

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



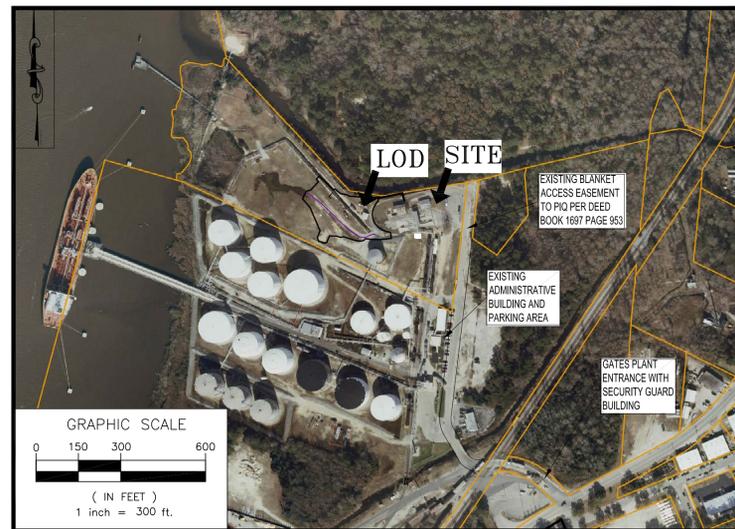
WHAT YOU DON'T KNOW CAN HURT YOU.
BEFORE YOU DIG!
CALL 1-800-632-4949
N.C. ONE-CALL CENTER
IT'S THE LAW!

CITY APPROVAL BLOCK

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

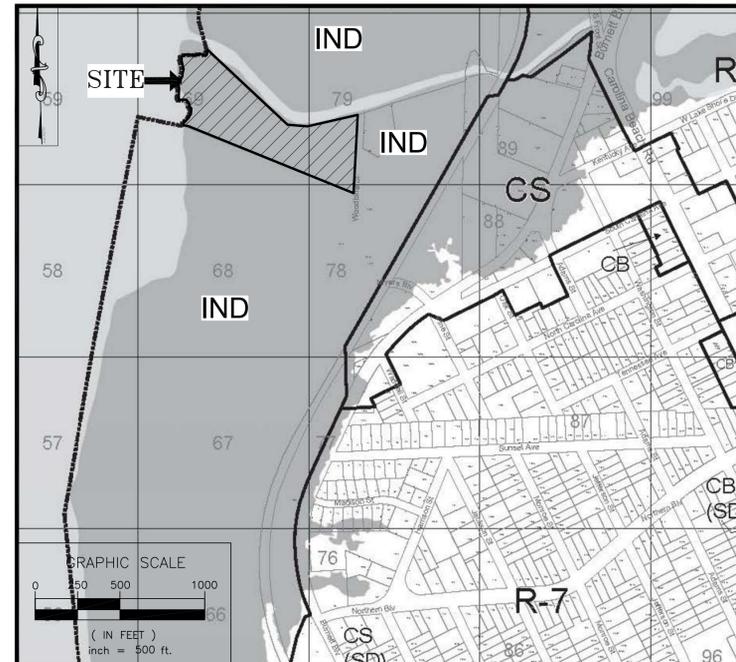
AERIAL MAP

SCALE: 1"=300'



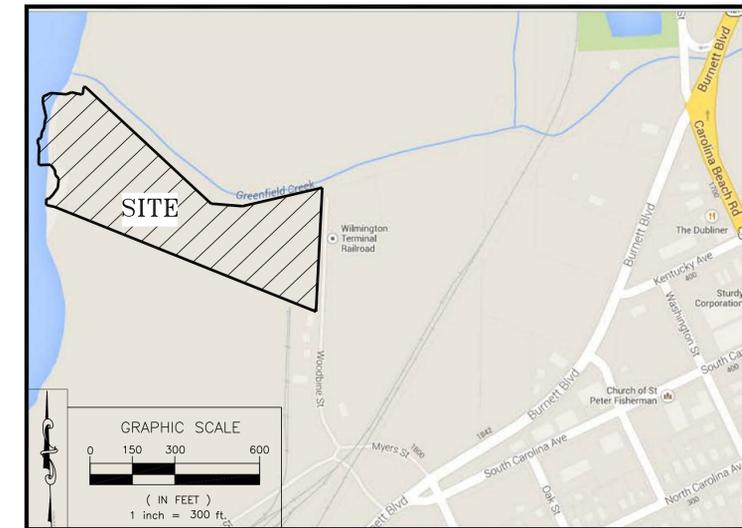
ZONING MAP

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 CFPUA 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 CFPUA 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 CFPUA water shall comply with CFPUA 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 CFPUA 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	1 OF 1
SITE INVENTORY PLAN (CITY ORDINANCE CHAPTER 18-136)	1 OF 1
SURVEY (PREPARED BY 'CAPE FEAR ENGINEERING')	1 OF 1
SURVEY (PREPARED BY 'PROGRESSIVE LAND DEVELOPMENT CONSULTANTS')	1 OF 1
WETLANDS SURVEY (PREPARED BY 'CAPE FEAR ENGINEERING')	1 OF 1

REV.	DATE	COMMENT
5	02/09/14	REV PER CITY REVIEW COMMENTS
4	02/09/14	REV PER BGA APPLICATION
3	02/09/14	REV PER MEETING WITH CITY ON 02/18/14
2	02/09/14	REV PER STORM SYSTEM LOCATION
1	02/26/14	REV PER PROJECT TEAM MEETING ON 02/25/14

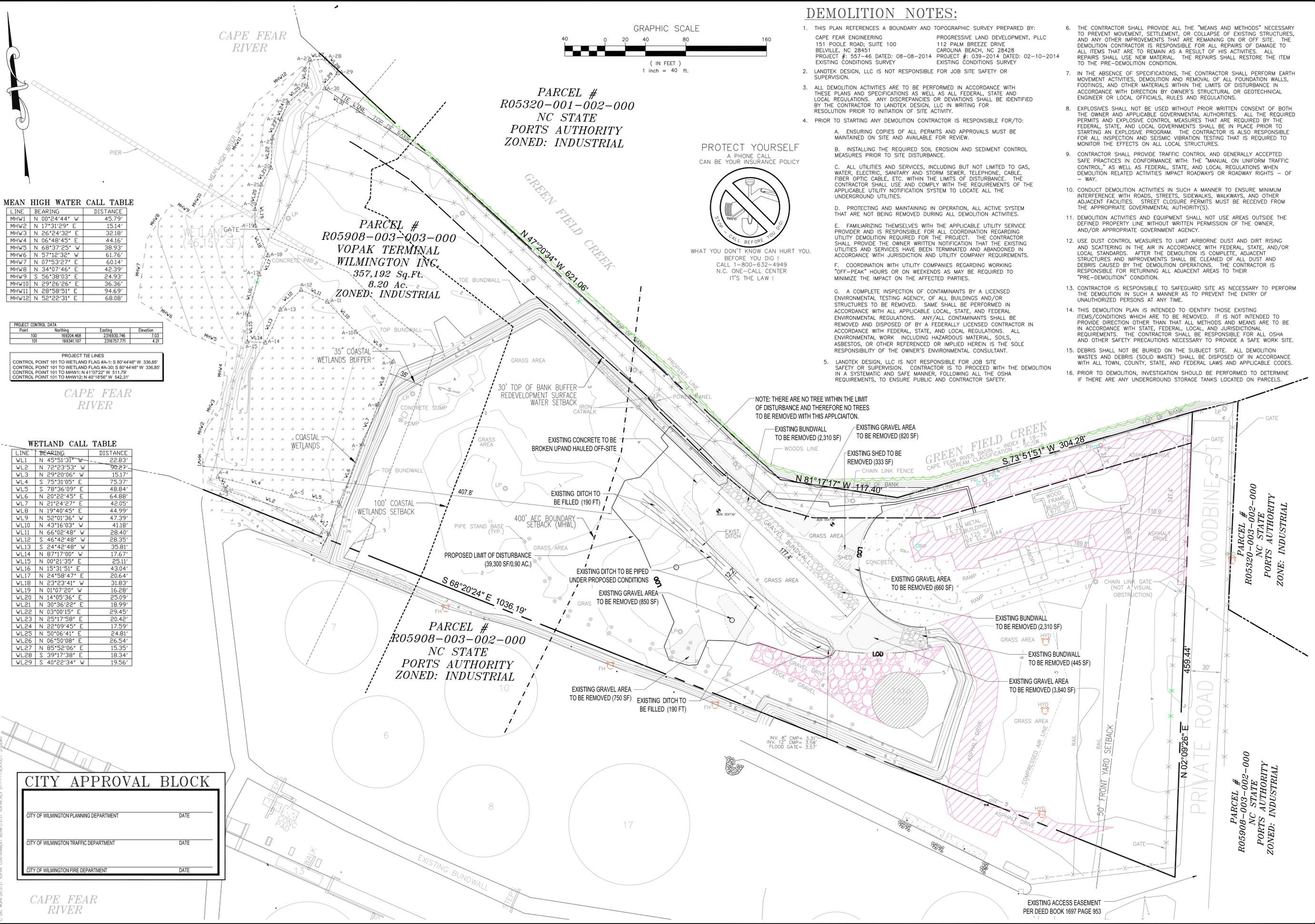
ERIC S. TOMCZAK, P.E.
NORTH CAROLINA LICENSE NO. 002281

PROJECT No: N13137
DRAWN BY: SC
CHECKED BY: ET
CAD ID #: 13137 VOPAK.REV. 5

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

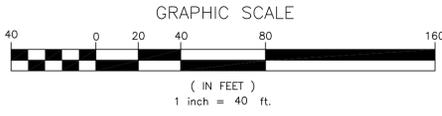
PROJECT: VOPAK TERMINAL WILMINGTON INC.
MINOR SITE PLAN AND STORMWATER PERMIT APPLICATION PLANS
INTERNAL SERVICES MAINTENANCE BUILDING #1
1704 WOODBINE STREET, CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

SCALE: (H) AS NOTED
(V) 1"=300'
DATE: 02/09/14
SHEET No: 1
REV. No: 5



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
 - PROGRESSIVE LAND DEVELOPMENT, PLLC 112 PALM BREEZE DRIVE CAROLINA BEACH, NC 28428 PROJECT #: 039-2014 DATED: 02-10-2014 EXISTING CONDITIONS SURVEY
- LANDEK 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 LANDEK 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.
- LANDEK 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 1-800-832-4949
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	231693.746	7.03
101	169241.107	231675.771	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 MHW11: N 41°07'22" W 511.79'
CONTROL POINT 101 TO MHW12: N 40°18'58" W 542.31'

WETLAND CALL TABLE

LINE	BEARING	DISTANCE
WL1	N 45°51'31" W	28.83'
WL2	N 72°23'53" W	90.22'
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	42.99'
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 _____

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. 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.: N13137
DRAWN BY: SC
CHECKED BY: ET
CAD ID. #: 13137 VOPAK REV. 5

TITLE: DEMOLITION PLAN

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

DATE: 02/09/14

SHEET No.: 2 **REV. No.:** 5

REV. DATE COMMENT

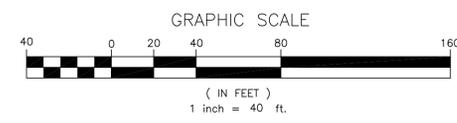
02/09/14	REV PER CITY REVIEW COMMENTS	ET
02/09/14	REV PER BOA APPLICATION	ET
02/09/14	REV PER MEETING WITH CITY ON 02/18/14	ET
02/09/14	REV PER STORM SYSTEM LOCATION	ET
02/26/14	REV PER PROJECT TEAM MEETING ON 02/25/14	ET
		BT

PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY



CAPE FEAR RIVER

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!



SITE DATA TABLE:

1. THIS DRAWING IS BASED ON A BOUNDARY LOCATION & TOPOGRAPHIC SURVEY PREPARED BY 'CAPE FEAR ENGINEERING' DATED 08-08-2014 UNDER JOB NUMBER 557-64 AS EXECUTED BY 'MIKE TACKETT' LICENSE NUMBER L-4556 AND 'PROGRESSIVE LAND DEVELOPMENT CONSULTANTS, PLLC' DATED FEBRUARY 10, 2014 UNDER JOB NUMBER 0039-2014 AS PREPARED BY 'L. SCOTT BAGGIE' LICENSE NUMBER 3450.

2. SPECIFIC RESOURCES, TECHNICAL REPORTS, DESIGN DOCUMENTS, ET AL. RELATED TO THIS PROJECT INCLUDE (BUT MAY NOT BE LIMITED TO) THE FOLLOWING:
A. BOUNDARY, LOCATION & TOPOGRAPHIC SURVEY REFERENCED ABOVE.
B. NEW HANOVER COUNTY GIS.
C. STORMWATER MANAGEMENT REPORT PREPARED BY LANDEK DESIGN, LLC.

3. 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.

4. APPLICANT/OWNER:
VOPAK TERMINALS WILMINGTON INC.
1704 WOODBINE STREET
WILMINGTON, NC 28401

5. PARCEL:
PARCEL IDENTIFICATION NUMBER: R0590-003-001-000
1704 WOODBINE STREET
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)(1))
USE: OFFICE - PROPOSED PERMITTED USE (SECT 18-199(b)(3))
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))
USE: WAREHOUSING GENERAL (PERMANENT) - PROPOSED PERMITTED USE (SECT 18-199(c)(1))

ACCESSORY USES:
USE: INTERNAL SERVICES MAINTENANCE BUILDING - PROPOSED PERMITTED ACCESSORY USE (SECT 18-199(c))

6. BULK REQUIREMENTS (SECT 18-199(d))

	IND	EXISTING	PROPOSED	COMMENTS
MIN. LOT AREA	N/S	8,20 AC	8,20 AC	357,192 SF AREA. LOT IS LAND LOCKED WITH EXISTING ACCESS.
MIN. LOT WIDTH	N/S	229.6'	229.6'	NO CHANGE
MAX. LOT IMPERVIOUS COVERAGE	N/A	20.8% (74,343 SF)	22.5% (80,380 SF)	6,037 SF INCREASE
MIN. FRONT YARD SETBACK	0'	110.9'	110.9'	COMPLIES (NEW BUILDING 360.9')
MIN. INTERIOR SIDE YARD SETBACK	0'	N/A	32.6'	NO CHANGE
MIN. CORNER SIDE YARD SETBACK	50'	N/A	N/A	NOT APPLICABLE
MIN. REAR YARD SETBACK	0'	N/A	598.1'	COMPLIES
MAX. BUILDING HEIGHT	35'	20'	<35'	COMPLIES
MAX. BUILDING COVERAGE	N/S	0.5%	2.0%	1,795 SF EXISTING VS 7,795 SF PROP (OVERHANG NOT INCL.)
TOTAL NUMBER OF BUILDING	N/S	2	3	ONE (1) BUILDING PROPOSED

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

7. OFF STREET PARKING AND LOADING DESIGN STANDARDS (ARTICLE 9):
THERE IS NO PARKING PROPOSED FOR THE MAINTENANCE BUILDING WITH EMPLOYEES PARKING AT THE ADMINISTRATIVE BUILDING LOCATED ON THE ADJACENT PROPERTY (1710 WOODBINE STREET) THAT IS LEASED BY VOPAK TERMINAL WILMINGTON INC FROM THE NORTH CAROLINA STATE PORTS AUTHORITY. EMPLOYEES WOULD TRAVEL FROM THE ADMINISTRATIVE BUILDING TO THE OPERATIONAL PORTION OF THE SITE WHERE THE MAINTENANCE BUILDING IS PROPOSED BY FOOT OR BY THE USE OF FORK LIFTS OR OTHER MACHINERY USED FOR PLANT OPERATIONS.

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

B. NUMBER OF SPACES REQUIRED (SECTION 18-532)
- OFFICE (MIN STANDARD): ONE (1) SPACE PER 300 SF OF GFA THEREFORE 400 SF / 300 SF = 1.33 SPACES - TWO (2) SPACES REQUIRED
- OFFICE (MAX STANDARD): ONE (1) SPACE PER 200 SF OF GFA THEREFORE 400 SF / 200 SF = 2 SPACES - TWO (2) SPACES REQUIRED
- WAREHOUSE (MIN/MAX STANDARD): ONE (1) SPACE PER 1,000 SF OF GFA THEREFORE 60' X 80' = 4,800 SF / 1,000 SF = 4.8 SPACES - FIVE (5) SPACES
- 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 PLANTER MACHINERY.

C. MIN. PARKING SETBACKS (SECT 18-532)
- NO STANDARD (C)

D. 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.

E. MIN AISLE WIDTH (SECT 18-1530)
PARKING ANGLE (DEGREE) MIN. WIDTH AISLE
90 (PERPENDICULAR PARKING) TWO-WAY AISLE 23' (C)

8. LIGHTING:
- THERE IS NO LIGHTING PROPOSED WITH THIS APPLICATION. EXISTING FREESTANDING LIGHTING TO REMAIN.

9. BUFFER AND ENVIRONMENTAL SETBACKS (SURFACE WATER, MEAN HIGH WATER LINE AND WETLANDS)
- A 30' BUFFER HAS BEEN PROPOSED FROM TOP OF BANK (SURFACE WATER) TO THE PROPOSED BUILDING OVERHANG IN ORDER TO COMPLY WITH REDEVELOPMENT SURFACE WATER REQUIREMENTS SET FORTH IN CITY OF WILMINGTON CODE 18-76(D).
- A 400' BUFFER HAS BEEN PROVIDED TO THE MEAN HIGH WATER LINE (AREA OF ENVIRONMENTAL CONCERN AS CONFIRMED BY THE DIVISION OF COASTAL MANAGEMENT SPECIFICALLY CAMA (ROB MAIRS)).
- A 100' SETBACK AND 35' BUFFER HAS BEEN PROVIDED TO THE COASTAL WETLANDS AS APPROVED BY THE US ARMY CORP OF ENGINEERS SPECIFICALLY EMILY HUGHES.

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 CERTIFICATE 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 AND BROUGHT TO DUMPSTER LOCATED ON ADJACENT PROPERTY LEASED BY VOPAK BY STAFF IN ACCORDANCE WITH SCHEDULE.

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 SIGN.

NOTE: ALL STREET NAME SIGNS ARE EXISTING.

14. 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 GRANTROR, NORTH CAROLINA STATE PORTS.

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

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

CITY APPROVAL BLOCK

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

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 PROCUREMENT 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 PROJECT. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCY BETWEEN THE GEOTECHNICAL REPORT AND PLANS, ETC.
- THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
- THESE PLANS ARE BASED ON INFORMATION PROVIDED TO LANDEK DESIGN, LLC AT THE TIME OF PLAN PREPARATION. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECT 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 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 CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
- CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE NECESSARY MEASURES AS 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 BE RESPONSIBLE FOR ALL DAMAGE TO UTILITIES, CURB, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECT CABLE, CONDUIT, AND LANDING CONDUIT 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 4,500 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 DEPICTED 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 WORKERS COMPENSATION INSURANCE. EMPLOYERS LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME LANDEK DESIGN, LLC AND ITS SUBCONSULTANTS AS ADJOINING INSURED AND TO PROVIDE CONTRACTOR LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH LANDEK DESIGN, LLC WITH CERTIFICATIONS OF INSURANCE COVERAGE OF THE REQUIRED INSURANCE COVERAGE WORK AND WORKER'S COMPENSATION RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS MUST MAINTAIN THE FULLLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS LANDEK 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 LANDEK DESIGN, LLC NOR THE PRESENCE OF LANDEK DESIGN, LLC OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION PROJECT SITE, SHALL RELIEVE THE CONTRACTOR OF HIS 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 HEALTH OR REGULATORY AGENCIES. LANDEK DESIGN, LLC AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION WORK OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY. LANDEK DESIGN, LLC SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADJOINING INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- LANDEK 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. LANDEK 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 LANDEK DESIGN, LLC HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. LANDEK DESIGN, LLC SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF LANDEK CONSULTING, LLC IN WRITING BY THE CONTRACTOR. LANDEK 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, LANDEK CONSULTING, LLC AND THE CONTRACTOR SHALL AGREE TO THE FOLLOWING: IF THE ITEM IS A COMPONENT, LANDEK DESIGN, LLC 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.

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

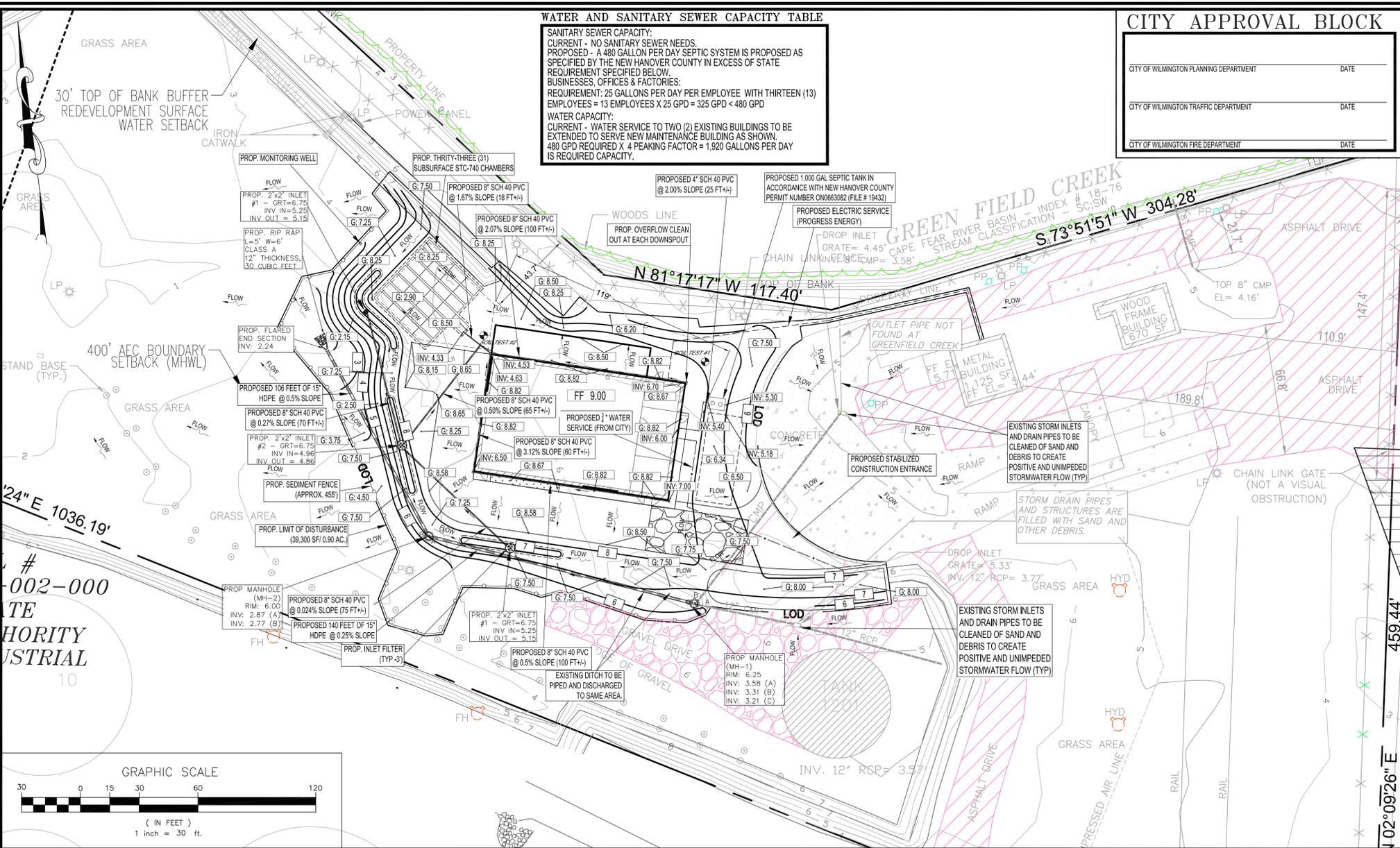
PROJECT NO: N13137
DRAWN BY: SC
CHECKED BY: ET
CAD ID #: 13137 VOPAK REV 5

ERIC S. TOMCZAK, P.E.
NORTH CAROLINA LICENSE NO. 00281

LANDTEK DESIGN, LLC
Engineers and Consultants
204 NORTH 6TH STREET
WILMINGTON, NC 28401
PHONE: (910) 772-8002 FAX: (910) 338-1815
ENGINEERING LICENSE NUMBER 03291

PARCEL # R05908-003-002-000
INTERNAL SERVICES MAINTENANCE BUILDING #1
1704 WOODBINE STREET, CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

TITLE: SITE PLAN



WATER AND SANITARY SEWER CAPACITY TABLE

SANITARY SEWER CAPACITY:
 CURRENT - NO SANITARY SEWER NEEDS.
 PROPOSED - A 480 GALLON PER DAY SEPTIC SYSTEM IS PROPOSED AS SPECIFIED BY THE NEW HANOVER COUNTY IN EXCESS OF STATE REQUIREMENT SPECIFIED BELOW.
BUSINESSES, OFFICES & FACTORIES:
 REQUIREMENT: 25 GALLONS PER DAY PER EMPLOYEE WITH THIRTEEN (13) EMPLOYEES = 13 EMPLOYEES X 25 GPD = 325 GPD < 480 GPD
WATER CAPACITY:
 CURRENT - WATER SERVICE TO TWO (2) EXISTING BUILDINGS TO BE EXTENDED TO SERVE NEW MAINTENANCE BUILDING AS SHOWN.
 480 GPD REQUIRED X 4 PEAKING FACTOR = 1,920 GALLONS PER DAY IS REQUIRED CAPACITY.

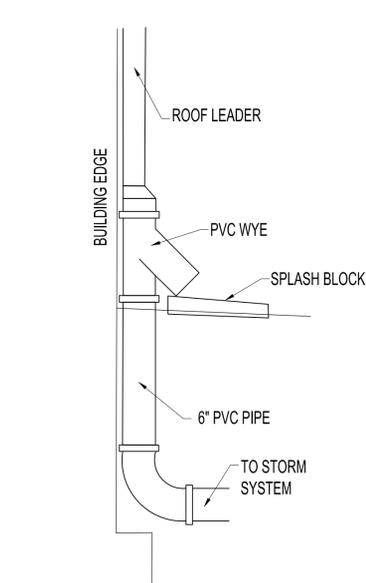
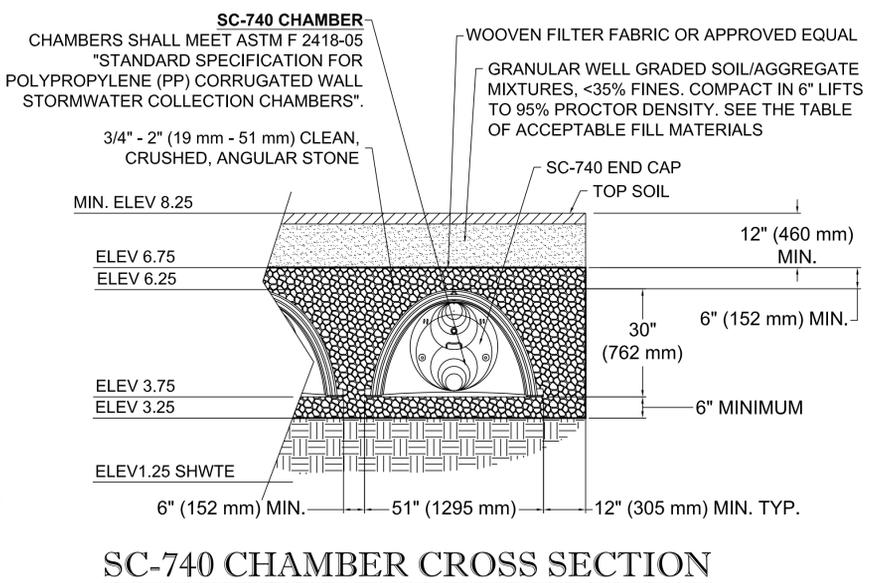
CITY APPROVAL BLOCK

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

GRADING AND UTILITY NOTES:

- LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINTS OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 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 SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR 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.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GRADE, ACCESS, DOOR ACCESS, AND EXTERIOR GRADING. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE PLANS, ENGINEER IS TO NOTIFY THE OWNER PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
- ALL NEW UTILITIES/SERVICES INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN A COMPUTER GENERATED REPORT TO THE QUALIFIED GEOTECHNICAL ENGINEER REGISTERED WITH THE STATE WHERE THE WORK IS COMPLETED. ALL FILL AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED ARE TO BE COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURBS, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBSIST BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
- ALL FILL COMPACTION AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATION, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND/OR TRENCHING. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM UNKNOWN OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTORS TO ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROTECT THE PUBLIC MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE AT THE CONTRACTOR'S OWN RISK. IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
- CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.
- ALL WETLAND PERMITS TO BE OBTAINED (NATIONWIDE PERMIT, INDIVIDUAL PERMIT, NC DENR DWO WETLANDS PERMIT AND DELINEATION CONFIRMATION) FROM US ARMY CORPS OF ENGINEER TO DISTRIB ANY WETLANDS. NOTE NONE PRESENT ON SITE PURSUANT TO FIELD REVIEW OF SITE AND GIS MAPPING.

- PLANNED EROSION AND SEDIMENTATION CONTROL PRACTICES:**
- CONSTRUCTION SEQUENCE: THE CONTRACTOR SHALL PROVIDE SEEDING AND MULCHING ON ALL DISTURBED AREAS WITHIN 21 WORKING DAYS FOLLOWING THE COMPLETION OF ANY PHASE OF GRADING. SEEDING REQUIREMENTS SHALL INCLUDE SOIL PREPARATION, SEE MIXTURES, AND MULCHING.
 - LAND GRADING: APPROXIMATELY 0.92 ACRES OF GRADING WILL BE REQUIRED FOR THE DEVELOPMENT OF THE STORMWATER IMPROVEMENTS AND ASSOCIATED APPURTENANCES. ALL FILL AND CUT SLOPES WILL BE MAXIMUM OF 3:1.
 - TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT - PRACTICE 6.06
 - SEDIMENT FENCING: A SEDIMENT FENCE WILL BE CONSTRUCTED ALONG THE DOWN-GRADIENT BOUNDARY OF THE PROJECT TO PREVENT UNTREATED RUNOFF FROM EXITING THE DISTURBANCE AREA.
 - CONTROLLED SEDIMENT FENCE OUTLET
 - TEMPORARY VEGETATIVE COVER: TEMPORARY VEGETATIVE COVER WILL BE IMPLEMENTED THROUGH SEEDING AFTER EVERY LAND DISTURBING ACTIVITY IS COMPLETED. VEGETATIVE COVER MUST BE ESTABLISHED WITHIN 21 DAYS OF LAND DISTURBING ACTIVITY. PERMANENT COVER MUST BE ESTABLISHED PRIOR TO COMPLETION OF THE PROJECT.



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!

- VEGETATIVE PLAN:**
 THE CONTRACTOR SHALL PROVIDE SEEDING AND MULCHING ON ALL DISTURBED AREAS WITHIN 21 WORKING DAYS FOLLOWING THE COMPLETION OF ANY PHASE OF GRADING. SEEDING REQUIREMENTS SHALL INCLUDE SOIL PREPARATION, SEE MIXTURES, AND MULCHING.
- MAINTENANCE PLAN:**
- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR INTEGRITY FOLLOWING EVERY RUNOFF PRODUCING RAINFALL EVENT, OR AT A MINIMUM, ONCE A WEEK. ANY REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN THE FUNCTION OF THE DESIGN MEASURES.
 - SEDIMENT WILL BE REMOVED FROM THE SEDIMENT FENCE WHEN IT BECOMES ABOUT A HALF OF A FOOT DEEP AT THE FENCE BASE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN FUNCTION AS A BARRIER.
 - THE SEDIMENT FENCING AREA AND COLLECTED SEDIMENTS WILL BE REMOVED AND BROUGHT TO GRADE AFTER THE CONTRIBUTING AREA HAS BEEN PROPERLY STABILIZED.
 - ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
 - CONTRACTOR TO SWEEP AND KEEP CLEAN OF SEDIMENT THE ROADWAY ADJACENT TO THE PROJECT SITE AS NECESSARY.
- CONTACT PERSON: VOPAK TERMINALS, INC. JASON LONG, (910) 264-1389.
- EROSION AND SEDIMENT CONTROL SEQUENCE & CONSTRUCTION SCHEDULE:**
- PERFORM CONSTRUCTION STAKE-OUT.
 - INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE.
 - CLEAR SITE, BUT DO NOT GRUB AND PERFORM DEMOLITION ACTIVITIES.
 - INSTALL A PERMANENT EROSION AND SEDIMENT FENCE INCLUDING REMOVAL OF OLD BUNDWALL AND CONSTRUCTION OF NEW BUNDWALL. NOTE NEW BUNDWALL MUST BE CONSTRUCTED FIRST SO THAT AT NO TIME WILL TANK AREA BE UNCONTAINED SHOULD A FAILURE OCCUR WHICH IS HIGHLY UNLIKELY.
 - GRUB SITE AND HAIL AWAY MATERIAL.
 - COMMENCE ROUGH GRADING OF THE SITE.
 - INSTALL STORMWATER MANAGEMENT DEVICES, INLETS, INLET FILTERS, CONSTRUCT SWALES AND UPSTREAM PIPE CONVEYANCE SYSTEM.
 - COMPLETE ROUGH GRADE THE SITE AND INSTALL SANITARY SEWER SEPTIC SYSTEM (TANK AND FIELD).
 - CONSTRUCT BUILDING INCLUDING CONNECTING BUILDING ROOF LEADERS TO STORM SYSTEM AND GRAVEL ACCESS DRIVEWAY.
 - SCARIFY, SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS.
 - RE-SCARIFY, RE-SEED, RE-FERTILIZE, AND MULCH ALL DISTURBED AREA.
 - AFTER DISTURBED AREAS ARE STABILIZED WITH VEGETATION, THE CONTRACTOR SHALL RETURN TO THE SITE AND REMOVE ALL TEMPORARY EROSION CONTROL MEASURES (SILT FENCE AND INLET FILTERS)
- STORMWATER TREATMENT INFORMATION**
 6,037 SF INCREASE IN IMPERVIOUS COVERAGE PROPOSED.
- STORMWATER PIPE CONVEYANCE SYSTEM HAS BEEN DESIGNED TO CONVEY THE 10 YEAR STORM EVENT.
- TOTAL TREATMENT VOLUME PROVIDED FROM THE SEASONAL HIGH WATER TABLE ELEVATION OF 1.25' PLUS 2 FEET TO THE BOTTOM ELEVATION OF STORMWATER TREATMENT SYSTEM OF 3.25' IS 2,321.9 CUBIC FEET. SHOULD THE SYSTEM FILL TO CAPACITY, THE OVERFLOW MECHANISM IS THE 45 DEGREE "Y" CONNECTIONS AT THE ROOF LEADER TO GRADE INTERFACE.
- PROPOSED STORMWATER MANAGEMENT BASIN HAS BEEN DESIGNED TO MITIGATE 1.5" OF RUNOFF OVER THE IMPERVIOUS AREA CONSTITUTING 16,045 SQUARE FEET.

PROJECT No: N13137
 DRAWN BY: SC
 CHECKED BY: ET
 CAD ID #: 13137 VOPAK REV 5

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

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

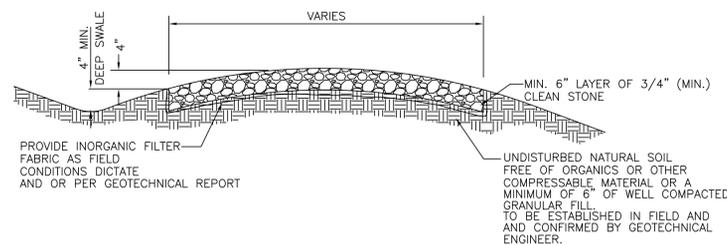
SCALE: (H) 1"=30'
 (V)

DATE: 02/09/14

SHEET No: 4 OF 5

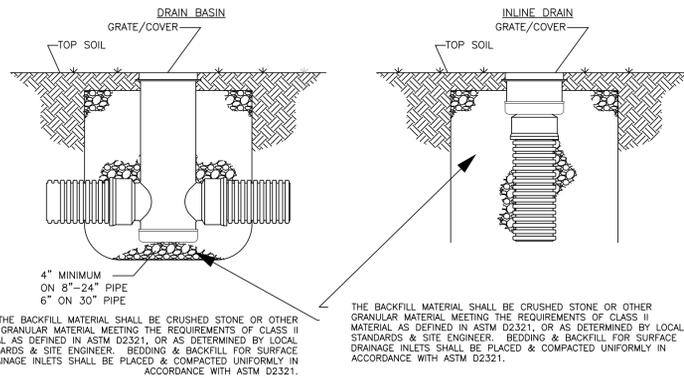
REV. No: 5

TITLE: GRADING, UTILITY AND STORMWATER PLAN



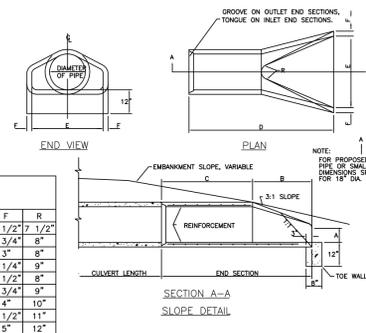
GRAVEL DRIVE DETAIL

NOT TO SCALE



12" X 12" DRAINTECH INLET DETAIL

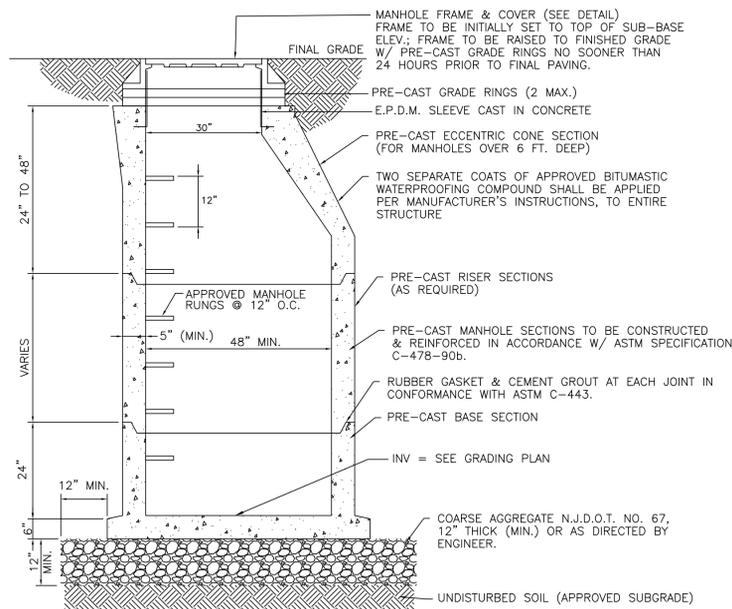
NOT TO SCALE



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'-11"	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'-8"	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"	8'-0"	5'-6"	3 3/4"	9"
36"	15"	5'-3"	2'-9"	8'-0"	6'-0"	4"	10"
42"	21"	5'-3"	2'-9"	8'-0"	6'-6"	4 1/2"	11"
48"	24"	6'-0"	2'-0"	8'-0"	7'-0"	5"	12"

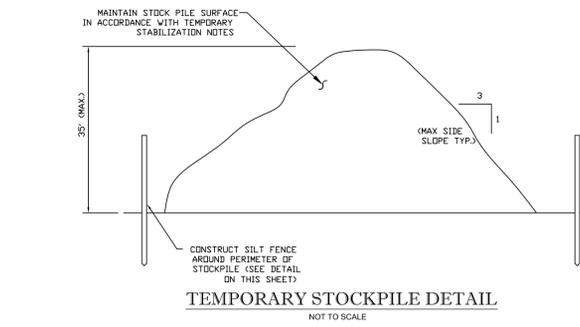
FLARED END SECTION

NOT TO SCALE



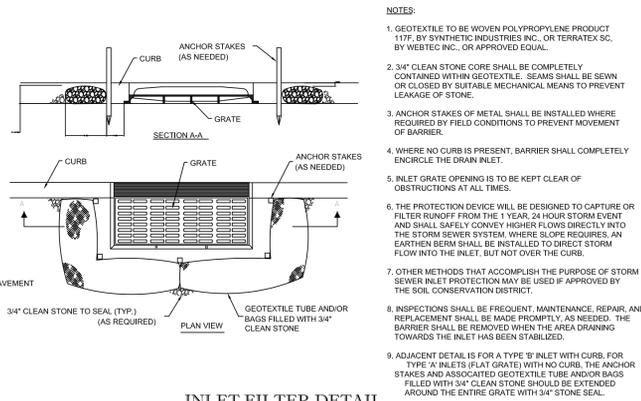
TYPICAL PRECAST STORM MANHOLE

NOT TO SCALE



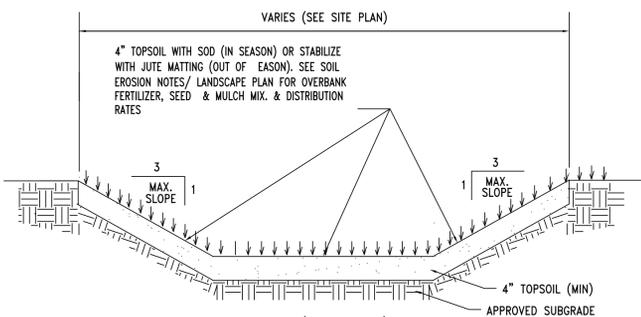
TEMPORARY STOCKPILE DETAIL

NOT TO SCALE



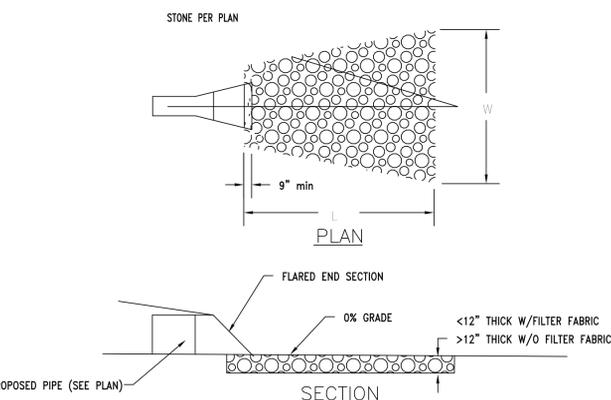
INLET FILTER DETAIL

NOT TO SCALE



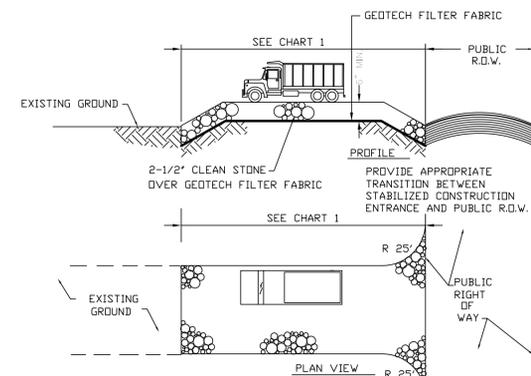
STORMWATER CONVEYANCE SWALE

NOT TO SCALE



RIP RAP DETAIL

NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE AND ANTI-TRACKING PAD

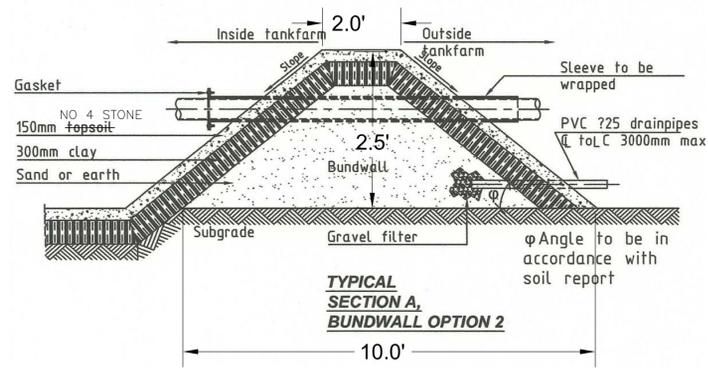
NOT TO SCALE

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.

soil report

TYPICAL SECTION A, BUNDWALL OPTION 1



TYPICAL SECTION A, BUNDWALL OPTION 2

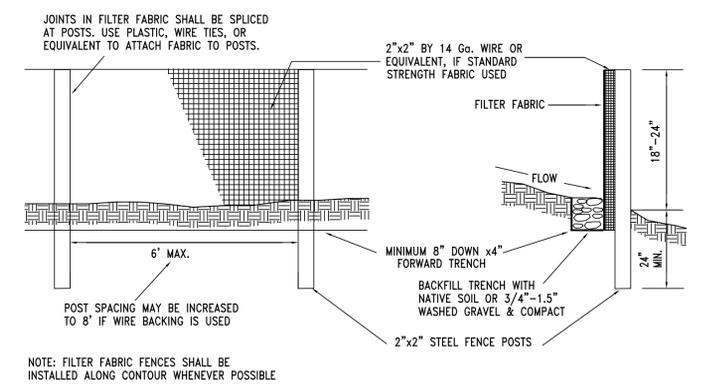
NOTE: 150 MM OF TOP SOIL TO BE REPLACED WITH NO. 4 STONE TO BE CONSISTENT WITH EXISTING WALL.

REMARKS

- DIMENSIONS BUNDWALL AND SLOPES TO BE CALCULATED BY CONTRACTOR

BUNDWALL DETAIL

NOT TO SCALE



SEDIMENT (SILT) FENCE

NOT TO SCALE

REV.	DATE	BY	DESCRIPTION
1	02/09/14	ET	REV PER CITY REVIEW COMMENTS
2	02/09/14	ET	REV PER PERM APPLICATION
3	02/09/14	ET	REV PER MEETING WITH CITY ON 02/18/14
4	02/09/14	ET	REV PER PERM APPLICATION
5	02/09/14	ET	REV PER PROJECT TEAM MEETING ON 02/25/14

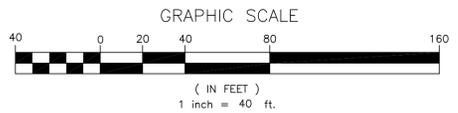
ERIC S. TOMCZAK, P.E.
NORTH CAROLINA LICENSE NO. 00281

PROJECT No: N113137
DRAWN BY: SC
CHECKED BY: ET
CAD ID #: 13137 VOPAK.REV.5

LANDTEK DESIGN, LLC
Engineers and Consultants
204 NORTH 6TH STREET
WILMINGTON, NC 28401
PHONE: (910) 772-8802 FAX: (910) 358-1815
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

TITLE: CONSTRUCTION DETAILS
SCALE: (H) AS NOTED (V) -
DATE: 02/09/14
SHEET No: 5 OF 5
REV. No: 5



CITY APPROVAL BLOCK

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

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	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: 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°18'50" 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'

SOIL TYPE: **W**

SOIL TYPE BOUNDARY PER NEW HANOVER COUNTY SOIL SURVEY

SOIL TYPE BOUNDARY PER NEW HANOVER COUNTY SOIL SURVEY

CAPE FEAR RIVER

SOIL TYPE: **TW**

SOIL TYPE: **UR**

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

PARCEL #
R05908-003-Q03-000
VOPAK TERMINAL
WILMINGTON INC.
357,192 Sq.Ft.
8.20 Ac.
ZONED: INDUSTRIAL

SOIL TYPE: **UR**

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

SOIL TYPE: **UR**

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

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

REV.	DATE	COMMENT
5	05/10/14	REV PER CITY REVIEW COMMENTS
4	05/04/14	REV PER BOA APPLICATION
3	03/19/14	REV PER MEETING WITH CITY ON 03/18/14
2	03/19/14	REV PER STORM SYSTEM LOCATION
1	02/29/14	REV PER PROJECT TEAM MEETING ON 02/29/14

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

PROJECT No: N13137
DRAWN BY: SC
CHECKED BY: ET
CAD ID #: 13137 VOPAK REV 5

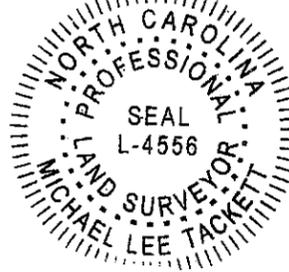
LANDTEK DESIGN, LLC
Engineers and Consultants
204 NORTH 6TH STREET
WILMINGTON, NC 28401
PHONE: (910) 772-8000 FAX: (910) 338-1815
ENGINEERING LICENSE NUMBER 032291

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
TITLE: SITE INVENTORY PLAN

SCALE: (H) 1" = 40'
DATE: 02/09/14
SHEET No: 1 OF 1
REV. No: 5

I, MICHAEL LEE TACKETT, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION DESCRIPTION AS SHOWN ON THE FACE OF THIS MAP. THE 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 5TH DAY OF SEPTEMBER, 2014

SIGN: 
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: _____

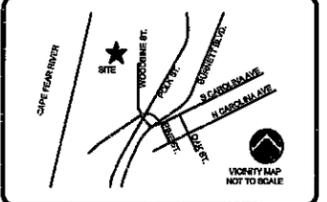
TITLE: _____

DATE: _____

USACE ACTION ID: _____

PROJECT CONTROL DATA			
Point	Northing	Easting	Elevation
100	199204.488	2316930.748	7.03
101	199341.107	2316767.771	4.21

PROJECT TIE LINES	
CONTROL POINT 101 TO WETLAND FLAG #A-1:	S 89°44'48" W 336.85'
CONTROL POINT 101 TO WETLAND FLAG #A-30:	N 41°07'22" W 511.79'



LEGEND	
	PROPERTY LINE FROM NHC GIS
	ADJACENT PROPERTY LINE
	MEAN HIGH WATER LINE
	WETLAND LINE
	PROJECT CONTROL POINT
	DENOTES WETLAND FLAG
	DEED CORNER
	DENOTES ASPHALT PAVEMENT
	DENOTES CONCRETE
	DENOTES WETLANDS

REV.	DESCRIPTION	REV. BY	DATE
1	REVISIONS		

CAPE FEAR RIVER

PIER

WETLAND AREA
46175.7 Sq. Feet
1.1 Acres

GREEN FIELD CREEK

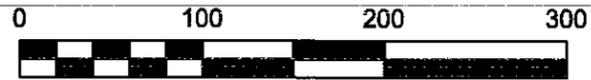
GREEN FIELD CREEK

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 68°02'48" W	28.40'
WL12	S 46°42'46" W	28.35'
WL13	S 24°42'48" W	35.81'
WL14	N 87°17'00" W	17.87'
WL15	N 00°21'35" E	25.11'
WL16	N 15°31'51" E	43.04'
WL17	N 24°58'47" E	20.84'
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°38'22" 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	19.34'
WL29	S 40°22'34" W	19.56'
WL30	S 45°51'31" E	13.28'
WL31	S 56°13'17" E	39.64'



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



SCALE: 1" = 100'

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

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

DRAWN: JOCR	PROJECT NUMBER: 020-001
DESIGN: JOCR	SCALE: 1"=100'
CHECK: M.TACKETT	DATE: 04 SEP 2014
APPROVED: H.STOCKS	

USACE 404 WETLAND
DELINEATION MAP

VOPAC TERMINAL
PHASE 1C
NEW HANOVER COUNTY
NORTH CAROLINA

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