City of New Bedford
Department of Planning, Housing & Community Development
608 Pleasant St, New Bedford, Massachusetts 02740
Telephone: (508) 979.1500 Facsimile: (508) 979.1575

PATRICK J. SULLIVAN
DIRECTOR

STAFF REPORT

PLANNING BOARD MEETING
September 13, 2017

Case #31-17: **SITE PLAN APPROVAL**
61 John Vertente Boulevard
(Map 133, Lot 47)

Applicant: Farland Corp
401 County Street
New Bedford, MA 02745

Applicant: SMRE 100, LLC
c/o Tim Cusson
255 State Street; 7th Fl
Boston, MA 02109

Owner: Symmetry New Bedford Real Estate, LLC
3724 N. State Road; 15
Warsaw, IN 46582


LOOKING SOUTHWEST TOWARD ENTRANCE OF EXISTING STRUCTURE


LOOKING SOUTH TOWARD MAIN ENTRANCE

Overview of Request

This is a request by applicant for **Site Plan** approval under **Chapter 9 Comprehensive Zoning, §5400-5490B** for a seafood warehouse and distribution facility located in New Bedford Business Park at 61 John Vertente Boulevard (Map 133, Lot 47) on a 16.4 +/- acre site in the Industrial C (IC) zoning district.

Manufacturing and Light Manufacturing defining this proposal are uses permitted by right in the Industrial C zoning district.

The designated parcel is subject to certain deed restrictions described and recorded in Bristol County (S.D.) Registry of Deeds at Book 1769, Page 1060; Book 7665, Page 48; and Book 8931, Page 199 (Attachment 3).

Existing Conditions

The location within the Business Park is an attractive, wooded setting with certain improvements that have become derelict, situated at the southern terminus of John Vertente Boulevard abutting the former Polaroid campus.

The previous 82,000+/- SF manufacturing facility is currently vacant. Two hundred and forty (240) associated parking areas are located to the north, east, and west of the structure. There is an existing utility easement [serving the former New Bedford Gas & Edison Light Company] running parallel with the south property lot line.

The applicant has stated the area is located in FEMA Flood Zone X, and is located outside the 0.2% annual chance floodplain.

Applicant also notes the site is not located within an area identified by the National Heritage and Endangered Species Program as a Priority Habitat of Rare Species or an Estimated Habitat of Rare Wildlife.

Proposed Conditions

The applicant intends to alter the terrain by paving the vegetated area adjacent to the southeast elevation of the building with bituminous pavement to facilitate construction of sixteen (16), twelve (12) by sixty (60) foot loading dock bays partially encroaching within the 100 foot wetland buffer zone. An additional forty-seven (47) tractor trailer spaces of gravel pervious pavement are proposed to be partially located within the buffer zone and within the utility easement area. Wetland replication is proposed, as access for tractor trailer spaces requires a wetland crossing.


LOOKING SOUTH TOWARD PRPOSED LOADING DOCK AREA OF RECONSTRUCTION FROM JOHN VERTENTE BOULEVARD

The stormwater management plan for Best Management Practice (BMP's) includes proprietary separators and a detention basin. A Notice of Intent for this parcel, which is adjacent to a Bordering Vegetated Wetland (BVW) along the Samuel Barnet Boulevard and John Vertente Boulevard frontage, is under review by the City of New Bedford Conservation Commission. A hearing before the Conservation Commission scheduled to August 22, 2017 was continued to September 5, 2017, and then subsequently continued to September 19, 2017 by the applicant in order to address peer review comments. Peer Review Letter from Nitsch Engineering may be found at Attachment 10.

The NOI for 60 John Vertente Boulevard may be viewed by following this link to the Conservation Commission web page:
http://newbedford.wpengine.netdna-cdn.com/environmental-stewardship/wp-content/uploads/sites/39/conservation/meetings/2017/61-John-Vertente-Blvd-NOI-Submittal-081117.pdf

[For comments from the city's conservation agent, see **Review Comments**.]

Planning staff calculates twenty-four (24) spaces are needed for the 83, 560+/- SF warehouse and distribution use. Under **521 CMR: Architectural Access Board** standards, five (5) compliant spaces are required for 101-150 spaces. Technical review of plans counts 144 parking spaces for employees and visitors to the business; 7 ADA spaces are included and are shown on plan sheets. The applicant should clarify for the Planning Board ADA accessibility to the structure's interior and final location of ADA complaint parking spaces.

The applicant does not state how many or what type of vehicles may be used by the business. This information should be provided by the applicant to comply with the stipulations under **Appendix C-Table of Parking & Loading Requirements**.

Two (2) loading spaces are required for each building containing 10,000 sq. ft. of gross floor area. Thereafter, one (1) additional loading space shall be required for each additional 25,000 sq. ft. of gross floor area (GFA). A minimum of five (5) loading docks are required for the 83, 560 +/- SF structure; sixteen (16) loading docks are shown on the architectural plans.

Zoning Data on the plan set Cover Sheet state the applicant has provided 153 parking spaces, eight (8) ADA spaces, and 18 loading dock spaces. Inconsistencies should be corrected on plan sheets, Project Summary, and application form.

Appendix C-Table of Parking & Loading Regulations

USE	PARKING REQUIREMENTS	LOADING REQUIREMENTS
Businesses engaged in the warehousing and distribution of goods & materials including building & construction contractors, equipment & supplies on premises, motor freight terminal, facilities for storing & servicing of motor vehicles used in conducting a business or public transportation, industrial machinery & equipment, grain, petroleum products & junkyards.	One (1) space per 1500 sq. ft. of gross floor area up to 15,000 sq. ft. Thereafter, one (1) additional space for each 5,000 sq. ft. or portion thereof in excess of 15,000 sq. ft., plus one (1) space for each vehicle utilized in the business.	Two (2) loading spaces for each building containing 10,000 sq. ft. of gross floor area. Thereafter, one (1) additional loading space shall be required for each additional 25,000 sq. ft. of gross floor area or for each fifteen (15) feet of dock, platform or opening in the building where the loading or unloading of commodities is intended to occur, whichever is the greatest.

No construction schedule or cost estimate have been included with the case submittal documents as required under §5452.

Demand and Operations

The applicant omits the number of employees, number of customers, hours of operation, days of operation, and hours and frequency of deliveries from the Site Plan Review Application form. The absence of these details poses a challenge to a complete site plan review.

To avoid further traffic congestion at the entrance to the business park around 7:00 a.m. and 3:00 p.m., the company shall begin its first shift outside of the 6:50 -7:10 a.m. time window and end its first shift outside of the 2:50-3:10 p.m. time window [as per Item 16 of the GNBIF Regulations].

Site Plan

Plans submitted for consideration:

The submittal is shown as the Site Plan for 61 John Vertente Boulevard (Assessors Map 133, Lot 47) New Bedford, MA dated August 10, 2017 prepared for Parallel Products of New England, 401 Industry Road, Louisville, KY 40208 by Farland Corp., 401 County Street, New Bedford, MA 02740, consisting of nine (9) sheets;

Recommended modifications are noted as follows:

- **Cover Sheet-Sheet 1 of 9**
  - ☐ Update Record Owner to reflect new deed book and page number as Deed Book 8931, Page 199.
  - ☐ The Zoning Matrix is inconsistent with the regulations of the Greater New Bedford Industrial Foundation stipulations.
    - ☐ The Zoning Matrix on the Cover plan sheet shall be amended to note the GNBIF Regulations for building coverage for first floor square footage shall not exceed 40% of the total area of the premises [as per Item 1 of the GNBIF Regulations].
    - ☐ The Zoning Matrix on the Cover plan sheet shall be amended to note the GNBIF Regulations for lot coverage, to include all uses on a lot which include, but are not limited to, buildings, driveways, parking areas, impermeable surfaces, etc., shall not cover more that 65% of the total area of the premises [as per Item 2 of the GNBIF Regulations].
    - ☐ The Zoning Matrix on the Cover plan sheet shall be amended to note the GNBIF Regulations for setbacks, which are fifty (50) feet from any street or lot line [as per Item 7 of the GNBIF Regulations].
  - ☐ Add **Waivers**.
  - ☐ Zoning Data on the plan set Cover Sheet state the applicant has provided 153 parking spaces, eight (8) ADA spaces, and 18 loading dock spaces. Please recheck calculations. Inconsistencies should be corrected on plan sheets, Project Summary, and application form.
- **Existing Conditions-Sheet 2 of 9**
  - ☐ If a Deed Book and Page number is available for utility easement, this should be included on revised plans.
- **Demolition Plan-Sheet 3 of 9**
- **Site Layout Plan-Sheet 4 of 9**
  - ☐ Identify Snow storage area(s) and snow disposal and plowing plan relative to Wetland Resource Areas.
  - ☐ Identify and note curb material for parking area east of existing structure.

- See comment #11 from Nitsch Engineering regarding Fuel Tank.

- **Utilities & Grading-Sheet 5 of 9**
  - Staff defers to the forthcoming Department of Public Infrastructure memo.

- **Erosion & Sediment Control Plan-6 of 9**
  - Staff defers to the forthcoming Department of Public Infrastructure memo and Conservation Commission peer review (Attachment 10).

- **Notes -Sheet 7 of 9**
  - General Construction Note #11, as per **§5471**, amend to read: the applicant shall minimize the number of removed trees six-inch caliper or larger.
  - General Construction Note #19, amend to read: and City Planner.
  - Soil Erosion and Sediment Control Note #21: Change Hay bales/Hay to Straw bales/Straw.

- **Detail Sheet- Sheet 8 of 9**
  - Change Hay bales/Hay to Straw bales/Straw where applicable.
  - Staff defers to the Department of Public Infrastructure and Conservation Commission peer review (Attachment).

- **Details-Sheet 9 of 9**

- **Lighting Plan Sheet -Omitted**
  - Provide cut sheets for all lighting fixtures for review and approval by the Planning Board or its designated agent.

Architectural Drawings-Omitted

- Show all structural building elevations (front, sides and rear façades) that will be affected by the proposed project.
- For additions/alterations: label existing and new construction, as well as items to be removed.
- Identify all existing and proposed exterior materials, treatments and colors - including roofing, roof eaves, eave brackets, siding, doors, trim, sills, windows, fences, and railings.
- Show details of proposed new exterior elements.
- Show any exterior mechanical, duct work, and/or utility boxes.
- Include dimensions for building height, wall length and identify existing and proposed floor elevations.

Waivers

The applicant has requested three (3) waivers for consideration by the Planning Board (Attachment 6):

1. Code of Ordinances - Chapter 9, **§5350** and **5455** [Development Impact Study)
2. Site Plan Review Checklist – Item 3g. Landscape Plan
   - Waiver from Landscape Plan should be with written approval from the GNBIF. An important aspect of the Foundations' decision on whether or not to approve the new building plans or plan for expansion to an existing building shall be the attractiveness of the building and the associated landscaping plans including an initial and ongoing commitment for landscaping and upkeep to improve the appearance of the property such as special planting and flowers, regular grass mowing and other maintenance actions to keep the appearance of the buildings and property in excellent condition [as per Item 5 of the GNBIF Regulations].
3. Site Plan Review Checklist – Item 8. Traffic Impact & Access Study

Approved Waivers shall be listed on plan set Cover sheet.

Development Impact Statement (DIS)
The applicant has petitioned for waiver.

Traffic Impact & Access Study
The applicant has petitioned for waiver.

Ground Sign Review-Omitted

- All signs shall be approved by the Foundation [as per Item 15 of the GNBIF Regulations].

Interdepartmental Review Comments
Plans were distributed to the City Clerk, City Solicitor, Health Department, Inspectional Services, Engineering, Public Infrastructure, Conservation Commission, Fire Department and School Department offices.

The Greater New Bedford Industrial Foundation (GNBIF) has provided evidence of support for the project proposal and plan submittals (Attachment 8).

The Conservation Agent has submitted the following comments for the Planning Board's consideration:

> *The property contains Bordering Vegetated Wetland protected under State and Local laws and Regulations. The applicant has filed an application with the Conservation Commission for work in the Buffer Zone and for the filling of 700 s.f. of Bordering Vegetated Wetland. Wetland replication is proposed to offset the filling. The stormwater design is currently under review by the Conservation Commission's consulting engineer.*

The Health Department states 61 John Vertente Boulevard presents no issues as long as this facility remains for storage only and is not for retail use.

The Department of Public Infrastructure memorandum had not been received at the time this report was compiled, but will be available at the Planning Board meeting on September 13, 2017

Outside of this, no further comments from city offices were received in this matter.

Master Plan Goal
The proposal for Site Plan Approval is consistent with the master plan's goal to expand workforce opportunities and communicates a positive message for business development.

Staff Recommendations
Having reviewed the case deliverables, staff recommends approval by the Planning Board after duly considering following stipulations:

- Inconsistencies should be corrected between plan sheets [to include architectural renderings], Project Summary, and application form for number of parking spaces and loading docks.

- Correct Owner of Record information to reflect new deed book and page number as Book 8931, Page 199; Book 8931, Page 199; and Book 7665, Page 48.

- The Zoning Matrix on the Cover plan sheet shall be amended to note the GNBIF Regulations for building coverage for first floor square footage shall not exceed 40% of the total area of the premises[as per Item 1 of the GNBIF Regulations].

- The Zoning Matrix on the Cover plan sheet shall be amended to note the GNBIF Regulations for lot coverage, to include all uses on a lot which include, but are not limited to, buildings, driveways, parking areas, impermeable surfaces, etc., shall not cover more that 65% of the total area of the premises [as per Item 2 of the GNBIF Regulations].

- The Zoning Matrix on the Cover plan sheet shall be amended to note the GNBIF Regulations for setbacks, which are fifty (50) feet from any street or lot line [as per Item 7 of the GNBIF Regulations].

- Add Waivers citing **§5455** under **on Cover plan sheet.**

- As per **§**5471. The applicant shall minimize: the volume of cut and fill, the number of removed trees six-inch caliper or larger, the area of wetland vegetation displaced, the extent of stormwater flow increase from the site, soil erosion, and the threat of air and water pollution.

- General Construction Note #11, as per **§5471**, amend to read: the applicant shall minimize the number of removed trees six-inch caliper or larger.

- General Construction Note #19, amend to read: and City Planner.

- Revise Hay bales/Hay to read Straw bales/Straw in Soil Erosion and Sediment Control Note #21 on plan sheet 7 of 9. Change Hay bales/Hay to Straw bales/Straw wherever applicable in plans and reports.

- All requirements and stipulations of the City of New Bedford Conservation Commission including the Order of Conditions are to be honored and completed as a condition of project approval.

- Stipulations that the use be for storage only set by the City of New Bedford Health Department be honored by the applicant that the use be for storage and not used as a retail establishment.

- Identify and note Snow Storage areas on plans.

- The applicant should provide a construction schedule or cost estimate as required under **§**5452.

- Any Waiver from the Landscape Plan submittal should be with written approval from the GNBIF.

- Provide cut sheets for all lighting fixtures for review and approval by the Planning Board or its designated agent.

- Show all structural building elevations (front, sides and rear façades) that will be affected by the proposed project.

- For additions/alterations: label existing and new construction, as well as items to be removed.

- Identify all existing and proposed exterior materials, treatments and colors including building and hardscape elements.

- Show details of proposed new exterior elements.

- Show any exterior mechanical, duct work, and/or utility boxes.

- Include dimensions for building height, wall length and identify existing and proposed floor elevations.

- To avoid further traffic congestion at the entrance to the business park around 7:00 a.m. and 3:00 p.m., the company shall begin its first shift outside of the 6:50 -7:10 a.m. time window and end its first shift outside of the 2:50-3:10 p.m. time window [as per Item 16 of the GNBIF Regulations].

Attachments:

1. Site Plan Review Application
2. Letter of Authorization
3. Deed of Ownership - Bristol County (S.D) Registry of Deeds:
   Book 8931, Page 199; Book 7665, Page 48;
   Book 1769, Page 1060
4. ANR Land Plan Book 142, Page 27
5. Request for Waivers
6. Stormwater Management Report
7. Greater New Bedford Industrial Foundation Regulations
8. Greater New Bedford Industrial Foundation Comments Dated August 30, 2017
9. Conservation Commission Peer Review Letter from Nitsch Engineering Dated September 1, 2017
10. Plan Set

PLANNING BOARD

CITY OF NEW BEDFORD
JONATHAN F. MITCHELL, MAYOR

SUBMIT TO:
Planning Department
133 William Street
Room 303
New Bedford, MA 0274

SITE PLAN REVIEW APPLICATION

The undersigned, being the Applicant, seeks Site Plan Approval for property depicted on a plan entitled: Site Plan - 61 John Vertente Boulevard by: Farland Corp. dated: 8/10/17

1. Application Information

Street Address: 61 John Vertente Boulevard

Assessor's Map(s): 133 Lot(s) 47

Registry of Deeds Book: 8931 Page: 199

Zoning District: Industrial C

Applicant's Name (printed): Tim Cusson - SMRE 100, LLC

Mailing Address: 255 State Street, 7th Floor (Street) Boston (City) MA (State) 02109 (Zip)

Contact Information: (617) 908-0825 (Telephone Number) timc@parallelproducts,com (Email Address)

Applicant's Relationship to Property: ☐ Owner ☐ Contract Vendee ☑ Other Buyer

CITY CLERK'S OFFICE NEW BEDFORD, MA 2017 AUG -1 A 11: 54 CITY CLERK

List all submitted materials (include document titles & volume numbers where applicable) below:

1.) Site Plan - 61 John Vertente Boulevard - New Bedford, MA; Dated: 8/10/17; By; Farland Corp.
2.) Project Narrative & Stormwater Analysis

By signing below, I/we acknowledge that all information presented herein is true to the best of my/our knowledge. I/we further understand that any false information intentionally provided or omitted is grounds for the revocation of the approval (s). I/we also give Planning Department staff and Planning Board Members the right to access the premises (both interior and exterior) at reasonable times and upon reasonable notice for the purpose of taking photographs and conducting other visual inspections.

8/10/17
Date

Tim Cusson
Signature of Applicant

PLANNING AUG 11 2017 DEPARTMENT

2. **Review Applicability** (Check All That Apply to Your Proposal)

Category

- [ ] Residential
- [ ] Commercial
- [x] Industrial
- [ ] Mixed (Check all categories that apply)

Construction

- [ ] New Construction
- [x] Expansion of Existing
- [x] Conversion
- [ ] Rehabilitation

Scale

- [ ] < 2,000 gross sq feet
- [x] > 2,000 gross sq feet
- [ ] 3 or more new residential units
- [ ] 1 or more new units in existing res. multi-unit
- [ ] Drive Thru Proposed
- [ ] Ground Sign Proposed
- [ ] Residential Driveway With > 1 curbcut

3. Zoning Classifications

Present Use of Premises: Manufacturing Plant (Vacant)

Proposed Use of Premises: Food Warehousing & Distribution

Zoning Relief Previously Granted (Variances, Special Permits, with Dates Granted):

4. Briefly Describe the Proposed Project:

The Applicant is seeking permission to expand the existing parking and loading features of the existing property. Along with these site improvements there will be associated grading and stormwater management practices put into effect. In addition to a small area of accessible parking spaces to the northeast of the existing building the applicant is proposing to add a large gravel parking area for trucks to be used for the business. The current use of the property is vacant and will be changed to a food warehousing and distribution facility handling mainly seafood.

5. Please complete the following:

	Existing	Allowed/Required	Proposed
Lot Area (sq ft)	16.4+/- Acres	0	16.4+/- Acres
Lot Width (ft)	908.85	0	908.85
Number of Dwelling Units	N/A	N/A	N/A
Total Gross Floor Area (sq ft)	83,560+/-	1,339,470+/-	83,560+/-
Residential Gross Floor Area (sq ft)	N/A	N/A	N/A
Non-Residential Gross Floor Area (sq ft)	83,560+/-	N/A	83,560+/-
Building Height (ft)	<100	100	<100
Front Setback (ft)	107.3+/-	60 25	107.3+/-
Side Setback (ft)	203.3+/-	50 25	203.3+/-
Side Setback (ft)	315.8+/-	50 25	315.8+/-

GNBI F

Rear Setback (ft)	241.4+/-	50 25	241.4+/-
Lot Coverage by Buildings (% of Lot Area)	11.7	40%, 65	11.7
Permeable Open Space (% of Lot Area)	>35	65% 35	>35
Green Space (% of Lot Area)			
Off-Street Parking Spaces	240	25	153 144
Long-Term Bicycle Parking Spaces			
Short-Term Bicycle Parking Spaces			
Loading Bays		11	18

6. Please complete the following:

	Existing	Proposed
a) Number of customers per day:	_____	_____
b) Number of employees:	_____	_____
c) Hours of operation:	_____	_____
d) Days of operation:	_____	_____
e) Hours of deliveries:	_____	_____

f) Frequency of deliveries: ☐ Daily ☐ Weekly ☐ Monthly ☐ Other:_____

7. Planning Board Special Permits:

☐ The applicant is also requesting a Special Permit from the Planning Board.

Specify the requested Special Permit(s) below, and set forth within attached Development Impact Statement how the request meets approval criteria listed in §5320 of the zoning code.

_____

_____

_____

8. ZBA Variances and Special Permits:

NOTICE: Checking below does not constitute application for a special permit or a variance. The applicant must also file the proper application form and fee with the Zoning Board of Appeals.

☐ The applicant is also requesting a special permit from the ZBA:

Specify zoning code section & title

_____ _____

_____ _____

☐ The applicant is also requesting a variance from the ZBA:

Specify zoning code section & title

_____ _____

_____ _____

9. OWNERSHIP VERIFICATION

This section is to be completed & signed by the property owner:

I hereby authorize the following Applicant: SMRE 100 LLC

at the following address: 969 Shawmut Ave NEw Bedford Ma

to apply for: Site Plan Review

on premises located at: 61 John Vertente BLVD

in current ownership since: 2008

whose address is: 3724 N. State Rd, 15 Warsaw Indian 46582

for which the record title stands in the name of: Symmetry New Bedford Real Estate LLC owner

whose address is: 3724 N. State Rd, 15 Warsaw Indian 46582

by a deed duly recorded in the:

Registry of Deeds of County: Bristol Book: 8931 Page: 199

OR Registry District of the Land Court, Certificate No.: _____ Book: _____ Page: _____

I/we acknowledge that all information presented herein is true to the best of my/our knowledge. I/we further understand that any false information intentionally provided or omitted is grounds for the revocation of the approval(s). I/we also give Planning Department staff and Planning Board Members the right to access the premises (both interior and exterior) at reasonable times and upon reasonable notice for the purpose of taking photographs and conducting other visual inspections.

7/14/2017 — John Connolly CFO

Date — Signature of Land Owner (If authorized Trustee, Officer or Agent, so identify)

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

July 20, 2016

New Bedford Planning Board
New Bedford City Hall
133 William Street
New Bedford, MA 02740

RE: Letter of Authorization for Representation
61 John Vertente Boulevard – New Bedford, MA (Map 133 Lot 47)

To whom it concerns:

This letter is to certify that I authorize Farland Corp. to serve as representative for any submission of petitions and/or applications in regards to the proposed development on the property located at 61 John Vertente Boulevard (Map 133 Lot 47).

If you should have any questions, please feel free to contact me.

Very truly yours,

John Conway C.F.O.
Property Owner
John Conway CFO

FARLAND CORP., INC.

Christian A. Farland, P.E., LEED AP
Principal Engineer and Vice President

PLANNING
AUG 11 2017
DEPARTMENT

ATTACHMENT 2

Case 31-17
08/11/2017

REG OF DEEDS
REG #07
BRISTOL S

01/30/08 1:39PM 01
000000 #2599

FEE $23712.00

CASH $23712.00

BK 8931 PG 199
01/30/08 01:38 DOC. 2358
Bristol Co. S.D.

61 John Vertente Blvd, New Bedford, MA

SPECIAL WARRANTY DEED

THIS INDENTURE, made the 25th day of January, 2008, between **DePuy Orthopaedics, Inc.** formerly **Johnson & Johnson Professional, Inc.**, of 700 Orthopaedic Drive, Warsar, IN 46580, hereinafter called "Grantor," and **Symmetry New Bedford Real Estate, LLC**, a limited liability company duly established under the laws of the State of Delaware, having a principal place of business at 3724 N. State Road 15, Warsaw, State of Indiana, hereinafter called "Grantee" (the terms "Grantor" and "Grantee" are used for the singular and plural, as the context demands).

WITNESSETH that: Grantor, for and in consideration of Five Million Two Hundred Thousand ($5,200,000.00) Dollars and other good and valuable considerations to said Grantor in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold and by these presents does grant, bargain and sell unto the said Grantee, and Grantee's heirs, successors and assigns forever, land situate, lying and being in New Bedford, Bristol County, Massachusetts, and more particularly described as follows:

BEGINNING at the northeast corner of the land herein described at a point formed by the intersection of the southerly line of Samuel Barnet Boulevard with the westerly line of John Vertente Boulevard as shown on plan of land hereinafter mentioned;

thence **SOUTH 05° 29' 10" EAST** in said westerly line of John Vertente Boulevard, six hundred ninety-nine and 86/100 (699.86) feet to a cement bound at land now or formerly of Polaroid Corp. as shown on said plan;

thence **SOUTH 84° 30' 50" WEST** in line of last-named land, nine hundred eight and 85/100 (908.85) feet to Lot B as shown on said plan;

thence **NORTH 05° 29' 10" WEST** in line of last-named lot, eight hundred twenty and 00/100 (820.00) feet to the said southerly line of Samuel Barnet Boulevard;

thence **NORTH 84° 30' 50" EAST** in said line of Samuel Barnet Boulevard, four hundred thirty-three and 62/100 (433.62) feet to a drill hole;

thence **NORTHEASTERLY, EASTERLY** and **SOUTHEASTERLY** still in said line of Samuel Barnet Boulevard, in the arc of a curve having a radius of four hundred fifty and 00/100 (450.00) feet, a distance of two hundred twenty-two and 85/100 (222.85) feet to a drill hole; and

ATTACHMENT 3

Case 31-17
08/11/2017

thence **SOUTHEASTERLY** still in said line of Samuel Barnet Boulevard, in the arc of a curve having a radius of five hundred fifty and 00/100 (550.00) feet, a distance of two hundred seventy-two and 37/100 (272.37) feet to the said westerly line of line of John Vertente Boulevard and the point of beginning.

CONTAINING 16.4 acres, more or less.

BEING shown as Lot A on "Approval Not Required Plan in New Bedford, Massachusetts, drawn for Johnson & Johnson Professional, Inc., prepared by Earle O. Phillips, Jr., Registered Professional Land Surveyors, 203 Belleville Road, New Bedford, MA 02745" dated January 18, 1999 and filed with the Bristol County S. D. Registry of Deeds in Plan Book 142, Page 27.

BEING a portion of the premises described in a deed dated September 21, 1978, recorded in the Bristol County S.D. Registry of Deeds, in Book 1769, Page 1060.

Subject to all encumbrances of record, including easements, restrictions, and rights of way, if any, insofar as the same may be in force and applicable.

Subject to the 2008 fiscal year real estate taxes which the said Grantee assumes and agrees to pay.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behalf of the said Grantee forever in FEE SIMPLE.

This conveyance and the warranties contained herein are hereby expressly made subject to: (i) the restrictions contained in a deed dated September 21, 1978, and recorded in said Registry of Deeds in Book 1769, Page 1060, as amended by an instrument dated July 14, 2005, and recorded in said Registry of Deeds in Book 7665, Page 48, and as amended by a certificate and release dated October 19, 2007, and recorded in said Registry of Deeds in Book 8832, Page 259, and as further amended by a certificate and release dated January 9, 2008, and recorded in said Registry of Deeds in Book 8931, Page 190 and (ii) a 150' wide easement to New Bedford Gas & Edison Light Co. as shown on the plan hereinabove mentioned.

4383-185 4/9/99

[CERTIFICATE OF NUMBER]

AND THE SAID Grantor will only warrant and forever defend the right and title to the above described property unto the said Grantee, and Grantee's heirs, successors and assigns forever, against the claims of those persons claiming by, through or under Grantor, but not otherwise.

This conveyance does not constitute a conveyance of all or substantially all of the grantor's assets located in the Commonwealth of Massachusetts.

IN WITNESS WHEREOF, the Grantor has signed, sealed and delivered this Deed, the day and year above written.

WITNESSES:

DEPUY ORTHOPAEDICS, INC.

By: _____
Edward Mackey
Vice President

By: _____
Peter Batesko
Treasurer

STATE OF INDIANA)
) SS.
COUNTY OF KOSCIUSKO)

On this 25th day of January, 2008, before me, the undersigned Notary Public, personally appeared Edward Mackey and Peter Batesko, as Vice President and Treasurer, respectively, of **DePuy Orthopaedics, Inc.**, personally known to me, and acknowledged to me that they signed the above Special Warranty Deed voluntarily for its stated purpose; and made oath as to the truth of the foregoing and acknowledged the foregoing instrument to be the free act and deed of said corporation, before me.

_____
Teresa A. Waites, Notary Public

My Commission Expires: _____

OFFICIAL
Teresa A. Waites
Notary Public
Kosciusko County, Indiana
My Commission Expires
7-28-12 2009

BK 7665 PG 48
07/20/05 08:41 DOC. 23254
Bristol Co. S.D.

Amendment to Restrictive Covenants

The Greater New Bedford Industrial Foundation having a principal place of business at 227 Union Street, New Bedford, Massachusetts (the "Foundation") hereby amends the restrictive covenants set forth in that certain deed from the Foundation to Codman & Shurtleff, Inc., dated September 21, 1978 recorded with the Bristol County (S.D.) Registry of Deeds in **Book 1769, Page 1060** as to that portion of the premises described in said deed conveyed to Distribution Realty, L.L.C. by deed of Johnson & Johnson Professional, Inc., dated April 9, 1999, recorded with said Registry of Deeds in **Book 4383, Page 149**, as follows:

The restriction lettered (d) "For every first floor acre of building, there shall be a minimum of four (4) acres of land surrounding the same" is hereby deleted and the following shall be inserted in its place: "The first floor square footage of the building covered by all buildings shall not exceed 40% of the total area of the conveyed parcel of land."

The remaining restrictive covenants affecting said property that are currently in effect shall remain in full force and effect.

Signed this 14th day of July, 2005.

The Greater New Bedford Industrial Foundation

By: Thomas G Davis - Exec. Director

COMMONWEALTH OF MASSACHUSETTS

Bristol, ss. July 14 2005

Then personally appeared the above-named Thomas G. Davis being the Executive Director of The Greater New Bedford Industrial Foundation, proved to me through satisfactory evidence of identification, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Amelia Dean
Notary Public
My commission expires: 12/20/07

BOOK 1769 PG 1060

10507

KNOW ALL MEN BY THESE PRESENTS that the GREATER NEW BEDFORD INDUSTRIAL FOUNDATION, a charitable trust duly organized under the laws of the Commonwealth of Massachusetts having its usual place of business at 222 Union Street, New Bedford, Bristol County Massachusetts, in consideration of Eighty-eight Thousand Eight Hundred Sixty ($88,860) Dollars to it paid does hereby grant unto CODMAN & SHURTLEFF, INC., a corporation duly organized under the laws of the Commonwealth of Massachusetts with a place of business in the Industrial Park, New Bedford, Bristol County, Massachusetts, with Quitclaim Covenants, the land situated in New Bedford and Dartmouth, bounded and described as follows:

BEGINNING at the northeasterly corner of the premises to be conveyed at a point in the westerly line of Vertente Boulevard at the intersection with the southerly line of the extension of Samuel Barnet Boulevard;

thence WESTERLY in the line of a curve having a radius of 550 feet a distance of 272.38 feet to a point;

thence continuing WESTERLY in the line of a curve having a radius of 450 feet a distance of 222.85 feet to a point;

thence continuing WESTERLY 882.97 feet to a point at the line of the Town of Dartmouth;

thence continuing in said same course 238.65 feet to a point at the northwesterly corner of the premises herein conveyed and other land of the Grantor;

thence SOUTHERLY 930.41 feet to a point at land now or formerly of the Commonwealth of Massachusetts and Polaroid Corp.;

thence NORTHEASTERLY 216.48 feet to a point;

thence EASTERLY 1410.64 feet to a point and the westerly line of said Vertente Boulevard;

City and Release 3/30/99 4372-338

City and Release 4/9/99 4383-155

Amendment 7-20-05 7665-48

Release 10-22-07 8832-359 LOT B

thence NORTHERLY in line of said Vertente Boulevard 699.86 feet to the point of beginning.

Containing 29.00 acres and 26.906 square feet, more or less.

Subject to a right of way to the New Bedford Gas and Edison Light Company as shown on a plan hereinafter mentioned. All being shown on a plan entitled Plan of Land in New Bedford and Dartmouth prepared for the Greater New Bedford Industrial Foundation, July 26, 1978, Arthur C. Thompson, Inc., Engineers and Surveyors, Marion, Massachusetts, to be recorded herewith, 100-102

This conveyance is made subject to the following restrictions:

a. No building shall be erected within fifty (50) feet of any street line or lot line, and the area set back from the street line shall be kept appropriately landscaped.

b. All parking shall be confined to the rear or side of the buildings and all such parking areas shall be properly paved.

c. All truck loading platforms or doors as well as rail siding facilities shall be located at the rear or sides of the buildings.

d. For every first floor acre of building, there shall be a minimum of four (4) acres of land surrounding the same.

e. The type of industry to occupy any buildings constructed upon said premises and the architecture and type of construction of all buildings to be erected upon said land shall meet with the approval of the Executive Committee of said Foundation. A certificate signed by the Secretary of the Foundation to the effect that said provisions have been complied with, duly recorded in the Bristol County (S.D.) Registry of Deeds, shall be conclusive evidence of said compliance.

f. All outside storage must be appropriate screened on all sides.

g. If by July 31, 1980, Codman & Shurtleff, Inc. shall not have constructed an industrial building upon the premises to be conveyed, it shall by written notice mailed within thirty (30) days after said date offer to reconvey said premises to the Foundation for the price of $3,000 per acre. If the Foundation within thirty (30) days after receipt of notice of such offer does not accept the same in writing, Codman & Shurtleff shall be free to retain said premises free of the limitations and agreements contained in this paragraph and/or to sell said premises to whomever it wishes upon such terms and conditions as are satisfactory to it, in one or more parcels and, for that purpose, to subdivide the land conveyed to it.

h. If prior to July 31, 1980, and prior to the construction of an industrial building on the premises, Codman & Shurtleff shall be desirous of selling the premises conveyed to it, it shall by written notice first offer to reconvey said premises to the Foundation at a price of $3,000 per acre, and if the Foundation within thirty (30) days after receipt of notice of such offer does not accept the same in writing, Codman & Shurtleff shall be free to retain said premises free of the limitations and agreements contained in Paragraph h and in this paragraph, and/or to sell said premises to whomever it wishes upon such terms and conditions as are satisfactory to it, in one or more parcels and for that purpose, to subdivide the land conveyed to it.

i. If an industrial building has been erected on a part of the premises to be conveyed by Foundation to Codman & Shurtleff, and if Codman & Shurtleff shall be desirous of selling any portion of the land conveyed to it, and each parcel of such subdivision shall be subject to, and shall comply with, the provisions of Paragraph a through f inclusive, hereinabove set forth, and

in addition thereto: (i) to sell the parcel of land containing such industrial building and retain the remaining vacant land; or (ii) if it then or at any time thereafter desires to sell such remaining vacant land (regardless of whether it retains or sells the land containing such industrial building) then Codman & Shurtleff shall by written notice first offer to reconvey said remaining vacant land to Foundation at a price of Three Thousand ($3,000) Dollars per acre and, if Foundation, within thirty (30) days after receipt of such offer, does not accept the same in writing, Codman & Shurtleff shall be free, at any time thereafter, to sell said remaining vacant land to whomever it wishes in one or more parcels and for that purpose, to subdivide or further subdivide the land conveyed to it. The provisions of this paragraph shall cease to be in effect if the Foundation shall discontinue its operations, and in any such event a written statement signed by any two officers or members of the Executive Committee of the Foundation serving in such capacity at the time of such discontinuance of operation, duly sworn to before a Notary Public, or declared to be made under the pains and penalties of perjury, certifying that the Foundation has discontinued its operations, which statement has been recorded with the Bristol County (S.D.) Registry of Deeds, shall be deemed to be conclusive evidence that the Foundation has in fact discontinued its operation.

j. In the event of any circumstance under the provisions of Paragraph h, i or j set forth above, under which Codman & Shurtleff is obligated to offer to reconvey to Foundation all or any portion of the land purchased by Codman & Shurtleff from Foundation, of Codman & Shurtleff shall have given the required notice and Foundation shall have failed to accept said offer within the time specified, a written affidavit executed under the penalties of perjury by a

duly authorized officer of Codman & Shurtleff and recorded in the Bristol County (S.D.) Registry of Deeds shall be conclusive evidence of the failure of Foundation to accept any such offer.

k. Except as hereinabove otherwise provided in Paragraphs h, i, or j, the premises to be conveyed to Codman & Shurtleff shall not be subdivided.

l. In the event that all of the land conveyed to Codman & Shurtleff is reconveyed to the Foundation by Codman & Shurtleff under the provisions of either Paragraph h or i, the restrictions hereinabove contained shall lapse and be of no further force and effect.

WITNESS the hand and seal of the GREATER NEW BEDFORD INDUSTRIAL FOUNDATION by David S. Barnet, its Chairman, hereunto duly authorized this 21st day of September, 1978.

GREATER NEW BEDFORD INDUSTRIAL FOUNDATION

By David S. Barnet
David S. Barnet, Chairman

COMMONWEALTH OF MASSACHUSETTS

Bristol, ss. New Bedford September 21, 1978

Then personally appeared the above-named David S. Barnet, chairman and acknowledged the foregoing instrument to be the free act and deed of the Greater New Bedford Industrial Foundation, before me

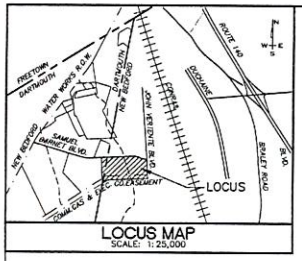
Philip Barnet
Notary Public
My commission expires: 7/10/81

COMMONWEALTH OF MASSACHUSETTS
DEEDS & EXCISE
SEP 26 '78
202.82
BRISTOL COUNTY
002852

Received & recorded Sept. 26 '78 at 2 hrs 25 min P M
Attest: John Gomes Register

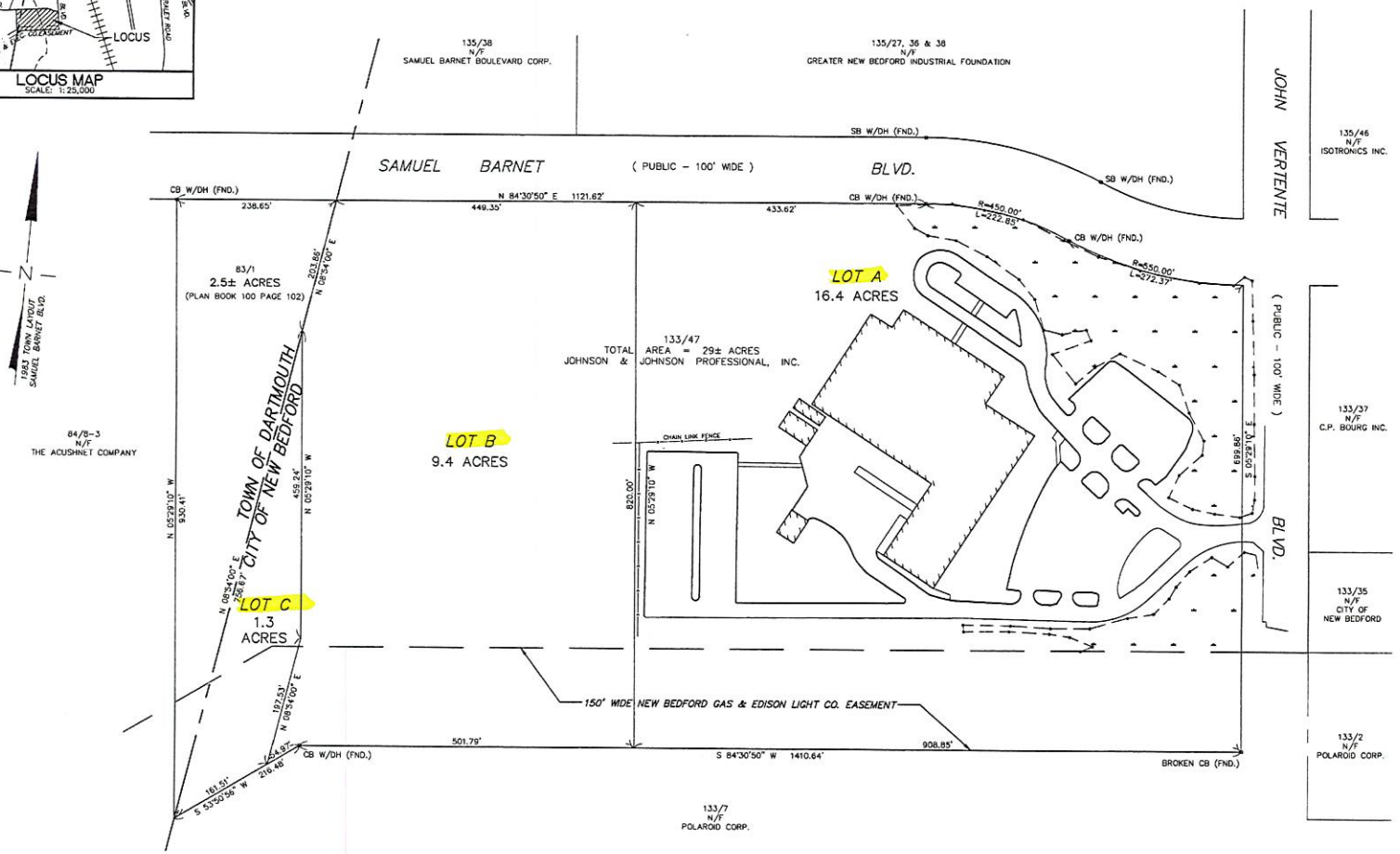
Le-Ch1

ATTACHMENT 4



RECD & RECORDED
1999 MAR 29 PM 12:53
REGISTRY OF DEEDS
BRISTOL COUNTY
SOUTHERN DISTRICT

REGISTRY USE ONLY



LEGEND

SB W/DH	STONE BOUND W/DRILL HOLE
CB W/DH	CONCRETE BOUND W/DRILL HOLE
– – – –	EDGE OF APPROVED WETLAND RESOURCE AREAS

NOTES:

1. WETLAND DELINEATION PERFORMED BY SABATIA INC. OF POCASSET, MASSACHUSETTS IN DECEMBER OF 1998.
2. WETLAND FLAG LOCATIONS SHOWN ARE THE RESULT OF A SURVEY PERFORMED BY N. DOUGLAS SCHNEIDER & ASSOCIATES IN SEPTEMBER AND DECEMBER OF 1998.
3. PROPERTY LINE INFORMATION SHOWN ON PLAN IS BASED ON A PLAN ENTITLED "PLAN OF LAND IN NEW BEDFORD AND DARTMOUTH PREPARED FOR THE GREATER NEW BEDFORD INDUSTRIAL FOUNDATION" DATED JULY 26, 1978 AND PREPARED BY ARTHUR C. THOMPSON, INC.
4. MAP AND LOT NUMBERS REFERS TO NEW BEDFORD & DARTMOUTH ASSESSORS RECORDS.
5. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE LOT 47 AS SHOWN ON NEW BEDFORD ASSESSORS MAP 133 INTO THREE SEPARATE LOTS, (A, B, & C). LOT C IN ITSELF IS NOT CONSIDERED A BUILDABLE LOT AND IS TO BE CONVEYED TO THE ADJACENT NORTHWESTERLY ABUTTER.

NEW BEDFORD PLANNING BOARD APPROVAL UNDER THE SUBDIVISION CONTROL LAW IS NOT REQUIRED. NO DETERMINATION AS TO COMPLIANCE WITH ZONING IS MADE OR INTENDED BY THIS ENDORSEMENT.

CHAIRMAN, EX-OFFICIO David A. Kennedy

DATE: 2-17-99

GENERAL LAW 36 SECTION 13A

I certify that this plan conforms with the Rules and Regulations of the Registers of Deeds.

Earle O. Phillips, Jr.
Registered Professional Land Surveyor

GRAPHIC SCALE

(IN FEET)
1 inch = 80 ft.

This survey and plan were prepared in accordance with the Procedural and Technical Standards for the Practice of Land Surveying in the Commonwealth of Massachusetts.

1/18/99 Date

Earle O. Phillips, Jr.
Registered Professional Land Surveyor

EARLE O PHILLIPS, JR. No. 30759 REGISTERED LAND SURVEYOR

Earle O. Phillips, Jr.

"APPROVAL NOT REQUIRED PLAN"
IN
NEW BEDFORD, MASSACHUSETTS
DRAWN FOR
JOHNSON & JOHNSON PROFESSIONAL, INC.

SCALE: 1" = 80' DATE: JANUARY 18, 1999

Earle O. Phillips, Jr.
REGISTERED PROFESSIONAL LAND SURVEYOR
203 BELLEVILLE ROAD
NEW BEDFORD, MA 02745
TEL./FAX 508-999-5830

L42-27

142-27

City of New Bedford

REQUEST FOR WAIVER

CASE Case 31-17
08/11/2017

APPLICATION FOR WAIVER FROM SITE PLAN REVIEW REQUIIREMENTS

In certain instances, after consulting with the City Planner, the applicant may submit, in writing, a request for waiver for any of the submittal or technical requirements of Section 5430 and 5440 where the project involves relatively simple development plans. The Planning Board will take a separate vote on written waiver requests by the applicant. Each request for waiver must be submitted individually to be considered by the Board. Please provide one (1) original and fifteen (15) copies of the request.

Any granted waivers must be disclosed on the final submitted and approved site plan.

SUBJECT PROPERTY			
ASSESSOR'S MAP PLOT#	133	LOT(S)#	47
REGISTRY OF DEEDS BOOK:	8931	PAGE #	199
PROPERTY ADDRESS: 61 John Vertente Boulevard			
ZONING DISTRICT: Industrial C			
OWNER INFORMATION			
NAME: Symmetry New Bedford Real Estate, LLC			
MAILING ADDRESS: 3724 N. State Road 15 - Warsaw, IN			
APPLICANT/CONTACT PERSON INFORMATION			
NAME (IF DIFFERENT): Tim Cusson - Parallel Products of New England			
APPLICANT'S RELATIONSHIP TO THE PROPERTY: *Check one:*	OWNER ☐	CONTRACT VENDEE ☐	OTHER *Describe* ☑ Buyer
MAILING ADDRESS (IF DIFFERENT): 401 Industry Road - Louisville, KY 40208			
TELEPHONE #	(617) 908-0825		
EMAIL ADDRESS:	timc@parallelproducts.com		

By signing below, I/we acknowledge that all information presented herein is true to the best of my/our knowledge. I/we further understand that any false information intentionally provided or omitted is grounds for the revocation of the approval(s). If petition is granted, I/we understand the approvals are specific to the plans submitted, unless the Board states otherwise and that if granted, that the waiver(s) must be noted on the approved Site Plan and acted upon within one year.

Tim Cusson

Signature of Applicant/s

8/10/17

Date

PLANNING
AUG 11 2017
DEPARTMENT

FILE COPY

ATTACHMENT 5

If the applicant differs from the owner, this section must be completed/signed by the property owner/s:

I hereby authorize the applicant represented above and throughout this application to apply and to represent my/our interests on my/our behalf for the relief requested herein for the premises I/we own noted as "property address" above and presented throughout this application. Furthermore, by signing this application I/we acknowledge having read and understood this application and the accompanying instructions and information. If petition is granted, I/we understand the approvals are specific to the plans submitted, unless the Board states otherwise and that if granted, that the waiver(s) must be noted on the approved Site Plan and acted upon within one year.

John Connolly CFO — 8/10/17

Signature of Owner/s — Date

DESCRIPTION

	Ordinance Section	CLEARLY Describe why this request is being made.
1	****Example**** 5451. b. Topography and Drainage Plan	****Example**** There currently exists a structure and pavement on the site. No excavation of the site is being proposed, therefore topography and drainage will not be altered.
2	Code of Ordinances Chapter 9 - Comprehensive Zoning Section 5350 - Development Impact Statement	The property has been previously developed and is currently in vacant. The proposed work is minimal compared to the development already done on site, and similar businesses surround the property which operate at the same hours.
3	Site Plan Review Checklist Section 3g. Landscape Plan	The area being previously developed with necessary landscaping should provide adequate screening and meets the required green space. The surrounding properties are of the same use and building type so the need to keep visual aesthetics is unnecessary.
4	Site Plan Review Checklist Section 8. Traffic Impact & Access Study	The property is accessible by a dead end street, and is currently vacant. This redevelopment of the property will not constitute a major change in traffic or access to the buildings as was once in use, and intended to handle this volume of traffic.

Additional pages describing the waiver request may be attached to this form following the same chart format, if necessary.

☐ Please check here if additional pages are attached.

3 Number of Waiver requests submitted for consideration:

PLANNING
AUG 11 2017
DEPARTMENT

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

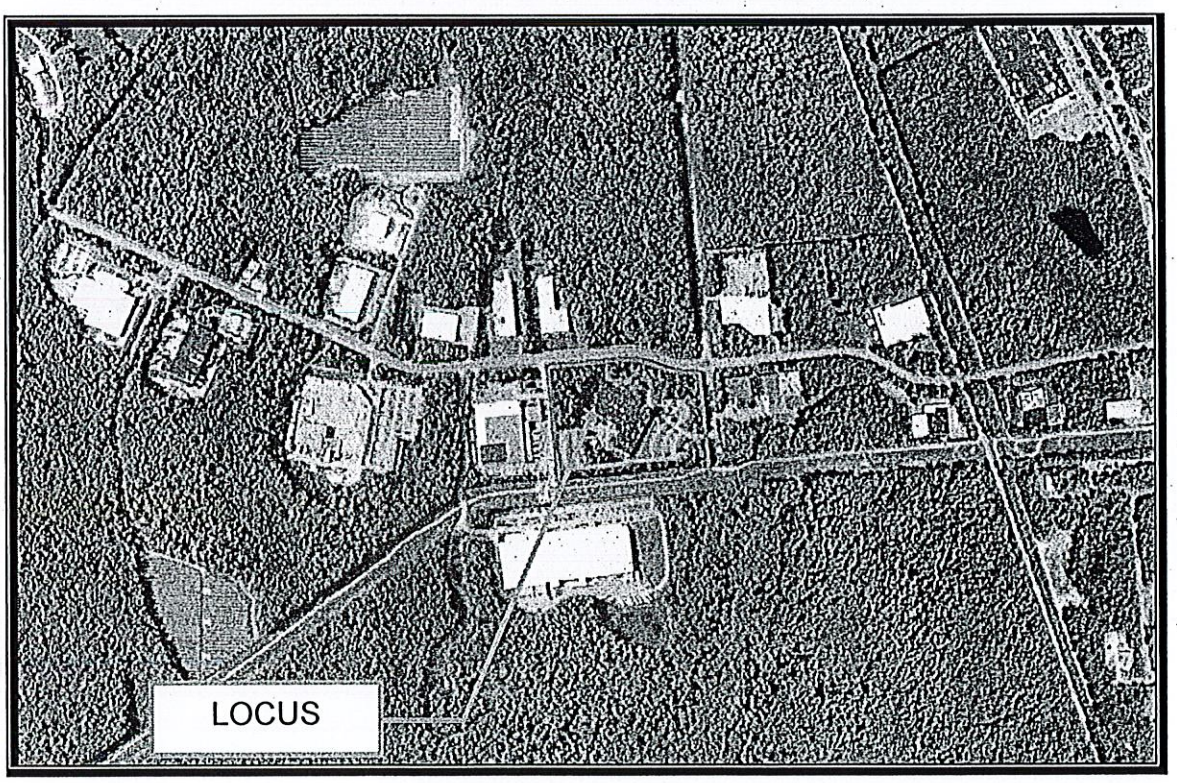
ENGINEERING | SITE WORK | LAND SURVEYING

STORMWATER REPORT

August 10, 2017

SITE PLAN

ASSESSORS PLOT 133 LOT 47
61 JOHN VERTENTE BOULEVARD
NEW BEDFORD, MASSACHUSETTS



PREPARED FOR:

Parallel Products of New England
401 Industry Road
Louisville, KY 40208

Case 31-17
08/11/2017

(MAIN OFFICE) 401 COUNTY STREET, NEW BEDFORD, MA 02740 P 508.717.3479 F 508.717.3481
ADDITIONAL OFFICES IN: TAUNTON • MARLBOROUGH • WARWICK, RI
WWW.FARLANDCORP.COM

ATTACHMENT 6

TABLE OF CONTENTS

STORMWATER MANAGEMENT REPORT AND HYDROLOGIC ANALYSIS

SECTION 1: Project Summary

The project area associated with this proposed development is located at the southwest quadrant of the intersection of Samuel Barnet Boulevard and John Vertente Boulevard in the New Bedford Business Park. The site is comprised of one existing parcel, identified as Assessors Plot 133, Lot 47 which consists of approximately 16.4 acres. The site is located entirely within the Industrial C Zoning District.

The site is partially developed, and consists of an 82,000+/- square foot manufacturing building, with associated parking areas to the north, east, and west of the building, and loading areas at the southwest corner of the building. Access to the site is gained from a single site entrance driveway off of John Vertente Boulevard. A bordering vegetated wetland is located along the eastern portion of the site, along the parcel's frontage on John Vertente Boulevard and along the eastern portion of the parcel's frontage on Samuel Barnet Boulevard. An electric easement runs along the parcel's southern boundary. The site is located entirely in Zone X, areas determined to be outside the 0.2% annual chance floodplain. The site is not located within an area identified by the Natural Heritage and Endangered Species Program as a Priority Habitat of Rare Species or an Estimated Habitat of Rare Wildlife.

The applicant is seeking permission to change the use of the structure, install loading dock bays along the structure's eastern wall, expand the paved parking area to the east of the building to allow for access to the loading docks, and to create additional gravel surfaced trailer storage parking spaces within the proposed easement area south of the existing building. This will require alteration of approximately 700 square feet of existing bordering vegetated wetland in order to construct an access to the easement area. The disturbed resource area, located along a finger-like ditch running along the existing site driveway, will be replicated on-site.

In order to attenuate the increased stormwater runoff generated by the proposed impervious site coverage and to provide the appropriate level of water quality treatment, stormwater management practices have been proposed. Proposed structural BMP's include proprietary separators and a detention basin.

SECTION 2: Methodology

Drainage computations were performed using the Natural Resources Conservation Services (NRCS) TR-20 method and HydroCAD® Drainage Calculation Software to

determine the change in the existing and post-development runoff rates from each drainage area for the 2-, 10-, and 100-year 24 hour storm events. The limits of the work proposed to complete the project fall within an area subject to protection by the Wetlands Protection Act, therefor, compliance with DEP Stormwater Management Standards is required. Sketches of the existing and proposed watershed areas, HydroCAD® Report, and copies of the calculation sheets are included as appendices to this report.

SECTION 3: Existing Conditions

The soils underlying the proposed development site are identified in the Natural Resources Conservation Service (NRCS) Soil Survey of Bristol County, Southern Part***(see Exhibit D)***. The site soils are classified as 306B (Paxton fine sandy loam, Hydrologic Soils Group [HSG "C"]), 311B (Woodbridge fine sandy loam, [HSG "C/D"]), and 73A (Whitman fine sandy loam, HSG "D").

SECTION 4: Stormwater Management Overview

Existing Conditions:

One design point has been chosen for this project: (1) the limit of the bordering vegetated wetlands along the eastern portion of the site. One subcatchment area which sheds runoff toward the design point has been analyzed for the purposes of this report. Areas which will not be altered as a result of the proposed construction have not been included in this analysis.

Stormwater runoff from that portion of the site located within the proposed limit of work sheds toward the bordering vegetated wetland at the southeast corner of the site, including the finger-like extension along the ditch. Much of the area consists of the existing easement area, where runoff sheds directly toward the wetland. The area along the eastern edge of the building sheds runoff toward existing catch basins within the paved area, which discharge directly into the wetland.

Proposed Conditions:

Under proposed conditions, two subcatchment areas have been included in the drainage model for the same design point. One subcatchment area sheds runoff toward the Bordering Vegetated Wetland without any BMP's designed to attenuate flow. The second subcatchment area, which captures a portion of the proposed gravel trailer parking storage area, will shed runoff toward a proposed Stormwater Detention Basin, which will discharge via a v-notch weir outlet towards the BVW. The proposed basin is not designed to provide water quality treatment. It is solely designed to attenuate peak runoff. However, in order do document maximum feasible compliance with groundwater recharge requirements, a rate of exfiltration appropriate for "D" soils has been assigned to the basin, understanding that the basin will not function as a fully compliant infiltration basin.

SECTION 5: Stormwater Management Standards

Standard 1:

- Under proposed conditions, there will be no new untreated discharges or erosion in wetland areas. The drainage outfall from the detention basin which discharges toward the existing BVW design point is provided with rip-rap outlet protection (12" max. graded rock size) to help control velocity and erosion at the outlet. Maximum velocity Detention Basin #1 is 6.85 feet per second.

Table A-3.3: Permissible Velocities for Rock Lined Channels

NSA No.	Graded Rock Size (In.)			Permissible Velocity* (fps)
	Max.	D_{50}	Min.	
R-1	1.5	0.75	No. 8	2.5
R-2	3	1.5	1	4.5
R-3	6	3	2	6.5
R-4	12	6	3	9
R-5	18	9	5	11.5
R-6	24	12	7	13
R-7	30	15	12	14.5

*Permissible velocities based on rock at 165 lbs. per cubic foot. Adjust velocities for other rock weights used.

Source: Pa DER Bureau of Soil and Water Conservation, April 1990. Erosion and Sedimentation Control Program Manual. Please refer to this document for additional information and stipulations.

Stormwater discharges have been held below erodible velocities. This standard has been met.

Standard 2:

- The design of the stormwater system was designed for the post-development conditions to handle all storms' peak discharges and runoff volume to include the 2, 10, and 100-year storm events. The site drainage system was designed in consideration of the structural standards and techniques of the Best Management Practices (BMP) and Low Impact Development (LID) outlined in the "Stormwater Management Handbook".

The results of site drainage calculations are presented in the following Table. The results are based upon evaluation of Pre-development conditions and the design of proposed surface drainage systems for the Post-development condition. These results show the Post-Development offsite runoff rates are reduced to less than the Pre-development conditions, thus meeting the BMP guidelines for this site development. This standard has been met.

Table 1 - Comparison of Pre- versus Post-Development Offsite Runoff				
	Pre-Development		Post-Development	
Storm Frequency	Rate (cfs)	Volume (af)	Rate (cfs)	Volume (af)
2-Year Storm				
To B.V.W.	12.58	1.079	12.04	1.215
10-Year Storm				
To B.V.W.	19.57	1.714	18.59	1.891
100-Year Storm				
To B.V.W.	30.48	2.737	29.98	2.974

Standard 3:

- The site is comprised entirely of soils belonging to Hydrologic Soils Groups "C" and "D", and is therefore required to meet the recharge requirements of Standard 3 to the maximum extent practicable. Due to the elevation of the existing building and parking areas to the east of the building, providing recharge of the proposed impervious areas is not feasible, however, an exfiltration rate appropriate for "D" soils was modeled for the proposed detention basin to demonstrate that the required volume of water to be recharged is provided within the basin.

Standard 4:

- The proposed stormwater management systems for this project have been designed to remove 80% of the average annual post construction load of Total Suspended Solids in accordance with this standard, as shown in calculations provided in ***Exhibit J***. Suitable practices for source control and pollution prevention have been identified in a long-term pollution prevention plan in ***Exhibit K***. Structural BMPs have been designed to capture the required water quality volume (***Exhibit I***) determined in accordance with the Stormwater Handbook. This standard has been met.

Standard 5:

- The use associated with this project is classified as a Land Use with Higher Potential Pollutant Load (LUHPPL); therefore, Standard 5 is applicable to this project. Stormwater runoff from the parking areas have been designed to flow through proprietary separator units prior to discharge to underground infiltration chambers and a surface infiltration basin, exceeding the 44% pretreatment requirement. This standard has been met.

Standard 6:

- The site does not discharge within the Zone II or IWPA of a public water supply, nor does it discharge near or to any critical areas. This standard does not apply.

Standard 7:

- Although a portion of the site may qualify as redevelopment, the project has not been designed as a redevelopment project. This standard does not apply.

Standard 8:

- Where there will be over one acre of disturbance, an EPA Construction General Permit must be obtained and a Storm Water Pollution Prevention Plan (SWPPP) is required. A construction period sedimentation and erosion control plan has been incorporated in the Site Plans. Safeguards have been incorporated into the construction period sedimentation and erosion control plans to ensure proper operation and maintenance and to prevent negative impacts to the on-site wetland resource areas. Additional erosion controls and pollutant source controls will be provided in the Stormwater Pollution Prevention Plan that will be completed prior to land disturbance. This standard will be met upon submittal of the final SWPPP and Construction General Permit filing.

Standard 9:

- A long-term operation and maintenance plan has been prepared to ensure that stormwater management systems function as designed. ***(Exhibit L)***

Standard 10:

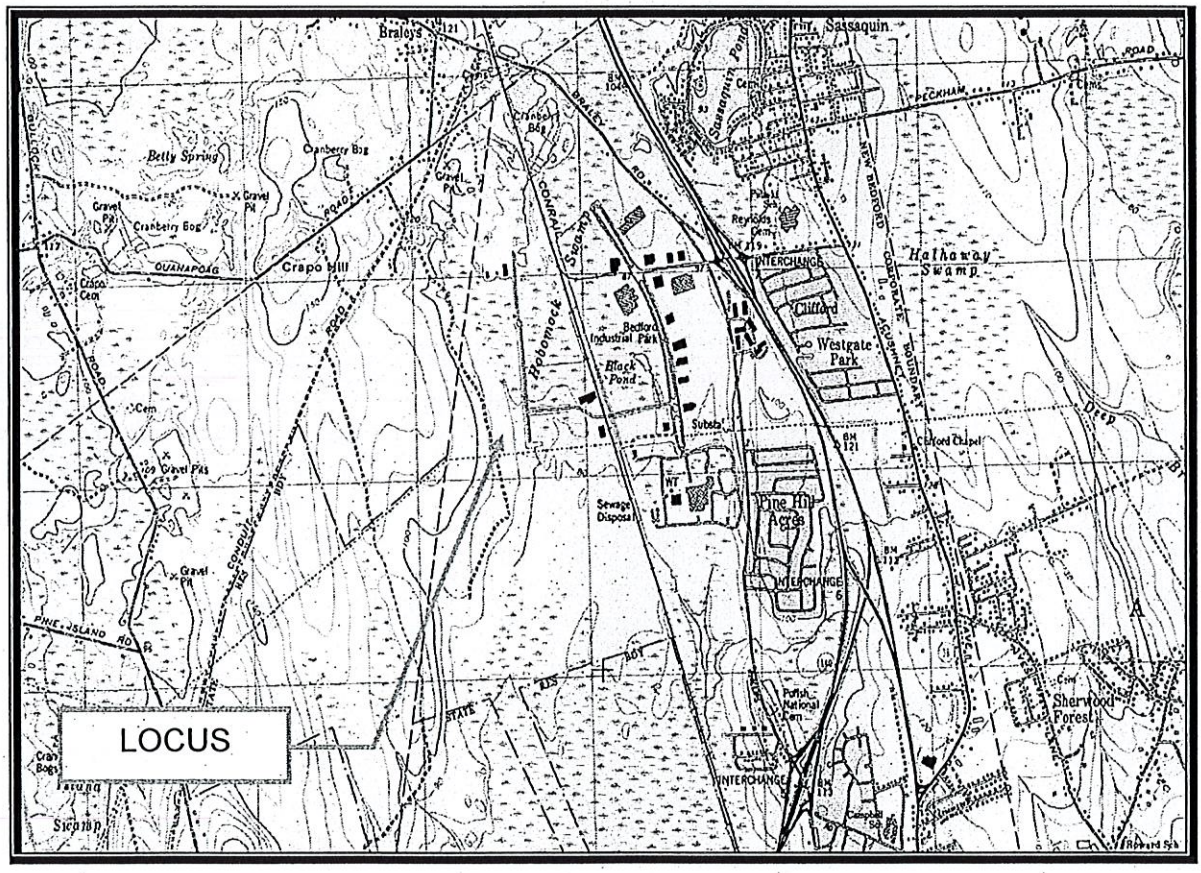
- We are not proposing any illicit discharges as defined in the Stormwater Management Regulations. See attached letter in ***Exhibit M***

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

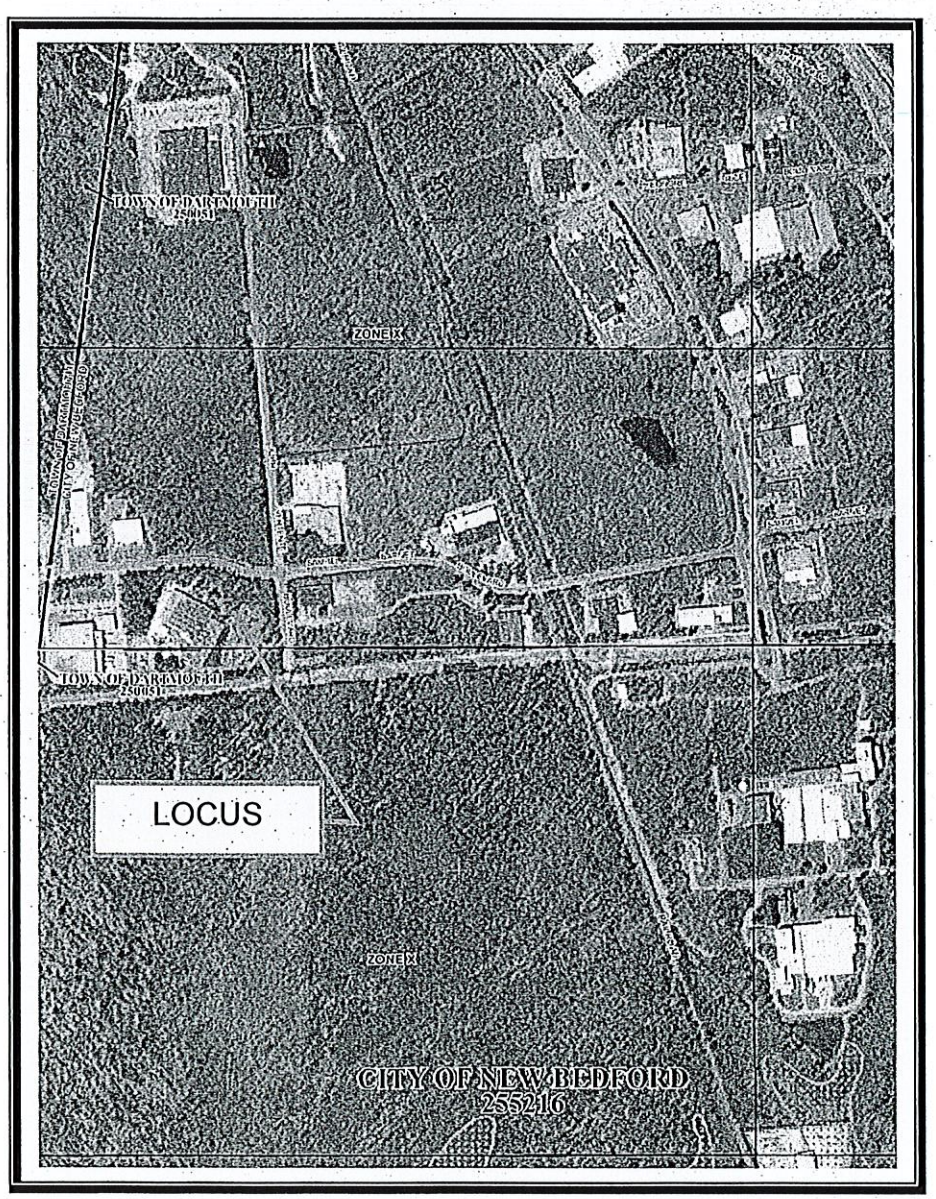
ENGINEERING | SITE WORK | LAND SURVEYING

USGS MAP
TOPO! VERSION 2.1.0

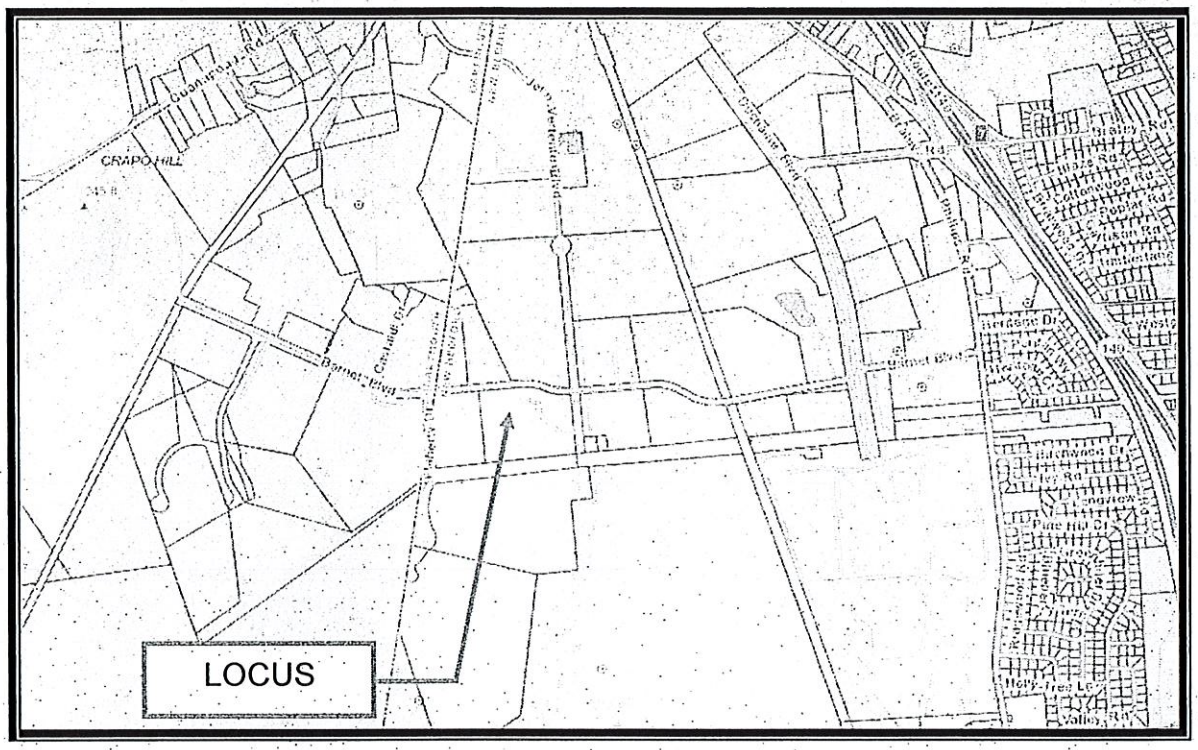


(MAIN OFFICE) 401 COUNTY STREET, NEW BEDFORD, MA 02740 P 508.717.3479 F 508.717.3481 WWW.FARLANDCORP.COM
ADDITIONAL OFFICES IN: TAUNTON • MARLBOROUGH • WARWICK, RI

FIRM MAP
PANELS #25005C0377F
& 25005C0379F



NHESP PRIORITY & ESTIMATED HABITAT MAP, 2008



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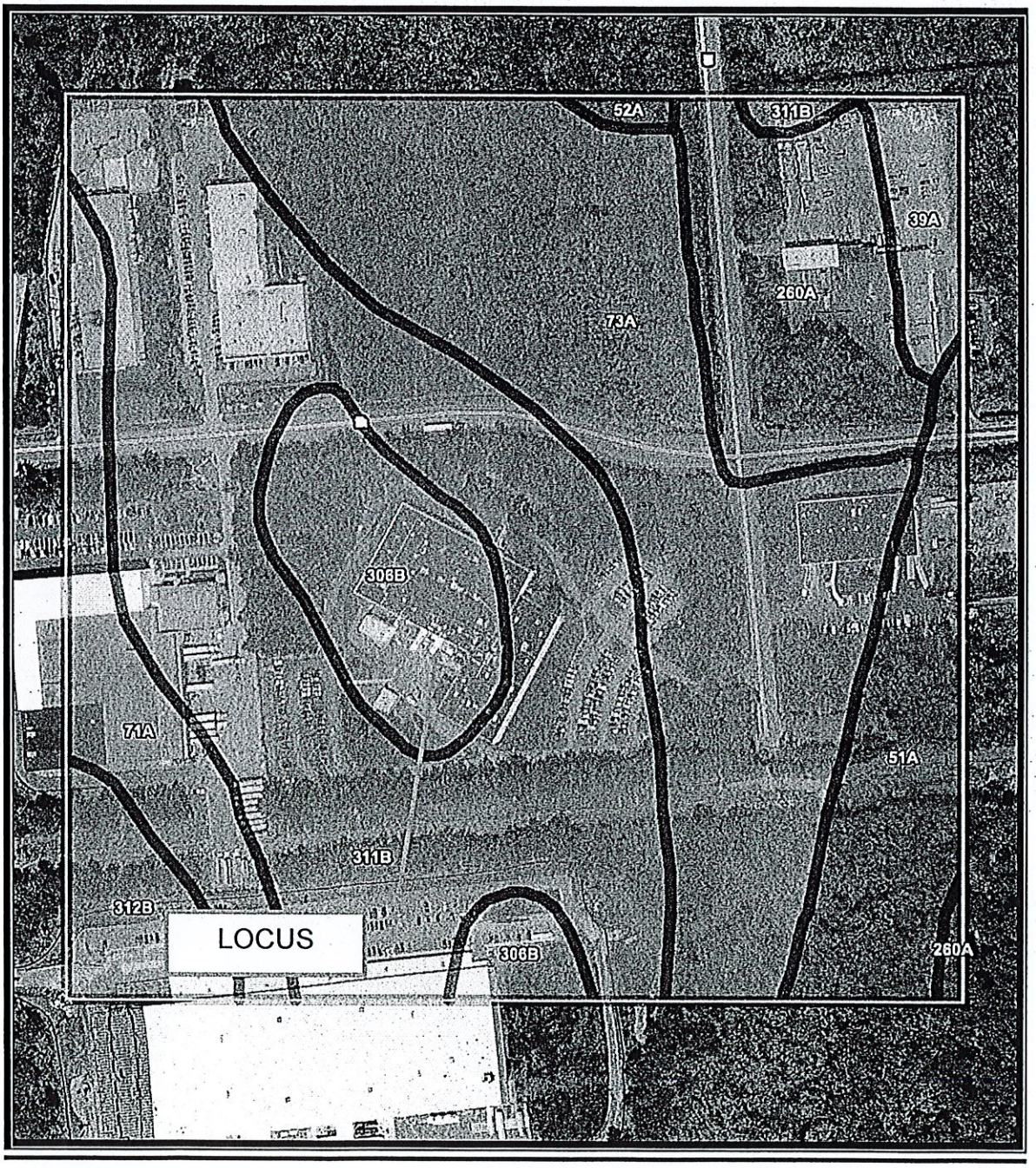
ADDITIONAL OFFICES IN: TAUNTON • MARLBOROUGH • WARWICK, RI

NRCS SOIL MAP



HYDROLOGIC CALCULATIONS
(STANDARD #2)

Uncontrolled to BVW

Subcat Reach Pond Link

Drainage Diagram for 17-413 PRE
Prepared by Farland Corporation, INC., Printed 8/10/2017

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S-1A: Uncontrolled to BVW Runoff Area=265,576 sf 36.18% Impervious Runoff Depth>2.12"
Flow Length=700' Tc=13.4 min CN=89 Runoff=12.58 cfs 1.079 af

Total Runoff Area = 6.097 ac Runoff Volume = 1.079 af Average Runoff Depth = 2.12"
63.82% Pervious = 3.891 ac 36.18% Impervious = 2.206 ac

Summary for Subcatchment S-1A: Uncontrolled to BVW

Runoff = 12.58 cfs @ 12.18 hrs, Volume= 1.079 af, Depth> 2.12"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.40"

	Area (sf)	CN	Description
	256	70	Woods, Good, HSG C
	27,950	77	Woods, Good, HSG D
	1,514	74	>75% Grass cover, Good, HSG C
	43,322	80	>75% Grass cover, Good, HSG D
	69,757	98	Paved parking
*	24,684	98	Roof
*	385	98	Concrete
	9,781	91	Gravel roads, HSG D
	86,670	89	<50% Grass cover, Poor, HSG D
*	1,257	98	BVW Area
	265,576	89	Weighted Average
	169,493		Pervious Area
	96,083		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
4.3	650	0.0250	2.55		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
13.4	700	Total			

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S-1A: Uncontrolled to BVW Runoff Area=265,576 sf 36.18% Impervious Runoff Depth>3.37"
Flow Length=700' Tc=13.4 min CN=89 Runoff=19.57 cfs 1.714 af

Total Runoff Area = 6.097 ac Runoff Volume = 1.714 af Average Runoff Depth = 3.37"
63.82% Pervious = 3.891 ac 36.18% Impervious = 2.206 ac

Summary for Subcatchment S-1A: Uncontrolled to BVW

Runoff = 19.57 cfs @ 12.18 hrs, Volume= 1.714 af, Depth> 3.37"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.80"

	Area (sf)	CN	Description
	256	70	Woods, Good, HSG C
	27,950	77	Woods, Good, HSG D
	1,514	74	>75% Grass cover, Good, HSG C
	43,322	80	>75% Grass cover, Good, HSG D
	69,757	98	Paved parking
*	24,684	98	Roof
*	385	98	Concrete
	9,781	91	Gravel roads, HSG D
	86,670	89	<50% Grass cover, Poor, HSG D
*	1,257	98	BVW Area
	265,576	89	Weighted Average
	169,493		Pervious Area
	96,083		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
4.3	650	0.0250	2.55		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
13.4	700	Total			

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S-1A: Uncontrolled to BVW Runoff Area=265,576 sf 36.18% Impervious Runoff Depth>5.39"
Flow Length=700' Tc=13.4 min CN=89 Runoff=30.48 cfs 2.737 af

Total Runoff Area = 6.097 ac Runoff Volume = 2.737 af Average Runoff Depth = 5.39"
63.82% Pervious = 3.891 ac 36.18% Impervious = 2.206 ac

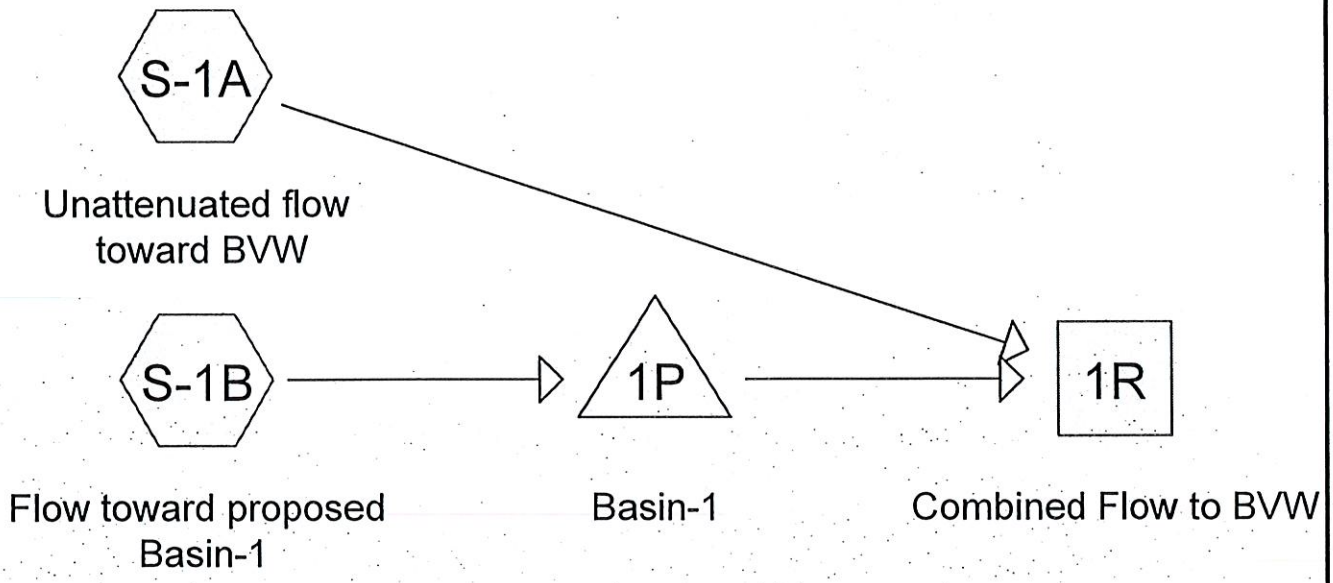
Summary for Subcatchment S-1A: Uncontrolled to BVW

Runoff = 30.48 cfs @ 12.18 hrs, Volume= 2.737 af, Depth> 5.39"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.00"

	Area (sf)	CN	Description
	256	70	Woods, Good, HSG C
	27,950	77	Woods, Good, HSG D
	1,514	74	>75% Grass cover, Good, HSG C
	43,322	80	>75% Grass cover, Good, HSG D
	69,757	98	Paved parking
*	24,684	98	Roof
*	385	98	Concrete
	9,781	91	Gravel roads, HSG D
	86,670	89	<50% Grass cover, Poor, HSG D
*	1,257	98	BVW Area
	265,576	89	Weighted Average
	169,493		Pervious Area
	96,083		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
4.3	650	0.0250	2.55		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
13.4	700	Total			



Subcat Reach Pond Link

Drainage Diagram for 17-413 POST
Prepared by Farland Corporation, INC., Printed 8/10/2017

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S-1A: Unattenuated flow Runoff Area=213,201 sf 54.36% Impervious Runoff Depth=2.54"
Flow Length=417' Tc=11.0 min CN=92 Runoff=11.96 cfs 1.036 af

Subcatchment S-1B: Flow toward proposed Runoff Area=52,063 sf 0.00% Impervious Runoff Depth=2.18"
Flow Length=309' Tc=11.0 min CN=88 Runoff=2.55 cfs 0.217 af

Reach 1R: Combined Flow to BVW Inflow=12.04 cfs 1.215 af
Outflow=12.04 cfs 1.215 af

Pond 1P: Basin-1 Peak Elev=83.78' Storage=4,769 cf Inflow=2.55 cfs 0.217 af
Discarded=0.01 cfs 0.011 af Primary=0.53 cfs 0.179 af Outflow=0.54 cfs 0.190 af

Total Runoff Area = 6.090 ac Runoff Volume = 1.253 af Average Runoff Depth = 2.47"
56.31% Pervious = 3.429 ac 43.69% Impervious = 2.661 ac

Summary for Subcatchment S-1A: Unattenuated flow toward BVW

Runoff = 11.96 cfs @ 12.15 hrs, Volume= 1.036 af, Depth= 2.54"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.40"

	Area (sf)	CN	Description
	256	70	Woods, Good, HSG C
	12,859	77	Woods, Good, HSG D
	1,514	74	>75% Grass cover, Good, HSG C
	24,779	80	>75% Grass cover, Good, HSG D
	86,531	98	Paved parking
*	24,684	98	Roof
*	2,300	98	Concrete
	40,938	91	Gravel roads, HSG D
	16,956	89	<50% Grass cover, Poor, HSG D
*	2,384	98	BVW Area
	213,201	92	Weighted Average
	97,302		Pervious Area
	115,899		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
0.1	17	0.0400	3.22		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
1.1	210	0.0260	3.27		**Shallow Concentrated Flow, CD** Paved Kv= 20.3 fps
0.4	75	0.0350	3.01		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
0.2	55	0.0090	4.30	3.38	**Circular Channel (pipe), EF** Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Concrete pipe, bends & connections
0.1	10	0.0150	1.97		**Shallow Concentrated Flow, FG** Unpaved Kv= 16.1 fps
11.0	417	Total			

Summary for Subcatchment S-1B: Flow toward proposed Basin-1

Runoff = 2.55 cfs @ 12.15 hrs, Volume= 0.217 af, Depth= 2.18"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.40"

Area (sf)	CN	Description
2,570	77	Woods, Good, HSG D
9,283	80	>75% Grass cover, Good, HSG D
26,312	91	Gravel roads, HSG D
13,898	89	<50% Grass cover, Poor, HSG D
52,063	88	Weighted Average
52,063		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
0.2	35	0.0400	3.22		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
0.0	9	0.3300	9.25		**Shallow Concentrated Flow, CD** Unpaved Kv= 16.1 fps
1.7	215	0.0170	2.10		**Shallow Concentrated Flow, DE** Unpaved Kv= 16.1 fps
11.0	309	Total			

Summary for Reach 1R: Combined Flow to BVW

Inflow Area = 6.090 ac, 43.69% Impervious, Inflow Depth > 2.39" for 2-Year event
Inflow = 12.04 cfs @ 12.15 hrs, Volume= 1.215 af
Outflow = 12.04 cfs @ 12.15 hrs, Volume= 1.215 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Basin-1

Inflow Area = 1.195 ac, 0.00% Impervious, Inflow Depth = 2.18" for 2-Year event
Inflow = 2.55 cfs @ 12.15 hrs, Volume= 0.217 af
Outflow = 0.54 cfs @ 12.65 hrs, Volume= 0.190 af, Atten= 79%, Lag= 29.8 min
Discarded = 0.01 cfs @ 12.65 hrs, Volume= 0.011 af
Primary = 0.53 cfs @ 12.65 hrs, Volume= 0.179 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 83.78' @ 12.65 hrs Surf.Area= 3,875 sf Storage= 4,769 cf

Plug-Flow detention time= 313.7 min calculated for 0.190 af (87% of inflow)
Center-of-Mass det. time= 257.7 min (1,074.9 - 817.2)

Volume	Invert	Avail.Storage	Storage Description
#1	82.00'	10,584 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
82.00	1,574	406.0	0	0	1,574
83.00	2,825	426.0	2,169	2,169	2,962
84.00	4,202	461.0	3,491	5,660	5,472
85.00	5,684	495.0	4,924	10,584	8,102

Device	Routing	Invert	Outlet Devices
#1	Discarded	82.00'	**0.090 in/hr Exfiltration over Surface area**
#2	Primary	83.50'	**33.0 deg x 0.8' long Sharp-Crested Vee/Trap Weir** C= 2.60
#3	Primary	82.45'	**2.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.01 cfs @ 12.65 hrs HW=83.78' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.53 cfs @ 12.65 hrs HW=83.78' (Free Discharge)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.42 cfs @ 1.69 fps)
└**3=Orifice/Grate** (Orifice Controls 0.12 cfs @ 5.37 fps)

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S-1A: Unattenuated flow Runoff Area=213,201 sf 54.36% Impervious Runoff Depth=3.89"
Flow Length=417' Tc=11.0 min CN=92 Runoff=17.93 cfs 1.588 af

Subcatchment S-1B: Flow toward proposed Runoff Area=52,063 sf 0.00% Impervious Runoff Depth=3.48"
Flow Length=309' Tc=11.0 min CN=88 Runoff=4.02 cfs 0.347 af

Reach 1R: Combined Flow to BVW Inflow=18.59 cfs 1.891 af
Outflow=18.59 cfs 1.891 af

Pond 1P: Basin-1 Peak Elev=84.15' Storage=6,307 cf Inflow=4.02 cfs 0.347 af
Discarded=0.01 cfs 0.012 af Primary=1.76 cfs 0.302 af Outflow=1.77 cfs 0.314 af

Total Runoff Area = 6.090 ac Runoff Volume = 1.935 af Average Runoff Depth = 3.81"
56.31% Pervious = 3.429 ac 43.69% Impervious = 2.661 ac

Summary for Subcatchment S-1A: Unattenuated flow toward BVW

Runoff = 17.93 cfs @ 12.15 hrs, Volume= 1.588 af, Depth= 3.89"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.80"

	Area (sf)	CN	Description
	256	70	Woods, Good, HSG C
	12,859	77	Woods, Good, HSG D
	1,514	74	>75% Grass cover, Good, HSG C
	24,779	80	>75% Grass cover, Good, HSG D
	86,531	98	Paved parking
*	24,684	98	Roof
*	2,300	98	Concrete
	40,938	91	Gravel roads, HSG D
	16,956	89	<50% Grass cover, Poor, HSG D
*	2,384	98	BVW Area
	213,201	92	Weighted Average
	97,302		Pervious Area
	115,899		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
0.1	17	0.0400	3.22		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
1.1	210	0.0260	3.27		**Shallow Concentrated Flow, CD** Paved Kv= 20.3 fps
0.4	75	0.0350	3.01		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
0.2	55	0.0090	4.30	3.38	**Circular Channel (pipe), EF** Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Concrete pipe, bends & connections
0.1	10	0.0150	1.97		**Shallow Concentrated Flow, FG** Unpaved Kv= 16.1 fps
11.0	417	Total			

Summary for Subcatchment S-1B: Flow toward proposed Basin-1

Runoff = 4.02 cfs @ 12.15 hrs, Volume= 0.347 af, Depth= 3.48"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.80"

Area (sf)	CN	Description
2,570	77	Woods, Good, HSG D
9,283	80	>75% Grass cover, Good, HSG D
26,312	91	Gravel roads, HSG D
13,898	89	<50% Grass cover, Poor, HSG D
52,063	88	Weighted Average
52,063		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
0.2	35	0.0400	3.22		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
0.0	9	0.3300	9.25		**Shallow Concentrated Flow, CD** Unpaved Kv= 16.1 fps
1.7	215	0.0170	2.10		**Shallow Concentrated Flow, DE** Unpaved Kv= 16.1 fps
11.0	309	Total			

Summary for Reach 1R: Combined Flow to BVW

Inflow Area = 6.090 ac, 43.69% Impervious, Inflow Depth > 3.73" for 10-Year event
Inflow = 18.59 cfs @ 12.16 hrs, Volume= 1.891 af
Outflow = 18.59 cfs @ 12.16 hrs, Volume= 1.891 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Basin-1

Inflow Area = 1.195 ac, 0.00% Impervious, Inflow Depth = 3.48" for 10-Year event
Inflow = 4.02 cfs @ 12.15 hrs, Volume= 0.347 af
Outflow = 1.77 cfs @ 12.43 hrs, Volume= 0.314 af, Atten= 56%, Lag= 16.7 min
Discarded = 0.01 cfs @ 12.43 hrs, Volume= 0.012 af
Primary = 1.76 cfs @ 12.43 hrs, Volume= 0.302 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 84.15' @ 12.43 hrs Surf.Area= 4,410 sf Storage= 6,307 cf

Plug-Flow detention time= 224.9 min calculated for 0.314 af (91% of inflow)
Center-of-Mass det. time= 178.9 min (982.9 - 804.0)

Volume	Invert	Avail.Storage	Storage Description
#1	82.00'	10,584 cf	**Custom Stage Data (Irregular)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
82.00	1,574	406.0	0	0	1,574
83.00	2,825	426.0	2,169	2,169	2,962
84.00	4,202	461.0	3,491	5,660	5,472
85.00	5,684	495.0	4,924	10,584	8,102

Device	Routing	Invert	Outlet Devices
#1	Discarded	82.00'	**0.090 in/hr Exfiltration over Surface area**
#2	Primary	83.50'	**33.0 deg x 0.8' long Sharp-Crested Vee/Trap Weir** C= 2.60
#3	Primary	82.45'	**2.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.01 cfs @ 12.43 hrs HW=84.15' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.75 cfs @ 12.43 hrs HW=84.15' (Free Discharge)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.62 cfs @ 2.52 fps)
└**3=Orifice/Grate** (Orifice Controls 0.13 cfs @ 6.12 fps)

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S-1A: Unattenuated flow Runoff Area=213,201 sf 54.36% Impervious Runoff Depth=6.05"
Flow Length=417' Tc=11.0 min CN=92 Runoff=27.21 cfs 2.470 af

Subcatchment S-1B: Flow toward proposed Runoff Area=52,063 sf 0.00% Impervious Runoff Depth=5.59"
Flow Length=309' Tc=11.0 min CN=88 Runoff=6.32 cfs 0.557 af

Reach 1R: Combined Flow to BVW Inflow=29.98 cfs 2.974 af
Outflow=29.98 cfs 2.974 af

Pond 1P: Basin-1 Peak Elev=84.56' Storage=8,224 cf Inflow=6.32 cfs 0.557 af
Discarded=0.01 cfs 0.014 af Primary=3.86 cfs 0.505 af Outflow=3.88 cfs 0.518 af

Total Runoff Area = 6.090 ac Runoff Volume = 3.027 af Average Runoff Depth = 5.96"
56.31% Pervious = 3.429 ac 43.69% Impervious = 2.661 ac

Summary for Subcatchment S-1A: Unattenuated flow toward BVW

Runoff = 27.21 cfs @ 12.15 hrs, Volume= 2.470 af, Depth= 6.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.00"

	Area (sf)	CN	Description
	256	70	Woods, Good, HSG C
	12,859	77	Woods, Good, HSG D
	1,514	74	>75% Grass cover, Good, HSG C
	24,779	80	>75% Grass cover, Good, HSG D
	86,531	98	Paved parking
*	24,684	98	Roof
*	2,300	98	Concrete
	40,938	91	Gravel roads, HSG D
	16,956	89	<50% Grass cover, Poor, HSG D
*	2,384	98	BVW Area
	213,201	92	Weighted Average
	97,302		Pervious Area
	115,899		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
0.1	17	0.0400	3.22		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
1.1	210	0.0260	3.27		**Shallow Concentrated Flow, CD** Paved Kv= 20.3 fps
0.4	75	0.0350	3.01		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
0.2	55	0.0090	4.30	3.38	**Circular Channel (pipe), EF** Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Concrete pipe, bends & connections
0.1	10	0.0150	1.97		**Shallow Concentrated Flow, FG** Unpaved Kv= 16.1 fps
11.0	417	Total			

Summary for Subcatchment S-1B: Flow toward proposed Basin-1

Runoff = 6.32 cfs @ 12.15 hrs, Volume= 0.557 af, Depth= 5.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.00"

Area (sf)	CN	Description
2,570	77	Woods, Good, HSG D
9,283	80	>75% Grass cover, Good, HSG D
26,312	91	Gravel roads, HSG D
13,898	89	<50% Grass cover, Poor, HSG D
52,063	88	Weighted Average
52,063		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	50	0.0400	0.09		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.40"
0.2	35	0.0400	3.22		**Shallow Concentrated Flow, BC** Unpaved Kv= 16.1 fps
0.0	9	0.3300	9.25		**Shallow Concentrated Flow, CD** Unpaved Kv= 16.1 fps
1.7	215	0.0170	2.10		**Shallow Concentrated Flow, DE** Unpaved Kv= 16.1 fps
11.0	309	Total			

Summary for Reach 1R: Combined Flow to BVW

Inflow Area = 6.090 ac, 43.69% Impervious, Inflow Depth > 5.86" for 100-Year event
Inflow = 29.98 cfs @ 12.16 hrs, Volume= 2.974 af
Outflow = 29.98 cfs @ 12.16 hrs, Volume= 2.974 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Basin-1

Inflow Area = 1.195 ac, 0.00% Impervious, Inflow Depth = 5.59" for 100-Year event
Inflow = 6.32 cfs @ 12.15 hrs, Volume= 0.557 af
Outflow = 3.88 cfs @ 12.32 hrs, Volume= 0.518 af, Atten= 39%, Lag= 9.9 min
Discarded = 0.01 cfs @ 12.32 hrs, Volume= 0.014 af
Primary = 3.86 cfs @ 12.32 hrs, Volume= 0.505 af

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Peak Elev= 84.56' @ 12.32 hrs Surf.Area= 5,001 sf Storage= 8,224 cf

Plug-Flow detention time= 162.8 min calculated for 0.518 af (93% of inflow)
Center-of-Mass det. time= 125.7 min (916.7 - 791.0)

Volume	Invert	Avail.Storage	Storage Description
#1	82.00'	10,584 cf	**Custom Stage Data (Irregular)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
82.00	1,574	406.0	0	0	1,574
83.00	2,825	426.0	2,169	2,169	2,962
84.00	4,202	461.0	3,491	5,660	5,472
85.00	5,684	495.0	4,924	10,584	8,102

Device	Routing	Invert	Outlet Devices
#1	Discarded	82.00'	**0.090 in/hr Exfiltration over Surface area**
#2	Primary	83.50'	**33.0 deg x 0.8' long Sharp-Crested Vee/Trap Weir** C= 2.60
#3	Primary	82.45'	**2.0" Vert. Orifice/Grate** C= 0.600

Discarded OutFlow Max=0.01 cfs @ 12.32 hrs HW=84.55' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=3.85 cfs @ 12.32 hrs HW=84.56' (Free Discharge)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 3.70 cfs @ 3.15 fps)
└**3=Orifice/Grate** (Orifice Controls 0.15 cfs @ 6.85 fps)

RECHARGE CALCULATIONS
(STANDARD #3)

STANDARD 3: RECHARGE CALCULATIONS

Note:
Required Recharge Volume calculations are based on new impervious areas only. Existing impervious areas have not been included.

REQUIRED:

Recharge Volume Required ("A" Soils) = [Impervious Area x (Recharge Depth inches/12)]
= [0 sf x (0.60"/12)]
= 0 cf (Required Volume)

Recharge Volume Required ("B" Soils) = [Impervious Area x (Recharge Depth inches/12)]
= [0 sf x (0.35"/12)]
= 0 cf (Required Volume)

Recharge Volume Required ("C" Soils) = [Impervious Area x (Recharge Depth inches/12)]
= [0 sf x (0.25"/12)]
= 0 cf (Required Volume)

Recharge Volume Required ("D" Soils) = [Impervious Area x (Recharge Depth inches/12)]
= [16,774 sf x (0.10"/12)]
=140 cf (Required Volume)

Total Required Recharge Volume = 140 cf

CAPTURE AREA ADUSTMENT:
It is noted that the site is comprised of solely of C and D soils and that groundwater recharge has been achieved to the maximum extent practicable. Due to the location and elevation of the proposed pavement, runoff from all new impervious area could not be captured by infiltrating BMP's.

STATIC METHOD:

- Assume the entire Required Recharge Volume is discharged into the infiltration device before infiltration begins.

PROVIDED:
Infiltration Basin #1:

- Cumulative Volume below the lowest outlet (Elev.=82.45) = 824 c.f.

Total Recharge Volume Provided = 824 c.f. (0.019 acre-feet)

DRAWDOWN CALCULATIONS
(STANDARD #3)

STANDARD 3: DRAWDOWN CALCULATIONS

$$Time_{drawdown} = \frac{Rv}{(K)(Bottom\ Area)}$$

Where:

Rv = Required Storage Volume = (F)(impervious area)

K = Saturated Hydraulic Conductivity

For "Static" and "Simple Dynamic" Methods, use Rawls Rate (see Table 2.3.3).

For "Dynamic Field" Method, use 50% of the in-situ saturated hydraulic conductivity.

INFILTRATION BASIN #1

$$Time_{drawdown} = \frac{Rv}{(K)(Bottom\ Area)} = 69.80 \text{ hours}$$

Rv =	*824*	*C.F.*	*(Recharge Volume Provided)*
K =	*0.09*	*inch/hr.*	
BA =	*1,574*	*S.F.*	*(Total Bottom Area)*

TABLE 2.3.3

Texture Class	NRCS Hydrologic Soil Group (HSG)	Infiltration Rate Inches/Hour
Sand	A	8.27
Loamy Sand	A	2.41
Sandy Loam	B	1.02
Loam	B	0.52
Silt Loam	C	0.27
Sandy Clay	C	0.17
Clay Loam	D	0.09
Silty Clay Loam	D	0.06
Sandy Clay	D	0.05
Silty Clay	D	0.04
Clay	D	0.02

WATER QUALITY VOLUME CALCULATIONS (STANDARD #4)

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

LOCATION: 61 John Vertente Boulevard - New Bedford, MA PROJECT #: 17-413 DATE: 8/10/17 REV:

STANDARD 4: WATER QUALITY VOLUME:

Note:
Water Quality Volume calculations are based on new impervious areas only. Existing impervious areas have not been included.

Water Quality Treament Volume Formula:
$V_{WQ} = D_{WQ} X (1 ft. / 12 in.) X A_{IMP}$
Where,
V_{WQ} = *Required Water Quality Volume* (in cubic feet)
D_{WQ} = Water Quality Depth: one-inch for discharges within a Zone II or IWPA, to or near another critical area, runoff from a LUHPPL, or exfiltration to soils with infiltration rate greater than 2.4 inches/hour; 1/2 -inch for discharges near or to other areas
A_{IMP} = Impervious Area (in cubic feet)

STORM WATER OUTFALL: CDS 2025 unit

CONTRIBUTING IMPERVIOUS AREA (A_{IMP}) = 16,774 S.F.

V_{WQ}	=	1.0	inch	X	1 ft/ 12 in.	X	16,774	s.f.	=	1,398 c.f.

STRUCTURAL BMP TREATMENT TRAIN:

CDS-2025

*Refer to attached WQV conversion calculation & CDS report = 1,398 c.f.

TOTAL WATER QUALITY VOLUME PROVIDED IN BMP TREATMENT TRAIN = 1,398 c.f.

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ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

LOCATION: 61 John Vertente Boulevard PROJECT #: 17-413 DATE: 8/10/17

WATER QUALITY VOLUME CONVERSION TO FLOW RATE:

Note: The following conversion performed according to methods described in "Standard Method to Convert Required Water Quality Volume to a Discharge Rate for Sizing Flow Based Manufactured Proprietary Stormwater Treatment Practices"

FLOW CONVERSION FOR WATER QUALITY VOLUME FROM CDS-2025-5 OUTLET

$Q_1 = (q_U) \times (V_{WQ}) \times (A_{IMP})$

Where,

q_U = Unit peak discharge, in csm/in (From Figure 4 of conversion guidance document described above, based on 0.1 hour Time of Concentration)

V_{WQ} = Water Quality Depth: one-inch for discharges within a Zone II or IWPA, to or near another critical area, runoff from a LUHPPL, or exfiltration to soils with infiltration rate greater than 2.4 inches/hour; 1/2 -inch for discharges near or to other areas

A_{IMP} = Impervious Area (in squre miles)

Q_1 =	774	csm/in	X	1,398	s.f.	X	3.587 e^{-8}	mi^2 / s.f.	X	1.0	inch	=	0.04	cfs

61 John Vertente

BMP-1

CDS 2025-5

CDS ESTIMATED NET ANNUAL SOLIDS LOAD REDUCTION BASED ON THE RATIONAL RAINFALL METHOD								
Rainfall Intensity[1] (in/hr)	% Rainfall Volume[1]	Cumulative Rainfall Volume	Rainfall Volume Treated	Total Flowrate (cfs)	Treated Flowrate (cfs)	Operating Rate (%)	Removal Efficiency (%)	Incremental Removal (%)
0.0800	35.30%	35.30%	35.30%	0.2160	0.2160	13.50%	92.62%	32.69%
0.1600	23.79%	59.09%	23.79%	0.4320	0.4320	27.00%	88.02%	20.94%
0.2400	12.91%	72.00%	12.91%	0.6480	0.6480	40.50%	83.42%	10.77%
0.3200	7.83%	79.83%	7.83%	0.8640	0.8640	54.00%	78.83%	6.17%
0.4000	4.91%	84.74%	4.91%	1.0800	1.0800	67.50%	74.23%	3.64%
0.4800	3.50%	88.24%	3.50%	1.2960	1.2960	81.00%	69.63%	2.44%
0.5600	1.71%	89.95%	1.71%	1.5120	1.5120	94.50%	65.03%	1.11%
0.6400	1.83%	91.78%	1.69%	1.7280	1.6000	100.00%	58.48%	1.07%
0.7200	1.87%	93.65%	1.54%	1.9440	1.6000	100.00%	51.98%	0.97%
0.8000	0.91%	94.56%	0.67%	2.1600	1.6000	100.00%	46.78%	0.43%
1.0000	2.32%	96.88%	1.37%	2.7000	1.6000	100.00%	37.43%	0.87%
2.0000	2.88%	99.76%	0.85%	5.4000	1.6000	100.00%	18.71%	0.54%
3.0000	0.23%	99.99%	0.05%	8.1000	1.6000	100.00%	12.48%	0.03%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
0.0000	0.00%	99.99%	0.00%	0.0000	0.0000	0.00%	0.00%	0.00%
								81.67%
							Removal Efficiency Adjustment2 =	0.00%
							Predicted % Annual Rainfall Treated =	96.12%
							Predicted Net Annual Load Removal Efficiency =	81.67%

1 - Based on 14 years of 15 minute precipitation data from NCDC station 3821, Hyannis, in Barnstable County, MA

2 - Reduction due to use of 60-minute data for a site that has a time of concentration less than 30-minutes.

TSS REMOVAL CALCULATIONS (STANDARD #4)

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

LOCATION: 61 John Vertente Boulevard - New Bedford, MA

PROJECT #: 17-413

DATE: 8/10/17

REV:

STANDARD 4: TSS REMOVAL CALCULATIONS:

STORM WATER OUTFALL: OUTLET FROM CDS 2025 UNIT

TREATMENT

A BMP	B TSS Removal Rate	C Starting TSS Load*	D Amount Removed (BXC)	E Remaining Load (C-D)
Proprietary Separator	82%	1.00	0.82	0.18
		Total TSS Removal=	0.82	

LONG TERM POLLUTION PREVENTION PLAN (STANDARD #4)

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

Long Term Pollution Prevention Plan

Site Plan
61 John Vertente Boulevard
New Bedford, MA 02745

Record Owner:
Assessor's Map 133 Lot 47:
Symmetry New Bedford Real Estate, LLC
61 John Vertente Boulevard
New Bedford, MA 02745

Prepared For:
Parallel Products of New England
401 Industry Road
Louisville, KY 40208

Prepared By:
Christian Farland, P.E.
Farland Corp.
Project No. 17-413

Long Term Pollution Prevention Plan

This Long Term Pollution Prevention Plan serves to outline good housekeeping practices in order to prevent pollution of the wetland resource areas and surrounding environment. The Long Term Operation & Maintenance Plan shall be taken as part of this document as it is a critical part of this plan and shall be adhered to. Proper operation and maintenance records shall be kept on file at all times.

Snow disposal shall be carried out by the owner. The owner should follow DEP guideline #BWR G2015-01 for all snow removal requirements. For this site, it is anticipated that snow will be plowed from the impervious parking and driveway areas and piled along the shoulders of the driveway and parking areas. Snow along the building is anticipated to be removed by shovel or snow blower.

Snow disposal in the following areas are prohibited:

- Dumping snow in the bordering vegetated wetlands is prohibited.
- Dumping of snow on top of storm drain catch basins, grassed swale, or in stormwater drainage basin is prohibited. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the system into surface water.

Illicit discharges to the stormwater management system are prohibited. Illicit discharges are those that are not entirely comprised of stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities; firefighting, water line flushing, landscape irrigation, uncontaminated groundwater, potable water sources, foundation drains, air conditioning condensation, footing drains, individual residence car washing, flows from riparian habitats and wetlands, de-chlorinated water from swimming pools, water used for street washing, and water used to clean residential buildings without detergents. Measures are provided below to prevent illicit discharges to the stormwater management system.

In order to prevent or minimize the potential for a spill of hazardous substances or oils to contaminate stormwater, a spill control and containment kit, including spill berm, absorbent materials, rags, gloves, and trash containers, shall be readily available. All product manufacturers recommended spill cleanup methods shall be known by maintenance personnel, who shall be trained regarding these procedures and the location of the cleanup procedure information and supplies. In the event of oil, gasoline or other hazardous waste spill on-site, the New Bedford Fire Department, DEP and the Conservation Agent shall be notified immediately. For spills of less than ¼ gallon, clean-up with absorbent materials or other appropriate means, unless circumstances dictate that the spill should be treated by a professional emergency response contractor. Spills which exceed the reportable quantities of substances mentioned in 40 CFR 110, 40 CFR 117, or 40 CFG 302 must be immediately reported to the EPA National Response Center (800) 242-8802. Any drainage inlet that may be affected by the spill shall be

covered immediately with a spill protector drain cover or similar product, or a spill berm placed around the perimeter of the opening to prevent any contamination into the drainage system. Proper cleanup and disposal of hazardous wastes must follow all applicable local and state regulations and must be carried out by a qualified contractor.

The maintenance of all lawns, gardens and landscaped areas shall be performed by the owner. Good housekeeping practices should include proper storage and minimal use of cleaning products and fertilizers. Facility owner should consult with a professional landscaper for proper maintenance of lawns and landscaped areas.

OPERATION & MAINTENANCE PLAN & LOGS (STANDARD #9)

FARLAND CORP.

ENGINEERING A BETTER TOMORROW

ENGINEERING | SITE WORK | LAND SURVEYING

Long Term Operation and Maintenance Plan

Site Plan
61 John Vertente Boulevard
New Bedford, MA 02745

August 10, 2017

Record Owner(s):
Assessor's Map 133 Lot 47:
Symmetry New Bedford Real Estate, LLC
61 John Vertente Boulevard
New Bedford, MA 02745

Prepared For:
Parallel Products of New England
401 Industry Road
Louisville, KY 40208

Prepared By:
Christian Farland, P.E.
Farland Corp.
Project No. 17-413

The Operator, Owner, and Party Responsible for Operation and Maintenance of the Stormwater BMP's will be the landowner of the property on which the BMP is located. The responsible party shall:

a) Maintain an operation and maintenance log for at least three years, including inspections, repairs, replacement and disposal (for disposal, the log shall indicate the type of material and disposal location);
b) Make this log available to MassDEP and the Conservation Commission upon request during normal business hours; and
c) Allow members and agents of the MassDEP and the Conservation Commission to enter and inspect the premises to evaluate and ensure that the responsible party complies with the Operation and Maintenance Plan requirements for each BMP.

Street Sweeping

It shall be the responsibility of the owner to:

Inspections:

Inspect sediment deposit accumulations on the parking lots quarterly.

Maintenance:

Sweep parking lots at least annually, during March or April before spring rains wash residual sand from winter applications into stormwater systems.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Stone/ Rip Rap Areas

The rip rap areas are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect the rip rapped areas quarterly.

Maintenance:

Remove accumulated sediment, trash, leaves and debris at least annually. Check for signs of erosion and repair as need. Replace any damaged areas with new rip rap of the same size.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Deep Sump Catch Basins / Drain Manholes

The catch basins, trench grate, and manholes are to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect the catch basins and manholes quarterly.

Maintenance:

Remove accumulated sediment, trash, leaves and debris when the depth of deposits is greater than or equal to one half the depth from the bottom invert of the lowest pipe in the basin and/or manhole to the bottom elevation of the basin or manhole.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

CDS® Units

The units are to be inspected and maintained by the owner.

CDS Units are proprietary products and must comply with manufacturer's inspection and maintenance requirements. Refer to the attached CDS Inspection and Maintenance Guide.

It shall be the responsibility of the owner to:

Inspections:

Inspect the units quarterly.

Prepare inspection reports as part of each inspection and include the following information:

1. Date of inspection
2. Maintenance personnel
3. Location of unit (GPS coordinates if possible)
4. Time since last rainfall
5. Installation deficiencies (missing parts, incorrect installation of parts)
6. Structural Deficiencies (concrete cracks, broken parts)
7. Operational deficiencies (leaks, blockages)
8. Presence of oil sheen of depth of oil layer
9. Estimate of depth/ volume of floatables (trash, leaves) captured
10. Sediment depth measured
11. Recommendations for any repairs and/ or maintenance for the units
12. Estimation of time before maintenance is required if not required at time of inspection.

Maintenance:

Cleaning should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method for removing pollutants from the system. The screen should be power washed to ensure it is free of trash and debris.

The CDS® Unit shall be cleaned once the sediment depth reaches 75% of the storage capacity.

If upon inspection, evidence of hydrocarbons is observed, such material shall be immediately removed and disposed of in accordance with local, state, and federal guidelines and regulations.

To remove oil and other hydrocarbons that accumulate, it may be preferable to use adsorbent pads.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Stormwater Detention Basin

The basin is to be inspected and maintained by the owner.

It shall be the responsibility of the owner to:

Inspections:

Inspect to basins quarterly and after major storms (>3.2" of rain in 24 hours)

Inspect basins for settlement, subsidence, erosion, cracking or tree growth on the embankment, condition of stone; sediment accumulation around the outlet or within the basin; and erosion within the basin and banks.

Inspect vee-notch weir outlet for evidence of clogging, sediment deposits or signs of erosion around the structure.

Ensure that the basins are operating as designed. If inspection shows that a basin fails to fully drain within 72 hours following a storm event, then the responsible party shall retain a Registered Professional Civil Engineer licensed in the state of Massachusetts to assess the reason for infiltration/ detention failure and recommend corrective action for restoring the intended functions.

Maintenance:

When mowing the basin and forebay, mow the buffer area, side slopes, and basin bottom. Remove grass clippings and accumulated debris. Mow three times per year in May, July and September.

Remove accumulated trash, leaves, debris in basin and forebay every month between April and November of each year. Inspect areas in February of each year, if possible, to determine whether the aforementioned services are required.

If the basin is ponding in areas or not functioning as designed, use deep tilling to break up clogged surfaces, and re-vegetate immediately.

Do not store snow in basin area.

Remove sediment from the basin as necessary and at least once every 5 years but wait until the floor of the basin is thoroughly dry. After removing sediment, replace any vegetation damaged during clean-out by either re-seeding or re-sodding.

Dispose of the accumulated sediment and hydrocarbons in accordance with local, state, and federal guidelines and regulations.

Drain Lines

After construction, the drain lines shall be inspected after every major storm for the first few months to ensure proper functions. Presence of accumulated sand and silt would indicate more frequent maintenance of the pre-treatment devices is required. Thereafter, the drain lines shall be inspected at least once per year. Accumulated silt shall be removed by a vactor truck or other method preferred.

Access Ways & Parking Areas

Inspections:

Inspect Daily
Clear any debris daily
Sweep bi-annually
Repair cracks and potholes as needed
Maintain painted lines as necessary for visibility

Fences/Walls

Inspections:

Inspect Monthly
Remove debris and litter daily
Repair as necessary

Landscaping

Inspections:

- Inspect weekly
- Remove debris and litter as necessary
- Prune and fertilize bi-annually
- Mow lawn as necessary
- Fertilize quarterly

"61 John Vertente Boulevard"
Operation & Maintenance Log Form

STRUCTURAL SEDIMENT CONTROL BMPS

BMP	DATE INSPECTED	SEDIMENT BUILDUP (YES/NO)	IF SEDIMENT BUILDUP, DATE CLEANED
CDS-2025			
Stormwater Detention Basin #1			
OTHER:			

Maintenance Notes:

_____

_____

_____

TO BE PERFORMED BY:_____ON OR BEFORE:_____

ILLICIT DISCHARGE STATEMENT (STANDARD #10)

Illicit Discharge Compliance Statement (IDCS)

This Illicit Discharge Compliance Statement is intended to verify that no illicit discharges exist on the site or are proposed. We have included, in the pollution prevention plan, measures to prevent illicit discharges to the stormwater management system, including wastewater discharges and discharges of stormwater contaminated by contact with process wastes, raw materials, toxic pollutants, hazardous substances, oil, or grease.

The site plan identifies the location of any systems for conveying wastewater and/or groundwater on the site and show that there are no connections between the stormwater and wastewater management systems and the location of any measures taken to prevent the entry of illicit discharges into the stormwater management system.

Farland Corp.

Christian A. Farland, P.E., LEED AP
Principal Engineer and President

WATERSHED PLANS

GNBIF REGULATIONS

The regulations for the Park were established by the Industrial Foundation to maintain high standards to protect private investment in the past, present and future.

Conveyance of said land is made subject to the following restrictions which shall run with the land, shall be binding upon successive owners thereof, and shall be for the benefit of and enforceable by the "Foundation" as follows: And subject to the Protective New Bedford Business Park Covenants, (sometimes herein referred to as the restrictions or restrictive covenants) imposed by the Foundation upon the Premises. These restrictions set forth below shall run with the land and be binding upon successive owners thereof, shall be for the benefit of and enforceable by (or waived in any particular instance by) the Foundation and shall be in effect for a period of 30 years from the execution date of the Deed and may be further extended for successive periods as provided herein:

1. The first floor square footage of all the buildings on the Premises shall not exceed 40% of the total area of the Premises.
2. All uses on a lot which include, but are not limited to, buildings, driveways, parking areas, impermeable surfaces etc. shall not cover more than 65% of the total area of the Premises.
3. The conveyed parcel of land shall not be used or occupied at any time for any purpose other than the purpose of: Corporate Headquarters; Offices; Service Industries; Research & Development and Testing Laboratories and Facilities; Manufacturing; Processing; Wholesaling; Distribution; and Warehousing, which is in connection with on-site manufacturing, processing, wholesaling and distribution. The conveyed parcel of land can also be used for a Hotel, Restaurant, Day-Care Facility and Health Club.
4. The architecture and type of construction, and the materials used therein, of all buildings and structures to be erected upon said land must be approved in writing by the Foundation. A certificate signed by the Chairman, Vice Chairman or Executive Director of the Foundation, in form suitable for recording, to the effect that these provisions have been complied with, duly recorded in the Registry, shall be conclusive evidence of such approval.
5. An important aspect of the Foundation's decision on whether or not to approve the new building plans or plans to expand an existing building of the applicant in Subsection "4" above shall be the attractiveness of the building and the associated landscaping plans including an initial and ongoing commitment for landscaping and upkeep to improve the appearance of the property such as special plantings and flowers, regular grass mowing and other maintenance actions to keep the appearance of the buildings and property in excellent condition..
6. No use shall be made of the Premises which would be obnoxious, or which would create a nuisance, or which would be hazardous per se to other occupants of the Park or owners of real estate abutting the Business Park, or which would violate applicable state, federal or local laws, regulations or by laws, or which would adversely impact on the quality of the atmosphere of aquifers therein or nearby. No project may go forward which poses any significant risks, hazards or problems to the land in the Park, other companies in the Park or nearby residents to the Park such as: Fire; Explosion; Dust; Noise; Smoke; Odor; Unhealthy Air Emissions; Ground Water Contamination; Soil Contamination; Adverse Wetlands Impacts; Adverse Endangered Species Impacts; or Unsightly Operations.
7. No building shall be erected within fifty (50) feet of any street line or lot line, and the area set back from the street line shall be kept appropriately landscaped and maintained in a professional and aesthetically pleasing manner.
8. Buyer shall provide on-site parking sufficient for all employees and visitors and shall not permit such parking on the public ways. All parking shall be confined to the rear and sides of the building and shall be set back 50 feet or more from property lines. All parking areas shall be properly paved with asphalt or concrete material maintained and screened from view in such manner, as the Foundation shall, in its sole discretion, from time to time determine.

9. All truck loading platforms or doors as well as rail-siding facilities shall be located at the rear of the building and screened from view in such manner as the Foundation shall, in its sole discretion, from time to time, determine.

10. AU outside storage must be appropriately screened on all sides.

11. No topsoil, sand, or gravel shall be removed from the said binds except for the purpose of building excavations and grading. Any topsoil, sand, or gravel removed for any purpose shall be disposed of in a lawful manner. Only borrow soil materials free of debris, roots and organic matter shall be permitted for use as fill. Topsoil shall be natural soil, typical of the locality, fertile and reasonably free from stones, weeds and clay.

12. The Premises shall not be hereafter subdivided or resold without the prior written consent of the Foundation.

13. No building, structure or any condition thereto, or any exterior alteration thereof, shall be erected or placed, and no parking area or driveway shall be constructed until the plans and specifications shall first have been approved in writing by Executive Director of the Foundation. The plans and specifications shall be prepared by a registered architect or engineer and shall include the following:

    a. Site plans showing existing and proposed contours, site drainage, site utilities, building locations, driveways, parking and loading areas, walks, lighting, landscaping, etc.

    b. Building plans, elevations and sections, including plans for all floor levels; general layout of interior spaces; elevations of all exterior facades (indicating heights, materials, finishes, and signs) typical building and wall sections showing nature of construction.

    c. Outline specifications noting materials of construction, including paving and landscaping; size and species of plant materials as well as building materials. Upon receipt of adequate and sufficient plans and specifications, the Foundation shall within one (1) week after such receipt, notify the Buyer in writing of its approval or disapproval of such plans. Such approval, however, will be conditional upon certification by the Buyer or its representative that the same plans and specifications as submitted to the Foundation for approval have also been or will be submitted to the building inspector in application for a building permit.

14. The building front must be primarily masonry and glass. The building sides must be masonry and glass or flat steel panels with concealed fasteners. The back of the building may be any material.

15. No billboards or advertising signs, other than those Identifying the main business and products of the firms occupying the premises shall be permitted in the New Bedford Business Park. All such signs shall be approved by the Foundation. No un-shaded, flashing or open lights shall be allowed on such signs.

16. To avoid further traffic congestion at the entrance to the Park around 7 a.m. and 3 p.m., the Company shall begin its first shift outside of the 6:50 -7:10 a.m. time window and end its first shift outside of the 2:50 - 3:10 p.m. time window.

17. The owner of the conveyed Parcel of land shall pay to the Greater New Bedford Industrial Foundation a quarterly payment of about $600, which is likely to increase in the future, to help cover the costs of the Park's Maintenance and Security Patrol Service.

18. By a date three (3) months after the closing, Buyer shall have commenced, and shall thereafter proceed with dispatch and use reasonable diligence in the construction of a building upon the Premises to be conveyed.

19. Subject to the foregoing, if Buyer shall not have completed construction of one proposed building on the premises to be conveyed by twelve (12) months after Closing, it shall, within thirty (30) days of said date, offer to re-convey said premises to the Foundation for the price of plus the actual cost of construction completed to date. If the Foundation within thirty (30) days after receipt of said offer, does not accept the same, Buyer may retain said premises free of the limitations and agreements contained in this paragraph and/or sell said premises to whomever it wishes.

20. Any re-conveyance of the Premises to the Foundation pursuant to the provisions hereof shall be by a good and sufficient quitclaim deed, conveying a good and clear record and marketable title to the same free from all encumbrances except those set forth herein and; and upon such re-conveyance, the restrictions and obligations imposed upon Buyer set forth herein shall lapse and be of no further force and effect.

21. The Foundation shall have the right to bring proceedings at law or equity against the party or parties violating or attempting to violate the conditions, covenants, restrictions and reservations contained herein, to enjoin them from so doing and to cause any such violation to be remedied, after written notice to the owner and mortgagees of record. Every act, omission to act, or condition which violates the terms of these Protective New Bedford Business Park Covenants shall constitute

a nuisance and every remedy available at law or in equity for the abatement of public or private nuisance shall be available to the Foundation.

22. These covenants and restrictions are intended to constitute a common scheme of restrictions running with the land of the Premises and to be effective and enforceable under the provisions of General Laws Chapter 184, Section 26 et seq., as same may be amended from time to time.

23. The Foundation and its successors and assigns reserve the right to extend the restrictions recited in Paragraphs 1-20 hereof for successive periods of not more than 20 years each from the execution date of the Deed contemplated herein (after the expiration of the initial 30 year period of restriction) so long as the same may be a benefit to the Foundation. Such extension of said restrictions shall be set forth on a Notice of Restrictions and shall:

    1. Be signed by the Chairman (or successor position), the Foundation being entitled of record to the benefit of the restrictions; and
    2. Describe the benefited land of the Foundation; and
    3. Describe the Premises; and
    4. Name the Foundation as having previously owned the Premises; and
    5. Specify the deed imposing the prior restrictions (as set forth herein and in said deed) and its place of record in the public records; and
    6. Be indexed and marginally referred as required by Massachusetts General Laws Chapter 184, Section 29; and
    7. Be recorded in the Registry before the expiration of 30 years of the private restrictions contemplated herein; and
    8. Thereafter, be recorded in said Registry before the expiration of 20 years preceding the filing of a further notice of restriction which is not to exceed 20 years.

This paragraph shall be deemed amended, from time to time, to the extent necessary, to comply with Association Title Standard No. 52 Extension of Restriction and Massachusetts General Laws Chapter 184, Sections 27 and 29, as same may be amended from time to time.

24. The Foundation may prosecute proceedings at law against Buyer for violating or attempting to violate the provisions hereof either to restrain violation or to recover damages. The failure of the Foundation to enforce any restrictions, regulations, covenants or provisions hereof shall not be deemed to be a waiver of the right to do so thereafter as to the same breach or to one occurring prior or subsequent thereto.

25. If any provision hereof or the application of any such provision to any person or circumstance shall be held invalid, the remainder of this Section 5 or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

26. The Foundation agrees for itself and its successors in interest to the Premises benefited by these restrictive covenants timely execute such documents and take such action, including the surrender of certificates of title, if any, for notation thereon as shall be necessary to cause such notices of restriction to be effective and enforceable under the applicable statutes.

27. These covenants and restrictions may be amended solely by the Foundation, its successors and assigns, at any time or from time to time and such amendment shall become effective upon recording. Any such subsequent amendment which would affect a parcel of land owned by a prior grantee, shall not be binding until said amendment has been assented to in writing by such prior grantee.

Constance M. Brawders

From: Jennifer Clarke
Sent: Wednesday, August 30, 2017 4:21 PM
To: Constance M. Brawders
Subject: BUSINESS PARK APPLICATIONS

Connie...

Just wanted to advise you that the GNBIF Exec Committee has been presented with both the John Vertente Blvd and 100 Duchaine plans and finds that both meet the park's regulations. Please be sure to note that in the staff reports.

Let me know when they are ready for review.

Thanks!

JENNIFER CLARKE, AICP
Deputy Director of Planning & Community Development
Department of Planning, Housing & Community Development
608 Pleasant Street
New Bedford, MA 02740
508.979.1500 x117 www.newbedford-ma.gov

ATTACHMENT 8

Nitsch Engineering

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472

www.nitscheng.com

September 1, 2017

Mr. Craig Dixon
Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 William Street
New Bedford, MA 02744

RE: Nitsch Project #9972
61 John Vertente Boulevard
New Bedford, MA

Dear Mr. Dixon:

This letter is in regards to the proposed project located at 61 John Vertente Boulevard in New Bedford, Massachusetts. Nitsch Engineering has reviewed the following documents for compliance with the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards:

- Plans entitled, "Site Plan, 61 John Vertente Boulevard, Assessor's Map #133 Lot #47, New Bedford, Massachusetts," prepared by Farland Corp., dated August 10, 2017; and
- Notice of Intent entitled, "Site Plan, Assessors Plot 133 – Lot 47, 61 John Vertente Boulevard, New Bedford, Massachusetts," prepared by Farland Corp., including stormwater calculations, dated August 10, 2017.

This project includes the construction of additional parking and a proposed stormwater basin. Below are our comments on the proposed project regarding stormwater management only:

1. The site includes C and D soils. The area of the proposed work is in D soils. Therefore, groundwater recharge is not required.
2. The proposed culverts underneath the proposed driveway in the area of wetlands fill do not have sufficient cover. We recommend these culverts be revised to ductile iron pipe to provide additional cover.
3. The proposed design does not include any pretreatment prior to discharge to the proposed stormwater basin.
4. It does not appear that test holes have been performed in the vicinity of the proposed stormwater basin. Test holes should be performed to verify seasonal high groundwater elevation.
5. The existing conditions and proposed conditions drainage areas are slightly different.
6. The time span used in the existing conditions hydrologic calculations is different than the time span used in the proposed conditions calculations. The time spans should be the same.
7. The Total Suspended Solids calculations do not include the proposed gravel parking area.
8. The project includes the filling of 700 square feet of wetlands and 930 square feet of replication.
9. We recommend that rip-rap be placed on the downstream end of the overflow weir.

10. It is unclear how the extents of the drainage analysis were determined. For instance, the large parking lot on the west side of the site was included in the analysis but the stormwater basin and the areas contributing to it were not. Both areas discharge to the drainage swale.

11. The relocated fuel tank appears to have been placed on the side slope of the existing stormwater basin. We recommend it be moved to a flatter area.

12. The applicant should provide calculations documenting that the existing piping system in the existing parking lot can accommodate the additional flows generated by the new pavement. Pipe sizing calculations should be provided.

13. We understand that the limits of the existing wetlands on site need to be verified. If the limits of the wetlands are expanded, it could impact the design of the 'infiltration' basin as well as expand the 25-foot buffer to wetlands.

14. We recommend that spot elevation be provided on the grading plan consistent with the top of berm elevation shown on the details.

If you have any questions, please call us at 617-338-0063.

Very truly yours,

Nitsch Engineering, Inc.

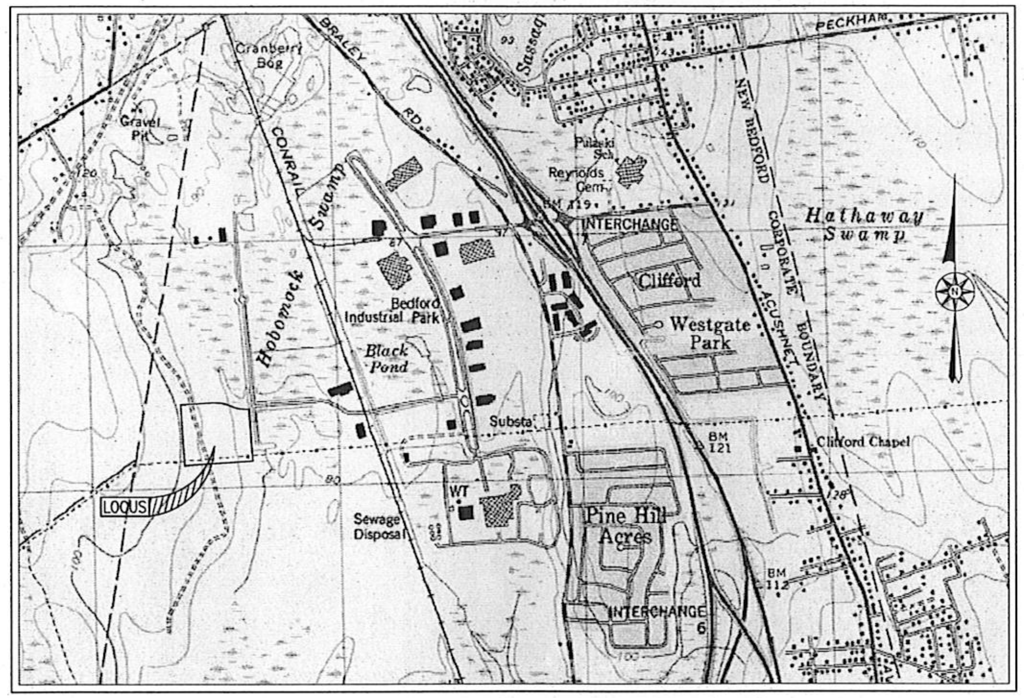
Scott D. Turner, PE, AICP, LEED AP ND
Director of Planning

SDT/vas

P:\9972 New Bedford NOIPR\Correspondence\Outgoing\2017-09-01 60 Verlente Boulevard.docx

SITE PLAN

61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP #133 LOT #47
NEW BEDFORD, MASSACHUSETTS



—AREA MAP—

SCALE: 1"=1,000'±

– ZONING DATA –

DISTRICT: INDUSTRIAL C

DESCRIPTION	REQUIRED	EXISTING	PROVIDED
LOT AREA	0 S.F.	16.43 AC	16.43 AC
UPLAND AREA	0 S.F.	13.5± AC	13.5± AC
UPLAND AREA PERCENTAGE	0 %	82.2± %	82.2± %
LOT FRONTAGE	0 FT	1478.82 FT	1478.82 FT
FRONT SETBACK	25 FT	107.3 FT	107.3 FT
SIDE SETBACK	25 FT	203.3 FT	203.3 FT
REAR SETBACK	25 FT	241.3 FT	241.3 FT
BUILDING HEIGHT (MAXIMUM)	100 FT	24.7± FT	24.7± FT
BUILDING COVERAGE (MAXIMUM)	50 %	11.7 %	11.7 %
LOT COVERAGE (MAXIMUM)	80 %	55.6 %	36.4 %

– PARKING & LOADING REQUIREMENTS –

PRINCIPAL USE: FOOD PACKAGING & DISTRIBUTION

(FOR PARKING REGULATION PURPOSES: BUSINESS ENGAGED IN WAREHOUSING & DISTRIBUTION)

REQUIREMENT	REQURIED	PROVIDED
1 SPACE PER 1,500 S.F. OF G.F.A. UP TO 15,000 S.F. THEREAFTER, ONE ADDITIONAL SPACE FOR EACH 5,000 S.F. OR PORTION THEREOF IN EXCESS OF 15,000 S.F., PLUS ONE SPACE FOR EACH VEHICLE UTILIZED IN THE BUSINESS.	25 SPACES	153 SPACES
WHEN 151-200 TOTAL PARKING SPACES ARE PROVIDED, 6 MUST BE ACCESSIBLE SPACES. ONE IN EVERY EIGHT ACCESSIBLE SPACES, BUT NOT LESS THAN ONE, SHALL BE VAN ACCESSIBLE	6 ACCESSIBLE, 1 VAN ACCESSIBLE	6 ACCESSIBLE, 2 VAN ACCESSIBLE
TWO (2) LOADING SPACES FOR EACH BUILDING CONTAINING 10,000 S.F. OF GROSS FLOOR AREA. THEREAFTER, ONE (1) ADDITIONAL LOADING SPACE SHALL BE REQUIRED FOR EACH FIFTEEN (15) FEET OF DOCK, PLATFORM, OR OPENING IN THE BUILDING WHERE THE LOADING OR UNLOADING OF COMMODITIES IS INTENDED TO OCCUR.	11 LOADING SPACES	18 LOADING SPACES

RECORD OWNER:
ASSESSORS MAP 133 LOT 47
SYMMETRY NEW BEDFORD REAL ESTATE, LLC
61 JOHN VERTENTE BOULEVARD
NEW BEDFORD, MA 02745
DEED BOOK 8931 PAGE 199

– INDEX –

REVISIONS

CHRISTIAN ALBERT FARLAND No. 47544 CIVIL

FARLAND CORP.

www.FarlandCorp.com
401 COUNTY STREET
NEW BEDFORD, MA 02740
P.508.717.3479
OFFICES IN:
•TAUNTON
•MARLBOROUGH
•WARWICK, RI

DRAWN BY: JKM
DESIGNED BY: CAF
CHECKED BY: CAF

SITE PLAN
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

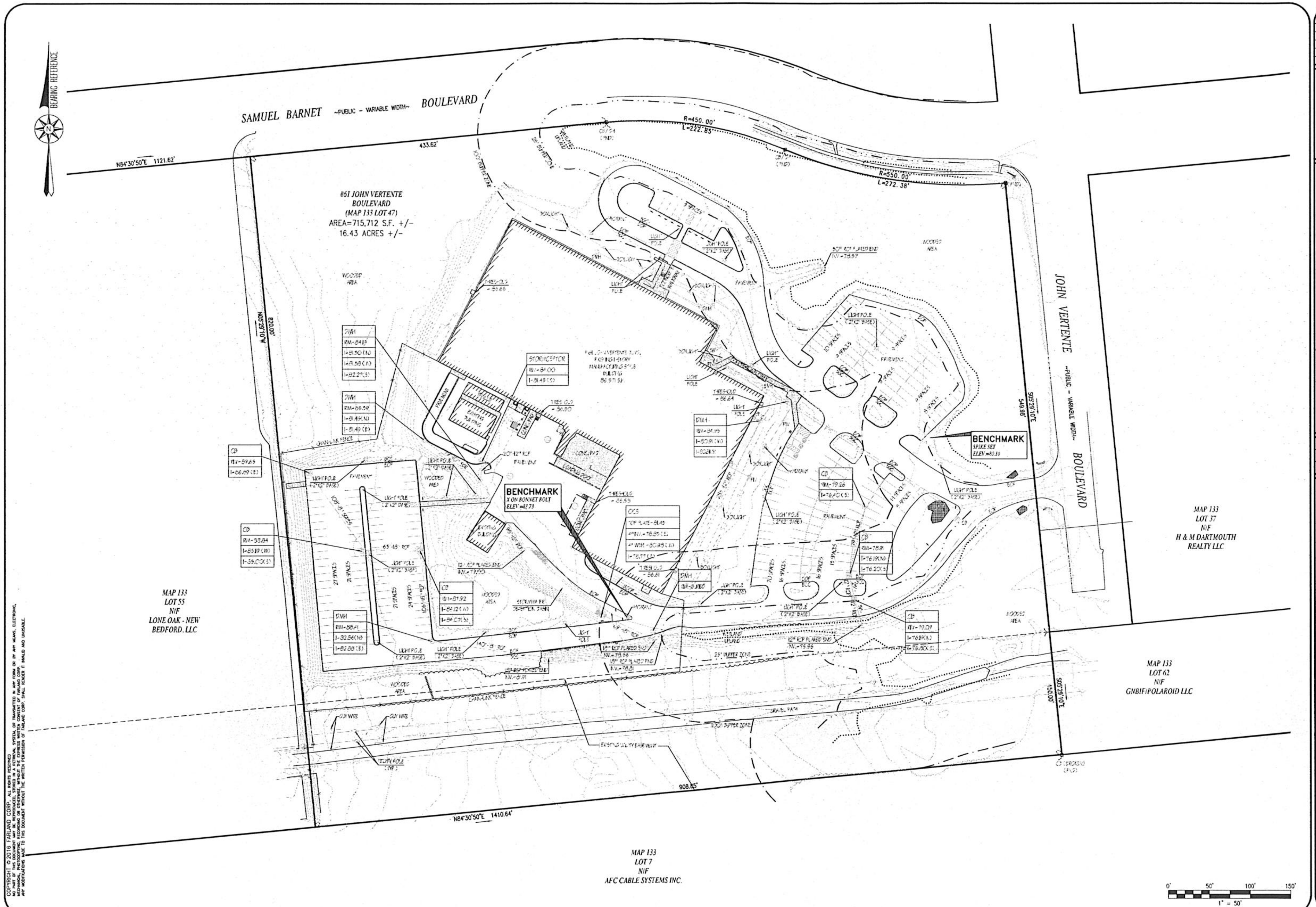
PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE: AS NOTED
JOB NO. 17-413
LATEST REVISION:

COVER SHEET
SHEET 1 OF 9

ATTACHMENT 10

Case 31-17
08/11/2017


BEARING REFERENCE
SAMUEL BARNET ~PUBLIC - VARIABLE WIDTH~ BOULEVARD
N84°30'50"E 1121.62'
433.82'
R=450.00'
L=222.83'
R=550.00'
L=272.38'
#61 JOHN VERTENTE BOULEVARD (MAP 133 LOT 47)
AREA=715,712 S.F. +/-
16.43 ACRES +/-
JOHN VERTENTE ~PUBLIC - VARIABLE WIDTH~ BOULEVARD
BENCHMARK
SPIKE SET
BENCHMARK
X ON BONNET BOLT
MAP 133
LOT 37
N/F
H & M DARTMOUTH REALTY LLC
MAP 133
LOT 55
N/F
LONE OAK - NEW BEDFORD, LLC
MAP 133
LOT 62
N/F
GNBIF/POLAROID LLC
N84°30'50"E 1410.64'
908.85'
MAP 133
LOT 7
N/F
AFC CABLE SYSTEMS INC.
0' 50' 100' 150'
1" = 50'

REVISIONS

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•MARLBOROUGH
•WARWICK, RI

DRAWN BY: JKM
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CHECKED BY: CAF

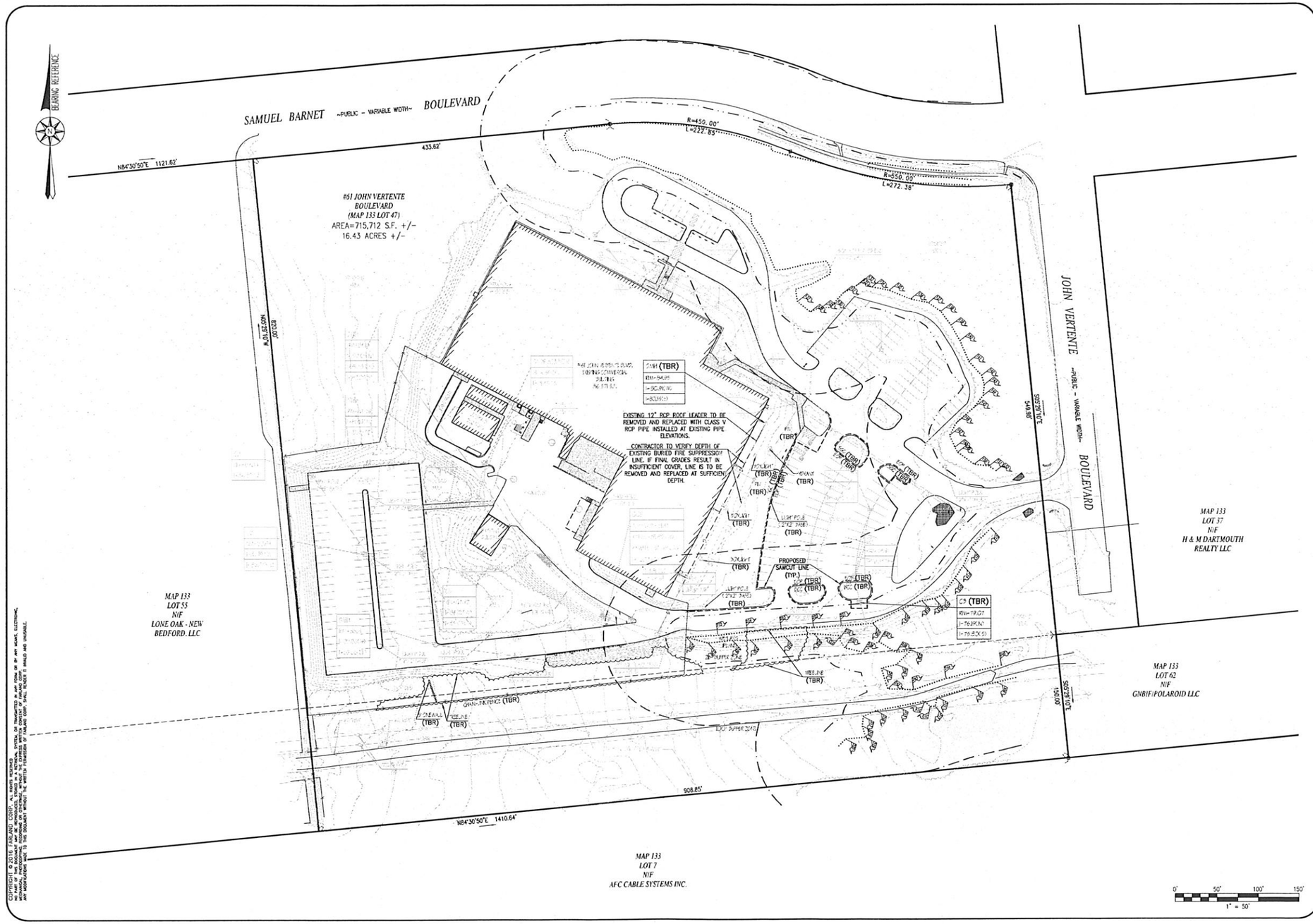
SITE PLAN
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE:
JOB NO. 17-413
LATEST REVISION:

EXISTING CONDITIONS
SHEET 2 OF 9

Case 31-17
08/11/2017



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•WARWICK, RI

DRAWN BY: JKM
DESIGNED BY: CAF
CHECKED BY: CAF

SITE PLAN

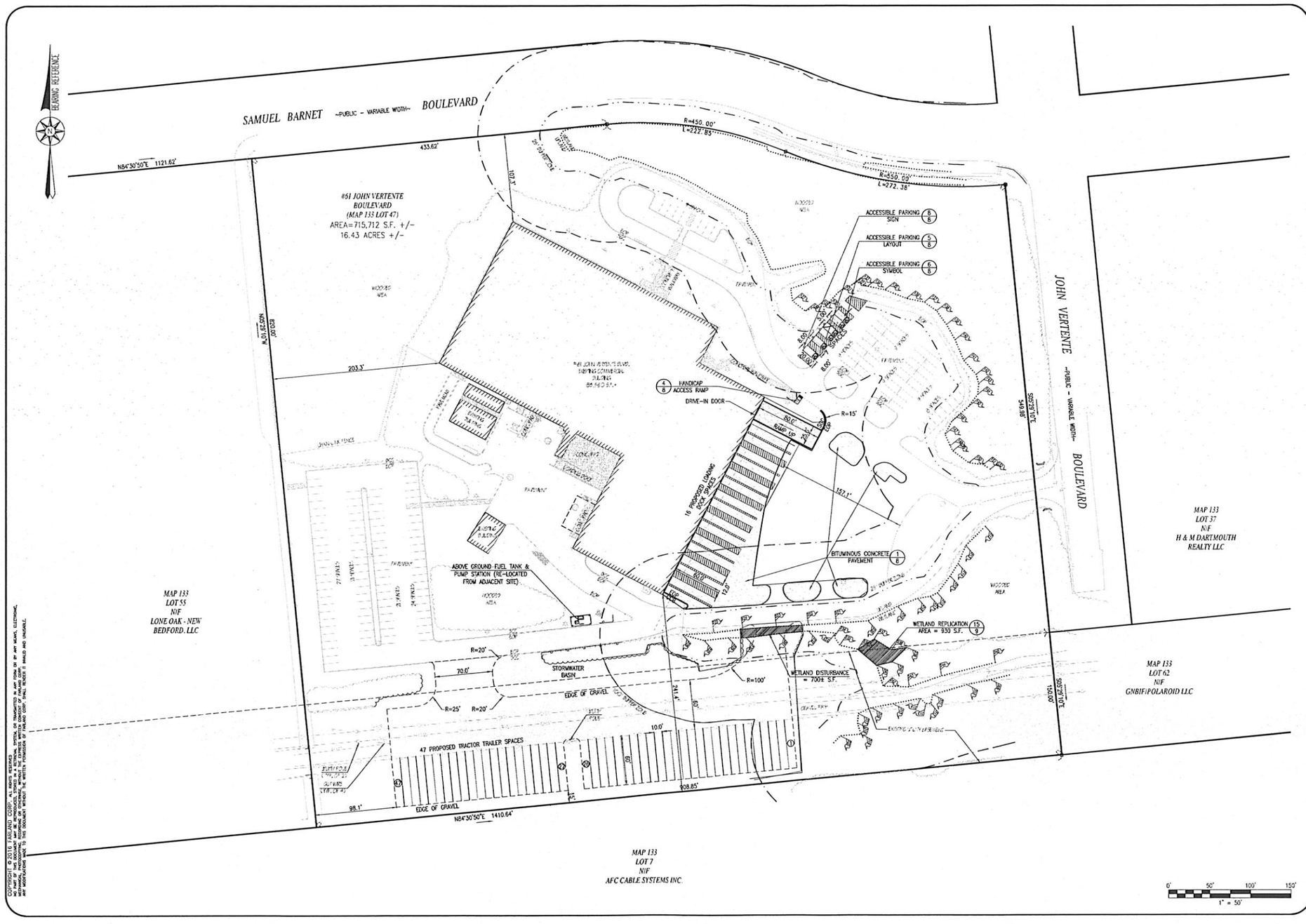
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE:
JOB NO. 17-413
LATEST REVISION:

DEMOLITION PLAN

SHEET 3 OF 9



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DRAWN BY: JKM
DESIGNED BY: CAF
CHECKED BY: CAF

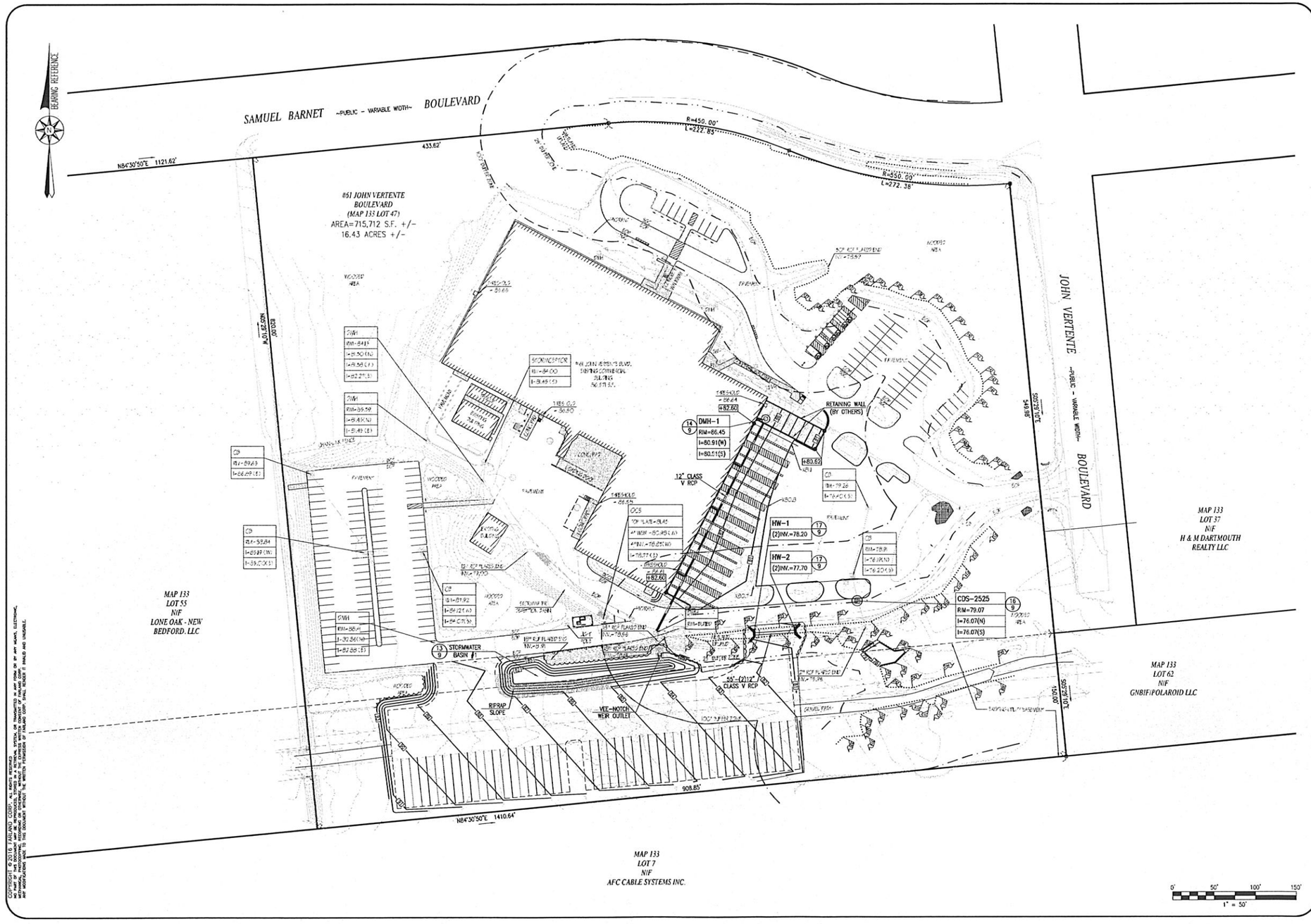
SITE PLAN

61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PADUCELL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE: 1"=50'
JOB NO. 17-413
LATEST REVISION:

SITE LAYOUT PLAN
SHEET 4 OF 9



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CHECKED BY: CAF

SITE PLAN

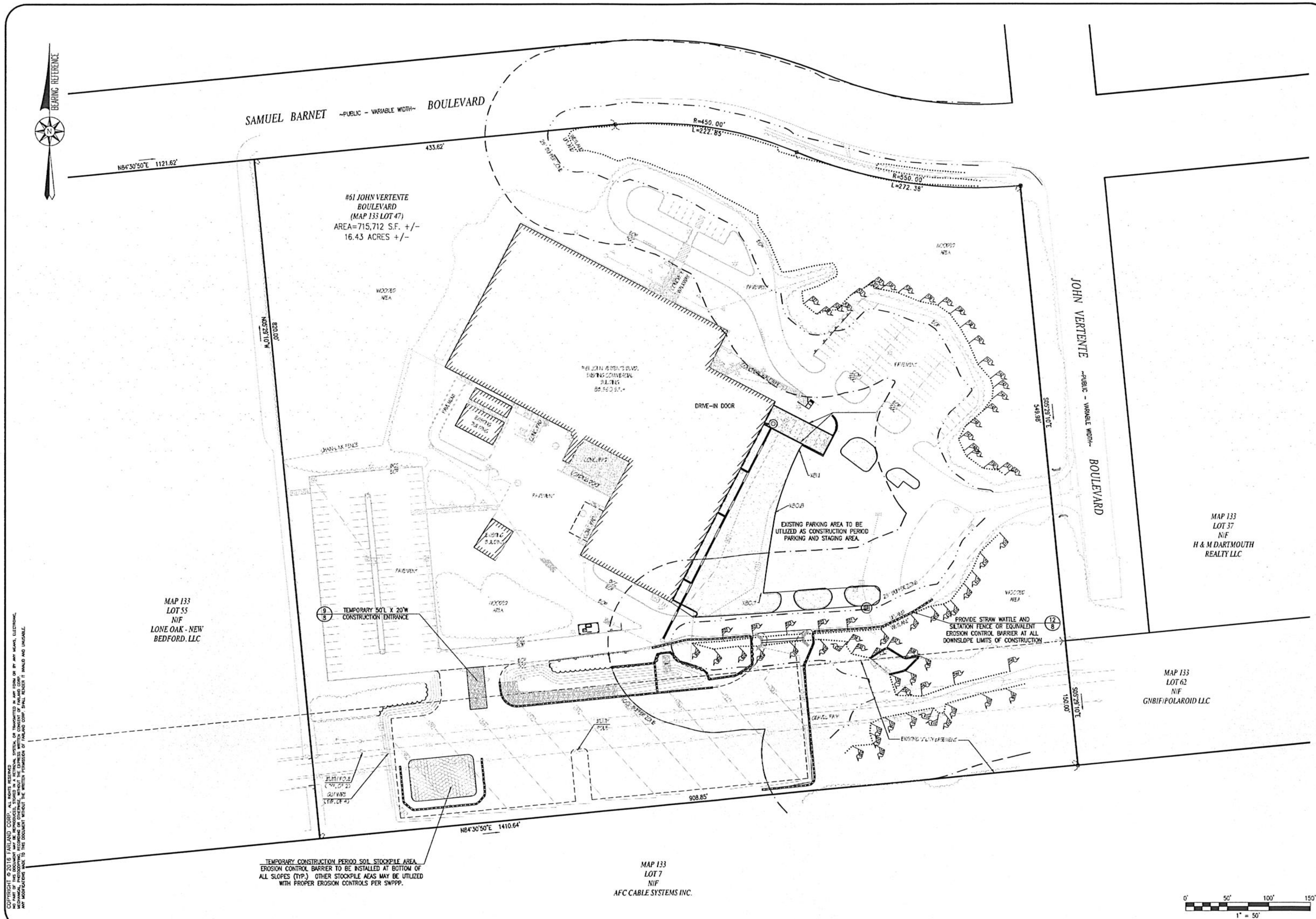
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE: 1"=50'
JOB NO. 17-413
LATEST REVISION:

GRADING & UTILITY PLAN
SHEET 5 OF 9

Case 31-17
08/11/2017



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•WARWICK, RI

DRAWN BY: JKM
DESIGNED BY: CAF
CHECKED BY: CAF

SITE PLAN

— 61 JOHN VERTENTE BOULEVARD —
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE: 1"=50'
JOB NO. 17-413
LATEST REVISION:

EROSION & SEDIMENT CONTROL PLAN
SHEET 6 OF 9

Case 31-17
08/11/2017

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
2. PROPERTY LINE INFORMATION TAKEN FROM:
3. PLAN ENTITLED: "APPROVAL NOT REQUIRED PLAN" IN NEW BEDFORD, MASSACHUSETTS DRAWN FOR JOHNSON & JOHSON PROFESSIONAL, INC." DATED JANUARY 18, 1999 BY EARLE O. PHILLIPS, JR.
4. TOPOGRAPHIC SURVEY PERFORMED BY FARLAND CORP. IN JULY & AUGUST 2017.
5. WETLAND DELINEATION FROM PLAN ENTITLED "MANUFACTURING AND OFFICE ADDITION, DEPUY ORTHOPEDICS, INC, 61 JOHN VERTENTE BOULEVARD" (SHEET C2) DATED 10/08/04 BY PLANNERS DESIGNERS ARCHITECTS, INC.
6. VERTICAL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 AND HORIZONTAL LOCATIONS REFER TO THE NORTH AMERICAN DATUM (NAD) OF 1983.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL STANDARDS AND REGULATIONS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
9. WHERE PROPOSED PAVEMENT AND WALKS ARE TO MEET EXISTING, THE CONTRACTOR SHALL SAWCUT A NEAT LINE AND MATCH GRADE. SEAL ALL JOINTS WITH HOT BITUMINOUS ASPHALT JOINT SEALER.
10. CURBING TO BE AS INDICATED ON THE PLANS.
11. ALL EXISTING TREES, SHRUBS AND GROUND COVER WHERE NATURAL GRADE IS TO BE RETAINED SHALL BE KEPT IN THEIR EXISTING STATE UNLESS REMOVAL IS REQUIRED FOR CONSTRUCTION PURPOSES.
12. ALL AREAS DISTURBED BY CONSTRUCTION AND NOT TO BE PAVED OR OTHERWISE TREATED AS NOTED ON PLAN SHALL BE TREATED WITH 4" OF LOAM, SEEDED AND HAY MULCHED FOR EROSION CONTROL.
13. SITE IMPROVEMENTS SHALL CONFORM TO A.D.A. SPECIFICATIONS.
14. LIGHTING SHALL BE DIRECTED ON SITE AND AWAY FROM TRAFFIC INTERFERENCE.
15. THE CONTRACTOR SHALL PROTECT AND/OR CAP OFF ALL EXISTING ON-SITE UTILITY SERVICES ACCORDING TO THE LOCAL AUTHORITY'S SPECIFICATIONS. SERVICES SHALL BE CAPPED OFF WHERE SAME ENTER THE PERIMETER OF THE PROPERTY LINE.
16. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
17. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
18. THESE PLANS ARE PERMITTING PLANS AND SHALL NOT TO BE USED FOR CONSTRUCTION. A FINAL SET OF STAMPED PLANS FOR CONSTRUCTION WILL BE ISSUED AFTER RECEIVING FINAL APPROVAL FROM THE LOCAL AND/OR STATE DEPARTMENTS.
19. ANY MINOR MODIFICATIONS (AS DETERMINIED BY THE CITY ENGINEER) TO THE INFORMATION SHOWN ON THE APPROVED SITE PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER AS A MINOR PLAN REVISION FOR APPROVAL PRIOR TO WORK BEING PERFORMED.
20. ANY WORK AND MATERIAL WITHIN THE CITY RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF NEW BEDFORD REQUIREMENTS.
21. ALL HANDICAP PARKING, RAMPS, AND ACCESS SHALL CONFORM TO AAB & MAAB REQUIREMENTS.
22. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION. EROSION CONTROL SHALL CONFORM TO CITY OF NEW BEDFORD CONSERVATION COMMISSION REQUIREMENTS AS STATED IN THE ORDER OF CONDITIONS.
23. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO MUTCD REQUIREMENTS.
24. THE CONTRACTOR SHALL OBTAIN A STREET DISTURBANCE & OBSTRUCTION PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE RIGHT OF WAY.
25. ALL WATER AND SEWER MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY OF NEW BEDFORD REQUIREMENTS.
26. ALL WATER AND SEWER CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF NEW BEDFORD BEFORE BEING BACKFILLED.
27. THE CITY SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE REQUIRED INSPECTIONS.

CONSTRUCTION SEQUENCING NOTES

1. CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES. EROSION CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING.
2. TREE PROTECTION FENCE SHALL BE INSTALLED AND APPROVED BY THE OWNER REPRESENTATIVE PRIOR TO ANY EARTH MOVING.
3. ALL PERMANENT DITCHES AND SWALES ARE TO BE STABILIZED WITH VEGETATION OR RIP RAP PRIOR TO DIRECTING RUNOFF TO THEM.
4. CLEAR CUT, DEMOLISH AND DISPOSE OF EXISTING SITE ELEMENTS NOT TO REMAIN.
5. STORMWATER SHALL NOT BE DIRECTED TOWARDS THE INFILTRATION BASIN UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. GRADE AND GRAVEL ALL PAVED AREAS. ALL PROPOSED PAVED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
7. BEGIN ALL PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
8. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND MULCH AND SEED AS REQUIRED.
9. FINISH PAVING ALL HARD SURFACE AREAS.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. REMOVE TEMPORARY EROSION CONTROL MEASURES.
13. THE CONSTRUCTION SEQUENCE SHALL BE CONFINED TO THE LIMIT OF WORK AS SHOWN ON THE DRAWINGS.
14. UPON COMPLETION OF CONSTRUCTION THE OWNER SHALL AGREE TO MAINTAIN AND CLEAN ALL DRAINAGE STRUCTURES AS REQUIRED.

SITE PREPARATION NOTES

1. WITHIN THE LIMIT OF WORK LINE AS NOTED ON THE SITE PLANS, REMOVE AND DISCARD ALL CONCRETE PAVEMENT, BITUMINOUS CONCRETE PAVEMENT, BRICK PAVEMENT, TOP SOIL, MULCH, TRASH, DEAD TREES AND STUMPS, SHRUBBERY, CHAIN LINK FENCE POSTS, RAILS, FABRIC, GATES, FOOTINGS AND ALL APPURTENANCES, BOLLARDS, POSTS, CONCRETE FOOTINGS AND FOUNDATIONS, WALLS AND CURBS UNLESS OTHERWISE NOTED.
2. THE OWNER'S REPRESENTATIVE SHALL BE CONSULTED AND WILL REVIEW THE WORK ON SITE WITH THE CONTRACTOR BEFORE ANY WORK SHALL COMMENCE.
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS TO REMAIN THAT ARE DUE TO CONTRACTOR OPERATIONS.
5. ALL ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS EFFORTS OF THE DEMOLITION WITH ALL TRADES.
7. THE CONTRACTOR SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.
8. THE CONTRACTOR SHALL MAINTAIN OR ADJUST TO NEW FINISH GRADES AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS LIGHT POLES, SIGN POLES, MANHOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED OR DIRECTED BY THE OWNER'S REPRESENTATIVE.

UTILITY AND GRADING NOTES

1. ALL ON-SITE STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE) OR CLASS V RCP, UNLESS NOTED OTHERWISE.
2. HDPE PIPE SHALL CONFORM WITH AASHTO DESIGNATIONS M294 AND M252, SHALL BE MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC AND SHALL BE ADS N-12 PIPE AS MANUFACTURED BY ADVANCE DRAINAGE SYSTEM, INC. OR HANCOR HI Q PIPE AS MANUFACTURED BY HANCOR, INC. OR APPROVED EQUAL UNLESS OTHERWISE NOTED OR DETAILED.
3. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN LINES.
4. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 5 FEET OF COVER AND A MAXIMUM OF 6 FEET OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE. GREATER DEPTHS ARE PERMITTED WHERE REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
5. GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSE. THE CONTRACTOR SHALL NOTE THAT NOT ALL FITTINGS ARE NOTED, SHOWN OR INDICATED.
6. ALL WATER MAIN FITTINGS, TEES, BENDS, HYDRANTS, ETC. SHALL BE RESTRAINED WITH CONCRETE THRUST BLOCKS.
7. DOMESTIC WATER SERVICES 2.5" AND SMALLER SHALL BE TYPE K COPPER TUBING AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED CORPORATION STOP AND APPROVED SADDLE CURB STOP, AND BOX, USING MATERIALS SPECIFIED BY THE MUNICIPAL WATER DEPARTMENT OR COMPANY.
8. ALL WATER MAINS 3" AND LARGER SHALL BE CEMENT LINED DUCTILE IRON - CLASS 52, AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED FITTINGS AND GATE VALVES.
9. ALL WATER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.
10. PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS AND REQUIREMENTS. CONTRACTORS SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTION WITH UTILITY TESTS, FLUSHING AND INSPECTIONS AS REQUIRED BY THE LOCAL MUNICIPALITY.
11. BEFORE THE DEVELOPMENT SITE IS GRADED, THE AREA OF THE DRAINAGE BASINS SHOULD BE FENCED OFF TO PREVENT HEAVY EQUIPMENT FROM COMPACTING THE UNDERLYING SOIL.
12. WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
13. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
14. MAXIMUM SLOPE IN DISTURBED AREAS SHALL NOT EXCEED 3:1 , UNLESS OTHERWISE NOTED.
15. CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
16. CONTRACTOR SHALL ADJUST UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.
17. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
18. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
19. THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE AND ELECTRICAL). FINAL DESIGN AND LOCATIONS AT THE BUILDING WILL BE PROVIDED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION.

LAYOUT AND MATERIAL NOTES

1. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
2. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATTIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND ALL DETAILS CONTIGUOUS TO THE BUILDING INCLUDING SIDEWALKS, RAMPS, UTILITY ENTRANCE LOCATIONS, WALL PACKS, CONCRETE DOOR PADS, ROOF DRAINS, ETC.
4. ACCESSIBLE CURB RAMPS SHALL BE PER THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES, WHICHER IS MORE STRINGENT.
5. THE FOLLOWING LAYOUT CRITERIA SHALL CONTROL UNLESS OTHERWISE NOTED ON THE PLAN:
   ALL DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING.
   ALL DIMENSIONS ARE TO FACE OF CURB AT GUTTER LINE.
   ALL DIMENSIONS ARE TO CENTER OF PAVEMENT MARKINGS.
   ALL TIES TO PROPERTY LINES ARE PERPENDICULAR TO THE PROPERTY LINE UNLESS OTHERWISE NOTED.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONSERVATION COMMISSION SHALL BE NOTIFIED, AT LEAST 72 HOURS PRIOR TO ANY LAND DISTURBANCE.
2. A COPY OF THE SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
3. SOIL EROSION AND SEDIMENT CONTROL PRACTICES IN THE PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
4. ALL APPLICABLE SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY DEMOLITION GRADING OPERATIONS AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
5. ALL APPLICABLE SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
6. ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
7. THE MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL MEASURES AND FACILITIES DURING AND IMMEDIATELY AFTER CONSTRUCTION RESTS WITH THE GENERAL CONTRACTOR. UPON ACCEPTANCE OF THE PROJECT, THE OWNER SHALL BECOME RESPONSIBLE FOR MAINTENANCE OF ANY REMAINING MEASURES AND FACILITIES.
8. OFF SITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE ENGINEER.
9. THE CONSERVATION COMMISSION AND/OR ENGINEER MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.
10. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS AT ALL TIMES.
11. THE CONTRACTOR SHALL UTILIZE ALL METHODS NECESSARY TO PREVENT BLOWING AND MOVEMENT OF DUST FROM THE EXPOSED SOIL SURFACES.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
13. A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ENTRANCE EXISTS. SEE LOCATION DETAIL ON PLAN.
14. ALL CATCH BASIN INLETS SHALL BE PROTECTED DURING CONSTRUCTION AS DETAILED ON THE PLAN, IF APPLICABLE.
15. ALL STORM DRAINAGE OUTLETS SHALL BE PROTECTED AS REQUIRED HEREON BEFORE DISCHARGE POINTS BECOME OPERATIONAL.
16. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
17. LAND AREAS EXPOSED AT ANY ONE TIME AND THE LENGTH OF EXPOSURE SHALL BE KEPT TO A PRACTICAL MINIMUM. THEY SHALL BE LEFT IN A NEAT AND FINISHED APPEARANCE AND PROTECTED FROM EROSION.
18. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTRIBUTED AREAS SHALL BE MULCHED.
19. ALL CRITICAL AREAS SUBJECT TO EROSION SHALL RECEIVE A TEMPORARY SEEDING AND BE MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS IMMEDIATELY FOLLOWING ROUGH GRADING.
20. IMMEDIATELY AFTER COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, SEED THE STOCKPILE WITH ANNUAL RYE GRASS. STABILIZE TOPSOIL STOCKPILES WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING.
21. SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF WETLANDS, THE FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITIES. THE BASE OF ALL STOCKPILES SHALL BE PROTECTED BY A HAY BALE BARRIER OR SEDIMENT FENCE. LOCATIONS ARE DELINEATED ON THE PLAN.
22. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.
23. ALL AREAS NOT STABILIZED BY CONSTRUCTION, SODDING OR LANDSCAPING SHALL BE SEEDED AND STABILIZED IN ACCORDANCE WITH THE SEEDING AND MULCHING SPECIFICATIONS.
24. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATIVE COVER.
25. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTRATION DEVICE. THE SEDIMENT FILTER MUST BE CAPABLE OF FILTERING THE SEDIMENT AND BE PLACED SO AS NOT TO CAUSE EROSION OF THE DOWNSTREAM AREA.

GENERAL PLANTING NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
2. ALL PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, WRAPPED, AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. GUY WIRES SHALL BE ATTACHED TO THE TREE AT A HEIGHT OF TWO-THIRDS THE HEIGHT OF THE TREE AND SHOULD BE LOCATED AT POINTS SO AS NOT TO SPLIT THE TRUNK OF MULTI-STEMMED TREES. PROVIDE THREE STAKES PER TREE UNLESS NOTED OTHERWISE INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. PROVIDE BURLAP WRAPPING WITH A 50% OVERLAP. CUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL.
3. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOP SOIL, PEAT MOSS, AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH SAND.
4. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION AND SHALL BE SUBSEQUENTLY FLOODED TWICE WITHIN TWENTY-FOUR (24) HOURS OF PLANTING. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED WITH MATERIAL OF SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE DEVELOPER. THE REPLACED PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER THE REPLACEMENT DATE.
6. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 6" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED.
7. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH EITHER SOD OR SEED AS INDICATED ON THE LANDSCAPE PLANS. SEED SHALL CONSIST OF THE MIXTURE LISTED IN THE GENERAL SEEDING NOTES. ALL DISTURBED LAWN AREAS SHALL BE TOP SOILED, LIMED, FERTILIZED, AND FINE GRADED PRIOR TO LAWN INSTALLATION.
8. ALL TREES ARE TO BE GUYED, 3 EACH, UNLESS OTHERWISE NOTED ON PLAN.
9. ALL DECIDUOUS TREES ARE TO BE WRAPPED, WITH TREE WRAP, UP TO THE FIRST BRANCHING AND SECURED.
10. THE LANDSCAPE CONTRACTOR IS TO PERFORM ALL CONTRACTED WORK IN A REASONABLE PERIOD OF CONTINUOUS WORK.
11. THE LANDSCAPE CONTRACTOR IS TO MAINTAIN PLANT MATERIAL WHILE THE PROJECT IS UNDERWAY AND FOR A PERIOD OF TWO WEEKS AFTER THE COMPLETION OF THE PROJECT UNLESS OTHERWISE SPECIFIED.
12. THE CONTRACTOR IS TO CLEAN UP AND REMOVE ANY DEBRIS FROM THE SITE, CAUSED BY THE LANDSCAPE CONTRACTOR.

LEGEND

EXISTING		PROPOSED
	CONTOUR LINE	101
	SPOT GRADE	+101.1
	EDGE OF PAVEMENT	EOP
	VERTICAL GRANITE CURB	VGC
	SLOPED GRANITE CURB	SGC
	VERTICAL CONCRETE CURB	VCC
	BITUMINOUS CONCRETE CURB	BCC
	CAPE COD BERM	CCB
	STONE WALL	
	CHAIN LINK FENCE	
	IRON FENCE	
	POST & RAIL FENCE	
	STOCKADE FENCE	
	GUARD RAIL	
	STRAW WATTLES	
	WATER LINE	W
	FIRE HYDRANT	
	POST INDICATOR VALVE	
	WATER GATE	
	WATER METER PIT	WM
	IRRIGATION HAND HOLE	IHH
	WELL	
	SEWER LINE	S
	SEWER MANHOLE	
	GAS LINE	G
	GAS METER	GM
	GAS GATE	
	DRAIN LINE	
	DRAIN MANHOLE	
	CATCH BASIN	
	OVERHEAD WIRES	OHW
	ELECTRIC, TELEPHONE & CABLE	ETC
	UTILITY POLE	
	GUY WIRE	

DETAIL NUMBER
1 / 2 SAMPLE DETAIL
NOT TO SCALE
NUMBER REFERENCES WHAT SHEET THE DETAIL IS ON

REVISIONS

CHRISTIAN ALBERT FARLAND No. 47544 CIVIL

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OFFICES IN:
• TAUNTON
• MARLBOROUGH
• WARWICK, RI

DRAWN BY: JKM
DESIGNED BY: CAF
CHECKED BY: CAF

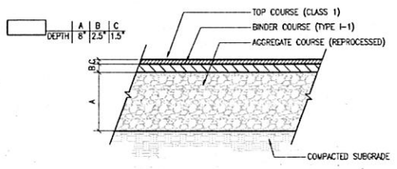
SITE PLAN
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

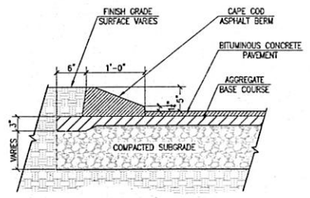
DATE: AUGUST 10, 2017
SCALE: AS NOTED
JOB NO. 17-413
LATEST REVISION:

NOTES
SHEET 7 OF 9

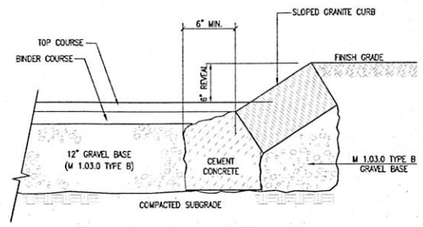
Case 31-17
08/11/2017



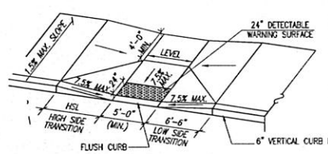
1/8 BITUMINOUS CONCRETE PAVEMENT
NOT TO SCALE



2/8 BITUMINIOUS CONCRETE CAPE COD BERM
NOT TO SCALE



3/8 SLOPED GRANITE CURB
NOT TO SCALE

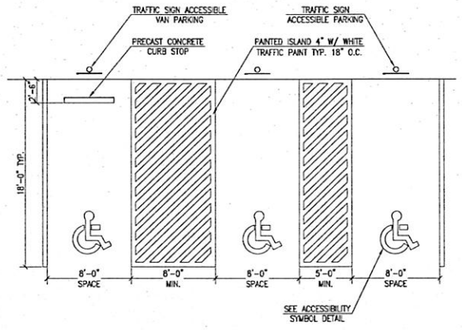


TRANSITION CURB LENGTH	
ROADWAY PROFILE GRADE %	HIGH SIDE TRANSITION LENGTH
0%	6'-6"
>0% TO 1%	7'-8"
>1% TO 2%	9'-0"
>2% TO 3%	11'-0"
>3% TO 4%	14'-0"
>4% TO 5%	15'-0" (MAX.)

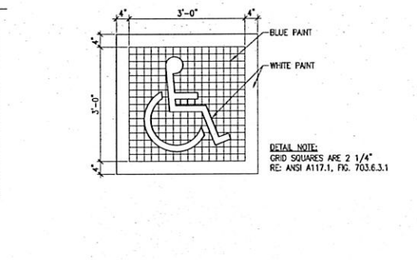
NOTE: BASED ON DESIGN SLOPE OF 7.5% AND A 6" CURB REVEAL

NOTES:
1. RAMP CROSS SECTION TO BE THE SAME AS ADJACENT SIDEWALK, I.E. DEPTH OF SURFACE AND FOUNDATION.
2. DIMENSIONS ARE SUBJECT TO CHANGE IN FIELD. ALL SLOPES AND DIMENSIONS TO COMPLY WITH ADA MAAB REQUIREMENTS.
3. PROVIDE EXPANSION JOINTS AT TOPS OF RAMP AND AT BACK OF WALK AT INTERFACE OF CURB.
4. PROVIDE HEAVY BROOM FINISH ON RAMP AND SIDE SLOPES PERPENDICULAR TO FLOW OF TRAFFIC.
5. MINIMUM WALK DIMENSIONS ARE FROM BACK OF CURB.
6. TRANSITION CURB LENGTH AS REQUIRED TO MEET CODE.
7. FIXED OBJECTS (I.E. UTILITY POLES, HYDRANTS, ETC.) MUST NOT ENCROACH ON ANY PART OF A WHEELCHAIR RAMP, INCLUDING TRANSITION SLOPES.
8. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP, EXCLUDING CURB TRANSITIONS, TO BE LOCATED OUTSIDE OF THE CROSSWALK.

4/8 ACCESSIBLE RAMP TYPE B
NOT TO SCALE



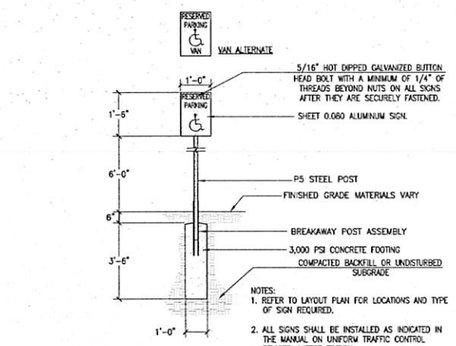
5/8 ACCESSIBLE PARKING LAYOUT
NOT TO SCALE



6/8 ACCESSIBLE PARKING SYMBOL
NOT TO SCALE

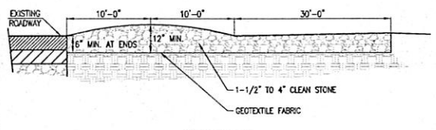
NOTES:
1. COLOR OF TACTILE DETECTABLE WARNINGS SHALL BE YELLOW.
2. CONTRACTOR SHALL INSTALL TILE PER MANUFACTURER'S SPECIFICATIONS
3. PREFERRED PRODUCT SHALL BE REPLACEABLE (WET-SET) COMPOSITE TACTILE BY ADA SOLUTIONS, INC. FOR PRICING QUOTATIONS, PLACING ORDERS, AND FURTHER INFORMATION, CALL JON MCHUMAN, EAST REGIONAL ACCOUNT DIRECTOR FOR ADA SOLUTIONS, INC. AT (800) 372-0519 or (978) 262-9900. DETAILED INFORMATION IS AVAILABLE AT www.cdotile.com.

7/8 DETECTABLE WARNING DETAIL
NOT TO SCALE



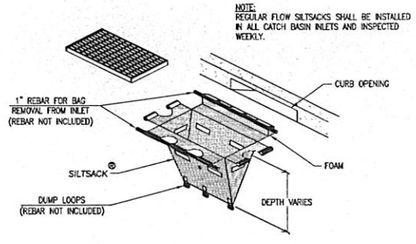
NOTES:
1. REFER TO LAYOUT PLAN FOR LOCATIONS AND TYPE OF SIGN REQUIRED.
2. ALL SIGNS SHALL BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

8/8 ACCESSIBLE PARKING SIGN
NOT TO SCALE

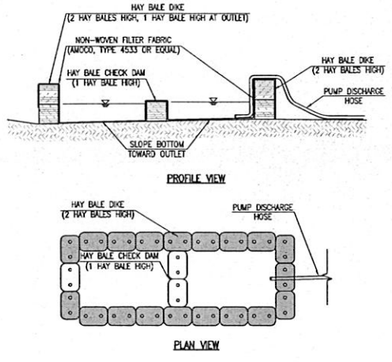


NOTE: PURPOSE IS TO REMOVE MUD FROM TIRES OF CONSTRUCTION VEHICLES.

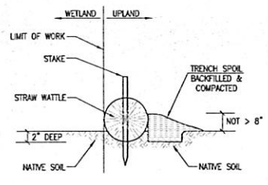
9/8 TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE



10/8 REGULAR FLOW SILTSACK®
NOT TO SCALE



11/8 DE-WATERING BASIN
NOT TO SCALE



12/8 STAKED STRAW WATTLE
NOT TO SCALE

REVISIONS

CHRISTIAN ALBERT FARLAND
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SITE PLAN
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
400 EASTPOINTE BLVD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
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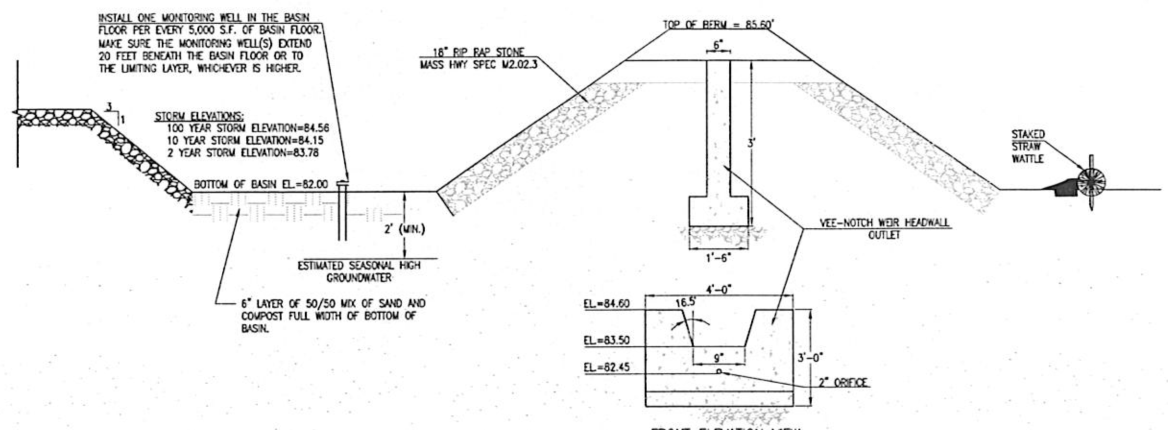
DETAIL SHEET
SHEET 8 OF 9

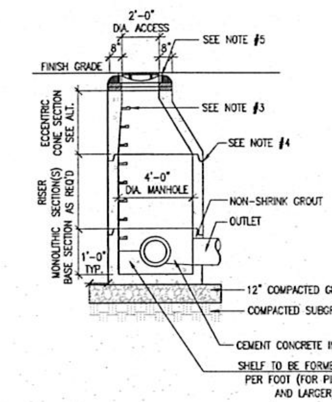
Case 31-17
08/11/2017

INFILTRATION BASIN CONSTRUCTION NOTES:

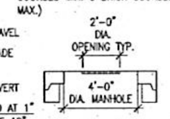
1. UNSUITABLE SOILS BENEATH NFILTRATION BASIN ARE TO BE REMOVED TO A DEPTH OF NATURALLY OCCURRING PERMOUS MATERIAL AND, IF NECESSARY, REPLACED WITH CLEAN WASHED SAND TO THE PROPOSED BASIN BOTTOM ELEVATION. AFTER BASIN FLOOR IS SHAPED, PLACE SOIL ADDITIVES, INCLUDING COMPOST, ON BASIN FLOOR. MIX NATIVE SOILS THAT WERE EXCAVATED FROM THE A & B HORIZONS TO CREATE THE BASIN, AND THEN SCARIFY THE NATIVE MATERIALS AND COMPOST INTO THE PARENT MATERIAL USING A CHISEL PLOW OR ROTARY DEVICE TO A DEPTH OF 12".
2. NEVER PLANT TREES OR SHRUBS WITHIN THE BASIN OR ON THE IMPOUNDING EMBANKMENTS AS THEY INCREASE THE CHANCE OF BASIN FAILURE DUE TO ROOT DECAY OR SUBSURFACE DISTURBANCE.
3. NEVER ALLOW CONSTRUCTION EQUIPMENT TO DRIVE ACROSS THE AREA INTENDED TO SERVE AS THE INFILTRATION BASIN.
4. NEVER COMPACT THE BASIN FLOOR.
5. IMMEDIATELY FOLLOWING BASIN CONSTRUCTION, STABILIZE THE FLOOR AND SIDE SLOPES WITH DENSE TURF OF WATER TOLERANT GRASS.
6. NEVER USE THE INFILTRATION BASIN AS A TEMPORARY SEDIMENT TRAP FOR CONSTRUCTION ACTIVITIES. DO NOT DIRECT RUNOFF INTO THE BASIN UNTIL THE BOTTOM AND SIDE SLOPES ARE STABILIZED, AND ALL CONTRIBUTING AREAS ARE STABILIZED.
7. INFILTRATION BASIN SHALL NOT ACCEPT STORMWATER RUNOFF UNTIL ALL AREAS WITHIN CONTRIBUTING WATERSHED AREA HAVE BEEN STABILIZED WITH HARDSCAPE OR VEGETATIVE STABILIZATION.



13/9 STORMWATER INFILTRATION BASIN
NOT TO SCALE



NOTES:
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 1" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
3. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR. (2 BRICK COURSES MIN. 5 BRICK COURSES MAX.)



ALTERNATE TOP SLAB
(STEEL REINFORCED FOR HS-20 LOADING)

14/9 DRAIN MANHOLE
NOT TO SCALE

REPLICAITON PLANTING TABLE

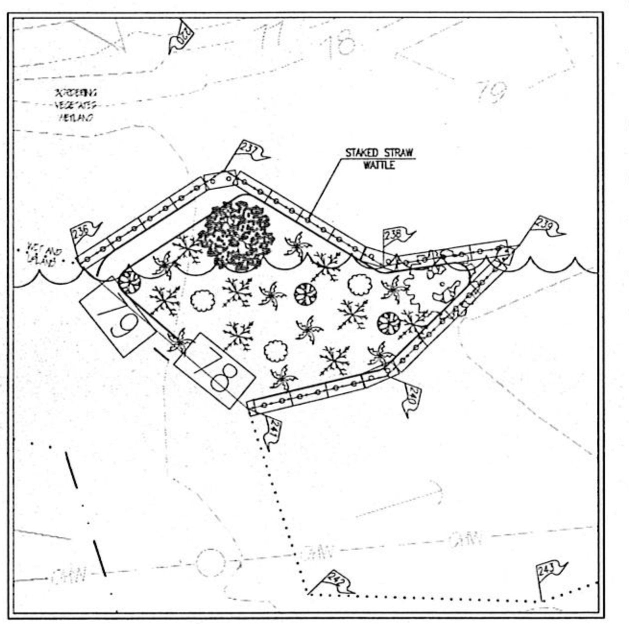
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
TREES				
	ACER RUBRUM	RED MAPLE	1 INCH CALIPER	1
	NYSSA SYLVATICA	BLACK TUPELO	1 INCH CALIPER	1

REPLICAITON PLANTING TABLE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
SHRUBS				
	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	36 INCH	3
	VACCINUIM CONYMBOSIUM	HIGHBUSH BLUEBERRY	36 INCH	3

REPLICAITON PLANTING TABLE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
GROUND				
	OSMUNDA REGALIS	ROYAL FERN	1 GALLON	8
	OSMUNDA CINNAMOMEA	CINNAMON FERN	1 GALLON	8



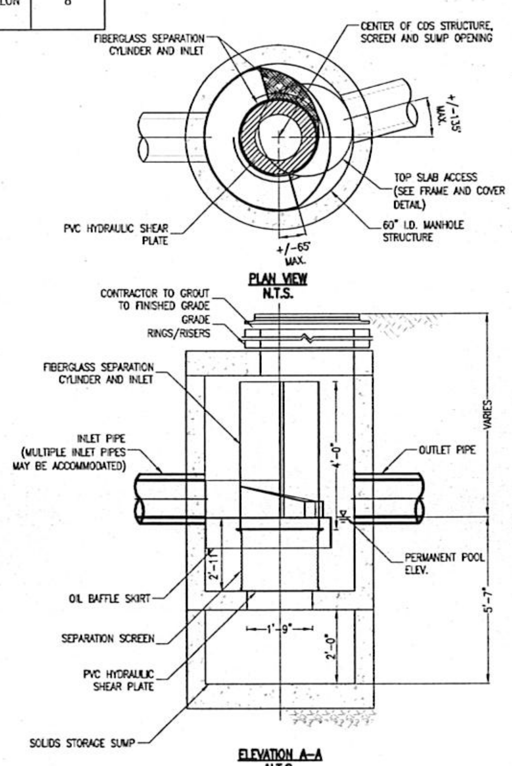
15/9 WETLAND REPLICATION PLAN
NOT TO SCALE

CONSTRUCTION SEQUENCE & NOTES

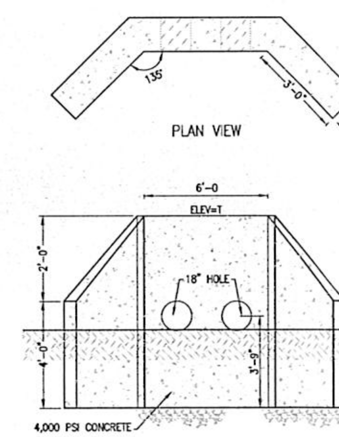
1. THE WETLAND REPLICATION AREA SHALL BE CONSTRUCTED PRIOR TO ANY EARTH DISTURBANCE REQUIRED FOR THE PROPOSED PROJECT.
2. WETLAND REPLICATION SHALL BE PERFORMED UNDER THE DIRECTION AND GUIDANCE OF A QUALIFIED BOTANIST.
3. PRIOR TO THE COMMENCEMENT OF WORK, THE LIMITS OF THE EXISTING WETLAND BOUNDARY SHALL BE STAKED OR FLAGGED AT 15' INTERVALS IN THE VICINITY OF THE REPLICATION AREAS, AND AN EROSION CONTROL BARRIER (STRAW WATTLE AND/OR SILT FENCE) SHALL BE INSTALLED ALONG THE PERIMETER OF THE REPLICATION AREA, AS SHOWN ON THE SITE PLAN, TO SERVE AS A LIMIT OF WORK, SUCH THAT NO ACTIVITIES ARE TO OCCUR ON THE WETLAND SIDE OF THE BARRIER.
4. TEMPORARY DISTURBANCE OR ALTERATION TO WETLAND RESOURCE AREAS NECESSARY FOR ACCESS TO THE PROPOSED REPLICATION AREA SHALL BE MINIMIZED. ONLY OPERATE IN WETLAND RESOURCE AREA IF IT IS DRY, FROZEN, OR OTHERWISE STABLE ENOUGH TO CARRY THE EQUIPMENT WITHOUT DAMAGE THROUGH THE USE OF TIRE MATS, BRUSH, CORDUROY, OR BOG BRIDGES. TEMPORARY ALTERATIONS TO RESOURCE AREAS SHALL BE SUBSTANTIALLY RESTORED TO PREEXISTING HYDROLOGY AND TOPOGRAPHY. AT LEAST 75% OF THE SURFACE AREA OF ANY DISTURBED VEGETATION SHALL BE ESTABLISHED WITH INDIGINEOUS WETLAND PLANT SPECIES WITHIN TWO GROWING SEASONS.
5. CONSTRUCTION SHALL COMMENCE WITH REMOVAL OF EXISTING VEGETATION WITHIN THE REPLICATION AREA. EXISTING MATURE UPLAND TREES THAT ARE FACULTATIVE OR WETTER MAY BE LEFT ON HUMMOCKS WITHIN THE REPLICATION AREA, AS THEY MAY PROVIDE SHADING TO THE PLANTINGS INSTALLED AROUND THESE HUMMOCKS. EXISTING BOULDERS WITHIN THE REPLICATION AREA ARE ALSO TO REMAIN.
6. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR REUSE ELSEWHERE ON-SITE. EXCAVATION SHALL EXTEND TO APPROXIMATELY 6" BELOW THE PROPOSED FINAL GRADE ELEVATION. IF DENSE SOILS ARE ENCOUNTERED, IT IS RECOMMENDED TO EXCAVATE AN ADDITIONAL 6" TO ACCOMMODATE WETLAND SOIL MIX.
7. THE EXCAVATED REPLICATION AREA FLOOR SHALL BE GRADED TO BLEND WITH UNDISTURBED WETLAND AREAS AND REMAINING HUMMOCKS WHERE EXISTING TREES ARE TO REMAIN. THE REPLICATION AREA SHALL NOT HAVE FINISHED TOPOGRAPHY WHICH RESULTS IN COMPLETELY FLAT TOPOGRAPHY. THE FINISH GRADING SHOULD RESULT IN A SHALLOW PIT AND MOUND TOPOGRAPHY THROUGHOUT THE REPLICATION AREA.
8. A WET SOIL MIX SHALL BE COMPRISED OF THE "O" AND "A" HORIZON SOILS STRIPPED FROM THE WETLAND DISTURBANCE AREA. SHOULD THESE SOILS BE OF INSUFFICIENT QUANTITY OR QUALITY, A CREATED BLEND CONSISTING OF ONE PART SANDY LOAM AND ONE PART COMPOSTED LEAVES OR PEAT MOSS SHALL BE USED.
9. TREE, SHRUB, AND GROUND COVER PLANTINGS SHALL BE INSTALLED PER PLAN IMMEDIATELY FOLLOWING THE EXCAVATION AND PLACEMENT OF ORGANIC SOILS WITHIN THE REPLICATION AREA. DUE TO HIGH PLANT MORTALITY, PLANTING SHOULD BE AVOIDED DURING THE SUMMER MONTHS. LOCATION OF PLANTS MAY BE ADJUSTED IN THE FIELD TO ACCOMMODATE EXISTING TREES AND/OR BOULDERS WHICH ARE TO REMAIN. TREES ARE TO BE PLANTED AT NO MORE THAN 25 FEET ON-CENTER. SHRUBS AND FERNS ARE TO BE PLANTED NO MORE THAN 8' ON CENTER. ALL WETLAND PLANTING IS TO BE PERFORMED BY HAND.
10. AFTER PLANTING IS COMPLETED, THE REPLICATION AREA SHALL BE HAND RAKED TO ELIMINATE AND DEPRESSIONS GREATER THAN FOUR INCHES IN DEPTH WHICH MAY HAVE BEEN CREATED DURING DIGGING, AND TO ELIMINATE COMPACTION AS MUCH AS POSSIBLE.
11. THE WETLAND FLOOR (UP TO ELEVATION 200.5 +/-) SHALL BE SEEDED WITH COMMERCIALLY AVAILABLE SEED MIX (NEW ENGLAND WETLAND PLANTS, INC. "NEW ENGLAND WETMIX", OR EQUAL), APPLIED AT A RATE OF 1 LB PER 2,500 S.F.

WATERING & MONITORING NOTES:

12. DEPENDING UPON THE WEATHER, THE REPLICATION AREA MAY NEED DAILY WATERING FOR APPROXIMATELY ONE MONTH, OR UNTIL THE PLANTINGS HAVE TAKEN ROOT AND GROWTH IS OBSERVED. IT IS RECOMMENDED THAT PLANTING BE PERFORMED IN APRIL/MAY OR SEPTEMBER/OCTOBER, TO AVOID PLANT MORTALITY DURING SUMMER MONTHS. PLANTINGS SHALL BE WATERED AS NECESSARY TO ENSURE SURVIVAL FOR A MINIMUM TWO-YEAR PERIOD.
13. THE TOWN OF STOUGHTON CONSERVATION COMMISSION SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF THE COMMENCEMENT OF WETLAND REPLICATION CONSTRUCTION.
14. A WETLAND SCIENTIST OR OTHER QUALIFIED PROFESSIONAL SHALL CONDUCT A PRE-CONSTRUCITON MEETING WITH THE CONTRACTOR, AND SHALL INSPECT THE CONSTRUCTION OF THE REPLICATION AREA UPON EXCAVATION TO THE SUBGRADE, WHEN WETSOIL MIX IS APPLIED AT FINISH GRADE, AND ONCE PLANTING HAVE BEEN INSTALLED.
15. AFTER ONE GROWING SEASON, THE REPLICATION AREA SHALL BE ASSESSED BY A WETLAND SCIENTIST TO DETERMINE THE GROWING SUCCESS OF THE PLANTINGS, AND ASSESS THE NEED FOR POSSIBLE ADDITIONAL PLANTINGS.
16. AFTER THE SECOND GROWING SEASON, A REPORT SHALL BE SUBMITTED TO THE CONSERVATION COMMISSION, STATING THE SUCCESS OF THE WETLAND REPLICATION AREA. IN ACCORDANCE WITH THE PERFORMANCE STANDARDS FOUND IN 310 CMR 10.55(4)(B)(6). IF THE 75% AERIAL COVERAGE CRITERIA IS NOT ACHIEVED, A MITIGATION PLAN SHALL BE SUBMITTED TO THE CONSERVATION COMMISSION AND THE MONITORING PERIOD SHALL BE EXTENDED.



16/9 CDS2025-5-C INLINE CDS
NOT TO SCALE



17/9 CONCRETE WING HEADWALL
NOT TO SCALE

REVISIONS

FARLAND CORP.
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P.508.717.3479
OFFICES IN:
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•MARLBOROUGH
•WARWICK, RI

DRAWN BY: JKM
DESIGNED BY: CAF
CHECKED BY: CAF

SITE PLAN
61 JOHN VERTENTE BOULEVARD
ASSESSORS MAP 133 LOT 47
NEW BEDFORD, MASSACHUSETTS
PREPARED FOR: PARALLEL PRODUCTS OF NEW ENGLAND
401 INDUSTRY ROAD
LOUISVILLE, KY 40208

DATE: AUGUST 10, 2017
SCALE: AS NOTED
JOB NO. 17-413
LATEST REVISION:

DETAIL SHEET
SHEET 9 OF 9

Case 31-17
08/11/2017