

MINOR SITE PLAN AND STORMWATER PERMIT APPLICATION PLANS

PROPOSED

INTERNAL SERVICES MAINTENANCE BUILDING #1

FOR

VOPAK TERMINAL WILMINGTON INC.

1704 WOODBINE STREET

CITY OF WILMINGTON

NEW HANOVER COUNTY, NORTH CAROLINA

PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY



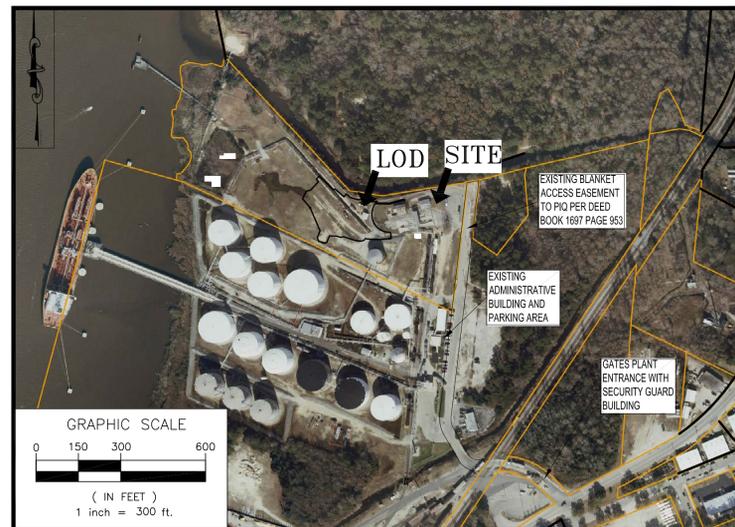
WHAT YOU DON'T KNOW CAN HURT YOU.
BEFORE YOU DIG!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

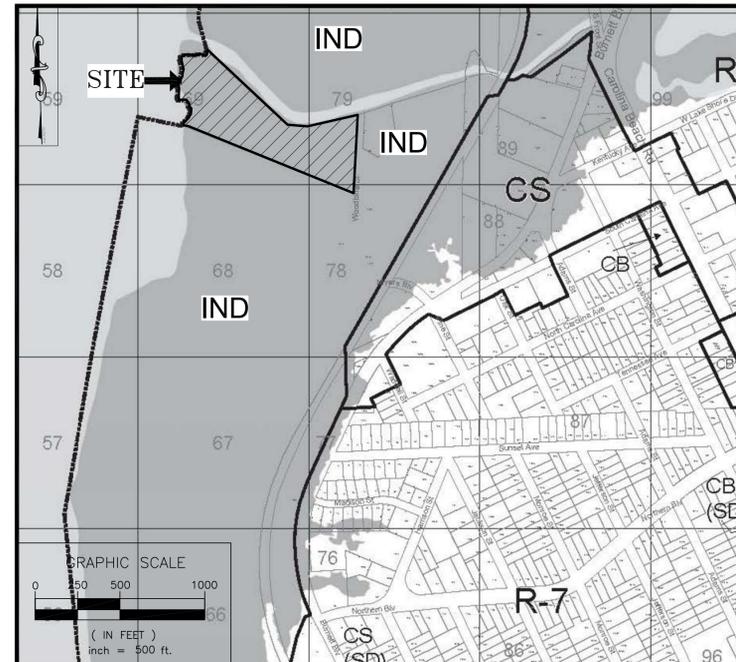
AERIAL MAP

SCALE: 1"=300'



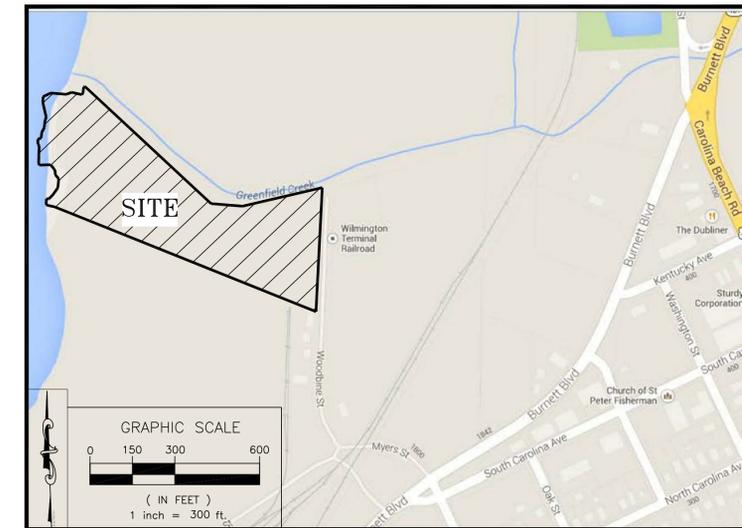
ZONING MAP

SCALE: 1"=500'



LOCATION MAP

SCALE: 1"=300'



CITY OF WILMINGTON FINAL SITE PLAN NOTES:

From Section K of the City of Wilmington Site Plan Application:

- Prior to any clearing, grading or construction activity, tree protection fencing shall be installed around protected trees or groves of trees. No construction workers, tools, materials, or vehicles are permitted within the tree protection fencing.
- Any trees and/or areas designated to be protected must be properly barricaded with fencing and protected throughout construction to insure that no clearing, grading or staging of materials will occur in those areas.
- No equipment is allowed on site until all tree protection fencing and silt fencing is installed and approved. Protective fencing is to be maintained throughout the duration of the project, and contractors shall receive adequate instruction on tree protection methods.
- All pavement markings in public rights-of-way and for driveways are to be thermoplastic and meet City and/or NCDOT standards.
- Once streets are open to traffic, contact Traffic Engineering regarding the installation of traffic and street name signs. Proposed street names must be approved prior to installation of street name signs.
- Traffic control devices (including signs and pavement markings) in areas open to public traffic are to meet MUTCD (Manual on Uniform Control Devices) standards.
- Contact Traffic Engineering at 910-341-7888 to ensure that all traffic signal facilities and equipment are shown on the plan.
- Call Traffic Engineering at 910-341-7888 forty-eight (48) hours prior to any excavation in the right-of-way.
- Traffic Engineering must approve of pavement marking prior to actual striping.
- All parking stall markings and lane arrows within parking areas shall be white.
- All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.
- Stop signs and street signs to remain in place during construction.
- Tactile warning mats will be installed on all wheelchair ramps.
- A utility cut permit is required for each open cut of a city street and the City is to be contacted at (910) 341-5888 to coordinate. Please note an entire resurfacing of the area being open cut may be required.
- Any broken or missing sidewalk panels, driveway panels and curbing will be replaced.
- Contact Karen Dixon at 910-341-7888 to discuss street lighting options.
- Water and sewer service shall meet Cape Fear Public Utility (CFPUA) details and specifications.
- Project shall comply with CFPWA Cross Connection Control requirements. Water meter(s) cannot be released until all requirements are met and the State has given their final approval. Call 910-343-3910 for information.
- If the contractor desires CFPWA water for construction, he shall apply in advance for this service and must provide a reduced pressure zone (RPZ) back-flow prevention device on the developer's side if the water meter box.
- Any irrigation system supplied by CFPWA water shall comply with CFPWA Cross Connection Control regulations. Call 910-343-3910 for information.
- Any irrigation system shall be equipped with a rain and freezer sensor.
- Any back-flow prevention devices required by the CFPWA will need to be on the list of approved devices by USFCCCCHR or ASSE.
- Contractor to field verify existing water and sewer service locations, sizes and materials prior to construction. Engineer to be notified of any conflicts.
- Contractor shall maintain all-weather access for emergency vehicles at all times during construction.
- Underground fire line(s) must be permitted and inspected by the Wilmington Fire Department from the public right-of-way to the building. Contact the Wilmington Fire Department Division of Fire and Safety at 910-341-0696.
- No obstructions are permitted in the space between thirty (30) inches and ten (10) feet above ground within the triangular sight distance.
- Contact the North Carolina One Call Center at 1-800-632-4949 prior to any digging, clearing, or grading.

PREPARED BY

LANDTEK DESIGN, LLC

204 NORTH 6TH STREET

WILMINGTON, NORTH CAROLINA 28401

SHEET INDEX

COVER SHEET	1 OF 5
DEMOLITION PLAN	2 OF 5
SITE PLAN	3 OF 5
GRADING, UTILITY & STORMWATER PLAN	4 OF 5
CONSTRUCTION DETAILS	5 OF 5
IMPERVIOUS COVERAGE EXHIBIT/DRAINAGE MAP (CITY STORMWATER DIVISION)	1 OF 1
SITE INVENTORY PLAN (CITY ORDINANCE CHAPTER 18-136)	1 OF 1
ENTIRE SITE SURVEY (PREPARED BY 'CAPE FEAR ENGINEERING')	1 OF 1
PARTIAL SURVEY (PREPARED BY 'PROGRESSIVE LAND DEVELOPMENT CONSULTANTS')	1 OF 1
WETLANDS SURVEY (PREPARED BY 'CAPE FEAR ENGINEERING')	1 OF 1

REV.	DATE	COMMENTS
7	11/03/14	REV PER CITY REVIEW COMMENTS
6	10/17/14	REV PER 10/17/14 ON SITE MEETING WITH DCM DAMA
5	05/10/14	REV PER CITY REVIEW COMMENTS
4	05/09/14	REV PER PERMITS APPLICATION
3	03/19/14	REV PER MEETING WITH CITY ON 03/18/14
2	10/29/13	REV PER STORM SYSTEM LOCATION
1	10/29/13	REV PER PROJECT TEAM MEETING ON 02/25/14

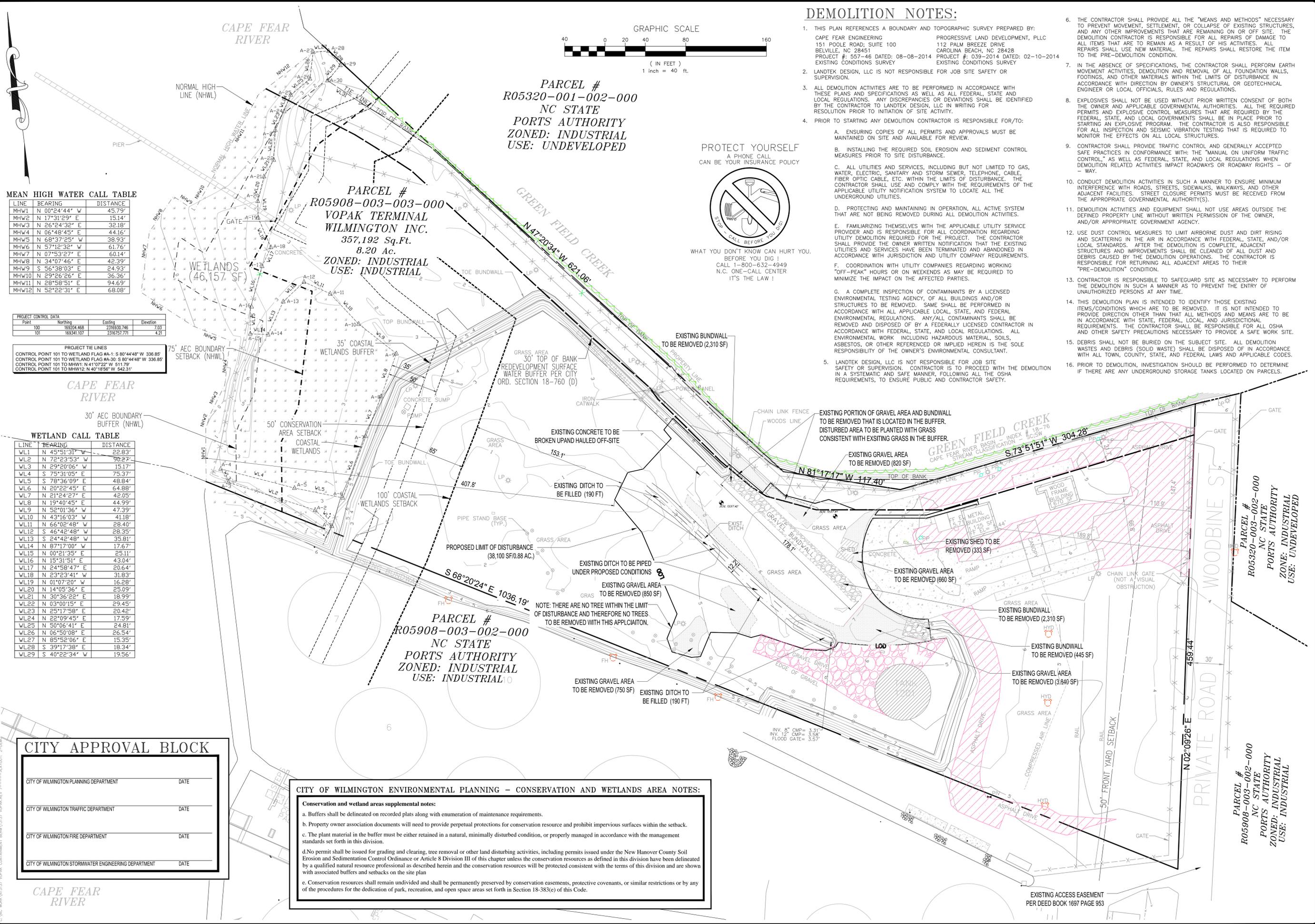
ERIC S. TOMCZAK, P.E.
NORTH CAROLINA LICENSE NO. 002281

PROJECT No: NT13137
DRAWN BY: SC
CHECKED BY: ET
CAD ID #: 13137 VOPAK.REV. 7

LANDTEK DESIGN, LLC
Engineers and Consultants
204 NORTH 6TH STREET
WILMINGTON, NC 28401
PHONE: (910) 772-8802 FAX: (910) 338-1815
ENGINEERING LICENSE NUMBER 032291

PROJECT: VOPAK TERMINAL WILMINGTON INC.
MINOR SITE PLAN AND STORMWATER PERMIT APPLICATION PLANS
INTERNAL SERVICES MAINTENANCE BUILDING #1
1704 WOODBINE STREET, CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

SCALE: (H) AS NOTED
(V) 1"=300'
DATE: 02/09/14
SHEET No: 1
REV. No: 7



DEMOLITION NOTES:

- THIS PLAN REFERENCES A BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY: CAPE FEAR ENGINEERING 151 POOLE ROAD, SUITE 100 BELVILLE, NC 28541 PROJECT #: 557-46 DATED: 08-08-2014 EXISTING CONDITIONS SURVEY
- LANDTEK DESIGN, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION.
- ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO LANDTEK DESIGN, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
- PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:
 - ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.
 - INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
 - ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
 - PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEM THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
 - FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
 - COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
 - A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT.
- LANDTEK DESIGN, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
- THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
- IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER OR LOCAL OFFICIALS, RULES AND REGULATIONS.
- EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHTS - OF - WAY.
- CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(S).
- DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
- USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
- CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
- THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.
- PRIOR TO DEMOLITION, INVESTIGATION SHOULD BE PERFORMED TO DETERMINE IF THERE ARE ANY UNDERGROUND STORAGE TANKS LOCATED ON PARCELS.

PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY



WHAT YOU DON'T KNOW CAN HURT YOU.
BEFORE YOU DIG!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

MEAN HIGH WATER CALL TABLE

LINE	BEARING	DISTANCE
MHW1	N 00°24'44" W	45.79'
MHW2	N 17°31'29" E	15.14'
MHW3	N 26°24'32" E	32.18'
MHW4	N 06°48'45" E	44.16'
MHW5	N 68°37'25" W	38.93'
MHW6	N 57°12'32" W	61.76'
MHW7	N 07°53'27" E	60.14'
MHW8	N 34°07'46" E	42.39'
MHW9	S 56°38'03" E	24.93'
MHW10	N 29°26'26" E	36.36'
MHW11	N 28°58'51" E	94.69'
MHW12	N 52°22'31" E	68.08'

PROJECT CONTROL DATA

Point	Northing	Easting	Elevation
100	169204.468	231630.746	7.03
101	169341.107	231619.771	4.21

PROJECT TIE LINES
 CONTROL POINT 101 TO WETLAND FLAG #A-1: S 80°44'48" W 336.85'
 CONTROL POINT 101 TO WETLAND FLAG #A-30: S 80°44'48" W 336.85'
 CONTROL POINT 101 TO MHW1: N 41°07'22" W 511.79'
 CONTROL POINT 101 TO MHW12: N 40°16'56" W 542.31'

WETLAND CALL TABLE

LINE	BEARING	DISTANCE
WL1	N 45°51'31" W	22.83'
WL2	N 72°23'53" W	90.27'
WL3	N 29°20'06" W	15.17'
WL4	S 75°31'05" E	75.37'
WL5	S 78°36'09" E	48.84'
WL6	N 20°22'45" E	64.88'
WL7	N 21°24'27" E	42.05'
WL8	N 19°40'45" E	44.99'
WL9	N 52°01'36" W	47.39'
WL10	N 43°16'03" W	41.18'
WL11	N 66°02'48" W	28.40'
WL12	S 46°42'48" W	28.35'
WL13	S 24°42'48" W	35.81'
WL14	N 87°17'00" W	17.67'
WL15	N 00°21'35" E	25.11'
WL16	N 15°31'51" E	43.04'
WL17	N 24°58'47" E	20.64'
WL18	N 23°23'41" W	31.83'
WL19	N 01°07'20" W	16.28'
WL20	N 14°05'36" E	25.09'
WL21	N 30°36'22" E	18.99'
WL22	N 03°00'15" E	29.45'
WL23	N 25°17'58" E	20.42'
WL24	N 22°09'45" E	17.59'
WL25	N 50°06'41" E	24.81'
WL26	N 06°50'08" E	26.54'
WL27	N 85°52'06" E	15.35'
WL28	S 39°17'38" E	18.34'
WL29	S 40°22'34" W	19.56'

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

CITY OF WILMINGTON ENVIRONMENTAL PLANNING - CONSERVATION AND WETLANDS AREA NOTES:

- Conservation and wetland areas supplemental notes:**
- Buffers shall be delineated on recorded plats along with enumeration of maintenance requirements.
 - Property owner association documents will need to provide perpetual protections for conservation resource and prohibit impervious surfaces within the setback.
 - The plant material in the buffer must be either retained in a natural, minimally disturbed condition, or properly managed in accordance with the management standards set forth in this division.
 - No permit shall be issued for grading and clearing, tree removal or other land disturbing activities, including permits issued under the New Hanover County Soil Erosion and Sedimentation Control Ordinance or Article 8 Division III of this chapter unless the conservation resources as defined in this division have been delineated by a qualified natural resource professional as described herein and the conservation resources will be protected consistent with the terms of this division and are shown with associated buffers and setbacks on the site plan.
 - Conservation resources shall remain undivided and shall be permanently preserved by conservation easements, protective covenants, or similar restrictions or by any of the procedures for the dedication of park, recreation, and open space areas set forth in Section 18-383(e) of this Code.

PROJECT: VOPAK TERMINAL WILMINGTON, NC
 MINOR SITE PLAN AND STORMWATER PERMIT APPLICATION PLANS
 INTERNAL SERVICES MAINTENANCE BUILDING #1
 1704 WOODBINE STREET, CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA

PROJECT No: NT13137
 DRAWN BY: SC
 CHECKED BY: ET
 CAD. ID. #: 13137 VOPAK REV 7

SCALE: (H) 1"=40'
 (V)

DATE: 02/09/14
 SHEET No: 2 of 5
 REV. No: 7

TITLE: DEMOLITION PLAN

ERIC S. TOMCZAK, P.E.
 NORTH CAROLINA LICENSE NO. 03291

LANDTEK DESIGN, LLC
 Engineers and Consultants
 204 NORTH 6TH STREET
 WILMINGTON, NC 28401
 PHONE (910) 772-8802 FAX (910) 338-1815
 ENGINEERING LICENSE NUMBER 03291

PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY



WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

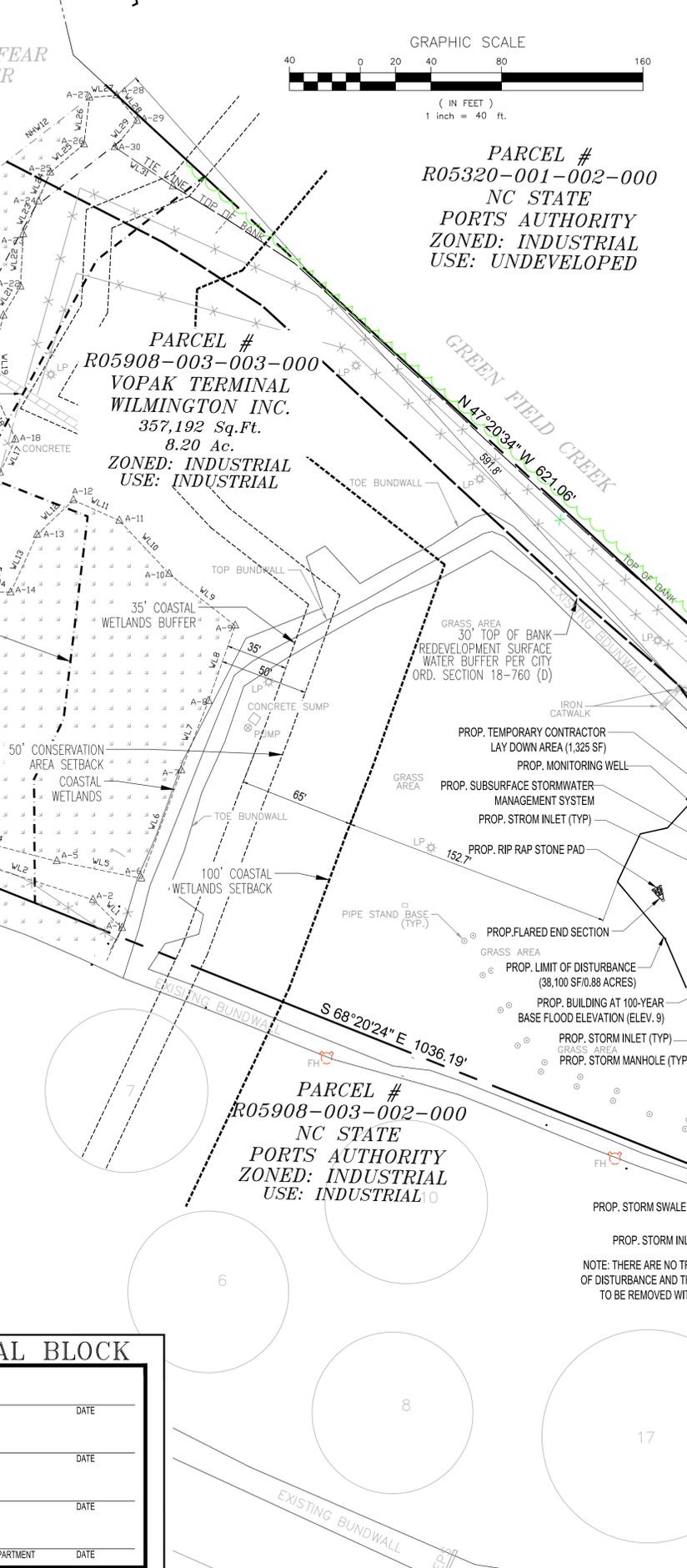
WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

WHAT YOU DON'T KNOW CAN HURT YOU BEFORE YOU DO IT!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!



SITE DATA TABLE:

- THIS DRAWING IS BASED ON A BOUNDARY LOCATION & TOPOGRAPHIC SURVEY PREPARED BY CAPE FEAR ENGINEERING DATED 08-08-2014 UNDER JOB NUMBER 557-46 AS EXECUTED BY MIKE TACKETT LICENSE NUMBER L-4556 AND PROGRESSIVE LAND DEVELOPMENT CONSULTANTS, PLLC DATED FEBRUARY 10, 2014 UNDER JOB NUMBER 009-2014 AS PREPARED BY L. SCOTT BAGGIE LICENSE NUMBER 3450.
- SPECIFIC RESOURCES, TECHNICAL REPORTS, DESIGN DOCUMENTS, ET. AL. RELATED TO THIS PROJECT INCLUDE (BUT MAY NOT BE LIMITED TO) THE FOLLOWING:
 - BOUNDARY, LOCATION & TOPOGRAPHIC SURVEY REFERENCED ABOVE.
 - NEW HANOVER COUNTY GIS.
 - STORMWATER MANAGEMENT REPORT PREPARED BY LANDTEK DESIGN, LLC.
- ALL ELEVATIONS SHOWN HERE ARE IN REFERENCE TO THE REFERENCED SURVEYOR'S BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAK.
- APPLICANT OWNER: VOPAK TERMINALS WILMINGTON INC. 1710 WOODBINE STREET WILMINGTON, NC 28401
- PARCEL:
 - PARCEL IDENTIFICATION NUMBER: R05908-003-003-000
 - CITY OF WILMINGTON
 - NEW HANOVER COUNTY, NORTH CAROLINA
 - ZONE: IND - INDUSTRIAL DISTRICT (SECT 18-199)
- PERMITTED BY RIGHT USES:
 - USE: CHEMICAL AND ALLIED PRODUCTS STORAGE - EXISTING PERMITTED USE (SECT 18-199(b)(10))
 - USE: OFFICE - PROPOSED PERMITTED USE (SECT 18-199(b)(8))
 - USE: PIPE LINES EXCEPT NATURAL GAS - EXISTING PERMITTED USE (SECT 18-199(b)(4))
- USES PERMITTED UNDER PRESCRIBED CONDITIONS:
 - USE: CONTRACTORS STORAGE YARD (TEMPORARY) - PROPOSED PERMITTED TEMPORARY USE (SECT 18-199(c)(6))
 - USE: WAREHOUSING GENERAL (PERMANENT) - PROPOSED PERMITTED USE (SECT 18-199(c)(15))
- ACCESSORY USES:
 - USE: INTERNAL SERVICES MAINTENANCE BUILDING - PROPOSED PERMITTED ACCESSORY USE (SECT 18-199(e)(1))

	IND	EXISTING	PROPOSED	COMMENTS
A. MIN. LOT AREA	N/S	8.20 AC	8.20 AC	357,192 SF AREA. LOT IS LAND LOCKED WITH EXISTING ACCESS.
B. MIN. LOT WIDTH	N/S	220.3'	220.3'	NO CHANGE
C. MAX. LOT IMPERVIOUS COVERAGE	N/A	20.8% (74,343 SF)	22.9% (81,825 SF)	7,482 SF INCREASE (ENTIRE LEASE AREA WITH WETLANDS INCLUDED AND NOTE GRAVEL ASSESSED AS IMPERVIOUS)
D. MIN. FRONT YARD SETBACK	50'	110.9'	110.9'	COMPLIES (NEW BUILDING 360.9')
E. MIN. INTERIOR SIDE YARD SETBACK	0'	N/A	32.6'	NO CHANGE
F. MIN. CORNER SIDE YARD SETBACK	50'	N/A	N/A	NOT APPLICABLE
G. MIN. REAR YARD SETBACK	0'	N/A	598.1'	COMPLIES
H. MAX. BUILDING HEIGHT	35'	20'	<35'	COMPLIES
I. MAX. BUILDING COVERAGE	N/S	0.5%	2.0%	1,795 SF EXISTING VS 7,795 SF PROP. (OVERHANG NOT INCL.)
J. TOTAL NUMBER OF BUILDING	N/S	2	3	ONE (1) BUILDING PROPOSED

(V)=VARIANCE (E)=EXISTING NON-COMFORMITY (DW)=DESIGN WAIVER N/A = NOT APPLICABLE N/S = NOT SPECIFIED

7. OFF STREET PARKING AND LOADING DESIGN STANDARDS (ARTICLE 9):
A. MIN. PARKING SPACE SIZE REQUIREMENTS (18-532)
-8.5' X 18' PARKING SPACE SIZE REQUIRED. NO PARKING SPACES PROPOSED. (N/A)
30' BUFFER LINE FROM TOP OF BANK
EXISTING TOP OF BANK PER FIELD SURVEY
AREA OF GRAVEL AND BUNDWALL THAT WAS REMOVED AND WAS LOCATED IN THE BUFFER. DISTURBED AREA TO BE PLANTED WITH GRASS CONSISTENT WITH EXISTING GRASS IN THE BUFFER.

8. MIN. PARKING SPACE SIZE REQUIREMENTS (18-532)
-8.5' X 18' PARKING SPACE SIZE REQUIRED. NO PARKING SPACES PROPOSED. (N/A)

9. BUFFER AND LOADING DESIGN STANDARDS (ARTICLE 9):
A. MIN. PARKING SPACE SIZE REQUIREMENTS (18-532)
-8.5' X 18' PARKING SPACE SIZE REQUIRED. NO PARKING SPACES PROPOSED. (N/A)

10. CAMA LAND USE PLAN CLASSIFICATION
-CONSERVATION AREA: THE SITE IS LOCATED ENTIRELY IN THE CONSERVATION AREA WHILE NOTING AN EXISTING INDUSTRIAL SITE.

11. FEMA FLOOD DESIGNATION - AE 9' FOR ENTIRE SITE. APPLICANT'S ENGINEER TO PROVIDE CERTIFICATION AS TO THE FLOOD PROOFING MEASURES FOR THE PROPOSED BUILDING PRIOR TO CERTIFYING THE USE OF OCCUPANCY. PLEASE REFERENCE ARCHITECTURAL PLANS FOR SPECIFIC FLOOD PROOFING MEASURES FOR THE BUILDING AND ASSOCIATED SHELVING.

12. TRASH TO BE HANDLED INTERNALLY IN NEW INTERNAL SERVICES MAINTENANCE BUILDING #1 AND BROUGHT TO DUMPSTER LOCATED ON ADJACENT PROPERTY LEASED BY VOPAK BY STAFF IN ACCORDANCE WITH SCHEDULE 1.

13. GENERAL TRAFFIC SIGNAGE NOTE: IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTION ASSOCIATED WITH THIS SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT (910) 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF THE STREET NAME SIGNS.

14. ALL STREET NAME SIGNS ARE EXISTING.

15. SITE ACCESS: THE SITE IS TO BE ACCESSED UNDER PROPOSED CONDITIONS AS UNDER EXISTING CONDITIONS THROUGH PRIVATELY OWNED WOODBINE STREET THROUGH A BLANKET ACCESS EASEMENT UNDER DEED BOOK 1697, PAGE 953 AS GRANTED TO VOPAK TERMINAL WILMINGTON, INC BY THE GRANTEE, NORTH CAROLINA STATE PORTS.

- NUMBER OF SPACES REQUIRED (SECTION 18-532)
 - OFFICE (MIN STANDARD): ONE (1) SPACE PER 300 SF OF OGA THEREFORE 400 SF / 300 SF = 1.33 SPACES - TWO (2) SPACES REQUIRED
 - OFFICE (MAX STANDARD): ONE (1) SPACE PER 200 SF OF OGA THEREFORE 400 SF / 200 SF = 2 SPACES - TWO (2) SPACES REQUIRED
 - WAREHOUSE (MIN/MAX STANDARD): ONE (1) SPACE PER 1,000 SF OF OGA THEREFORE 60' X 80' = 4,800 SF / 1,000 SF = 4.8 SPACES - FIVE (5) SPACES REQUIRED
 - A TOTAL OF SEVEN (7) SPACES REQUIRED. THE EXISTING INDUSTRIAL FACILITY HAS OFF SITE PARKING AT ADMINISTRATIVE BUILDING WHERE EMPLOYEES WILL PARK AND TRAVEL TO THE OPERATIONAL PORTION BY FOOT OR PLANT EQUIPMENT.
- MIN. PARKING SETBACKS (SECT 18-532)
 - NO STANDARD (C)
- LOADING AREA REQUIREMENTS (SECT 18-527)
 - NO LOADING SPACES PROPOSED OR REQUIRED (C)
 - NOTE: ONE (1) OFF-STREET LOADING SPACE REQUIRED PER WAREHOUSE USE WITH GREATER THAN 19,999 SF OF THEREFORE DOES NOT APPLY.
- MIN AISLE WIDTH (SECT 18-1530)
 - PARKING ANGLE (DEGREE): TWO-WAY AISLE 23' (C)
 - MIN. WIDTH AISLE: TWO-WAY AISLE 23' (C)
- LIGHTING:
 - THERE IS NO LIGHTING PROPOSED WITH THIS APPLICATION. EXISTING FREESTANDING LIGHTING TO REMAIN.
- BUFFER AND ENVIRONMENTAL SETBACKS (SURFACE WATER, NORMAL HIGH WATER LINE AND WETLANDS)
 - A 30' BUFFER HAS BEEN PROVIDED FROM TOP OF BANK (SURFACE WATER) FOR THE PROJECT TO COMPLY WITH REDEVELOPMENT SURFACE WATER REQUIREMENTS SET FORTH IN CITY OF WILMINGTON CODE 18-760(D).
 - A 75' SETBACK AND 30' BUFFER HAVE BEEN PROVIDED TO THE NORMAL HIGH WATER LINE (AREA OF ENVIRONMENTAL CONCERN AS CONFIRMED BY THE DIVISION OF COASTAL MANAGEMENT SPECIFICALLY CAMA (ROB MAIRS)).
 - A 100' COASTAL WETLANDS SETBACK AND 35' BUFFER HAS BEEN PROVIDED TO THE COASTAL WETLANDS AS APPROVED BY THE US ARMY CORP OF ENGINEERS SPECIFICALLY EMILY HUGHES. THE CITY OF WILMINGTON HAS FURTHER ADDED A 50' CONSERVATION AREA SETBACK TO THE WETLANDS AS SHOWN ON THE PLANS.
- CONSERVATION AREA: THE SITE IS LOCATED ENTIRELY IN THE CONSERVATION AREA WHILE NOTING AN EXISTING INDUSTRIAL SITE.
- FEMA FLOOD DESIGNATION - AE 9' FOR ENTIRE SITE. APPLICANT'S ENGINEER TO PROVIDE CERTIFICATION AS TO THE FLOOD PROOFING MEASURES FOR THE PROPOSED BUILDING PRIOR TO CERTIFYING THE USE OF OCCUPANCY. PLEASE REFERENCE ARCHITECTURAL PLANS FOR SPECIFIC FLOOD PROOFING MEASURES FOR THE BUILDING AND ASSOCIATED SHELVING.
- TRASH TO BE HANDLED INTERNALLY IN NEW INTERNAL SERVICES MAINTENANCE BUILDING #1 AND BROUGHT TO DUMPSTER LOCATED ON ADJACENT PROPERTY LEASED BY VOPAK BY STAFF IN ACCORDANCE WITH SCHEDULE 1.
- GENERAL TRAFFIC SIGNAGE NOTE: IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTION ASSOCIATED WITH THIS SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT (910) 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF THE STREET NAME SIGNS.
- ALL STREET NAME SIGNS ARE EXISTING.
- SITE ACCESS: THE SITE IS TO BE ACCESSED UNDER PROPOSED CONDITIONS AS UNDER EXISTING CONDITIONS THROUGH PRIVATELY OWNED WOODBINE STREET THROUGH A BLANKET ACCESS EASEMENT UNDER DEED BOOK 1697, PAGE 953 AS GRANTED TO VOPAK TERMINAL WILMINGTON, INC BY THE GRANTEE, NORTH CAROLINA STATE PORTS.

GENERAL NOTES (AS APPLICABLE):

- THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL GOVERNING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATE OF OCCUPANCY. ISSUANCE, INCLUDING BUT NOT LIMITED TO REQUIREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
- THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE CONTRACT DOCUMENTS AND IN CASE OF CONFLICT SHALL PREVAIL OVER THESE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND THESE PLANS, ETC.
- THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
- THESE PLANS ARE BASED ON INFORMATION PROVIDED TO LANDTEK DESIGN, LLC AT THE TIME OF PLAN PREPARATION. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY LANDTEK DESIGN, LLC IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES.
- ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRASSES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY LOCATIONS.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES.
- CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF EXCAVATED STRUCTURES, AS FIELD CONDITIONS DICTATE.
- CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ADJACENT TO PAVEMENT, STRUCTURES, ETC. TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES TO ENSURE NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT TO REMAIN AND TO PROVIDE A SAFE WORK AREA.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION. CONTRACTOR SHALL NOT BE LIMITED TO ORANGE, UTILITIES, PAVEMENT, STORMWATER, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SMALL INTERCONNECT CABLE, CONDUIT, AND/OR ACCESSORIES DAMAGED DURING CONSTRUCTION. REPAIR SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION START.
- ALL CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AS INDICATED IN SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICED ON THESE PLANS NOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND ENGINEER OF RECORD WHEN A CONFLICT IS IDENTIFIED.
- ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY NOR HAVE THEY BEEN RETAINED FOR SUCH PURPOSES.
- ALL CONTRACTORS MUST CARRY STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME LANDTEK DESIGN, LLC AND ITS SUBCONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND HOLD HARMLESS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH LANDTEK DESIGN, LLC WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY. DURING THE ENTIRE PERIOD OF CONSTRUCTION, IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS LANDTEK DESIGN, LLC AND ITS SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
- NEITHER THE PROFESSIONAL ACTIVITIES OF LANDTEK DESIGN, LLC NOR THE PRESENCE OF LANDTEK DESIGN, LLC OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION PROJECT SITE SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY CITY, COUNTY OR STATE REGULATORY REQUIREMENTS. LANDTEK DESIGN, LLC AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION OR TO MAKE ANY CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY. LANDTEK DESIGN, LLC SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE A HOLD HARMLESS INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- LANDTEK DESIGN, LLC SHALL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. MEANS OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS, ALL ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. LANDTEK DESIGN'S REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT LANDTEK DESIGN, LLC HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. LANDTEK DESIGN, LLC SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF LANDTEK CONSULTING, LLC IN WRITING BY THE CONTRACTOR. LANDTEK DESIGN SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- IN AN EFFORT TO RESOLVE ANY CONFLICTS THAT ARISE DURING THE DESIGN AND CONSTRUCTION OF THE PROJECT OR FOLLOWING THE COMPLETION OF THE PROJECT, LANDTEK CONSULTING, LLC AND THE CONTRACTOR SHALL AGREE TO THE MEDIATION PROCEDURE SET FORTH IN THE MEDIATION AGREEMENT. LANDTEK DESIGN'S REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT LANDTEK DESIGN, LLC HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. LANDTEK DESIGN, LLC SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF LANDTEK CONSULTING, LLC IN WRITING BY THE CONTRACTOR. LANDTEK DESIGN SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED THEREON, WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND ENGINEER, IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
- THE APPLICANT IS RESPONSIBLE FOR OBTAINING ALL FEDERAL, STATE AND LOCAL PERMITS REQUIRED FOR THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO STATE STORMWATER, STATE UTILITY PERMITS, WETLANDS DISTURBANCE PERMITS, CITY STORMWATER PERMITS, ETC.

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

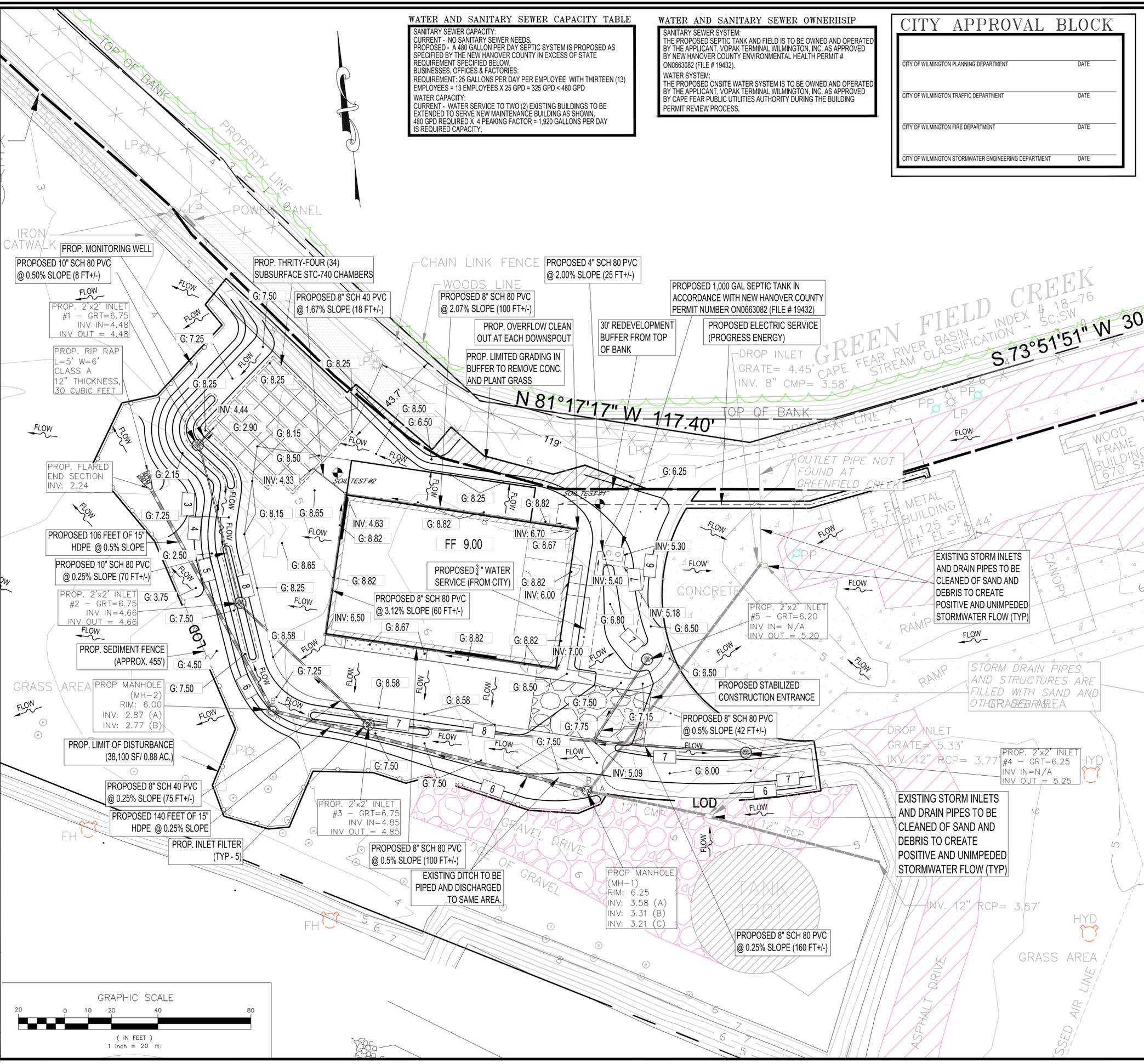
PROJECT: VOPAK TERMINAL WILMINGTON INC. APPLICATION PLANS
 SCALE: (H) 1"=40'
 (V) 1"=40'
 DATE: 02/09/14
 SHEET NO: 3 OF 5
 REV. NO: 7

ERIC S. TOMCZAK, P.E.
 PROJECT NO: NT13137
 DRAWN BY: SC
 CHECKED BY: ET
 CAD ID #: 13137 VOPAK REV 7

LANDTEK DESIGN, LLC
 Engineers and Consultants
 204 NORTH 6TH STREET
 WILMINGTON, NC 28401
 PHONE (910) 772-8002 FAX (910) 338-1815
 ENGINEERING LICENSE NUMBER 032291

INTERNAL SERVICES MAINTENANCE BUILDING #1
 1704 WOODBINE STREET, CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA
 ENGINEERING LICENSE NUMBER 032291

SITE PLAN



PROJECT: VOPAK TERMINAL WILMINGTON INC. APPLICATION PLANS
MINOR SITE PLAN AND STORMWATER PERMIT
 INTERNAL SERVICES MAINTENANCE BUILDING #1
 1704 WOODBINE STREET, CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA

SCALE: (H) 1"=20'
 (V) 1"=4'

DATE: 02/09/14

SHEET No: 4 of 5

REV. No: 7

PROJECT No: NT13137
DRAWN BY: SC
CHECKED BY: ET
CAO ID #: 13137 VOPAK REV 7

PROJECT: 11/02/14 REV PER CITY REVIEW COMMENTS
 6 10/14/14 REV PER 10/17/14 ON SITE MEETING WITH DCH CMAA
 5 09/19/14 REV PER CITY REVIEW COMMENTS
 4 05/09/14 REV PER BOA APPLICATION
 3 03/19/14 REV PER MEETING WITH CITY ON 03/18/14
 2 03/09/14 REV PER STORM SYSTEM LOCATION
 1 02/29/14 REV PER PROJECT TEAM MEETING ON 02/25/14
 REV. DATE COMMENT

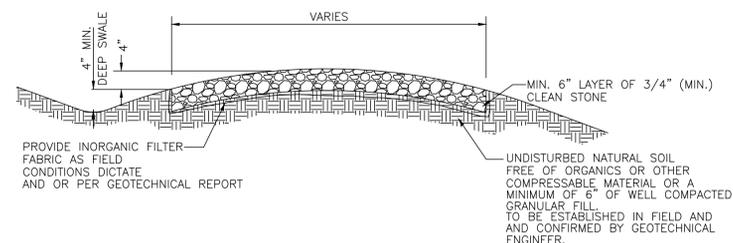
ERIC S. TOMCZAK, P.E.
 NORTH CAROLINA LICENSE NO. 03291

LANDTEK DESIGN, LLC
 204 NORTH 6TH STREET
 WILMINGTON, NC 28401
 PHONE (910) 772-8802 FAX (910) 338-1615
 ENGINEERING LICENSE NUMBER 03291

GRADING, UTILITY AND STORMWATER PLAN

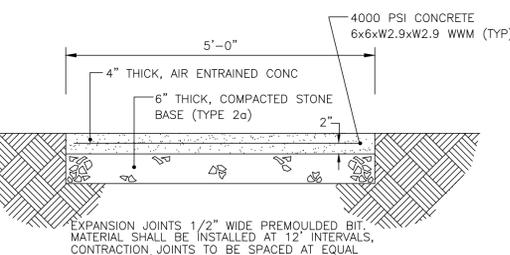
CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE



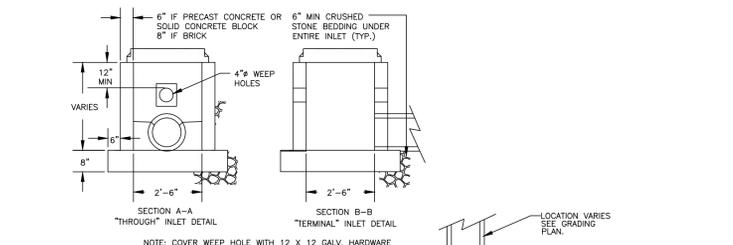
GRAVEL DRIVE DETAIL

NOT TO SCALE



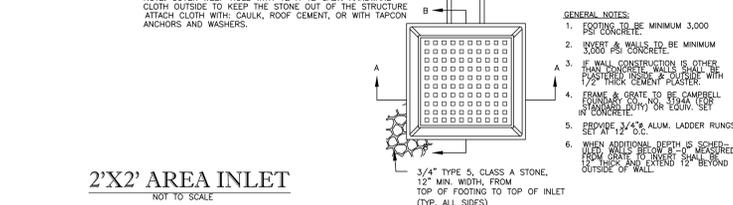
CONCRETE SIDEWALK DETAIL

NOT TO SCALE



2'X2' AREA INLET

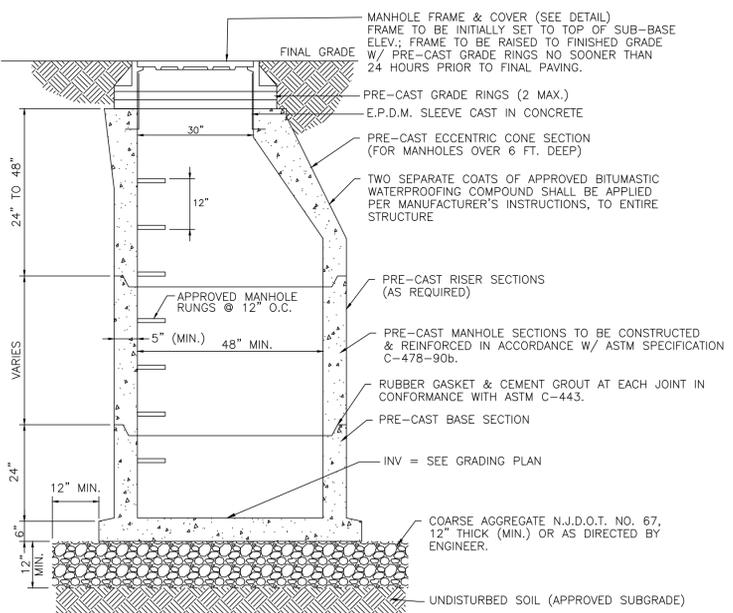
NOT TO SCALE



FLARED END SECTION

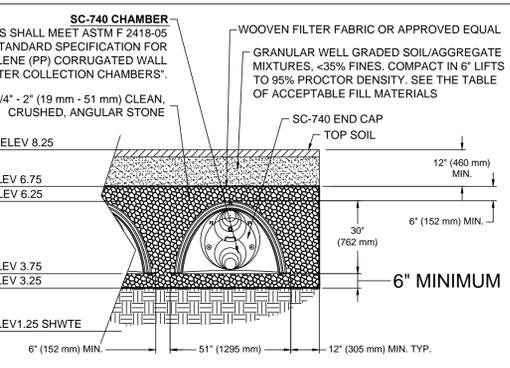
NOT TO SCALE

DIAM.	A	B	C	D	E	F	R
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	7 1/2"
21"	9"	3'-0"	3'-1"	6'-1"	3'-6"	2 3/4"	8"
24"	9 1/2"	3' 7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	8"
27"	16-1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	3 1/4"	9"
30"	12"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3 1/2"	8"
33"	13-1/2"	4'-10 1/2"	3'-1 1/2"	6'-0"	5'-6"	3 3/4"	9"
36"	15"	5'-3"	2'-9"	6'-0"	6'-0"	4"	10"
42"	21"	5'-3"	2'-9"	6'-0"	6'-6"	4 1/2"	11"
48"	24"	6'-0"	2'-0"	6'-0"	7'-0"	5"	12"



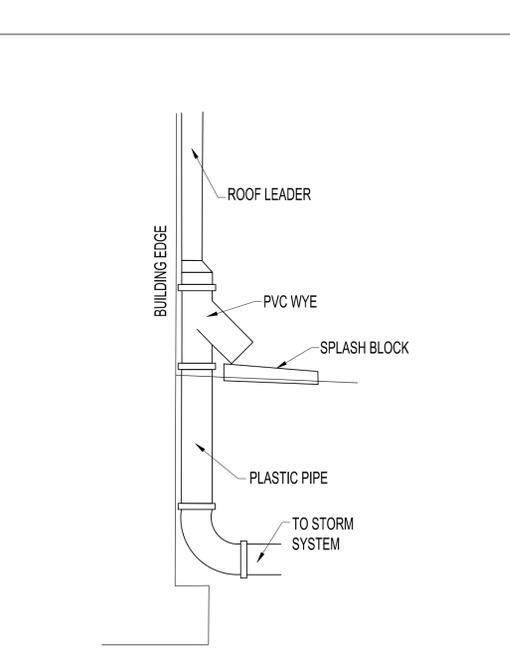
TYPICAL PRECAST STORM MANHOLE

NOT TO SCALE



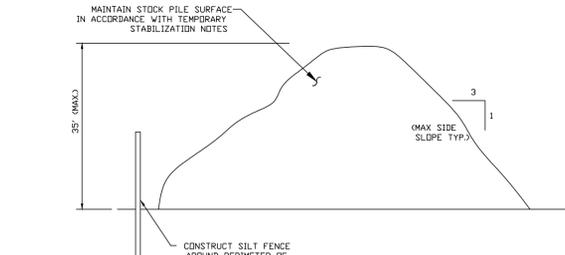
SC-740 CHAMBER CROSS SECTION

NOT TO SCALE



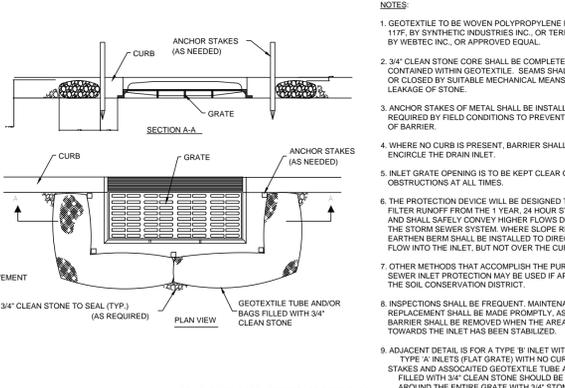
STORMWATER OVERFLOW MECHANISM DETAIL

NOT TO SCALE



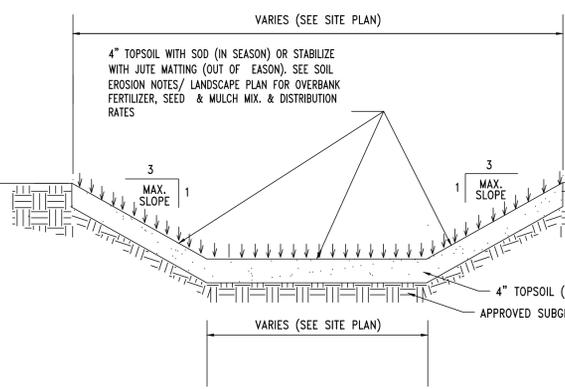
TEMPORARY STOCKPILE DETAIL

NOT TO SCALE



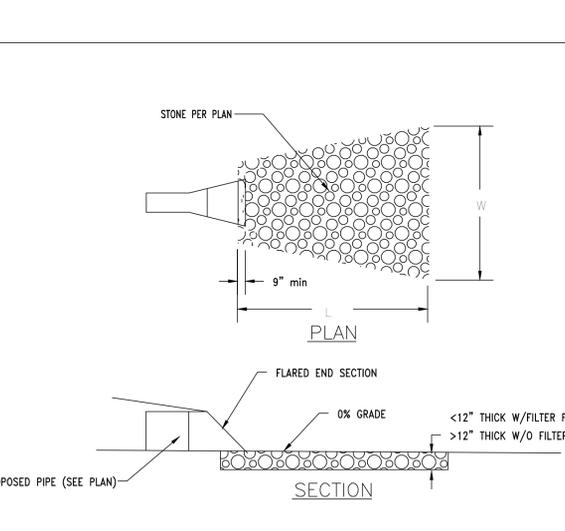
INLET FILTER DETAIL

NOT TO SCALE



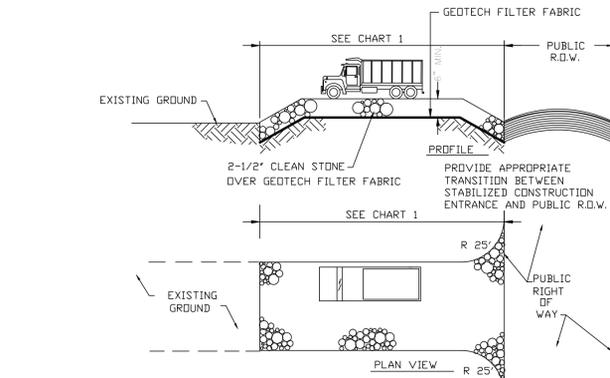
STORMWATER CONVEYANCE SWALE

NOT TO SCALE



RIP RAP DETAIL

NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE AND ANTI-TRACKING PAD

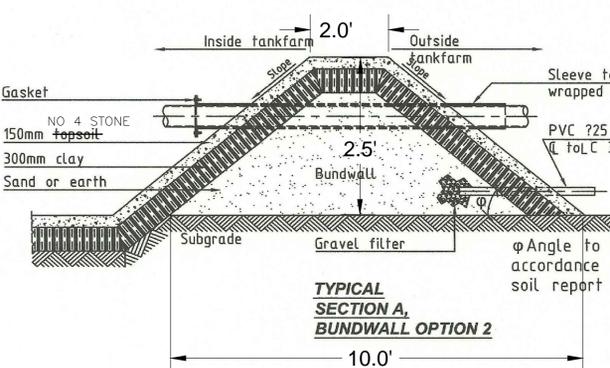
NOT TO SCALE

NOTE: THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE ANTI-TRACKING PAD FOR THE DURATION OF THE PROJECT, SO THAT THE ROAD IS KEPT CLEAN. REPLACEMENT OF THE PAD AS WELL AS REPLENISHMENT OF THE STONE MAY BE REQUIRED.

PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2% TO 5%	100 FT	200 FT
>5%	ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1)	

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

TYPICAL SECTION A, BUNDWALL OPTION 1

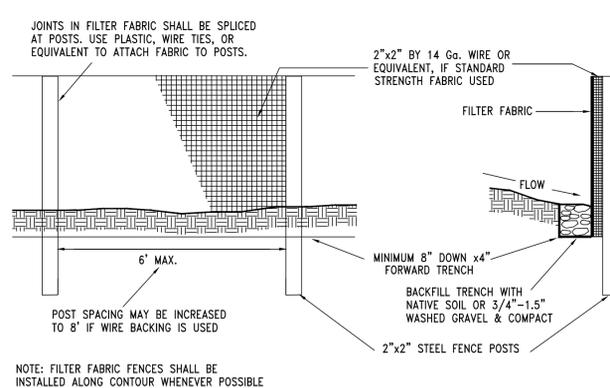


TYPICAL SECTION A, BUNDWALL OPTION 2



BUNDWALL DETAIL

NOT TO SCALE



SEDIMENT (SILT) FENCE

NOT TO SCALE

PROJECT: VOPAK TERMINAL WILMINGTON, INC. APPLICATION PLANS
 MINOR SITE PLAN AND STORMWATER PERMIT
 INTERNAL SERVICES MAINTENANCE BUILDING #1
 1704 WOODBINE STREET, CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA

PROJECT NO: NT13137
 DRAWN BY: SC
 CHECKED BY: ET
 CAD ID #: 13137 VOPAK REV 7

ERIC S. TOMCZAK, P.E.
 NORTH CAROLINA LICENSE NO. 03291

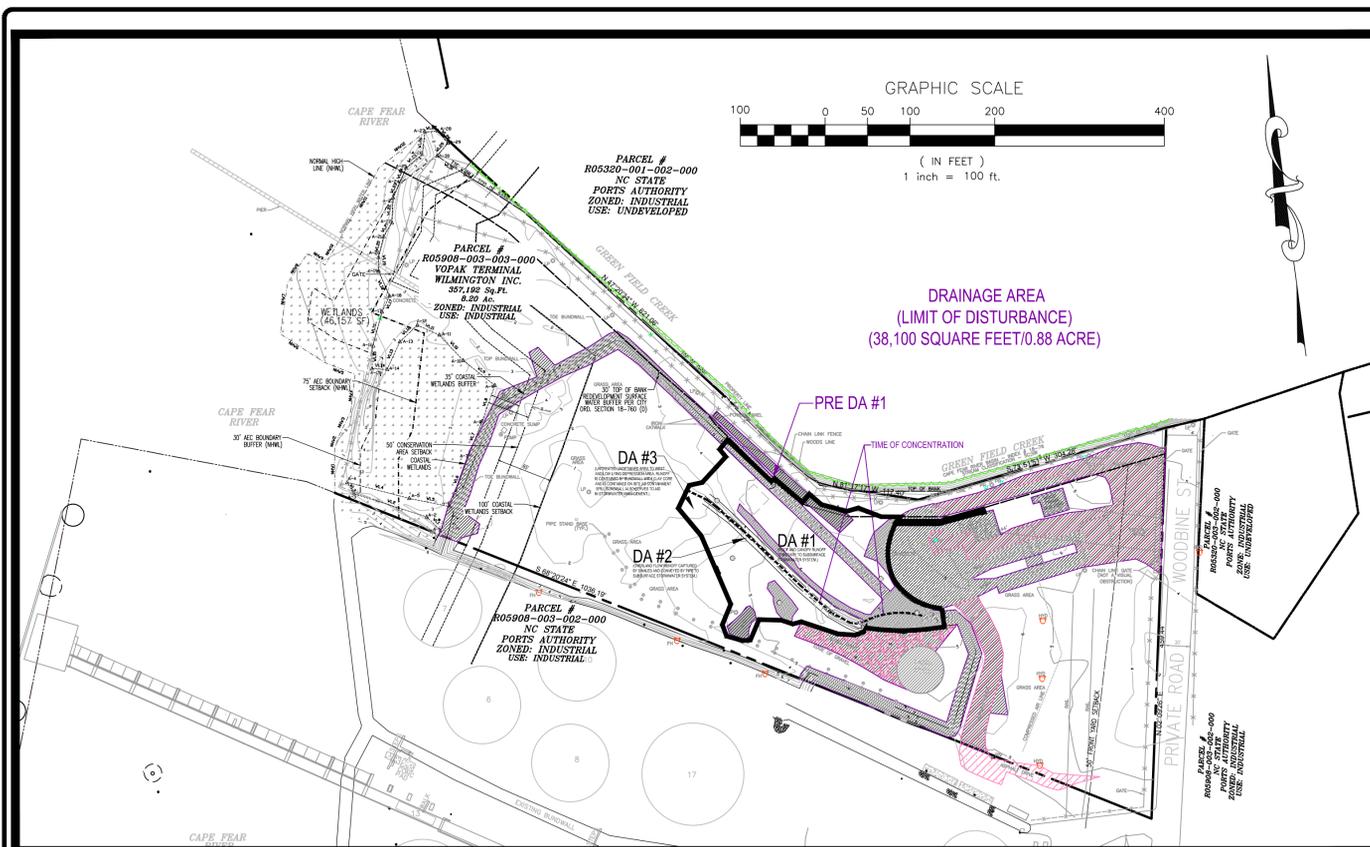
LANDTEK DESIGN, LLC
 Engineers and Consultants
 204 NORTH 6TH STREET
 WILMINGTON, NC 28401
 PHONE: (910) 772-8802 FAX: (910) 338-1615
 ENGINEERING LICENSE NUMBER 03291

TITLE: CONSTRUCTION DETAILS

SCALE: (H) AS NOTED
 (V) -

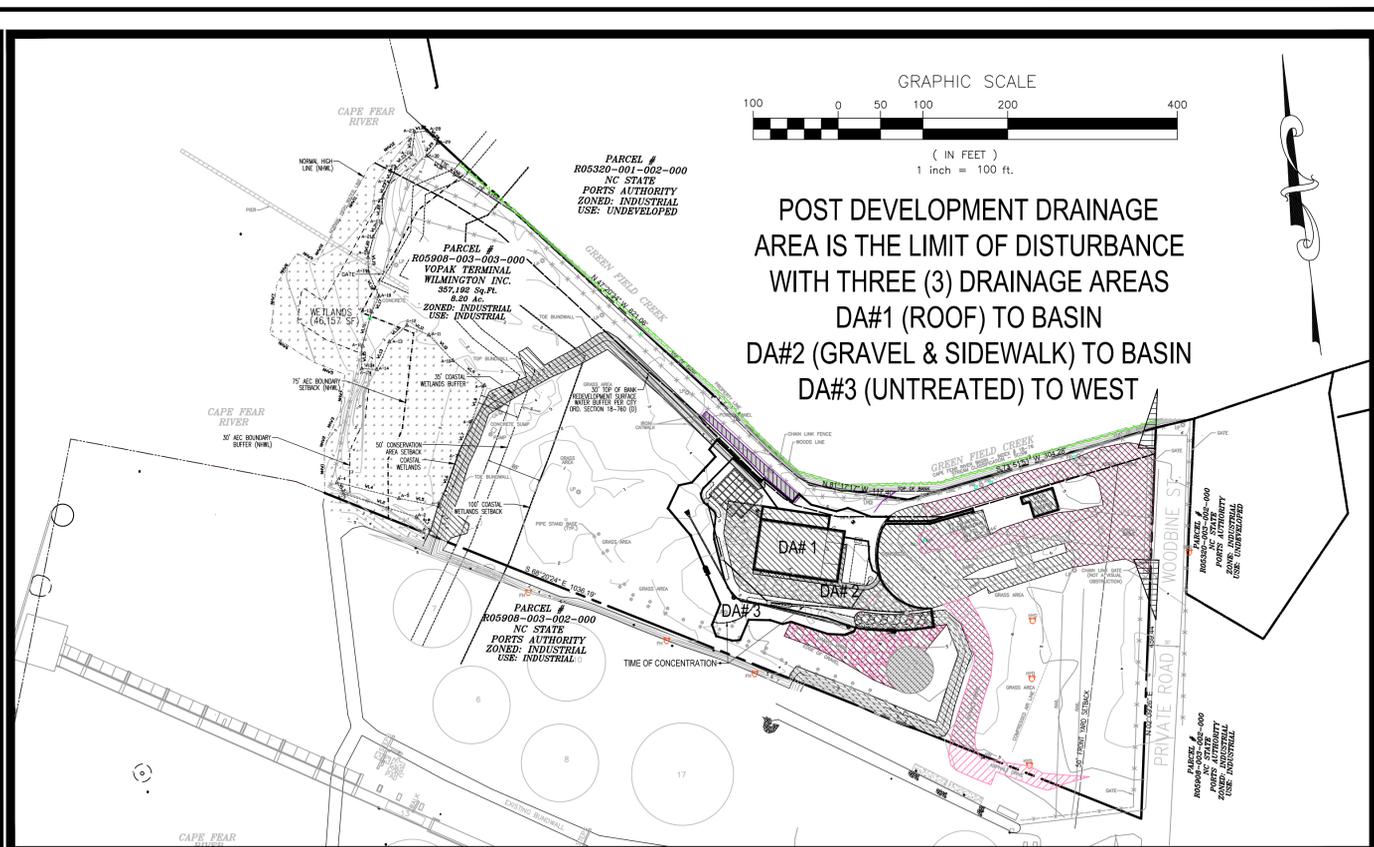
DATE: 02/09/14

SHEET No: 5 REV No: 7



EXISTING CONDITIONS IMPERVIOUS COVERAGE EXHIBIT AND PREDEVELOPMENT DRAINAGE AREA MAP

TOTAL LOT AREA = 357,192 SQUARE FEET (8.2 ACRES)
 EXISTING IMPERVIOUS COVERAGE = 74,343 SQUARE FEET (1.73 ACRES)
 EXISTING PERCENT IMPERVIOUS COVERAGE = 20.8%
 NOTE: 46,157 SQUARE FEET OF WETLANDS INCLUDED IN ABOVE CALCULATION.



PROPOSED CONDITIONS IMPERVIOUS COVERAGE EXHIBIT AND POST DEVELOPMENT DRAINAGE AREA MAP

TOTAL LOT AREA = 357,192 SQUARE FEET (8.2 ACRES)
 PROPOSED IMPERVIOUS COVERAGE = 81,825 SQUARE FEET (1.88 ACRES)
 PROPOSED PERCENT IMPERVIOUS COVERAGE = 22.9%
 NOTE: 46,157 SQUARE FEET OF WETLANDS INCLUDED IN ABOVE CALCULATION.

PROTECT YOURSELF
 A PHONE CALL
 CAN BE YOUR INSURANCE POLICY



WHAT YOU DON'T KNOW CAN HURT YOU.
 BEFORE YOU DIG!
 CALL 1-800-632-4949
 N.C. ONE-CALL CENTER
 IT'S THE LAW!

STATE PERMITTING REQUIREMENT:

- 1) SITE DOES NOT REQUIRE A DIVISION OF COASTAL MANAGEMENT CAMA PERMIT AS IMPROVEMENTS ARE OUT OF MEAN HIGH WATER LINE 400' SETBACK (A.K.A. AREA OF ENVIRONMENTAL CONCERN).
- 2) SITE IS BELOW ONE (1) ACRE OF DISTURBANCE AREA AND THEREFORE DOES NOT REQUIRE A DIVISION OF LAND QUALITY EROSION PERMIT.
- 3) AS THE SITE DOES NOT REQUIRE A CAMA OR EROSION PERMIT AND DOES NOT CREATE A NET INCREASE OF GREATER THAN 10,000 SQUARE FEET BUILT UPON AREA, NO PERMIT IS REQUIRED. NOTE STATE STORMWATER GIVES CREDIT FOR EXISTING IMPERVIOUS COVERAGE.

NET INCREASE OF 7,482 SF OF IMPERVIOUS COVERAGE
 NEW IMPERVIOUS COVERAGE = 17,490 SQUARE FEET

STORMWATER MANAGEMENT DENSITY CALCULATION
 CITY OF WILMINGTON SECTION 18-764 (C; SW WATERS)

TOTAL LOT AREA = 357,192 SQUARE FEET (8.2 ACRES)
 PROPOSED IMPERVIOUS COVERAGE = 81,825 SQUARE FEET (1.88 ACRES)
 NOTE: 46,157 SQUARE FEET OF WETLANDS ON SITE.
 STORM CALCULATION TOTAL LOT AREA = 311,035 SQUARE FEET IF WETLANDS EXCLUDED
 STORM CALCULATION ONLY IMPERVIOUS % = 26.3% THEREFORE HIGH DENSITY PROJECT

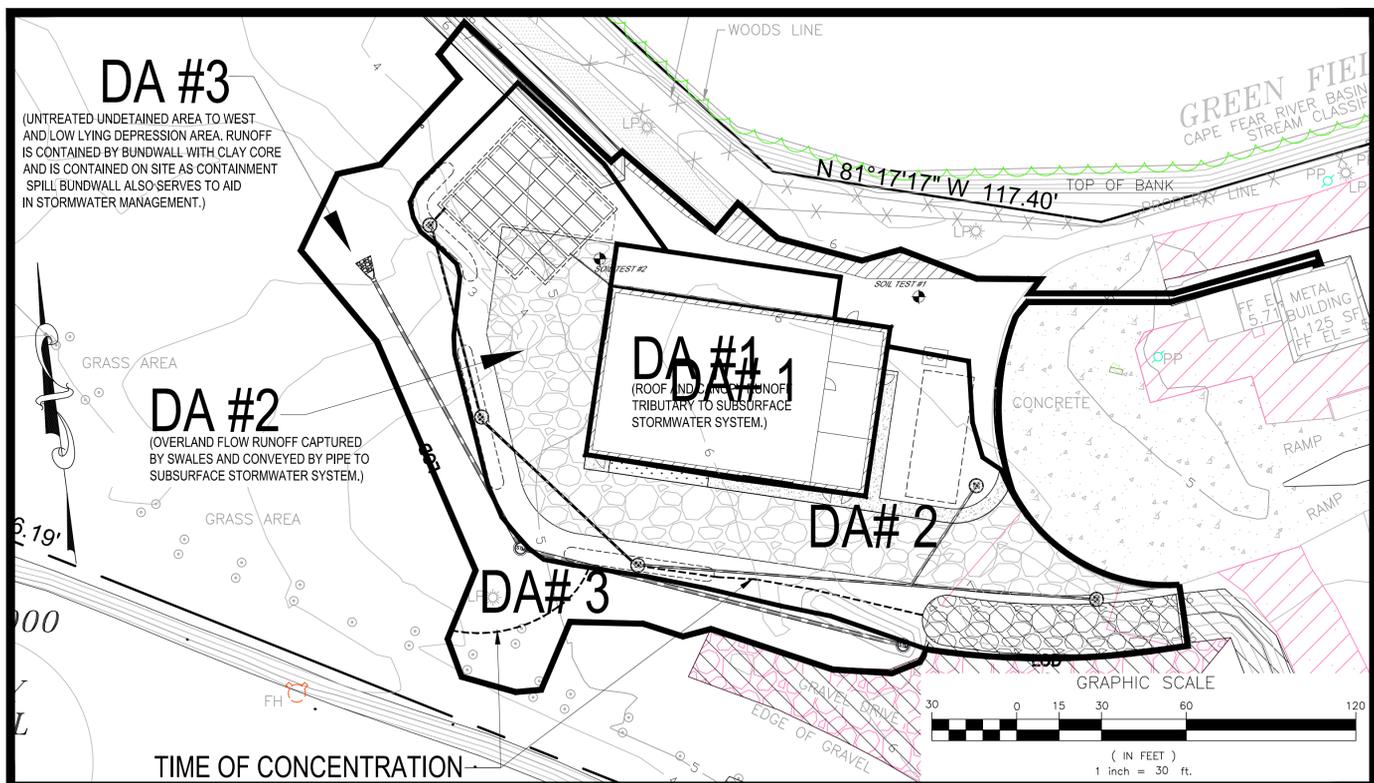
CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

CITY OF WILMINGTON ENVIRONMENTAL PLANNING - CONSERVATION AND WETLANDS AREA NOTES:

Conservation and wetland areas supplemental notes:

- a. Buffers shall be delineated on recorded plats along with enumeration of maintenance requirements.
- b. Property owner association documents will need to provide perpetual protections for conservation resource and prohibit impervious surfaces within the setback.
- c. The plant material in the buffer must be either retained in a natural, minimally disturbed condition, or properly managed in accordance with the management standards set forth in this division.
- d. No permit shall be issued for grading and clearing, tree removal or other land disturbing activities, including permits issued under the New Hanover County Soil Erosion and Sedimentation Control Ordinance or Article 8 Division III of this chapter unless the conservation resources as defined in this division have been delineated by a qualified natural resource professional as described herein and the conservation resources will be protected consistent with the terms of this division and are shown with associated buffers and setbacks on the site plan.
- e. Conservation resources shall remain undivided and shall be permanently preserved by conservation easements, protective covenants, or similar restrictions or by any of the procedures for the dedication of park, recreation, and open space areas set forth in Section 18-383(e) of this Code.



POST DEVELOPMENT DRAINAGE AREA MAP
 ENLARGED SCALE

ET	11/02/14 REV PER CITY REVIEW COMMENTS
ET	6 10/17/14 REV PER 10/17/14 ON SITE MEETING WITH DCM CMAA
ET	5 09/10/14 REV PER CITY REVIEW COMMENTS
ET	4 02/09/14 REV PER BOA APPLICATION
ET	3 03/19/14 REV PER MEETING WITH CITY ON 03/18/14
ET	2 03/09/14 REV PER STORM SYSTEM LOCATION
ET	1 02/26/14 REV PER PROJECT TEAM MEETING ON 02/25/14
ET	REV. DATE COMMENT

ERIC S. TOMCZAK, P.E.
 NORTH CAROLINA LICENSE NO. 03291

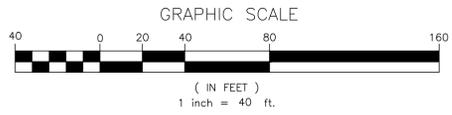
PROJECT No: N13137
 DRAWN BY: SC
 CHECKED BY: ET
 CAD ID #: 13137 VOPAK REV 7

LANDTEK DESIGN, LLC
 204 NORTH 6TH STREET
 WILMINGTON, NC 28401
 PHONE: (910) 772-8866 FAX: (910) 338-8185
 ENGINEERING LICENSE NUMBER 032291

PROJECT: VOPAK TERMINAL WILMINGTON INC.
 MINOR SITE PLAN AND STORMWATER PERMIT APPLICATION PLANS
 INTERNAL SERVICES MAINTENANCE BUILDING #1
 1704 WOODBINE STREET, CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA

TITLE: IMPERVIOUS COVERAGE & DRAINAGE MAP EXHIBIT

SCALE: (H)VARIES (V)VARIES
 DATE: 02/09/14
 SHEET No: 1 REV. No: 7



PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY



WHAT YOU DON'T KNOW CAN HURT YOU.
BEFORE YOU DIG!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

**DIVISION OF COASTAL MANAGEMENT
COASTAL AREA MANAGEMENT ACT (CAMA)**

ON OCTOBER 13, 2014 THE DIVISION OF COASTAL MANAGEMENT PERFORMED A REVIEW OF THE SITE AND CONFIRMED THE FLAGS FOR THE NORMAL HIGH WATER LINE AND ASSOCIATED 75' SETBACK FOR THE AREA OF ENVIRONMENTAL CONCERN WITH 30' BUFFER TO BE ACCURATE. BY SIGNATURE BELOW THE DIVISION OF COASTAL MANAGEMENT HAS APPROVED THE LOCATION OF THE FLAGS, 75' AEC SETBACK AND 30' BUFFER SHOWN ON THIS PLAN.

ROBB MAIRS, NEW HANOVER COUNTY DCM CAMA REPRESENTATIVE DATE

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

CITY OF WILMINGTON ENVIRONMENTAL PLANNING - CONSERVATION AND WETLANDS AREA NOTES:

Conservation and wetland areas supplemental notes:

- a. Buffers shall be delineated on recorded plats along with enumeration of maintenance requirements.
- b. Property owner association documents will need to provide perpetual protections for conservation resource and prohibit impervious surfaces within the setback.
- c. The plant material in the buffer must be either retained in a natural, minimally disturbed condition, or properly managed in accordance with the management standards set forth in this division.
- d. No permit shall be issued for grading and clearing, tree removal or other land disturbing activities, including permits issued under the New Hanover County Soil Erosion and Sedimentation Control Ordinance or Article 8 Division III of this chapter unless the conservation resources as defined in this division have been delineated by a qualified natural resource professional as described herein and the conservation resources will be protected consistent with the terms of this division and are shown with associated buffers and setbacks on the site plan
- e. Conservation resources shall remain undivided and shall be permanently preserved by conservation easements, protective covenants, or similar restrictions or by any of the procedures for the dedication of park, recreation, and open space areas set forth in Section 18-383(e) of this Code.

MEAN HIGH WATER CALL TABLE

LINE	BEARING	DISTANCE
MHW1	N 00°24'44" W	45.79'
MHW2	N 17°31'29" E	15.14'
MHW3	N 26°24'32" E	32.18'
MHW4	N 06°48'45" E	44.16'
MHW5	N 68°37'25" W	38.93'
MHW6	N 57°12'32" W	61.76'
MHW7	N 07°53'27" E	60.14'
MHW8	N 34°07'46" E	42.39'
MHW9	S 56°38'03" E	24.93'
MHW10	N 23°26'23" E	36.36'
MHW11	N 28°58'51" E	94.69'
MHW12	N 52°22'31" E	68.08'

Point	Northing	Easting	Elevation
100	169204.468	236920.746	7.03
101	169341.107	236757.771	4.21

PROJECT TIE LINES
CONTROL POINT 101 TO WETLAND FLAG #A-1: S 80°44'48" W 336.85'
CONTROL POINT 101 TO WETLAND FLAG #A-30: S 80°44'48" W 336.85'
CONTROL POINT 101 TO MHW1: N 41°07'22" W 511.79'
CONTROL POINT 101 TO MHW12: N 40°18'56" W 542.31'

WETLAND CALL TABLE

LINE	BEARING	DISTANCE
WL1	N 45°51'31" W	22.83'
WL2	N 72°23'53" W	90.27'
WL3	N 29°20'06" W	15.17'
WL4	S 75°31'05" E	75.37'
WL5	S 70°36'09" E	48.84'
WL6	N 20°22'45" E	64.88'
WL7	N 21°24'27" E	42.05'
WL8	N 19°40'45" E	44.99'
WL9	N 52°01'36" W	47.39'
WL10	N 43°16'03" W	41.18'
WL11	N 66°02'48" W	28.40'
WL12	S 46°42'48" W	28.35'
WL13	S 24°42'48" W	35.81'
WL14	N 87°17'00" W	17.67'
WL15	N 00°21'35" E	25.11'
WL16	N 15°31'51" E	43.04'
WL17	N 24°58'47" E	20.64'
WL18	N 23°23'41" W	31.83'
WL19	N 01°07'20" W	16.28'
WL20	N 14°05'36" E	25.09'
WL21	N 30°36'22" E	18.99'
WL22	N 03°00'15" E	29.45'
WL23	N 25°17'58" E	20.42'
WL24	N 22°09'45" E	17.59'
WL25	N 50°08'41" E	24.81'
WL26	N 06°50'08" E	26.54'
WL27	N 85°52'06" E	15.35'
WL28	S 39°17'38" E	18.34'
WL29	S 40°22'34" W	19.56'

**PARCEL #
R05320-001-002-000
NC STATE
PORTS AUTHORITY
ZONED: INDUSTRIAL
USE: UNDEVELOPED**

**PARCEL #
R05908-003-003-000
VOPAK TERMINAL
WILMINGTON INC.
357,192 Sq.Ft.
8.20 Ac.
ZONED: INDUSTRIAL
USE: INDUSTRIAL**

**PARCEL #
R05908-003-002-000
NC STATE
PORTS AUTHORITY
ZONED: INDUSTRIAL
USE: INDUSTRIAL**

**PARCEL #
R05320-003-002-000
NC STATE
PORTS AUTHORITY
ZONED: INDUSTRIAL
USE: UNDEVELOPED**

**PARCEL #
R05908-003-002-000
NC STATE
PORTS AUTHORITY
ZONED: INDUSTRIAL
USE: INDUSTRIAL**

PROPOSED CONDITIONS IMPERVIOUS COVERAGE CALCULATION

TOTAL LOT AREA = 357,192 SQUARE FEET (8.2 ACRES)
PROPOSED IMPERVIOUS COVERAGE = 81,825 SQUARE FEET (1.88 ACRES)
PROPOSED PERCENT IMPERVIOUS COVERAGE = 22.9%
NOTE: 46,157 SQUARE FEET OF WETLANDS INCLUDED IN ABOVE CALCULATION.

PROJECT: VOPAK TERMINAL WILMINGTON INC. APPLICATION PLANS
MINOR SITE PLAN AND STORMWATER PERMIT
INTERNAL SERVICES MAINTENANCE BUILDING #1
1704 WOODBINE STREET, CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

SCALE: (H) 1" = 40'
DATE: 02/09/14
SHEET No: 1 OF 1
REV. No: 7

TITLE: SITE INVENTORY PLAN

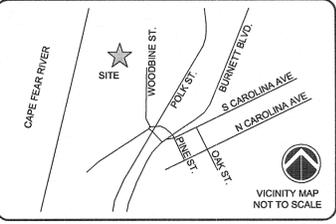
PROJECT No: N13137
DRAWN BY: SC
CHECKED BY: ET
CAD. ID. #: 13137 VOPAK REV. 7

ERIC S. TOMCZAK, P.E.
NORTH CAROLINA LICENSE NO. 03291

LANDTEK DESIGN, LLC
Engineers and Consultants
204 NORTH 6TH STREET
WILMINGTON, NC 28401
PHONE: (910) 722-8002 FAX: (910) 338-1615
ENGINEERING LICENSE NUMBER 03291

I, MICHAEL LEE TACKETT, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS GROUND SURVEY WAS PERFORMED AT THE 95 PERCENT CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THE HORIZONTAL ACCURACY IS AT A MINIMUM +/- 0.05 FEET; THAT THE VERTICAL ACCURACY IS AT A MINIMUM +/- 0.10; AND THAT THE ORIGINAL DATA WAS OBTAINED ON JULY 28, AND COMPLETED ON JULY 29, 2014; AND ALL COORDINATES ARE BASED ON NAD 83(2011); AND ALL ELEVATIONS ARE BASED ON NAVD 88. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 5TH DAY OF SEPTEMBER, 2014.

SIGN: *Michael Lee Tackett*
MICHAEL LEE TACKETT, N.C.P.L.S. No. L-4556



LEGEND:

---	PROPERTY LINE FROM NHC GIS
- - - -	ADJOINER PROPERTY LINE
x x x	CHAIN LINK FENCE
---	MEAN HIGH WATER LINE
---	WETLAND LINE
---	EDGE OF PAVEMENT
---	EDGE OF CONCRETE
---	WOODS LINE
5	CONTOUR ELEVATION
△	PROJECT CONTROL POINT
FH	FIRE HYDRANT
LP	LIGHT POLE
PP	POWER POLE
PIV	POST INDICATOR VALVE
△A-30	DENOTES WETLAND FLAG
[Hatched Box]	DENOTES ASPHALT PAVEMENT
[Dotted Box]	DENOTES CONCRETE
[Stippled Box]	DENOTES GRAVEL
[Wavy Box]	DENOTES WETLANDS

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

- NOTES:**
- BASED ON SURVEY BY CAPE FEAR ENGINEERING, INC. ON JULY 28, AND 29, 2014.
 - WETLANDS DELINEATED BY OTHERS.
 - ELEVATIONS BASED ON NAVD '88.
 - MEAN HIGH WATER LINE DELINEATED BY OTHERS.
 - ELEVATIONS AND BEARINGS BASED ON OPUS OBSERVATIONS PERFORMED ON JULY 28, AND 29, 2014.
 - PROPERTY LINE SHOWN TAKEN FROM NEW HANOVER COUNTY GIS. NO BOUNDARY SURVEY WAS PERFORMED AS PART OF THE SURVEY.

A	ADDED PROPERTY LINES FROM GIS	MLT
REV. #	DESCRIPTION	REV. BY DATE
	REVISIONS	

WETLAND CALL TABLE

LINE	BEARING	DISTANCE
WL1	N 45°51'31" W	22.83'
WL2	N 72°23'53" W	90.27'
WL3	N 29°20'06" W	15.17'
WL4	S 75°31'00" E	75.37'
WL5	S 78°36'00" E	48.84'
WL6	N 20°22'45" E	64.88'
WL7	N 21°24'27" E	42.05'
WL8	N 19°40'45" E	44.99'
WL9	N 52°01'30" W	47.39'
WL10	N 43°18'03" W	41.18'
WL11	N 69°02'48" W	28.40'
WL12	S 46°42'48" W	26.35'
WL13	S 24°42'48" W	35.81'
WL14	N 87°17'00" W	17.67'
WL15	N 00°21'30" E	25.11'
WL16	N 15°31'51" E	43.04'
WL17	N 24°58'47" E	20.64'
WL18	N 23°23'41" W	31.83'
WL19	N 01°07'20" W	16.28'
WL20	N 14°08'30" E	25.09'
WL21	N 30°36'22" E	18.99'
WL22	N 03°00'15" E	28.45'
WL23	N 25°17'58" E	20.42'
WL24	N 22°09'49" E	17.59'
WL25	N 50°08'41" E	24.81'
WL26	N 09°50'08" E	26.54'
WL27	N 85°52'06" E	15.35'
WL28	S 39°17'38" E	18.34'
WL29	S 40°22'34" W	19.56'
WL30	S 45°51'13" E	13.29'
WL31	S 56°13'17" E	39.64'

MEAN HIGH WATER CALL TABLE

LINE	BEARING	DISTANCE
MHW1	N 00°24'44" W	45.79'
MHW2	N 17°31'29" E	15.14'
MHW3	N 28°24'32" E	32.18'
MHW4	N 05°48'45" E	44.16'
MHW5	N 68°37'25" W	38.93'
MHW6	N 57°12'32" W	61.76'
MHW7	N 07°53'27" E	60.14'
MHW8	N 34°07'46" E	42.39'
MHW9	S 50°38'03" E	24.95'
MHW10	N 29°28'26" E	36.38'
MHW11	N 28°58'51" E	94.69'
MHW12	N 52°22'31" E	68.08'

PROJECT CONTROL DATA

Point	Northing	Easting	Elevation
100	169204.468	2316930.746	7.03
101	169341.107	2316757.771	4.21

PROJECT TIE LINES
 CONTROL POINT 101 TO WETLAND FLAG #A-1: S 80°44'48" W 336.85'
 CONTROL POINT 101 TO WETLAND FLAG #A-30: N 41°07'22" W 511.79'
 CONTROL POINT 101 TO MHW1: N 41°07'22" W 511.79'
 CONTROL POINT 101 TO MHW12: S 69°29'39" W 457.04'



SCALE: 1" = 50'
 P:\557\557-46 VOPAK TERMINAL\DWG\557-46-EXIST-COND-SURVEY.DWG

CAPE FEAR ENGINEERING
 151 Poole Rd., Suite 100, Belville, NC, 28451
 TEL (910) 383-1044; FAX (910) 383-1045
 www.capefearengineering.com
 N.C. LICENSE # C-1621

PROJECT NUMBER: 557-46
 NUMBER: AS SHOWN
 DATE: 08 AUG. 2014
 TRACKING: JDC:R,MLT

EXISTING CONDITIONS SURVEY VOPAK TERMINAL

NEW HANOVER COUNTY NORTH CAROLINA

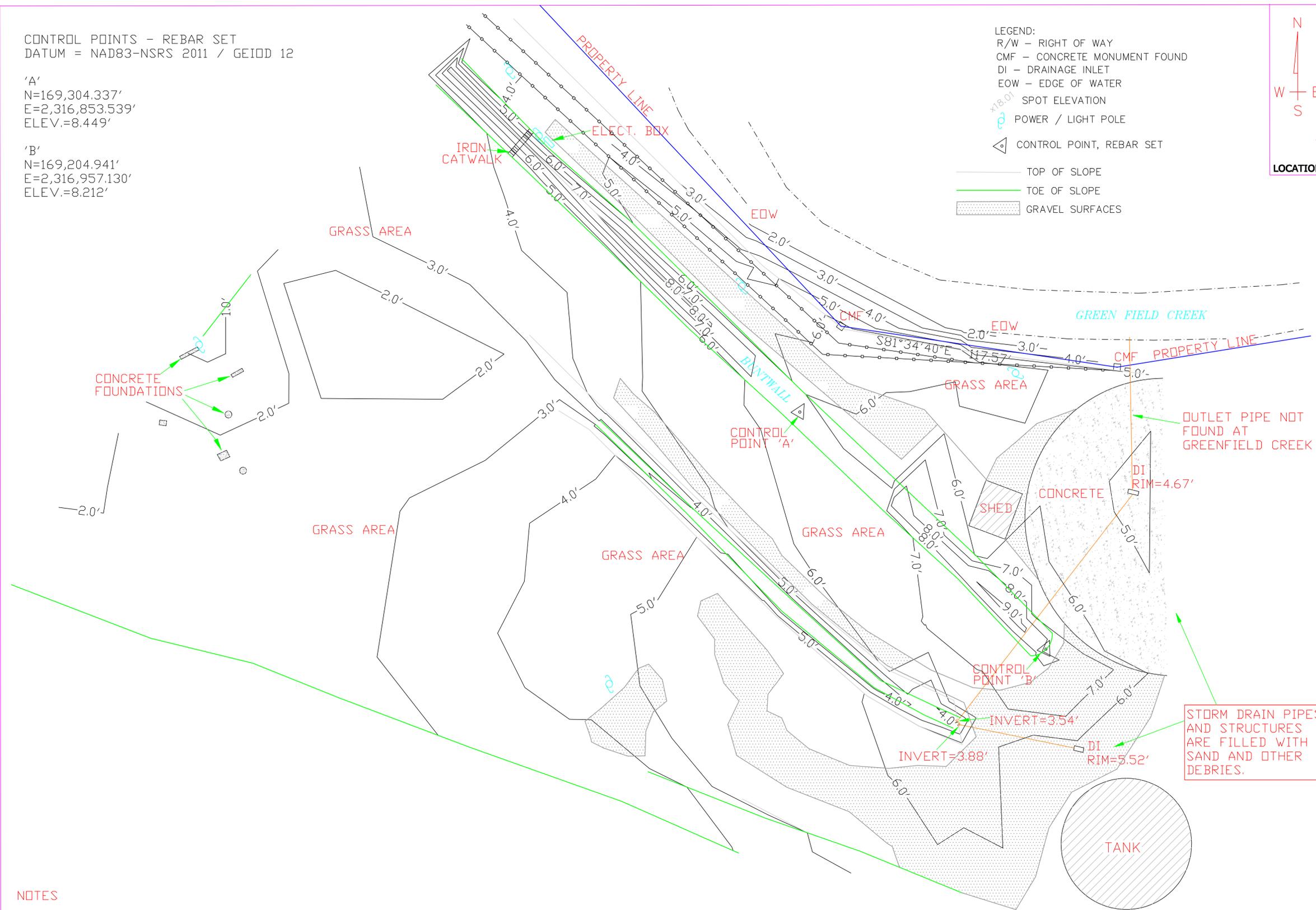
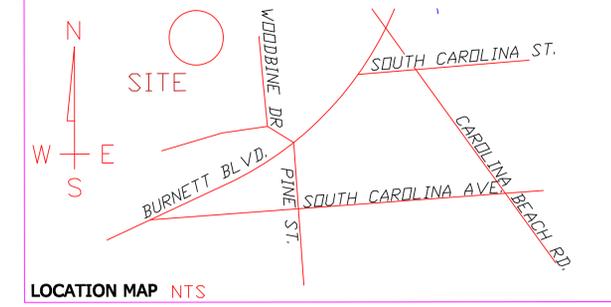
PROJECT NUMBER	SHEET NUMBER
557-46	C-1

CONTROL POINTS - REBAR SET
 DATUM = NAD83-NSRS 2011 / GEIOD 12

'A'
 N=169,304.337'
 E=2,316,853.539'
 ELEV.=8.449'

'B'
 N=169,204.941'
 E=2,316,957.130'
 ELEV.=8.212'

- LEGEND:
 R/W - RIGHT OF WAY
 CMF - CONCRETE MONUMENT FOUND
 DI - DRAINAGE INLET
 EOW - EDGE OF WATER
 SPOT ELEVATION
 POWER / LIGHT POLE
 CONTROL POINT, REBAR SET
 TOP OF SLOPE
 TOE OF SLOPE
 GRAVEL SURFACES



OUTLET PIPE NOT FOUND AT GREENFIELD CREEK

STORM DRAIN PIPES AND STRUCTURES ARE FILLED WITH SAND AND OTHER DEBRIS.

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE

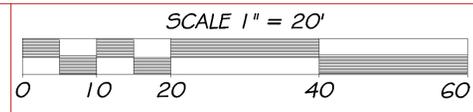
NOTES

THIS SURVEY IS A PORTION OF THE PROPERTY REFERENCED AND DESCRIBED IN DEED BOOK 1697 PAGE 953.
 SUBJECT PROPERTY IS ZONED HM-HEAVY INDUSTRIAL.
 SUBJECT PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA PER F.E.M.A. FLOOD INSURANCE RATE MAP 3720311600/K, DATED 6-2-0; ZONE AE, BASE FLOOD ELEVATION 9' MSL.
 CONTOURS DEPICTED ARE A 1' INTERVAL.

EXISTING CONDITIONS SURVEY FOR
VOPAK TERMINAL NORTH WILMINGTON
 1710 WOODBINE STREET
 CITY OF WILMINGTON
 NEW HANOVER COUNTY - NORTH CAROLINA
 FEBRUARY 10, 2014 JOB No.0039-2014

OWNER - NC STATE PORTS AUTHORITY
 WILMINGTON, NC 28402

PROGRESSIVE LAND DEVELOPMENT CONSULTANTS, PLLC
 112 PALM BREEZE DRIVE
 CAROLINA BEACH, NORTH CAROLINA 28428
 TELE: (910) 707-0168
 lsbaggie@pldcpa.com / P-0874



I, MICHAEL LEE TACKETT, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION DESCRIPTION AS SHOW ON THE FACE OF THIS MAP RATIO OF PRECISION AS CALCULATED BY COMPUTER IS 1:10,000 ±, THAT THE BOUNDARIES NOT SURVEYED ARE SHOWN BY BROKEN LINES PLOTTED FROM INFORMATION REFERENCED, THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH 'THE STANDARDS' OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA' WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 6TH DAY OF SEPTEMBER, 2014

SIGN: *Michael Lee Tackett*
MICHAEL LEE TACKETT, N.C.P.L.S. No. L-4556



THIS CERTIFIES THAT THIS COPY OF THIS MAP ACCURATELY DEPICTS THE BOUNDARY OF THE JURISDICTION OF SECTION 404 OF THE CLEAN WATER ACT AS DETERMINED BY THE UNDERSIGNED ON THIS DATE. UNLESS THERE IS A CHANGE IN THE LAW, OR OUR PUBLISHED REGULATIONS, THIS DETERMINATION OF SECTION 404 JURISDICTION MAY BE RELIED UPON FOR A PERIOD NOT TO EXCEED FIVE YEARS FROM THIS DATE. THIS DETERMINATION WAS MADE UTILIZING THE APPROPRIATE REGIONAL SUPPLEMENT TO THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL.

REGULATORY OFFICIAL: *Emily Hughes*

TITLE: *Reg. Specialist*

DATE: *Oct. 15, 2014*

USACE ACTION ID: *SAW-2014-01889*

Exp. date 10/15/19

RECEIVED

OCT 14 2014

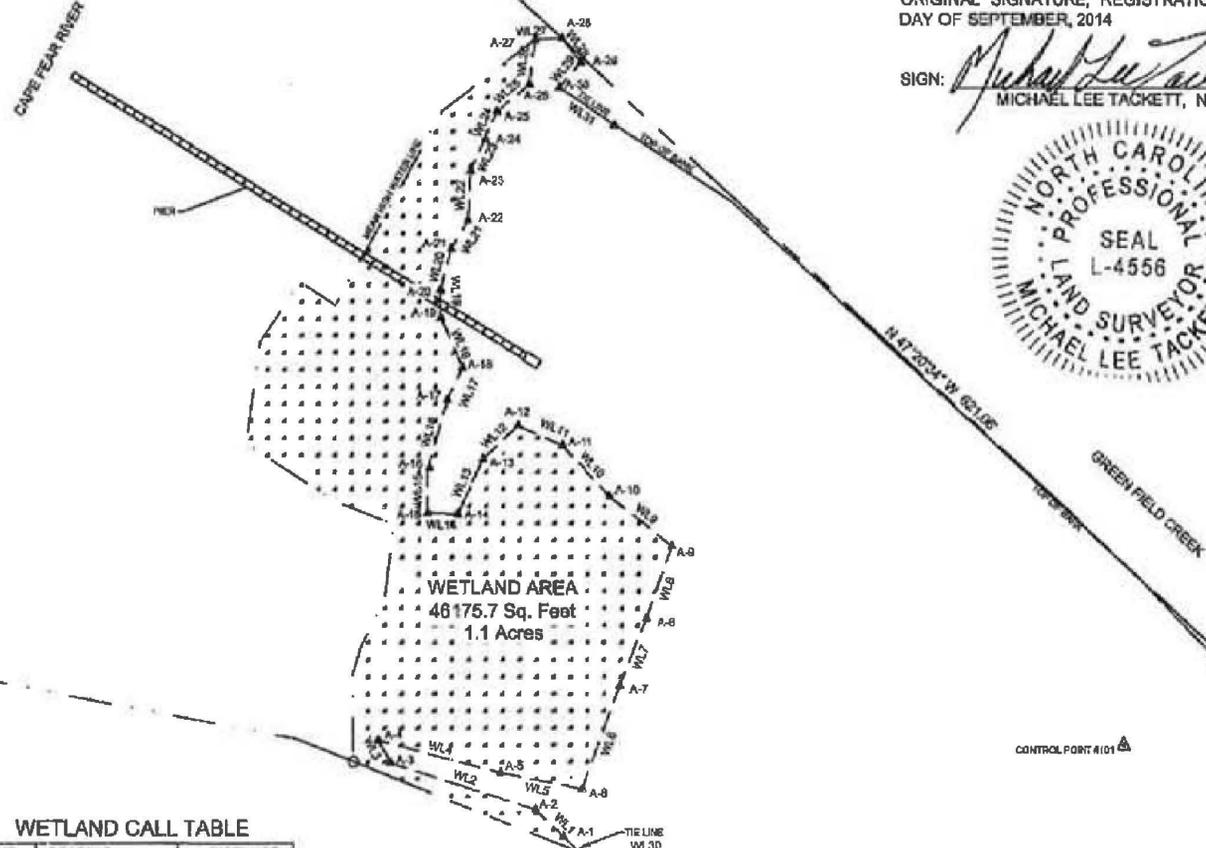
WILM. E.D. DEC.

Point	Northing	Easting	Elevation
100	18224.468	216530.748	7.53
101	18234.107	216767.771	4.31

PROJECT TIE LINES
CONTROL POINT 101 TO WETLAND FLAG #A-1: S 30°44'48" W 336.83'
CONTROL POINT 101 TO WETLAND FLAG #A-30: N 41°07'22" W 611.79'

CITY APPROVAL BLOCK

CITY OF WILMINGTON PLANNING DEPARTMENT	DATE
CITY OF WILMINGTON TRAFFIC DEPARTMENT	DATE
CITY OF WILMINGTON FIRE DEPARTMENT	DATE
CITY OF WILMINGTON STORMWATER ENGINEERING DEPARTMENT	DATE



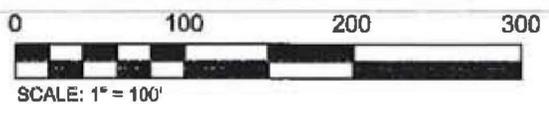
WETLAND AREA
46175.7 Sq. Feet
1.1 Acres

WETLAND CALL TABLE

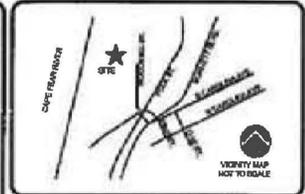
LINE	BEARING	DISTANCE
WL1	N 45°51'31" W	22.83'
WL2	N 72°23'53" W	90.21'
WL3	N 29°20'06" W	15.17'
WL4	S 75°31'05" E	75.37'
WL5	S 78°35'09" E	48.84'
WL6	N 20°22'45" E	64.85'
WL7	N 21°24'27" E	42.05'
WL8	N 19°40'45" E	44.99'
WL9	N 62°01'36" W	47.39'
WL10	N 43°10'03" W	41.18'
WL11	N 88°02'48" W	26.40'
WL12	S 49°42'48" W	28.35'
WL13	S 24°42'48" W	35.81'
WL14	N 87°17'06" W	17.67'
WL15	N 00°21'35" E	26.11'
WL16	N 15°31'51" E	43.04'
WL17	N 24°59'47" E	20.64'
WL18	N 23°23'41" W	31.83'
WL19	N 01°07'20" W	16.28'
WL20	N 14°05'38" E	25.09'
WL21	N 39°36'22" E	18.98'
WL22	N 03°00'15" E	29.45'
WL23	N 25°17'58" E	20.42'
WL24	N 22°09'45" E	17.59'
WL25	N 50°08'41" E	24.81'
WL26	N 08°50'08" E	28.54'
WL27	N 85°52'08" E	15.35'
WL28	S 39°17'38" E	18.34'
WL29	S 40°22'34" W	19.58'
WL30	S 45°51'31" E	13.28'
WL31	S 56°13'17" E	38.64'



N.C. GRID
(NAD '83-2011)



P:\557\557-46 VOPAK TERMINAL\DWG\557-46-EXIST-COND-WETLAND-MAP.DWG



LEGEND

	PROPERTY LINE FROM MNC OR ADJACENT PROPERTY LINE
	MEAN HIGH WATERLINE
	WETLAND LINE
	PROJECT CONTROL POINT
	DESIGNER WETLAND FLAG
	DEED CORNER
	DENOTES ASPHALT PAVEMENT
	DENOTES CONCRETE
	DENOTES WETLANDS

REV.	DESCRIPTION	REV. BY	DATE

CAPE FEAR ENGINEERING
151 Poole Rd., Suite 100, Beaufort, NC, 28511
TEL (910) 383-1044; FAX (910) 383-1045
www.capefearengineering.com
N.C. LICENSE # C-1621

DESIGNER: <i>JLH</i>	PROJECT: <i>557-46</i>
DRAWN: <i>JLH</i>	SCALE: <i>1"=100'</i>
CHECKED: <i>MLT</i>	DATE: <i>08/09/14</i>
APPROVED: <i>MLT</i>	

USACE 404 WETLAND DELINEATION MAP

VOPAC TERMINAL PHASE 1C
NEW HANOVER COUNTY
NORTH CAROLINA

JOB NUMBER: 557-46	SHEET NUMBER: C-1
--------------------	-------------------