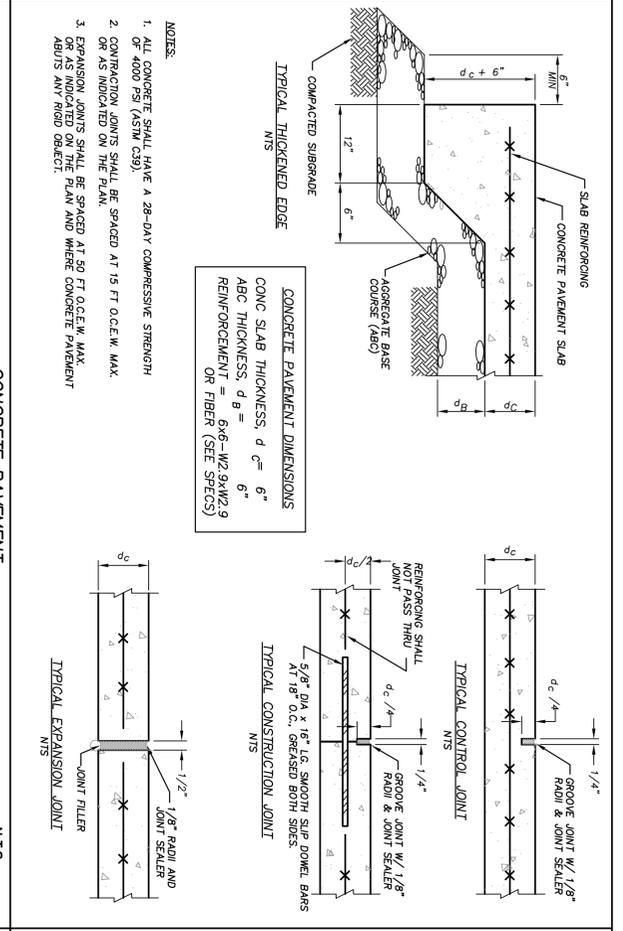
PIPE OUTLET PROTECTION

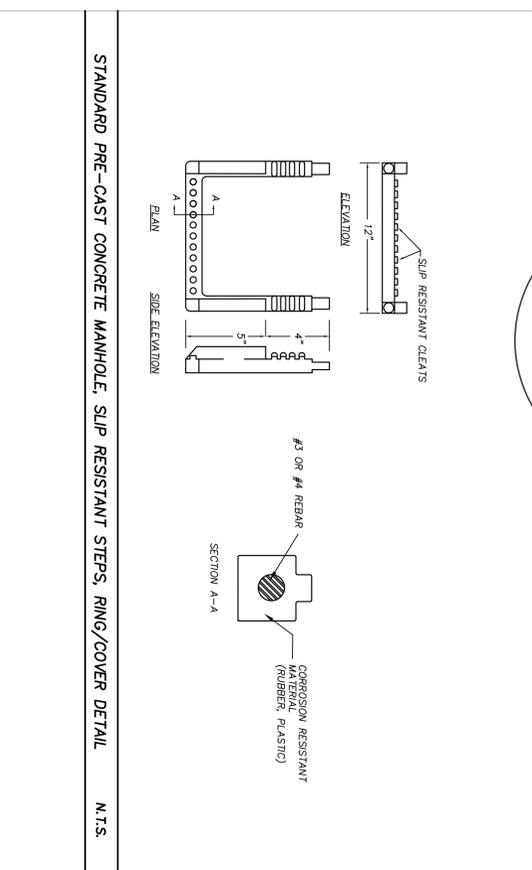
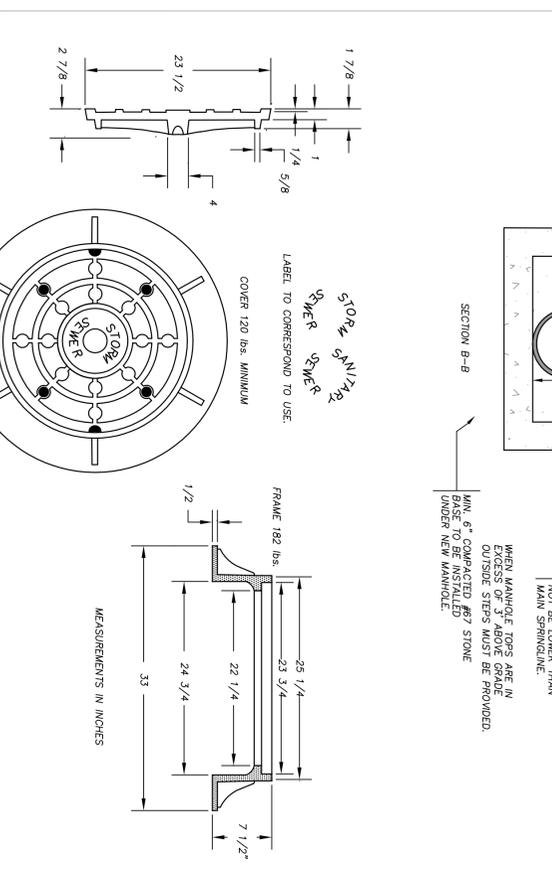
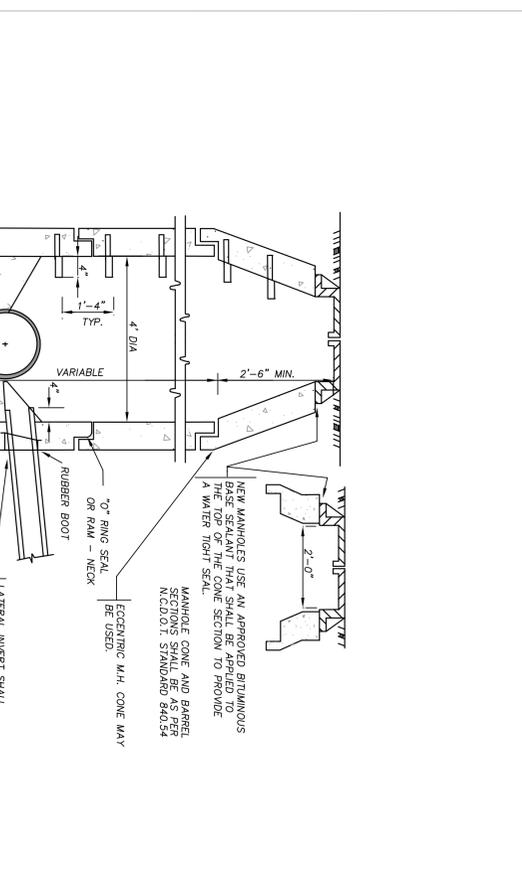
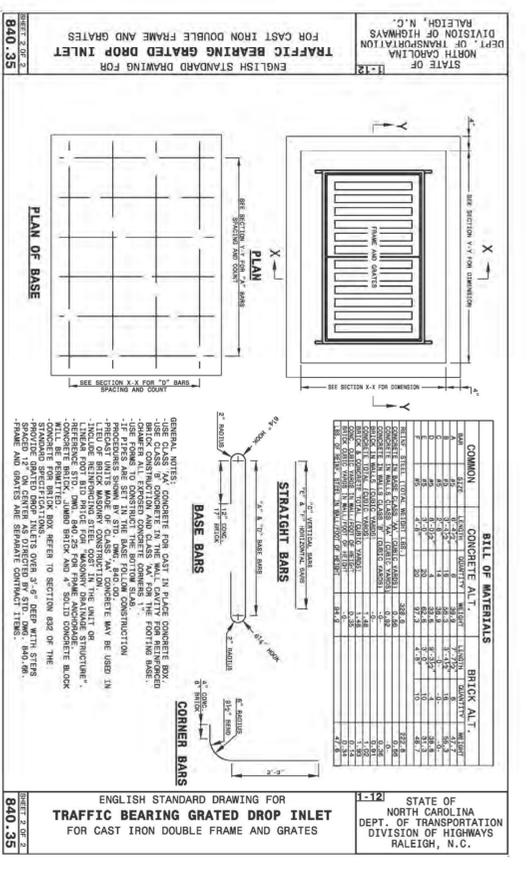
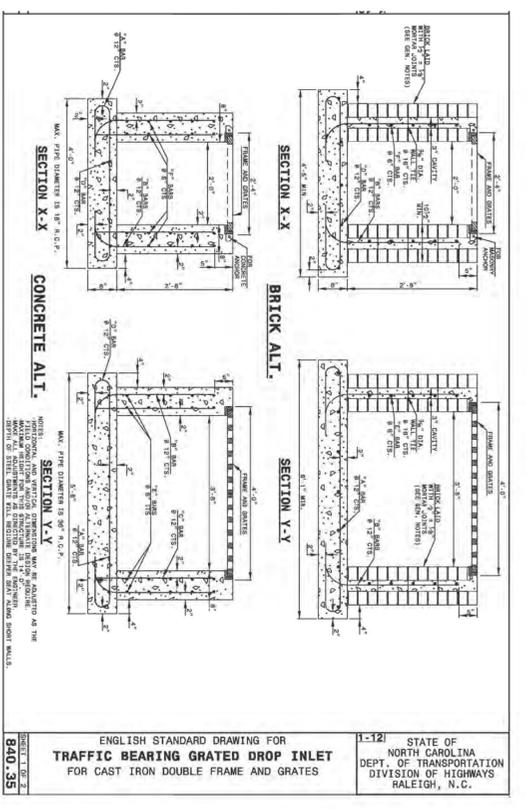
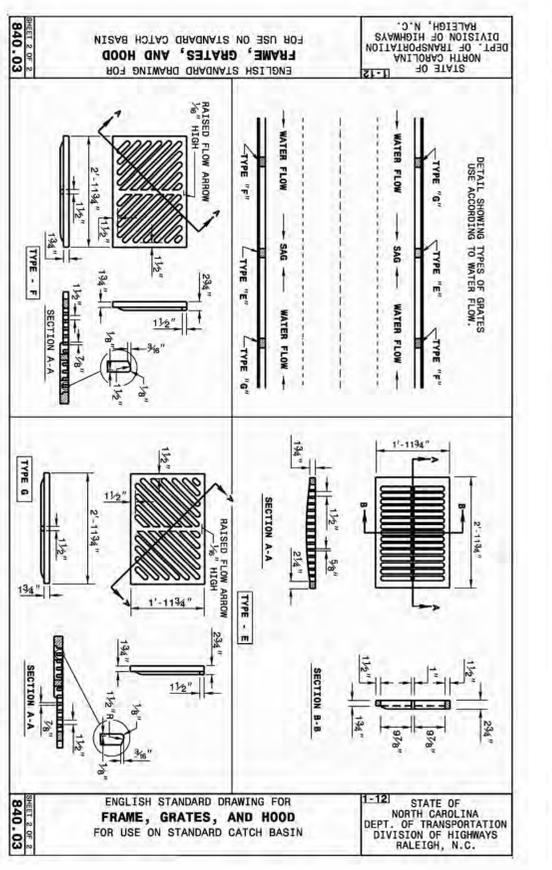
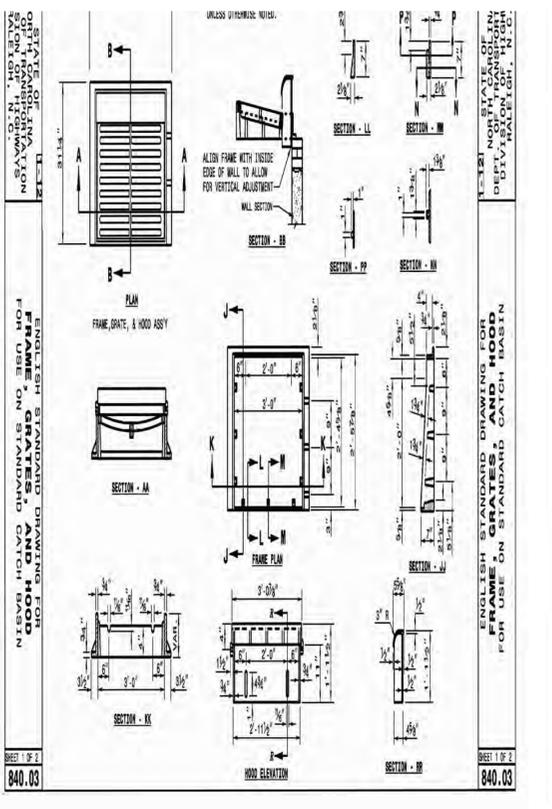
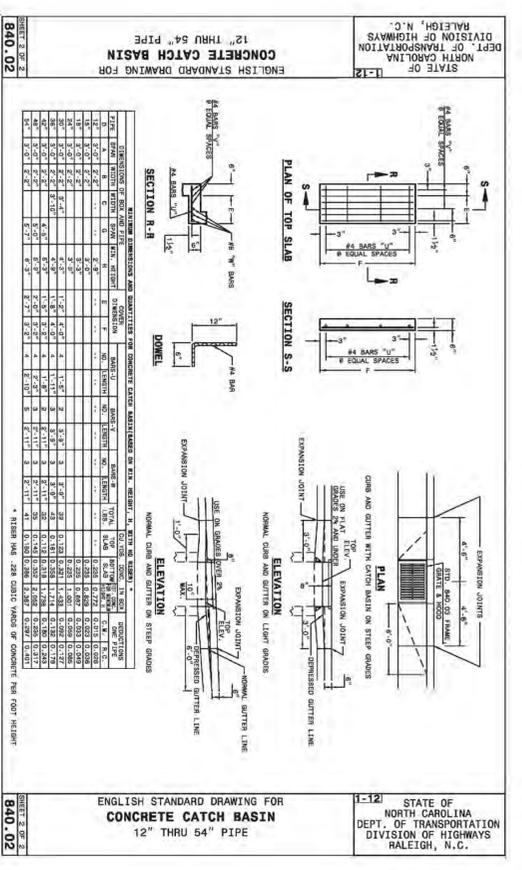
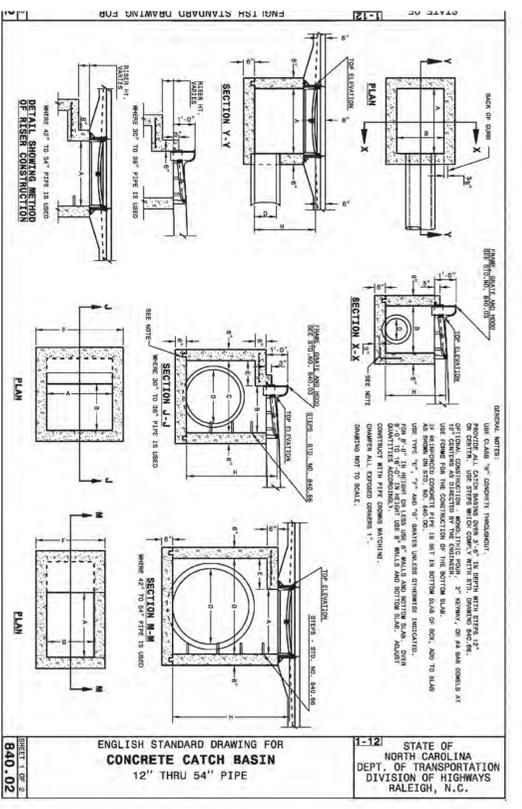
N.T.S.

DATE: MAY 27, 2016
REVISIONS:
SHEET NUMBER

WILMINGTON
CITY OF WILMINGTON ENGINEERING
P.O. BOX 1819
WILMINGTON, NC 28402
(910) 341-7807
SID 15-019

APPROVED CONSTRUCTION PLAN
TRAFFIC
DATE





NCDOT STORMWATER DETAILS

N.T.S.

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

WILMINGTON
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

APPROVED CONSTRUCTION PLAN
 NAME _____ DATE _____
 PLANNING _____
 TRAFFIC _____
 FIRE _____

Job Numbers 15-120
 Drawn by JGM
 Checked by JGM
 Date MAY 27, 2016
 Revisions

C7.4

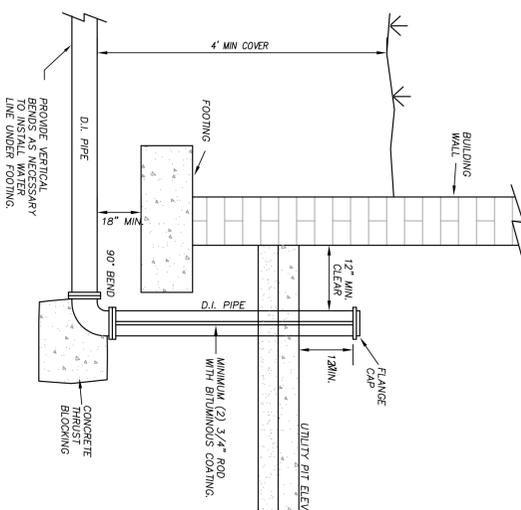
Phase One: Renovations and Additions to:
John T. Hoggard High School
 4305 Shipyard Blvd.
 Wilmington, North Carolina 28403

BOWMAN MURRAY HEMINGWAY ARCHITECTS
 514 Market Street
 Raleigh, NC 27601
 Tel - (919) 763-2621
 Fax - (919) 763-8806

Project ID # 900-9005

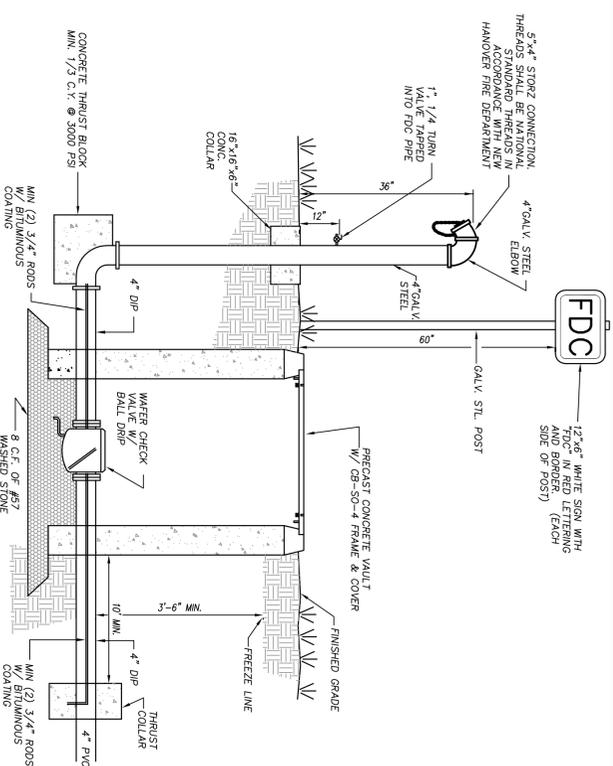
CLH DESIGN
 23853
 5-27-16

SEAL
 23853
 5-27-16



STANDARD FIRE SERVICE INSTALLATION AT BUILDING

N.T.S.

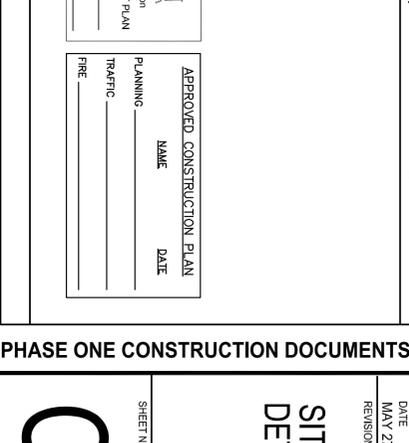
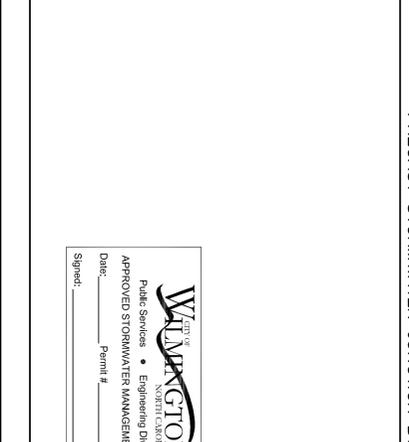
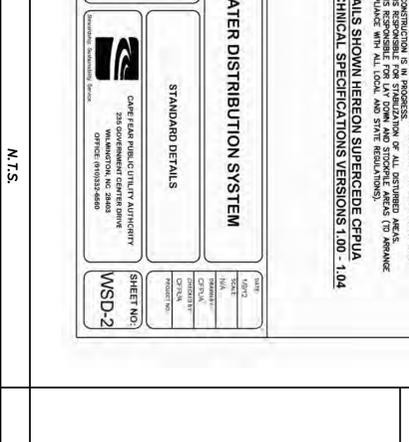
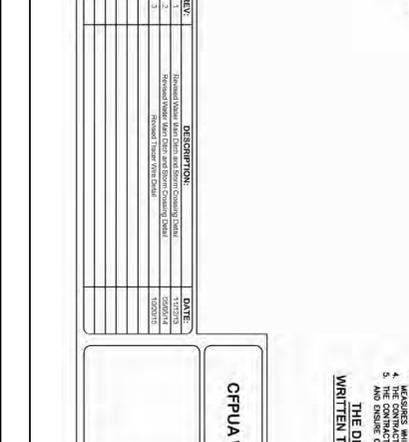
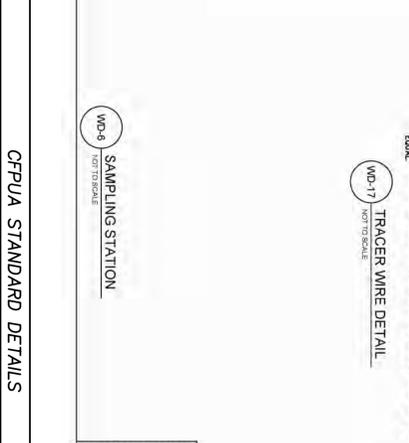
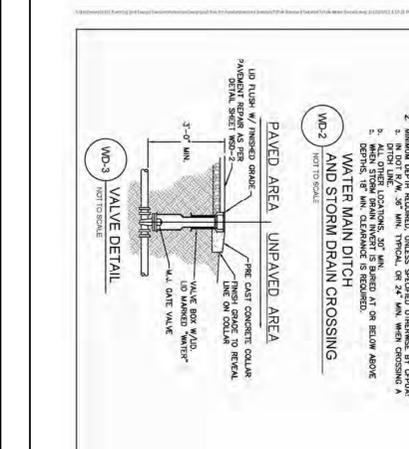
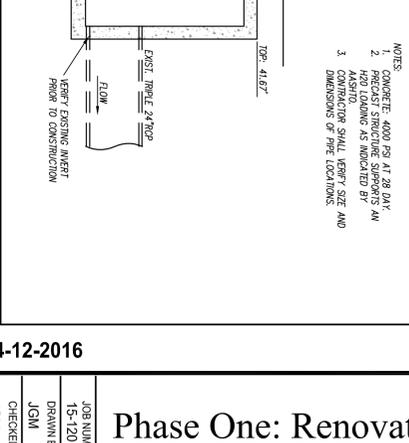
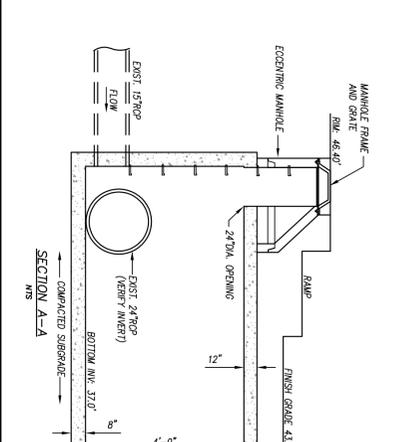
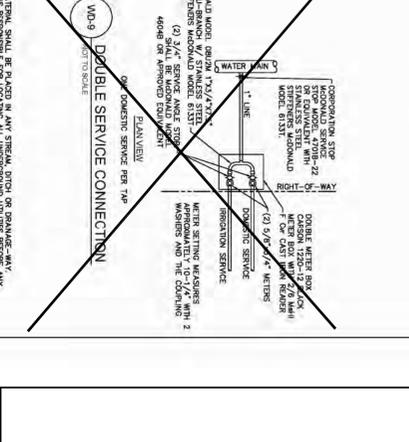
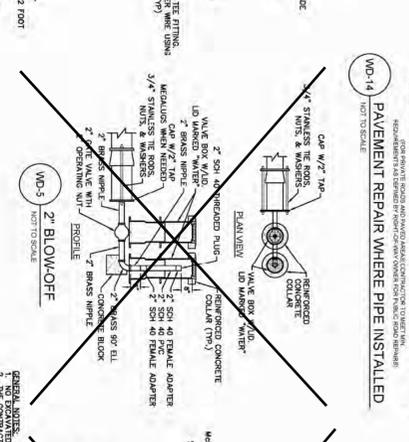
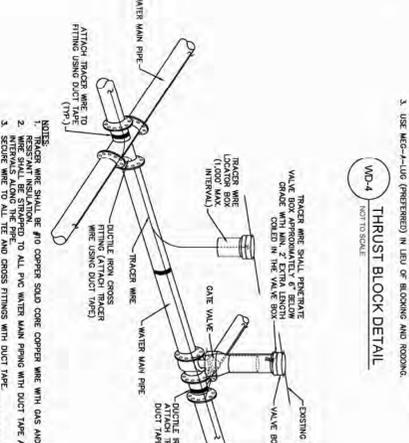
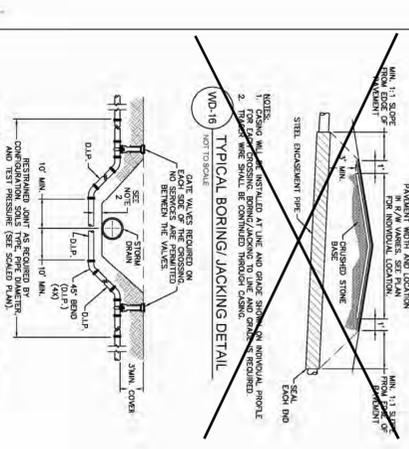
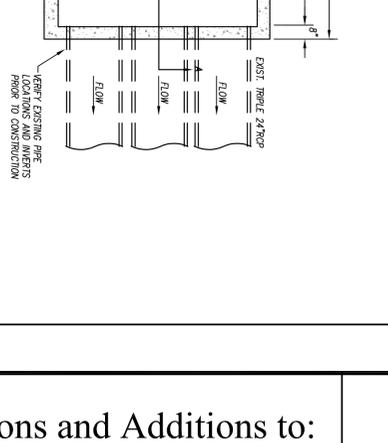
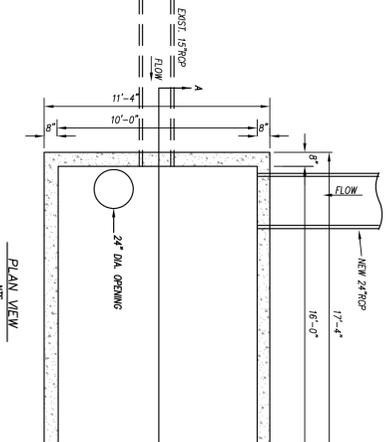
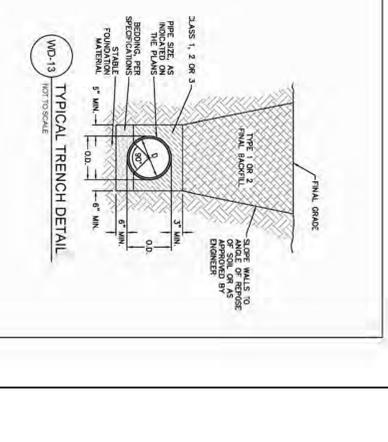
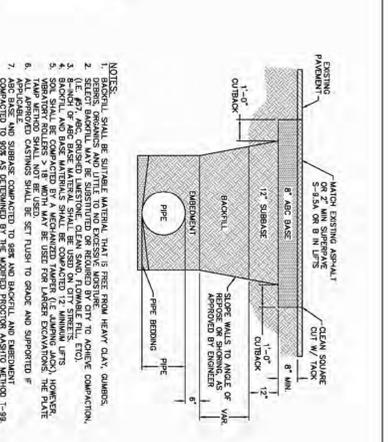
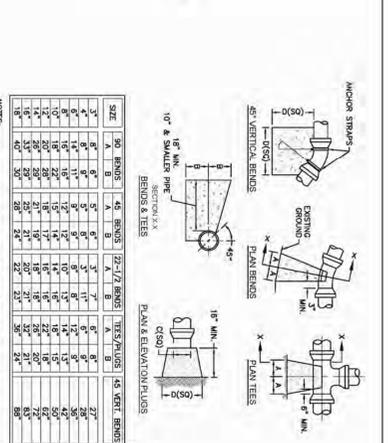
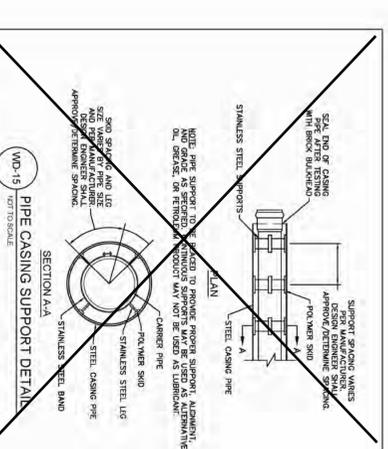
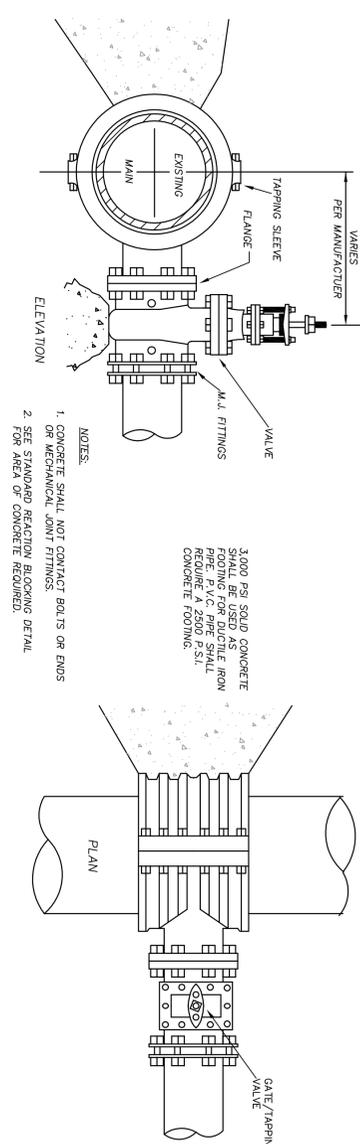


FIRE DEPARTMENT CONNECTION

N.T.S.

4" - 24" STANDARD TAPPING SLEEVE AND VALVE ASSEMBLY

N.T.S.



REV.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	05/21/2016
2	ISSUED FOR PERMIT	05/21/2016
3	ISSUED FOR PERMIT	05/21/2016

CPFWA WATER DISTRIBUTION SYSTEM

STANDARD DETAILS

DATE: 05/21/2016

PROJECT: 330 GOVERNMENT CENTER DRIVE, WILMINGTON, NC 28403

CONTRACT NO: WSD-2

SHEET NO: 07.5

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

APPROVED CONSTRUCTION PLAN

PLANNING NAME DATE

TRAFFIC NAME DATE

FILE NAME DATE

WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Permit # _____

Signed: _____

DATE: MAY 27, 2016

REVISIONS

JOB NUMBERS: 15-120

DRAWN BY: JGM

CHECKED BY: JGM

Phase One: Renovations and Additions to: John T. Hoggard High School

4305 Shipyard Blvd. Wilmington, North Carolina 28403

CLTH DESIGN/PA

314 Market Street, Suite 1800, Wilmington, NC 28403

Tel: (910) 763-2621 Fax: (910) 763-8806

Project ID # 900-9005

BOWMAN MURRAY HEMINGWAY ARCHITECTS

314 Market Street, Suite 1800, Wilmington, NC 28403

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SEAL

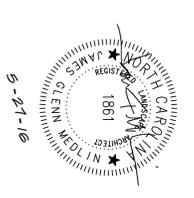
23853

STATE OF NORTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER

5-21-16

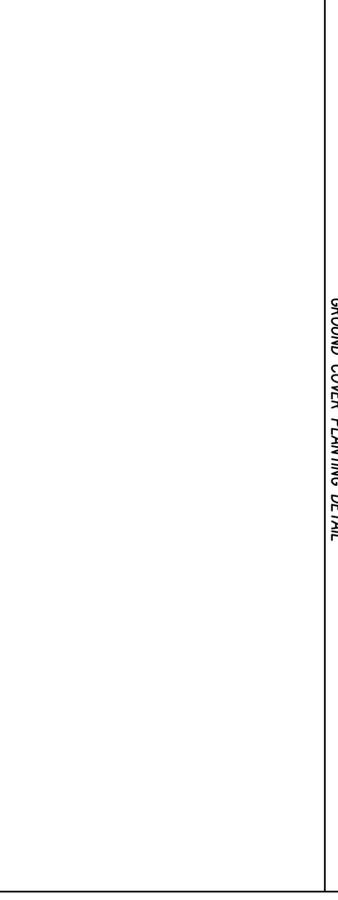
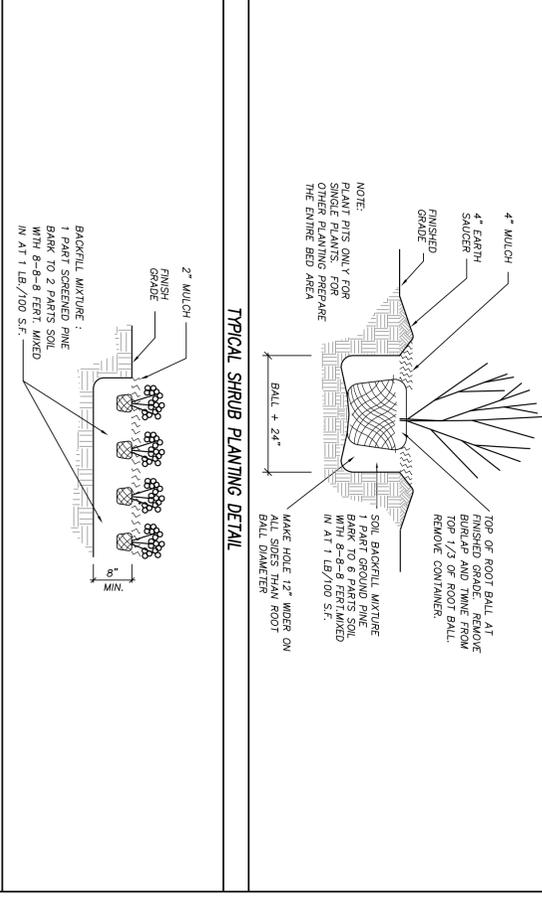
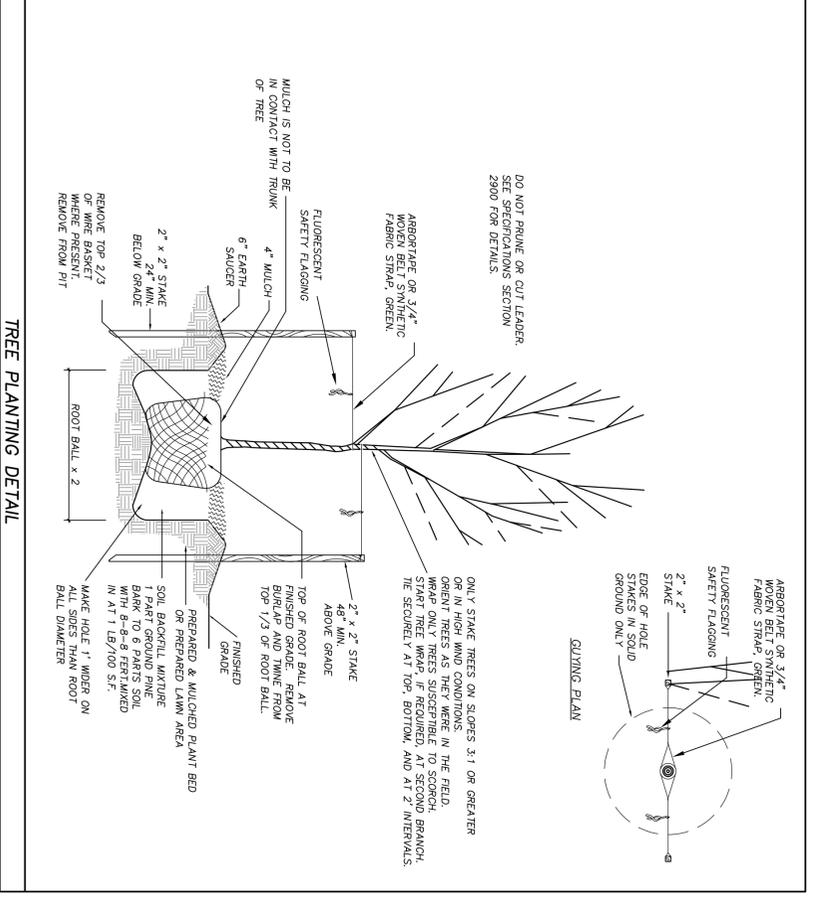
PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016



**Phase One: Renovations and Additions to:
John T. Hoggard High School**
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

JOB NUMBERS	15-120
DRAWN BY	JGM
CHECKED BY	JGM
DATE	MAY 27, 2016
REVISIONS	

SHEET NUMBER	C7.6	
PLANNING	NAME	DATE
TRAFFIC		
FIRE		

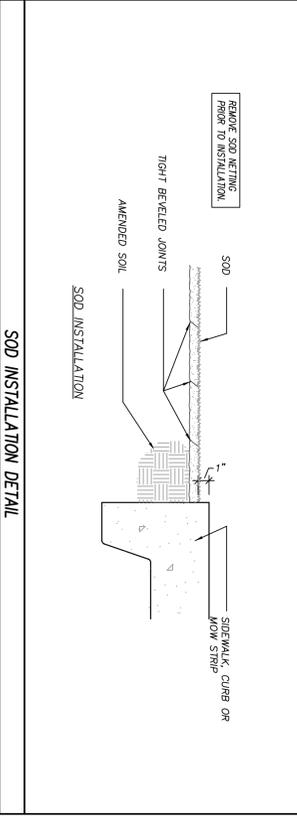
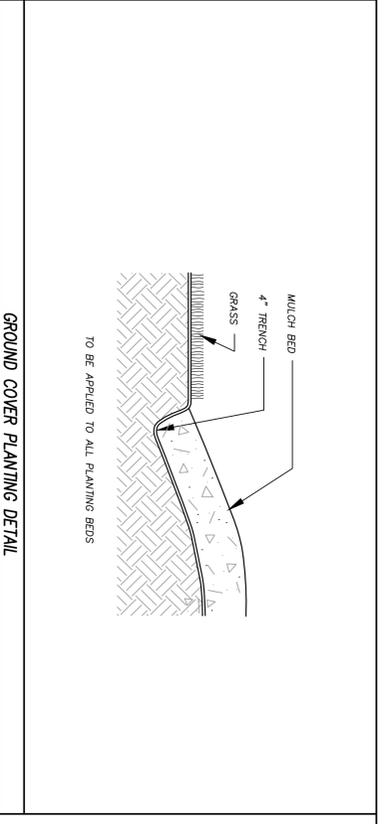


APPROVED CONSTRUCTION PLAN

PLANNING	NAME	DATE
TRAFFIC		
FIRE		

City of Wilmington, North Carolina
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____



- LOOK FOR EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE FINAL LAYOUT. VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR INSTALLATION OF THE CONTRACTOR, AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- CONTACT THE LANDSCAPE ARCHITECT FOR INSPECTION 48 HOURS IN ADVANCE OF THE SCHEDULED SITE VISIT AND AT THE FOLLOWING INTERVALS:
 - REVIEW OF GRADING PRIOR TO PLANT AND LAMN INSTALLATION
 - REVIEW OF PLANT MATERIAL PRIOR TO INSTALLATION
 - ONE SUBSTANTIAL COMPLETION MEETING FOR PLANT INSTALLATION.
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE WRITTEN SPECIFICATIONS.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDING.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT MANUFACTURER'S RECOMMENDED RATES AND INTERVALS.
- DO NOT INSTALL PLANT MATERIAL IN IMPROVISED SOILS (i.e. HOLES WHICH WERE FILLED WITH WATER DO NOT COMPLETELY DRAIN WITHIN TWO HOURS).
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL PLANTS AND LAMN AREAS AT HIS COST FROM HIS OWN WATER SOURCE INCLUDING PERIODS OF DROUGHT UNTIL COMPLETION. AT THE END OF EACH WATERING PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL EQUIPMENT & SUBCONTRACTORS AWAY FROM SEEDING AREAS. IF DAMAGE OCCURS THROUGH NO FAULT OF THE OWNER, AREAS SHALL BE REGRADED AND RESEEDED IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL WATER AND MAINTAIN THOSE AREAS UNTIL THEY ARE AT 95% COVERAGE AT SUBSTANTIAL COMPLETION.
- SUBSTITUTIONS OF PLANT MATERIAL SHALL ONLY BE ACCEPTED 60 DAYS PRIOR TO COMMENCEMENT OF PLANTING. ANY SUBSTITUTIONS MUST BE APPROVED BY THE ARCHITECT AND OWNER. ACCEPTED FOR LACK OF AVAILABILITY REASONS WHICH CAN BE SUBSTANTIATED OR FOR SUPERIOR SEED SUBSTITUTIONS.
- GENERAL LAMN AREAS SHALL BE SEEDED WITH SUNSTAR/RIVERA BERMUDA/GRASS OR APPROVED EQUIV.
- LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT TO REVIEW GRADING ONE WEEK PRIOR TO SEEDING. IF THE LANDSCAPE CONTRACTOR AND LANDSCAPE ARCHITECT FIND GRADING UNACCEPTABLE FOR FINAL SEEDING, LANDSCAPE CONTRACTOR SHALL BRING IT TO THE ATTENTION OF THE GENERAL CONTRACTOR. LANDSCAPE CONTRACTOR SHALL NOT PROCEED WITHOUT APPROVAL BY LANDSCAPE ARCHITECT.

- CHESE ALL OUT GRADED OR COMPACTED AREAS TO A MINIMUM DEPTH OF 8".
 - DISC ALL AREAS TO RECEIVE GRASS TO A MINIMUM OF 8 INCHES AND MOUND WITH 3 INCHES OF WELLS SCREENED TOPSOIL ON-SITE SPECIFICATIONS SECTION 29000.
 - REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE RELATIVELY SMOOTH AND UNIFORM.
 - APPLY AGRICULTURAL LIME, FERTILIZER, AND PHOSPHATE UNIFORMLY AS PER SPECIFICATIONS AND MIX WELL WITH SOIL.
 - CONTINUE TILLAGE UNTIL A WELL-PHILTRATED, FINE, REASONABLY UNIFORM SEEDBED IS PREPARED TO A 6 INCHES DEPTH.
 - SEED AT RATE SPECIFIED OR AS NEEDED TO ACHIEVE AND MAINTAIN A THICK, HEALTHY GROUND COVERAGE.
 - MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH BEGON THROUGH WATERING OF GRASSED AREAS IMMEDIATELY UPON INSTALLATION. DO NOT ALLOW GRASSED AREAS TO BECOME EXCESSIVELY DRY.
 - INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS AS NEEDED.
 - IF CONFLICTS OCCUR BETWEEN WRITTEN SPECIFICATIONS AND THE DRAWINGS, THE WRITTEN SPECIFICATIONS SHALL PREVAIL.
- SEEDBED PREPARATION**
- APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS. OR APPLY A MINIMUM 3,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND A MINIMUM 500 LB/ACRE 10-10-10 FERTILIZER, AS NEEDED TO ESTABLISH 95% COVERAGE (AS DETERMINED ON A PER SQUARE YARD BASIS) PRIOR TO SUBSTANTIAL COMPLETION. CONTRACTOR TO SUBMIT A COPY OF ALL SOIL REPORTS TO OWNER UPON RECEIPT.
- LIME & FERTILIZATION SCHEDULE**
- DURING ALL PHASES OF CONSTRUCTION, GROUNDCOVER ON EXPOSED SLOPES SHALL BE PROVIDED WITHIN 30 DAYS OF EXCAVATION OR DISTURBANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING PLANTS AND TREES WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
 - USE EXCELLENT MATING OR OTHER APPROVED CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS.
 - APPLY 4000 LB/ACRE/2 TONS LB/AO GRAIN STRAW OVER SEEDING AREAS AND ANCHOR STRAW GRADING WITHIN 30 DAYS OF EXCAVATION OR DISTURBANCE. STRAW SHALL BE TACKLED ON OTHER APPROVED METHODS. ASPHALT TACKING SHALL BE 400 GAL/LACRE (9 GAL/1000 SF).
 - MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES AND CLOG DRAINAGE DEVICES.

DATE	APRIL 2008	STANDARD DETAIL
DRAWN BY	SR	LANDSCAPE NOTES
CHECKED BY	H.R. PE	CITY OF WILMINGTON NORTH CAROLINA OFFICE OF WILMINGTON ENGINEERING WILMINGTON, NC 28402 (910) 341-7807
SCALE	NOT TO SCALE	SD 15-14

- No plantings over thirty (30) inches in height allowed in vision clearance.
- Protection from vehicular traffic provided around all landscaping with a minimum height of six (6) inches.
- Owner is responsible for maintenance to ensure plant material lives and prospers.
- Planting plans shall be approved by Landscape Designer prior to installation.
- Landscaping shall be required at the ends of all parking rows.
- A low buffer shall be required where parking is within fifty (50) feet of the Right-of-Way.
- Landscaped islands shall be a minimum width of twelve (12) feet (back of curb to back of curb) and a minimum of two hundred and sixteen (216) square feet.
- A minimum of fifteen (15) trees 2 inches or greater in diameter as measured 6 inches above ground per disturbed acre.
- For recommended Plant List see "Landscape" 1-10-4.

DATE	APR 15 - JUL 15	PLANTING RATE
APR 15 - JUL 15	** MULLED SUNSTAR OR RIVERA BERMUDA 85 LBS/ACRE *	
JULY 15 - AUG 15	SUNSTAR OR RIVERA BERMUDA SPROGS 5 BUSHELS/1,000 SF	
AUG 15 - APR 15	TEMPORARY SEEDING APPLIES**	

CITY OF WILMINGTON LANDSCAPE NOTES

LAWN MAINTENANCE NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR LAWN MAINTENANCE UNTIL FINAL COMPLETION.
- LAWN MUST BE AT 95% COVERAGE AT SUBSTANTIAL COMPLETION REVIEW TO BE ACCEPTED.
- IF NOT AT 95% SUBSTANTIAL COMPLETION WILL BE DELAYED UNTIL THE FOLLOWING GROWING SEASON.

SUBSTANTIAL COMPLETION (GRASS):

CONTRACTOR SHALL BE RESPONSIBLE FOR LAWN MAINTENANCE AND WATERING UNTIL SUBSTANTIAL COMPLETION. LAWN/Turf SHALL BE CONSIDERED SUBSTANTIALLY COMPLETE WHEN GRASS ESTABLISHMENT IS AT LEAST 95% OF THE MINIMUM REQUIREMENTS AND NOT MEET SPECIFIED TOLERANCES. SPECIFIED TOLERANCES ARE MET POSSIBLY INTO THE FOLLOWING GROWING SEASON. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR WATERING AND MAINTENANCE OF THE GRASS UNTIL SUBSTANTIAL COMPLETION IS REACHED. SEE SPECIFICATIONS FOR FURTHER INFORMATION.

PERMANENT SEEDING SCHEDULE— BERMUDA SEED

PREPARATION OF TEMPORARY GROUND COVER SHALL BE REQUIRED OVER ALL DISTURBED AREAS OF THE SITE AS SOON AS POSSIBLE. HOWEVER, NO LATER THAN 30 DAYS AFTER CONSTRUCTION ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED DURING ANY PHASE OF WORK.

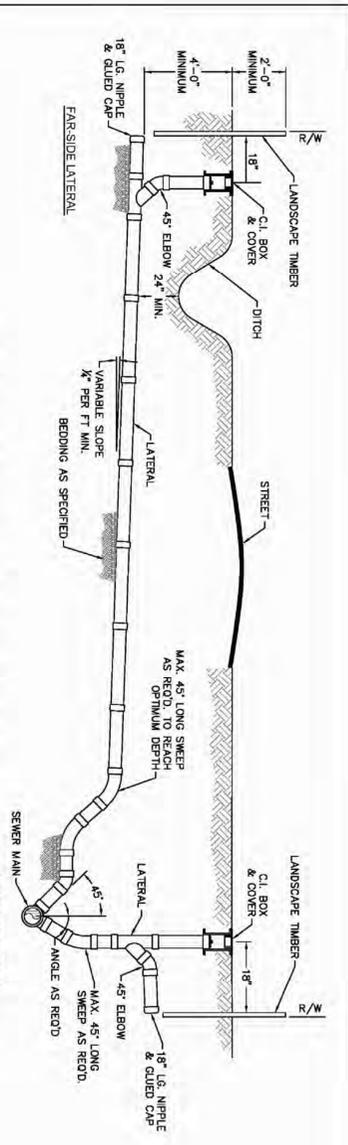
TEMPORARY OR PERMANENT GROUND COVER SHALL BE PROVIDED ON ALL SLOPES WITHIN 15 WORKING DAYS OR 30 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITIES PERMANENTLY OR TEMPORARILY CEASED.

DATE	TYPE	PLANTING RATE
AUG 15 - FEB 1	TALL RESCUE AND WINTER RYE (GRAN)	70 LBS/ACRE
APR 1 - AUG 15	TALL RESCUE AND GERMAN WHEAT ** OR SIDANGRASS (SMALL-STEMMED VAR) ***	120 LBS/ACRE 25 LBS/ACRE 30 LBS/ACRE

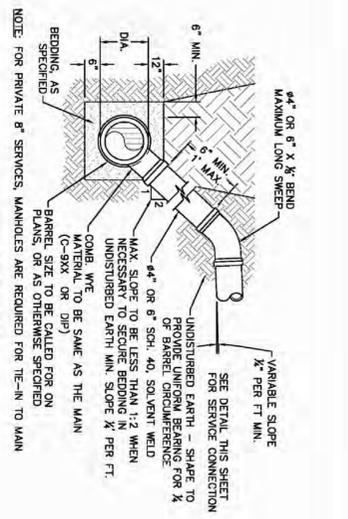
CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR SOIL MANAGEMENT AND EROSION CONTROL. THE ABOVE REGISTRATION RATES ARE THOSE WHICH DO MEET UNDER LOCAL CONDITIONS. OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

**TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT RESTORATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING.

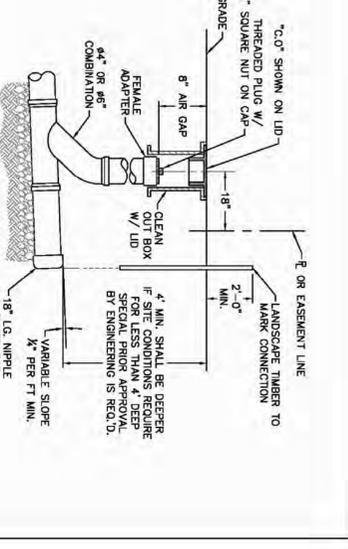
TEMPORARY SEEDING SCHEDULE



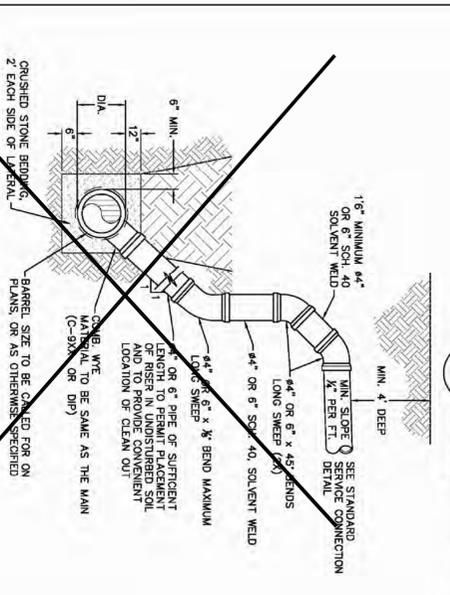
SD-19
NOT TO SCALE
NOTE: FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR THE IN-TO MAIN WITH RIGHT-OF-WAY RESTRICTIONS.



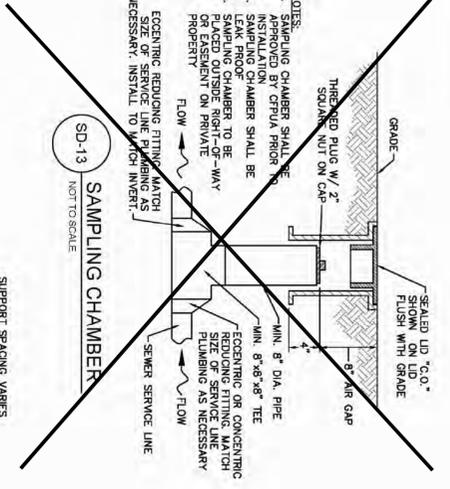
SD-10
NOT TO SCALE
NOTE: FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR THE IN-TO MAIN MAIN DEPTH LESS THAN 8 FT.



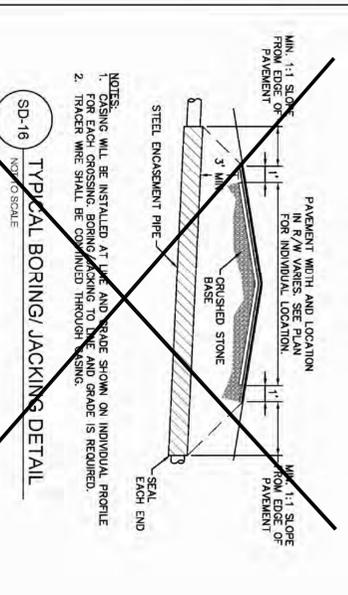
SD-11
NOT TO SCALE
NOTE: FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR THE IN-TO MAIN.



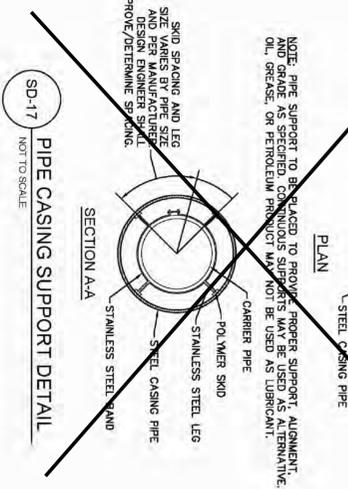
SD-12
NOT TO SCALE



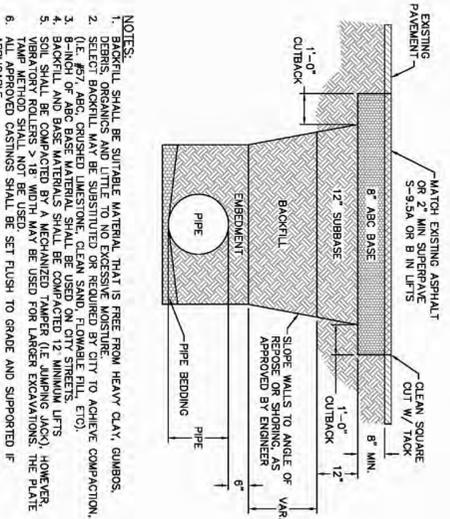
SD-13
NOT TO SCALE



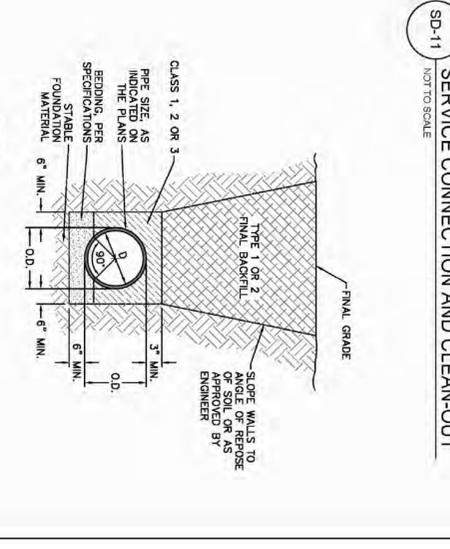
SD-16
NOT TO SCALE



SD-17
NOT TO SCALE



SD-14
NOT TO SCALE



SD-15
NOT TO SCALE

WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

DATE: _____ PERMIT # _____
SHEET NO. _____

APPROVED CONSTRUCTION PLAN
NAME _____ DATE _____

PLANNING _____
TRAFFIC _____
FIRE _____

REV.	DESCRIPTION	DATE
1	SAMPLING CHAMBER REVISED	10/26/12

CFPUA SANITARY SEWER
STANDARD DETAILS

Cape Fear Public Utility Authority
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)333-6500

SHEET NO.: **SSD-2**

GENERAL NOTES:
1. UNEXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS. SIGNAL FOR TEMPORARY SEGMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
4. THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN AND STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

PHASE ONE CONSTRUCTION DOCUMENTS: 4-12-2016

JOB NUMBER: 15-120
DRAWN BY: JGM
CHECKED BY: JGM
DATE: MAY 27, 2016
REVISIONS:

SITE/CIVIL DETAILS

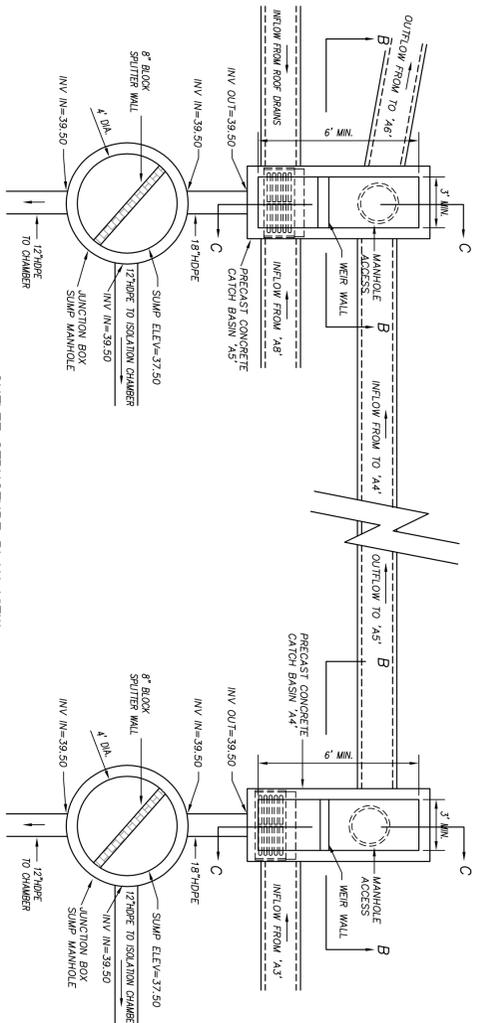
SHEET NUMBER

**Phase One: Renovations and Additions to:
John T. Hoggard High School**
4305 Shipyard Blvd.
Wilmington, North Carolina 28403

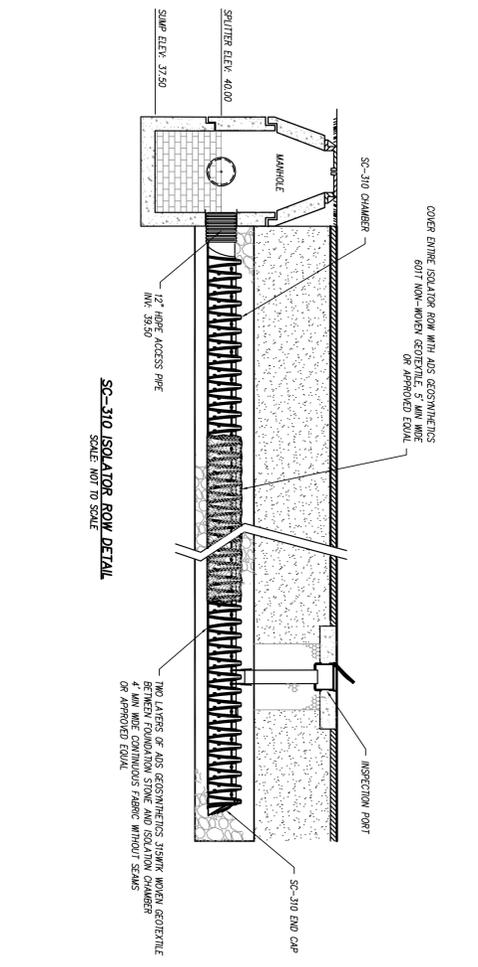


BOWMAN MURRAY HEMINGWAY ARCHITECTS
514 Market Street
Wilmington, NC 28401
Tel - (910) 763-2621
Fax - (910) 763-8806

Project ID # 9001-9005



OUTLET STRUCTURE PLAN VIEW
SCALE: NOT TO SCALE



SC-310 ISOLATOR ROW DETAIL
SCALE: NOT TO SCALE

- INSPECTION & MAINTENANCE**
- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- INSPECT PORTS OF PRECAST CONCRETE MANHOLE
 - REMOVE AND CLEAN FLEXIBLE FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STAINA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - REMOVE A COVER AND ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - TO STEP 2) IF SEDIMENT IS 1/8\"/>
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE LETHAL PROCESS
- SPREAD OF 45\"/>
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LOGS RECORD OBSERVATIONS AND ACTIONS
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORAGE SYSTEM

APPROVED CONSTRUCTION PLAN

DATE: _____ Permit # _____

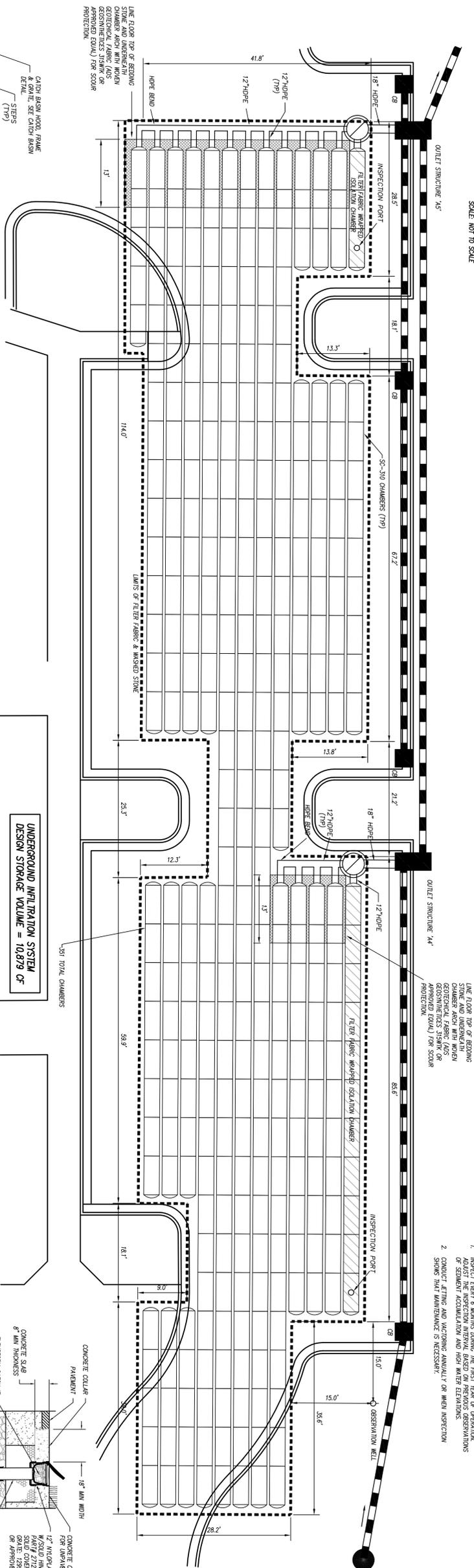
Signature: _____

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

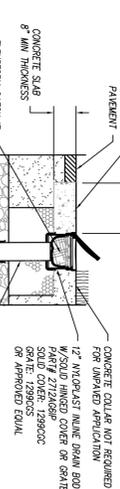
PLANNING NAME DATE

TRAFFIC _____

FIRE _____

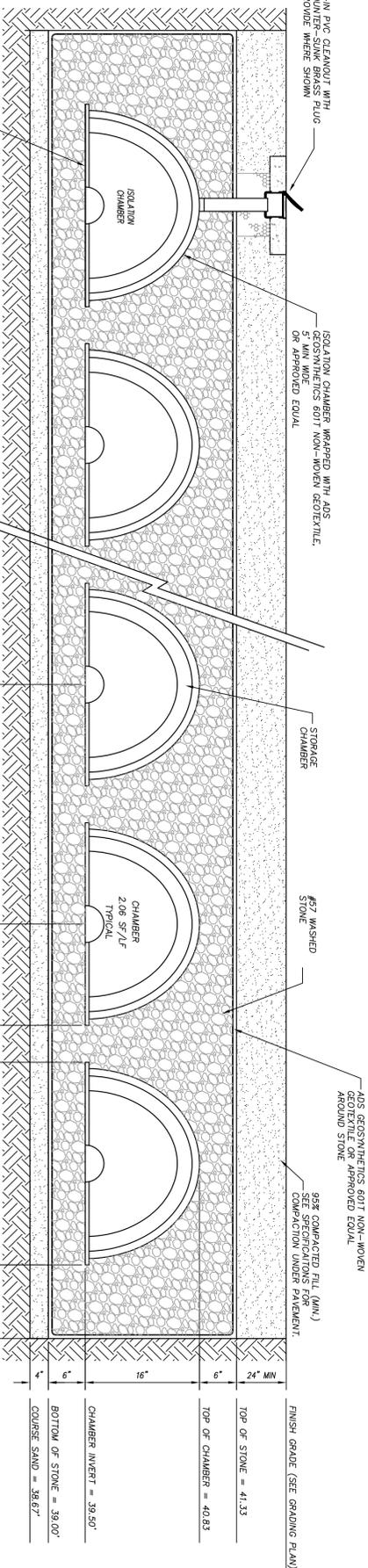


PLAN VIEW
SCALE: 1\"/>



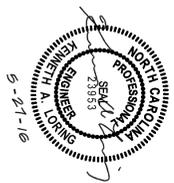
SC-310 6\"/>

- NOTES**
- MANUFACTURER AND SHALL INCLUDE ALL NECESSARY COMPONENTS INCLUDING STORAGE CHAMBER UNITS, CHAMBER CONNECTIONS, FITTINGS AND ACCESSORIES EQUAL.
 - STORMWATER STORAGE CHAMBERS SHALL BE FORMICOR SC-310 OR APPROVED EQUAL.
 - ALL PARTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND OBSERVED BY THE CONTRACTOR. REPRESENTATIVE AN INSTALLATION PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH REPRESENTATIVES OF THE DESIGN TEAM, CONTRACTOR AND CHAMBERS SHALL BE CONSTRUCTED OF HIGH MODULAR WEIGHT POLYPROPYLENE OPEN BOTTOMS, INTERLOCKED EDGEMILLS AND REINFORCED SIDEWALLS RAINLIPS.
 - CHAMBER SYSTEMS SHALL BE DESIGNED TO WITHSTAND MINIMUM 14-20 LOAD RAINLIPS.
 - CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS OF THE COMPLETE SYSTEM TO THE ENGINEER FOR REVIEW AND APPROVAL.
 - FILTER FABRIC SHALL BE 4-6 OZ NON-WOVEN GEOTEXTILE.
 - STONE BACKFILL SHALL BE NO. 57 WASHED STONE.
 - SYSTEM SHALL NOT BE INSTALLED UNTIL THE COMBING REMAINS ARE STABILIZED AND APPROVED BY THE ENGINEER. EXTREME CARE SHALL BE USED DURING INSTALLATION TO AVOID CONTAMINATION OF WASHED-STONE BACKFILL. STABILIZED IMMEDIATELY.



SECTION VIEW A-A
SCALE: NOT TO SCALE

SECTION B-B
SCALE: NOT TO SCALE



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ARCHITECTS

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Project ID # 900-9005

