

# City of New Bedford Conservation Commission • Department of Environmental Stewardship

133 William Street · Room 304 · New Bedford, Massachusetts 02740 Telephone: (508) 991.6188

Conservation • Environmental Stewardship • Resilience

#### CITY OF NEW BEDFORD, MASSACHUSETTS

# CONSERVATION COMMISSION 2022 FILING FEE CALCULATION WORKSHEET\*

PROJEC	T LOCATION: 215 Due	chaine Blvd	
MAP(S)	136	LOT(S) <sup>331</sup>	
APPLICA	ANT: Acushnet Compar	ny	
CONSE	RVATION COMMISSION	ON APPLICATION TYPE:	
A E	EQUEST FOR DETERMINATION FOR THE PROPERTY OF A COMMENCE OF COMMENT OF COMMENTS		
Applica		of a project proposed in a Wetland Resource Area alteration fee as follows:	a or its Buffer Zone is  AMOUNT DUE:
	Appliestics and Field	d Pavious Fac (\$200.00)	
		d Review Fee (\$200.00)	\$200.00
•		SF Wetland Resource Area	Ş
•	\$0.05 X	\$2000.00 per project SF of Isolated Land Subject to Flooding, ect to Flooding or Land Subject to Coastal	\$
	Fee shall not exceed	\$500.00	
•	\$0.50 X	SF of altered 25' Riverfront Area	\$
	Fee shall not exceed		
•	\$1.00 X	SF of undeveloped 25' Riverfront Area	\$
	Fee shall not exceed		
•		LF of Coastal or Inland Bank	\$
	Fee shall not exceed		-



•	\$0.10 X <u>4,700</u>	SF of Buffer Zone altered	\$ <u>470.00</u>
	Fee shall not exceed \$6,500.0	00	
•	\$10.00 X	LF of dock	\$
•	\$10.00 X	acres of aquaculture	\$
(B) EX	TENSION OF AN ORDER OF CO	NDITIONS:	
•		or project (house addition, in ground pool	
	dock etc.) = $$200.00$		\$
•	Subdivision, commercial or in	dustrial project = \$400.00	\$
(C) Al	MENDING A PERMIT		
•		or project (house addition, in ground pool	\$
		teration fee – refer to (A) above	
•	fee – refer to (A) above	dustrial project = \$500.00 + new alteration	\$
(D) W	½ acre or less	ERIFICATION (with or without proposed	_
•	½ acre to 2 acres = \$500.00 (\$	\$100/acre thereafter) not to exceed \$3,500	\$
(E) CE	ERTIFICATES OF COMPLI	ANCE	
•	One new house = \$250.00		\$
•	One activity at an existing ho	use = \$150.00	\$
•	Residential or Commercial do	cks = \$200.00	\$
•	Commercial & Industrial Facil	ities = \$1,500.00	\$
•	New Roadways & Associated	Stormwater Mgt. Systems = \$1,500.00	\$
But yo	_	have the same fee as a Certificate of Com a do not pay double to obtain a full Certifi	-
(F) AF	TER THE FACT FILING F	EE	
•		Order of Conditions = \$500.00	\$
•	Request for a Determination	of Applicability = \$250.00	\$
TOTA	AL AMOUNT DUE:		\$670.00
Notes:	; ;		

\*Please refer to the Conservation Commission fee schedule – dated 02/2020

Please make check or Money Order payable to the <u>City of New Bedford</u> Cash is not accepted.





#### CITY OF NEW BEDFORD

OFFICE OF THE CITY SOLICITOR 133 William Street, Room 203 New Bedford, MA 02740-6163

> Tel.# (508) 979-1460 Fax.# (508) 979-1515

# **MEMORANDUM**

TO:

Planning Board

Zoning Board of Appeals
Conservation Commission

Board of Health

Licensing Department

Traffic Division

FROM:

Irene B. Schall, City Solicitor

SUBJECT:

APPLICATION INFORMATION

DATE:

September 28, 2006

Effective immediately all applications for any permits issued by your respective boards must be accompanied by documentation showing the nature of the property interest(s) affected by the permit(s). Required will be: copies of deeds, certificates of title, leases and purchase and sales agreements and most recent plan or record showing the affected lot or lots. In addition, for ZBA applications, also include a copy of the deed or deeds of abutting parcels, if said parcels have been held in common ownership with the subject parcel at any time since January 1, 1976. If the applicant is not the owner, a signed and notarized letter from the record owner (or authorized representative) which authorizes the applicant to submit an application for the parcel or parcels affected will be required. If you are not provided with the necessary information or you require clarification on ownership, please contact this office.

This change should immediately be reflected in a change to your applications and may be attached to the Application as an Appendix (submitted herewith) or incorporated directly into the application itself.

Your cooperation will be greatly appreciated.

### <u>Appendix</u>

(1)	Owner's/Landlord's Name:
(2)	Title Reference to Property:
	(Attach copy of Deed, Certificate of Title & most recent Recorded Plans showing affected lot or lots)
(3)	If the Applicant is Not the Owner:
	Provide:
	<ol> <li>Notarized authorization letter from owner to tenant or buyer for application for this permit (on letterhead);</li> </ol>
	2. Copy of Purchase & Sale agreement or lease, where applicable;
	(In addition, for ZBA only)
•	<ol> <li>Copy of the deed or deeds of abutting parcels if said parcels have been held in common ownership with the subject property at any time since January 1, 1976.</li> </ol>

BK 4150 PG 281 07/01/98 12:22 DOC. 17177 Bristol Co. S.D.

#### **QUITCLAIM DEED**

Duchaine Realty LLC a limited liability company duly established under the laws of the Commonwealth of Massachusetts and having its usual place of business at 744 Belleville Avenue, New Bedford, Massachusetts for consideration paid, and in full consideration of Three Million Eight Hundred Thousand and 00/100 (\$3,800,000.00) Dollars grants to Acushnet Company, a Delaware corporation, of 333 Bridge Street, Fairhaven, Bristol County, Massachusetts with quitclaim covenants, the land with any buildings and improvements thereon in New Bedford, Bristol County, Massachusetts bounded and described as follows:

See Exhibit A attached hereto and made a part hereof.

Subject to easements shown in Plan Book 118, Page 118; Plan Book 72, Page 25, and instrument recorded in Book 1523, Page 365, all in the Bristol County (SD) Registry of Deeds.

Subject to Agreement with Greater New Bedford Industrial Foundation dated May 31, 1966 and recorded in said Registry in Book 1523, Page 368, so far as now in force and applicable.

Subject to easement to New Bedford Gas & Edison Light company dated December 10, 1966 and recorded in said Registry in Book 1542, Page 172 and shown in Plan Book 73, Page 51.

Subject to restrictions set forth in deed of Greater New Bedford Industrial Foundation dated May 31, 1966 and recorded in said Registry in Book 1523, Page 365, so far as now in force and applicable.

FOR TITLE see deed of PCI Group, Inc. to Duchaine Realty, LLC, dated December 30, 1996, and recorded with the Bristol County (SD) Registry of Deeds in Book 3796, Page 28.

IN WITNESS WHEREOF, the said Duchaine Realty, LLC has caused these presents to be signed, acknowledged and delivered in its name and behalf by James G. DeMello and Ronald V. Fernandes its Managers hereto duly authorized, this 1\* day of July in the year one thousand nine hundred and ninety-eight.

DEEDS REG 07 BRISTOL SOUTH

TAX 17328.00 CHCK 17328.00 1104A128 12:22 EXCISE TAX

#### **EXHIBIT A**

#### To

#### Deed from Duchaine Realty, LLC to Acushnet Rubber Company

The land in New Bedford, Bristol County, Commonwealth of Massachusetts, bounded and described as follows:

NORTHEASTERLY by Duchaine Boulevard 1050.00 feet;

NORTHWESTERLY by land now or formerly of Roger B. Knowles, 110.00 feet;

NORTHERLY by said land of Knowles 1097.78 feet;

SOUTHWESTERLY by land now or formerly of Consolidated Rail Corporation 1200.00 feet; and

SOUTHEASTERLY by Parcel R as shown on the plan hereinafter referred to 1326.00 feet

Said premises are shown as Parcel Q containing 31.67 acres as shown on a plan by R.E. Cameron and Associates, Inc. dated December 2, 1987, recorded in the Bristol County (SD) Registry of Deed in Plan Book 118, Page 118.

# BK 4150 PG 284

DUCHAINE REALTY, LLC

By: James G. DeMello Manager

By: Kald V. Fernandes
Ronald V. Fernandes
Manager

#### GNBIF STANDARD PURCHASE AND SALE AGREEMENT

AGREEMENT made this 7th day of June, 2007, by and between the Greater New Bedford Industrial Foundation, a charitable trust duly organized under the laws of the Commonwealth of Massachusetts, with its principal place of business at 227 Union Street, New Bedford, Bristol County, Massachusetts, (the "Foundation") and (the "Buyer"), Acushnet Company, a Delaware Corporation with its principal place of business at 333 Bridge Street, Fairhaven, MA 02719.

In consideration of the mutual covenants and promises herein contained, the parties hereto do hereby agree as follows:

- 1. The Foundation agrees to sell and Buyer agrees to buy an approximate 1.7 acre parcel of land (the "Premises") situated on Duchaine Boulevard in the New Bedford Business Park (the "Business Park") more particularly described on Exhibits "A-1" and "A-2" attached hereto and incorporated herein by reference thereto.
- 2. The Premises are to be conveyed to Buyer or its nominee by a good and sufficient Quitclaim Deed (the "Deed") of the Foundation, conveying a good and clear record and marketable title to the same free from all encumbrances and encroachments on the Premises except as set forth in Sections 2.1 through 2.4 below, and subject to the restrictions imposed by Section 2.5, below, for a period of 30 years from the execution date of the deed contemplated herein as may be further extended for successive periods as provided herein.
- 2.1 Such real estate taxes for the current year are not due and payable on the date of delivery of the deed;
- 2.2 Any liens for municipal betterments assessed after the date of this agreement;
  - 2.3 Provisions of local zoning laws, if any;
- 2.4 Easements of record for drainage, railroad spurs, utilities and any other like items of record, if any, which have been approved by Buyer prior to acceptance of the Deed, it being understood that Buyer shall have no obligation to approve any such matters;
- 2.5 And subject further, to the restrictions imposed by the Foundation upon the Premises, which restrictions 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 as follows:
- 2.5.1 The conveyed parcel of land shall not be used or occupied at any time for any purpose other than the purpose of an employee parking lot for an adjacent office and plant facility.

- 2.5.2 An important aspect of the Foundation's decision on whether or not to approve the new employee parking lot plans shall be the attractiveness of the to be developed 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 mowings and other maintenance actions to keep the appearance of the property in substantially the same condition as shown on the Buyer's to be developed landscaping design plan which will be reviewed by the Foundation prior to the Closing.
- 2.5.3 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.
- 2.5.4 No parking lot shall be erected within fifteen (15) feet of any street line, and the area set back from the street line shall be kept appropriately landscaped and maintained in a professional and aesthetically pleasing manner.
- 2.5.5 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 Massachusetts General Laws ("MGL") Chapter 184, Section 26 et seq.
- 2.5.6 The Foundation and its successors and assigns reserve the right to extend the restrictions recited in Paragraphs 2.5.1-2.5.5 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), of 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 referenced as required by MGL Chapter 184, Section 29; and
- 7. Be recorded in the Bristol County (S.D.) Registry of Deeds 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 Massachusetts Real Estate Bar Association Title Standard No. 52 Extension of Restriction and Massachusetts General Laws Chapter 184, Sections 27 and 29.

2.5.7 The Foundation may prosecute proceedings at law against Buyer 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.

If any provision hereof or the application of any such provision to any person or circumstance shall be held invalid, the remainder of this declaration 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.

- 2.5.8 The Foundation agrees for itself and its successors in title to the premises to 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.
- 2.5.9 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 the Acushnet Company shall not be binding until said amendment has been assented to in writing by Acushnet Company.
- 3. For such deed and conveyance, Buyer shall pay the sum of One Hundred and Twenty-Two Thousand Four Hundred and 00/100 (\$122,400.00) U.S. Dollars and Twelve Thousand and 00/100 (\$12,000.00) U.S. Dollars have been paid this day and One Hundred Ten Thousand Four Hundred and 00/100 (\$110,400.00) U.S. Dollars are to be paid by Bank Cashier's or Treasurer's Check or Certified Check upon the delivery of said deed. However, if the total acres sold are slightly more or slightly less than 1.7 acres, the above price shall be adjusted proportionately at the rate of \$72,000 per total acre.

- 4. Taxes shall be apportioned as of the day of delivery of the deed. If the amount of said taxes is not known at the time of delivery of the deed, they shall be apportioned on the basis of the taxes assessed for the previous year, with a reapportionment as soon as the new tax rate and value can be ascertained.
- 5. If Buyer shall fail to fulfill and perform the terms of this agreement, all deposits made hereunder shall be retained by the Foundation as liquidated damages and there shall be no further recourse against Buyer at law or in equity.
- 6. The deed is to be delivered and the consideration paid on the date of closing as established by Buyer's notice to Foundation (c/o Mickelson, Barnet, P.C., 30 Cornell Street, New Bedford, Massachusetts 02740-1709) at least seven (7) days before the anticipated date of closing (the "Closing") at the offices of Mickelson, Barnet, P.C., 30 Cornell Street, New Bedford, Massachusetts 02740-1709, but in no event later than September 1, 2007, unless some other place and time shall be mutually agreed upon in writing. It is agreed that time is of the essence in this agreement.
- 7. From the date hereof until the closing, the Foundation hereby grants to Buyer, its agents and other duly authorized representatives, the right to come onto the Premises for the purposes of making whatever tests it shall desire, including conducting borings, percolation tests, soil tests and the like, all at its own cost and risk; and by coming onto the land or be permitting its agents, employees or independent contractors to come thereon, Buyer shall indemnify and hold the Foundation harmless from the claims, demands and suits of any and all persons arising from any cause whatsoever in connection with any of Buyer's (or its agents, employees or independent contractors) activities, or in furtherance of its interests therein. Copies of any and all site borings, perc tests and similar land studies shall be delivered unto the Foundation, which shall be free to use the same at any time and for any purpose as if owned by the Foundation.
- 8. Buyer's obligation to take title hereunder is conditional upon satisfaction or performance of the following conditions, and if any of said conditions have not been satisfied or performed at the time for delivery of the deed hereunder, Buyer may, at it discretion, demand refund of the deposit, whereupon this Agreement shall be null and void and of no further force and effect and without further recourse to the parties hereto:
- 8.1 The Premises are zoned for office and industrial use, zoning having become final and effective and not subject to any appeals or litigation, and that the Buyer's intended use is permitted under existing zoning by-laws. There shall be no proposal pending for any adverse change in the zoning applicable to the Premises.
- 8.2 Buyer shall be satisfied with such borings, engineering tests (including without limitation percolation tests) and other studies and surveys, if any, as it may cause to be conducted with regard to the Premises. Test borings, if any, made by or for Buyer shall have disclosed no subsoil conditions of ledge or any other conditions which would require unreasonable costs to overcome.

- 8.3 The Premises shall have been legally subdivided and separated from all other lots pursuant to the provisions of the "Subdivision Control Law," so called, and pursuant to statutory requirements, and the plan of the Premises shall have been properly endorsed (pursuant to said Subdivision Control Law) by the Planning Board or other appropriate authority of the City of New Bedford with the words "Approval Under Subdivision Control Law Not Required" and such endorsement shall have been done with all the formalities required by law and all periods for appeal therefrom shall have expired without any appeal having been taken therefrom. Said plan shall be prepared at the cost of Seller.
- 8.4 The premises to be conveyed hereunder shall not be identified at the time for performance hereof as being located in a Special Flood Hazard Area on a "Flood Hazard Boundary Map" issued by the Department of Housing and Urban Development/Federal Insurance Administrations under the National Flood Insurance Program. If it shall be so identified, then flood insurance shall be either not required or be available through the National Food Insurance Program in order for Buyer to obtain Federal or Federal unrelated financial assistance in the form of a mortgage or construction loan with regard to the purchase or construction on the Premises.
- 8.5 Buyer shall have received a certificate from an engineering or hydrological firm satisfactory to Buyer, based on a site evaluation of the Premises in accordance with diligent professional practices, which certificate indicates that there has been no release of "Hazardous Material" or "Oil," as such terms are defined in M.G.L. c. 21E, on the Premises (and Buyer shall bear all expenses related to obtaining such certificate).
- 8.6 Buyer shall have received, at its own expenses, all permits, licenses and other governmental approvals (or variances if necessary) which are required for the construction and expansion of its adjacent facilities, and related parking, vehicular access, drainage and sewer, water and other utility connections (the "Permits"). The Foundation shall cooperate fully with Buyer in Buyer's efforts to secure the Permits, and to oppose any appeals from any of the Permits, including, if necessary, signing applications and other documents, provided in each instance that Buyer pays the out-of-pocket expenses incurred by the Foundation in connection therewith, and provided further that this paragraph shall not be deemed a waiver by the Foundation of any of its discretionary rights set forth in this Agreement. Buyer agrees to use reasonably diligent efforts to secure the Permits.
- 9. All tests, borings and other studies and surveys required by and set forth in Paragraph 8 shall be commenced and all work in connection therewith carried forward in such a manner that it reasonably would be expected that all of the conditions set forth in Paragraph 8 be satisfied by the date set forth herein for delivery of the deed. All work in connection with foregoing shall be at the sole expense of Buyer with the execution of the plan and survey contemplated in Section 8.3, above. If at any time in Buyer's judgment further applications for approvals, consents, surveys and boring required by it (as set forth in Paragraph 8) would not result in satisfaction of all of the conditions set forth in Paragraph 8, Buyer may terminate this Agreement upon notice of the Foundation, and thereupon, all deposits made under this Agreement by Buyer to the Foundation shall be forthwith refunded and all other obligations of the parties hereto shall cease, and this Agreement shall be null and void without recourse to the parties hereto.

- 10. Buyer shall have the right at any time to waive any conditions upon which its obligations under this Agreement are conditioned.
- 11. If the Foundation shall be unable to give title or to make conveyance or to deliver possessions of the Premises, all as herein stipulated, the Foundation shall use reasonable efforts to remove any defects in title, and the time for performance shall be extended for thirty (30) days. If at the expiration of the extended time, the Foundation shall have failed to remove any title defects, deliver possession or make the Premises conform, as the case may be, all as herein agreed, then Buyer shall at its election have the right to accept such title as the Foundation is able to convey with no abatement of the purchase price, or it shall have the right to terminate this Agreement, and thereupon, shall be entitled to a return of its deposit, and upon such repayment of this Agreement, shall be null, void and of no force and effect.
- 12. All notices hereunder shall be in writing and either hand delivered or mailed by certified or registered mail, postage prepaid, return receipt requested.

Notices to the Foundation shall be mailed or delivered to it at: 227 Union Street, Room 607, New Bedford, Massachusetts 02740.

Notice to Acushnet Company shall be mailed or delivered to it at: 333 Bridge Street, Fairhaven, MA 02719, Attn: Chad Van Ess, Esq..

Notices shall be deemed given when so mailed or when so hand delivered.

13. The acceptance of the deed by Buyer or its nominee as the case may be, shall be deemed to be a full performance and discharge of every agreement and obligation herein contained or expressed, except such as are, by the terms hereof, to be performed after delivery of said deed.

IN WITNESS WHEREOF the parties hereto do hereunto set their hands and seals by their respective officers, hereunto duly authorized.

The Greater New Bedford Industrial Foundation  By:  Thomas G. Davis, Executive Director
BUYER:
Ву:

#### **EXHIBIT A-2**

# <u>DESCRIPTION OF PROPOSED PARCEL</u> (PORTION OF LOT 11 ON THE CITY OF NEW BEDFORD ASSESSOR'S MAP 133)

Beginning at the southeast corner of the parcel herein described and being along the westerly sideline of Duchaine Boulevard; thence running

S 74-23-07 W	a distance of 113.94 feet along land now or formerly of Jafford LLC; thence running
N 15-36-53 W	a distance of 124.85 feet along land now or formerly of Jafford LLC; thence running
N 48-00-17 W	a distance of 345.39 feet along land now or formerly of Jafford LLC; thence running
N 72-56-31 E	a distance of 285.28 feet along land now or formerly of Acushnet Company; thence running
Southerly Curve	along an arc curving to the right having a radius of 3900.00 feet a distance of 424.13 feet along the westerly sideline of Duchaine Boulevard to the point of beginning.

# **Appendix 1**

2001 Stormwater Report <sup>1</sup>

Acushnet Company Ball Plant III

<sup>&</sup>lt;sup>1</sup> Applicable excerpts from full report dated October 11, 2001

Acushnet Company Ball Plant III 215 Duchaine Blvd. New Bedford, MA

Storm Drainage Project Narrative 2001 Project

This project involves building and site modifications at the Northwest corner of Ball Plant III located at 215 Duchaine Boulevard in the New Bedford Industrial Park.

The current project involves redevelopment in this particular location at the site (Fig. 1). The original project permitted under the Department of Environmental Protect (D.E.P.) File N° SE 49-328 included substantial site improvements and associated stormwater management systems in the vicinity of the current project.

Bioswales and Detention Basin Stormwater BMPs were used to mitigate the stormwater impacts for the entire new site development program. The detention basin, bioswales, and check dams were all constructed per the approved plans and a certificate of compliance was issued for the completed work.

The drainage calculations presented for the original project indicate the existing drainage basins 2 and 3 were oversized for all storm events. (2 yr., 10 yr., 25 yr., and 100 yr.)

The following table illustrates required storage volumes for each storm event. Note that in <u>all</u> instances the required storage volume is substantially LESS than the Volume provided in the drainage basin by at least 25%.

#### CATCHMENT 2

#### Volume Verification

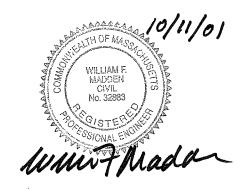
STORM EVENT	REQUIRE STORAGE Volume	MAX Volume Provided
2 yr Event	3,452 CF EL 80.27	7,280 CF EL 81.0
10 yr Event	3,313 CF EL 80.25	7,280 CF EL 81.0
25 yr Event	3,011 CF EL 80.19	7,280 CF EL 81.0
100 yr Event	2,579 CF EL 80.11	7,280 CF EL 81.0
	CATCHMENT 3	

STORM EVENT	REQUIRE STORAGE Volume	MAX Volume Provided
2 yr Event	6,337 CF EL 79.77	8,277 CF EL 80.0
10 yr Event	8,948 CF EL 80.07	18,076 CF EL 81.0
25 yr Event	10,428 CF EL 80.22	18,076 CF EL 81.0
100 yr Event	12,298 CF EL 80.41	18,076 CF EL 81.0

Refer to Stormwater Management Report dated October 11, 2001.

# ACUSHNET COMPANY BALL PLANT III 215 Duchaine Blvd. New Bedford, MA 02745

#### Stormwater Management Report



Prepared by

G.A.F. Engineering, Inc. 454 Wareham Street P.O. Box 953 Marion, MA 02738 Tel. (508) 748-0252 Fax (508) 748-0542

October 11, 2001

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#### 1.0 Purpose:

The goal of this Stormwater Management Report is to improve water quality and address water quantity problems by implementation of performance standards for Stormwater Management. To protect wetlands and waters of the Commonwealth from the adverse impacts of stormwater runoff D.E.P. issued a Stormwater Management Policy in November of 1996. Since the project falls under Conservation Commission jurisdiction, established under the Wetlands Protection Act (WPA), compliance with the Stormwater Management Standards is required.

This Stormwater Management Plan is designed to:

- Prevent untreated discharge to wetlands and waters.
- Preserve hydrologic conditions that closely resemble pre-development conditions.
- Reduce or prevent flooding by managing peak discharges and volumes of runoff.
- Minimize erosion and sedimentation.
- Reduce suspended solids and other pollutants to improve water quality.
- Provide for increased protection of sensitive natural resources.

The purpose of this report is to present the stormwater management system design methodology and measures for compliance with the related regulatory requirements. The stormwater related regulatory requirements for activities subject to the Massachusetts Wetlands Protection Act are governed by the Massachusetts Department of Environmental Protection Agency (DEP), Stormwater Management Standards (MADEP 1997), the Massachusetts Wetlands Protection Act and the National Pollutant Discharge Elimination System (NPDES) regulations regarding construction stormwater runoff.

**Standard #3 Recharge to Groundwater:** The project results in a net increase of impervious area. No significant recharge potential exists on site due to the intense development on the property. To mitigate for the loss of permeable surface area, the entire impervious area of the parking area will be used to determine the volume of recharge. Under these conditions 3503 c.f. of recharge is required, 7730 c.f. of recharge is provided. Calculations are provided at the end of this section.

Standard #4 80 Percent TSS Removal: The proposed stormwater management system has been designed to use various BMP's to facilitate the average annual removal rate of 80% of the Total Suspended Solids (TSS) for the site and to provide treatment of the required water quality volume (0.5 inches per acre of impervious parking area). The selected BMP's that will achieve this are stormwater bioswales with check dams, detention basins and street sweeping. The TSS calculation sheets are provided at the end of this section.

Standard #5 Higher Potential Pollutant Loads: The project site does not contain land uses with higher potential pollutant loads.

**Standard #6 Protection of Critical Areas**: The project site does not contain critical areas with sensitive resources. The stormwater management design incorporates BMP's that will effectively treat stormwater runoff from the site.

Standard #8 Erosion/Sediment Control: Erosion and sediment controls are incorporated into the project design to prevent erosion, control sediment movement, and stabilize exposed soils during construction and thereafter.

Standard #9 Operation and Maintenance Plan: An Operation and Maintenance plan for both construction and post-development stormwater controls will be developed and implemented prior to construction. Key elements include drainage structures to be inspected and cleaned on an as needed basis. The SWMP outlines operations and maintenance procedures during construction. The operation and maintenance plan for post-construction is included in Section 7.0.

The proposed design meets the DEP Stormwater Management Standards for both water quality and water quantity. The following sections summarize the specific design methodology used in developing the stormwater management system for the site.

#### 4.2.1 **Drainage Patterns**

The post development runoff will not adversely impact the adjacent wetlands system. All runoff associated with the development will be treated through the use of water quality bioswales and detention basins. After development is complete, the drainage patterns will remain very similar to existing conditions. All disturbed areas (excluding paved areas) shall be stabilized with either topsoil or seed to match or improve existing ground cover conditions or with riprap as designated on the plans.

The proposed site is graded to divert surface water runoff into bioswales, which ultimately outlet to each of three proposed detention basins. Basin 1 is designed to collect drainage from portions of the proposed building and parking area at the southerly end of the site; Basin 2 collects roadway runoff from the access road at the rear of the site; Basin 3 is designed to receive stormwater runoff from a portion of the site access road and parking area to the north of the existing building. The site has been graded in a manner, which directs all surface water runoff from parking areas and roadways into bioswales, which outlet into the various detention basins. Each basin is provided with a riprap spillway to control peak rates of discharge for the design storms.

Drainage calculations for the post-development have been performed in the same manner as the pre-development. These calculations, along with the plans, are provided in Appendix 3.

#### 5.0 Drainage Overview:

The drainage system has been designed to minimize significant property damages or losses from notable rainfall events. Site grading has been proposed in a manner, which will maintain existing drainage patterns as well as minimize drainage off-site.

The present site topography indicates that the site drains by overland flow, unmitigated, into the wetland. Due to this predominant site feature, G.A.F. Engineering, Inc.'s approach will be to utilize overland flow and direct this runoff into D.E.P. Stormwater Management Best Management Practices (BMP's) prior to discharge into the wetlands. The discharge of the stormwater through these treatment facilities will create filtering medias, which reduce the amount of waterborne sediments and other suspended material, thus reducing the load of potential pollutants prior to final discharge.

#### 5.1 Detention Basin Design

The proposed detention basin has been designed utilizing the Soil Conservation Service (SCS) Technical Release 55 (TR55). The SCS Method utilizes a twenty-four (24) hour rainfall of a Type III distribution. Hydrolic soil groups were determined from the United States Department of Agriculture Soil Conservation Service Soil Survey Maps of the area and by actual on-site soil investigations. Runoff curve numbers were determined for each drainage area based on the hydrological soil group and land use. Time of Concentration (Tc) has been determined, by the slopes, along the flow path from the existing and proposed topography.

The net difference in runoff was examined for the two (2), ten (10), twenty-five (25) and one hundred (100) year storm events. The runoff rate discharging from the proposed detention basins is less than or equal to the pre-developed rates.

Peak discharge rates and storm runoff modeling was analyzed using the TR55 Method and hydrograph routing. The design point of analysis is the lowest upland elevation and largest catchment area of the pre-developed site. The following Table 1.0 summarizes the pre vs. post-developed peak discharge rates and volumes.

#### **6.0** Water Quality and Recharge:

The following sections address water quality and recharge for the site.

#### 6.1 Existing Conditions

Currently water quality at the site is poor due to nonexistant stormwater management controls. No detention is provided and the majority of the sites runoff sheet flows directly to adjacent wetlands and upland areas, which lie upgradient of wetlands. No pretreatment of stormwater exists on site.

#### 6.2 Proposed Conditions

The capacity of the proposed water quality system was calculated using the impervious areas of parking lots and access roadways times 0.5 inches of runoff per acre. To achieve the required treatment volume various long term water quality controls, including structural and nonstructural BMP's, have been into the stormwater management for the site.

#### ♦ <u>RECHARGE CALCULATIONS</u>

#### ♦ Standard No. 3 — Recharge to Groundwater

The proposed detention basins and water quality swales are sited in soils that indicate moderate infiltration would occur through the bottom of the basins and swales.

Given: Hydrologic Soil Group "B" & "D"

Volume to recharge: 0.25" inches of runoff

Impervious Area – Parking Lot = 168,141 s.f.

Proposed Volume to recharge  $(V_r) = 0.25$ " x Total Impervious Area

 $V_r = 0.25$ " x 168,141 s.f. / 12 = 3,503 c.f.

The proposed Water quality swales provide the following volumes:

Swale for Catchment 1 = 3,665 c.f.

Swale for Catchment 2 = 1,485 c.f

Swale for Catchment 3 = 2,580 c.f.

Total Volume provided in Swales = 7730 c.f.

Volume provided is greater than volume required.

# Calculating TSS Removal

	A	B	C	D	闰	ĬŦ,
	BMP	TSS Removal Rate*	Starting TSS Load	Amount Removed (BxC)	Cumulative Removed $(\Sigma D_1 \text{ to } D_2)$	Amount Remaining (C-D)
-	Parking Lot Sweeping	10%	100	10.0	10.0	90.0
7	Detention Basin (no forebay)	50%	90.0	45.0	55.0	45.0
3	Water Quality Swale (w/ check dams)	70%	45.0	31.5	86.5	13.50

\*Per DEP Technical Guidance Manual

Note: All catchments will have parking lot sweeping, detention basin and water quality swales, therefore TSS removal will be the same for each catchment.

#### 4.0 Stormwater Quantity:

An analysis of existing versus proposed runoff conditions was conducted to determine the impact of this project on the peak stormwater flow rates leaving the site.

#### 4.1 Existing Conditions

The referenced project is located in the New Bedford Industrial Park Complex on Duchaine Boulevard. The parcel of land is approximately thirty-one and a half acres  $(31.5 \pm Ac.)$  in size. Presently on the site is an existing building, approximately one hundred forty-four thousand square feet (144,000 s.f.), with bituminous concrete parking lot. Existing woodlands surround the developed site. Refer to Figure 1.

#### 4.1.1 **Drainage Patterns**

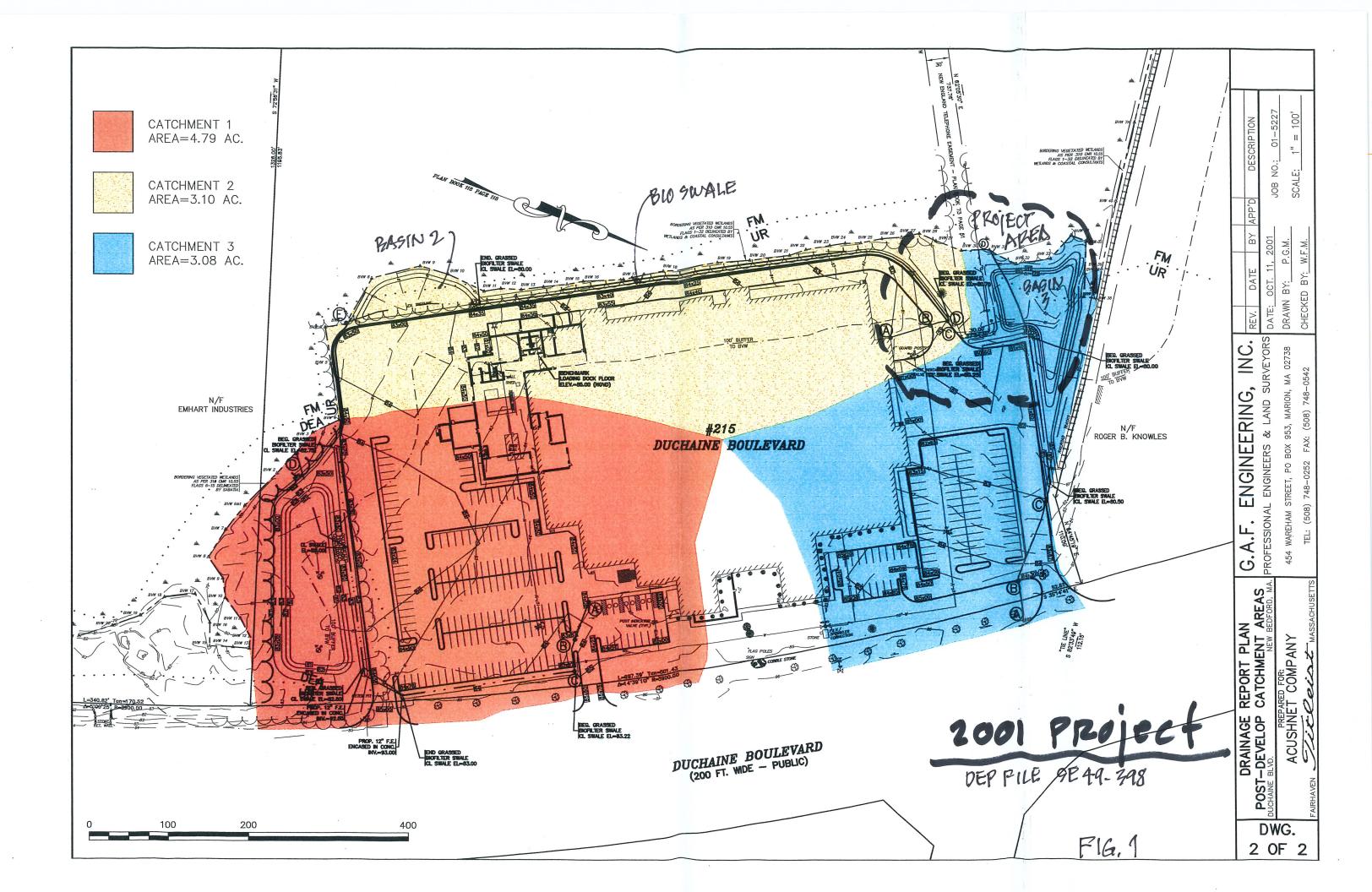
The topography is fairly flat throughout the site with steeper slopes on the perimeter of the development adjacent to the wetlands. The majority of existing site surface water runoff discharges unmitigated into the adjacent wetlands resource areas.

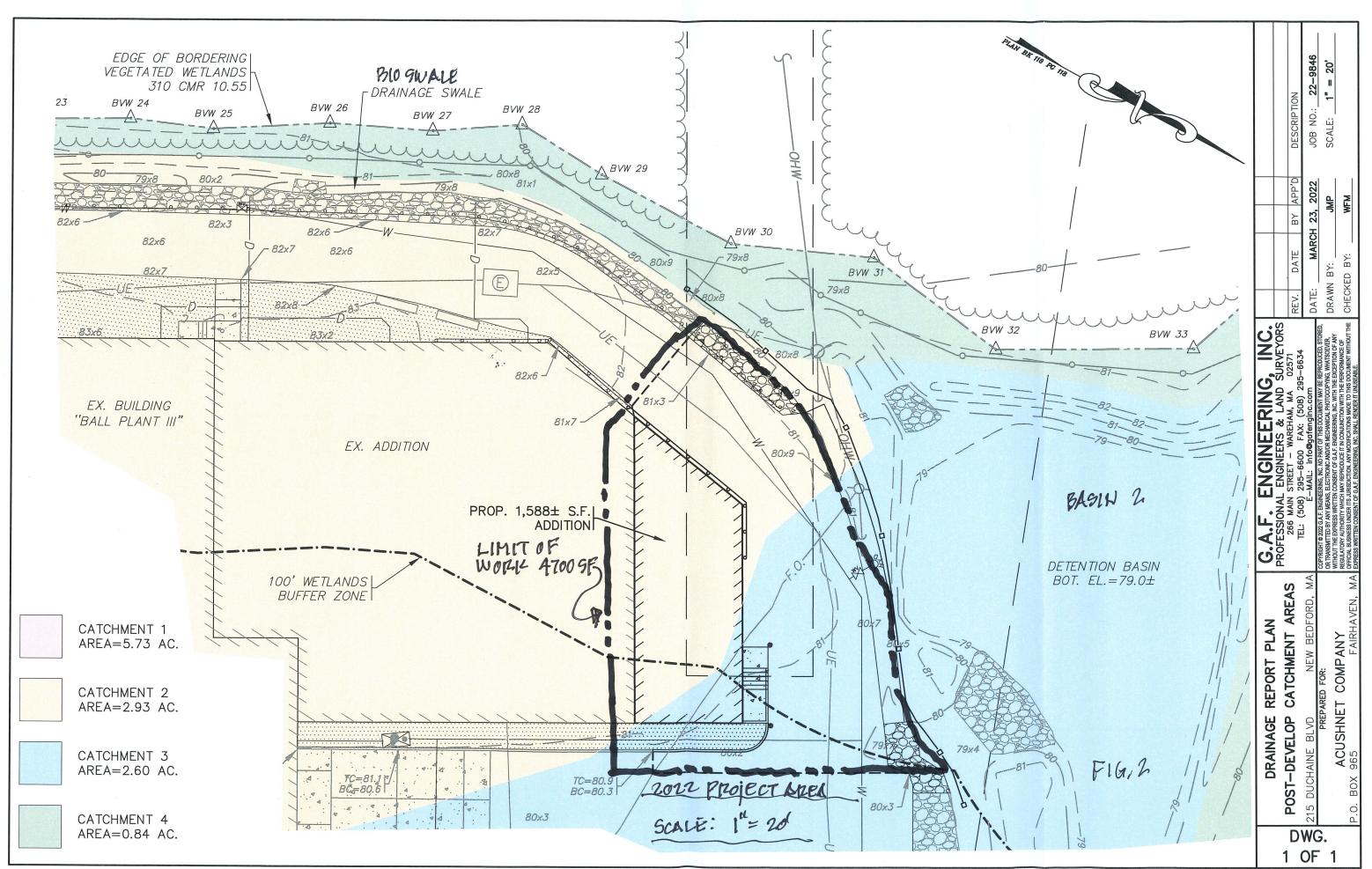
Approximately twenty-two hundred linear feet (2,200') of Bordering Vegetated Wetland (BVW) surrounds the site. Soils have been identified as Deerfield (DeA), Freetown Muck (FM) and Urban Land (Ur) in the USDA-NRCS Bristol County Massachusetts southern Part Soil Survey Maps and are shown on the plans. Refer to Figure 2.

Drainage calculations have been performed on the site, with the wetlands being the limits of the calculations. The site has been broken down into three (3) catchment areas. These calculations along with the plan are provided in Appendix 2.

#### 4.2 Proposed Conditions

The applicant, Acushnet Company, intends to upgrade and improve the existing manufacturing facility with a sixteen thousand square foot (16,000 S.F.) building addition, additional parking spaces to accommodate the proposed addition are also proposed. Parking facilities will be provided on the north and south sides of the building. An eighteen (18') foot wide emergency access drive will be provided along the rear of the building and will connect the two parking lots. The use of bioswales and detention basins will be used to meet the stormwater management standards for water quality and quantity.





# Appendix 2

2007 Stormwater Report <sup>1</sup>

Acushnet Company Ball Plant III

<sup>&</sup>lt;sup>1</sup> Applicable excerpts from full report dated July 11, 2007





Drainage Report
For

"Acushnet Company Ball Plant No. III"

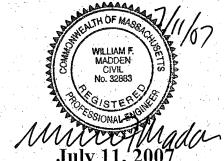
215 Duchaine Boulevard New Bedford, MA



Prepared for

**Acushnet Company** 

P.O. Box 965 Fairhaven, Ma.



266 MAIN ST.

WAREHAM, MA
02571

TEL 508.295.6600

FAX 508.295.6634



GAF.ENG@VERIZON.NET

#### **Site Conditions**

#### 1. Existing Conditions

The referenced project is located in the New Bedford Industrial Park Complex on Duchaine Boulevard. The parcel of land is approximately thirty-one and a half acres (31.5 ± Ac.) in size. Presently on the site is an existing building, approximately one hundred sixty-two thousand square feet (162,000 s.f.), with bituminous concrete parking lot. Existing woodlands surround the developed site. Refer to Figure 1. Approximately twenty-six hundred linear feet (2,600') of Bordering Vegetated Wetland (BVW) surrounds the site. Soils have been identified as Deerfield (DeA), Freetown Muck (FM) and Urban Land (Ur) in the USDA-NRCS Bristol County Massachusetts southern Part Soil Survey Maps.

The topography is fairly flat throughout the site with steeper slopes on the perimeter of the development adjacent to the wetlands. The majority of existing site surface water runoff discharges through the use of water quality swales and eventually into one of three detention basins located on the site that were constructed in 2002. One detention basin is located in the northwest corner of the site, another in the southwest corner and the larger of the three is located along the southerly property line. All detention basins are equipped with a stone rip rap spillway that discharges into the adjacent bordering vegetated wetlands.

Drainage calculations have been performed on the site, with the wetlands being the limits of the calculations. The site has been broken down into four (4) catchment areas. These calculations along with the plan are provided in Section 1.

#### 2. <u>Proposed Conditions</u>

The applicant, Acushnet Company, intends to upgrade and improve the existing manufacturing facility with the construction of several additions adjacent to the existing manufacturing facility. A 9,000 s.f. addition will be located in the northwest corner of the facility; a 5,000 s.f addition will be located in the northeast corner of the facility; a 19,000 s.f. addition will be located in the southeast corner of the facility; and a 1,350 s.f. addition will be located in the southwest corner of the facility near the receiving dock. The majority of the proposed building additions will be located on existing impervious surfaces (parking lot and access ways).

Additional work will take place in the northwest corner, which will include modifications of an associated vehicular drive access; modifications to the existing water quality swale; removal and relocation of existing site utilities; and minor modification to the side slope of the existing detention basin. Also the entire parking lot on the north side of the facility will be restriped and landscaped islands will be relocated. All the work proposed on the north side will yield an increase of 0.19 acres of impervious surfaces.

Work associated on the easterly side of the facility near Duchaine Boulevard will include the construction of a parking lot for ten vehicles. The existing swale will be filled in to accomadate the proposed expansion. Two twelve inch pipes will be installed along the bottom of the existing swale. The pipes will be wrapped in filter fabric and surrounded with 1 ½" double washed crushed stone.

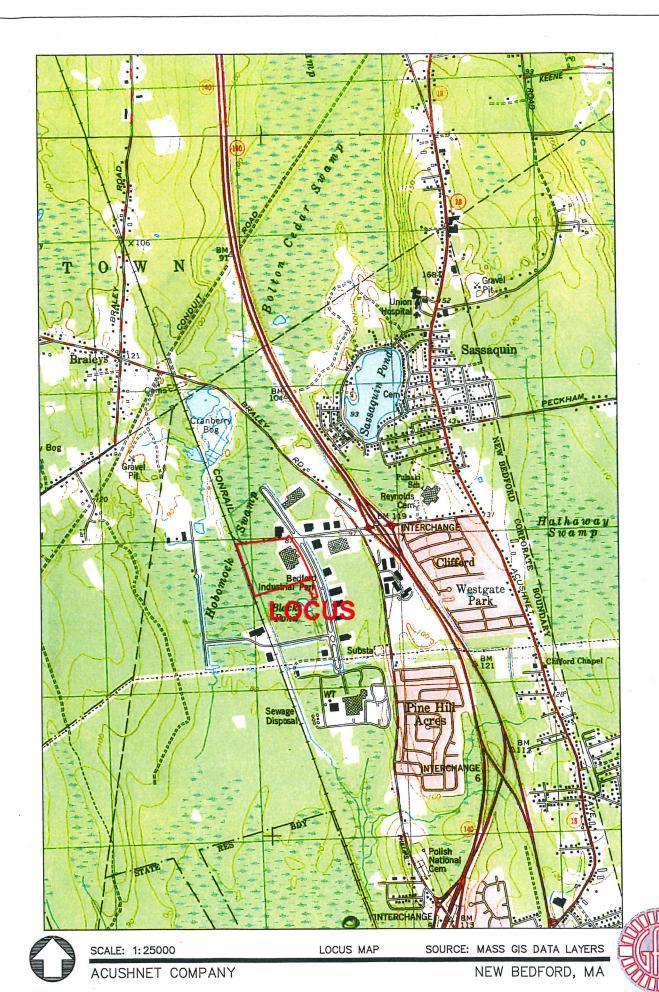
The southerly side of the site will also be restriped and landscape islands will be relocated. An additional parking lot to accommodate 122 vehicles will be created over the existing detention basin. The detention basin will be replaced with an underground detention facility consisting of RAINSTORE³ units. The stormwater will be directed into a trench drain located along the edge of the existing parking lot, then into a Stormceptor®, through the RAINSTORE³ units and eventually discharge into the existing bordering vegetated wetlands. The RAINSTORE³ units will be equipped with an outlet control structure that will control the discharge rates to be equal to or less than pre-development conditions. Additional work associated with the construction of the underground detention basin includes excavation of unsuitable materials, placement of outlet control structures and piping, and installation of filter fabric and backfill associated with the construction of the parking lot will increase the impervious area by 0.97 acres.

The post development runoff will not adversely impact the adjacent wetlands system. All runoff associated with the development will be treated through the use of water quality swales, detention basins, Stormceptor®, and RAINSTORE³ units. After development is complete, the drainage patterns will remain very similar to existing conditions. All disturbed areas (excluding paved areas) shall be stabilized with either topsoil or seed to match or improve existing ground cover conditions or with riprap as designated on the plans.

Drainage calculations for the post-development have been performed in the same manner as the pre-development. These calculations, along with the plans, are provided in Section 2. The existing detention basins located in the northwest and southwest portion of the site will continue to function as they did under pre-existing conditions. The discharge out of these basins has slightly increased. The proposed underground RAINSTORE<sup>3</sup> units has been designed to accommodate this increase and the net discharge from the existing detention basins and the RAINSTORE<sup>3</sup> units will be less than or equal to pre-development conditions.

#### 3. Drainage Overview

The proposed shallow detention basins and underground infiltration systems have been sized utilizing the Soil Conservation Service (SCS) Technical Release 55 (TR-55). The SCS Method utilizes a twenty-four (24) hour rainfall of a Type III distribution. Hydrologic soil groups were determined from the United States Department of Agriculture Soil Conservation Service Soil Survey Maps of the area and by actual onsite soil investigation. Runoff curve numbers were determined for each drainage area based on the hydrological soil group and land use. Drainage area hydraulic length and



slopes along the hydraulic lengths were determined by existing and proposed topography.

The net difference in runoff was examined for the two (2) year, ten (10) year, twenty-five (25) year and hundred (100) year storm events. Detailed analysis can be found in there respective sections of the report.

Peak discharge rates and storm runoff modeling was analyzed using the USDA-NRCS Technical Release #55 (TR-55) Method and hydrograph routing. The design point of the analysis is the lowest upland elevation and largest catchment area of the pre-developed site.

#### A. D.E.P. Stormwater Management

This project shall comply with D.E.P. Stormwater Management Standards. The proposed site development has been designed to meet these standards regarding water quality and quantity management, to the maximum extent practicable. (Refer to the attached Stormwater Management Form and the Watershed Analysis.).

#### ♦ Standard No. 1 — No Untreated Discharges

The proposed stormwater management system treats runoff with BMP's before discharge.

# ♦ <u>Standard No. 2 — Post-developed discharge rates cannot exceed pre-developed discharge rates.</u>

The proposed stormwater management system utilizes existing water quality swales, existing detention basins and Stormceptor® together with the RAINSTORE<sup>3</sup> units with outlet control structures.

#### ♦ Standard No. 3 — Recharge to Groundwater

Given: Hydrologic Soil Group "B"

Volume to recharge: 0.25" inches of runoff Impervious Areas: Roadways = 50,529 s.f.

Proposed Volume to recharge  $(V_r) = 0.25$ " x 50,529 s.f./12in = 1,053 c.f.

Volume provided in RAINSTORE<sup>3</sup> below the outlet control structure is greater than volume required.

#### ♦ Standard No. 4 — Removal of 80% of Total Suspended Solids (TSS).

The proposed stormwater management system shall remove more than 80% of TSS by use of the following BMP's:

Street Sweeping (10%), Detention Basin (70%), Water Quality Swales (70%), Stormceptor® (80%)

#### ♦ Standard No. 5 — Higher Potential Pollutant Loads

This standard is not applicable (N/A) to this project.

#### ♦ Standard No. 6 — Critical Areas

This standard is N/A by the absence of nearby critical resource areas.

#### Standard No. 7 — Redevelopment

The proposed project is a combination project. The site is currently developed and the applicant is proposing several additions to be located adjacent to the existing manufacturing facility and will be restriping the existing parking lot to better serve the facility. The applicant is also proposing to construct a new parking lot over the existing detention basin and into existing undisturbed lands. This project has met all standards.

#### ♦ Standard No. 8 — Erosion & Sedimentation Control

The proposed development shall meet this standard by installation of silt fence and erosion control barriers as shown on the plans and stabilization of disturbed areas with loam and seed as specified in the plan notes.

#### Standard No. 9 — Operation & Maintenance

#### CONSTRUCTION OPERATION AND MAINTENANCE SCHEDULE:

The operation and maintenance (O&M) scheduled during the construction period is the responsibility of the Contractor. The outline below shall be followed as closely as possible to ensure the proper construction and function of the drainage facilities.

- o In conjunction with the parking lot & construction of the building addition, all utilities shall be installed and the effected areas stabilized (loam and seeded, hydroseed, rip-rap, etc.). Permanent stabilization of these areas shall be started as soon as possible.
- o Existing detention basins & swales shall be protected during construction activities so not be damage and effective their function.
- Hay bales and/or silt fence shall be placed along the limits of work where shown on the plans.
- O All Areas shall be inspected weekly and after large storms. If there is evidence of erosion, the eroded area shall be re-stabilized and measures shall be taken to prevent reoccurrence. This schedule must be adhered to by the contractor and/or owners until the project is completed.

#### POST-CONSTRUCTION OPERATION AND MAINTENANCE PLAN:

Upon the completion of the project, maintenance shall be conducted by the Owner. The outline below shall be adhered to as closely as possible to ensure the proper operation of the drainage facilities.

o Parking lot maintenance in the form of sweeping shall be conducted twice per year in the Spring and Fall. Sweeping provides important non-point source pollution control. When practical and as weather permits, accumulated sediments should be swept and removed on an as needed basis. Maintenance of vegetated buffers will occur as needed in the months of May through November. All material removed shall

- be disposed in accordance with all applicable federal, state and local requirements.
- O Detention basins shall be inspected annually to ensure that the basins are operating as intended and designed. Inspections should be made during and after storm events to ensure that detention times are met. The outlet structure should be inspected for evidence of clogging and for erosion within the basin and its banks. During inspections changes in the detention basin or the contributing watershed should be noted. Sediment should be removed from the basin as necessary at least once every five (5) years.
- The water quality swales are designed to retain the prescribed water quality volume. The swales have the necessary dimensional criteria to convey excessive stormwater flows to detention basin areas. Swales should be inspected on a semi-annual basis with additional inspections scheduled for the first few months to ensure that vegetation within the swales becomes adequately established. The water quality swales should be inspected for slope integrity, soil stability and vegetative health. Regular maintenance can include mowing, fertilizing, as well as weed and pest control. Swales shall be mowed at least twice per year with grass cut not shorter than four (4") inches. Sediment shall be removed once per year, periodic seeding may be required to maintain a dense vegetative cover.
- o RAINSTORE<sup>3</sup> system shall be inspected after every major storm event in the first few months after construction to ensure proper stabilization and function. Thereafter, the system shall be inspected at least once per year. Water depth in the system should be observed and measured at 0, 24 and 48-hour intervals after a major storm event at least once per year. Clearance rates are calculated by dividing the drop in water level (inches) by the elapsed time (hour). A comparison of clearance rate measurements taken over the years provided a useful tool for tracking any clogging problems within the system.
- Inspect and maintain the in-line Stormceptor® 900 from the surface without entry into the unit. Perform maintenance once the stored volume reaches 15 percent of the Stormceptor® capacity, or immediately in the event of a spill. Maintenance intervals vary depending on the application. We recommend quarterly inspections during the first year of installation to accurately establish a maintenance schedule. Remove oil and sediment through the 24-inch diameter outlet riser pipe. Alternatively, you may remove floatables and hydrocarbons through the 6-inch oil inspection port. Requirements for the disposal from the Stormceptor® are similar to that of any other best management practice. Consult local guidelines or Rinker Stormceptor before disposing of the separator.
- o Inspect and maintain the inlet Stormceptor® 450i from the surface without entry into the unit. Perform maintenance once the stored volume reaches 15 percent of the Stormceptor® capacity, or immediately in the event of a spill. Maintenance intervals vary depending on the application. We recommend quarterly inspections

during the first year of installation to accurately establish a maintenance schedule. The inlet drop pipe has a tapered insert connected to a handle. After removing the handle, remove oil and sediment through the 12-inch diameter inlet drop pipe. Requirements for the disposal from the Stormceptor® are similar to that of any other best management practice. Consult local guidelines or Rinker Stormceptor before disposing of the separator.

