DEVELOPMENT IMPACT STATEMENT
FOR
PROPOSED PARKING LOT
ON BOLTON STREET
NEW BEDFORD, MA 02744

PREPARED FOR:

HOWLAND PLACE REALTY TRUST
651 ORCHARD STREET - SUITE 200
NEW BEDFORD, MA 02744

PREPARED BY:

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TABLE OF CONTENTS

1.0 INTRODUCTION

It is proposed to construct a 119 space parking lot in New Bedford which requires Site Plan Review from the Planning Board. One element of the submittal package is a Development Impact Statement. This document has been prepared to satisfy that requirement.

2.0 EXISTING CONDITIONS

The site is a vacant parcel on the east side of Bolton Street. It is part of a large site owned by Clark Cove Development Co., LLC. An Approval Not Required plan will be submitted to the Planning Department to create the subject parcel once Site Plan Approval is granted. It is referenced as Lot 158 on Assessor's Map 23 and Lot 1 on Map 19. It contains 44,645 square feet of area. Historically, the site was covered with a large manufacturing building (No. 5 Passaic Mill). The site slopes down from a high point at elevation 21 at the west end to elevation 9.5 at the east end of the site. The land surface is covered with grass with some shrubs.

3.0 PROPOSED DEVELOPMENT

It is proposed to construct a parking lot with 119 standard spaces. Parking of vehicles operated by patrons of Howland Place overflow to on-street parking on Bolton Street and nearby side streets. This proposed parking lot would provide additional off street parking spaces and lessen the parking load on Bolton Street and the nearby side streets.

The existing brush will be removed and chipped. The topsoil will be stripped and spread on an adjacent parcel and seeded with a commercial lawn seed mix. The site will then be graded and paved as shown on the project plans.

The sidewalks adjacent to the development on Bolton Street will be reconstructed with a 5 foot wide grass ribbon strip and 5 foot wide concrete sidewalk.

4.0 PHYSICAL ENVIRONMENT

The site is a listed Massachusetts Contingency Plan (MCP) site due to impacted soil from the former tire manufacturing operation. The Activity and Use Limitation (AUL) that has been recorded on this site requires that access to the existing soil be prevented by either fencing the site or covering the soil with pavement or a 3 foot depth of clean soil. The majority of the site will be paved. The landscaped areas will have a 3 foot depth of clean soil.

If geotechnically unsuitable debris is encountered, it will be removed and then the replacement soil will be placed and compacted in one foot lifts. Any solid waste will be transported to a licensed disposal facility. Other than the above, there are no unusual geologic, archeologic, scenic or historic features or structures. There are no stone walls, trails, open space links, or indigenous wildlife.

There is undeveloped land to the north and east. The existing Howland Place parking lot borders

the site on the south side. Residences exist on the west side across Bolton Street.

5.0 SURFACE WATER AND SUBSURFACE CONDITIONS

The site contains urban fill which, as in many areas of New Bedford, have been impacted by petroleum hydrocarbons, metals and poly nuclear aromatic hydrocarbons (PAHs). After development, these soils will be inaccessible since they will be beneath pavement and, and in the

landscaped areas, under clean imported soil. During construction, soil will be managed with a written soil management plan.

Historical releases of lubricating oils and other petroleum products (No. 6 fuel oil) have resulted in the detection of TPH and the following PAHs in soils; acenaphthene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene. Lead, butyl benzl phthalate and the followiing VOCs were also detected in soils: xylenes, methylene chloride, chloroform, tetrachloroethene, 1,2 dichloroethene and styrene.

Historical releases of lubricating oils and other petroleum products (No. 6 fuel oil) have resulted in the detection of TPH, naphthalene, and benzene in groundwater. Creosols (2 methylphenol, 4 methylphenol), 2,4 dimethylphenol, benzoic acid, phenol, bis 2 ethyl hexyl phthalate and the following VOCs were also detected in groundwater: ethylbenzene, toluene, xylenes, methyl tertiary butyl ether, isopropylbenzene, n-propylbenzene, 1,2,4, trimethylbenzene, methylene chloride, chloroform, 1,1 dichloroethene, 1,1 dichloroethane, 1,2 dichloroethene, trichloroethene, vinyl chloride, trichlorofluromethane, 1,4 dichlorobenzene and 4, methyl 2 pentanone.

Surface water will be collected in a deep sump catch basin and treated with a Stormceptor brand storm treatment system and then discharged to a storm drain main which will be installed by the current landowners from a drain manhole in front of the Fishermens' Club to the site. Due to the presence of impacted soil, on site infiltration of stormwater is ill advised. Hydrologic computations are presented in Appendix A.

6.0 CIRCULATION SYSTEM

Bolton Street is a city street which runs from Cove Road on the south to Fair Street to the north. It has a 30 foot pavement width with sidewalks on both sides. There is excellent site visibility in both directions from the subject site.

Bolton Street experiences moderate traffic in the morning and evening rush hours and light to moderate traffic for the balance of the day.

No new building is proposed, so no additional traffic is projected to occur. The proposal is to construct a parking lot that alleviates an existing street parking situation.

It is proposed that the existing sidewalk on Bolton Street be reconstructed with the New Bedford standard 5 foot wide grass ribbon and 5 foot wide concrete sidewalk along the street edge.

7.0 SUPPORT SYSTEMS

No fuel storage is proposed at the site. Fire Station #11 is less than one mile from the site, therefore emergency response should not be an issue.

The presence of a parking lot will not have any affect on recreation or schools.

8.0 COMPLIANCE WITH SITE PLAN REVIEW STANDARDS

Section 5470 of the New Bedford Zoning Ordinance prescribes specific Site Plan Review design requirements. This section presents how each of these design standards are being met:

8.1 Earthworks

The proposed grading for the site requires importing approximately 1600 cubic yards of gravel required to be placed immediately beneath the pavement and approximately 4000 cubic yards of ordinary earth for beneath the gravel layer.

8.2 Pedestrian and Vehicular Safety

The site will be accessed by a proposed driveway and ample parking will be provided. A sidewalk will provide safe pedestrian access from the lot to the building. The north entrance to the building has a handicap ramp. The 5 handicap spaces that are required as a result of adding the proposed 120 parking spaces will be striped in a location closest to that north building entrance.

8.3 Scenic Views

The proposed parking lot will not obstruct any scenic views from publicly accessible locations.

8.4 Visual Intrusion

The parking lot has been layed out so as not to be visually intrusive to any public way and residentially used or zoned areas. Landscaping will be provided around the perimeter of the site.

8.5 Off-Site Glare

The proposed parking has been designed so as to prevent glare. The parking lot lighting will be dark sky compliant and will shine downward in order to prevent off-site glare.

8.6 Character, Material and Scale of Building

This is not applicable since there is no proposed building.

8.7 Water Contamination

The stormwater will be passed through a Stormceptor brand stormwater treatment system, thereby assuring proper water quality. No infiltration is proposed because the soils are contaminated.

8.8 Zoning Compliance

The site design complies with all the relevant zoning ordinance provisions in the mixed-use business district.

8.9 Public Ways

The proposed use will not damage Bolton Street or any other public way.

8.10 Internal Vehicle Circulation

The proposed driveways have been layed out in order to promote orderly and reasonable internal circulation within the site so as to protect public safety.

8.11 Estimated Construction Costs

An engineering estimate of the construction costs are presented in Appendix B.

9.0 CONCLUSION

The proposed parking lot will add to the City's tax base and provide a convenient location for off street parking. The developed site will be privately owned and maintained. None of the property will become common or public land. Compliance with zoning standards is presented on the Zoning Summary Table which is presented on the site plan review application form. It is intended that construction will be completed in 2017, subject to weather conditions. Vegetation planting may have to be completed in spring 2018.

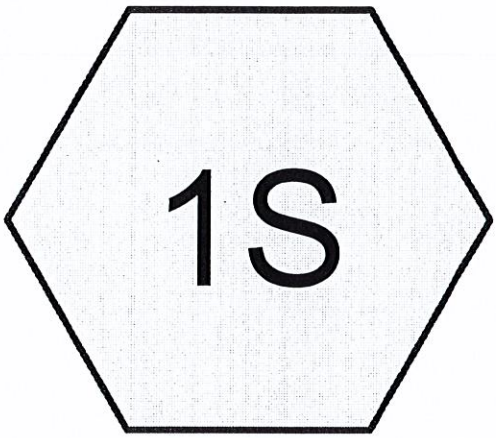
APPENDIX A
HYDROLOGIC COMPUTATIONS

HYDROLOGIC COMPUTATIONS

The site was previously covered entirely the Pasaic No. 5 mill, therefore, there was 100 percent impervious cover. The following hydrologic computations indicate the following peak flows for the proposed parking lot:

Design Storm (YR)	Peak Flow (CFS)
2	2.91
10	4.14
25	4.83
100	6.05

The runoff will be conveyed to a 12 inch diameter HDPE drainline at a 2% slope which has a capacity of 6.51 CFS. The 12 inch drain discharges to a 24 inch diameter HDPE pipe which has a capacity of 23.1 CFS and currently receives 7.48 CFS under the 100 year storm.



Parking lot area

Subcat Reach Pond Link

Routing Diagram for Post-development
Prepared by {enter your company name here}, Printed 9/8/2017

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.881	98	paved (1S)
0.881	**98**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Parking lot area Runoff Area=38,380 sf 100.00% Impervious Runoff Depth=3.17"
Tc=6.0 min CN=98 Runoff=2.91 cfs 0.233 af

Total Runoff Area = 0.881 ac Runoff Volume = 0.233 af Average Runoff Depth = 3.17"
0.00% Pervious = 0.000 ac 100.00% Impervious = 0.881 ac

Summary for Subcatchment 1S: Parking lot area

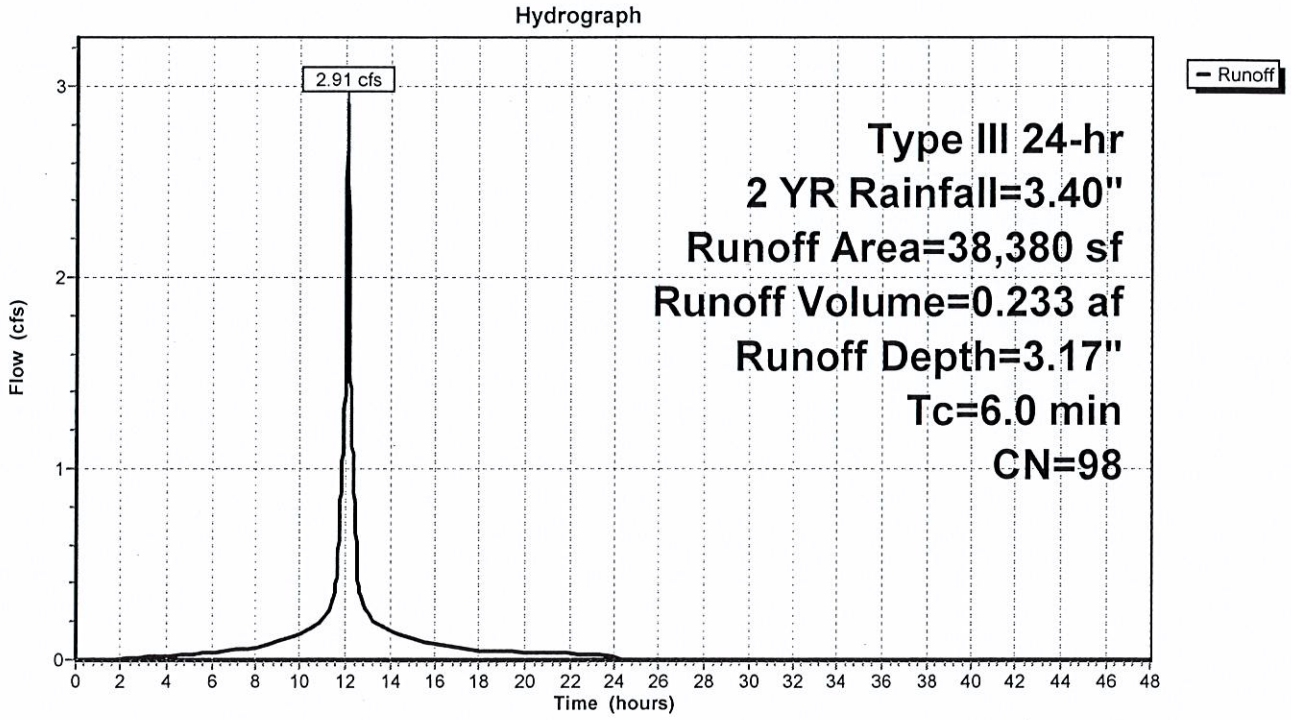
Runoff = 2.91 cfs @ 12.08 hrs, Volume= 0.233 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 YR Rainfall=3.40"

	Area (sf)	CN	Description
*	38,380	98	paved
	38,380		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1S: Parking lot area



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Parking lot area Runoff Area=38,380 sf 100.00% Impervious Runoff Depth=4.56"
Tc=6.0 min CN=98 Runoff=4.14 cfs 0.335 af

Total Runoff Area = 0.881 ac Runoff Volume = 0.335 af Average Runoff Depth = 4.56"
0.00% Pervious = 0.000 ac 100.00% Impervious = 0.881 ac

Summary for Subcatchment 1S: Parking lot area

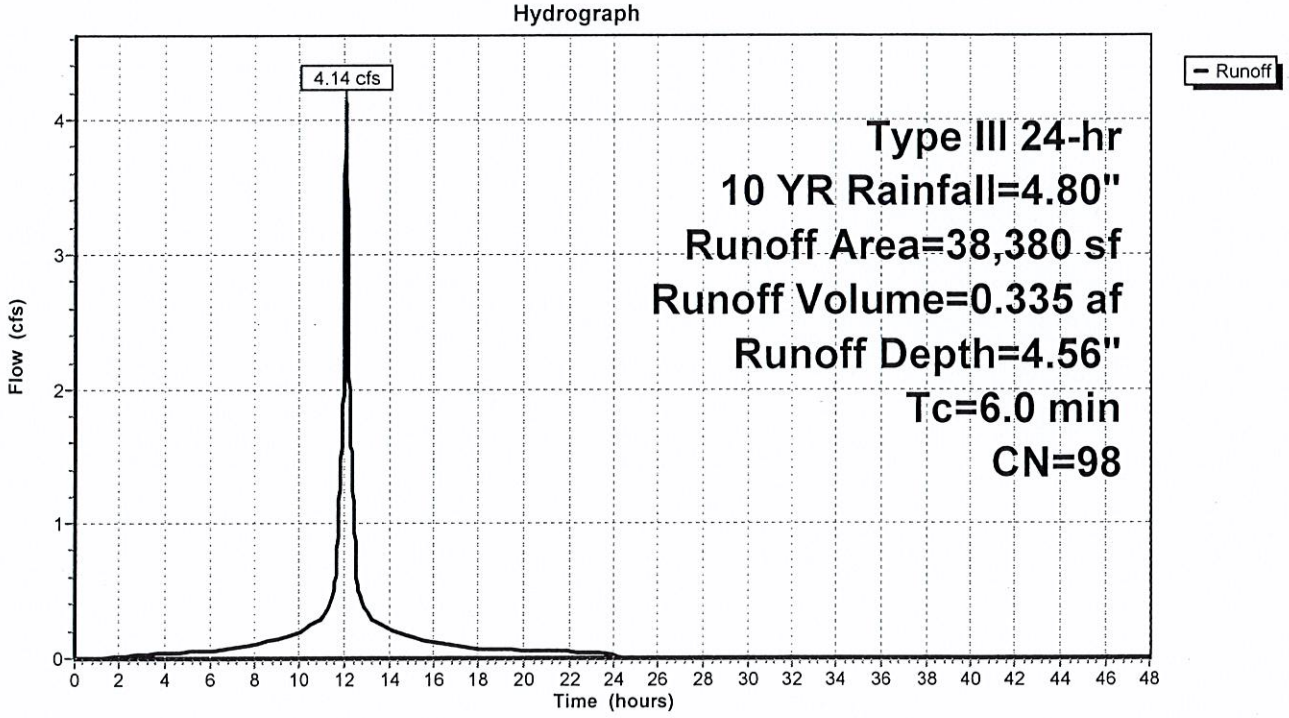
Runoff = 4.14 cfs @ 12.08 hrs, Volume= 0.335 af, Depth= 4.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 YR Rainfall=4.80"

	Area (sf)	CN	Description
*	38,380	98	paved
	38,380		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1S: Parking lot area



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Parking lot area Runoff Area=38,380 sf 100.00% Impervious Runoff Depth=5.36"
Tc=6.0 min CN=98 Runoff=4.83 cfs 0.394 af

Total Runoff Area = 0.881 ac Runoff Volume = 0.394 af Average Runoff Depth = 5.36"
0.00% Pervious = 0.000 ac 100.00% Impervious = 0.881 ac

Summary for Subcatchment 1S: Parking lot area

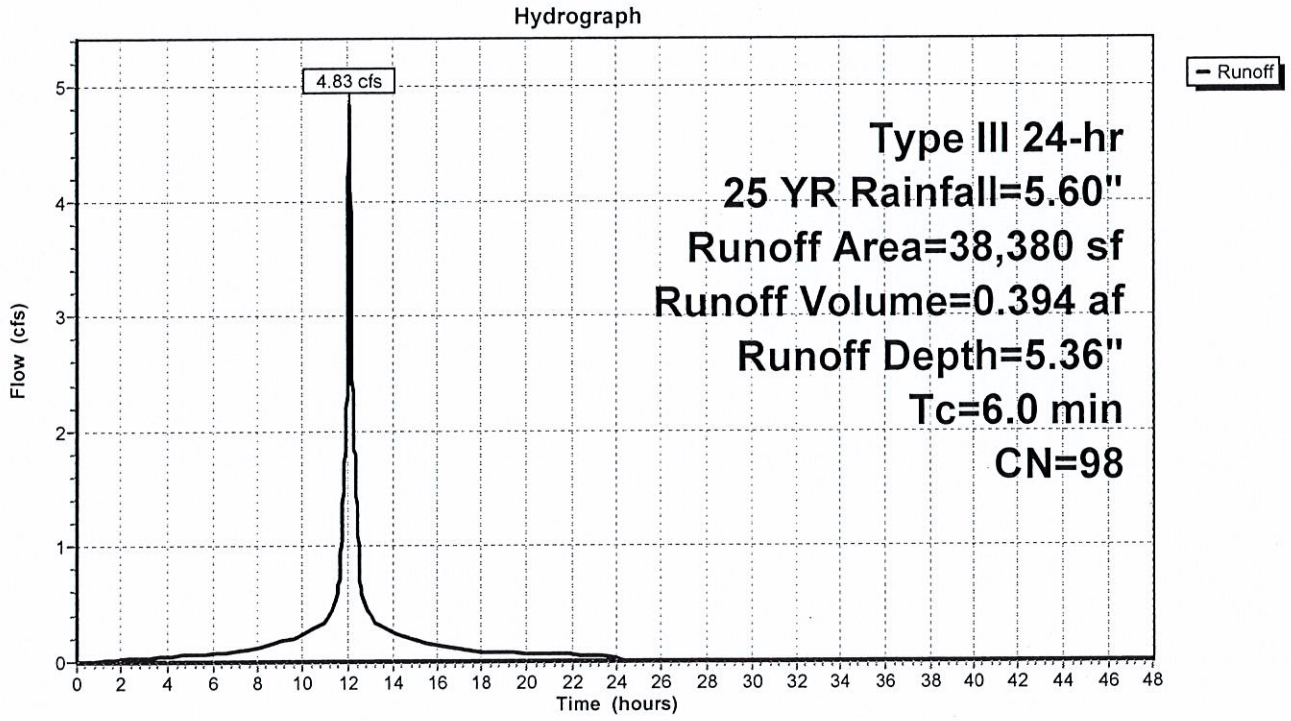
Runoff = 4.83 cfs @ 12.08 hrs, Volume= 0.394 af, Depth= 5.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YR Rainfall=5.60"

	Area (sf)	CN	Description
*	38,380	98	paved
	38,380		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1S: Parking lot area



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Parking lot area Runoff Area=38,380 sf 100.00% Impervious Runoff Depth=6.76"
Tc=6.0 min CN=98 Runoff=6.05 cfs 0.496 af

Total Runoff Area = 0.881 ac Runoff Volume = 0.496 af Average Runoff Depth = 6.76"
0.00% Pervious = 0.000 ac 100.00% Impervious = 0.881 ac

Summary for Subcatchment 1S: Parking lot area

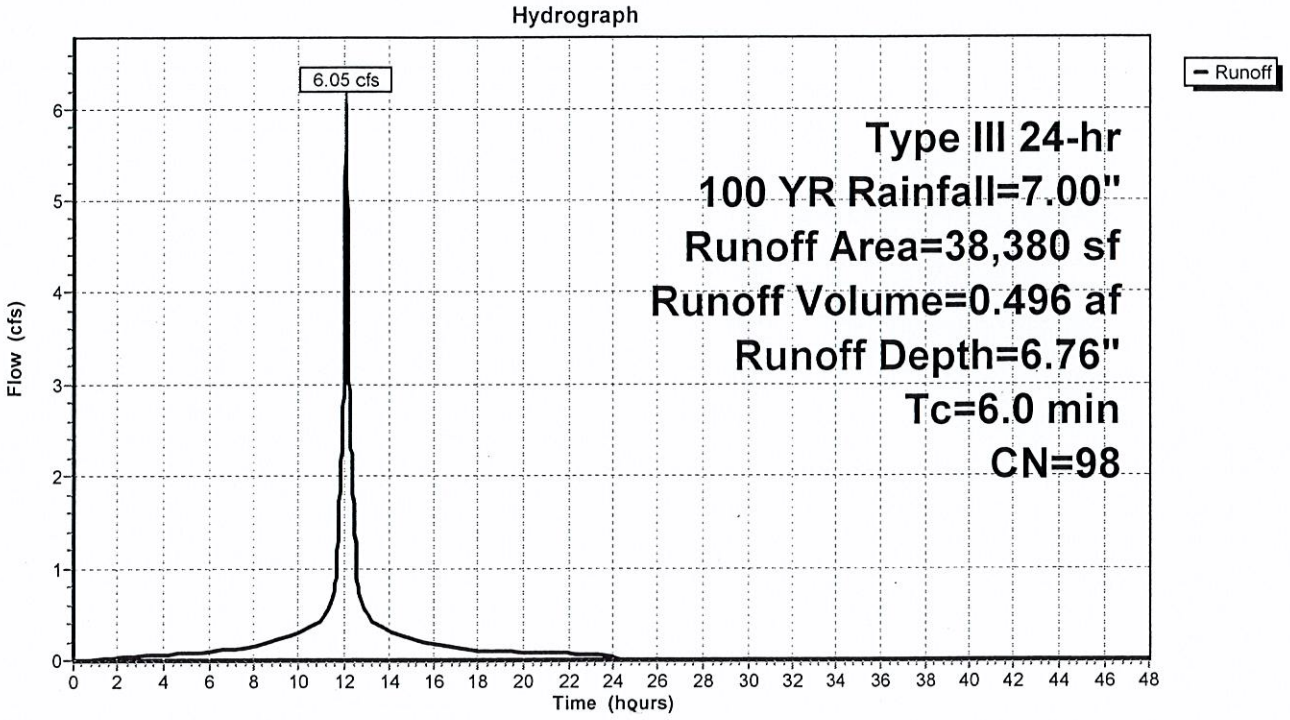
Runoff = 6.05 cfs @ 12.08 hrs, Volume= 0.496 af, Depth= 6.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 YR Rainfall=7.00"

	Area (sf)	CN	Description
*	38,380	98	paved
	38,380		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1S: Parking lot area



APPENDIX B
ENGINEER'S COST ESTIMATE

Engineers Estimate of Construction Costs
For Proposed 120 Space Parking Lot
Bolton Street, New Bedford

Pavement & Striping	33,500 SF paved @ $2.50	$ 83,750
Trees	14 @ $300/each	$ 4,200
Shrubs	70 @ $80/each	$ 5,600
Fence	580 LF @ $15/LF	$ 8,700
Lights	$500/each @ 2	$ 1,000
Catch Basin	1 @ $3,000	$ 3,000
Stormceptor	1 @ $10,000	$ 10,000
Gravel base	1,200 CY @ $20/CY	$ 24,000
Earthwork	4,000 CY @$10/CY	$ 40,000
		$180,250