

317 B 5

375-375 Riverside street, Portland, Maine

Big Moose Harley- showroom Additio

Big mouse Harley- Davidson

October 4, 2004
01430

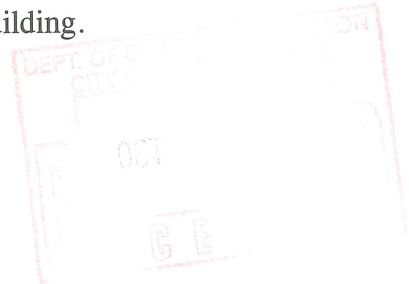
Margaret Schmuckal, Zoning Administrator
Code Enforcement Department
City of Portland
389 Congress Street, 3rd Floor
Portland, ME 04101

Proposed Showroom Addition-Tax Map 317, Block B, Lot 5
Minor Site Plan Application- 375 Riverside Street, Big Moose Harley-Davidson

Dear Marge:

On behalf of Big Moose Harley-Davidson, we are pleased to submit nine (9) copies of the enclosed plans and associated information for the re-approved minor site plan application. As you will recall, the Site Plan Committee previously approved this addition with conditions as contained in a letter dated July 15, 2003 from the Planning Division Director, Alexander Jaegerman, to Calvin Reynolds, President of Big Moose Harley-Davidson. Based upon a conversation with City staff, the conditions associated with the original approval have been addressed as outlined within the attached letter. As originally approved, and as now proposed, it is the intent of the applicant to expand the existing showroom to provide an additional 3,050 square feet of space. The façade of the expansion will be compatible with the existing building in accordance with the enclosed elevation. The facility is located at 375 Riverside Street and consists of 2.87 acres of property within the B-4 Zone. The existing facility and the proposed expansion will meet the space and bulk requirements of that zone.

The development proposal consists of constructing a 3,050 square foot building addition within an existing paved area and installing a paved access drive around the expansion. Existing water, gas, and underground electrical service will be relocated outside of the proposed building footprint. All utility services for the addition will be provided from the existing building. Proposed new lighting will consist only of low-level wall packs at building entrances. An existing light pole will be relocated. The existing site is heavily landscaped such that no new landscaping is proposed. Existing trees and shrubs will be relocated as depicted on the plans due to the paved access drive around the building.



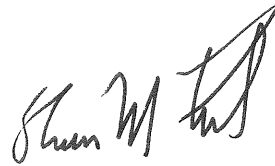
We are hopeful that we have provided the required information to allow this project to proceed through the permitting process. Upon your review of the enclosed material, however, please call with any questions or if you require additional information. Thank you for your consideration.

Sincerely,

SEBAGO TECHNICS, INC.



Gregory J. Boulette
Project Engineer



Shawn M. Frank, PE
Project Manager

GJB:gjb/jc
Enc.

cc: Calvin Reynolds, President

October 4, 2004
01430

Kandi Talbot, City Planner
City of Portland
389 Congress Street, 4th Floor
Portland, ME 04101

Proposed Showroom, Big Moose Harley Davidson, ID # 2003-0103, CBL # 317-B-005
Conditions of Prior Approval

Dear Kandi:

This letter and the enclosed plans are in response to the conditions of approval regarding the above referenced project in a letter dated July 15, 2003 from the Planning Division Director, Alexander Jaegerman. The following numbered responses correspond with the numbered conditions in that letter:

1. A utility capacity letter has been requested from the Portland Water District and will be forwarded upon receipt. The existing building is served by a private on-site septic field; therefore, a letter of capacity to serve from the Portland Sewer District is not warranted.
2. Spot grades have been added to the new pavement area to assure positive drainage away from the building.
3. The pavement area just northeast of the building has been revised so that it does not extend onto the abutting property.
4. A parking lot detail has been added to show the required depths of gravel (15") and asphalt (3").
5. A note has been added to the plans stating, "The applicant is responsible to install and maintain erosion control measures in accordance with the submitted narrative and Best Management Practices".
6. Bollards have been added to the plans around the new locations of the A/C units, gas meter, and electrical box.
7. A note has been added to the plans stating, "The applicant shall contribute \$1,500 to the City for the improvement of a drainage channel and outfall crossing downstream of Handyman Rental, on Riverside Street."

We are hopeful that we have provided the required information to allow this project to proceed through the permitting process. Upon your review of the enclosed material, however, please call with any questions or if you require additional information. Thank you for your consideration.

Sincerely,

SEBAGO TECHNICS, INC.



Gregory J. Boulette
Sr. Project Engineer



Shawn M. Frank, PE
Project Manager

GJB/SMF:gjb/jc
Enc.

cc: Calvin Reynolds, President

City of Portland Site Plan Application

If you or the property owner owe real estate taxes, personal property taxes or user charges on any property within the City of Portland, payment arrangements must be made before permit applications can be received by the Inspections Dept.

Address of Construction: 375 Riverside Street		Zone: B-4 Zone
Total Square Footage of Proposed Structure 3,050		Square Footage of Lot 125,017
Tax Assessor's Chart, Block & Lot Chart# 317 Block# B Lot# 5	Property owner, mailing address: Big Moose Harley-Davidson 375 Riverside Street Portland, Maine 04102	Telephone: (207) 797-6061
Consultant/Agent, mailing address, phone & contact person Shawn Frank c/o Sebago Technics, Inc. P.O. Box 1339 Westbrook, Maine 04098-1339	Applicant name, mailing address, telephone #/Fax#/Pager#: Big Moose Harley-Davidson 375 Riverside Street Portland, Maine 04102 (207) 797-6061 (phone) (207) 878-3115 (fax)	Project name: Big Moose Harley-Davidson
Proposed Development (check all that apply) <input type="checkbox"/> New Building <input checked="" type="checkbox"/> Building Addition <input type="checkbox"/> Change of Use <input type="checkbox"/> Residential <input type="checkbox"/> Office <input type="checkbox"/> Retail <input type="checkbox"/> Manufacturing <input type="checkbox"/> Warehouse/Distribution <input checked="" type="checkbox"/> Parking lot <input type="checkbox"/> Subdivision, amount of lots _____ \$25.00 per lot \$ _____ <input type="checkbox"/> Site Location of Development \$3,000, except for residential lots which are then \$200 per lot _____ <input type="checkbox"/> Traffic Movement \$1,000 <input type="checkbox"/> Stormwater Quality \$250.00 <input checked="" type="checkbox"/> Other - Showroom Addition _____ <input type="checkbox"/> After the fact review - Major project \$1,500.00 <input type="checkbox"/> After the fact review - Minor project \$1,200.00 Major Development _____ \$500.00 Minor Development <input checked="" type="checkbox"/> \$400.00 Plan Amendments: <input type="checkbox"/> Board review \$200.00 <input type="checkbox"/> Staff review \$100.00		
Who billing will be sent to: Big Moose Harley-Davidson Mailing address: 375 Riverside Street State and Zip: Portland, Maine 04103 Contact person: Calvin Reynolds Phone: (207) 797-6061		

Submittals shall include (9) separate folded packets of the following:

- a. copy of application
- b. cover letter stating the nature of the project
- c. site plan containing the information found in the attached sample plans check list

Amendment to Plans: Amendment applications should include 6 separate packets of the above (a, b, and c)
ALL PLANS MUST BE FOLDED NEATLY AND IN PACKET FORM

Section 14-522 of the Zoning Ordinance outlines the process, copies are available at the counter at .50 per page (8.5 x11) you may also visit the web site: ci.portland.me.us chapter 14

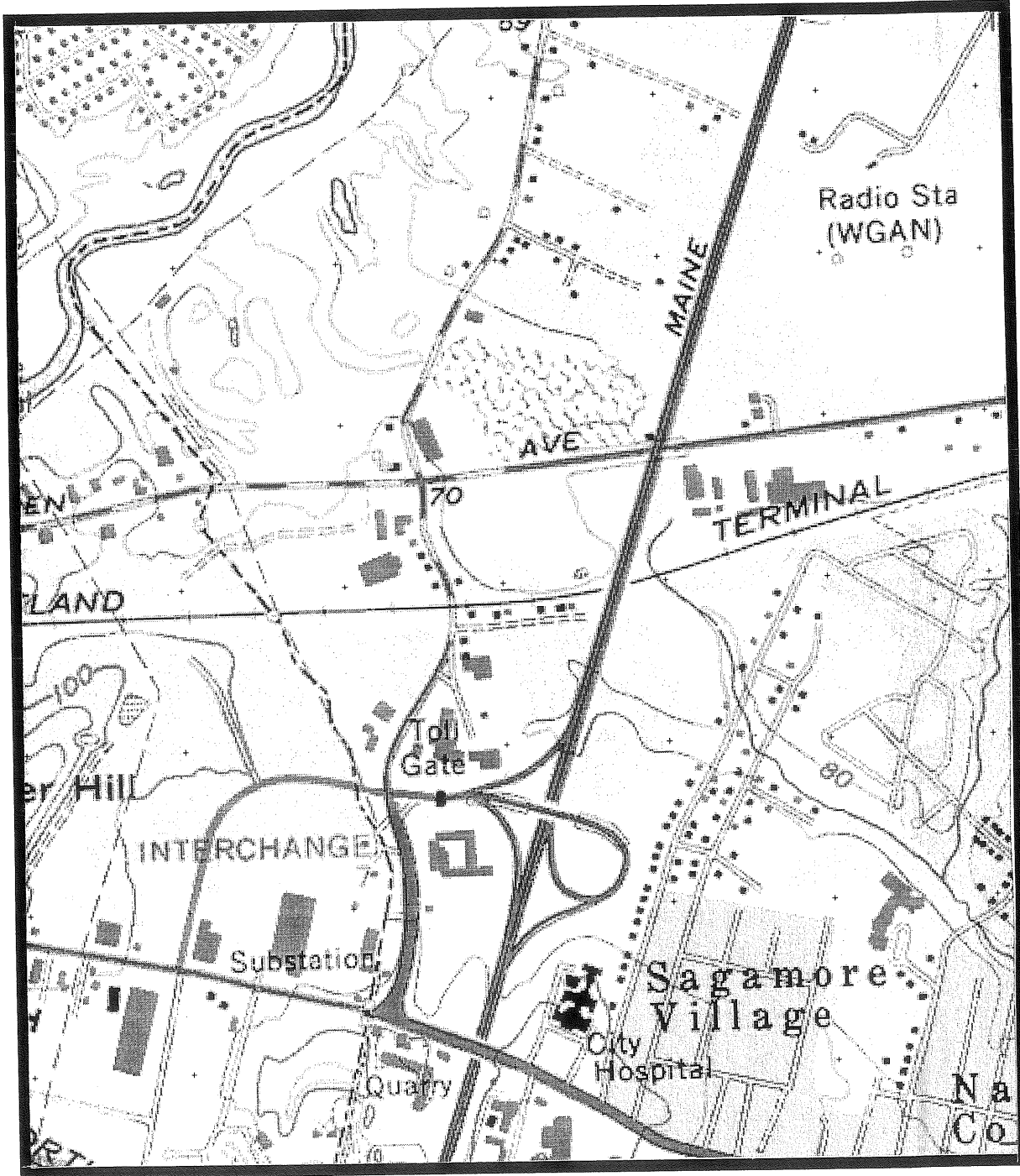
I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: 	Date: <u>10/1/04</u>
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This application is for site review ONLY, a building Permit application and associated fees will be required Prior to construction.

Figure 1 – Site Location Map

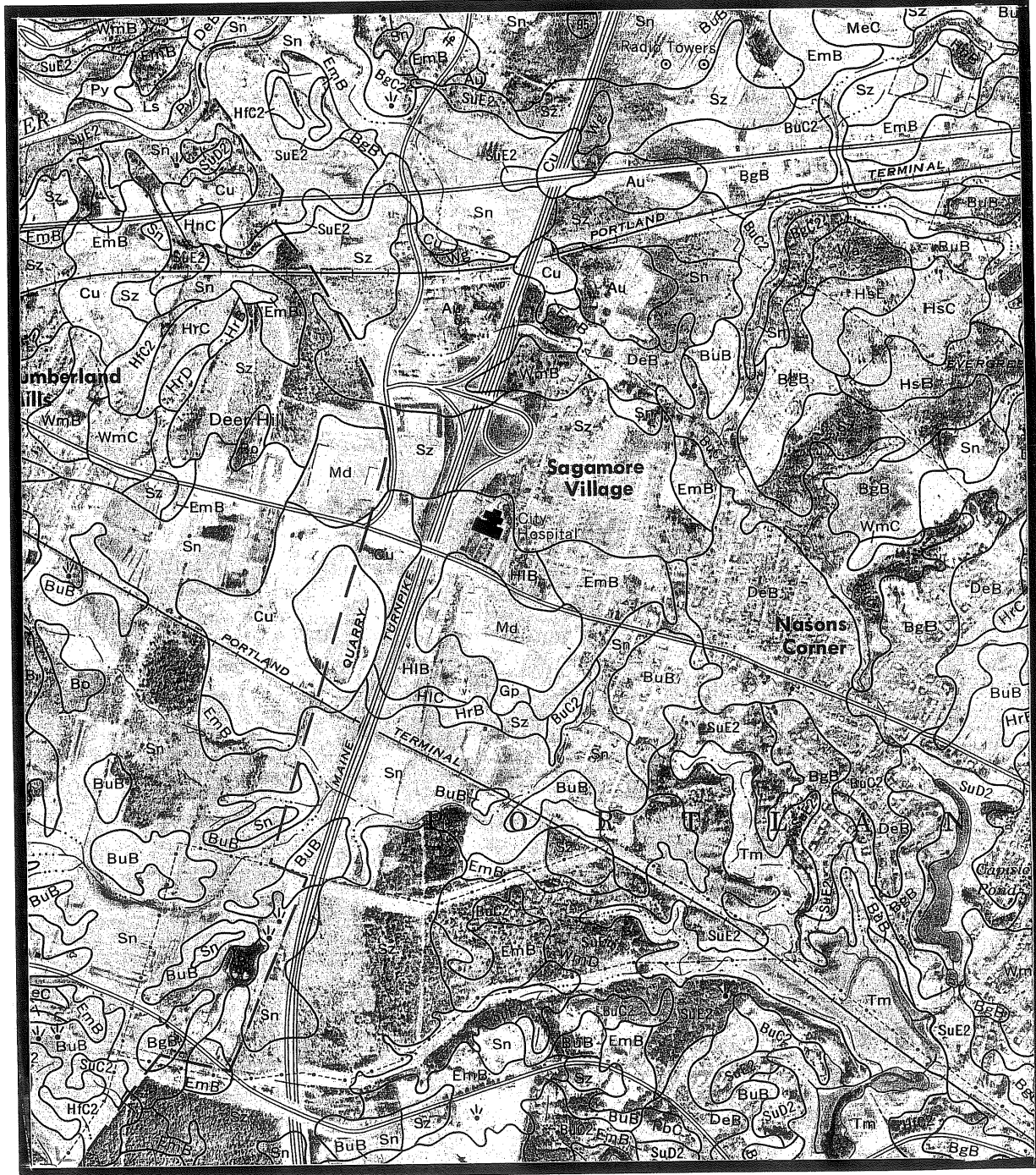
FIGURE 1



SITE LOCATION MAP
USGS TOPOGRAPHIC
7.5 MIN. QUADRANGLE
PORTLAND WEST
SCALE: 1"=1,000'

Figure 2 – Medium Intensity Soils Map

FIGURE 2



MEDIUM INTENSITY SOIL SURVEY
CUMBERLAND COUNTY
SHEET 81
SCALE 1:20,000



Figure 3 - Deed

8705-031

013818

MORTGAGE DEED

Know all Men by these Presents,

That Marianne M. Reynolds, of Gorham, County of Cumberland and State of Maine, (hereinafter referred to as "Mortgagor"), in consideration of Eight Hundred Thousand and 00/100ths (\$800,000.00) Dollars, paid to the Mortgagor and Calvin J. Reynolds, Jr. by Key Bank of Maine, a banking corporation organized and existing under the laws of the State of Maine, and having a place of business at One Canal Plaza, Portland, County of Cumberland and State of Maine, (hereinafter referred to as "Mortgagee") the receipt whereof Mortgagor does hereby acknowledge, does hereby give, grant, bargain, sell and convey unto the said Key Bank of Maine, and its Successors and Assigns forever,

See Schedule A attached hereto and incorporated herein by reference.

Together with all heating furnaces and boilers, oil burners and attachments thereto, heaters, water tanks, mantels, gas and electric light fixtures, screens, storm doors and windows, screen doors, window shades, awnings, and all other fixtures of whatever kind or nature at present contained in said buildings and hereinafter placed therein prior to the full payment and discharge of this Mortgage, which are hereby agreed to be a part of the mortgaged real estate.

To have and to hold the aforegranted and bargained premises with all the rights, easements, privileges and appurtenances

0X870500032

thereto belonging, to the said Mortgagee, and its Successors and Assigns, to their use and behoof forever.

And I, the said Mortgagor, for myself and my Heirs, Executors, Administrators Successors and Assigns, do covenant with the said Mortgagee, and its Successors and Assigns, that I am lawfully seized in fee of the premises; that they are free of all encumbrances, excepting any prior mortgages of record; that I have good right to sell and convey the same to the said Mortgagee, and its Successors and Assigns forever, as aforesaid; and that I and my Heirs, Executors, Administrators, Successors and Assigns shall and will Warrant and Defend the same to the said Mortgagee, and its Successors and Assigns forever, against the lawful claims and demands of all persons.

And the Mortgagor does hereby further **COVENANT AND AGREE** with said Mortgagee to keep all the buildings herein mortgaged insured against loss or damage by fire and the other perils insured under extended coverage in a sum not less than One Hundred percent (100%) of the full replacement value of the mortgaged premises as determined by the Mortgagee for the benefit of said Mortgagee, and its Successors and Assigns, in such insurance company or companies as said Mortgagee shall approve, until payment of the debt secured by this Mortgage and to deliver the policies for all such insurance to said Mortgagee, to be retained by it until the debt secured shall be paid, and also to pay all taxes and water-rates, insurance, repairs and improvements upon said premises, and should I neglect to keep

said buildings so insured or to pay said taxes, water-rates, repairs and improvements, I hereby authorize said Mortgagee so to insure said buildings at my expense, and to pay said taxes, water-rates, repairs and improvements for me, and I agree that all sums due or to become due the Mortgagee and all sums so paid by said Mortgagee shall become a part of the mortgage debt secured by this Mortgage, and that no indebtedness will be contracted for labor, materials, or otherwise which would create a lien on the property that would have priority over this Mortgage without written consent of the Mortgagee.

LEASE ASSIGNMENT

As further security for payment of the indebtedness and performance of the obligations, covenants and agreements secured hereby, the Mortgagor hereby assigns to the Mortgagee, and its Successors and Assigns, all leases and rents now existing or hereafter acquired on said premises, and in the event of default hereunder, or in the event of default in the terms and conditions of any Promissory Note or Notes of even date herewith given by the Mortgagor to the Mortgagee, the Mortgagee shall have the right to collect all rents and profits arising from said premises and apply the same to the payment of the mortgage debt and obligations.

NON-ALIENATION CLAUSE

In the event the Mortgagor sells, transfers or conveys any right, title or interest in the mortgaged premises, the obligations secured hereby shall become due and payable ON DEMAND at the

BR 8705700034

option of the Mortgagee.

Provided, Nevertheless, that if the said Mortgagor and Calvin J. Reynolds, Jr. or their heirs, Executors, Administrators, Successors and Assigns shall pay to the said Mortgagee, or its Successors or Assigns, the sum of Eight Hundred Thousand and 00/100ths (\$800,000.00) Dollars in accordance with the terms of a certain Promissory Note or Notes of even date given by Mortgagor and Calvin J. Reynolds, Jr. to Mortgagee, and shall pay at maturity any other Note(s) or Allonge(s) given by Mortgagor and Calvin J. Reynolds, Jr. to Mortgagee in renewal, extension or modification of said debt, and shall pay all other existing debts and obligations of the Mortgagor and Calvin J. Reynolds, Jr. to the Mortgagee, and future advances made by the Mortgagee to the Mortgagor to protect the security hereof, and shall also keep and perform all the covenants and agreements herein contained, and shall not make or suffer any strip or waste on said mortgaged premises, and shall repay to Mortgagee all expenses, if any are incurred, of foreclosure of this Mortgage, together with reasonable attorney's fees, then this Mortgage, as also a certain Promissory Note or Notes as aforesaid given by the said Mortgagor and Calvin J. Reynolds, Jr. to the said Mortgagee, to pay the said sum and interest at the time aforesaid shall be void. Otherwise, this Mortgage shall remain in full force and effect.

8703-035

In Witness Whereof, Marianne M. Reynolds has hereunto set her hand and seal this 31st day of March in the year of our Lord one thousand nine hundred and eighty-nine.

Signed, Sealed and Delivered
in the presence of

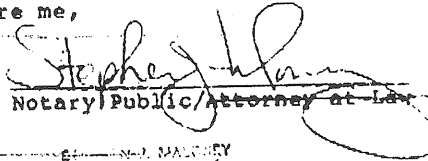
 Marianne M. Reynolds
Marianne M. Reynolds

State of Maine
County of Cumberland, ss.

March 31, 1989

Personally appeared the above named Marianne M. Reynolds and acknowledged the above instrument to be her free act and deed.

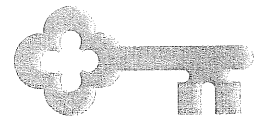
Before me,


Notary Public/Attorney at Law

STEPHEN J. MALTBY
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES APRIL 8, 1993

SEAL

Figure 4 – Letter of Financial Capability



KeyBank National Association
100 Gannett Drive
South Portland, ME 04106

April 23.2003

City of Portland

Dear Sir or Madam

Re: Marianne and Calvin Reynolds

Please be advised that Marianne and Calvin Reynolds have had a relationship with KeyBank since the mid 1960's. Key has provided the Reynolds and the operating companies, Jack Reynolds and son, Inc., H.D. Acquisitions Company, Inc., and Augusta Motor Sports, with various deposit, cash management, and loan services including working capital lines of credit, term and mortgage loans, and floor plan financing. All accounts have always been handled in a very satisfactory manner.

It is my understanding that an expansion is planned at the Riverside Street , Big Moose Harley Davidson location at an approximate cost of \$300,000. Mr. And Mrs. Reynolds have the financial capacity and/or availability to finance with KeyBank the necessary funding for this project.

Should you have any questions, contact me at 207 842-1073.

Sincerely,

Leo Amato

Vice president and Relationship Manager

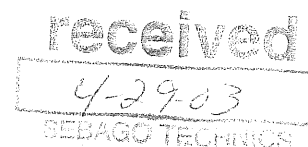


Figure 5 – Erosion & Sedimentation Control Narrative

EROSION AND SEDIMENTATION CONTROL PLAN

**Big Moose Harley-Davidson
Riverside Street
Portland, Maine**

A. Pre-Construction Phase

Prior to the beginning of any construction, filter fabric fencing will be staked across the slope(s), on the contour at or just below the limits of clearing or grubbing, and/or just above any adjacent property line or watercourse to protect against construction related erosion. The placement of silt fences shall be completed in accordance with guidelines established in Best Management Practices and in accordance with the erosion control plan and details in the plan set. This network is to be maintained by the contractor until all exposed slopes have at least 85%-90% vigorous perennial vegetative cover to prevent erosion.

Prior to construction, the contractor shall prepare a detailed schedule and marked up plan indicating areas and components of the work and key dates showing date of disturbance and completion of the work. The contractor shall schedule a pre-construction meeting with the municipal staff. Three (3) copies of the schedule and marked up plan shall be provided to the municipality three days prior to the scheduled pre-construction meeting. Special attention shall be given to the 14-day limit of disturbance in the schedule addressing temporary and permanent vegetation measures.

The following erosion control measures shall be followed by the contractor throughout construction of this project.

B. Construction and Post-Construction Phase

- 1a. Areas undergoing actual construction shall only expose that amount of mineral soil necessary for progressive and efficient construction and shall not exceed 14 days. Areas that will not be completed (covered and/or finish graded) within 14 days of disturbance shall be anchored with temporary erosion control blanket or mulch as directed by the inspecting engineer and as shown on the design plans. If mulch is used, hay or straw mulch shall be applied such that the areas shall be sufficiently covered with mulch to avoid any visible soil exposure. Mulch shall be kept moist to avoid loss due to wind. Erosion control blanket shall be applied in the base of all grassed waterways and in slopes which exceed 15% and any disturbed areas within 100' of wetlands or streams. Areas located within 100' of streams shall be anchored with temporary erosion control within seven (7) days.
- 1b. If disturbed areas do not receive final seeding by September 15th of the year of construction, then all disturbed areas shall be seeded with a winter cover crop of

Rye at the rate of 3 lbs/1,000 S.F. to provide winter protection. Winter seedings shall be covered with mulch such that no soil is visible. Erosion control blankets shall be used in the base of all grassed waterways, on slopes equal to or greater than 15%, and any disturbed areas within 100' of wetlands or streams. Erosion control blankets shall also be applied for additional winter protection along side slopes of grassed waterways and in all areas equal to or greater than 8% slope.

- 1c. During winter conditions, areas that will not be completed (covered and/or finish graded) within seven (7) days of disturbance shall be anchored with temporary erosion control measures within seven (7) days of disturbance. Temporary erosion control shall consist of hay or straw mulch applied to provide a minimum uniform mulch depth of 4" or, if blown, application area shall be sufficiently covered with mulch to avoid any visible soil exposure.
2. All topsoil shall be collected, stockpiled, seeded with Rye at 3 lbs./1,000 S.F. and mulched, and re-used as required. Siltation fencing shall be placed down gradient from stockpiled loam. Loam shall be stockpiled at locations designated by the owner and inspecting engineer.
3. All silt fences shall be installed according to this plan. This shall be maintained during development to remove sediment from runoff water. All the silt fences shall be inspected before and after any rainfall or runoff event, maintained and cleaned until all areas have at least 85%-90% vigorous perennial vegetative cover of grasses.
4. A construction entrance shall be built at the intersection of the existing road and the access drive. Roadway areas shall be periodically swept or washed to avoid tracking of mud, dust or debris from the construction area. Dust control during construction shall be achieved by the use of a watering truck to periodically sprinkle the exposed roadway areas as necessary to reduce dust during the dry months.
5. Stone check dams may be removed only after the roadways are paved and the vegetated swales are established with at least 85%-90% of vigorous perennial growth.
6. All areas shall be seeded and stabilized in accordance with the following vegetation plan.

C. Vegetation Plan

Revegetation measures shall commence immediately upon completion of construction of the roadway improvements. Disturbed areas shall also be mulched and anchored prior to any storm event. See mulching requirements in Section B(1a) above. If final

seeding cannot be accomplished by September 15th, then all disturbed areas shall be seeded with a winter cover crop at the rate of 3 lbs./1,000 S.F. to provide winter protection. Seeded areas shall be covered with erosion control mesh. See winter protection requirements in Section B(1b) above. Revegetation measures shall consist of the following:

1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface. Loam shall be free of subsoil, clay lumps, stones and other objects over 1" in diameter, and without weeds, roots or other objectionable material.
2. Soils tests shall be taken at the time of soil stripping to determine fertilization requirements. Soils test shall be taken promptly as to not interfere with the 14-day limit on soil exposure. Based upon test results, soil amendments shall be incorporated into the soil prior to final seeding. In lieu of soil tests, soil amendments may be applied as follows:

<u>ITEM</u>	<u>APPLICATION RATE</u>
10-20-20 Fertilizer (N-P205-K20 or equal)	18.4 lbs./1,000 S.F.
Ground Limestone (50% Calcium & magnesium oxide)	138 lbs./1,000 S.F.

3. Following seed bed preparation, swale areas, fill areas and back slopes shall be seeded at a rate of 3 lbs./1,000 S.F. with a mixture of 35% Creeping Red Fescue, 6% Red Top, 24% Kentucky Bluegrass, 10% Perennial Ryegrass, 20% Annual Ryegrass and 5% White Dutch Clover.
4. Erosion control mesh shall be applied in accordance with the plans over all finish-seeded areas as specified on the design plans.
5. All hay bale and/or filter fabric barriers will remain in place until seedings have become 85 %-90% established and then removed within 10-days.
6. The inspecting engineer at his/her discretion may require additional erosion control measures and/or supplemental vegetative provisions to maintain stability of earthworks and finish-graded areas. The contractor shall be responsible for providing and installing any supplemental measures as directed by the inspecting engineer. Failure to comply with the engineer's directions will result in discontinuation of construction activities.

D. Construction Schedule

Site improvements will most likely begin in summer of 2003 depending upon final project approval. The following schedule is anticipated for the construction of the roadway improvements.

SCHEDULE

- | | | |
|-------|--|------------------------------|
| 1. | Estimated construction time. | 3 months |
| 2. | Erosion control measures placed | Week 1- Week 2 |
| 3. | Site clearing and grubbing | Week 2 - Week 4 |
| 4. | Construction of parking subbase | Week 4 - Week 6 |
| 5. | Utility improvements and parking construction | Week 6 - Week 12 |
| 6. | Mulch spread for winter erosion control | Oct. 15 of construction year |
| 7. | Start final seedings on prepared areas
(during growth season) | Week 8 |
| 8. | Biweekly monitoring of vegetative growth | Week 10 |
| 9.** | Re-seeding of areas, if needed | Week 10 |
| 10.** | Removal of erosion control devices | Upon final completion |

** Dates are subject to change at the discretion of the engineer, depending on construction progress.


E Inspections/Monitoring

Maintenance measures shall be applied as needed during the entire construction cycle. After each rainfall, the contractor shall perform a visual inspection of all installed erosion control measures. The contractor shall perform repairs as needed to allow continued proper functioning of the erosion control measure. The contractor shall provide the municipality with written documentation describing dates of inspections and necessary follow-up work to maintain erosion control measures meeting the requirements of this plan.

Following the temporary and/or final seedings, the contractor shall inspect the work area semimonthly until the seedings have been established. Established means a minimum of 85%-90% of areas vegetated with vigorous growth. Reseeding shall be carried out by the contractor with follow-up inspections in the event of any failures until vegetation is adequately established.

Prepared by,

SEBAGO TECHNICS, INC.


Gregory J. Boulette
Project Engineer

Shawn M. Frank, PE
Project Manager

GJB/SMF:/gjb/df
April 18, 2003

Figure 6 – Stormwater Management Narrative

STORMWATER RUNOFF EVALUATION

Big Moose Harley-Davidson Riverside Street Portland, Maine

The following Stormwater Management Plan has been prepared for Big Moose Harley-Davidson to evaluate stormwater runoff and erosion control for a proposed 3,050 square foot building expansion in Portland, Maine. The 2.87-acre parcel is located on the east side of Riverside Street. The property is presently developed and is predominately impervious. The topography on site is flat to moderate slopes generally sloping to the rear of the site. One curb cut along Riverside Street will be maintained for access to the site.

Given the size of the building addition in relationship to the size of the overall development, any increase in stormwater runoff will be inconsequential. This project will generate less than 10,000 square feet of new impervious surfaces and, therefore, is not subject to any Department of Environmental Protection permits in regards to stormwater runoff.

Temporary erosion control measures will be required to be implemented during the construction phase of the project as specified on the Erosion & Sedimentation Control Plan provided on the site plans.

Permanent erosion control measures have also been incorporated into the plan for long-term stabilization of the site. These measures will be integrated with the overall site development, which includes limits for disturbance and clearing (see clearing limits on site plans), and a permanent revegetation plan.

GJB:gjb/df
April 18, 2003

City of Portland
 Development Review Application
 Planning Division Transmittal form

Application Number: 2011-310 **Application Date:** 8/1/2011 12:00:00 AM
CBL: 317-B-4
Project Name: Handyman Rental – Warren Avenue Access Drive
Address: 357 Riverside Street

Project Description: Installation of a new driveway to obtain vehicular access from Warren Ave.
Zoning: IM
Other Reviews Required:
Review Type: Level II Preliminary

Distribution List:

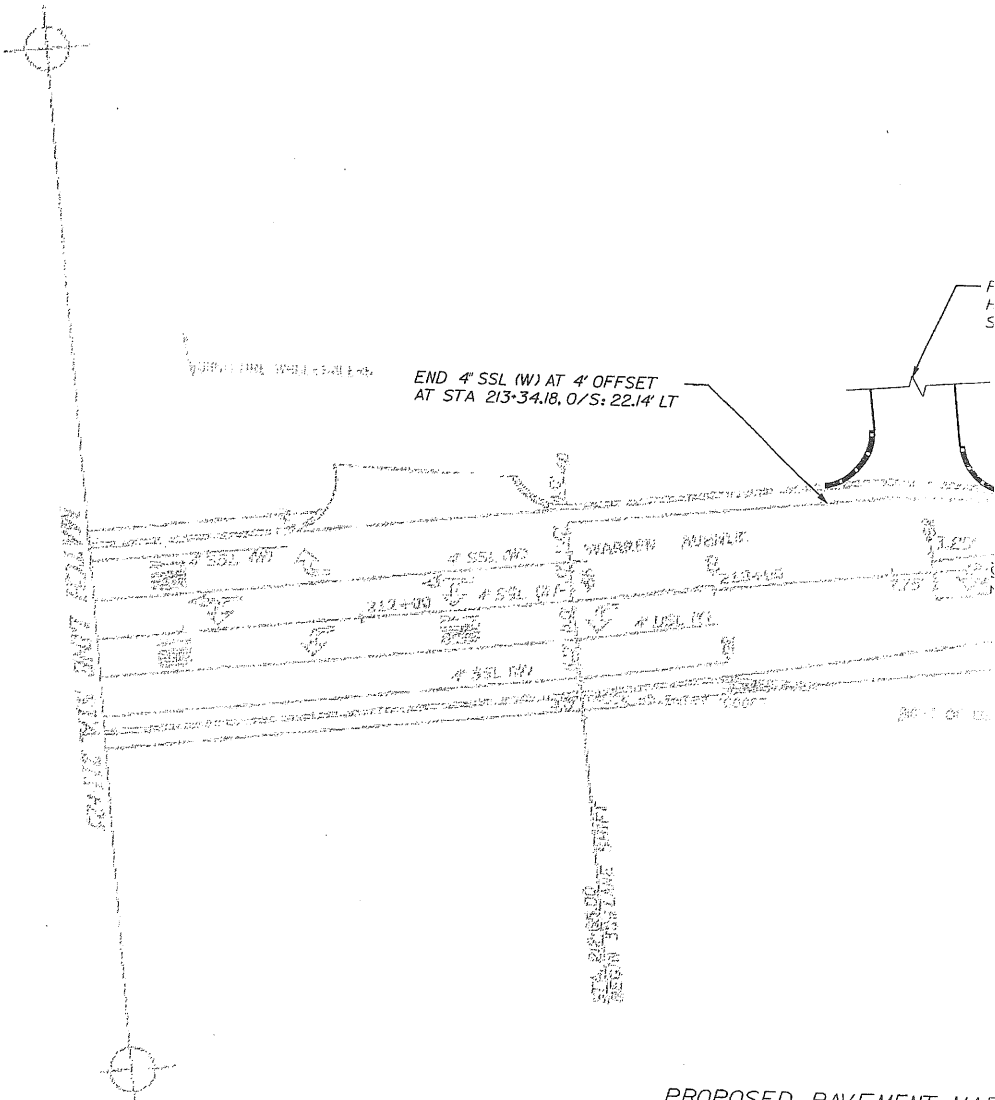
<input checked="" type="checkbox"/> Planner	Jean Fraser	<input type="checkbox"/> Parking	John Peverada
<input type="checkbox"/> Zoning Administrator	Marge Schmuckal	<input type="checkbox"/> Design Review	Alex Jaegerman
<input type="checkbox"/> Traffic	Tom Errico	<input type="checkbox"/> Corporation Counsel	Danielle West-Chuhta
<input type="checkbox"/> Stormwater	David Senus	<input type="checkbox"/> Sanitary Sewer	John Emerson
<input type="checkbox"/> Fire Department	Chris Pirone	<input type="checkbox"/> Inspections	Tammy Munson
<input type="checkbox"/> City Arborist	Jeff Tarling	<input type="checkbox"/> Historic Preservation	Deb Andrews
<input type="checkbox"/> Engineering	David Margolis-Pineo	<input type="checkbox"/> Outside Agency	
		<input type="checkbox"/> DRC Coordinator	Phil DiPierro

Comments needed by: August 10, 2011

KEY TO SIGNS AND PAVEMENT MARKINGS

- R&R- REMOVE AND RESET SIGN
- REM- REMOVE SIGN AND DISPOSED
- RET- RETAIN SIGN IN PLACE
- REL- RELOCATE SIGN
- RESE- RESEAL AND STACK SIGN
- SL- SINGLE SOLID LINE (STOP LINE) - 4"
- SSL- SINGLE SOLID LINE (CONCRETE WORK) - 4"
- SSL- SINGLE SOLID LINE - 4"
- SP- SINGLE PAVEMENT LINE - 4"
- DSL- DOUBLE SOLID LINE - 4"
- WH- WHITE
- Y- YELLOW
- W/S- WHITE LEFT OR RIGHT ARROW
- AW- CROSS WALK - 4"

DRAWN BY: [illegible] CHECKED BY: [illegible] DATE: [illegible]



NOTE:
 BASE PLAN TAKEN FROM
 MDOT PROJECT STP-5136(30)X

PROPOSED PAVEMENT MARKING
 ADJUSTMENTS FOR HANDYMAN ROAD
 9/26/11



Note for file

Handyman Rental.

9.28.11 9:30

Dev Rev Mtg (incl AJ/BB/DM-P/TE)

① Striping - MDOT could do all at no cost
Tom doesn't want done unless sure that
the driveway will be constructed.
JF to get email/letter from applicant con-
firming that they intend to do the
driveway in Spring 2012

② \$6500 Def. Guar. re curb-cut - needs to be paid
now as imminent in MSBP program - MDOT
will hold on this if not paid.

9-28-11 2:00 approx

Jim Seymour returned my call from this am.

I advised him of above.

He was going to speak to applicant (Brad Watson)
this afternoon + follow up with email to me.

(Jim knows I am out of office tomorrow)

A.

Jean Fraser - RE: Reply #2 RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.

From: Jean Fraser
To: Seymour, James
Date: 9/28/2011 4:50 PM
Subject: RE: Reply #2 RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.
CC: Barhydt, Barbara; DiPierro, Philip; Errico, Thomas; Margolis-Pineo, D...

Jim

Just to confirm our telephone conversation of today in case you need to follow up with Barbara when I am out of the office tomorrow.

I understand that you will discuss the following with Brad Watson (applicant) today and get back to us as appropriate:

1. Our request that the Performance Guarantee for the Curb Cut (\$6500) be paid immediately as the MDOT are near to doing that work and will not proceed with it unless the PG is paid; it is my understanding that when the PG for the driveway is posted that this amount can be put toward that;
2. Re striping in Warren Avenue- the MDOT contract includes this and therefore it could be done at no expense to Mr Watson- but we do not want it to be done to address the new curb cut and then find that the driveway is not constructed in the near future (leaving an odd striping pattern there and/or need for it to be redone). We request a letter or e-mail confirming that the driveway construction (per site plan approval) will be completed in the spring of 2012.

Jean

*Jean Fraser, Planner
City of Portland
874 8728*

>>> "James Seymour" <jseymour@sebagotechnics.com> 9/26/2011 11:47 AM >>>

Sorry about that. Lets try this!

Thanks

James R. Seymour P.E.

Sebago Technics Inc

1 Chabot Street,

PO Box 1339

Westbrook, ME 04098-1339

Tel.207 856-0277 ext 277

Fax 207 856-2206

From: Jean Fraser [mailto:JF@portlandmaine.gov]
Sent: Monday, September 26, 2011 11:38 AM
To: James Seymour
Subject: Reply #2 RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.

there was no attachment to this so I can't forwards as of yet.....

>>> "James Seymour" <jseymour@sebagotechnics.com> 9/26/2011 11:03 AM >>>

Here is a copy of the revised pavement marking plan I just got from our Traffic Engineer

Can you forward to Tom or Mike for review?

James R. Seymour P.E.

Sebago Technics Inc

1 Chabot Street,

PO Box 1339

Westbrook, ME 04098-1339

Tel.207 856-0277 ext 277

Fax 207 856-2206

From: Jean Fraser [mailto:JF@portlandmaine.gov]
Sent: Monday, September 26, 2011 10:41 AM
To: James Seymour
Cc: 03375
Subject: Handyman Rental - Cond of App vi Re: FW: Attached image data.

Jim

I am writing with respect to the following:

- Preliminary Site Plan, rev. date September 20, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.
- Response to Review Comments and attachments from James Seymour, dated September 20, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.

These submissions address condition # vi of the 9.19.2011 Approval letter as they meet the requirements of the Basic, General and Flooding Standards and have addressed all of the review comments of the City's Peer Engineer on this project.

At some stage I will need paper copies if this is the final site plan; in the meantime I will circulate the referenced plan to the DRC, DPS and other reviewers and those involved with the MDOT project to assist with the coordination re the curb cut and sidewalk.

Jean

Jean Fraser, Planner
City of Portland
874 8728

>>> "James Seymour" <jseymour@sebagotechnics.com> 9/20/2011 4:01 PM >>>
Jean,

Here are the revised plans and conditions around stormwater design for the Handyman Rental site. I have contacted DEP and am awaiting reply on the amended wetland permit process.

I know Brad has spoken with Peters Construction on building this after they are Done with Warren Ave improvements, but am not sure of any certainty yet.

I will have Steve Sawyer work with the State and Tom on the striping details.

Thanks

James R. Seymour P.E.

Sebago Technics Inc

1 Chabot Street,

PO Box 1339

Westbrook, ME 04098-1339

Tel.207 856-0277 ext 277

Fax 207 856-2206

-----Original Message-----

From: copier@sebagotechnics.com [mailto:copier@sebagotechnics.com]

Sent: Tuesday, September 20, 2011 3:15 PM

To: James Seymour

Subject: Attached image data.

This is image data from the scanner.

MEMORANDUM



TO: Jean Fraser, Planner
FROM: Lauren Swett, P.E.
DATE: September 22, 2011
RE: Handyman Rental – 357 Riverside Street

Woodard & Curran has reviewed the revised Level II Site Plan and stormwater design for the Handyman Rental Warren Avenue access drive project located at 357 Riverside Street in Portland, Maine. The proposed project includes constructing a second driveway access which would connect Warren Avenue to the Handyman Rental site, impacting wetlands and creating new impervious surface.

Documents Provided

- Preliminary Site Plan, rev. date September 20, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.
- Response to Review Comments and attachments from James Seymour, dated September 20, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.

Comments

- The Applicant has met the requirements of the Basic, General, and Flooding Standards and has addressed our previously noted review comments from memos dated 8/12/2011 and 9/15/2011.

Jean Fraser - Handyman curb cut

From: Jean Fraser
To: Farmer, Michael
Date: 10/5/2011 12:20 PM
Subject: Handyman curb cut
CC: Barhydt, Barbara; DiPierro, Philip; Errico, Thomas; Jaegerman, Alex; ...
Attachments: APP LTR Handyman Rental 9.19.2011.pdf; final app. plan set Handyman Rental 03375 9-20-11.pdf

Mike

I am writing to confirm that Mr Watson of Handyman Rental has paid the Performance Guarantee of \$6500 (reference condition ii of the attached approval letter) and that the MDOT contract may proceed with installing the curb cut for Handyman Rental as shown on the approved plans (also attached- dated 9.20.11 as changes were made re drainage).

Phil DiPierro, DRC in Planning Division is the point of contact; Phil will refund the \$6500 when the Performance Guarantee for the rest of the driveway project is received and all other actions re that remaining part of the project are completed (building permits, MDEP permit etc).

Please let me know if you need scaled copies of the approved plans dated 9.20.2011 as only one set was sent to me and I am going to request additional copies.

Jean

*Jean Fraser, Planner
City of Portland
874 8728*

Jean Fraser - RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.

From: Jean Fraser
To: Seymour, James; Watson, Brad
Date: 10/5/2011 12:37 PM
Subject: RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.
CC: 03375@sebagotechnics.com; DiPierro, Philip

Jim and Brad,

I am writing to confirm the receipt of the Curb Cut performance guarantee (\$6500) as referenced in condition ii of the approval letter; I have informed all of those involved with the Warren Ave construction project (including Mike Farmer) that this has been paid and the curb cut installation may proceed.

The final approved plans are as dated 9.20.2011 and please send another 6 copies of the plans at scale (ref. Std Condition 5) so I can stamp them and circulate to other relevant departments.

Please note that the driveway work also needs a building permit via Inspections Division.

Thank you
Jean

Jean Fraser, Planner
City of Portland
874 8728



PORTLAND MAINE

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Planning and Urban Development Department
Penny St. Louis, Director

Planning Division
Alexander Jaegerman, Director

September 19, 2011

Bradford Watson
Watson Realty Company
357 Riverside Street
Portland ME 04103

James Seymour, PE
Sebago Technics, Inc.
1 Chabot Street, PO Box 1339
Westbrook ME 04098

RE: **Handyman Rental - Secondary Access Driveway and Curb Cut on Warren Avenue (between 633 and 659 Warren Avenue)**

**357 Riverside Street
Level II Site Plan
Application ID # 2011-310 (One Solution)**

Dear Mr. Watson and Mr. Seymour,

On September 19, 2011, the Portland Planning Authority approved a Level II site plan for a driveway and associated curb cut onto Warren Avenue, to provide a secondary access for Handyman Rental at 357 Riverside Street, as submitted by Watson Realty Company and shown on the approved site plan prepared by Sebago Technics Inc. Sheet 1 of 3 Rev B 9.13.2011 with the following conditions:

Conditions of Approval

- i. That this approval does not constitute approval of this driveway and associated curb cut for any other potential development/intensification proposals that may take place on the Handyman property; such proposals would require further review regarding the adequacy of this driveway and associated curb cut as it relates to increased traffic volumes and it should not be assumed that the provision and design of the current layout will be maintained in the future. It is likely that any future development/intensification would be required to include a pedestrian connection into the site from Warren Avenue; and
- ii. That this approval does constitute an approval of the installation of the associated curb cut prior to the completion of the driveway (and prior to compliance with subsequent conditions), subject to the applicant posting a Performance Guarantee in the amount of \$6,500.00 prior to the installation of the curb cut (by the MDOT or others) in order to cover the cost of removal of the curb cut in the event the driveway connection to the existing Handyman Rental is not completed within one (1) year of the date of this approval or such other date as approved by the planning authority in advance of the expiration of the aforementioned one (1) year deadline. This Performance Guarantee may be combined with the Performance Guarantee related to the driveway (see Standard Condition 5); and

- iii. That the applicant shall submit copies of a Tier 1 NRPA permit, that confirms MDEP approval to the revised plans as approved by this letter, prior to the issuance of a building permit for the driveway; and
- iv. That the applicant shall submit a pavement marking and signage plan for Warren Avenue in the vicinity of the driveway project, for review and approval prior to the issuance of a building permit for the driveway. Following approval of the pavement marking and signage plans, the applicant shall be responsible for implementation of all approved new pavement marking and signage (and removal of existing where approved) to be completed prior to the driveway being used for vehicle access/egress; and
- v. That the applicant shall provide an Inspection and Maintenance Plan for the wetpond, in accordance with the requirements of Maine DEP Chapter 500 and Chapter 32 of the City of Portland Code of Ordinances, prior to the issuance of a building permit for the driveway; and
- vi. That the applicant shall submit revised plans and associated information as outlined in the attached Woodard and Curran Memo dated September, 15, 2011, for review and approval prior to the issuance of a building permit for the driveway; and
- vii. That the applicant shall install gates (similar to those at the neighboring property at 633 Warren Avenue) at the Warren Avenue end of the driveway prior to the driveway being used for vehicle access/egress, and to be closed when the driveway is not operational as outlined in the application submission; and
- viii. That the applicant is required under the City's ordinance to provide sidewalk and curbing along the entire frontage of the property; as some of this will have been completed prior to construction of the driveway, the applicant is required to pave the sidewalk along the frontage of Warren Avenue between Handyman's proposed drive cut and the drive of the abutting property drive cut to the East. The City will be responsible for paving the sidewalk between the Rug Depot drive cut and the proposed drive cut for Handyman Rental; all sidewalk along the site frontage to be completed prior to the use of the driveway for vehicle access/egress; and
- ix. That this approval does not constitute an approval to any existing or future signs on the proposal site, which will instead require separate sign permits in accordance with the City of Portland Land Use Ordinance.

The approval is based on the submitted site plan and waivers of the site plan traffic standards as outlined in the Traffic Engineer Reviewer comments dated September 16, 2011 (attached).

If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

Standard Conditions:

1. The site shall be developed and maintained as depicted in the site plan and the written submission of the applicant. Modification of any approved site plan or alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or the Planning Authority pursuant to the terms of Chapter 14 of the Portland City Code.
2. The above approvals do not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Inspection Division.
3. Final sets of plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

4. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.
5. A performance guarantee covering the site improvements (driveway) as well as an inspection fee payment of 2.0% of the guarantee amount and seven (7) final sets of plans must be submitted to and approved by the Planning Division and Public Services Dept. prior to the release of a building permit or certificate of occupancy for the driveway site plans. If you need to make any modifications to the approved plans, you must submit a revised site plan application for staff review and approval.
6. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
7. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Service's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
8. The applicant and all assigns must comply with the conditions of Chapter 32 Storm Water including Article III Post Construction Storm Water Management, which specifies the annual inspections and reporting requirements. The developer/contractor/subcontractor must comply with conditions of the construction storm water management plan and sediment and erosion control plan based on the City of Portland standards and state guidelines.
9. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site when the MDOT contract is completed along this frontage. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.) Please note that that Warren Avenue will be a moratorium street when the current MDOT contract is completed and there are likely to be additional costs and fees associated with any work in the street.
10. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to the release of the performance guarantee. Please schedule any property closing with these requirements in mind.

As stated in section 14-529 of the Site Plan Ordinance, any person aggrieved may appeal this decision to the planning board within thirty (30) days of the date of the written decision of the planning authority. Upon the taking of such an appeal, the application shall be reviewed as a new application.

If there are any questions, please contact Jean Fraser at 874- 8728.

Sincerely,



Alexander Jaegerman
Planning Division Director

Attachments:

1. Peer Engineering Review comments 9.15.2011
2. Traffic Review comments 9.16.2011
3. Performance Guarantee Packet

Electronic Distribution:

Penny St. Louis, Director of Planning and Urban Development
Barbara Barhydt, Development Review Services Manager
Jean Fraser, Planner
Philip DiPierro, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections Division Director
Gayle Guertin, Inspections Division
Lisa Danforth, Inspections Division
Lannie Dobson, Inspections Division
Chris Pirone, Fire Department
Michael Bobinsky, Public Services Director

Kathi Earley, Public Services
Bill Clark, Public Services
David Margolis-Pineo, Deputy City Engineer
Matt Doughty, Public Services
John Low, Public Services
Jane Ward, Public Services
Jeff Tarling, City Arborist
Tom Errico, Traffic Engineering Reviewer
David Senus, Woodard & Curran
Assessor's Office
Approval Letter File

Hard Copy: Project File

Attachment 1

**COMMITMENT & INTEGRITY
DRIVE RESULTS**

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

MEMORANDUM



TO: Jean Fraser, Planner
FROM: Lauren Swett, P.E. & David Senus, P.E.
DATE: September 15, 2011
RE: Handyman Rental – 357 Riverside Street

Woodard & Curran has reviewed the revised Level II Site Plan and stormwater design for the Handyman Rental Warren Avenue access drive project located at 357 Riverside Street in Portland, Maine. The proposed project includes constructing a second driveway access which would connect Warren Avenue to the Handyman Rental store, impacting wetlands and creating new impervious surface.

Documents Provided

- Preliminary Site Plan, rev. date September 13, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.
- Letter and Proposed Stormwater Management Summary from James Seymour, dated September 13, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.

Comments

Stormwater:

- *Basic Standards:* The Applicant has submitted an erosion control plan in general conformance with the Basic Standards. In addition to the erosion control measures identified on the plan, a detail and location for a stabilized construction exit should be included on the plans.
- *General Standards:* The Applicant has designed a wet pond for the treatment of stormwater runoff generated from the proposed access drive. We have reviewed the wet pond for conformance with Chapter 4 of the Maine DEP BMPs Technical Design Manual. We have the following comments with regard to the design:
 - The HydroCAD model for the pond does not model the gravel trench/underdrain outlet. This outlet is the primary outlet for the wet pond. The model only includes the spillway outlet. The HydroCAD model should be modified to account for all outlets.
 - The gravel trench/underdrain outlet for the pond must be designed to provide 24-36 hour detention time for the channel protection volume. The Applicant should provide verification that this detention time will be achieved.
 - The Applicant should provide an Inspection and Maintenance plan in accordance with the requirements of Maine DEP Chapter 500 and Chapter 32 of the City of Portland Code of Ordinances.
 - The Applicant has shown a chain link fence crossing the proposed drainage swale inlet to the wet pond. Please clarify how this fence will be installed. Will the base of the fence follow the change in grade, or will there be an opening under the fence at the swale?
- *Flooding Standard:* The applicant has requested a waiver of the Flooding Standards for the 25-year storm. The post-development flows in the 25-year storm are 0.2 cfs higher than the pre-development flows. We would support a waiver for this level of increased flow; however, changes in the model to account for the gravel trench outlet should be submitted for consideration.
- *Urban Impaired Stream Standard:* The project site is located within the watershed of the Presumpscot River, which is not classified as an urban impaired stream. The project is not required to meet the Urban Impaired Stream Standard.

General:

- The proposed access driveway will cross an existing culvert at approximately STA 4+55. This culvert has been modeled in both the pre- and post-development HydroCAD models. The plans should note the size, material, and inlet / outlet invert elevations of this existing culvert, and the Applicant should provide an assessment of the condition of the culvert.
- The Applicant has stated that a Tier 1 Natural Resource Protection Act (NRPA) Permit was previously received for the project's original proposed wetland impacts. The project design has changed since the original permit was approved, and the Applicant has stated that updated plans are being provided to the regulatory agencies. Start of construction should be conditional upon receipt of approval of the revised design from the review agencies.

Attachment 2

From: Tom Errico <thomas.errico@tylin.com>
To: Jean Fraser <JF@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Jean Fraser <JF@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>
Date: 9/16/2011 10:12 AM
Subject: **Handyman Rental - Warren Avenue**

Jean - I have reviewed the plans submitted by Sebago Technics, Inc. as it relates to providing a new driveway curb cut on Warren Avenue opposite the existing Home Depot Driveway. I find the location of the driveway to be acceptable with the following comments.

- * The applicant should submit a pavement marking and signage plan for Warren Avenue in the vicinity of the project for review and approval. Following approval of plans, the applicant will be responsible for implementation of all changes.
- * It should be noted that approval of this driveway does not constitute approval of this driveway for any potential development intensification proposals that may take place on the Handyman property. Future review of the adequacy of this driveway as it relates to increased traffic volumes will be required and it should not be assumed that the provision and design of the current layout will be maintained in the future. I would note that with future development plans, a pedestrian connection into the site from Warren Avenue will likely be required.
- * I support a waiver from our technical standards relative to driveway separation along Warren Avenue. This is based upon the following:
 - o According to information provided by the applicant, Warren Avenue is not classified as a High Crash Location as defined by MaineDOT. Accordingly, Warren Avenue in the vicinity of the proposed driveway does not appear to be safety deficient.
 - o Traffic volumes entering and exiting driveways on the same side as the proposed driveway are low. Twenty-one vehicles entered and exited the Rug Depot driveway during the PM peak hour, while 9 vehicles entered and exited the Paper Party Store driveway during the PM peak hour. Higher traffic volumes entered and exited the Home Depot Drive, which supports the desire to align the proposed driveway with the Home Depot Driveway.
 - o Traffic entering and exiting the existing Handyman development off Riverside Street is very low. During the PM peak hour only 9 vehicles entered and exited the site.
 - o The Handyman driveway entrance on Riverside Street is a difficult location for making left-turn movements due to heavy traffic volumes, high travel speeds, and limited visibility. It is my opinion that a secondary access location will improve area-wide safety.
- * Sidewalk and curbing should be provided along the entire frontage of the subject property on Warren Avenue. DPS engineering staff has provided guidance on the design of the proposed driveway, which I find acceptable.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
 Senior Associate
 Traffic Engineering Director
 T.Y. Lin International
 12 Northbrook Drive
 Falmouth, ME 04105
 207.347.4354 direct
 207.400.0719 mobile
 207.781.4753 fax

O:\PLAN\Dev Rev\Riverside 357 (Handyman Rental)\Correspondence\final APP LTR 9.19.2011 357 Riverside re Warren drive.doc

Jean Fraser - Handyman Rental- approved Insp & Main Plan

From: Jean Fraser
To: DiPierro, Philip
Date: 10/28/2011 1:15 PM
Subject: Handyman Rental- approved Insp & Main Plan
Attachments: Approved Insp & Main Plan re cond v. re'd Spt 2011.pdf

Phil

Brad is correct- it was submitted at the end of the package dated Sept 20, 2011 and was reviewed as acceptable by David Senus of Woodard & Curran on Sept 22, 2011- so condition v is met. Copy attached.

Please extend my apologies to Brad for not realizing it was there.

Jean

September 20, 2011
03375

Jean Fraser, Planner
City of Portland
389 Congress Street
Portland, Maine 04101

Response to Review Comments
Handyman Rental - Warren Avenue Access Road
357 Riverside Street, Portland, Maine

Dear Jean:

We have received review comments relating to the proposed Handyman Rental - Warren Avenue Access Road from Woodard and Curran dated September 15, 2011. We have revised our plans, calculations and details, which are included for consideration. The following is an outline of the significant changes and items of clarification requested in the review comments.

1. The Site Plan has been revised to show the location of the stabilized construction entrance and the addition of the associated detail.
2. The HydroCAD model has been updated to include the effects of the gravel trench in the proposed wet pond. As a result of the revision, the peak rates of runoff in the developed condition will be less than the pre-developed condition in all storm events.
3. With the gravel bench modeled in the HydroCAD, the calculated detention time in the wet pond was approximately 26 hours which is in the range of the design requirement of 24 to 36 hours. This request is somewhat unusual as our experience with the Maine Department of Environmental Protection is, if we design to their criteria, we meet their standards. The pond is relatively small, so the gravel bench is a very limited area, but we have attempted to model the infiltration with a rate similar to gravel soil permeability. Regardless, the increase to the overall discharge is nearly negligible. The revised HydroCAD model output is attached to this submission.
4. An Inspection, Maintenance and Housekeeping Plan is provided for the project site.
5. To clarify the concerns of the third party engineers, the chain-link fence will be installed such that there will be a clear opening under the fence.
6. The Site Plan has been revised to indicate the pipe size and inverts of the culverts to the north of the site which are included in the HydroCAD model.

We look forward to hearing from you as soon as possible. If you have any questions or require any additional information, do not hesitate to contact me.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in cursive script, appearing to read "James R. Seymour".

James R. Seymour, P.E.
Senior Project Manager

JRS:kn
Att.

Flow Through Gravel Bench

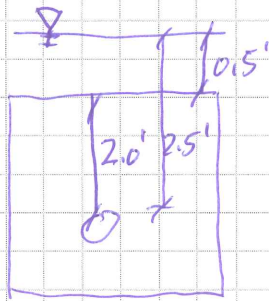
$$Q = K i A$$

$K =$ From Text Book

$$\text{Gravel} = 10^{-1} \text{ cm/s} \rightarrow 10^{-2} \text{ cm/s}$$

$$\text{Use Average} = 0.05 \text{ cm/s} = \underline{0.0016 \text{ ft/s}}$$

$$i = \frac{\Delta h}{\Delta x}$$

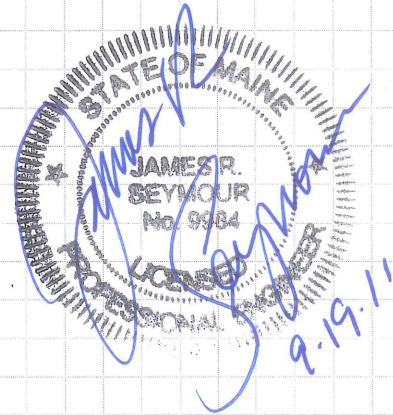


$$i = \frac{2.5}{2.0} = 1.25$$

$$A = 4' \times 10' = \underline{40 \text{ ft}^2}$$

$$Q = 0.0016 \text{ ft/s} \times 1.25 \times 40 \text{ ft}^2$$

$$\therefore Q = 0.08 \text{ cfs}$$



STORMWATER COLLECTION SYSTEMS DESIGN HANDBOOK

Larry W. Mays Editor in Chief

*Department of Civil and Environmental Engineering
Arizona State University
Tempe, Arizona*

McGRAW-HILL

New York Chicago San Francisco Lisbon London Madrid
Mexico City Milan New Delhi San Juan Seoul
Singapore Sydney Toronto



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TABLE 9.2 Permeability Coefficients (Hydraulic Conductivity) for Various Porous Media

Material	Hydraulic conductivity, K , (cm/sec)
Gravel	10^{-1} to 10^{-2}
Sand	10^{-5} to 1.0
Silt/loam	10^{-7} to 10^{-3}
Clay	10^{-9} to 10^{-5}

pores. A constant standing water pool implies possible clogging due to sediment yields from the catchment. It is necessary to check the soil erosion controls in the catchment. To warrant the functional integrity of an infiltration device requires adequate maintenance and backwash of the filtering layers.

The quantity of water that can infiltrate into the soil depends on the soil storage volume in terms of the soil porosity, and the conveyance capacity in terms of the subsurface hydraulic gradient and conductivity. *Darcy's Law* describes a steady laminar flow through saturated soil medium as:

$$q = KiA \quad (9.1)$$

where i = hydraulic gradient
 q = rate of flow through the cross-sectional area A
 i = hydraulic gradient
 K = hydraulic conductivity

The *permeability* is also called *hydraulic conductivity* which is a soil property to reflect how fast the water can flow through the soil. Permeability coefficients are listed in Table 9.2 for various porous media.

The flow pattern of infiltrating water through the bottom of an infiltration basin can be described by a flownet which consists of stream lines and equipotential lines. Stream lines are defined as the lines tangent to the velocity vectors throughout the flow field, and equipotential lines depict the equal potential in the flow field. The stream lines have to cross the equipotential lines at right angles. *Hydraulic gradient* is defined as the energy or head loss per unit length along the flow path. The hydraulic gradient between any two adjacent equipotential lines is computed by the difference of potential heads divided by the distance traversed as:

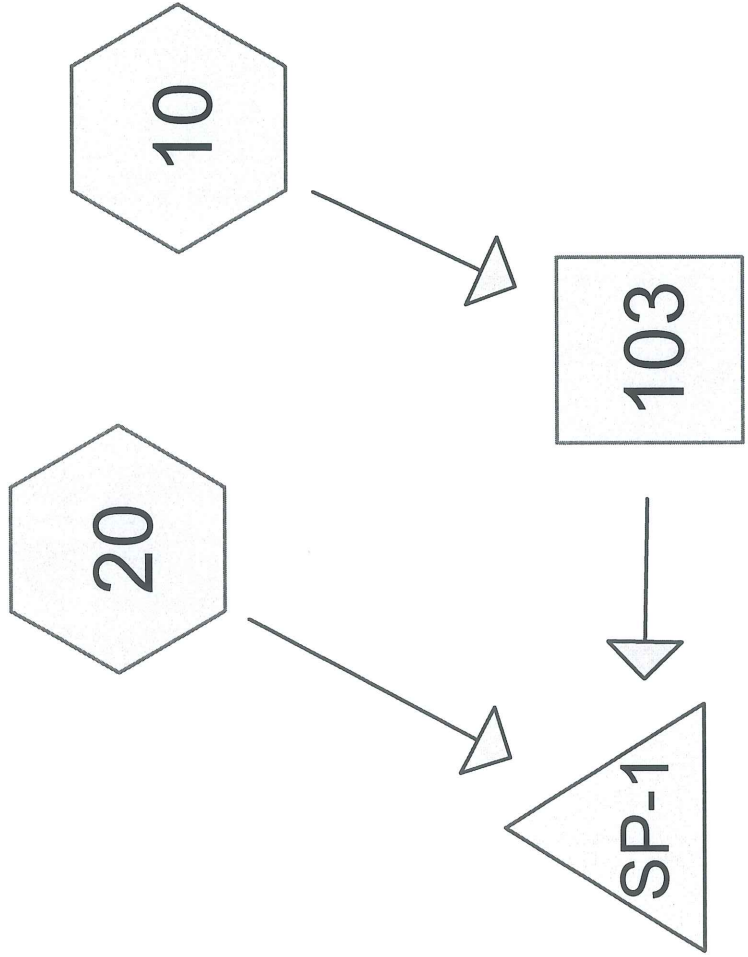
$$i = \frac{\Delta h}{\Delta x} \quad (9.2)$$

in which Δh = energy loss, and Δx = distance traveled. The impacts of the infiltrating water on the groundwater table can be studied by the flownet which requires the prior knowledge of soil infiltration and seepage rates.

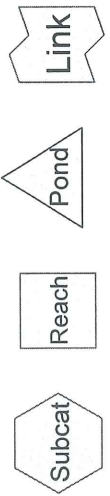
Among the aforementioned infiltration devices, this chapter focuses on the design of infiltration basins.

9.3 DESIGN STORAGE VOLUME

An infiltration basin can be designed as a *flood detention basin* for peak flow attenuation purposes, or a *water quality control basin* for water quality enhancement purposes. A flood

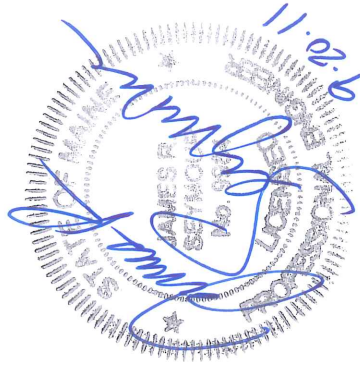


STUDY POINT 1



Drainage Diagram for 03375-PRE

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FOR HYDROCAD CALC'S

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 10:

Runoff Area=3.290 ac 3.04% Impervious Runoff Depth>1.14"
Flow Length=612' Tc=35.5 min CN=80 Runoff=2.47 cfs 0.312 af

Subcatchment 20:

Runoff Area=0.260 ac 19.23% Impervious Runoff Depth>1.55"
Tc=6.0 min CN=86 Runoff=0.50 cfs 0.034 af

Reach 103:

Avg. Depth=0.42' Max Vel=6.01 fps Inflow=2.47 cfs 0.312 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/' Capacity=14.13 cfs Outflow=2.47 cfs 0.312 af

Pond SP-1: STUDY POINT 1

Inflow=2.59 cfs 0.346 af
Primary=2.59 cfs 0.346 af

Summary for Subcatchment 10:

Runoff = 2.47 cfs @ 12.51 hrs, Volume= 0.312 af, Depth> 1.14"

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=3.00"

Area (ac)	CN	Description
* 0.100	98	Buildings and Parking
0.340	91	Gravel roads, HSG D
2.850	78	Meadow, non-grazed, HSG D
3.290	80	Weighted Average
3.190		Pervious Area
0.100		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.0	150	0.0060	0.08		Sheet Flow, SHEET A TO B Grass: Dense n= 0.240 P2= 3.00"
2.0	379	0.0060	3.17	348.79	Trap/Vee/Rect Channel Flow, CHANNEL B TO C Bot.W=15.00' D=2.00' Z= 20.0 ' /' Top.W=95.00' n= 0.040
0.1	21	0.0100	6.44	11.38	Circular Channel (pipe), PIPE C TO D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
0.4	62	0.0042	2.64	47.57	Trap/Vee/Rect Channel Flow, CHANNEL D TO E Bot.W=3.00' D=2.00' Z= 3.0 ' /' Top.W=15.00' n= 0.040
35.5	612	Total			

Summary for Subcatchment 20:

Runoff = 0.50 cfs @ 12.09 hrs, Volume= 0.034 af, Depth> 1.55"

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=3.00"

Area (ac)	CN	Description
* 0.050	98	Parking and Building
0.090	91	Gravel roads, HSG D
0.120	78	Meadow, non-grazed, HSG D
0.260	86	Weighted Average
0.210		Pervious Area
0.050		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

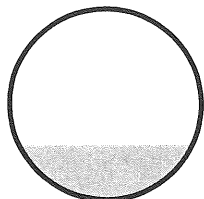
Summary for Reach 103:

Inflow Area = 3.290 ac, 3.04% Impervious, Inflow Depth > 1.14" for 2-YEAR event
Inflow = 2.47 cfs @ 12.51 hrs, Volume= 0.312 af
Outflow = 2.47 cfs @ 12.52 hrs, Volume= 0.312 af, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 6.01 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 2.96 fps, Avg. Travel Time= 0.3 min

Peak Storage= 20 cf @ 12.52 hrs, Average Depth at Peak Storage= 0.42'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 14.13 cfs

18.0" Diameter Pipe, n= 0.012
Length= 48.0' Slope= 0.0154 '/'
Inlet Invert= 42.82', Outlet Invert= 42.08'



Summary for Pond SP-1: STUDY POINT 1

Inflow Area = 3.550 ac, 4.23% Impervious, Inflow Depth > 1.17" for 2-YEAR event
Inflow = 2.59 cfs @ 12.50 hrs, Volume= 0.346 af
Primary = 2.59 cfs @ 12.50 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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 10: Runoff Area=3.290 ac 3.04% Impervious Runoff Depth>2.43"
Flow Length=612' Tc=35.5 min CN=80 Runoff=5.30 cfs 0.667 af

Subcatchment 20: Runoff Area=0.260 ac 19.23% Impervious Runoff Depth>3.00"
Tc=6.0 min CN=86 Runoff=0.94 cfs 0.065 af

Reach 103: Avg. Depth=0.64' Max Vel=7.42 fps Inflow=5.30 cfs 0.667 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=5.30 cfs 0.667 af

Pond SP-1: STUDY POINT 1 Inflow=5.52 cfs 0.731 af
Primary=5.52 cfs 0.731 af

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 10:

Runoff Area=3.290 ac 3.04% Impervious Runoff Depth>3.09"
Flow Length=612' Tc=35.5 min CN=80 Runoff=6.71 cfs 0.847 af

Subcatchment 20:

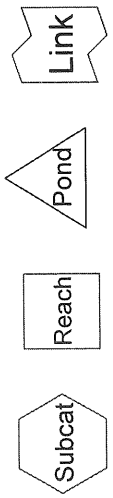
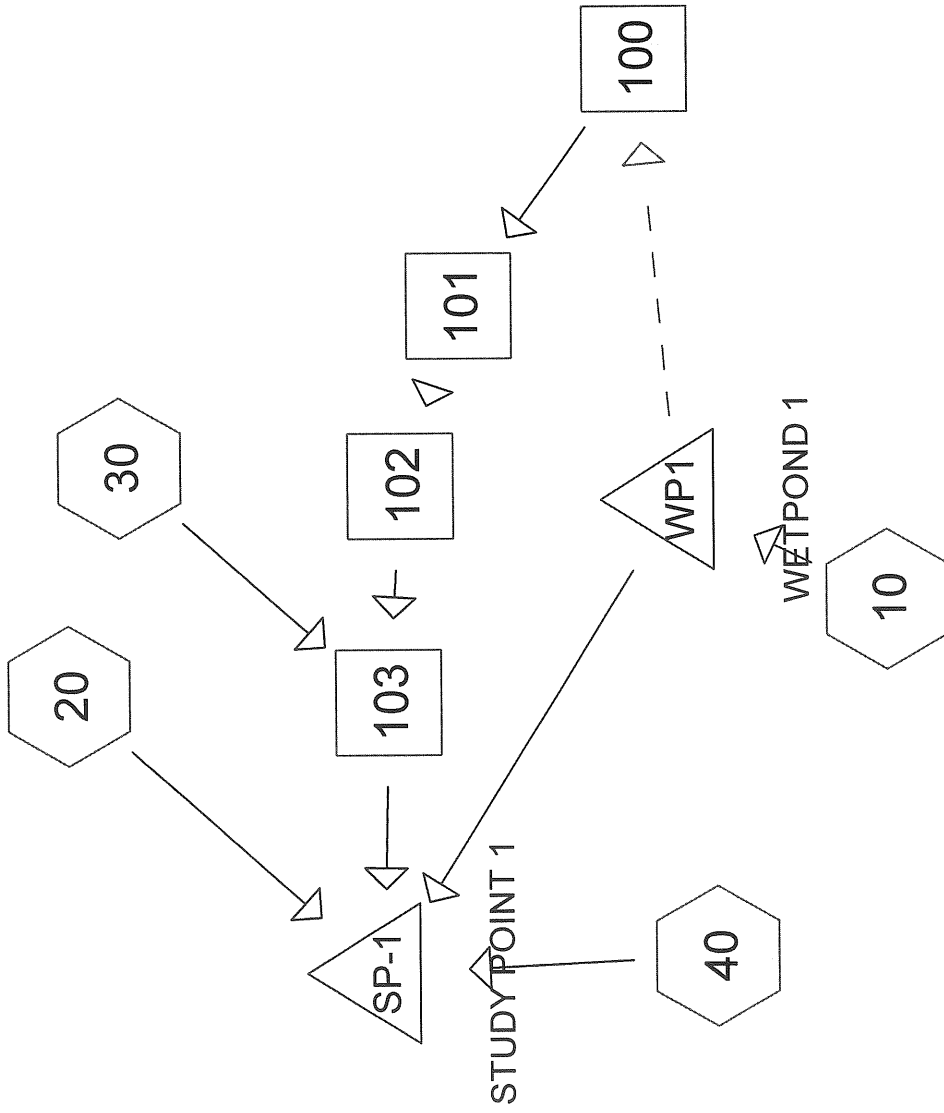
Runoff Area=0.260 ac 19.23% Impervious Runoff Depth>3.71"
Tc=6.0 min CN=86 Runoff=1.15 cfs 0.080 af

Reach 103:

Avg. Depth=0.73' Max Vel=7.89 fps Inflow=6.71 cfs 0.847 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/' Capacity=14.13 cfs Outflow=6.71 cfs 0.847 af

Pond SP-1: STUDY POINT 1

Inflow=6.98 cfs 0.927 af
Primary=6.98 cfs 0.927 af



Drainage Diagram for 03375-POST

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Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10: Runoff Area=20,480 sf 46.88% Impervious Runoff Depth=2.16"
Tc=6.0 min CN=92 Runoff=1.14 cfs 0.085 af

Subcatchment 20: Runoff Area=0.144 ac 65.28% Impervious Runoff Depth=2.55"
Tc=6.0 min CN=96 Runoff=0.39 cfs 0.031 af

Subcatchment 30: Runoff Area=2.856 ac 4.10% Impervious Runoff Depth=1.25"
Flow Length=566' Tc=35.3 min CN=80 Runoff=2.15 cfs 0.298 af

Subcatchment 40: Runoff Area=0.080 ac 0.00% Impervious Runoff Depth=1.13"
Tc=6.0 min CN=78 Runoff=0.10 cfs 0.008 af

Reach 100: Avg. Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.040 L=332.0' S=0.0060 '/ Capacity=348.62 cfs Outflow=0.00 cfs 0.000 af

Reach 101: Avg. Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
D=18.0" n=0.012 L=21.0' S=0.0105 '/ Capacity=11.65 cfs Outflow=0.00 cfs 0.000 af

Reach 102: Avg. Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.040 L=62.0' S=0.0042 '/ Capacity=47.54 cfs Outflow=0.00 cfs 0.000 af

Reach 103: Avg. Depth=0.40' Max Vel=5.77 fps Inflow=2.15 cfs 0.298 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=2.15 cfs 0.298 af

Pond SP-1: STUDY POINT 1 Inflow=2.34 cfs 0.420 af
Primary=2.34 cfs 0.420 af

Pond WP1: WETPOND 1 Peak Elev=46.80' Storage=1,614 cf Inflow=1.14 cfs 0.085 af
Primary=0.08 cfs 0.085 af Secondary=0.00 cfs 0.000 af Outflow=0.08 cfs 0.085 af

Summary for Subcatchment 10:

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.085 af, Depth= 2.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
* 9,600	98	Paved Road
7,119	80	>75% Grass cover, Good, HSG D
3,761	98	Water Surface, 0% imp
20,480	92	Weighted Average
10,880		Pervious Area
9,600		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

Summary for Subcatchment 20:

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 2.55"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-YEAR Rainfall=3.00"

Area (ac)	CN	Description
* 0.044	98	Paved Road
* 0.050	98	Existing Building and Parking
0.050	91	Gravel roads, HSG D
0.144	96	Weighted Average
0.050		Pervious Area
0.094		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

Summary for Subcatchment 30:

Runoff = 2.15 cfs @ 12.51 hrs, Volume= 0.298 af, Depth= 1.25"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-YEAR Rainfall=3.00"

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Type III 24-hr 2-YEAR Rainfall=3.00"

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Area (ac)	CN	Description
* 0.017	98	NEW ROAD
* 0.100	98	Buildings and Parking
0.340	91	Gravel roads, HSG D
2.399	78	Meadow, non-grazed, HSG D
2.856	80	Weighted Average
2.739		Pervious Area
0.117		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.0	150	0.0060	0.08		Sheet Flow, SHEET A TO B Grass: Dense n= 0.240 P2= 3.00"
1.8	333	0.0060	3.17	348.79	Trap/Vee/Rect Channel Flow, CHANNEL B TO C Bot.W=15.00' D=2.00' Z= 20.0 ' /' Top.W=95.00' n= 0.040
0.1	21	0.0100	6.44	11.38	Circular Channel (pipe), PIPE C TO D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
0.4	62	0.0042	2.64	47.57	Trap/Vee/Rect Channel Flow, CHANNEL D TO E Bot.W=3.00' D=2.00' Z= 3.0 ' /' Top.W=15.00' n= 0.040
35.3	566	Total			

Summary for Subcatchment 40:

Runoff = 0.10 cfs @ 12.10 hrs, Volume= 0.008 af, Depth= 1.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (ac)	CN	Description
0.080	78	Meadow, non-grazed, HSG D
0.080		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

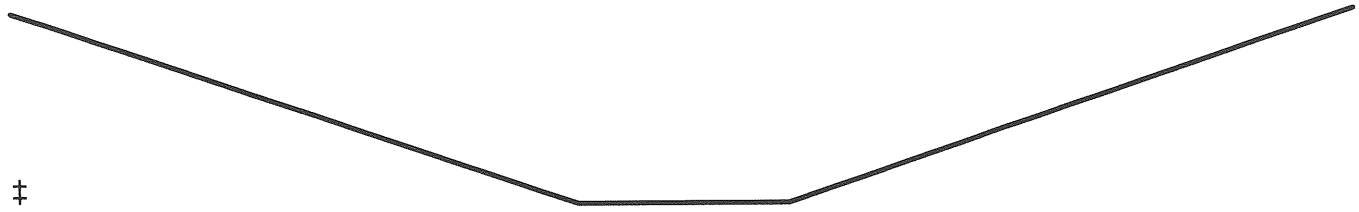
Summary for Reach 100:

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs, Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 2.00', Capacity at Bank-Full= 348.62 cfs

15.00' x 2.00' deep channel, n= 0.040
Side Slope Z-value= 20.0 ' / ' Top Width= 95.00'
Length= 332.0' Slope= 0.0060 ' / '
Inlet Invert= 0.00', Outlet Invert= -1.99'



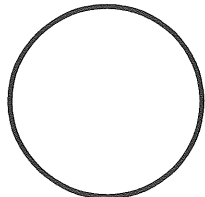
Summary for Reach 101:

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs, Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 11.65 cfs

18.0" Diameter Pipe, n= 0.012
Length= 21.0' Slope= 0.0105 ' / '
Inlet Invert= 43.08', Outlet Invert= 42.86'



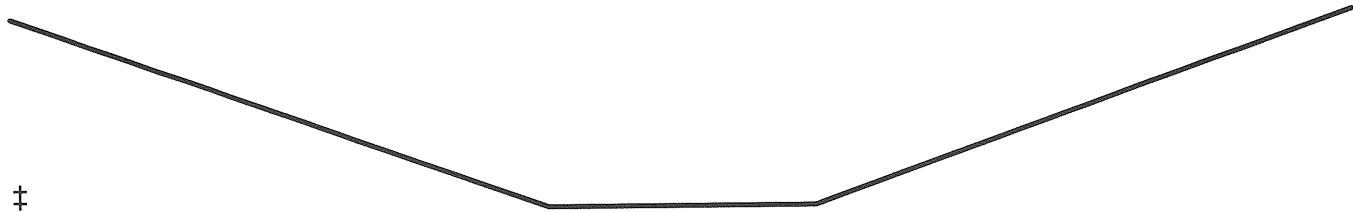
Summary for Reach 102:

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs, Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 2.00', Capacity at Bank-Full= 47.54 cfs

3.00' x 2.00' deep channel, n= 0.040
Side Slope Z-value= 3.0 ' / ' Top Width= 15.00'
Length= 62.0' Slope= 0.0042 ' / '
Inlet Invert= 43.08', Outlet Invert= 42.82'



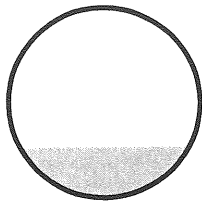
Summary for Reach 103:

Inflow Area = 2.856 ac, 4.10% Impervious, Inflow Depth = 1.25" for 2-YEAR event
 Inflow = 2.15 cfs @ 12.51 hrs, Volume= 0.298 af
 Outflow = 2.15 cfs @ 12.52 hrs, Volume= 0.298 af, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
 Max. Velocity= 5.77 fps, Min. Travel Time= 0.1 min
 Avg. Velocity = 2.47 fps, Avg. Travel Time= 0.3 min

Peak Storage= 18 cf @ 12.51 hrs, Average Depth at Peak Storage= 0.40'
 Bank-Full Depth= 1.50', Capacity at Bank-Full= 14.13 cfs

18.0" Diameter Pipe, n= 0.012
 Length= 48.0' Slope= 0.0154 '/'
 Inlet Invert= 42.82', Outlet Invert= 42.08'



Summary for Pond SP-1: STUDY POINT 1

Inflow Area = 3.550 ac, 12.15% Impervious, Inflow Depth = 1.42" for 2-YEAR event
 Inflow = 2.34 cfs @ 12.50 hrs, Volume= 0.420 af
 Primary = 2.34 cfs @ 12.50 hrs, Volume= 0.420 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs

Summary for Pond WP1: WETPOND 1

Inflow Area = 0.470 ac, 46.88% Impervious, Inflow Depth = 2.16" for 2-YEAR event
 Inflow = 1.14 cfs @ 12.09 hrs, Volume= 0.085 af
 Outflow = 0.08 cfs @ 11.45 hrs, Volume= 0.085 af, Atten= 93%, Lag= 0.0 min
 Primary = 0.08 cfs @ 11.45 hrs, Volume= 0.085 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs

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Type III 24-hr 2-YEAR Rainfall=3.00"

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Peak Elev= 46.80' @ 13.58 hrs Surf.Area= 5,452 sf Storage= 1,614 cf

Plug-Flow detention time= 179.7 min calculated for 0.085 af (100% of inflow)

Center-of-Mass det. time= 179.6 min (979.7 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	46.50'	8,767 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.50	5,176	0	0
47.00	5,631	2,702	2,702
48.00	6,500	6,066	8,767

Device	Routing	Invert	Outlet Devices
#1	Secondary	47.00'	15.0' long x 6.0' breadth Emergency Spillway Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83
#2	Primary	46.50'	0.08 cfs Flow Through Trench when above invert

Primary OutFlow Max=0.08 cfs @ 11.45 hrs HW=46.52' (Free Discharge)

↳2=Flow Through Trench (Exfiltration Controls 0.08 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=46.50' (Free Discharge)

↳1=Emergency Spillway (Controls 0.00 cfs)

Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

- Subcatchment 10: Runoff Area=20,480 sf 46.88% Impervious Runoff Depth=3.80"
Tc=6.0 min CN=92 Runoff=1.95 cfs 0.149 af
- Subcatchment 20: Runoff Area=0.144 ac 65.28% Impervious Runoff Depth=4.23"
Tc=6.0 min CN=96 Runoff=0.63 cfs 0.051 af
- Subcatchment 30: Runoff Area=2.856 ac 4.10% Impervious Runoff Depth=2.63"
Flow Length=566' Tc=35.3 min CN=80 Runoff=4.61 cfs 0.627 af
- Subcatchment 40: Runoff Area=0.080 ac 0.00% Impervious Runoff Depth=2.46"
Tc=6.0 min CN=78 Runoff=0.23 cfs 0.016 af
- Reach 100: Avg. Depth=0.03' Max Vel=0.29 fps Inflow=0.20 cfs 0.016 af
n=0.040 L=332.0' S=0.0060 '/ Capacity=348.62 cfs Outflow=0.14 cfs 0.016 af
- Reach 101: Avg. Depth=0.11' Max Vel=2.23 fps Inflow=0.14 cfs 0.016 af
D=18.0" n=0.012 L=21.0' S=0.0105 '/ Capacity=11.65 cfs Outflow=0.14 cfs 0.016 af
- Reach 102: Avg. Depth=0.09' Max Vel=0.46 fps Inflow=0.14 cfs 0.016 af
n=0.040 L=62.0' S=0.0042 '/ Capacity=47.54 cfs Outflow=0.14 cfs 0.016 af
- Reach 103: Avg. Depth=0.59' Max Vel=7.15 fps Inflow=4.61 cfs 0.643 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=4.61 cfs 0.643 af
- Pond SP-1: STUDY POINT 1 Inflow=4.89 cfs 0.843 af
Primary=4.89 cfs 0.843 af
- Pond WP1: WETPOND 1 Peak Elev=47.03' Storage=2,878 cf Inflow=1.95 cfs 0.149 af
Primary=0.08 cfs 0.132 af Secondary=0.20 cfs 0.016 af Outflow=0.28 cfs 0.149 af

Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10: Runoff Area=20,480 sf 46.88% Impervious Runoff Depth=4.58"
Tc=6.0 min CN=92 Runoff=2.33 cfs 0.179 af

Subcatchment 20: Runoff Area=0.144 ac 65.28% Impervious Runoff Depth=5.03"
Tc=6.0 min CN=96 Runoff=0.75 cfs 0.060 af

Subcatchment 30: Runoff Area=2.856 ac 4.10% Impervious Runoff Depth=3.33"
Flow Length=566' Tc=35.3 min CN=80 Runoff=5.84 cfs 0.793 af

Subcatchment 40: Runoff Area=0.080 ac 0.00% Impervious Runoff Depth=3.14"
Tc=6.0 min CN=78 Runoff=0.29 cfs 0.021 af

Reach 100: Avg. Depth=0.07' Max Vel=0.45 fps Inflow=0.64 cfs 0.039 af
n=0.040 L=332.0' S=0.0060 '/ Capacity=348.62 cfs Outflow=0.48 cfs 0.039 af

Reach 101: Avg. Depth=0.21' Max Vel=3.23 fps Inflow=0.48 cfs 0.039 af
D=18.0" n=0.012 L=21.0' S=0.0105 '/ Capacity=11.65 cfs Outflow=0.48 cfs 0.039 af

Reach 102: Avg. Depth=0.19' Max Vel=0.71 fps Inflow=0.48 cfs 0.039 af
n=0.040 L=62.0' S=0.0042 '/ Capacity=47.54 cfs Outflow=0.47 cfs 0.039 af

Reach 103: Avg. Depth=0.67' Max Vel=7.62 fps Inflow=5.84 cfs 0.832 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=5.84 cfs 0.832 af

Pond SP-1: STUDY POINT 1 Inflow=6.16 cfs 1.054 af
Primary=6.16 cfs 1.054 af

Pond WP1: WETPOND 1 Peak Elev=47.07' Storage=3,092 cf Inflow=2.33 cfs 0.179 af
Primary=0.08 cfs 0.141 af Secondary=0.64 cfs 0.039 af Outflow=0.72 cfs 0.179 af

03375-POST

Type III 24-hr 25-YEAR Rainfall=5.50"

Printed 9/19/2011

Prepared by {enter your company name here}

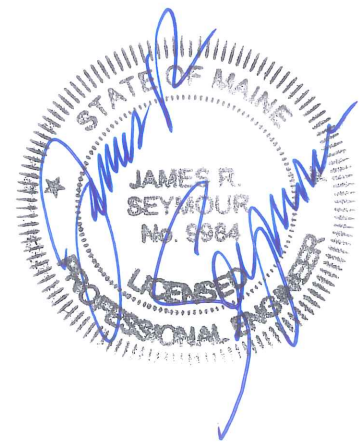
HydroCAD® 8.50 s/n 001856 © 2007 HydroCAD Software Solutions LLC

Hydrograph for Pond WP1: WETPOND 1

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	46.50	0.00	0.00	0.00
1.00	0.00	0	46.50	0.00	0.00	0.00
2.00	0.00	0	46.50	0.00	0.00	0.00
3.00	0.00	0	46.50	0.00	0.00	0.00
4.00	0.00	3	46.50	0.00	0.00	0.00
5.00	0.01	8	46.50	0.01	0.01	0.00
6.00	0.01	13	46.50	0.01	0.01	0.00
7.00	0.02	21	46.50	0.02	0.02	0.00
8.00	0.04	33	46.51	0.03	0.03	0.00
9.00	0.06	53	46.51	0.05	0.05	0.00
10.00	0.09	83	46.52	0.08	0.08	0.00
11.00	0.15	227	46.54	0.08	0.08	0.00
12.00	1.49	1,436	46.77	0.08	0.08	0.00
13.00	0.21	2,864	47.03	0.26	0.08	0.18
14.00	0.13	2,781	47.01	0.14	0.08	0.06
15.00	0.10	2,746	47.01	0.11	0.08	0.03
16.00	0.07	2,704	47.00	0.08	0.08	0.00
17.00	0.05	2,636	46.99	0.08	0.08	0.00
18.00	0.04	2,522	46.97	0.08	0.08	0.00
19.00	0.04	2,375	46.94	0.08	0.08	0.00
20.00	0.03	2,215	46.91	0.08	0.08	0.00
21.00	0.03	2,042	46.88	0.08	0.08	0.00
22.00	0.03	1,859	46.85	0.08	0.08	0.00
23.00	0.02	1,665	46.81	0.08	0.08	0.00
24.00	0.02	1,462	46.78	0.08	0.08	0.00
25.00	0.00	1,181	46.72	0.08	0.08	0.00
26.00	0.00	893	46.67	0.08	0.08	0.00
27.00	0.00	605	46.62	0.08	0.08	0.00
28.00	0.00	317	46.56	0.08	0.08	0.00
29.00	0.00	42	46.51	0.04	0.04	0.00
30.00	0.00	1	46.50	0.00	0.00	0.00
31.00	0.00	0	46.50	0.00	0.00	0.00
32.00	0.00	0	46.50	0.00	0.00	0.00
33.00	0.00	0	46.50	0.00	0.00	0.00
34.00	0.00	0	46.50	0.00	0.00	0.00
35.00	0.00	0	46.50	0.00	0.00	0.00
36.00	0.00	0	46.50	0.00	0.00	0.00
37.00	0.00	0	46.50	0.00	0.00	0.00
38.00	0.00	0	46.50	0.00	0.00	0.00
39.00	0.00	0	46.50	0.00	0.00	0.00
40.00	0.00	0	46.50	0.00	0.00	0.00
41.00	0.00	0	46.50	0.00	0.00	0.00
42.00	0.00	0	46.50	0.00	0.00	0.00
43.00	0.00	0	46.50	0.00	0.00	0.00
44.00	0.00	0	46.50	0.00	0.00	0.00
45.00	0.00	0	46.50	0.00	0.00	0.00
46.00	0.00	0	46.50	0.00	0.00	0.00
47.00	0.00	0	46.50	0.00	0.00	0.00
48.00	0.00	0	46.50	0.00	0.00	0.00

Start

Finish



INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

Handyman Rental - Warren Avenue Access Road 357 Riverside Street Portland, Maine

Introduction

The Owner responsible for this Inspection, Maintenance and Housekeeping Plan is Watson Realty, LLC. The Owner's address is 357 Riverside Street, Portland, Maine 04103; the telephone number is (207) 775-3441. The Owner of the proposed project will be responsible for the maintenance of all stormwater management structures, and the keeping of records and maintenance logbook.

The project is subject to the standards of a Post-Construction Stormwater Management Plan as defined in Section 32-38 of the City of Portland Code of Ordinances. The Owner is responsible for conducting maintenance and maintaining records in accordance with this Inspection, Maintenance and Housekeeping Plan. Records of all inspections and maintenance work accomplished must be maintained. The Owner shall, by June 30 of each year, provide a completed and signed certification to the Department of Public Services (DPS) certifying that the Owner has inspected, cleaned and maintained the stormwater management facilities, describing any deficiencies found during the inspection for the stormwater management facilities and certifying that the Owner has repaired any deficiencies in the stormwater management facilities noted during the inspections.

The following plan outlines the anticipated inspection, maintenance, and housekeeping procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

The procedures, as outlined in this Inspection, Maintenance, and Housekeeping Plan, are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional details on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (Maine DEP).

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control

measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven (7) calendar days and prior to any storm event (rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least five (5) years from the completion of permanent stabilization.
4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. Stone Check Dams:

- Inspect the center of the dam to make sure it is lower than the edges. Erosion caused by high flows around the edges of the dam must be corrected.
- Sediment accumulation shall be removed prior to reaching half of the original design height.
- Areas beneath stone check dams must be seeded and mulched upon removal.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

- A. Spill Prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

- B. Groundwater Protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- C. Fugitive Sediment and Dust: Actions must be taken to insure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- D. Debris and Other Materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench Dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

After Construction

1. **Inspection**: After construction, it is the responsibility of the Owner or assigned heirs to comply with the inspection, maintenance, and housekeeping procedures outlined in this section. All measures must be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions in all applicable permits, shall conduct the inspections.
2. **Specific Inspection, Maintenance, and Housekeeping Tasks**: The following is a list of permanent erosion control and stormwater management measures and the inspection, maintenance, and housekeeping tasks to be performed after construction.
 - A. Vegetated Areas:
 - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.
 - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

C. Ditches, Swales, and Other Open Channels:

- Inspect ditches, swales and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
- Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
- Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
- If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric is showing through the stone or where stones have dislodged.

D. Winter Sanding:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Wet Ponds:

- The inlet and outlet of the pond should be checked periodically to ensure that flow structures are not blocked by debris. All ditches or pipes connecting ponds in series should be checked for debris that may obstruct flow. Inspections should be conducted monthly during wet weather conditions from March to November.
- The gravel trench outlet should be inspected after every major rainfall event in the first few months to ensure proper function and then once every six months after that. Inspector shall verify the pond is emptying within 12-24 hours after rainfall event. The top several inches of gravel in the trench shall be replaced if the pond does not drain within 72 hours.
- Wet ponds should be inspected annually for erosion, destabilization of side slopes, embankment settling and other signs of structural failure.

Corrective action should be taken immediately upon identification of problems.

- Wet ponds lose 0.5-1.0% of their volume annually due to sediment accumulation. Dredging is required when accumulated volume loss reaches 15%, or approximately every 15-20 years.

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.
4. **City of Portland Certification:** Any person owning, operating, or otherwise having control over a BMP required by a Post-Construction Stormwater Management Plan shall maintain the BMPs in accordance with the approved plan and shall demonstrate compliance with the plan.
 - A. The Owner or operator of a BMP shall hire a qualified post-construction stormwater inspector to at least annually inspect the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved Post-Construction Stormwater Management Plan.
 - B. If the BMP requires maintenance, repair or replacement to function as intended by the approved Post-Construction Stormwater Management Plan, the Owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the DPS in the annual report.
 - C. The Owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification to the DPS in a form provided by the DPS, certifying that the person has inspected the BMPs and that they are adequately maintained and functioning as intended by the approved Post-Construction Stormwater Management Plan, or that they require maintenance or repair, including the record of the deficiency and corrective action(s) taken.
 - D. Any persons required to file an annual certification under this section shall include with the annual certification a filing fee established by the DPS to pay the administrative and technical costs of review of the annual certification.

- E. In order to determine compliance with this article and with the Post-Construction Stormwater Management Plan, the DPS may enter upon property at reasonable hours with the consent of the Owner, occupant or agent to inspect the BMPs.

Attachments

Attachment 1 – Sample Stormwater Inspection and Maintenance Log

ATTACHMENT 1
STORMWATER INSPECTION, MAINTENANCE AND HOUSEKEEPING LOG

Handyman Rental - Warren Avenue Access Road
357 Riverside Street, Portland, Maine

This log is intended to accompany the stormwater Inspection, Maintenance and Housekeeping Plan for the Handyman Rental - Warren Avenue Access Road located in Portland, Maine. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Inspection, Maintenance and Housekeeping Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the municipality. Qualified personnel familiar with drainage systems and soils shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comment(s)
Vegetated Areas	Inspect Slopes			
	Replant Bare Areas			
	Check after Major Storms			
Culverts	Inspect culverts monthly or after rainfall of >1"			
	Clean culverts when sediment occupies more than 20% of pipe diameter			
	Repair any erosion at inlet and outlet pipes			
	Replace displaced riprap at least once a year			
	Remove vegetation growing through riprap at least once a year			
Ditches, Swales and other Open Channels	Inspect and remove accumulated sediments or debris that obstructs flow.			
	Vegetated ditches should be mowed annually			
	Inspect and replace rip rap lining as necessary			
Winter Sanding	Clean annually (Spring)			
	Remove sand and sediment from roadway shoulders			
Wet Pond	Inspect inlet and outlet for blockage and debris			
	Inspect gravel trench outlet to ensure pond drains within 12-24 hours.			
	Replace top several inches of the gravel trench if drain time is more than 72 hours.			
	Inspect for erosion, destabilization of side slopes and other structural failure.			
	Dredge wet pond if accumulated volume loss reaches 15%.			

Jean Fraser - RE: Reply #2 RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.

From: Jean Fraser
To: Seymour, James
Date: 9/28/2011 4:50 PM
Subject: RE: Reply #2 RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.
CC: Barhydt, Barbara; DiPierro, Philip; Errico, Thomas; Margolis-Pineo, D...

Jim

Just to confirm our telephone conversation of today in case you need to follow up with Barbara when I am out of the office tomorrow.

I understand that you will discuss the following with Brad Watson (applicant) today and get back to us as appropriate:

1. Our request that the Performance Guarantee for the Curb Cut (\$6500) be paid immediately as the MDOT are near to doing that work and will not proceed with it unless the PG is paid; it is my understanding that when the PG for the driveway is posted that this amount can be put toward that;
2. Re striping in Warren Avenue- the MDOT contract includes this and therefore it could be done at no expense to Mr Watson- but we do not want it to be done to address the new curb cut and then find that the driveway is not constructed in the near future (leaving an odd striping pattern there and/or need for it to be redone). We request a letter or e-mail confirming that the driveway construction (per site plan approval) will be completed in the spring of 2012.

Jean

*Jean Fraser, Planner
City of Portland
874 8728*

>>> "James Seymour" <jseymour@sebagotechnics.com> 9/26/2011 11:47 AM >>>

Sorry about that. Lets try this!

Thanks

James R. Seymour P.E.

Sebago Technics Inc

1 Chabot Street,

PO Box 1339

Westbrook, ME 04098-1339

Tel.207 856-0277 ext 277

Fax 207 856-2206

From: Jean Fraser [mailto:JF@portlandmaine.gov]
Sent: Monday, September 26, 2011 11:38 AM
To: James Seymour
Subject: Reply #2 RE: Handyman Rental - Cond of App vi Re: FW: Attached image data.

there was no attachment to this so I can't forwards as of yet....

>>> "James Seymour" <jseymour@sebagotechnics.com> 9/26/2011 11:03 AM >>>

Here is a copy of the revised pavement marking plan I just got from our Traffic Engineer

Can you forward to Tom or Mike for review?

James R. Seymour P.E.

Sebago Technics Inc

1 Chabot Street,

PO Box 1339

Westbrook, ME 04098-1339

Tel.207 856-0277 ext 277

Fax 207 856-2206

From: Jean Fraser [mailto:JF@portlandmaine.gov]
Sent: Monday, September 26, 2011 10:41 AM
To: James Seymour
Cc: 03375
Subject: Handyman Rental - Cond of App vi Re: FW: Attached image data.

Jim

I am writing with respect to the following:

- Preliminary Site Plan, rev. date September 20, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.
- Response to Review Comments and attachments from James Seymour, dated September 20, 2011, prepared by Sebago Technics on behalf of Watson Realty LLC.

These submissions address condition # vi of the 9.19.2011 Approval letter as they meet the requirements of the Basic, General and Flooding Standards and have addressed all of the review comments of the City's Peer Engineer on this project.

At some stage I will need paper copies if this is the final site plan; in the meantime I will circulate the referenced plan to the DRC, DPS and other reviewers and those involved with the MDOT project to assist with the coordination re the curb cut and sidewalk.

Jean

Jean Fraser, Planner
City of Portland
874 8728

>>> "James Seymour" <jseymour@sebagotechnics.com> 9/20/2011 4:01 PM >>>
Jean,

Here are the revised plans and conditions around stormwater design for the Handyman Rental site. I have contacted DEP and am awaiting reply on the amended wetland permit process.

I know Brad has spoken with Peters Construction on building this after they are Done with Warren Ave improvements, but am not sure of any certainty yet.

I will have Steve Sawyer work with the State and Tom on the striping details.

Thanks

James R. Seymour P.E.

Sebago Technics Inc

1 Chabot Street,

PO Box 1339

Westbrook, ME 04098-1339

Tel.207 856-0277 ext 277

Fax 207 856-2206

-----Original Message-----

From: copier@sebagotechnics.com [mailto:copier@sebagotechnics.com]

Sent: Tuesday, September 20, 2011 3:15 PM

To: James Seymour

Subject: Attached image data.

This is image data from the scanner.

Jean Fraser - Performance Guarantee for Curb Cut

From: Jean Fraser
To: Brad Watson
Date: 10/3/2011 4:08 PM
Subject: Performance Guarantee for Curb Cut
CC: Farmer, Michael; Seymour, Jim

Mr Watson,

I understand that both Jim Seymour and Mike Farmer have been assisting you with the Performance Guarantee process re the curb cut.

This Performance Guarantee is handled through the Planning Division and at this stage (given imminent construction of the curb cut) we suggest you make out a check for the \$6500 to the city to be held as an escrow account in order to secure the curb cut. We can accept that tomorrow (at Planning Reception 4th floor City Hall - ask for Jennifer Yeaton/Barbara Barhydt/Jean Fraser/Phil diPierro) - and we will give you a receipt.

We will arrange for that escrow account for \$6500 to be refunded to you when the Performance Guarantee for the rest of the driveway is submitted- which would be through Phil diPierro of the Planning Office (Phil is on 874 8632).

Please do not hesitate to call me if any questions.

Thank you
Jean

*Jean Fraser, Planner
City of Portland
874 8728*

September 13, 2011
03375

Jean Fraser, Planner
City of Portland Planning Division
City Hall, 4th Floor
389 Congress St.
Portland, ME 04101

Level II-Site Plan Application Submittal
Proposed Driveway Curb Cut for Warren Avenue Access
Handyman Rental, 357 Riverside St., Portland, Maine

Dear Ms. Fraser:

On behalf of Handyman Rental, please find four copies of the Level II Revised Site Plan and stormwater design calculations for Handyman Rental's facility at 357 Riverside Street to propose construction of a new driveway for access to Warren Avenue. Based on comments and concerns raised by the Planning Staff, we have relocated the proposed driveway such that it aligns nearly opposite of an entrance to the Home Depot. That location is positioned approximately 140 feet east of the Rug and Carpet Depot entrance, and 208 feet west of the Pine Tree Paper entrance. Both distances were measured centerline to centerline of the driveway entrances. Due to the alignment of our driveway across from the Home Depot driveway, this will require a waiver of the City's Technical Standards Section 1.7.2.7 for Location and Spacing of Driveways, which would require 100-125 feet separation, including Home Depot's driveway.

Mr. Watson currently shares one entrance on Riverside Street which leads to safety concerns with left turns. This proposed driveway will offer his business better circulation to access Riverside Street towards the Maine Turnpike and Brighton Avenue. Due to the existing nature of driveways on Warren Avenue, this location was determined by Staff to be the preferred individually operated location. A shared driveway was not pursued by Mr. Watson due to property and wetland impacts, design and legal complications, and expense constraints.

The State of Maine currently has begun construction for the widening of Warren Avenue and the extension of an existing culvert adjacent to our proposed driveway entrance location. Our understanding is that prior to final construction, Handyman Rental and its owner Bradford Watson, the City, and the State's General Contractor will need to coordinate the final logistics, such that our plans can be incorporated into the final curbing alignment. It is also our understanding that upon approval, the State will be installing the actual driveway apron and curb opening.

Mr. Watson has discussed that the site will be gated and only operational during normal business hours to alleviate concerns of creating any shortcut for vehicles attempting to avoid the

intersection to gain access to travel northeasterly onto Riverside Street. We understand in discussions with Planning Staff that there could be some pavement marking revisions necessary to adjust turning arrows for Home Depot's entrance such that it does not compromise safety with our proposed entrance.

Construction would consist of a new access drive connecting Warren Avenue to the store which will be approximately 525 linear feet. The wetland impact is 4,756 square feet (SF) which is slightly less than the original Maine Department of Environmental Protection (MDEP) approval of 5,195 SF of which we have received a Tier 1 Natural Resource Protection Act Permit. Under the City's Site Plan Ordinance, the project requires a Level II Review. While the review is based on the increase of impervious surface for the new driveway exceeding 7,500 SF, there are no plans for installation of utilities, new buildings, or additions to the site.

A formal Stormwater Management Report was not prepared due to the limited impacts of the site. However, following the City's standards which incorporate treatment in compliance with Chapter 500 standards, we have included calculations showing the driveway will meet these standards. It was very difficult to achieve treatment through appurtenances, or filters, and therefore; we were forced to grade the driveway such that collected runoff will directly enter a wetpond and discharge into the adjacent cross-country swale.

We have met our flood standard in the 2-year and 10-year storm and exceed it by 0.2 cubic feet per second (CFS) in the 25-year storm. Therefore, we have requested that much of the peak rate of discharge from the new driveway be waived for the 25-year storm. As we have noted, the new road project proposes to discharge their increase of runoff onto Mr. Watson's property without flood control or treatment. We feel that this project's minimum peak discharge increase can easily be contained in the existing hay field as a natural buffer/detainable area.

Due to the discharge of offsite runoff, a by-pass culvert of 18-inches diameter will convey drainage from the new road project, and another culvert discharge from Pine Tree Paper's driveway, such that it will direct channel flows under our proposed driveway and empty into the cross-country swale. This large swale traverses the property line to the west to direct drainage from the Home Depot site northerly to a culvert system under Riverside Street via a drainage easement. All of our site's runoff eventually reaches the Presumpscot River.

The improvements to this remaining vacant land are very modest, and have been designed to mitigate wetland disturbance, and promote vehicle safety. We are hopeful the City will be cooperative with the stormwater review given the impacts from Warren Avenue and the historical use of the property for their own discharges. We have shown erosion control measures on the plan which will protect the site during construction. A fore-bay will be designed as part of the wetpond providing a depression for sediments to be captured.

Lastly, we understand that the applicant may be responsible for completing the pavement of the sidewalk per City Site Plan standards and policies. We are hoping that we can coordinate with the State's Contractor to alleviate some of the costs, and further work with them under separate contract to begin the pond and driveway base if weather conditions and schedules allow.

The project is under a very strict construction schedule against the Warren Avenue project. In the interim, while the City is reviewing this latest design revision, we intend to coordinate our

design improvements with the State's Engineer, the General/Site Contractor, and Public Work's Engineers. We will also be reviewing our Driveway Plans with the Pine Tree Paper owners to explain our driveway location design and minimal traffic impacts as it relates to their business.

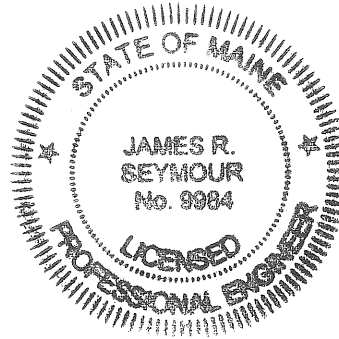
We thank the City for its cooperation and appreciate their efforts to approve this project while the road construction project on Warren Avenue is currently in progress. If you have any questions, please do not hesitate to contact us.

Sincerely,

SEBAGO TECHNICS, INC.



James R. Seymour, P.E.
Project Manager



JRS:jrs/kn
Enc.

cc: Bradford Watson, Handyman Rental

Proposed Stormwater Management Summary

Handyman Rental - Warren Avenue Access Design, Portland, Maine

The proposed driveway improvements will be designed to City of Portland standards, which will require the owner to obtain a waiver for driveway separation such that the proposed location can maximize distance between abutters' driveways, and set opposite the Home Depot Access to Warren Avenue. To accomplish such setbacks, the driveway will be forced to cross a maintained grass field, containing pockets of seasonally saturated depressions, which due to hydrology, soils, and plants species, could be classified as wetlands. Upon review by the City Engineers we have located to driveway adjacent to a large culvert extension and cross country swale. We have additionally incorporated the State's Warren Avenue Improvement Project proposed drainage infrastructure additions to assist in directing that projects point discharge flows such that they will reach the cross country channel. This is an improvement to the overall area as the State's plan appeared to be simply directing pipe discharged runoff onto Mr. Watson's field which would flood and saturate his field. Previously, drainage sheet flowed from the road across the entire length of frontage.

The access drive connecting Warren Ave to the store will be approximately 525 linear feet of 24 foot wide driveway. The wetland impact is 4756 SF, of which we have received a Tier 1 NRPA permit but will need to file a revised plan with the state as the original driveway location and wetland impacts were lessened and shifted westward. Under the City's Site Plan Ordinance the project will fall into a Level II review. While the review is based on increase of impervious surface for the new driveway exceeding 7500 SF, there are no plans for installation of utilities, new buildings, or additions to the site. Due to the near saturated conditions of the site, treatment in compliance with Chapter 500 standards was very difficult to achieve through treatment appurtenances, or filters. We were able to adjust the driveway grading and super-elevate the grading to collect drainage along a curb and channel into a forebay area and a wetpond to meet treatment requirements. A large swale traverses the property line to the west to direct drainage from the Home Depot site northerly to a culvert system under Riverside Street. A new culvert is proposed to also direct drainage from the field's easterly front edge to interconnect with the swale system, and Riverside Street, which all eventually discharge to the Presumpscot River. The majority of this runoff is untreated flows resulting from runoff collected along Warren Avenue easterly from the I-95 overpass area to a new catch basin installed as part of the road widening currently in progress.

The improvements to this remaining vacant land are very modest, and have been designed to mitigate wetland disturbance, and promote vehicle safety. We are hopeful the City will be cooperative, with the stormwater review given the impacts from Warren Avenue runoff, and the need to use the property for their own stormwater impacts.

The calculations attached indicate that the designed wetpond size will treat the minimum 75% of impervious area as allowed for a linear road section. In addition we have included a spreadsheet

showing the pond design meets the minimum criteria for channel protection volume, permanent pool volume, sediment forebay volume, and mean depth calculations for a minimal treatment pond of 3 feet mean depth. (Actual pond depth = 9.0+ feet).

In addition we provided a basic stormwater model indicating that flood calculations have been maintained in the two, and ten year storms with the 25 yr storm slightly exceeded by 0.18 cfs. The increase is approximately a 2.5% increase over existing conditions per our model. Based on the topography as being generally level, and that the larger storms tend to flood the entire field area, as based on past observations by the owner, the small increase will not provide measureable or adverse impacts on the property or downstream collection systems as a result of the driveway addition. It should also be noted that the State's current widening of Warren Avenue neither provides flood control, nor treatment for Warren Avenue drainage collected by catch basins or roadside ditches. The street drainage discharges by a pipe outfall into Mr. Watson's field, but now will be redirected into the cross country swale by a new 18-inch culvert installed by our design as to further prevent flooding on his private property which he maintains as a mowed field, or allow transport of polluted sediment to further denigrate his field conditions.

A small portion of the new driveway will be directed away from Warren Avenue into the existing site where it will not be collected or treated by the wetpond. The driveway will be graded with a crown over this section to promote sheet flow through grass sideslopes to mitigate impacts.

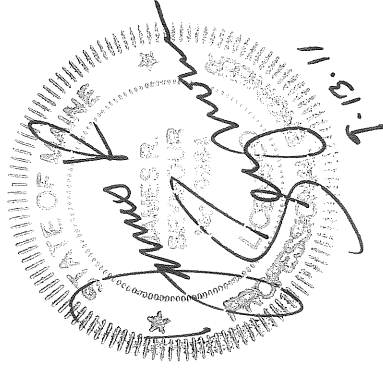
We believe this design will promote safer customer access for the Handyman Rental store with improvements for runoff treatment generated from the new driveways paved surfaces in accordance with the City of Portland's stormwater management standards, and will have no adverse detrimental flooding affects on downstream areas or City drainage infrastructure. The project will incorporate the design features and grading of the Maine Department of Transportation Warren Avenue and Riverside Street intersection drainage improvements and through cooperation with Mr. Watson will allow continued access to the cross country swale for periodic maintenance.



TABLE 1
IMPERVIOUS AREA / DEVELOPED AREA
TREATMENT SUMMARY

Area ID	On-Site Impervious (S.F.)	On-Site Landscaping (S.F.)	On-Site Developed (S.F.)	Receives Treatment (Yes/No)	Impervious Area Treated (S.F.)	Landscaped Area Treated (S.F.)	Developed Area Treated (S.F.)	TREATMENT BMP	Channel Protection Volume (C.F.)	Permanent Pool Volume (C.F.)	Sediment Forebay (C.F.)						
STA. 0+00 THRU 4+00	9600	10680	20480	YES	9600	10680	20480	WET POND	1,163	1,744	11						
STA. 4+00 THRU 5+09	2620	0	2620	NO	0	0	0	NONE	0	0	0						
S.F.	12,220	10,680	23,100		9,600	10,680	20,480										
ACRES	0.28	0.25	0.53		0.22	0.25	0.47										
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;"> TOTAL IMPERVIOUS AREA TOTAL IMPERVIOUS AREA REQUIRING TREATMENT (75%) TOTAL IMPERVIOUS AREA RECEIVING TREATMENT % OF IMPERVIOUS AREA RECEIVING TREATMENT </td> <td style="width:50%; text-align: center;"> 12,220 9,165 9,600 78.6% </td> </tr> <tr> <td colspan="2" style="text-align: center;"> TOTAL DEVELOPED AREA TOTAL DEVELOPED AREA REQUIRING TREATMENT (50%) TOTAL DEVELOPED AREA RECEIVING TREATMENT % OF DEVELOPED AREA RECEIVING TREATMENT </td> </tr> <tr> <td colspan="2" style="text-align: center;"> 23,100 11,550 20,480 88.7% </td> </tr> </table>												TOTAL IMPERVIOUS AREA TOTAL IMPERVIOUS AREA REQUIRING TREATMENT (75%) TOTAL IMPERVIOUS AREA RECEIVING TREATMENT % OF IMPERVIOUS AREA RECEIVING TREATMENT	12,220 9,165 9,600 78.6%	TOTAL DEVELOPED AREA TOTAL DEVELOPED AREA REQUIRING TREATMENT (50%) TOTAL DEVELOPED AREA RECEIVING TREATMENT % OF DEVELOPED AREA RECEIVING TREATMENT		23,100 11,550 20,480 88.7%	
TOTAL IMPERVIOUS AREA TOTAL IMPERVIOUS AREA REQUIRING TREATMENT (75%) TOTAL IMPERVIOUS AREA RECEIVING TREATMENT % OF IMPERVIOUS AREA RECEIVING TREATMENT	12,220 9,165 9,600 78.6%																
TOTAL DEVELOPED AREA TOTAL DEVELOPED AREA REQUIRING TREATMENT (50%) TOTAL DEVELOPED AREA RECEIVING TREATMENT % OF DEVELOPED AREA RECEIVING TREATMENT																	
23,100 11,550 20,480 88.7%																	

Required 75%
is met.



03375-POND SIZING

Rainfall not specified

Prepared by {enter your company name here}

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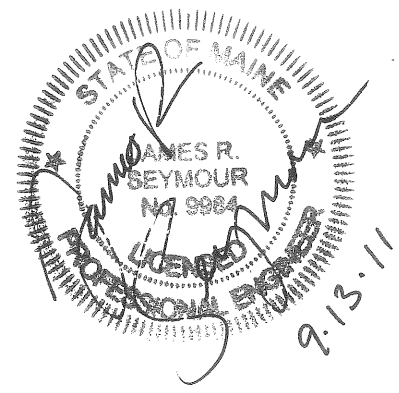
Stage-Area-Storage for Pond 2P: PERMENANT POOL

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
38.70	80	0	43.90	1,961	4,611
38.80	101	9	44.00	2,010	4,809
38.90	122	20	44.10	2,060	5,013
39.00	142	33	44.20	2,110	5,222
39.10	163	49	44.30	2,160	5,435
39.20	184	66	44.40	2,210	5,654
39.30	205	85	44.50	2,260	5,877
39.40	225	107	44.60	2,310	6,106
39.50	246	130	44.70	2,360	6,339
39.60	267	156	44.80	2,410	6,578
39.70	288	184	44.90	2,460	6,821
39.80	308	214	45.00	2,510	7,069
39.90	329	246	45.10	2,569	7,323
40.00	350	279	45.20	2,627	7,583
40.10	387	316	45.30	2,686	7,849
40.20	424	357	45.40	2,744	8,120
40.30	461	401	45.50	2,803	8,398
40.40	498	449	45.60	2,861	8,681
40.50	535	501	45.70	2,920	8,970
40.60	572	556	45.80	2,978	9,265
40.70	609	615	45.90	3,037	9,565
40.80	646	678	46.00	3,095	9,872
40.90	683	744	46.10	3,228	10,188
41.00	720	814	46.20	3,361	10,518
41.10	759	888	46.30	3,495	10,860
41.20	798	966	46.40	3,628	11,217
41.30	837	1,048	46.50	3,761	11,586
41.40	876	1,134			
41.50	915	1,223			
41.60	954	1,317			
41.70	993	1,414			
41.80	1,032	1,515			
41.90	1,071	1,620			
42.00	1,110	1,729			
42.10	1,151	1,843			
42.20	1,192	1,960			
42.30	1,233	2,081			
42.40	1,274	2,206			
42.50	1,315	2,336			
42.60	1,356	2,469			
42.70	1,397	2,607			
42.80	1,438	2,749			
42.90	1,479	2,895			
43.00	1,520	3,044			
43.10	1,569	3,199			
43.20	1,618	3,358			
43.30	1,667	3,523			
43.40	1,716	3,692			
43.50	1,765	3,866			
43.60	1,814	4,045			
43.70	1,863	4,229			
43.80	1,912	4,417			

$\frac{8398}{2803} = 3.0$ MEAN DEPTH

46.50 > 1,744 CF REQ.

Permanent Pool Elevation



03375-POND SIZING

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Rainfall not specified

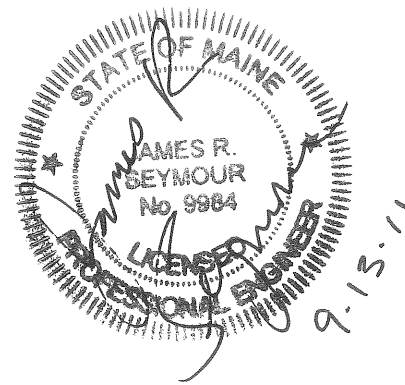
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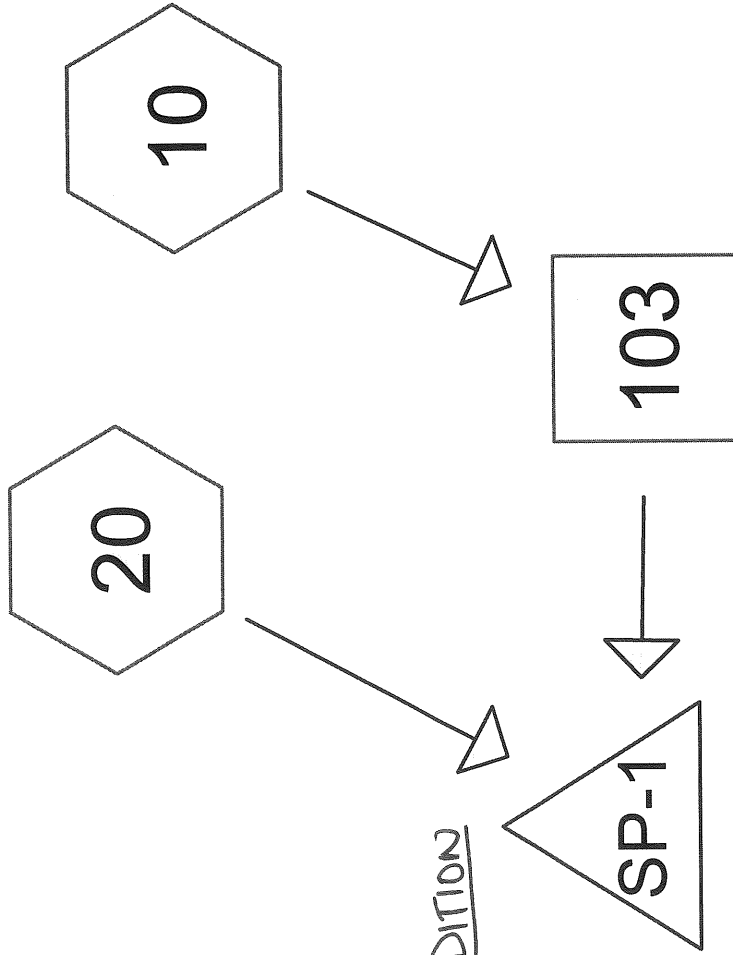
Stage-Area-Storage for Pond WP1: WETPOND 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
46.50	5,176	0	47.54	6,100	5,869
46.52	5,194	104	47.56	6,118	5,991
46.54	5,212	208	47.58	6,135	6,114
46.56	5,231	312	47.60	6,152	6,237
46.58	5,249	417	47.62	6,170	6,360
46.60	5,267	522	47.64	6,187	6,484
46.62	5,285	628	47.66	6,205	6,607
46.64	5,303	734	47.68	6,222	6,732
46.66	5,322	840	47.70	6,239	6,856
46.68	5,340	946	47.72	6,257	6,981
46.70	5,358	1,053	47.74	6,274	7,107
46.72	5,376	1,161	47.76	6,291	7,232
46.74	5,394	1,268	47.78	6,309	7,358
46.76	5,413	1,377	47.80	6,326	7,485
46.78	5,431	1,485	47.82	6,344	7,611
46.80	5,449	1,594	47.84	6,361	7,738
46.82	5,467	1,703	47.86	6,378	7,866
46.84	5,485	1,812	47.88	6,396	7,994
46.86	5,504	1,922	47.90	6,413	8,122
46.88	5,522	2,033	47.92	6,430	8,250
46.90	5,540	2,143	47.94	6,448	8,379
46.92	5,558	2,254	47.96	6,465	8,508
46.94	5,576	2,366	47.98	6,483	8,637
46.96	5,595	2,477	48.00	6,500	8,767
46.98	5,613	2,589			
<u>47.00</u>	5,631	<u>2,702</u>			
47.02	5,648	2,815			
47.04	5,666	2,928			
47.06	5,683	3,041			
47.08	5,701	3,155			
47.10	5,718	3,269			
47.12	5,735	3,384			
47.14	5,753	3,499			
47.16	5,770	3,614			
47.18	5,787	3,729			
47.20	5,805	3,845			
47.22	5,822	3,962			
47.24	5,840	4,078			
47.26	5,857	4,195			
47.28	5,874	4,312			
47.30	5,892	4,430			
47.32	5,909	4,548			
47.34	5,926	4,667			
47.36	5,944	4,785			
47.38	5,961	4,904			
47.40	5,979	5,024			
47.42	5,996	5,143			
47.44	6,013	5,264			
47.46	6,031	5,384			
47.48	6,048	5,505			
47.50	6,066	5,626			
47.52	6,083	5,747			

SPILLWAY
ELEV.

> 1,163 CF REQ

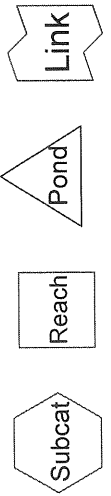




PRE-DEV CONDITION

$Q_{2yr} = 2.59 \text{ cfs}$
 $Q_{10yr} = 5.52 \text{ cfs}$
 $Q_{25yr} = 6.98 \text{ cfs}$

STUDY POINT 1



Drainage Diagram for 03375-PRE

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03375-PRE

Type III 24-hr 2-YEAR Rainfall=3.00"

Prepared by {enter your company name here}

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Page 1

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 10:

Runoff Area=3.290 ac 3.04% Impervious Runoff Depth>1.14"
Flow Length=612' Tc=35.5 min CN=80 Runoff=2.47 cfs 0.312 af

Subcatchment 20:

Runoff Area=0.260 ac 19.23% Impervious Runoff Depth>1.55"
Tc=6.0 min CN=86 Runoff=0.50 cfs 0.034 af

Reach 103:

Avg. Depth=0.42' Max Vel=6.01 fps Inflow=2.47 cfs 0.312 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=2.47 cfs 0.312 af

Pond SP-1: STUDY POINT 1

Inflow=2.59 cfs 0.346 af
Primary=2.59 cfs 0.346 af

Summary for Subcatchment 10:

Runoff = 2.47 cfs @ 12.51 hrs, Volume= 0.312 af, Depth> 1.14"

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=3.00"

Area (ac)	CN	Description
* 0.100	98	Buildings and Parking
0.340	91	Gravel roads, HSG D
2.850	78	Meadow, non-grazed, HSG D
3.290	80	Weighted Average
3.190		Pervious Area
0.100		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.0	150	0.0060	0.08		Sheet Flow, SHEET A TO B Grass: Dense n= 0.240 P2= 3.00"
2.0	379	0.0060	3.17	348.79	Trap/Vee/Rect Channel Flow, CHANNEL B TO C Bot.W=15.00' D=2.00' Z= 20.0 '/' Top.W=95.00' n= 0.040
0.1	21	0.0100	6.44	11.38	Circular Channel (pipe), PIPE C TO D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
0.4	62	0.0042	2.64	47.57	Trap/Vee/Rect Channel Flow, CHANNEL D TO E Bot.W=3.00' D=2.00' Z= 3.0 '/' Top.W=15.00' n= 0.040
35.5	612	Total			

Summary for Subcatchment 20:

Runoff = 0.50 cfs @ 12.09 hrs, Volume= 0.034 af, Depth> 1.55"

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=3.00"

Area (ac)	CN	Description
* 0.050	98	Parking and Building
0.090	91	Gravel roads, HSG D
0.120	78	Meadow, non-grazed, HSG D
0.260	86	Weighted Average
0.210		Pervious Area
0.050		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

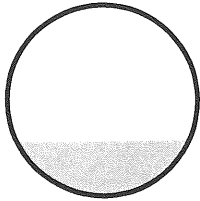
Summary for Reach 103:

Inflow Area = 3.290 ac, 3.04% Impervious, Inflow Depth > 1.14" for 2-YEAR event
 Inflow = 2.47 cfs @ 12.51 hrs, Volume= 0.312 af
 Outflow = 2.47 cfs @ 12.52 hrs, Volume= 0.312 af, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Max. Velocity= 6.01 fps, Min. Travel Time= 0.1 min
 Avg. Velocity = 2.96 fps, Avg. Travel Time= 0.3 min

Peak Storage= 20 cf @ 12.52 hrs, Average Depth at Peak Storage= 0.42'
 Bank-Full Depth= 1.50', Capacity at Bank-Full= 14.13 cfs

18.0" Diameter Pipe, n= 0.012
 Length= 48.0' Slope= 0.0154 '/'
 Inlet Invert= 42.82', Outlet Invert= 42.08'



Summary for Pond SP-1: STUDY POINT 1

Inflow Area = 3.550 ac, 4.23% Impervious, Inflow Depth > 1.17" for 2-YEAR event
 Inflow = 2.59 cfs @ 12.50 hrs, Volume= 0.346 af
 Primary = 2.59 cfs @ 12.50 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

03375-PRE

Type III 24-hr 10-YEAR Rainfall=4.70"

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Page 1

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 10:

Runoff Area=3.290 ac 3.04% Impervious Runoff Depth>2.43"
Flow Length=612' Tc=35.5 min CN=80 Runoff=5.30 cfs 0.667 af

Subcatchment 20:

Runoff Area=0.260 ac 19.23% Impervious Runoff Depth>3.00"
Tc=6.0 min CN=86 Runoff=0.94 cfs 0.065 af

Reach 103:

Avg. Depth=0.64' Max Vel=7.42 fps Inflow=5.30 cfs 0.667 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/' Capacity=14.13 cfs Outflow=5.30 cfs 0.667 af

Pond SP-1: STUDY POINT 1

Inflow=5.52 cfs 0.731 af
Primary=5.52 cfs 0.731 af

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 10:

Runoff Area=3.290 ac 3.04% Impervious Runoff Depth>3.09"
Flow Length=612' Tc=35.5 min CN=80 Runoff=6.71 cfs 0.847 af

Subcatchment 20:

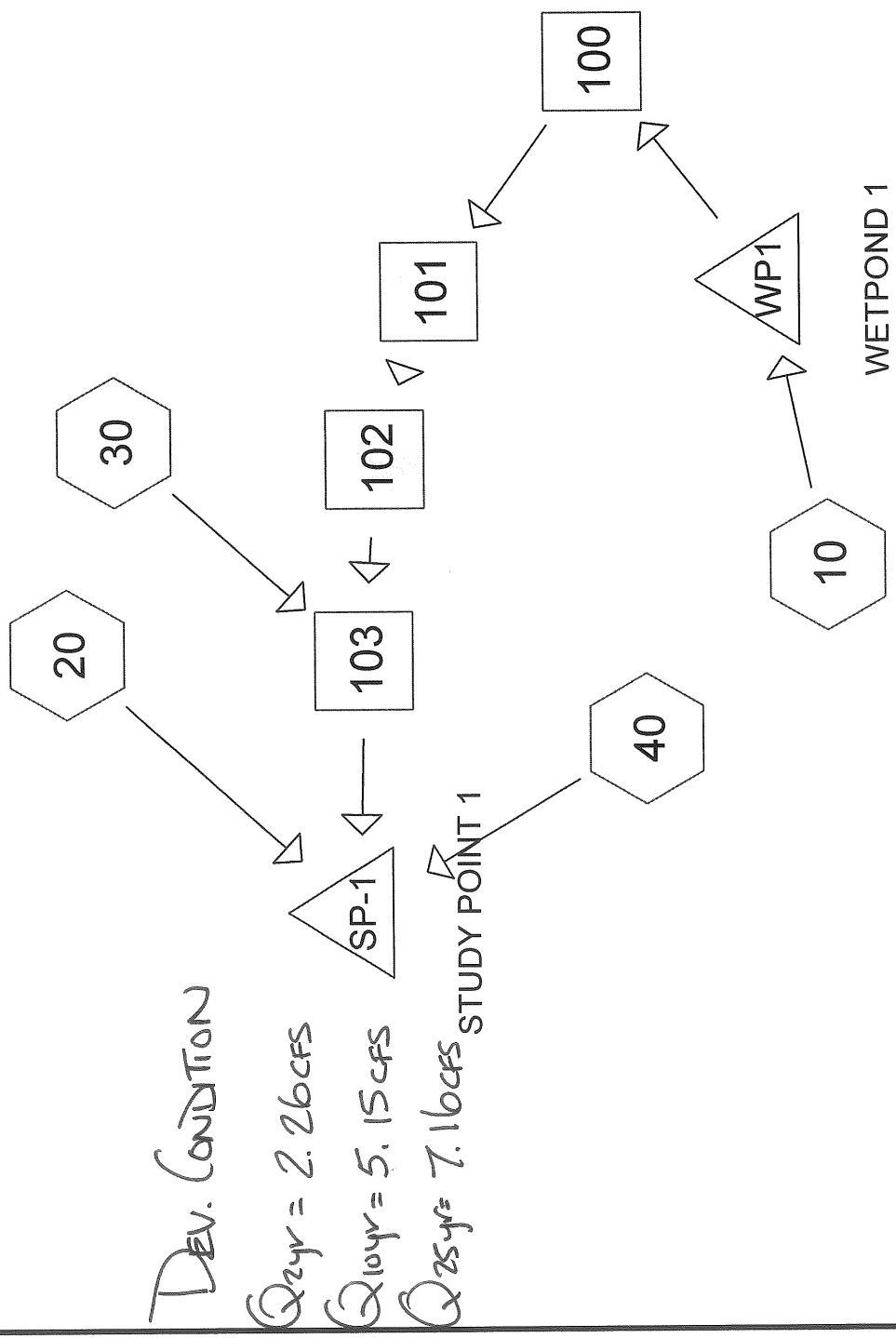
Runoff Area=0.260 ac 19.23% Impervious Runoff Depth>3.71"
Tc=6.0 min CN=86 Runoff=1.15 cfs 0.080 af

Reach 103:

Avg. Depth=0.73' Max Vel=7.89 fps Inflow=6.71 cfs 0.847 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=6.71 cfs 0.847 af

Pond SP-1: STUDY POINT 1

Inflow=6.98 cfs 0.927 af
Primary=6.98 cfs 0.927 af

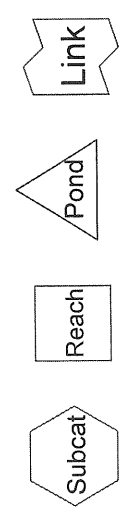


Dev. Condition

Q_{2yr} = 2.26cfs

Q_{10yr} = 5.15cfs

Q_{25yr} = 7.16cfs
STUDY POINT 1



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 10: Runoff Area=20,480 sf 46.88% Impervious Runoff Depth>2.04"
Tc=6.0 min CN=92 Runoff=1.14 cfs 0.080 af
- Subcatchment 20: Runoff Area=0.144 ac 65.28% Impervious Runoff Depth>2.41"
Tc=6.0 min CN=96 Runoff=0.39 cfs 0.029 af
- Subcatchment 30: Runoff Area=2.856 ac 4.10% Impervious Runoff Depth>1.14"
Flow Length=566' Tc=35.3 min CN=80 Runoff=2.15 cfs 0.271 af
- Subcatchment 40: Runoff Area=0.080 ac 0.00% Impervious Runoff Depth>1.04"
Tc=6.0 min CN=78 Runoff=0.10 cfs 0.007 af
- Reach 100: Avg. Depth=0.02' Max Vel=0.21 fps Inflow=0.06 cfs 0.017 af
n=0.040 L=332.0' S=0.0060 '/ Capacity=348.62 cfs Outflow=0.05 cfs 0.016 af
- Reach 101: Avg. Depth=0.07' Max Vel=1.65 fps Inflow=0.05 cfs 0.016 af
D=18.0" n=0.012 L=21.0' S=0.0105 '/ Capacity=11.65 cfs Outflow=0.05 cfs 0.016 af
- Reach 102: Avg. Depth=0.05' Max Vel=0.32 fps Inflow=0.05 cfs 0.016 af
n=0.040 L=62.0' S=0.0042 '/ Capacity=47.54 cfs Outflow=0.05 cfs 0.015 af
- Reach 103: Avg. Depth=0.40' Max Vel=5.77 fps Inflow=2.15 cfs 0.286 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=2.15 cfs 0.286 af
- Pond SP-1: STUDY POINT 1 Inflow=2.26 cfs 0.322 af
Primary=2.26 cfs 0.322 af
- Pond WP1: WETPOND 1 Peak Elev=47.01' Storage=2,775 cf Inflow=1.14 cfs 0.080 af
Outflow=0.06 cfs 0.017 af

Summary for Subcatchment 10:

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.080 af, Depth> 2.04"

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=3.00"

Area (sf)	CN	Description
* 9,600	98	Paved Road
7,119	80	>75% Grass cover, Good, HSG D
3,761	98	Water Surface, 0% imp
20,480	92	Weighted Average
10,880		Pervious Area
9,600		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

Summary for Subcatchment 20:

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 2.41"

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=3.00"

Area (ac)	CN	Description
* 0.044	98	Paved Road
* 0.050	98	Existing Building and Parking
0.050	91	Gravel roads, HSG D
0.144	96	Weighted Average
0.050		Pervious Area
0.094		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

Summary for Subcatchment 30:

Runoff = 2.15 cfs @ 12.51 hrs, Volume= 0.271 af, Depth> 1.14"

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=3.00"

Area (ac)	CN	Description
* 0.017	98	NEW ROAD
* 0.100	98	Buildings and Parking
0.340	91	Gravel roads, HSG D
2.399	78	Meadow, non-grazed, HSG D
2.856	80	Weighted Average
2.739		Pervious Area
0.117		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.0	150	0.0060	0.08		Sheet Flow, SHEET A TO B Grass: Dense n= 0.240 P2= 3.00"
1.8	333	0.0060	3.17	348.79	Trap/Vee/Rect Channel Flow, CHANNEL B TO C Bot.W=15.00' D=2.00' Z= 20.0 ' /' Top.W=95.00' n= 0.040
0.1	21	0.0100	6.44	11.38	Circular Channel (pipe), PIPE C TO D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012
0.4	62	0.0042	2.64	47.57	Trap/Vee/Rect Channel Flow, CHANNEL D TO E Bot.W=3.00' D=2.00' Z= 3.0 ' /' Top.W=15.00' n= 0.040
35.3	566	Total			

Summary for Subcatchment 40:

Runoff = 0.10 cfs @ 12.10 hrs, Volume= 0.007 af, Depth> 1.04"

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=3.00"

Area (ac)	CN	Description
0.080	78	Meadow, non-grazed, HSG D
0.080		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, 6 MINUTE MIN. TC

Summary for Reach 100:

Inflow Area = 0.470 ac, 46.88% Impervious, Inflow Depth > 0.44" for 2-YEAR event
Inflow = 0.06 cfs @ 14.59 hrs, Volume= 0.017 af
Outflow = 0.05 cfs @ 15.69 hrs, Volume= 0.016 af, Atten= 12%, Lag= 65.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.21 fps, Min. Travel Time= 26.6 min
Avg. Velocity = 0.21 fps, Avg. Travel Time= 26.6 min

Peak Storage= 80 cf @ 15.25 hrs, Average Depth at Peak Storage= 0.02'
Bank-Full Depth= 2.00', Capacity at Bank-Full= 348.62 cfs

03375-POST

Type III 24-hr 2-YEAR Rainfall=3.00"

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Page 4

15.00' x 2.00' deep channel, n= 0.040
Side Slope Z-value= 20.0 '/' Top Width= 95.00'
Length= 332.0' Slope= 0.0060 '/'
Inlet Invert= 0.00', Outlet Invert= -1.99'



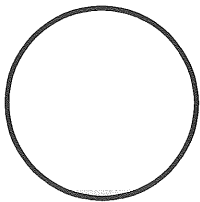
Summary for Reach 101:

Inflow Area =	0.470 ac, 46.88% Impervious, Inflow Depth > 0.40"	for 2-YEAR event
Inflow =	0.05 cfs @ 15.69 hrs, Volume=	0.016 af
Outflow =	0.05 cfs @ 15.70 hrs, Volume=	0.016 af, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.65 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.42 fps, Avg. Travel Time= 0.2 min

Peak Storage= 1 cf @ 15.69 hrs, Average Depth at Peak Storage= 0.07'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 11.65 cfs

18.0" Diameter Pipe, n= 0.012
Length= 21.0' Slope= 0.0105 '/'
Inlet Invert= 43.08', Outlet Invert= 42.86'



Summary for Reach 102:

Inflow Area =	0.470 ac, 46.88% Impervious, Inflow Depth > 0.40"	for 2-YEAR event
Inflow =	0.05 cfs @ 15.70 hrs, Volume=	0.016 af
Outflow =	0.05 cfs @ 15.78 hrs, Volume=	0.015 af, Atten= 0%, Lag= 5.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.32 fps, Min. Travel Time= 3.2 min
Avg. Velocity = 0.27 fps, Avg. Travel Time= 3.8 min

Peak Storage= 10 cf @ 15.73 hrs, Average Depth at Peak Storage= 0.05'
Bank-Full Depth= 2.00', Capacity at Bank-Full= 47.54 cfs

03375-POST

Type III 24-hr 2-YEAR Rainfall=3.00"

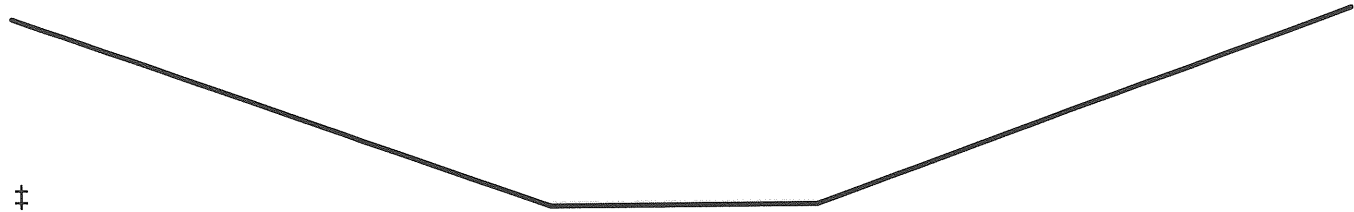
Prepared by {enter your company name here}

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Page 5

3.00' x 2.00' deep channel, n= 0.040
Side Slope Z-value= 3.0 '/ Top Width= 15.00'
Length= 62.0' Slope= 0.0042 '/
Inlet Invert= 43.08', Outlet Invert= 42.82'



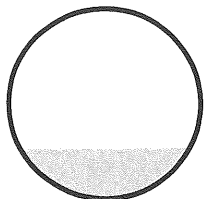
Summary for Reach 103:

Inflow Area =	3.326 ac, 10.14% Impervious, Inflow Depth > 1.03" for 2-YEAR event
Inflow =	2.15 cfs @ 12.51 hrs, Volume= 0.286 af
Outflow =	2.15 cfs @ 12.52 hrs, Volume= 0.286 af, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.77 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 2.93 fps, Avg. Travel Time= 0.3 min

Peak Storage= 18 cf @ 12.51 hrs, Average Depth at Peak Storage= 0.40'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 14.13 cfs

18.0" Diameter Pipe, n= 0.012
Length= 48.0' Slope= 0.0154 '/
Inlet Invert= 42.82', Outlet Invert= 42.08'



Summary for Pond SP-1: STUDY POINT 1

Inflow Area =	3.550 ac, 12.15% Impervious, Inflow Depth > 1.09" for 2-YEAR event
Inflow =	2.26 cfs @ 12.50 hrs, Volume= 0.322 af
Primary =	2.26 cfs @ 12.50 hrs, Volume= 0.322 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond WP1: WETPOND 1

Inflow Area =	0.470 ac, 46.88% Impervious, Inflow Depth > 2.04" for 2-YEAR event
Inflow =	1.14 cfs @ 12.09 hrs, Volume= 0.080 af
Outflow =	0.06 cfs @ 14.59 hrs, Volume= 0.017 af, Atten= 95%, Lag= 150.3 min
Primary =	0.06 cfs @ 14.59 hrs, Volume= 0.017 af

03375-POST

Type III 24-hr 2-YEAR Rainfall=3.00"

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Page 6

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.01' @ 14.59 hrs Surf.Area= 5,642 sf Storage= 2,775 cf

Plug-Flow detention time= 346.7 min calculated for 0.017 af (21% of inflow)
 Center-of-Mass det. time= 213.2 min (982.0 - 768.7)

Volume	Invert	Avail.Storage	Storage Description
#1	46.50'	8,767 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.50	5,176	0	0
47.00	5,631	2,702	2,702
48.00	6,500	6,066	8,767

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	15.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.05 cfs @ 14.59 hrs HW=47.01' (Free Discharge)
 ↑1=**Broad-Crested Rectangular Weir** (Weir Controls 0.05 cfs @ 0.27 fps)

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 10:	Runoff Area=20,480 sf 46.88% Impervious Runoff Depth>3.59" Tc=6.0 min CN=92 Runoff=1.95 cfs 0.141 af
Subcatchment 20:	Runoff Area=0.144 ac 65.28% Impervious Runoff Depth>3.98" Tc=6.0 min CN=96 Runoff=0.63 cfs 0.048 af
Subcatchment 30:	Runoff Area=2.856 ac 4.10% Impervious Runoff Depth>2.43" Flow Length=566' Tc=35.3 min CN=80 Runoff=4.61 cfs 0.579 af
Subcatchment 40:	Runoff Area=0.080 ac 0.00% Impervious Runoff Depth>2.29" Tc=6.0 min CN=78 Runoff=0.23 cfs 0.015 af
Reach 100:	Avg. Depth=0.08' Max Vel=0.50 fps Inflow=0.85 cfs 0.077 af n=0.040 L=332.0' S=0.0060 '/ Capacity=348.62 cfs Outflow=0.66 cfs 0.076 af
Reach 101:	Avg. Depth=0.24' Max Vel=3.56 fps Inflow=0.66 cfs 0.076 af D=18.0" n=0.012 L=21.0' S=0.0105 '/ Capacity=11.65 cfs Outflow=0.65 cfs 0.076 af
Reach 102:	Avg. Depth=0.23' Max Vel=0.79 fps Inflow=0.65 cfs 0.076 af n=0.040 L=62.0' S=0.0042 '/ Capacity=47.54 cfs Outflow=0.65 cfs 0.076 af
Reach 103:	Avg. Depth=0.62' Max Vel=7.31 fps Inflow=5.00 cfs 0.654 af D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=5.00 cfs 0.654 af
Pond SP-1: STUDY POINT 1	Inflow=5.15 cfs 0.717 af Primary=5.15 cfs 0.717 af
Pond WP1: WETPOND 1	Peak Elev=47.08' Storage=3,172 cf Inflow=1.95 cfs 0.141 af Outflow=0.85 cfs 0.077 af

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 10: Runoff Area=20,480 sf 46.88% Impervious Runoff Depth>4.33"
Tc=6.0 min CN=92 Runoff=2.33 cfs 0.169 af

Subcatchment 20: Runoff Area=0.144 ac 65.28% Impervious Runoff Depth>4.71"
Tc=6.0 min CN=96 Runoff=0.75 cfs 0.057 af

Subcatchment 30: Runoff Area=2.856 ac 4.10% Impervious Runoff Depth>3.09"
Flow Length=566' Tc=35.3 min CN=80 Runoff=5.84 cfs 0.735 af

Subcatchment 40: Runoff Area=0.080 ac 0.00% Impervious Runoff Depth>2.93"
Tc=6.0 min CN=78 Runoff=0.29 cfs 0.020 af

Reach 100: Avg. Depth=0.11' Max Vel=0.61 fps Inflow=1.49 cfs 0.106 af
n=0.040 L=332.0' S=0.0060 '/ Capacity=348.62 cfs Outflow=1.13 cfs 0.104 af

Reach 101: Avg. Depth=0.31' Max Vel=4.17 fps Inflow=1.13 cfs 0.104 af
D=18.0" n=0.012 L=21.0' S=0.0105 '/ Capacity=11.65 cfs Outflow=1.12 cfs 0.104 af

Reach 102: Avg. Depth=0.31' Max Vel=0.94 fps Inflow=1.12 cfs 0.104 af
n=0.040 L=62.0' S=0.0042 '/ Capacity=47.54 cfs Outflow=1.11 cfs 0.104 af

Reach 103: Avg. Depth=0.74' Max Vel=7.96 fps Inflow=6.94 cfs 0.840 af
D=18.0" n=0.012 L=48.0' S=0.0154 '/ Capacity=14.13 cfs Outflow=6.93 cfs 0.839 af

Pond SP-1: STUDY POINT 1 Inflow=7.16 cfs 0.916 af
Primary=7.16 cfs 0.916 af

Pond WP1: WETPOND 1 Peak Elev=47.12' Storage=3,388 cf Inflow=2.33 cfs 0.169 af
Outflow=1.49 cfs 0.106 af

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Planning Copy**

2004-0203
Application I. D. Number

Big Moose Harley-Davidson
Applicant
375 Riverside Street, Portland, ME 04102
Applicant's Mailing Address

10/01/2004
Application Date

Big Moose Harley - Showroom Additio
Project Name/Description

Consultant/Agent
Applicant Ph: (207) 797-6061 Applicant Fax: (207) 878-3115
Applicant or Agent Daytime Telephone, Fax

375 - 375 Riverside Street, Portland, Maine
Address of Proposed Site
317 B005
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential Office Retail
 Manufacturing Warehouse/Distribution Parking Lot Other (specify) **Showroom Addition**

3,050 s.f. **B4**
Proposed Building square Feet or # of Units Acreage of Site Zoning

Check Review Required:

- | | | | |
|--|---|--|--|
| <input checked="" type="checkbox"/> Site Plan
(major/minor) | <input type="checkbox"/> Subdivision
of lots | <input type="checkbox"/> PAD Review | <input type="checkbox"/> 14-403 Streets Review |
| <input type="checkbox"/> Flood Hazard | <input type="checkbox"/> Shoreland | <input type="checkbox"/> Historic Preservation | <input type="checkbox"/> DEP Local Certification |
| <input type="checkbox"/> Zoning Conditional
Use (ZBA/PB) | <input type="checkbox"/> Zoning Variance | | <input type="checkbox"/> Other |

Fees Paid: Site Plan **\$400.00** Subdivision Engineer Review **\$1,190.48** Date **11/08/2004**

Planning Approval Status:

Reviewer **Kandi Talbot**

- Approved** **Approved w/Conditions**
See Attached **Denied**

Approval Date **11/05/2004** Approval Expiration **11/05/2005** Extension to Additional Sheets
 OK to Issue Building Permit **Kandi Talbot** **11/09/2004** Attached
signature date

Performance Guarantee **Required*** **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

- | | | | |
|---|----------------|--|-----------------|
| <input type="checkbox"/> Performance Guarantee Accepted | date | amount | expiration date |
| <input type="checkbox"/> Inspection Fee Paid | date | amount | |
| <input type="checkbox"/> Building Permit Issue | date | | |
| <input type="checkbox"/> Performance Guarantee Reduced | date | remaining balance | signature |
| <input type="checkbox"/> Temporary Certificate of Occupancy | date | <input type="checkbox"/> Conditions (See Attached) | expiration date |
| <input type="checkbox"/> Final Inspection | date | signature | |
| <input type="checkbox"/> Certificate Of Occupancy | date | | |
| <input type="checkbox"/> Performance Guarantee Released | date | signature | |
| <input type="checkbox"/> Defect Guarantee Submitted | submitted date | amount | expiration date |
| <input type="checkbox"/> Defect Guarantee Released | date | signature | |

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
DRC Copy

2004-0203
Application I. D. Number

10/01/2004
Application Date

Big Moose Harley-Davidson
Applicant
375 Riverside Street, Portland, ME 04102
Applicant's Mailing Address

Big Moose Harley - Showroom Additio
Project Name/Description

Consultant/Agent
Applicant Ph: (207) 797-6061 **Applicant Fax: (207) 878-3115**
Applicant or Agent Daytime Telephone, Fax

375 - 375 Riverside Street, Portland, Maine

Address of Proposed Site

317 B005

Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential Office Retail
 Manufacturing Warehouse/Distribution Parking Lot Other (specify) **Showroom Addition**

3,050 s.f.

Proposed Building square Feet or # of Units

Acreage of Site

B4

Zoning

Check Review Required:

- Site Plan (major/minor) Subdivision # of lots PAD Review 14-403 Streets Review
 Flood Hazard Shoreland Historic Preservation DEP Local Certification
 Zoning Conditional Use (ZBA/PB) Zoning Variance Other

Fees Paid: Site Plan **\$400.00** Subdivision Engineer Review **\$1,190.48** Date **11/08/2004**

DRC Approval Status:

Reviewer **Chris Earle/Steve Bushey**

- Approved** **Approved w/Conditions** See Attached **Denied**

Approval Date **11/05/2004** Approval Expiration **11/05/2005** Extension to Additional Sheets Attached

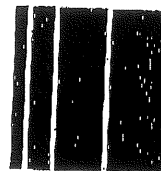
Condition Compliance **Kandi Talbot** **11/09/2004**
signature date

Performance Guarantee **Required*** **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

- Performance Guarantee Accepted date amount expiration date
 Inspection Fee Paid date amount
 Building Permit Issue date
 Performance Guarantee Reduced date remaining balance signature
 Temporary Certificate of Occupancy date Conditions (See Attached) expiration date
 Final Inspection date signature
 Certificate Of Occupancy date
 Performance Guarantee Released date signature
 Defect Guarantee Submitted submitted date amount expiration date
 Defect Guarantee Released date signature

SebagoTechnics
Engineering Expertise You Can Build On



Facsimile Cover Sheet

Project No. 01430

To: Kandi Talbot

Company: City of Portland

Phone: 874-8901

Fax: 756-8258

From: Greg Boulette

Date: 10-07-04

**Pages including this
cover page:** 5

Comments:

Kandi,
Attached is the ability to serve letter from the Portland Water District for Big Moose Harley. If you require additional information please give me a call.
Thank you

Reply Requested: _____ Yes _____ _____ No

Original to go out in mail: _____ Yes _____ _____ No

If you have any problems receiving this FAX, please contact Julie at:
(207) 856-0277
(207) 856-2206 FAX Number

01430

Portland Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

Customer Service Hotline (207) 761-8310

(207) 774-5961

FAX (207) 879-5837

October 4, 2004

Gregory Boulette
Sebago Technics
PO Box 1339
Westbrook, Me. 04098

Re: Big Moose Harley Davidson-375 Riverside St.-Portland

Greg:

This letter is to confirm there should be an adequate supply of clean and healthful water to serve the needs of the proposed expansion at 375 Riverside St. in Portland. Checking District records, I find there is a 12" DI water main on the east side of Riverside St. as well as a water hydrant located 800' north of the property.

The current data from the nearest hydrant indicates there should be adequate capacity of water to serve the needs of your proposed project.

Hydrant Location: Riverside St. @Grove St.

Hydrant # 1265

Static pressure = 80 PSI

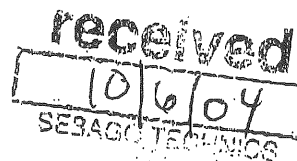
Flow = 1413 GPM

Last Tested = 9/28/04

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

Jim Pandiscio
Means Coordinator





1729
1201 1938

1201 1972
RIVERSIDE ST

RIVERSIDE ST

1265

GROVE ST
401 1265

12" DI water main

Big Moose Harley Davidson

HYD 1265



Portland Water District
 225 Douglass Street, P.O. Box 3559
 Portland, ME 04104
 (207)774-5981 Fax (207)761-8307

Water Hydrant Inventory Detail

Report Date 10/04/2004 02:53 PM Submitted By JPandiscio

Hydrant ID HY2701265
 Address RIVERSIDE ST
 PORTLAND ME 04103-
 Address Qualifier @ GROVE ST
 Area 27 PORTLAND/DEERING Sub-area
 District Loc
 Map #

Type EDDY CLOW EDDY (TR) Feeder Length 15.00
 Height 6.50 Feeder Diameter 6.00
 Paint Color Barrel Size 0.00
 Paint Type Manufacturer
 Size of Outlets 0.00 0.00 0.00 0.00 Serial #
 Packing Model #
 Feeder Type CI CAST IRON

Date Installed 10/28/1999

Ownership
 Parcel
 Water Main
 Valve ID HC2701265
 SL ID
 Complex

As Built
 X Coord
 Y Coord
 Z Coord
 Pressure Zone 287 GREATER PORTLAND
 Service Status ISF
 Obstruction

Budget # Expired By

Comments

Affected Water Mains

Year	From ID	Type	To ID	Address
------	---------	------	-------	---------

There are no affected water mains for this asset

Affected Shut Off Valves

Shut Off Valve	Address
----------------	---------

There are no affected shut off valves for this asset

Affected Hydrants

Hydrant ID	Address
------------	---------

There are no affected hydrants for this asset

Affected Critical Services

Number	Description	ID	Address
--------	-------------	----	---------

There are no affected critical services for this asset

Water Hydrant Flow Tests

Inspector	Started	Completed	Test Flow	Static Pressure	Residual Pressure
-----------	---------	-----------	-----------	-----------------	-------------------

39908	09/28/2004 03:00	09/28/2004 03:00	1413	80	0
30411	04/10/2003 00:00	04/10/2003 00:00	0	70	0
21504	06/20/1991 00:00		1233	68	0
21505	05/01/1986 00:00		1299	70	0

Schedule

ACTIVITY	Requested By	WO Number	Material	Next Scheduled	Last Completed	Priority	Assign To	Owner	Authorized
----------	--------------	-----------	----------	----------------	----------------	----------	-----------	-------	------------

There are no schedules for this asset



Portland Water District

225 Douglass Street, P.O. Box 3553
Portland, ME 04104
(207)774-5961 Fax (207)761-8307

Water Service Line Detail Report

Report Date 10/04/2004 02:57 PM

Submitted By JFandiscio

Page 1

Service Line SV27D3320
Address 375 RIVERSIDE ST
PORTLAND ME 04103-1036
Address Qualifier TP LEFT SIDE
Area 27 PORTLAND/DEERING
District 05B DISTRICT 5
Map #

Sub-area NDER NORTH DEERING
Loc 0080 BOOK 80

Service Line Type
Pipe Type COP COPPER PIPE
Service Type C COMMERCIAL ACCOUNT
Surface Cover
Copper 0.75
Pipe Length 12.000
Manufacturer

Critical Serv
Water Tap Location Fire Line
MAIN TO STOP: 12 FT 0 IN
Curb Stop Location
STOP TO STREET LINE: 5 FT 0 IN

Date Installed 02/28/1975
As Built 1370
X Coord
Z Coord
Pressure Zone 267 GREATER PORTLAND
Main ID
Expired By

Budget #
Service Status ISF IN SERVICE FULL
Complex
Parcel
To
Ownership

Comments
Group Code: 27-SV
Remarks:

D & B # UIC ID #
NPDES # SIC
EPA ID #

CAS ID Date Installed Generic Class Description

There are no CAS for this service line

There are no Generic Class for this service line

There are no address contacts for this service line

Asset Comp Type / Qualifier	Unit ID	Expired	Address	Description
WBF	2476		375 RIVERSIDE ST PORTLAND	
WMTR	S49429888		375 RIVERSIDE ST PORTLAND	

Scheduled
Activity: Reported By: Status: Unit: Interval: Next Scheduled: Last Completed: Priority: Assign To: Crew: Authorization:

There are no schedules for this asset



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Planning and Development Department

Lee D. Urban, Director

Planning Division

Alexander Jaegerman, Director

November 9, 2004

Calvin Reynolds
President
Big Moose Harley-Davidson
375 Riverside Street
Portland, ME 04102

RE: Big Moose Harley-Davidson Addition, 375 Riverside Street
ID #2004-0203, CBL #317-B-005

Dear Mr. Reynolds:

On November 5, 2004, the Portland Planning Authority granted minor site plan approval for a 3,050 sq. ft. addition located at 375 Riverside Street, as shown on the approved plan. Where submission drawings are available in electronic form, the applicant shall submit any available electronic CADD.DXF files with seven sets of final plans.

The approval is based on the submitted site plan. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

Please note the following provisions and requirements for all site plan approvals:

1. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. A one year extension may be granted by this department if requested by the applicant in writing prior to the expiration date of the site plan.
2. A performance guarantee in a form acceptable to the City of Portland and an inspection fee equal to 2.0% of the performance guarantee will have to be posted before beginning any site construction or issuance of a building permit.
3. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
4. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.

5. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8822. (Only excavators licensed by the City of Portland are eligible.)
6. Where submission drawings are available in electronic form, the applicant shall submit any available electronic CADD.DXF files with seven sets of final plans.
7. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please note that no Certificates of Occupancy will be issued until all site improvements have been completed and inspected in the field by the Development Review Coordinator.

If there are any questions, please contact Kandice Talbot at 874-8901.

Sincerely,



Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Sarah Hopkins, Development Review Program Manager
Kandice Talbot, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Gayle Guertin, Inspections
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Assessor's Office
Approval Letter File

Infrastructure Financial Contribution Form

Obtain an Account Number from Paul Colpitts, Chief Acct.,
(ext. 8665) prior to the distribution of this form.

Amount \$ 1,500.00

City Account Number: 710-0000-236-21-00

Project Name:

Big Moose Harley-Davidson

Project Job Number:
(from Site Plan Application Form)

2004-0203

Project Location:

375 Riverside Street

Project Description:
(attach approval letter)

Applicant's Name:

Calvin Reynolds

Applicant's Address:

375 Riverside Street

Expiration:

If funds are not expended or encumbered for the intended purpose by _____, funds, or any balance of remaining funds, shall be returned to contributor within six months of said date.

Funds shall be permanently retained by the City.

Other (describe in detail) _____

Form of Contribution:

Escrow Account

Cash Contribution

Interest Disbursement: Interest on funds to be paid to contributor only if project is not commenced.

Terms of Draw Down of Funds: The City shall periodically draw down the funds via a payment requisition from Public Works, which form shall specify use of City Account # shown above.

Date of Form: 11/3/04
Planner: Kandi Talbot

Person Completing Form: Jennifer Dorr

The original form, copy of the check and any attachments shall be given to Debbie Marquis.

- The original check, copy of the form and any attachments shall be given to Jennifer Dorr.
- A copy of this form, the check and any attachments shall also be given to the following people:

Paul Colpitts (Finance), Jennifer Babcock (Finance), Alexander Jaegerman (Planning), Planner for project,
Michael Bobinsky (Public Works), Tony Lombardo (Public Works), Penny Littell (Corporation Counsel), Applicant

Security enhanced document. See back for details.

53151

52-607112
136

BIG MOOSE HARLEY-DAVIDSON
375 RIVERSIDE ST.
PORTLAND, ME 04103

DATE 10-21-04

PAY TO THE ORDER OF

City of Portland
One thousand Five hundred 00/100

\$ 1500.00
DOLLARS



KeyBank National Association
Gorham, Maine 04038
1-800-KEY2YOU Key.com

FOR Building Permit

Stewart Reynolds

⑆053151⑆ ⑆0112006081⑆ 191364001732⑆

Security enhanced document. See back for details.

53152

52-607112
136

BIG MOOSE HARLEY-DAVIDSON
375 RIVERSIDE ST.
PORTLAND, ME 04103

DATE 10-21-04

PAY TO THE ORDER OF

City of Portland
One thousand two hundred Fifty Six 00/100

\$ 1256.00
DOLLARS



KeyBank National Association
Gorham, Maine 04038
1-800-KEY2YOU Key.com

FOR Permit

Stewart Reynolds

⑆053152⑆ ⑆0112006081⑆ 191364001732⑆

REPORT OF RECEIPTS



54760

To the Director of Finance, City of Portland, Maine

From the Department of Planning Date 11-10-04

Source of Receipts _____ For the Period of _____

HTE Description - up to 19 characters (_____)	Amount	Revenue/Expenditure Code Project #
Big Moose Halley - ck. 53152 # 2004-0203 (included) Dep. Insp.	1190.48 UC 65.52 PV	
Forest City - ck. 47872 # 2004-0184 (included) Dep. Insp.	1572.60 UC	
Big Moose - ck. 53151 # 2004-0203 Infrastructure Finan. Center.	1500.00	710-0000 - 236-24-00
Totals Notes/Wire Transfer \$ _____ Total Credit Card Receipts \$ _____ Total Direct Deposits \$ _____ Total Checks \$ _____ Total Cash \$ _____ Total Amount <u>4328.60</u>		

CITY OF PORTLAND
PAID
2004 NOV 17 AM 10:57
THANK YOU

The undersigned certifies that this is a true, complete report of all collections made since the date of their last report.

Authorized Agent Kimberly Den Phone # 8719

Received This Day

Forward all copies to the Treasury Department where they will be received and returned.

From: "Steve Bushey" <SBushey@DelucaHoffman.com>
To: "Kandi Talbot (E-mail)" <KCOTE@ci.portland.me.us>
Date: 11/03/2004 11:51:40 AM
Subject: Big Moose Harley Davidson

Kandi,

I have reviewed the October 26, 2004 letter and supporting plans from Sebago Technics for the Big Moose Harley Davidson project and find that they have addressed my earlier comments. I will leave it to staff to address landscaping and any further questions regarding circulation to the Fire Dept. The project is primarily within areas of existing impervious surface therefore impacts to stormwater runoff are minimal. The normal erosion control measures and prevention should be sufficient to address construction related concerns. The current plan does include a water main extension from Riverside Street. Activities within the street require a street opening permit and all work must be completed in accordance with the City's street opening ordinance. There may be a moritorium on Riverside Street openings at this location, therefore the requirements may be a lot more stringent for this proposal. I assume Public Works can address this item.

If you have any further questions please call.

Steve Bushey

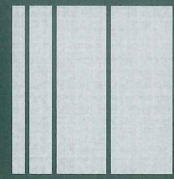
From: "Steve Bushey" <SBushey@DelucaHoffman.com>
To: "Kandi Talbot (E-mail)" <KCOTE@ci.portland.me.us>
Date: 11/03/2004 11:51:40 AM
Subject: Big Moose Harley Davidson

Kandi,

I have reviewed the October 26, 2004 letter and supporting plans from Sebago Technics for the Big Moose Harley Davidson project and find that they have addressed my earlier comments. I will leave it to staff to address landscaping and any further questions regarding circulation to the Fire Dept. The project is primarily within areas of existing impervious surface therefore impacts to stormwater runoff are minimal. The normal erosion control measures and prevention should be sufficient to address construction related concerns. The current plan does include a water main extension from Riverside Street. Activities within the street require a street opening permit and all work must be completed in accordance with the City's street opening ordinance. There may be a moratorium on Riverside Street openings at this location, therefore the requirements may be a lot more stringent for this proposal. I assume Public Works can address this item.

If you have any further questions please call.

Steve Bushey



October 26, 2004
03319

Kandi Talbot, City Planner
City of Portland
389 Congress Street, 4th Floor
Portland, ME 04101

Proposed Showroom, Big Moose Harley Davidson, ID # 2003-0103, CBL # 317-B-005
Peer Review Comments

Dear Kandi:

This letter and the enclosed plans are in response to the peer review comments regarding the above referenced project in a memorandum dated October 13, 2004 from DeLuca-Hoffman Associates, Inc. The following numbered responses correspond with the numbered conditions in that letter:

1. An updated building plan is attached for your review. The Site Plan has been updated as well.
2. A note has been added to the plans to deal with stormwater running off the roof and onto the mechanical equipment. The location of the units has been revised.
3. No Comment.
4. The sign will not need to be removed due to the required grading around the sign.
5. Silt fence has been added to the plan as requested.
6. We do not believe additional landscaping is warranted with this proposal. If staff feels differently we will address their requirements when we receive them.
7. There will be a wal-pak above the new door location. The moving of the existing light pole will not affect the lighting on the adjacent property.
8. No Comment.

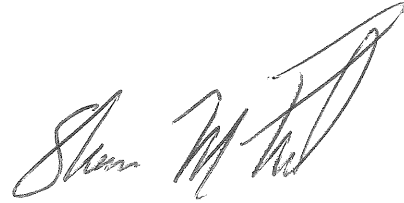
We are hopeful that we have provided the required information to allow this project to proceed through the permitting process. Upon your review of the enclosed material, however, please call with any questions or if you require additional information. Thank you for your consideration.

Sincerely,

SEBAGO TECHNICS, INC.



Gregory J. Boulette
Sr. Project Engineer



Shawn M. Frank, PE
Project Manager

GJB:SMF/gjb/df



CITY OF PORTLAND

Division Directors
Mark B. Adelson
Housing & Neighborhood Services

Alexander Q. Jaegerman, AICP
Planning

John N. Lufkin
Economic Development

July 15, 2003

Calvin Reynolds
President
Big Moose Harley-Davidson
375 Riverside Street
Portland, ME 04102

RE: Big Moose Harley-Davidson Addition, 375 Riverside Street
ID #2003-0103, CBL #317-B-005

Dear Mr. Reynolds:

On July 15, 2003, the Portland Planning Authority granted minor site plan approval for a 3,050 sq. ft. addition located at 375 Riverside Street, as shown on the approved plan, with the following conditions:

- i. Utility capacity letters from Portland Water District and Portland Sewer Division shall be submitted to staff.
- ii. A final plan should provide specific spot grading or contours for the paved area behind the rear of the expansion. A drainage inlet may be warranted on the southeast side of the expansion.
- iii. If necessary, a grading or other form of easement shall be submitted to staff for the new pavement surface, which will extend slightly onto the adjacent property, just off the northeast building corner.
- iv. At least 15" of gravel and 3" of asphalt shall be installed for the paved section.
- v. The applicant must be responsible to install and maintain erosion control measures in accordance with the submitted narrative and the Best Management Practices.
- vi. Bollards shall be installed around the relocated AC units, gas entry valve and other related equipment.
- vii. The applicant shall contribute \$1,500 to the City for the improvement of a drainage channel and outfall crossing downstream of Handyman Rental, on Riverside Street.

Where submission drawings are available in electronic form, the applicant shall submit any available electronic CADD.DXF files with seven sets of final plans.

cc: Lee D. Urban, Planning and Development Department Director
Sarah Hopkins, Development Review Program Manager
✓Kandice Talbot, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Michael Bobinsky, Public Works Director
Karen Dunfey, Inspections
Larry Ash, Traffic Engineer
Tony Lombardo, Project Engineer
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Don Hall, Appraiser, Assessor's Office
Approval Letter File
Correspondence File

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Engineering Copy**

2003-0103
Application I. D. Number

05/13/2003
Application Date

Big Moose Harley-Davidson
Project Name/Description

Big Moose Harley-Davidson
Applicant
375 Riverside Street, Portland, ME 04102
Applicant's Mailing Address

375 - 375 Riverside St, Portland, Maine
Address of Proposed Site
317 B005001
Assessor's Reference: Chart-Block-Lot

Consultant/Agent
Applicant Ph: (207) 797-6061 Applicant Fax: (207) 878-3115
Applicant or Agent Daytime Telephone, Fax

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential Office Retail
 Manufacturing Warehouse/Distribution Parking Lot Other (specify) **Showroom Addition**

3,050 s.f. Proposed Building square Feet or # of Units **_____** Acreage of Site **_____** **B4** Zoning

Check Review Required:

Site Plan (major/minor) Subdivision # of lots _____ PAD Review 14-403 Streets Review
 Flood Hazard Shoreland Historic Preservation DEP Local Certification
 Zoning Conditional Use (ZBA/PB) Zoning Variance Other _____
Fees Paid: Site Plan **\$400.00** Subdivision _____ Engineer Review _____ Date **05/27/2003**

Engineering Comments

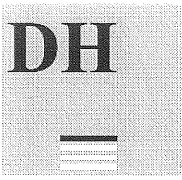
PUBLIC WORKS ENGINEERING REVIEW...7/03/03

I have reviewed the plans and offer the following comments:

1. A proposed building expansion still requires a request for utility capacity. Specifically, a written request must be made to Public Works regarding sanitary sewer capacity.
2. As was requested of the most recent development associated with the abutting property owned by Harvey Industries, Public Works is requesting the applicant contribute an equal financial contribution amount to the City's efforts to improve the drainage channel and outfall crossing downstream of Handyman Rental, on Riverside Street. The amount requested is \$1,500.

Performance Guarantee	<input type="checkbox"/> Required*	<input type="checkbox"/> Not Required	
<input type="checkbox"/> Performance Guarantee Accepted	_____	_____	_____
	date	amount	expiration date
<input type="checkbox"/> Inspection Fee Paid	_____	_____	
	date	amount	
<input type="checkbox"/> Building Permit Issue	_____		
	date		
<input type="checkbox"/> Performance Guarantee Reduced	_____	_____	_____
	date	remaining balance	signature
<input type="checkbox"/> Temporary Certificate of Occupancy	_____	<input type="checkbox"/> Conditions (See Attached)	_____
	date		expiration date
<input type="checkbox"/> Final Inspection	_____	_____	
	date	signature	

* No building permit may be issued until a performance guarantee has been submitted as indicated below



DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1121
FAX 207 879 0896

■ ROADWAY DESIGN
■ ENVIRONMENTAL ENGINEERING
■ TRAFFIC STUDIES AND MANAGEMENT
■ PERMITTING
■ AIRPORT ENGINEERING
■ SITE PLANNING
■ CONSTRUCTION ADMINISTRATION

MEMORANDUM

DATE: June 25, 2003

TO: Kandi Talbot, City of Portland Planning Authority

FROM: Stephen R. Bushey, P.E.

SUBJECT: Big Moose Harley Davidson, 375 Riverside Street

I have reviewed the Minor Site Plan application materials prepared by Sebago Technics on behalf of Big Moose Harley Davidson, dated 5-21-03. The materials include an Erosion and Sediment Control narrative and a brief discussion regarding Stormwater runoff. A Site plan has also been prepared that depicts a proposed building expansion and a small area of pavement expansion. I offer the following comments:

1. The building expansion appears to be in an area presently paved on the north side of the existing building. The site currently sheds runoff primarily by sheet flow to a ditch at the front of the site and a drainage swale on the south side of the site. There appears to be no closed storm drainage system except for a culvert under the driveway. The drainage patterns for the property will generally remain the same except that the building addition may require a bit more detail as to the conveyance of runoff around the new footprint area. It is uncertain exactly how the paved area behind the rear of the expansion will drain. If it drains towards the front it may be necessary to provide additional spot grading and detail to the plan in order to avoid a poorly drained area behind the addition. The grades of the pavement to remain and the new pavement appear to be quite flat, although no specific spot grading or contours are shown on the current plan. A final plan should provide this additional information. A drainage inlet may be warranted on the southeast side of the expansion.
2. We concur with the engineer's conclusion that stormwater management for the proposed activity appears to be unwarranted. The site discharges runoff towards a drainageway that flows under Riverside Street and through the McAllister Farm subdivision and into the Presumpscot River. There are no known or apparent drainage issues along this drainage path currently. There also appears to be no real opportunity to provide water quality treatment for the runoff from the site's paved surfaces, therefore, it seems reasonable to accept the plan as presented with no measures for stormwater.
3. The site plan seems to suggest that a new pavement surface will extend slightly onto the adjacent property, just off the northeast building corner. If this is the case, a grading or other form of easement may be necessary.
4. The plan outlines an area of pavement expansion around the proposed building. This will improve circulation and maneuvering area for emergency equipment and appears

- appropriate. No detail was provided for the pavement section, so we recommend at least 15” of gravel and 3” of asphalt be installed for the paved section.
5. The erosion control narrative outlines a simple program for minimizing erosion from the site. The site plan does not specifically show the areas for silt fence installation, although the proposed disturbance areas appear to be minor in nature. Therefore, the conditions of approval should simply state that the applicant must be responsible to install and maintain erosion control measures in accordance with the submitted narrative and the Best Management Practices.
 6. The building elevations suggest that there will be no entry doors for the expansion area. We assume that the Codes Department will review the plan for the need for any access provisions.
 7. The expansion will require relocation of existing onsite utilities for natural gas, electric and telephone. There appears to be no issues related to these relocations. We do suggest the applicant consider the installation of some bollards around the relocated AC units, gas entry valve and other related equipment. Quite often bollards are also beneficial at building corners where vehicles and snow removal equipment will be close to the building.

Based on the materials submitted for this minor site plan application, we recommend approval for the proposed expansion, although we recommend that the additional spot grading details be provided on the Final Approved Site plan supplied for the City’s records.

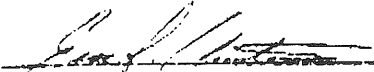
If you have any questions please call.

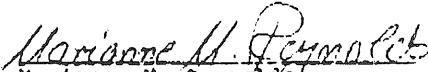
Steve Bushey, PE
Technical Reviewer
DeLuca-Hoffman Associates, Inc.

8705-035

In Witness Whereof, Marianne M. Reynolds has hereunto set her hand and seal this 31st day of March in the year of our Lord one thousand nine hundred and eighty-nine.

Signed, Sealed and Delivered
in the presence of



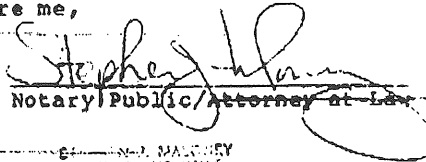

Marianne M. Reynolds

State of Maine
County of Cumberland, ss.

March 31, 1989

Personally appeared the above named Marianne M. Reynolds and acknowledged the above instrument to be her free act and deed.

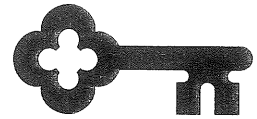
Before me,


Notary Public/Attorney at Law

STEPHEN J. MALONEY
NOTARY PUBLIC, ATTORNEY
MY COMMISSION EXPIRES AT 11:00, 1993

SEAL

Figure 4 – Letter of Financial Capability



KeyBank National Association
100 Gannett Drive
South Portland, ME 04106

April 23.2003

City of Portland

Dear Sir or Madam

Re: Marianne and Calvin Reynolds

Please be advised that Marianne and Calvin Reynolds have had a relationship with KeyBank since the mid 1960's. Key has provided the Reynolds and the operating companies, Jack Reynolds and son, Inc., H.D. Acquisitions Company, Inc., and Augusta Motor Sports, with various deposit, cash management, and loan services including working capital lines of credit, term and mortgage loans, and floor plan financing. All accounts have always been handled in a very satisfactory manner.

It is my understanding that an expansion is planned at the Riverside Street , Big Moose Harley Davidson location at an approximate cost of \$300,000. Mr. And Mrs. Reynolds have the financial capacity and/or availability to finance with KeyBank the necessary funding for this project.

Should you have any questions, contact me at 207 842-1073.

Sincerely,

Leo Amato

Vice president and Relationship Manager

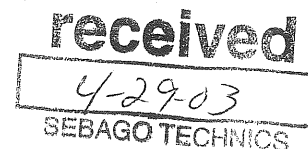


Figure 5 – Erosion & Sedimentation Control Narrative

EROSION AND SEDIMENTATION CONTROL PLAN

Big Moose Harley-Davidson Riverside Street Portland, Maine

A. Pre-Construction Phase

Prior to the beginning of any construction, filter fabric fencing will be staked across the slope(s), on the contour at or just below the limits of clearing or grubbing, and/or just above any adjacent property line or watercourse to protect against construction related erosion. The placement of silt fences shall be completed in accordance with guidelines established in Best Management Practices and in accordance with the erosion control plan and details in the plan set. This network is to be maintained by the contractor until all exposed slopes have at least 85%-90% vigorous perennial vegetative cover to prevent erosion.

Prior to construction, the contractor shall prepare a detailed schedule and marked up plan indicating areas and components of the work and key dates showing date of disturbance and completion of the work. The contractor shall schedule a pre-construction meeting with the municipal staff. Three (3) copies of the schedule and marked up plan shall be provided to the municipality three days prior to the scheduled pre-construction meeting. Special attention shall be given to the 14-day limit of disturbance in the schedule addressing temporary and permanent vegetation measures.

The following erosion control measures shall be followed by the contractor throughout construction of this project.

B. Construction and Post-Construction Phase

1a. Areas undergoing actual construction shall only expose that amount of mineral soil necessary for progressive and efficient construction and shall not exceed 14 days. Areas that will not be completed (covered and/or finish graded) within 14 days of disturbance shall be anchored with temporary erosion control blanket or mulch as directed by the inspecting engineer and as shown on the design plans. If mulch is used, hay or straw mulch shall be applied such that the areas shall be sufficiently covered with mulch to avoid any visible soil exposure. Mulch shall be kept moist to avoid loss due to wind. Erosion control blanket shall be applied in the base of all grassed waterways and in slopes which exceed 15% and any disturbed areas within 100' of wetlands or streams. Areas located within 100' of streams shall be anchored with temporary erosion control within seven (7) days.

1b. If disturbed areas do not receive final seeding by September 15th of the year of construction, then all disturbed areas shall be seeded with a winter cover crop of

Rye at the rate of 3 lbs/1,000 S.F. to provide winter protection. Winter seedings shall be covered with mulch such that no soil is visible. Erosion control blankets shall be used in the base of all grassed waterways, on slopes equal to or greater than 15%, and any disturbed areas within 100' of wetlands or streams. Erosion control blankets shall also be applied for additional winter protection along side slopes of grassed waterways and in all areas equal to or greater than 8% slope.

- 1c. During winter conditions, areas that will not be completed (covered and/or finish graded) within seven (7) days of disturbance shall be anchored with temporary erosion control measures within seven (7) days of disturbance. Temporary erosion control shall consist of hay or straw mulch applied to provide a minimum uniform mulch depth of 4" or, if blown, application area shall be sufficiently covered with mulch to avoid any visible soil exposure.
2. All topsoil shall be collected, stockpiled, seeded with Rye at 3 lbs./1,000 S.F. and mulched, and re-used as required. Siltation fencing shall be placed down gradient from stockpiled loam. Loam shall be stockpiled at locations designated by the owner and inspecting engineer.
3. All silt fences shall be installed according to this plan. This shall be maintained during development to remove sediment from runoff water. All the silt fences shall be inspected before and after any rainfall or runoff event, maintained and cleaned until all areas have at least 85%-90% vigorous perennial vegetative cover of grasses.
4. A construction entrance shall be built at the intersection of the existing road and the access drive. Roadway areas shall be periodically swept or washed to avoid tracking of mud, dust or debris from the construction area. Dust control during construction shall be achieved by the use of a watering truck to periodically sprinkle the exposed roadway areas as necessary to reduce dust during the dry months.
5. Stone check dams may be removed only after the roadways are paved and the vegetated swales are established with at least 85%-90% of vigorous perennial growth.
6. All areas shall be seeded and stabilized in accordance with the following vegetation plan.

C. Vegetation Plan

Revegetation measures shall commence immediately upon completion of construction of the roadway improvements. Disturbed areas shall also be mulched and anchored prior to any storm event. See mulching requirements in Section B(1a) above. If final

seeding cannot be accomplished by September 15th, then all disturbed areas shall be seeded with a winter cover crop at the rate of 3 lbs./1,000 S.F. to provide winter protection. Seeded areas shall be covered with erosion control mesh. See winter protection requirements in Section B(1b) above. Revegetation measures shall consist of the following:

1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface. Loam shall be free of subsoil, clay lumps, stones and other objects over 1" in diameter, and without weeds, roots or other objectionable material.
2. Soils tests shall be taken at the time of soil stripping to determine fertilization requirements. Soils test shall be taken promptly as to not interfere with the 14-day limit on soil exposure. Based upon test results, soil amendments shall be incorporated into the soil prior to final seeding. In lieu of soil tests, soil amendments may be applied as follows:

<u>ITEM</u>	<u>APPLICATION RATE</u>
10-20-20 Fertilizer (N-P205-K20 or equal)	18.4 lbs./1,000 S.F.
Ground Limestone (50% Calcium & magnesium oxide)	138 lbs./1,000 S.F.

3. Following seed bed preparation, swale areas, fill areas and back slopes shall be seeded at a rate of 3 lbs./1,000 S.F. with a mixture of 35% Creeping Red Fescue, 6% Red Top, 24% Kentucky Bluegrass, 10% Perennial Ryegrass, 20% Annual Ryegrass and 5% White Dutch Clover.
4. Erosion control mesh shall be applied in accordance with the plans over all finish-seeded areas as specified on the design plans.
5. All hay bale and/or filter fabric barriers will remain in place until seedings have become 85%-90% established and then removed within 10-days.
6. The inspecting engineer at his/her discretion may require additional erosion control measures and/or supplemental vegetative provisions to maintain stability of earthworks and finish-graded areas. The contractor shall be responsible for providing and installing any supplemental measures as directed by the inspecting engineer. Failure to comply with the engineer's directions will result in discontinuation of construction activities.

D. Construction Schedule

Site improvements will most likely begin in summer of 2003 depending upon final project approval. The following schedule is anticipated for the construction of the roadway improvements.

SCHEDULE

- | | | |
|-------|--|------------------------------|
| 1. | Estimated construction time. | 3 months |
| 2. | Erosion control measures placed | Week 1- Week 2 |
| 3. | Site clearing and grubbing | Week 2 - Week 4 |
| 4. | Construction of parking subbase | Week 4 - Week 6 |
| 5. | Utility improvements and parking construction | Week 6 - Week 12 |
| 6. | Mulch spread for winter erosion control | Oct. 15 of construction year |
| 7. | Start final seedings on prepared areas
(during growth season) | Week 8 |
| 8. | Biweekly monitoring of vegetative growth | Week 10 |
| 9.** | Re-seeding of areas, if needed | Week 10 |
| 10.** | Removal of erosion control devices | Upon final completion |

** Dates are subject to change at the discretion of the engineer, depending on construction progress.

E. Inspections/Monitoring

Maintenance measures shall be applied as needed during the entire construction cycle. After each rainfall, the contractor shall perform a visual inspection of all installed erosion control measures. The contractor shall perform repairs as needed to allow continued proper functioning of the erosion control measure. The contractor shall provide the municipality with written documentation describing dates of inspections and necessary follow-up work to maintain erosion control measures meeting the requirements of this plan.

Following the temporary and/or final seedings, the contractor shall inspect the work area semimonthly until the seedings have been established. Established means a minimum of 85%-90% of areas vegetated with vigorous growth. Reseeding shall be carried out by the contractor with follow-up inspections in the event of any failures until vegetation is adequately established.

Prepared by,

SEBAGO TECHNICS, INC.


Gregory J. Boulette
Project Engineer

Shawn M. Frank, PE
Project Manager

GJB/SMF:/gjb/df
April 18, 2003

Figure 6 – Stormwater Management Narrative

STORMWATER RUNOFF EVALUATION

Big Moose Harley-Davidson Riverside Street Portland, Maine

The following Stormwater Management Plan has been prepared for Big Moose Harley-Davidson to evaluate stormwater runoff and erosion control for a proposed 3,050 square foot building expansion in Portland, Maine. The 2.87-acre parcel is located on the east side of Riverside Street. The property is presently developed and is predominately impervious. The topography on site is flat to moderate slopes generally sloping to the rear of the site. One curb cut along Riverside Street will be maintained for access to the site.

Given the size of the building addition in relationship to the size of the overall development, any increase in stormwater runoff will be inconsequential. This project will generate less than 10,000 square feet of new impervious surfaces and, therefore, is not subject to any Department of Environmental Protection permits in regards to stormwater runoff.

Temporary erosion control measures will be required to be implemented during the construction phase of the project as specified on the Erosion & Sedimentation Control Plan provided on the site plans.

Permanent erosion control measures have also been incorporated into the plan for long-term stabilization of the site. These measures will be integrated with the overall site development, which includes limits for disturbance and clearing (see clearing limits on site plans), and a permanent revegetation plan.

GJB:gjb/df
April 18, 2003

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Planning Copy**

2003-0103

Application I. D. Number

05/13/2003

Application Date

Big Moose Harley-Davidson

Project Name/Description

Big Moose Harley-Davidson

Applicant

375 Riverside Street, Portland, ME 04102

Applicant's Mailing Address

Consultant/Agent

Applicant Ph: (207) 797-6061 Applicant Fax: (207) 878-3115

Applicant or Agent Daytime Telephone, Fax

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential Office Retail

Manufacturing Warehouse/Distribution Parking Lot Other (specify) **Showroom Addition**

3,050 s.f.

Proposed Building square Feet or # of Units

Acreage of Site

B4

Zoning

Check Review Required:

- Site Plan (major/minor)
- Flood Hazard
- Zoning Conditional Use (ZBA/PB)
- Subdivision # of lots _____
- Shoreland
- Zoning Variance
- PAD Review
- Historic Preservation
- 14-403 Streets Review
- DEP Local Certification
- Other _____

Fees Paid: Site Plan \$400.00 Subdivision _____ Engineer Review _____ Date 05/27/2003

Reviewer _____

Planning Approval Status:

- Approved
- Approved w/Conditions See Attached
- Denied
- Approval Date _____ Approval Expiration _____ Extension to _____ Additional Sheets Attached
- OK to Issue Building Permit _____ signature _____ date _____

Performance Guarantee

Required* Not Required

* No building permit may be issued until a performance guarantee has been submitted as indicated below

<input type="checkbox"/> Performance Guarantee Accepted	_____ date	_____ amount	_____ expiration date
<input type="checkbox"/> Inspection Fee Paid	_____ date	_____ amount	
<input type="checkbox"/> Building Permit Issue	_____ date		
<input type="checkbox"/> Performance Guarantee Reduced	_____ date	_____ remaining balance	_____ signature
<input type="checkbox"/> Temporary Certificate of Occupancy	_____ date	<input type="checkbox"/> Conditions (See Attached)	_____ expiration date
<input type="checkbox"/> Final Inspection	_____ date	_____ signature	
<input type="checkbox"/> Certificate Of Occupancy	_____ date		
<input type="checkbox"/> Performance Guarantee Released	_____ date	_____ signature	
<input type="checkbox"/> Defect Guarantee Submitted	_____ submitted date	_____ amount	_____ expiration date
<input type="checkbox"/> Defect Guarantee Released	_____ date	_____ signature	

May 21, 2003
01430

Margaret Schmuckal, Zoning Administrator
Code Enforcement Department
City of Portland
389 Congress Street, 3rd Floor
Portland, ME 04101

Proposed Showroom Addition-Tax Map 317, Block B, Lot 5
Minor Site Plan Application- 375 Riverside Street, Big Moose Harley-Davidson

Dear Marge:


On behalf of Big Moose Harley-Davidson, we are pleased to submit nine (9) copies of the enclosed plans and associated information for a minor site plan application. It is the intent of the applicant to expand the existing showroom to provide an additional 3,050 square feet of space. The façade of the expansion will be compatible with the existing building in accordance with the enclosed elevation. The facility is located at 375 Riverside Street and consists of 2.87 acres of property within the B-4 Zone. The existing facility and the proposed expansion will meet the space and bulk requirements of that zone.

The development proposal consists of constructing a 3,050 square foot building addition within an existing paved area and installing a paved access drive around the expansion. Existing water, gas, and underground electrical service will be relocated outside of the proposed building footprint. All utility services for the addition will be provided from the existing building. Proposed new lighting will consist only of low-level wall packs at building entrances. An existing light pole will be relocated. The existing site is heavily landscaped such that no new landscaping is proposed. Existing trees and shrubs will be relocated as depicted on the plans due to the paved access drive around the building.

We are hopeful that we have provided the required information to allow this project to proceed through the permitting process. Upon your review of the enclosed material, however, please call with any questions or if you require additional information. Thank you for your consideration.

Sincerely,

SEBAGO TECHNICS, INC.


Gregory J. Boulette
Project Engineer



Shawn M. Frank, PE
Project Manager

GJB:gjb/df

cc: Calvin Reynolds, President

City of Portland Site Plan Application

If you or the property owner owe real estate taxes, personal property taxes or user charges on any property within the City of Portland, payment arrangements must be made before permit applications can be received by the Inspections Dept.

Address of Construction: 375 Riverside Street		Zone: B-4 Zone
Total Square Footage of Proposed Structure 3,050		Square Footage of Lot 125,017
Tax Assessor's Chart, Block & Lot Chart# 317 Block# B Lot# 5	Property owner, mailing address: Big Moose Harley-Davidson 375 Riverside Street Portland, Maine 04102	Telephone: (207) 797-6061
Consultant/Agent, mailing address, phone & contact person Shawn Frank c/o Sebago Technics, Inc. P.O. Box 1339 Westbrook, Maine 04098-1339	Applicant name, mailing address, telephone #/Fax#/Pager#: Big Moose Harley-Davidson 375 Riverside Street Portland, Maine 04102 (207) 797-6061 (phone) (207) 878-3115 (fax)	Project name: Big Moose Harley-Davidson
Proposed Development (check all that apply) <input type="checkbox"/> New Building <input checked="" type="checkbox"/> Building Addition <input type="checkbox"/> Change of Use <input type="checkbox"/> Residential <input type="checkbox"/> Office <input type="checkbox"/> Retail <input type="checkbox"/> Manufacturing <input type="checkbox"/> Warehouse/Distribution <input checked="" type="checkbox"/> Parking lot <input type="checkbox"/> Subdivision, amount of lots _____ \$25.00 per lot \$ _____ <input type="checkbox"/> Site Location of Development \$3,000, except for residential lots which are then \$200 per lot _____ <input type="checkbox"/> Traffic Movement \$1,000 <input type="checkbox"/> Stormwater Quality \$250.00 <input checked="" type="checkbox"/> Other - Showroom Addition _____ <input type="checkbox"/> After the fact review - Major project \$1,500.00 <input type="checkbox"/> After the fact review - Minor project \$1,200.00 Major Development _____ \$500.00 Minor Development <input checked="" type="checkbox"/> \$400.00 Plan Amendments: <input type="checkbox"/> Board review \$200.00 <input type="checkbox"/> Staff review \$100.00		
Who billing will be sent to: Big Moose Harley-Davidson Mailing address: 375 Riverside Street State and Zip: Portland, Maine 04103 Contact person: Calvin Reynolds Phone: (207) 797-6061		

Submittals shall include (9) separate folded packets of the following:


- a. copy of application
- b. cover letter stating the nature of the project
- c. site plan containing the information found in the attached sample plans check list

Amendment to Plans: Amendment applications should include 6 separate packets of the above (a, b, and c)

ALL PLANS MUST BE FOLDED NEATLY AND IN PACKET FORM

Section 14-522 of the Zoning Ordinance outlines the process, copies are available at the counter at .50 per page (8.5 x11) you may also visit the web site: ci.portland.me.us chapter 14

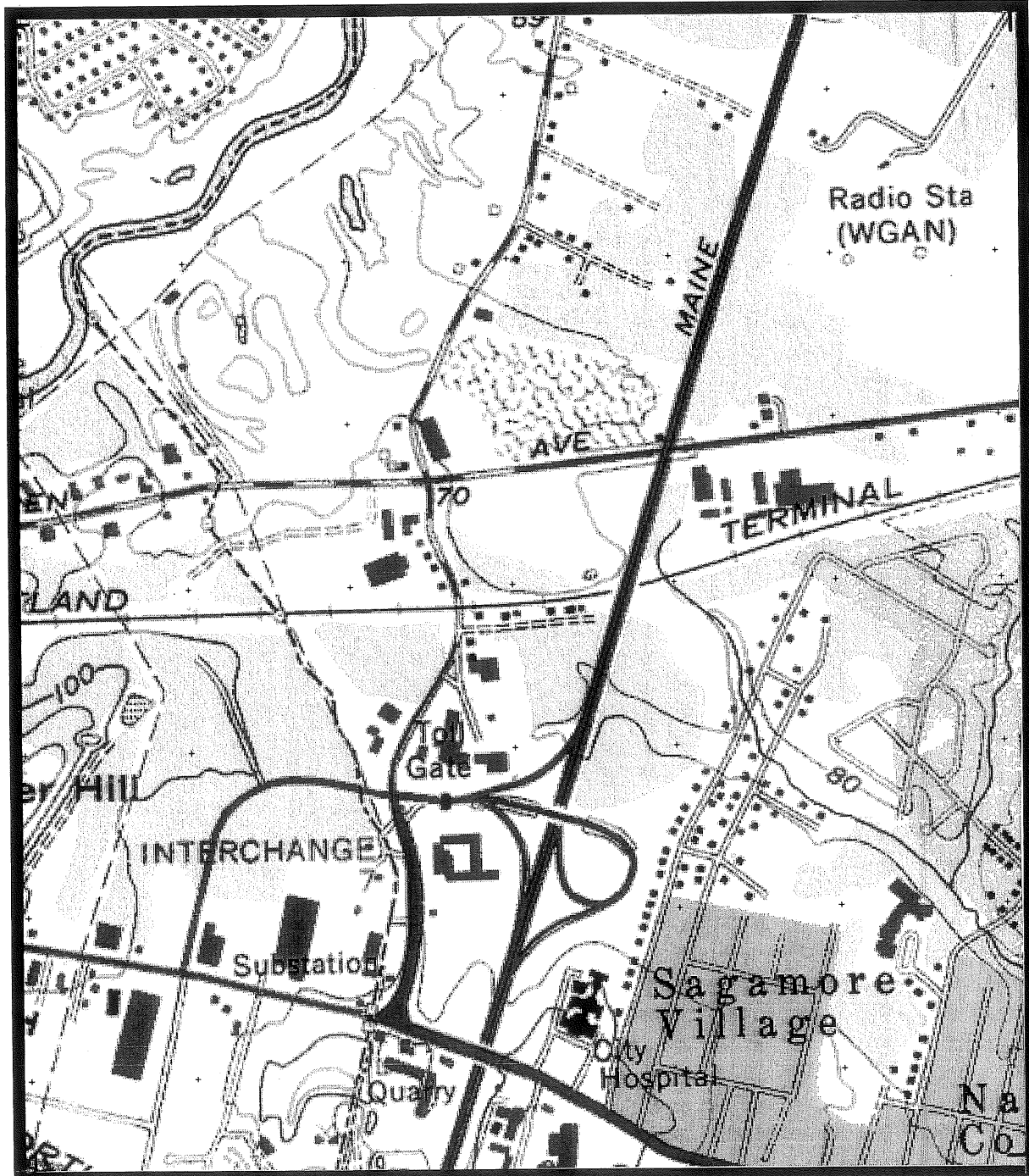
I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: 	Date: 5-13-03
---	----------------------

This application is for site review ONLY, a building Permit application and associated fees will be required Prior to construction.

Figure 1 – Site Location Map

FIGURE 1



SITE LOCATION MAP
 USGS TOPOGRAPHIC
 7.5 MIN. QUADRANGLE
 PORTLAND WEST
 SCALE: 1"=1,000'


Sebago Technics
Engineering & Planning for the Future

Figure 2 – Medium Intensity Soils Map

Figure 3 - Deed

8705-031

013818

MORTGAGE DEED

Know all Men by these Presents,

That Marianne M. Reynolds, of Gorham, County of Cumberland and State of Maine, (hereinafter referred to as "Mortgagor"), in consideration of Eight Hundred Thousand and 00/100ths (\$800,000.00) Dollars, paid to the Mortgagor and Calvin J. Reynolds, Jr. by Key Bank of Maine, a banking corporation organized and existing under the laws of the State of Maine, and having a place of business at One Canal Plaza, Portland, County of Cumberland and State of Maine, (hereinafter referred to as "Mortgagee") the receipt whereof Mortgagor does hereby acknowledge, does hereby give, grant, bargain, sell and convey unto the said Key Bank of Maine, and its Successors and Assigns forever,

See Schedule A attached hereto and incorporated herein by reference.

Together with all heating furnaces and boilers, oil burners and attachments thereto, heaters, water tanks, mantels, gas and electric light fixtures, screens, storm doors and windows, screen doors, window shades, awnings, and all other fixtures of whatever kind or nature at present contained in said buildings and hereinafter placed therein prior to the full payment and discharge of this Mortgage, which are hereby agreed to be a part of the mortgaged real estate.

To have and to hold the aforegranted and bargained premises with all the rights, easements, privileges and appurtenances

0X870590032

thereto belonging, to the said Mortgagee, and its Successors and Assigns, to their use and behoof forever.

And I, the said Mortgagor, for myself and my Heirs, Executors, Administrators Successors and Assigns, do covenant with the said Mortgagee, and its Successors and Assigns, that I am lawfully seized in fee of the premises; that they are free of all encumbrances, excepting any prior mortgages of record; that I have good right to sell and convey the same to the said Mortgagee, and its Successors and Assigns forever, as aforesaid; and that I and my Heirs, Executors, Administrators, Successors and Assigns shall and will Warrant and Defend the same to the said Mortgagee, and its Successors and Assigns forever, against the lawful claims and demands of all persons.

And the Mortgagor does hereby further **COVENANT AND AGREE** with said Mortgagee to keep all the buildings herein mortgaged insured against loss or damage by fire and the other perils insured under extended coverage in a sum not less than One Hundred percent (100%) of the full replacement value of the mortgaged premises as determined by the Mortgagee for the benefit of said Mortgagee, and its Successors and Assigns, in such insurance company or companies as said Mortgagee shall approve, until payment of the debt secured by this Mortgage and to deliver the policies for all such insurance to said Mortgagee, to be retained by it until the debt secured shall be paid, and also to pay all taxes and water-rates, insurance, repairs and improvements upon said premises, and should I neglect to keep

said buildings so insured or to pay said taxes, water-rates, repairs and improvements, I hereby authorize said Mortgagee so to insure said buildings at my expense, and to pay said taxes, water-rates, repairs and improvements for me, and I agree that all sums due or to become due the Mortgagee and all sums so paid by said Mortgagee shall become a part of the mortgage debt secured by this Mortgage, and that no indebtedness will be contracted for labor, materials, or otherwise which would create a lien on the property that would have priority over this Mortgage without written consent of the Mortgagee.

LEASE ASSIGNMENT

As further security for payment of the indebtedness and performance of the obligations, covenants and agreements secured hereby, the Mortgagor hereby assigns to the Mortgagee, and its Successors and Assigns, all leases and rents now existing or hereafter acquired on said premises, and in the event of default hereunder, or in the event of default in the terms and conditions of any Promissory Note or Notes of even date herewith given by the Mortgagor to the Mortgagee, the Mortgagee shall have the right to collect all rents and profits arising from said premises and apply the same to the payment of the mortgage debt and obligations.

NON-ALIENATION CLAUSE

In the event the Mortgagor sells, transfers or conveys any right, title or interest in the mortgaged premises, the obligations secured hereby shall become due and payable ON DEMAND at the

EW8705700034

option of the Mortgagee.

Provided, Nevertheless, that if the said Mortgagor and Calvin J. Reynolds, Jr. or their heirs, Executors, Administrators, Successors and Assigns shall pay to the said Mortgagee, or its Successors or Assigns, the sum of Eight Hundred Thousand and 00/100ths (\$800,000.00) Dollars in accordance with the terms of a certain Promissory Note or Notes of even date given by Mortgagor and Calvin J. Reynolds, Jr. to Mortgagee, and shall pay at maturity any other Note(s) or Allonge(s) given by Mortgagor and Calvin J. Reynolds, Jr. to Mortgagee in renewal, extension or modification of said debt, and shall pay all other existing debts and obligations of the Mortgagor and Calvin J. Reynolds, Jr. to the Mortgagee, and future advances made by the Mortgagee to the Mortgagor to protect the security hereof, and shall also keep and perform all the covenants and agreements herein contained, and shall not make or suffer any strip or waste on said mortgaged premises, and shall repay to Mortgagee all expenses, if any are incurred, of foreclosure of this Mortgage, together with reasonable attorney's fees, then this Mortgage, also a certain Promissory Note or Notes as aforesaid given by the said Mortgagor and Calvin J. Reynolds, Jr. to the said Mortgagee, to pay the said sum and interest at the time aforesaid shall be void. Otherwise, this Mortgage shall remain in full force and effect.

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
DRC Copy**

2001-0298
Application I. D. Number
11/02/2001
Application Date
5000 Sq.ft. Building/storage for bikes
Project Name/Description

Big Moose Harley Davidson
Applicant
375 Riverside St., Portland, ME 04103
Applicant's Mailing Address
Sebago Technics/Jim Seymour
Consultant/Agent
Applicant Ph: (207) 797-6061 Agent Fax: (207) 856-2206
Applicant or Agent Daytime Telephone, Fax

375 - 375 Riverside St, Portland, Maine
Address of Proposed Site
317 B005001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential Office Retail
 Manufacturing Warehouse/Distribution Parking Lot Other (specify) **storage facility**

5000 s.f Proposed Building square Feet or # of Units **B4** Zoning
Acreage of Site

Check Review Required:

- Site Plan (major/minor) Subdivision # of lots PAD Review 14-403 Streets Review
- Flood Hazard Shoreland Historic Preservation DEP Local Certification
- Zoning Conditional Use (ZBA/PB) Zoning Variance Other

Fees Paid: Site Plan **\$400.00** Subdivision _____ Engineer Review **\$300.00** Date **01/25/2002**

DRC Approval Status:

Reviewer **Jay Reynolds**

- Approved Approved w/Conditions See Attached Denied

Approval Date **11/21/2001** Approval Expiration **11/21/2002** Extension to _____ Additional Sheets Attached

Condition Compliance **Jay Reynolds** **11/21/2001**
signature date

Performance Guarantee Required* Not Required

* No building permit may be issued until a performance guarantee has been submitted as indicated below

<input checked="" type="checkbox"/> Performance Guarantee Accepted	<u>01/24/2002</u> date	<u>\$14,120.00</u> amount	<u>10/29/2002</u> expiration date
<input type="checkbox"/> Inspection Fee Paid	_____ date	_____ amount	
<input type="checkbox"/> Building Permit Issue	_____ date		
<input type="checkbox"/> Performance Guarantee Reduced	_____ date	_____ remaining balance	_____ signature
<input type="checkbox"/> Temporary Certificate of Occupancy	_____ date	<input type="checkbox"/> Conditions (See Attached)	_____ expiration date
<input type="checkbox"/> Final Inspection	_____ date	_____ signature	
<input type="checkbox"/> Certificate Of Occupancy	_____ date		
<input type="checkbox"/> Performance Guarantee Released	_____ date	_____ signature	
<input type="checkbox"/> Defect Guarantee Submitted	_____ submitted date	_____ amount	_____ expiration date
<input type="checkbox"/> Defect Guarantee Released	_____ date	_____ signature	

TO: Inspections

FROM: Jay Reynolds, Development Review Coordinator 

DATE: June 11, 2002

RE: C. of O. for Big Moose Harley-Davidson 375 Riverside Street
Lead CBL (317B005) ID# (2001-0298)

After visiting #375 Riverside Street, I have the following comments:

Site Work Complete.

At this time, **I recommend issuing a Permanent Certificate of Occupancy.**

Please contact me if you have any questions or comments.
Thank You.

Cc: Sarah Hopkins, Development Review Services Manager
Mike Nugent, Inspection Services Manager
file

File: O:\drc\375riverside2.doc

TO: Inspections

FROM: Jay Reynolds, Development Review Coordinator *J.R.*

DATE: May 13, 2002

RE: C. of O. for Big Moose Harley-Davidson 375 Riverside Street
Lead CBL (317B005) ID# (2001-0298)

After visiting #375 Riverside Street, I have the following comments:

At this time, **I recommend issuing a temporary Certificate of Occupancy.**

Please contact me if you have any questions or comments.
Thank You.

Cc: Sarah Hopkins, Development Review Services Manager
Mike Nugent, Inspection Services Manager
file

File: O:\drc\375riverside1.doc

*67-02
All set
Issue perm.
Request West*

Department of Planning & Development
Lee D. Urban, Director



CITY OF PORTLAND

Division Directors
Mark B. Adelson
Housing & Neighborhood Services

Alexander Q. Jaegerman, AICP
Planning

John N. Lufkin
Economic Development

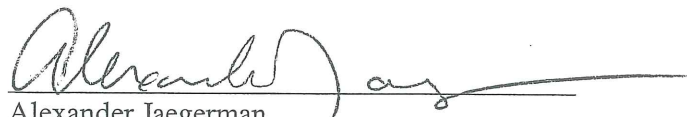
TO: Duane Kline, Finance Department
FROM: Alexander Jaegerman, Planning Division Director
DATE: October 31, 2002
SUBJECT: Request for Reduction of Performance Guarantee
Big Moose Harley Davidson/375 Riverside Street
ID# (2001-0298) Lead CBL# (317-B-005)

A request by Big Moose Harley Davidson has been made for a reduction of Letter of Credit # S303998 for the Bike Storage Facility at 375 Riverside Street.

Original Sum	\$ 14,100.00
<u>This Reduction Amount</u>	<u>\$ 12,690.00</u>
Remaining Sum	\$ 1,410.00

This is the first reduction for the project.

Approved:


Alexander Jaegerman
Planning Division Director

cc: Sarah Hopkins, Development Review Services Manager
✓ Jay Reynolds, Development Review Coordinator
Todd Merkle, Public Works
Code Enforcement
File

O:\PLAN\CORRESP\DRC\PERFORM\BIGMOOSEHARLEY1.DOC

Finance Department



Duane G. Kline
Director

CITY OF PORTLAND

November 8, 2002

Keybank National Association
179 John Roberts Road
South Portland, ME 04106

Re: Irrevocable Standby Letter of Credit #S303998 dated January 11, 2002
H.D. Acquisition Co., d/b/a Big Moose Harley Davidson

This is to inform you that I am authorizing a reduction in the above-named letter of credit by the amount of \$12,690.00, which should leave a balance of \$1,410.00 remaining.

If you require any further information, please let me know.

Sincerely,

Duane G. Kline
Finance Director

DGK,jlb

pc: Jay Reynolds, Development Review Coordinator

Uplight/Downlight with Minimal Light Trespass

SUNDOWNER™ 12

Sundowner is an environmentally friendly luminaire series that delivers a sharp 85-degree light cutoff making it ideal for accentuating a building's form and presence, without the light pollution common to most outdoor lighting.

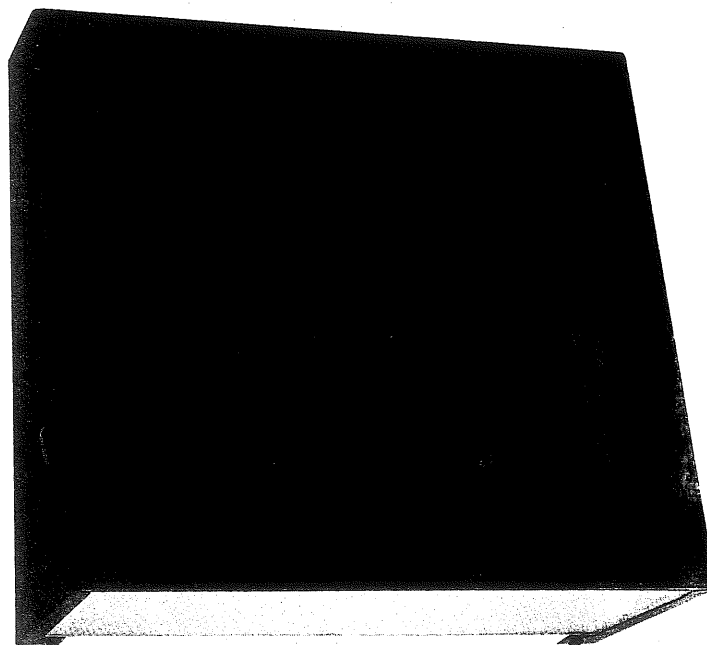
Sundowner's light-control design meets stringent light trespass code compliances for down lighting, and is available in wattages from 50 to 175 watt.

The unique optical system includes a specular aluminum reflector and canopy design that achieves a precise light cutoff and distribution pattern through an etched, 5/32" tempered diffused glass lens.

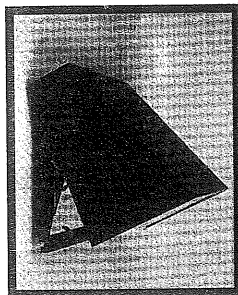
Design features include a tapered, corrosion resistant aluminum canopy which is Listed for Wet Locations for downlighting.

All exterior hardware is stainless steel to resist the elements, and canopy is gasketed to back plate to prevent water entry and minimize infiltration by insects.

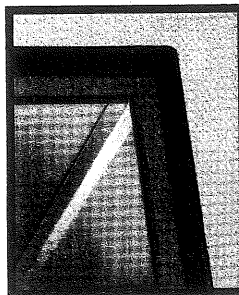
Sundowner – a precise answer to precise outdoor lighting needs.



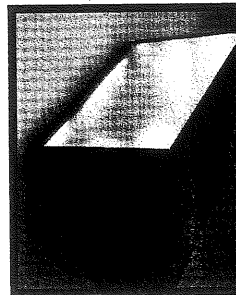
Canopy hinges for lamp or electrical maintenance and easily removes from backplate.



Fixture canopy seals to backplate with quality silicone gasketing.



Diffusing glass lens is silicone sealed in canopy to resist moisture and insect infiltration.



Specifications/Features

GENERAL

- Sharp cutoff, wall mounted HID luminaire suitable for low glare applications and light trespass code compliance.
- Utilizes Metal Halide and High Pressure Sodium HID lamps up to 175W for best design options available.
- Wet location applications.
- Uplight mounting available. (Damp Location)

CONSTRUCTION

- Corrosion resistant .05" low copper content aluminum canopy and back plate finished in baked bronze polyester powder coat.
- Easy one man installation with cast aluminum backplate. Backplate mounts to electrical box with box strap and nipple supplied.
- Canopy hinged and easily removable from back plate; enhances ease of installation and maintenance.
- Specular aluminum reflectors produce front cutoff at 85 degree and S/MH 2.7:1.
- Canopy sealed to back plate with extruded, high temperature, silicone gasket.

- Corrosion resistant stainless steel external hardware.
- 5/32" tempered diffused glass lens silicone sealed to prevent entrance of water, and minimize insect infiltration.
- Canopy secured by two captive stainless steel screws; optional tamper resistant screws.

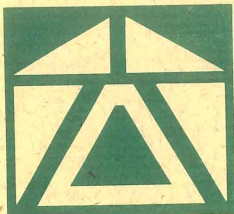
LISTINGS

- Listed 1572 Wet location for downlight and damp location for upright versions.

ELECTRICAL

- Standard ballasts are 120V, HPF, maximum 175W medium base HID lamp in vertical position.
- Ground wire attached to backplate for positive grounding and quick installation.
- Optional button type photocell mounts in top of canopy.
- All fixtures are IBEW, Union made to ensure quality.

GUTH
LIGHTING



P A T C O
CONSTRUCTION, INC.

December 10, 2001

Kandice Talbot, Planner
Planning and Urban Development
City Hall
389 Congress Street
Portland, ME 04101

RE: Big Moose Harley Davidson, 375 Riverside St.
ID #2001-0298, CBL #317-B-005

Dear Kandice:

Attached please find two page letter from Key Bank USA regarding the financing for the proposed new building.

This should satisfy Condition No. 1 of your Minor Site Approval. If you need additional information, please give myself or Jim Seymour a call.

Sincerely,

Dennis M. Waters
Vice President

Enclosure
cc: Jim Seymour, Sebago Technics



Sebago Technics

Engineering & Planning for the Future

Facsimile Cover Sheet

Project No. 01430

To: KANDI TALBOT

Company: PORTLAND PLANNING

Phone: 874-8721

Fax: 756-8258

From: Jim Seymour

Date: 11/14/01

Pages including this cover page: 2

Comments:

BIG-MOOSE HARLEY

- FINANCIAL STATEMENT -

OBVIOUSLY YOU'LL HAVE TO CALL TO GET
A BANK STATEMENT AND/OR LETTER

Thanks
Jim S.

Reply Requested: Yes No

Original to go out in mail: Yes No

If you have any problems receiving this FAX, please contact Pam at:
(207) 856-0277
(207) 856-2206 FAX Number.

October 13, 2001

TO: City of Portland, Maine

TO WHOM IT MAY CONCERN:

As the owner of the property at 375 Riverside Street I am contemplating the construction of a 5,000 sq. ft. storage building. If I decide to build this facility it will be funded with personal cash. There will be no additional borrowing.

This property is presently occupied by Big Moose Harley-Davidson.

If more information is needed please call 929-6488.

Sincerely yours,


Marianne M. Reynolds

Marianne M. Reynolds

3. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
4. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
5. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8822. (Only excavators licensed by the City of Portland are eligible.)
6. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Department at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Kandice Talbot at 874-8901.

Sincerely,


Alexander Jaegerman
Chief Planner

cc: Sarah Hopkins, Development Review Program Manager
✓ Kandice Talbot, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Jodine Adams, Inspections
William Bray, Director of Public Works
Larry Ash, Traffic Engineer
Tony Lombardo, Project Engineer
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Lee Urban, Director of Economic Development
Lt. Gaylen McDougall, Fire Prevention
Don Hall, Appraiser, Assessor's Office
Susan Doughty, Assessor's Office
Approval Letter File
Correspondence File



Key Bank USA

Key Auto Finance
Commercial Finance Group
179 John Roberts Road
South Portland, ME 04106

November 26, 2001

Calvin and Marianne Reynolds
375 Riverside Street
Portland, Maine 04103

Dear Mr. and Mrs. Reynolds:

It is our pleasure to inform you that KeyBank National Association (Lender) has approved a certain Credit Facility for Calvin and Marianne Reynolds (Borrower) in the amount, and for the purpose of, and subject to the terms and conditions stated below. The term loan is subject to periodic review by the Lender and shall be based upon factors deemed relevant to the Lender. This letter outlines general provisions of the Credit Facility and certain terms relating to the Credit Facility, and does not contain all the conditions required by the Lender. Additional terms and conditions will be contained in the Promissory Note (the "Note") and other loan documents necessary to govern and secure the Credit Facility.

Credit Facility

Term Loan:

Purpose:	Build a 5,000 square foot building on the Big Moose Harley Davidson property.
Amount:	\$175,000.00.
Interest Rate:	The rate per annum equal to the Prime Rate.
Term:	Nine (9) month construction period to be converted to a five (5) year term, ten (10) year amortization.
Payment Frequency:	Nine (9) monthly interest payments to be followed by fifty-nine (59) principal payments of \$1,458.33 plus interest with a balloon principal balance plus interest due at maturity.
Late Fee:	If a payment is 10 days or more late, Borrower will be charged 5% of the unpaid portion of the regularly scheduled payment or \$50.00, whichever is greater.
Special Collateral:	Third mortgage, assignment of leases and rents, and UCC filing on property located at 375 Riverside Street, Portland, Maine 04103.

Other Terms and Conditions:

Borrower agrees to provide Lender with all legal documents requested by Lender to fully and properly document the Credit Facility. The form and content of all documents to be executed in connection with the Credit Facility, and all details concerning same, shall be subject to the approval of Lender and that of its counsel.

Borrower agrees to maintain insurance on all assets in amounts sufficient to cover Lender's Term Loan outstanding balance and all other outstanding balances at all times. Borrower shall list Lender as Loss Payee on all such policies as its interest may appear.

In addition to the terms of the Note and other loan documents, Lender's obligation to grant the Credit Facility and to make any advances thereunder is contingent upon each of the following:


- No material adverse change in the financial or economic condition or prospects of the Borrower;
- No material diminution in the value of the Collateral;
- No failure by the Borrower to make timely payments to Lender including any costs or expenses incident to the granting of the Credit Facility; and
- Compliance by Borrower with the terms and conditions of the Note and all other loan documents or any other agreements with Lender.

We at KeyBank and Key AutoFinance appreciate the opportunity to be of service to you. Please acknowledge your acceptance of the terms and conditions of this letter by signing and returning it to me within 30 days of the date of this letter. Unless otherwise extended in writing by us, this offer shall expire at that time. Upon acceptance of this letter, this financing commitment will remain in effect until May 16, 2002.

Sincerely yours,


Stephen M. Gilchrist
Vice President
KeyBank National Association/Key AutoFinance

The terms and conditions stated above are hereby accepted:


Calvin Reynolds

11-29-01
Date


Marianne Reynolds

11/29/01
Date

COST ESTIMATE OF IMPROVEMENTS TO BE COVERED BY PERFORMANCE GUARANTEE

Date: 12/4/01

Name of Project: BIG MOOSE HARLEY-DAVIDSON - BUILDING ADDITION

Address/Location: 375 RIVERSIDE ST. PORTLAND, ME

Developer/CONTRACTOR: PATCO CONSTRUCTION INC.

Form of Performance Guarantee: Letter of credit

Type of Development: Subdivision _____ Site Plan (Major/Minor) MINOR

TO BE FILLED OUT BY THE APPLICANT:

Item	PUBLIC			PRIVATE		
	Quantity	Unit Cost	Subtotal	Quantity	Unit Cost	Subtotal
1. STREET/SIDEWALK						
Road / <u>PAVEMENT</u>				<u>220 T</u>	<u>\$40/T</u>	<u>8800.-</u>
Granite Curbing	_____	_____	_____	_____	_____	_____
Sidewalks	_____	_____	_____	_____	_____	_____
Esplanades	_____	_____	_____	_____	_____	_____
Monuments	_____	_____	_____	_____	_____	_____
Street Lighting	_____	_____	_____	_____	_____	_____
Street Opening Repairs	_____	_____	_____	_____	_____	_____
Other	_____	_____	_____	_____	_____	_____
2. EARTH WORK						
Cut	_____	_____	_____	_____	_____	_____
Fill	_____	_____	_____	_____	_____	_____
3. SANITARY SEWER						
Manholes	_____	_____	_____	_____	_____	_____
Piping	_____	_____	_____	_____	_____	_____
Connections	_____	_____	_____	_____	_____	_____
Main Line Piping	_____	_____	_____	_____	_____	_____
House Sewer Service Piping	_____	_____	_____	_____	_____	_____
Pump Stations	_____	_____	_____	_____	_____	_____
Other	_____	_____	_____	_____	_____	_____
4. WATER MAINS						
_____	_____	_____	_____	_____	_____	_____
5. STORM DRAINAGE						
Manholes	_____	_____	_____	_____	_____	_____
Catchbasins	_____	_____	_____	_____	_____	_____
Piping	_____	_____	_____	_____	_____	_____
Detention Basin	_____	_____	_____	_____	_____	_____
Stormwater Quality Units	_____	_____	_____	_____	_____	_____
Other	_____	_____	_____	_____	_____	_____

PUBLIC IMPROVEMENTS
REQUIRED
NO

7. EROSION CONTROL				
Silt Fence			380 LF	\$4/LF
Check Dams				1520-
Ripe Inlet/Outlet Protection				
Level Lip Spreader				
Slope Stabilization				
Geotextile				
Hay Bale Barriers				
Catch Basin Inlet Protection				
8. RECREATION AND OPEN SPACE AMENITIES				
9. LANDSCAPING (Attach breakdown of plant materials, quantities, and unit costs)			8 AUSTRIAN PINS (6'-7')	\$250 EA \$2000.00
10. MISCELLANEOUS				
TOTAL:				\$14,120.-
GRAND TOTAL:				\$14,120.00

NO PUBLIC IMPROVEMENT

REQUIRED

INSPECTION FEE (to be filled out by the City)

OK
12-12-01
J.R.

	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>TOTAL</u>
A: 2.0% of totals:	_____	_____	_____
or			
B: Alternative Assessment:	0	300.00	300.00
Assessed by:	J.R. (name)	J.R. (name)	J.R.